

Board of Directors

Pete Kaiser, Director

Russ Baggerly, Director Angelo Spandrio, Director Brian Brennan, Director

CASITAS MUNICIPAL WATER DISTRICT Meeting to be held at the

The meeting will be held via teleconference. To attend the meeting please call US Toll Free (888) 788-0099 or (877) 853- 5247 Enter Meeting ID 984 1485 4813# June 24, 2020 @ 3:00 PM

<u>Right to be heard</u>: Members of the public have a right to address the Board directly on any item of interest to the public which is within the subject matter jurisdiction of the Board. The request to be heard should be made immediately before the Board's consideration of the item. No action shall be taken on any item not appearing on the agenda unless the action is otherwise authorized by subdivision (b) of ¶54954.2 of the Government Code and except that members of a legislative body or its staff may briefly respond to statements made or questions posed by persons exercising their public testimony rights under section 54954.3 of the Government Code.

<u>Special Accommodations</u>: If you require special accommodations for attendance at or participation in this meeting, please notify our office 24 hours in advance at (805) 649-2251, ext. 113. (Govt. Code Section 54954.1 and 54954.2(a)).

1. CALL TO ORDER

- 2. ROLL CALL
- 3. AGENDA CONFIRMATION
- 4. PUBLIC COMMENTS Presentation on District related items that are not on the agenda three minute limit.
- 5. CONSENT AGENDA
 - 5.a. Approval of the Minutes of the June 8, 2020 Special Board Meeting.

6 8 2020 Minutes.pdf

- 5.b. Approval of the Minutes of the June 10, 2020 Board Meeting. 6 10 20 Meeting Minutes.pdf
- 5.c. Approval of the MInutes of the March 21, 2020 Special Board Meeting. 3 21 2020 Minutes.pdf
- 5.d. Recommend Approval of the Accounts Payable Report for the period of 5/28/2020 6/10/2020.
 Accounts Payable Report 5 28 2020 to 6 10 2020.pdf
- 5.e. Resolution requesting that the General District Election to be held on November 3, 2020, be consolidated with other elections called to be held on the same day and in the same territory. Reso consolidation of election.pdf
- 6. PUBLIC HEARING ON THE CITY OF VENTURA ADJUDICATION IMPACT FEE
 - 6.a. Open Public Hearing.
 - 6.b. Receive Staff Report and Recommendations. Board Memo on City of Ventura Adjudication Impact Charge 062420.pdf Casitas Adjudication Charge Public Hearing June 24.pdf City of Ventura Adjudication Impact Charge Implementation Policy.pdf CityofVentura Adjudication Impact Charge Notice 062420.pdf Consultant memo on the Adjudication Charge 062420.pdf
 - 6.c. Report of Written Communications by Clerk of the Board.
 - 6.d. Public Comment.
 - 6.e. Close Public Hearing.
 - 6.f. Discussion by Board of Directors and Possible Adoption of a Resolution Establishing the City of Ventura Adjudication Impact Fee. Resolution Adopting the City of Ventura Adjudication Impact Fee 062420 (1).pdf
- 7. PUBLIC HEARING ON THE ADOPTION OF THE FISCAL YEAR 2020-2021 BUDGET
 - 7.a. Open Public Hearing

- 7.b. Receive Staff Report and Recommendations. Board Memo on FY 2021 Budget Hearing 062420.pdf Revenue - 2020-21 Rev 1.pdf
 Revenue - Expense Summary 2020-21 Rev 3.pdf
 Budget 2020 - 2021 06-15-2020.pdf
 10 Year Capital - Summary.pdf
 Proposed Capital Projects - 2020-21 Rev1.pdf
 10 Year Capital by Department.pdf
- 7.c. Report of Written Communications by Clerk of the Board.
- 7.d. Public Comment.
- 7.e. Close Public Hearing.
- 7.f. Discussion by Board of Directors and Possible Adoption of the Resolution Approving the General Fund Budget, Debt Service Fund and Mira Monte Water Assessment District Fund Budgets for the Fiscal Year Ending June 30, 2021. Resolution Adopting Final General Fund Budget 2020-2021.pdf

8. ACTION ITEMS

- 8.a. Resolution expressing appreciation to Denise Collin, CFO upon her retirement. Reso Denise Collin Retirement.pdf
- 8.b. Adopt Resolution fixing a tax rate for Fiscal Year 2020-2021 and authorizing the President of the Board to execute a certificate requesting the Ventura County Board of Supervisors to levy such a tax. Resolution for Tax Rate State Water 2020-2021.pdf Board of Supervisors 2020-2021.pdf
- 8.c. Adopt Resolution to authorize, under Proposition 4, the 2020/2021 Establishment of Appropriations Limit of \$15,034,621. Prop 4 - Memo 2020-2021.pdf Prop 4 - Resolution 2020-2021.pdf Prop 4 - Spending Limits in CA.pdf
- 8.d. Adopt Resolution authorizing the levy of a special tax for fiscal year 2020-2021 for Community Facilities District No. 2013-1 (Ojai). Resolution for CFD 2013-1 (Ojai).pdf
 Exhibit 1 (Special Tax Levy) - Approval (1).pdf
- 8.e. Approve, and Authorize Board President to sign, Agreements with: Michael K. Nunley & Associates, Inc.; Water Works Engineers, LLC; MNS Engineers, Inc.; and Cannon Corporation, for on-call engineering services for Fiscal Year 2020-21.

Board Memo_On-CallEngineeringFY20-21 (2).pdf

- 8.f. Approve, and Authorize Board President to sign, Agreements with: GHD, Inc. and IRJ Engineers, Inc, for on-call electrical engineering services for Fiscal Year 2020-21. Board Memo_On-CallEngineeringFY20-21 (2).pdf
- 8.g. Approve, and Authorize Board President to sign, an Agreement with Rincon Consultants, Inc to provide on-call environmental consulting services for Fiscal Year 2020-21. Board Memo, On CallEngineeringEV20, 21 (2) pdf

Board Memo_On-CallEngineeringFY20-21 (2).pdf

- 8.h. Approve, and Authorize Board President to sign, Agreements with Oakridge Geoscience, Inc and Yeh and Associates, Inc. to provide on-call geotechnical support services for Fiscal Year 2020-21. Board Memo_On-CallEngineeringFY20-21 (2).pdf
- 8.i. Award the contract to Best Drilling and Pump, Inc. for emergency repair of Mutual Well #6 in the amount of \$57,155.00. Board Memo for Mutual Well #6 Repairs 20200624 (1).pdf
- 8.j. Approve the Release of the Draft Comprehensive Water Resources Plan Report for Public Review. BoardMemo_20200624_DraftCWRP.pdf draft_CWRP_June2020_rev01.pdf
- 8.k. Review and Approve Messaging Platform for the Draft Comprehensive Water Resources Plan. BoardMemo_20200624_DraftCWRP_MessagingPlatform.pdf Draft CWRP Message Platform 6.12.2020pm (4).pdf
- 8.I. Recommend approval of a Letter of Support for AB 2182 (Rubio) Emergency Backup Generators: Water and Wastewater Facilities: Exemption. AB 2182 Letter of Support_DRAFT_062420_v2.pdf
- 8.m. Recommend approval of a Letter of Support for H.R. 7073, Special Districts Provide Essential Services Act. HR 7073 Letter of Support DRAFT 062420.pdf
- 9. INFORMATION ITEMS
 - 9.a. Monthly Engineering Report. BoardMemo Eng Report202006.pdf June_2020_8x11.pdf
 - 9.b. Monthly Hydrology Report. Hydrology Report.pdf

- 9.c. Lake Casitas Recreation Area Report for April, 2020. Rec Report4.April.2020 (1) (4).pdf
- 9.d. Recreation Committee Minutes. Rec Minutes 060220.pdf
- 9.e. Special Water Resources Committee Meeting Minutes. Special Water Resources Minutes 060520.pdf
- 9.f. Executive Committee Minutes. Exec Minutes 061220.pdf
- 9.g. Investment Report. Investment Report 06-16-20.pdf
- 10. GENERAL MANAGER COMMENTS
- 11. BOARD OF DIRECTOR REPORTS ON MEETINGS ATTENDED
- 12. BOARD OF DIRECTOR COMMENTS PER GOVERNMENT CODE SECTION 54954.2(a).
- 13. CLOSED SESSION
 - 13.a. CONFERENCE WITH LEGAL COUNSEL EXISTING LITIGATION (Government Code §54956.9(a) Santa Barbara Channelkeeper v. State Water Resources Control Board, City of San Buenaventura, et al.; and City of San Buenaventura v Duncan Abbott, et al., Cross Complaint; Superior Court of the State of California, County of Los Angeles, Case No. 19STCP01176.
- 14. ADJOURNMENT

Minutes of the Casitas Municipal Water District Special Board Meeting Held June 8, 2020

A special meeting of the Board of Directors was held June 8, 2020. The meeting was held via teleconference.

1. CALL TO ORDER

The meeting was called to order by President Baggerly at 10:00 a.m.

2. ROLL CALL

Directors Kaiser, Spandrio, Brennan and Baggerly are present. Also present are General Manager Flood, Assistant General Manager Dyer, Executive Administrator Vieira and Counsel Mathews, CFO Collin, Park Manager Belser.

3. PUBLIC COMMENTS

None

4. ACTION ITEMS

4.a. Recommend approval of a budget for \$30,000 for legal assistance under the current Agreement for Provision of Legal services with Rutan & Tucker, LLP for legal assistance with the proposed Casitas MWD bond measure.

On the motion of Director Brennan, seconded by Director Kaiser, the above recommendation was approved by the following roll call vote:

AYES:	Directors:	Kaiser, Spandrio, Brennan, Baggerly
NOES:	Directors:	None
ABSENT:	Directors:	None

5. DISCUSSION ITEMS

5.a. Discussion of a Casitas policy statement regarding the proposed City of Ventura Adjudication Impact Fee.

Mr. Flood reviewed a possible policy statement for City of Ventura Adjudication Impact Fee. The Board discussed the item and provided additional input to staff.

5.b. Presentation and discussion of the Casitas MWD Fiscal Year 2020-2021 budget.

Mr. Flood provided a presentation on the proposed budget including discussion of revenue, expense, capital projects, balancing the budget, reserves and the recommendation to hold a mid-year budget review. The board had the opportunity to ask questions and provide input. The public hearing for the budget will be held on June 24, 2020.

6. ADJOURNMENT

President Baggerly adjourned the meeting at 11:16 a.m.

Angelo Spandrio, Secretary

Minutes of the Casitas Municipal Water District Board Meeting Held June 10, 2020

A meeting of the Board of Directors was held June 10, 2020. The meeting was held via teleconference.

1. CALL TO ORDER

The meeting was called to order by President Baggerly at 3:00 p.m.

2. ROLL CALL

Directors Spandrio, Brennan and Baggerly are present. Director Kaiser is absent. Also present are General Manager Flood, Assistant General Manager Dyer, Executive Administrator Vieira and Counsel Mathews.

3. Agenda Confirmation

Mr. Flood pulled item 6.b. which will come back to the next meeting.

4. PUBLIC COMMENTS - Presentations on District related items that are not on the agenda - three minute limit.

None

5. CONSENT AGENDA

- 5.a. Approval of the Minutes of the May 27, 2020 Board Meeting.
- 5.b. Recommend Approval of the Accounts Payable Report for 5/14/2020 to 5/27/2020.

Director Spandrio questioned the payment to Nigro & Nigro with CFO Collin explaining that this is the last billing. Director Spandrio then requested that the preliminary audit meeting be conducted with the Finance Committee. Director Spandrio then questioned the voided checks at the end of the report and CFO Collin explained that they have to be voided in the system, stop payments issued and then reissue of the checks.

The Consent Agenda was offered by Director Brennan, seconded by Director Spandrio and approved by the following roll call vote:

AYES:	Directors:	Spandrio, Brennan, Baggerly
NOES:	Directors:	None
ABSENT:	Directors:	Kaiser

6. ACTION ITEMS

6.a. Award a contract for Liquid Oxygen to Matheson Tri-State Gas in the amount not to exceed \$210,679 for Fiscal Year 20-21.

On the motion of Director Spandrio, seconded by Director Brennan, the above recommendation was approved by the following roll call vote:

AYES:	Directors:	Spandrio, Brennan. Baggerly
NOES:	Directors:	None
ABSENT:	Directors:	Kaiser

6.b. Recommend approval of annual On-Call Agreements for Engineering, Environmental and Geo-Technical services with Michael K. Nunley & Associates, Inc., Water Works Engineers, LLC, MNS Engineers, Inc., and Cannon Corporation for FY 20-21.

This item was pulled and will be brought back on the next agenda.

6.c. Approval of a purchase order assigned to Sam Hill and Sons Inc. for emergency pipeline replacement on the Rincon 2M system at Station 37.

On the motion of Director Spandrio, seconded by Director Brennan, the recommendation was approved by the following roll call vote:

AYES:	Directors:	Spandrio, Brennan, Baggerly
NOES:	Directors:	None
ABSENT:	Directors:	Kaiser

7. INFORMATION ITEMS

- 7.a. Special Recreation Committee Minutes.
- 7.b. Executive Committee Minutes.
- 7.c. Finance Committee Minutes.
- 7.d. Water Resources Committee Minutes.
- 7.e. Public Relations Committee Minutes.
- 7.f. Consumption Report for April 2020.
- 7.g. CFD 2013-01 (Ojai) Project Report.
- 7.h. State Water Project Interconnect Project Costs.
- 7.i. Investment Report.

The information items were offered by Director Brennan, seconded by Director Spandrio and approved by the following roll call vote:

AYES: Directors: Spandrio, Brennan, Baggerly

NOES:	Directors:	None
ABSENT:	Directors:	Kaiser

8. GENERAL MANAGER COMMENTS

Mr. Flood suggested cancellation of the Water Resources committee and the Conservation Appeals Panel scheduled for next week. We are looking towards the possibility of camping in the next week. Mr. Flood informed the board that he would be out of the office the week of July 6th. The meetings will continue with AGM Dyer at the helm.

9. BOARD OF DIRECTORS REPORTS ON MEETINGS ATTENDED

Director Brennan reported attendance at the AWA Executive Board meeting.

10. BOARD OF DIRECTOR COMMENTS PER GOVERNMENT CODE SECTION 54954.2(a).

None

President Baggerly moved the meeting to closed session at 3:34 p.m.

11. CLOSED SESSION

13.a. Conference with Labor Negotiators (Government Code Sec. 54957.6) Agency Designated Representative: Julia Aranda Employee Organization: Management.

13.b. CLOSED SESSION – CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION (Government Code Section 54956.9(a) Santa Barbara Channelkeeper v. State Water Resources Control Board, City of San Buenaventura, et al.; and City of San Buenaventura v Duncan Abbott, et al., Cross Complaint; Superior Court of the State of California, County of Los Angeles, Case No. 19STCP01176.

The meeting moved out of closed session at 4:53 p.m. with an announcement that the board met with labor negotiator in item 11.a. and no action was taken. The board also met with special and general counsel on item 11.b. and no action was taken during closed session.

12. ADJOURNMENT

The meeting was adjourned at 4:56 p.m.

Minutes of the Casitas Municipal Water District Special Board Meeting Held March 21, 2020

A special meeting of the Board of Directors was held March 21, 2020. The meeting was held via teleconference. The meeting was called to order by President Baggerly at 9:00 a.m.

1. ROLL CALL

Directors Kaiser, Spandrio, Brennan and Baggerly are present. Also present are General Manager Flood, Assistant General Manager Dyer, Executive Administrator Vieira and Counsel Mathews. Management staff present include CFO Collin, Park Manager Belser, HR Manager Impeartrice, Engineering Manager Aranda, Operations Manager Shields.

2. PUBLIC COMMENTS

None

3. <u>REVIEW AND APPROVE A CASITAS MUNICIPAL WATER DISTRICT</u> <u>EMERGENCY DECLARATION AND ORDERS.</u>

3.a. Review and approval of an Emergency Declaration and Orders.

Mr. Flood explained that we are working flexible schedules this week to restrict contact. We may need to make other changes as this progresses. If we need to send people home all we have for policy right now is to use sick or vacation and time without pay and an additional 96 hours of sick can forwarded. With the unknown extent and how it may impact staff propose we do something different, With consultation with our labor attorney we recommend if an employee is not working and not working from home that they be placed on paid administrative leave so they do not have to take personal time or time without pay that could lead to issues of due process.

Director Kaiser added that is what the Federal agencies are doing. It is important to maintain the chain of command in case one of the managers get sick we still need to be able to operate and carry out the functions of the district.

Director Brennan added the protocols are excellent. Director Baggerly asked if people would still be working in the district building and Mr. Flood answered yes.

Director Spandrio informed the board that he signed a check a few days ago moving \$3 million dollars from the general fund to the AP fund. I would like to hear what the explanation is for the money moving. CFO Collin explained that due to covid-19 and distancing we wanted to front load the AP account so we can continue to pay our bills. We will do a report on what is spent. That covers the next two weeks. State water payment is \$1.5 million. Mr. Flood added this alleviates having to have directors sign checks and anticipates expenditures in the next few weeks.

Mr. Flood added that it is the intention to not have any delinquency or conservation penalties. LCRA is closed to camping with the exception of snowbirds and hosts. We intent to leave it open for day use until otherwise directors or if it becomes unmanageable.

Director Kaiser offered the emergency declaration including the inclusion of a 5% pay differential, this was seconded by Director Spandrio and approved by the following roll call vote:

AYES:	Directors:	Kaiser, Spandrio, Brennan, Baggerly
NOES:	Directors:	None
ABSENT:	Directors:	None

4. <u>ADJOURNMENT</u>

President Baggerly adjourned the meeting at 9:32 a.m.

Angelo Spandrio, Secretary

CASITAS MUNICIPAL WATER DISTRICT Payable Fund Check Authorization Checks Dated 05/28/20-06/10/20 Presented to the Board of Directors For Approval June 24, 2020

Check	Payee		Description	Amount
000967	Payables Fund Account	 9759651478	Accounts Payable Batch 060320	\$787,234.65
000968	Payables Fund Account	9759651478	Accounts Payable Batch 061020	\$359,014.84

\$1,146,249.49

Publication of check register is in compliance with Section 53065.6 of the Government Code which requires the District to disclose reimbursements to employees and/or directors.

The above numbered checks, 000967-000968 have been duly audited is hereby certified as correct.

6/16/2020

Denise Collin, Chief Financial Officer

Signature

Signature

Signature

A/P Fund

Publication of check register is in compliance with Section 53065.6 of the Government Code which requires the District to disclose reimbursements to employees and/or directors.

000967 A/P Checks: A/P Draft to P.E.R.S. A/P Draft to State of CA A/P Draft to I.R.S. Voids: 038751-039056 000000 000000 000000 038806

000968 A/P Checks: A/P Draft to P.E.R.S. A/P Draft to State of CA A/P Draft to I.R.S. Voids:

039091, 039099

039057-039239

6/16/2020 Denise Collin, Chief Financial Officer

Denise Collin, Chief Financial Offi

Signature

Signature

Signature

CERTIFICATION

Payroll disbursements for the pay period ending 05/30/20 Pay Date of 06/04/20 have been duly audited and are hereby certified as correct.

6/1/2020 Signed: inu

Denise Collin

Signed:

Signature

Signed:

Signature

Signed:___

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Signature

6/10/2020 2:06 PM VENDOR SET: 01 Casitas Municipal Water D BANK: * ALL BANKS DATE RANGE: 5/28/2020 THRU 6/10/2020

A/P HISTORY CHECK REPORT

VENDOR	I.D.	NAME		STATUS	CHECK DATE	INVOICE AMOUNT	CHECK DISCOUNT NO	CHECK CHECK STATUS AMOUNT
	C-CHECK C-CHECK C-CHECK	VOID CHECK VOID CHECK VOID CHECK		v v v	6/03/2020 6/10/2020 6/10/2020		038806 039091 039099	
* * RE	T O T A L S * * GULAR CHECKS: HAND CHECKS: DRAFTS: EFT: NON CHECKS:		NO 0 0 0 0			INVOICE AMOUNT 0.00 0.00 0.00 0.00 0.00	DISCOUNTS 0.00 0.00 0.00 0.00 0.00	CHECK AMOUNT 0.00 0.00 0.00 0.00 0.00
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TOTAL	ERRORS: 0							
VEND	OR SET: 01 BANK:	TOTALS :	NO 3			INVOICE AMOUNT 0.00	DISCOUNTS 0.00	CHECK AMOUNT 0.00
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I-SI1534002

I-SI1534012

I-SI1535959

I-1938

02179

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6/03/2020

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Auto Sprinkler Valves - LCRA

Reservation Sys. Hosting/Maint

PVC Cap & 90 Ell - LCRA

Marking Flags - LCRA

Art Street Interactive

INVOICE

386.22

37.56

12.43

542.15

CHECK

CHECK

038756

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436.21

542.15

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VENDOR	I.D.	NAME	STATUS	DATE	AMOUNT	DISCOUNT	NO	STATUS	AMOUNT
00128		INTERNAL REVENUE SERVICE							
	I-T1 202006011712	Federal Withholding	D	6/03/2020	37,820.26		000037		
	I-T3 202006011712	FICA Withholding	D	6/03/2020	40,672.70		000037		
	I-T4 202006011712	Medicare Withholding	D	6/03/2020	9,512.08		000037	81	3,005.04
0187		CALPERS							
	I-PBB202006011712	PERS BUY BACK	D	6/03/2020	130.46		000038		
	I-PBP202006011712	PERS BUY BACK	D	6/03/2020	161.96		000038		
	I-PEB202006011712	PEPRA EMPLOYEES PORTION	D	6/03/2020	9,427.01		000038		
	I-PEM202006011712	PERS EMPLOYEE PORTION MGMT	D	6/03/2020	2,633.52		000038		
	I-PER202006011712	PERS EMPLOYEE PORTION	D	6/03/2020	6,536.01		000038		
	I-PRB202006011712	PEBRA EMPLOYER PORTION	D	6/03/2020	9,755.18		000038		
	I-PRR202006011712	PERS EMPLOYER PORTION	D	6/03/2020	11,368.98		000038	41	0,013.12
0049		STATE OF CALIFORNIA							
	I-T2 202006011712	State Withholding	D	6/03/2020	14,773.18		000039	1.	4,773.18
2587		ASM LAWNMOWER SHOP							
	I-49235	Carring System - LCRA	R	6/03/2020	64.74		038751		64.74
0004		ACWA JOINT POWERS INSURANCE AU							
	I-0646396	Health Insurance 06/20	R	6/03/2020	171,757.81		038752	17	1,757.81
01325		Aflac Worldwide Headquarters							
	I-713063	Supplemental Insurance 05/20	R	6/03/2020	3,659.36		038753	:	3,659.36
00012		ALL-PHASE ELECTRIC SUPPLY CO.							
	1-5665-664628	Alumnium Conduit 1/2 - EM	R	6/03/2020	36.22		038754		
	I-5665-668607	Material For Gorham Well - ENG	R	6/03/2020	336.76		038754		372.98
03044		Amazon Capital Services							
	I-1DG4-G37X-461L	Toner - LCRA	R	6/03/2020	51.44		038755		
	I-1VHH-3W44-6DGH	Monitor & Flash Drives - EM	R	6/03/2020	381.77		038755		
	I-1WXV-LDHD-DGDF	Face Mask - LCRA	R	6/03/2020	45.03		038755		478.24
00014		AQUA-FLO SUPPLY							
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VENDOR SET: 01 Casitas Municipal Water D BANK: AP ACCOUNTS PAYABLE DATE RANGE: 5/28/2020 THRU 6/10/2020

A/P HISTORY CHECK REPORT

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DATE R	ANGE: 5/28/2020 THRU	6/10/2020							
VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK
01666	I-000014810400	AT & T Acct#9391064013	R	6/03/2020	20.75	2 -	038758	9 e .	20.75
03429	I-274255507	AT&T Acct#8310006908483	R	6/03/2020	1,044.17		038759	3	,044.17
04202	I-051820	AT&T Acct#296003321	R	6/03/2020	48.15		038760		48.15
00021	I-06-12541	AWA OF VENTURA COUNTY WaterWise Breakfast 05/21/20	R	6/03/2020	40.00		038761		40.00
00030	I-1900945673 I-1900945674	B&R TOOL AND SUPPLY CO Ear Plugs - UT Tarps - ENG	R R	6/03/2020 6/03/2020	215.48 24.66		038762 038762		240.14
00679	I-S2720368.001	BAKERSFIELD PIPE & SUPPLY INC Meter Parts - PL	R	6/03/2020	100.48		038763		100.48
05143	I-888832 I-888889	Christina Banania Camping Cancellation - COVID19 Camping Cancellation - COVID19		6/03/2020 6/03/2020	456.00 114.00		038764 038764		570.00
05144	I-888170	Hector Bedolla Camping Cancellation - COVID19		6/03/2020	114.00		038765		114.00
05145	I-902678	Eniko Berditchevski Camping Cancellation - COVID19	R	6/03/2020	432.00		038766		432.00
04111	I-BU01213925	Roadpost, Inc. Sat Phone Service - TP	R	6/03/2020	54.80		038767		54.80
03207	I-013902	BMI PacWest Inc. AC Maintenance - LCRA	R	6/03/2020	838.46		038768		838.46
03059	I-BPI51138	Brenntag Pacific Inc. Chlorine for Ojai Sys TP	R	6/03/2020	383.04		038769		383.04
00724	I-043020	BUREAU OF RECLAMATION Ltr Of Agreement 20-WC-20-5649	R	6/03/2020	110,000.00		038770	110	,000.00
00463	I-624603	Cal-Coast Machinery Belt for JD Mower - LCRA	R	6/03/2020	103.98		038771		103.98

6/10/2020 2:06 PM VENDOR SET: 01 Casitas Municipal Water D BANK: AP ACCOUNTS PAYABLE DATE RANGE: 5/28/2020 THRU 6/10/2020

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
05146	1-892227	Ana Casteneda Camping Cancellation - COVID19	R	6/03/2020	198.00		038772		198.00
	1 Office /	camping cancertacion covidio	24	07 057 2020	130.00		030772		138.00
01843		COASTAL COPY							
	I-907704	Copier Usage - LCRA	R	6/03/2020	146.84		038773		146.84
05147		John Collins							
	I-884467	Camping Cancellation - COVID19	R	6/03/2020	144.00		038774		
	I-884626	Camping Cancellation - COVID19	R	6/03/2020	144.00		038774		288.00
03035		Community Memorial Hospital/Sa							
	I-102819	Drug Test - DOS 10/28/19	R	6/03/2020	68.35		038775		68.35
01764		DataProse, LLC							
	I-DP2001969	UB Mailing 04/20	R	6/03/2020	3,468.31		038776	2	3,468.31
		HOM THE PARTY							
00076		DEKREEK TECHNICAL SERVICES	47					199	
	I-7005-2	OWS/CMWD SCADA Mods - EM	R	6/03/2020	18,948.00		038777	16	8,948.00
00740		DELL MARKETING L.P.							
00.10	I-10397288421	Laptop - ADM	R	6/03/2020	1,131.37		038778	1	1,131.37
		- and the second							,
05148		Debbie DeSoto							
	I-889222	Camping Cancellation - COVID19	R	6/03/2020	370.00		038779		370.00
00662		Diamond A Equipment							
00001	I-P40784	Bush & Collar Thrust -Unit 277	R	6/03/2020	47.12		038780		
	I-P40981	Seal, Oil - LCRA	R	6/03/2020	12.35		038780		59.47
									10 KG 10 KG
03910		DoiT International USA, INC							
	I-IN204000904	Google Apps 05/20	R	6/03/2020	1,464.00		038781	1	1,464.00
00086		E.J. Harrison & Sons Inc							
00000	1-5568	Acct#1C00054230	R	6/03/2020	455.00		038782		455.00
				-,,					
00095		FAMCON PIPE & SUPPLY		e-née tren					
	I-S100023464.002	Storage Tank & Fittings - ENG	R	6/03/2020	7,550.40		038783		
	I-S100028261.001	Airvac Valve & Muller ValveENG		6/03/2020	2,477.48		038783		
	I-S100028532.001	4" Cla-Val - PL	R	6/03/2020	4,499.14		038783		
	I-S100028775.001	Bolts, Nuts & Washers - PL	R	6/03/2020	368.94		038783		
	I-S100029135.001	Valve Box & Airvac can - ENG	R	6/03/2020	525.53		038783		
	I-S100029202.001	Bolt, Nut & Gaskets - ENG	R	6/03/2020	62.74		038783		
	I-S100029272.001	1/2 Ball Valves - PL	R	6/03/2020	128.70		038783	1!	5,612.93

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE Amount	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
04858	I-021480	Fiona Hutton & Associates, Inc PR Consulting Services - PR	R	6/03/2020	19,685.94		038784	19	9,685.94
00104	I-124666	FRED'S TIRE MAN Battery - Unit 23	R	6/03/2020	176.53		038785		176.53
00106	I-F0258966	FRONTIER PAINT Paint for Filters - TP	R	6/03/2020	207.01		038786		207.01
05149	I-902787	Rebeka Garcia Camping Cancellation - COVID19	R	6/03/2020	342.00		038787		342.00
02720	I-10561875	Garda CL West, Inc. Armored Tuck Service	R	6/03/2020	305.56		038788		305.56
04467	I-060220	General Pump Company, Inc. San Antonio Well #4 Rehab- ENG	R	6/03/2020	18,453.75		038789	18	3,453.75
04634	1-142761	GHD Inc DO Electrical - ENG	R	6/03/2020	1,773.75		038790	1	1,773.75
00115	I-9537624612	GRAINGER, INC Mini Switch - LCRA	R	6/03/2020	4.67		038791		4.67
00121	I-11971146	HACH COMPANY Buffer Kit - TP	R	6/03/2020	159.05		038792		159.05
04730	I-202	Hildebrand Consulting, LLC Water Cost Rate Study - MGMT	R	6/03/2020	3,360.00		038793	з	3,360.00
00596	1-4452319	HOME DEPOT Royal Brown Aluminum - LCRA	R	6/03/2020	11.90		038794		11.90
01177	I-316015162	ICON SAFETY COMPANY INC. Oxigen Sensor - EM	R	6/03/2020	184.67		038795		184.67
02565	I-INV-1588329	Industrial Networking Solution PLC & SCADA Hardware - TP	R	6/03/2020	3,081.38		038796	З	3,081.38
02344	I-38048A	Janitek Cleaning Solutions Janitorial Service - Do	R	6/03/2020	2,123.67		038797	2	2,123.67
00131	I-821992	JCI JONES CHEMICALS, INC Chloring - TP, CM 822097	R	6/03/2020	1,650.00		038798	1	L,650.00

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
02808		Jess Ranch Fish Hatchery	-	6/03/2020	12,750.00		038799	1.	2,750.00
	I-2166	Triploid Trout - LCRA	R	6/03/2020	12,750.00		030799		2,730.00
03596		Margaret Kearns							
	I-884458	Camping Cancellation - COVID19		6/03/2020	288.00		038800		
	I-884480	Camping Cancellation - COVID19	R	6/03/2020	144.00		038800		432.00
05150		John Kinnear							
(C1 E 27)	I-883945	Camping Cancellation - COVID19	R	6/03/2020	189.00		038801		189.00
00329		MCMASTER-CARR SUPPLY CO.							
	I-40238518	Fire Hose Fittings - EM	R	6/03/2020	164.95		038802		164.95
04689		MDJ Management							
	I-CAS 1002.1	San Antonio Building Rehab-ENG	R	6/03/2020	18,941.77		038803		
	I-CAS 1003.1	CMU Wall Replacement - PL	R	6/03/2020	5,857.61		038803	2	4,799.38
02129		Tracy Medeiros							
	I-052920	1102wc180000001 05/18-05/29	R	6/03/2020	2,129.42		038804		2,129.42
00151		MEINERS OAKS ACE HARDWARE							
00101	1-925391	Elbow PVC & Conduit - ENG	R	6/03/2020	25.33		038805		
	1-925508	Metal Screws - LCRA	R	6/03/2020	18.76		038805		
	1-925545	Base & Deck Sprayer - WP	R	6/03/2020	114.79		038805		
	1-925620	All Thread & Nut Box - LCRA	R	6/03/2020	75.54		038805		93
	I-925621	Cement - LCRA	R	6/03/2020	56.03		038805		
	I-925631	Single Cut Key - TP	R	6/03/2020	16.46		038805		
	I-925636	Rust Prevention - LCRA	R	6/03/2020	10.12		038805		
	1-925680	Ball Valve & Couple - ENG	R	6/03/2020	49.72		038805		
	I-925683	PVV Pipe - ENG	R	6/03/2020	32.60		038805		
	I-925722	Tape & Sprinkler Head - LCRA	R	6/03/2020	44.47		038805		
	I-925797	Elbow & Nipple Galv LCRA	R	6/03/2020	51.68		038805		
	I-925894	Spray Paint & Concrete - LCRA	R	6/03/2020	72.82		038805		
	I-925905	Bolts & Screws - LCRA	R	6/03/2020	62.36		038805		
	I-925946	Paint, Paint Brush & Tape - TP		6/03/2020	69.84		038805		
	I-926147	Sprinkler Heads - LCRA	R	6/03/2020	65.54		038805		
	I-926218	Fittings, Bolts & Screws-LCRA	R	6/03/2020	48.65		038805		
	I-926221	Insecticides & Spray Paint -TP	R	6/03/2020	14.61		038805		
	I-926278	Wire Connect - LCRA	R	6/03/2020	9.74		038805		
	I-926362	Pine Screen - LCRA	R	6/03/2020	19.79		038805		
	I-926446	Toilete Tank & Concrete - LCRA		6/03/2020	53.82		038805		
	I-926550	Pilers & Nylon Rope - LCRA	R	6/03/2020	18.52		038805		
	1-926563	Dry Concrete - LCRA	R	6/03/2020	29.54		038805		
	I-926625	Bar & Chain Oil - LCRA	R	6/03/2020	29.99		038805		990.72
		¥1							

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK	
03444		Mission Linen Supply								
	I-512565911	Uniform Pants - PL	R	6/03/2020	28.71		038807			
	I-512565912	Uniform Pants - MAINT	R	6/03/2020	27.00		038807			
	I-512565913	Uniform Pants - UT	R	6/03/2020	28.56		038807			
	I-512565915	Uniform Pants - TP	R	6/03/2020	35.98		038807		120.25	
03701		MNS Engineers, Inc.								
0.0702	1-74371	Canada & Emily PL - ENG	R	6/03/2020	000 50					
	1-75170	Wellfield Pipe Replace - ENG	R		202.50		038808			
	I-75171			6/03/2020	4,312.50		038808			
	I-75171 I-75172	Rincon PP Relocated Design - E	R	6/03/2020	4,160.00		038808			
		Canada & Emily PL - ENG	R	6/03/2020	2,215.00		038808			
	1-75173	12" Main Replace - ENG	R	6/03/2020	529.81		038808			
	I-75174	Groham Well #1 Design - ENG	R	6/03/2020	1,842.88		038808			
	1-75175	Plesant Daly Design Serv - ENG	R	6/03/2020	5,960.00		038808			
	I-75176	LCRA Sewer Implementation -ENG	R	6/03/2020	8,062.50		038808			
	I-75177	Santa Ana Bridge Design - ENG	R	6/03/2020	8,133.75		038808			
	I-75178	Robles Permits - ENG	R	6/03/2020	4,277.50		038808	39	9,696.44	
02792		OEO Energy Solutions								
	I-27138	Ez LED Ho-D-P-5K - TP	R	6/03/2020	1,766.72		038809	3	1,766.72	
00163		OFFICE DEPOT								
	I-498971900001	Filing Cabinet - TP	R	6/03/2020	288.13		038810		288.13	
00625		OfficeTeam								
0002.0	I-55861447	Water Quality Temp - 5/19-5/22	R	6/03/2020	594.00		038811		594.00	
00165		OTAT LIBRED CO TNO					transfer a			
00105	I-2005-974728	OJAI LUMBER CO, INC	-	c 100 10000						
		Gorham Well VFD Lumber - ENG	R	6/03/2020	558,72		038812			
	I-2005-976070	Plywood & Douglas Fir - WP	R	6/03/2020	49.86		038812		608.58	
00168		OJAI VALLEY NEWS								
	I-300036112	AD 05/29/20	R	6/03/2020	150.00		038813		150.00	
05155		Plaza Locksmith Inc								
00100	I-44394	Rekey Locks at SA Plant -MAINT	R	6/03/2000	506 11					
	7-44024	Rekey LOCKS at SA FIANT -MAINT	R	6/03/2020	506.41		038814		506.41	
02833		Praxair, Inc								
	I-96815532	Liquid Oxigen - TP	R	6/03/2020	2,383.16		038815	2	2,383.16	
02756		SC Fuels								
	I-1632846-IN	Gas & Diesel - LCRA	R	6/03/2020	2,347.91		038816	2	2,347.91	

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VENDOR	I.D.	NAME	status	CHECK DATE	INVOICE Amount	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
05151	I-884486	Aly Shoji Camping Cancellation - COVID19	R	6/03/2020	207.00		038817		207.00
00872	I-6540a	Smart Rain Weather Station Signal	R	6/03/2020	79.00		038818		79.00
00608	I-3585261	SMITH PIPE & SUPPLY INC. Roundup Pro Max - LCRA	R	6/03/2020	560.30		038819		560.30
00215	I-052920	SOUTHERN CALIFORNIA EDISON Acct#2210507034	R	6/03/2020	17,274.12		038820		
	I-053020	Acct#2210503702	R	6/03/2020	2,597.89		038820	19	,872.01
02202	I-328609	Stanley Pest Control Squirrel Control - LCRA	R	6/03/2020	850.00		038821		850.00
02643	I-10880590	Take Care by WageWorks Reimburse Med/Dep Care	R	6/03/2020	4.94		038822		4.94
00317	I-060220	TIERRA CONTRACTING INC Vta St. Water Line Replace-ENG	R	6/03/2020	12,082.99		038823	12	,082.99
02527	I-34477	Traffic Technologies LLC Stop/Slow Paddles - UT	R	6/03/2020	317.54		038824		317.54
00225		UNDERGROUND SERVICE ALERT							
	I-520200095 I-dsb20192598	CASO1 New Ticket Charges Regulatory Costs - ENG	R R	6/03/2020 6/03/2020	303.70 157.24		038825 038825		460.94
05152	I-901021	Agueda Vargas Camping Cancellation - COVID19	R	6/03/2020	342.00		038826		342.00
00254	I-521202011M	VENTURA LOCKSMITHS Duplicate Key - LCRA	R	6/03/2020	62.50		038827		62.50
00257		VENTURA RIVER WATER DISTRICT		.,,	01.00		050027		02.50
00207	I-053120a I-053120b	Acct#05-37500A Acct#03-50100A	R R	6/03/2020 6/03/2020	118.08 10.00		038828 038828		128.08
09955		VENTURA WHOLESALE ELECTRIC							
	I-252681 I-256925	Cord for V1M Radio - EM Camp Pedestal Repairs - LCRA	R R	6/03/2020 6/03/2020	97.78 110.64		038829		208.42
		Mar 1993 - Solor State States Street States	072791744						and of the A contract

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK	CHECK STATUS	CHECK AMOUNT
05153	I-899201	David Villaneda Camping Cancellation - COVID19	R	6/03/2020	114.00		038830		114.00
02854	I-10384 I-10635	Water Works Engineers, LLC VTA/CARP Intertie - ENG VTA/CARP Intertie - ENG	R R	6/03/2020 6/03/2020	39,995.68 10,853.63		038831 038831	50	0,849.31
01830	I-4006 50813	WATERTRAX USA Watertrax for Casitas SysLAB	R	6/03/2020	6,263.70		038832		6,263.70
05028	I-W0E1426	Weck Analytical Environmental Stage 2 DBP Sampling - LAB	R	6/03/2020	650.00		038833		650.00
03124	I-884813 I-884827	Farshad Abdoh Camping Cancellation - COVID19 Camping Cancellation - COVID19	R R	6/03/2020 6/03/2020	144.00 144.00		038834 038834		288.00
05214	I-888947	Age Abellera Camping Cancellation - COVID19	R	6/03/2020	99.00		038835		99.00
05191	I-888124	Karen Adair Camping Cancellation - COVID19	R	6/03/2020	137.00		038836		137.00
03616	I-885600a	Laura Addison Camping Cancellation - COVID19	R	6/03/2020	180.00		038837		180.00
05196	I-892765	Deborah Allen Camping Cancellation - COVID19	R	6/03/2020	123.00		038838	¢.	123.00
05260	I-895318	John Amaki Camping Cancellation - COVID19	R	6/03/2020	109.00		038839		109.00
04641	I-884736	Wade Anderson Camping Cancellation - COVID19	R	6/03/2020	414.00		038840		414.00
05409	I-884668 I-890163	Maria Argueta Camping Cancellation - COVID19 Camping Cancellation - COVID19		6/03/2020 6/03/2020	114.00 114.00		038841 038841		228.00
05382	I-884860	Hani Ayoub Camping Cancellation - COVID19	R	6/03/2020	267.00		038842		267.00
05344	I-887316	Ociel Bahena Camping Cancellation - COVID19	R	6/03/2020	144.00		038843		144.00

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT	
05184	I-886131	Nancy Barr Camping Cancellation - COVID19	R	6/03/2020	213.00		038844		213.00	
05178	I-892062	Valerie Barroso Camping Cancellation - COVID19	R	6/03/2020	99.00		038845		99.00	
05190	I-887997	Patricia Baughn Camping Cancellation - COVID19	R	6/03/2020	137.00		038846		137.00	
05343	I-887482	Pedro Bautista Camping Cancellation - COVID19	R	6/03/2020	144.00		038847		144.00	
03618	I-886532	Valerie Berry Camping Cancellation - COVID19	R	6/03/2020	137.00		038848		137.00	
03127	I-898383 I-898390	Belinda Betancourt Camping Cancellation - COVID19 Camping Cancellation - COVID19	R R	6/03/2020 6/03/2020	297.00 432.00		038849 038849		729.00	
05179	I-885998	Boccali Vineyards Camping Cancellation - COVID19	R	6/03/2020	762.00		038850		762.00	
05171	I-895150	Linda Boecker Camping Cancellation - COVID19	R	6/03/2020	99.00		038851		99.00	
05351	I-899828	Silvestre Bogarin Camping Cancellation - COVID19	R	6/03/2020	114.00		038852		114.00	
04646	I-904187	Stephen Brackley Camping Cancellation - COVID19	R	6/03/2020	369.00		038853		369.00	
05380	1-885970	Steven Bragunier Camping Cancellation - COVID19	R	6/03/2020	207.00		038854		207.00	
03512	I-898622	Sheila Brohammer Camping Cancellation - COVID19	R	6/03/2020	441.00		038855		441.00	
05336	1-904725	Matt Brown Camping Cancellation - COVID19	R	6/03/2020	310.00		038856		310.00	
05325	I-884549	Sharon Brown Camping Cancellation - COVID19	R	6/03/2020	3,062.00		038857		3,062.00	

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
05392	I-886411	Jerry Bryant Camping Cancellation - COVID19	R	6/03/2020	364.00		038858		364.00
05418	I-901865	Kristen Busch Camping Cancellation - COVID19	R	6/03/2020	201.00		038859		201.00
05128	I-894718	Aurelio Cabal Camping Cancellation - COVID19	R	6/03/2020	114.00		038860		114.00
05272	I-901847 I-901872	Oscard Canchola Camping Cancellation - COVID19 Camping Cancellation - COVID19	R	6/03/2020 6/03/2020	198.00 99.00		038861 038861		297.00
05339	I-897660	Genevieve Cardona Camping Cancellation - COVID19	R	6/03/2020	169.00		038862		169.00
05415	I-896350	Benito Carrasco Camping Cancellation - COVID19	R	6/03/2020	114.00		038863		114.00
04396	I-884657	Lupe Carrillo Camping Cancellation - COVID19	R	6/03/2020	342.00		038864		342.00
05340	I-888661	Darlene Carson Camping Cancellation - COVID19	R	6/03/2020	288.00		038865		288.00
05365	I-899999	Carolina Caruso Camping Cancellation - COVID19	R	6/03/2020	141.00		038866		141.00
05379	I-884802	Patricia Chamrerkchang Camping Cancellation - COVID19	R	6/03/2020	348.00		038867		348.00
05261	I-892403	Mera Chaney Camping Cancellation - COVID19	R	6/03/2020	261.00		038868		261.00
05377	I-889866	Wendy Chen Camping Cancellation - COVID19	R	6/03/2020	684.00		038869		684.00
05274	I-895636	Catherine Chien Camping Cancellation - COVID19	R	6/03/2020	141.00		038870		141.00
05267	I-899636	Bryan Clar Camping Cancellation - COVID19	R	6/03/2020	79.00		038871		79.00

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
05313	I-886586	Jaclyn Copeland Camping Cancellation - COVID19	R	6/03/2020	340.00		038872		340.00
05161	I-896848	Lindsay Costello Camping Cancellation - COVID19	R	6/03/2020	79.00		038873		79.00
05345	I-884994	Mariela Covarrubias Camping Cancellation - COVID19	R	6/03/2020	228.00		038874		228.00
05182	I-892603	Glenn Cox Camping Cancellation - COVID19	R	6/03/2020	123.00		038875		123.00
05198	I-887321	Alan Crooks Camping Cancellation - COVID19	R	6/03/2020	109.00		038876		109.00
03585	I-885583	Deirdre Cutting Camping Cancellation - COVID19	R	6/03/2020	531.00		038877		531.00
05373	I-892627	Curtis Dawson Camping Cancellation - COVID19	R	6/03/2020	228.00		038878		228.00
05164	I-888929	Fulvio De la Fuente Camping Cancellation - COVID19	R	6/03/2020	141.00		038879		141.00
05275	I-899995	Marcela De Pablo Camping Cancellation - COVID19	R	6/03/2020	79.00		038880		79.00
05270	I-903381	David Delgado Camping Cancellation - COVID19	R	6/03/2020	297.00		038881		297.00
05160	I-892401	Daniel Diggs Camping Cancellation - COVID19	R	6/03/2020	141.00		038882		141.00
05192	I-894038	Brian Dolan Camping Cancellation - COVID19	R	6/03/2020	137.00		038883		137.00
05403	I-901277	Grace Dominguez Camping Cancellation - COVID19	R	6/03/2020	456.00	2	038884		456.00
05420	I-898833	Lupe Dominguez Camping Cancellation - COVID19	R	6/03/2020					
05279		Yolanda Douglas		21, 27, 22, 25, 25, 25, 25, 25, 25, 25, 25, 25	144.00		038885		144.00
	I-892435	Camping Cancellation - COVID19	R	6/03/2020	261.00		038886		261.00

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK	CHECK STATUS	CHECK
05289	I-886692	Deborah Downey Camping Cancellation - COVID19	R	6/03/2020	546.00		038887		546.00
05180	I-895399	Susan Dragoo Camping Cancellation - COVID19	R	6/03/2020	99.00		038888		99.00
05254	I-884497	Linwood Ellis Camping Cancellation - COVID19	R	6/03/2020	1,140.00		038889	1,	,140.00
05185	I-900276	Paul Elstein Camping Cancellation - COVID19	R	6/03/2020	79.00		038890		79.00
05337	I-904492	Randy Elwell Camping Cancellation - COVID19	R	6/03/2020	231.00		038891		231.00
05277	I-886697	Rachel Escobar Camping Cancellation - COVID19	R	6/03/2020	114.00		038892		114.00
03764	I-885399	Ignacio Fernandez Camping Cancellation - COVID19	R	6/03/2020	114.00		038893		114.00
05163	I-897035	Emily Flamenco Camping Cancellation - COVID19	R	6/03/2020	109.00		038894		109.00
05416	I-890394	Jessica Flores Camping Cancellation - COVID19	R	6/03/2020	228.00		038895		228.00
05258	I-899494 I-899500	Leslie Flores Camping Cancellation - COVID19 Camping Cancellation - COVID19	R	6/03/2020 6/03/2020	395.00 79.00		038896 038896		12 - 17
	I-899671	Camping Cancellation - COVID19	R	6/03/2020	79.00		038896		553.00
05253	I-889287	Margaret Flores Camping Cancellation - COVID19	R	6/03/2020	144.00		038897		144.00
05202	I-905012	Anthony Foli Camping Cancellation - COVID19	R	6/03/2020	158.00		038898		158.00
05276	I-896146	Lataisha Ford Camping Cancellation - COVID19	R	6/03/2020	119.00		038899		119.00
04274	I-885473a	Brandon Fuchs Camping Cancellation - COVID19	R	6/03/2020	284.00		038900		284.00

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VENDOR SET: 01 Casitas Municipal Water D BANK: AP ACCOUNTS PAYABLE

DATE RANGE: 5/28/2020 THRU 6/10/2020

VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO		CHECK
05204	I-904979	Lisa Gadsby Camping Cancellation - COVID19	R	6/03/2020	90.00		038901	٤	90.00
05201	I-886154	Laura Galvan Camping Cancellation - COVID19	R	6/03/2020	783.00		038902	78	33.00
05158	1-900130	Dan Gamble Camping Cancellation - COVID19	R	6/03/2020	141.00		038903	14	41.00
05266	I-894331	Margaret Garcia Camping Cancellation - COVID19	R	6/03/2020	1,584.00		038904	1,58	34.00
05263	1-887514	Leny Gerrie Camping Cancellation - COVID19	R	6/03/2020	141.00		038905	14	11.00
05330	I-884420 I-884422	Alfred Gibbs Camping Cancellation - COVID19 Camping Cancellation - COVID19	R R	6/03/2020 6/03/2020	414.00 414.00		038906		
05407	1-884725	Mark Gibson Camping Cancellation - COVID19	R	6/03/2020	144.00		038906		28.00
05177	1-897038	Clara Gonzalez Camping Cancellation - COVID19	R	6/03/2020	109.00				14.00
05414	1-884808	Manuel Gonzalez					038908	10	09.00
19942	1-895354	Camping Cancellation - COVID19 Camping Cancellation - COVID19	R R	6/03/2020 6/03/2020	228.00 114.00		038909 038909	34	12.00
05386	I-900363	Mike Gonzalez Camping Cancellation - COVID19	R	6/03/2020	141.00		038910	14	1.00
05165	I-899442	Jerry Graham Camping Cancellation - COVID19	R	6/03/2020	141.00		038911	14	11.00
05419	1-892806	Amanda Granados Camping Cancellation - COVID19	R	6/03/2020	114.00		038912	13	L4.00
05413	I-889109	Adrian Gutierrez Camping Cancellation - COVID19	R	6/03/2020	342.00		038913	34	12.00
05390	I-901033	Alfredo Gutierrez Camping Cancellation - COVID19	R	6/03/2020	174.00		038914	17	74.00

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VENDOR SET: 01 Casitas Municipal Water D BANK: AP ACCOUNTS PAYABLE DATE RANGE: 5/28/2020 THRU 6/10/2020

VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK
05181	I-895678	Juan Gutierrez Camping Cancellation - COVID19	R	6/03/2020	198.00		038915		198.00
05328	I-888561	Andy Handall Camping Cancellation - COVID19	R	6/03/2020	114.00		038916		114.00
05195	I-887990	Crystal Handberg Camping Cancellation - COVID19	R	6/03/2020	137.00		038917		137.00
04143	I-893983	Drew Haney Camping Cancellation - COVID19	R	6/03/2020	141.00		038918		141.00
05157	I-885579	Bryan Hannah Camping Cancellation - COVID19	R	6/03/2020	569.00		038919		569.00
05346	I-899041	Troy Hart Camping Cancellation - COVID19	R	6/03/2020	228.00		038920		228.00
05367	I-901285	Christy Haskell Camping Cancellation - COVID19	R	6/03/2020	114.00		038921		114.00
05375	I-884590	Lynn Hayes Camping Cancellation - COVID19	R	6/03/2020	114.00		038922		114.00
05168	I-893747	John Hellman Camping Cancellation - COVID19	R	6/03/2020	109.00		038923		109.00
05169	I-902072 I-902920	Elena Hernandez Camping Cancellation - COVID19 Camping Cancellation - COVID19	R R	6/03/2020 6/03/2020	402.00 338.00		038924 038924		740.00
05381	I-884862	Shirley Herrera Camping Cancellation - COVID19	R	6/03/2020	534.00		038925		534.00
05368	1-902271	Angela Inferrera Camping Cancellation - COVID19	R	6/03/2020	228.00		038926		228.00
05388	I-884476	Toya Jackson Camping Cancellation - COVID19	R	6/03/2020	267.00		038927		267.00
04144	I-889349	Katrina Jacobsen Camping Cancellation - COVID19	R	6/03/2020	261.00		038928		261.00

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VENDOR SET: 01 Casitas Municipal Water D BANK: AP ACCOUNTS PAYABLE DATE RANGE: 5/28/2020 THRU 6/10/2020

	VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
	05364	1-895423	Nyoki Johnson Camping Cancellation - COVID19	R	6/03/2020	201.00		038929		201.00
	04655	I-901400 I-901406	Ange Johnston Camping Cancellation - COVID19 Camping Cancellation - COVID19	R R	6/03/2020 6/03/2020	194.00 136.00		038930 038930		330.00
×	05394	I-900098	Rudy Juarez Camping Cancellation - COVID19	R	6/03/2020	606.00		038931		606.00
	05369	I-901701	Christine Jurado Camping Cancellation - COVID19	R	6/03/2020	114.00		038932		114.00
	04030	I-886243	Lee Kammrad Camping Cancellation - COVID19	R	6/03/2020	175.00		038933		175.00
	05422	I-892758	Vic Kan Camping Cancellation - COVID19	R	6/03/2020	228.00		038934		228.00
	04145	I-885589	Mike Kapp Camping Cancellation - COVID19	R	6/03/2020	531.00		038935		531.00
	04184	I-886292	Darrell Kays Camping Cancellation - COVID19	R	6/03/2020	783.00		038936		783.00
	04115	I-8920143	John Kazemi Camping Cancellation - COVID19 Ryan Kennedy	R	6/03/2020	237.00		038937		237.00
	05194	I-884837	Camping Cancellation - COVID19 Aaron Kirkland	R	6/03/2020	822.00		038938		822.00
	05193	I-892365	Camping Cancellation - COVID19	R	6/03/2020	137.00		038939		137.00
	05370	I-888002	Tracy Klock Camping Cancellation - COVID19	R	6/03/2020	137.00		038940		137.00
	02373	I-892975	Chelsie Kluckow Camping Cancellation - COVID19 Jill Kramer	R	6/03/2020	114.00		038941		114.00
	~~ <i>~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~</i>	I-887971 I-887976	Camping Cancellation - COVID19 Camping Cancellation - COVID19	R R	6/03/2020 6/03/2020	137.00 274.00		038942 038942		411.00

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VENDOR SET: 01 Casitas Municipal Water D BANK: AP ACCOUNTS PAYABLE

DATE RANGE: 5/28/2020 THRU 6/10/2020

VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK	CHECK STATUS	CHECK AMOUNT
05406	I-884416	Russell Laubacher Camping Cancellation - COVID19	R	6/03/2020	114.00		038943		114.00
05348	1-901231	Heeeun Lee Camping Cancellation - COVID19	R	6/03/2020	114.00		038944		114.00
05335	I-884435	Art Lesebereg Camping Cancellation - COVID19	R	6/03/2020	720.00		038945		720.00
05385	I-901756	Matthew Lindsey Camping Cancellation - COVID19	R	6/03/2020	261.00		038946		261.00
05412	1-889259	Aldien Liu Camping Cancellation - COVID19	R	6/03/2020	141.00		038947		141.00
05383	I-884538	Guadalupe Lucio Camping Cancellation - COVID19	R	6/03/2020	207.00		038948		207.00
03082	I-893464	Teri Mabry Camping Cancellation - COVID19	R	6/03/2020	201.00		038949		201.00
03892	I-884450	Brandi Macias Camping Cancellation - COVID19	R	6/03/2020	414.00		038950		414.00
05331	I-884518 I-884610	Jose Macias Camping Cancellation - COVID19 Camping Cancellation - COVID19	R R	6/03/2020 6/03/2020	828.00 870,00		038951 038951	1	,698.00
05326	I-896696	Diane Macintyre Camping Cancellation - COVID19	R	6/03/2020	114.00		038952		114.00
05156	I-897614	Julia Mack Camping Cancellation - COVID19	R	6/03/2020	79.00		038953		79.00
05423	I-884414	Ernest Maestas Camping Cancellation - COVID19	R	6/03/2020	144.00		038954		144.00
05349	I-884643	Renee Malabanan Camping Cancellation - COVID19	R	6/03/2020	114.00		038955		114.00
05362	I-884739	Sara Maldonado Camping Cancellation - COVID19	R	6/03/2020	228.00		038956		228.00

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VENDOF	RI.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK
04809		Irene Martinez							100000112
	I-884881	Camping Cancellation - COVID1	9 R	6/03/2020	114.00		038957		114.00
05395		Carlos Mayorquin							
	I-894136	Camping Cancellation - COVID1	9 R	6/03/2020	342.00				
	I-894954	Camping Cancellation - COVID1	9 R	6/03/2020	114.00		038958 038958		456.00
05405		Chris McClendon							300.00
	I-884582	Camping Cancellation - COVID1	9 R	6/03/2020	114.00		038959		114.00
3894		Diane McDonald					036333		114.00
	I-885793	Camping Cancellation - COVID1	9 R	6/03/2020	207.00		000000		
5265				0,00,2020	207.00		038960		207.00
00200	I-895312	Sydney McGill Camping Cancellation - COVID1	9 R	6/03/2020	100 00				
5207			~ ~	0/03/2020	123.00		038961		123.00
5397	1-900415	Jason McKnelly	-						
		Camping Cancellation - COVID1	9 R	6/03/2020	144.00		038962		144.00
5159	1-900390	Charles McNeil							
	1-900330	Camping Cancellation - COVID1	9 R	6/03/2020	109.00		038963		109.00
5372		Mario Mendez							
	I-892957	Camping Cancellation - COVID1	R	6/03/2020	114.00		038964		114.00
5256		David Mesa							
	I-893162	Camping Cancellation - COVID1	R	6/03/2020	99.00		038965		99.00
5269		Julius Miller							33.00
	I-901255	Camping Cancellation - COVID19	R	6/03/2020	114.00		038966		114 00
)5199		Kristin Miller					030900		114.00
	I-888307	Camping Cancellation - COVID19	R	6/03/2020	137.00				
5338			. 1/	0/03/2020	137.00		038967		137.00
15338	I-889898	Rachelle Montoya Camping Cancellation - COVID19	_						
		camping cancertation - covidis	R	6/03/2020	207.00		038968		207.00
5334		Marla Moss							
	I-884985	Camping Cancellation - COVID19	R	6/03/2020	502.00		038969		502.00
5352		Angelica Navarro							
	T-QQEQQE	G							

Camping Cancellation - COVID19 R

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Casitas Municipal Water D VENDOR SET: 01 AP ACCOUNTS PAYABLE BANK: DATE RANGE: 5/28/2020 THRU 6/10/2020

VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT
05167	I-887967	Kim Nowinski Camping Cancellation - COVID19	R	6/03/2020	79.00
05183	I-890128	John Oconnor Camping Cancellation - COVID19	R	6/03/2020	603.00
05374	I-884655	Leith Oleary Camping Cancellation - COVID19	R	6/03/2020	114.00
05354		Dawn Ott	Ð	6/03/2020	99.00

05183	I-890128	John Oconnor Camping Cancellation - COVID19	R	6/03/2020	603.00	038972	603.00
05374	I-884655	Leith Oleary Camping Cancellation - COVID19	R	6/03/2020	114.00	038973	114.00
05354	1-901103	Dawn Ott Camping Cancellation - COVID19	R	6/03/2020	99.00	038974	99.00
05206	I-896030	Shlomit Ovadia Camping Cancellation - COVID19	R	6/03/2020	790.00	038975	790.00
05173	I-898272	Jeanette Page Camping Cancellation - COVID19	R	6/03/2020	137.00	038976	137.00
05342	I-886011	Maria Palafox Camping Cancellation - COVID19	R	6/03/2020	288.00	038977	288.00
05203	I-905099	No Min Park Camping Cancellation - COVID19	R	6/03/2020	324,00	038978	324.00
05255	I-885332	Kathy Patton Camping Cancellation - COVID19	R	6/03/2020	790.00	038979	790.00
05257	I-893602	Adriana Pech Camping Cancellation - COVID19	R	6/03/2020	570.00	038980	570.00
05359	I-885392	Carlie Peisley Camping Cancellation - COVID19	R	6/03/2020	109.00	038981	109.00
05358	I-888526	Kara Petry Camping Cancellation - COVID19	R	6/03/2020	114.00	038982	114.00
05268	I-886664 I-886685	Arnecia Polanco Camping Cancellation - COVID19 Camping Cancellation - COVID19	R R	6/03/2020 6/03/2020	1,370.00 274.00	038983 038983	1,644.00
05371	1-886347	Jeff Ragusa Camping Cancellation - COVID19	R	6/03/2020	1,930.00	038984	1,930.00

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK	CHECK STATUS	CHECK
05391	I-887125	Alfredo Ramirez Camping Cancellation - COVID19	R	6/03/2020	728.00		038985		728.00
05186	I-891659	Jose Ramirez Camping Cancellation - COVID19	R	6/03/2020	109.00		038986		109.00
05208	I-896941	Maribel Ramirez Camping Cancellation - COVID19	R	6/03/2020	790.00		038987		790.00
05357	I-900263	Jason Ramos Camping Cancellation - COVID19	R	6/03/2020	114.00		038988		114.00
05384	I-901719	Ashley Ramsey Camping Cancellation - COVID19	R	6/03/2020	381.00		038989		381.00
05402	I-895326	Matt Rauchberg Camping Cancellation - COVID19	R	6/03/2020	456.00		038990		456.00
05332	I-884662	Scott Reardon Camping Cancellation - COVID19	R	6/03/2020	174.00		038991		174.00
05262	I-889085	Ryan Reddick Camping Cancellation - COVID19	R	6/03/2020	569.00		038992		569.00
05393	I-884442	Guillermo Reyes Camping Cancellation - COVID19	R	6/03/2020	144.00		038993		144.00
04161	I-898202	Cindy Reynolds Camping Cancellation - COVID19	R	6/03/2020	114.00		038994		114.00
04667	I-886220a	Nicole Robbs Camping Cancellation - COVID19	R	6/03/2020	350.00		038995		350.00
05398	I-884482	Felipe Rodriguez Camping Cancellation - COVID19	R	6/03/2020	114.00		038996		114.00
05327	I-890294	Francisco Rodriguez Camping Cancellation - COVID19	R	6/03/2020	114.00		038997		114.00
05411	I-884629	Mayra Rodriguez Camping Cancellation - COVID19	R	6/03/2020	114.00		038998		114.00
05189	I-886152 I-886158	Philph Rodriguez Camping Cancellation - COVID19 Camping Cancellation - COVID19	R R	6/03/2020 6/03/2020	261.00 261.00		038999 038999		522.00
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ACCOUNTS PAYABLE BANK: AP DATE RANGE: 5/28/2020 THRU 6/10/2020

	VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT	
	04501	I-888977	Rachel Romero Camping Cancellation - COVID19	R	6/03/2020	327.00		039000		327.00	
	05347	I-894124	Elizabeth Safi Camping Cancellation - COVID19	R	6/03/2020	114.00		039001		114.00	
	05361	I-896900	Noel Salazar Camping Cancellation - COVID19	R	6/03/2020	684.00		039002		684.00	
	03601	I-884960	Arturo Salcedo Camping Cancellation - COVID19	R	6/03/2020	1,140.00		039003	1	1,140.00	
	05360	I-904678	Nichole Sandefur Camping Cancellation - COVID19	R	6/03/2020	252.00		039004		252.00	
	05399	I-885386	LeiLani Sandstrom Camping Cancellation - COVID19	R	6/03/2020	720.00		039005		720.00	
	05174	I-898288	Georgina Sandy Camping Cancellation - COVID19	R	6/03/2020	169.00		039006		169.00	
	05170	I-902008	Mark Schmidt Camping Cancellation - COVID19	R	6/03/2020	237.00		039007		237.00	
80 	05259	I-899209	Nicholas Segura Camping Cancellation - COVID19	R	6/03/2020	141,00		039008		141.00	
	05366	I-888428	Martin Serrano Camping Cancellation - COVID19	R	6/03/2020	114.00		039009		114.00	
	05280	I-891306	Ravniel Shankar Camping Cancellation - COVID19	R	6/03/2020	198.00		039010		198.00	
	05197	I-887822	Susan Sharp Camping Cancellation - COVID19	R	6/03/2020	1,490.00		039011		1,490.00	
	04574	1-899462	Sam Silverman Camping Cancellation - COVID19	R	6/03/2020	381.00		039012		381.00	
	03641	I-885573	Robert Simpson Camping Cancellation - COVID19	9 R	6/03/2020	569.00		039013		569.00	
8	05172	I-903642	Matthew Smith Camping Cancellation - COVID1	9 R	6/03/2020	137.00		039014		137.00	

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VENDOR SET: 01 Casitas Municipal Water D BANK: AP ACCOUNTS PAYABLE DATE RANGE: 5/28/2020 THRU 6/10/2020

VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
05162	I-900485	Nicole Snaid Camping Cancellation - COVID19	R	6/03/2020	79.00		039015		79.00
05200	I-886038	Soar Inc Camping Cancellation - COVID19	R	6/03/2020	319.00		039016		319.00
05363	I-888503	Krystal Solomon Camping Cancellation - COVID19	R	6/03/2020	114.00		039017		114.00
05353	1-902977	Laura Tapp Camping Cancellation - COVID19) R	6/03/2020	114.00		039018		114.00
05188	I-886230	Melissa Taylor Camping Cancellation - COVID19	R	6/03/2020	700.00		039019		700.00
05176	I-897959	Ryan Thomas Camping Cancellation - COVIDIS	R	6/03/2020	99.00		039020		99.00
05205	I-891349	Christine Timbre Camping Cancellation - COVID19	R	6/03/2020	432.00		039021		432.00
05389	I-884510	Karen Tjaden Camping Cancellation - COVID19	R	6/03/2020	675.00		039022		675.00
05401	I-893279	Hermes Torres Camping Cancellation - COVID19	R	6/03/2020	114.00		039023		114.00
03789	1-888673	Selena Torres Camping Cancellation - COVID19		6/03/2020	545.00		039024		\$2-1 °),0
05404	I-889202	Camping Cancellation - COVID19		6/03/2020	411.00		039024		956.00
05000	1-884811	Camping Cancellation - COVID19	R	6/03/2020	114.00		039025		114.00
05329	I-885025	Gregory Turner Camping Cancellation - COVID19	R	6/03/2020	228.00		039026		228.00
03197	I-904779	Gloria Valdez Camping Cancellation - COVID19	R	6/03/2020	126.00		039027		126.00
05341	I-887443	Guadalupe Valles Camping Cancellation - COVID19	R	6/03/2020	288.00		039028		288.00

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BANK: AP ACCOUNTS PAYABLE DATE RANGE: 5/28/2020 THRU 6/10/2020

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
05187	I-895135	Saul Velasco Camping Cancellation - COVID19	R	6/03/2020	79.00		039029		79.00
05333	I-887637 I-889327	Chester Ventura Camping Cancellation - COVID19 Camping Cancellation - COVID19	R	6/03/2020 6/03/2020	198.00 198.00		039030 039030		396.00
05166	I-896822	Eric Victoria Camping Cancellation - COVID19	R	6/03/2020	198.00		039031		198.00
05400	I-884768	Luis Vicuna Camping Cancellation - COVID19	R	6/03/2020	114.00		039032		114.00
05410	I-884575	Damian Villanueva Camping Cancellation - COVID19	R	6/03/2020	114.00		039033		114.00
05356	I-886977	Maria Villanueva Camping Cancellation - COVID19	R	6/03/2020	228.00		039034		228.00
05273	I-899819	Robert Villasana Camping Cancellation - COVID19	R	6/03/2020	237.00		039035		237.00
04510	I-896898	Baldemar Viveros Camping Cancellation - COVID19	R	6/03/2020	114.00		039036		114.00
03690	I-899512	Leticia Vorgitch Camping Cancellation - COVID19	R	6/03/2020	141.00		039037		141.00
05278	I-898729	Wallace Dale Camping Cancellation - COVID19	R	6/03/2020	109.00		039038		109.00
05207	1-901912	Amber Walsh Camping Cancellation - COVID19	R	6/03/2020	138.00		039039		138.00
05421	I-896352	Carolynne Weiner Camping Cancellation - COVID19	R	6/03/2020	114.00		039040		114.00
05271	I-895628	Rachael Weitz Camping Cancellation - COVID19	R	6/03/2020	109.00		039041		109.00
05378	I-888971	Jerald White Jr. Camping Cancellation - COVID19	R	6/03/2020	342.00		039042		342.00

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VENDOR SET: 01 Casitas Municipal Water D BANK: AP ACCOUNTS PAYABLE

DATE RANGE: 5/28/2020 THRU 6/10/2020

VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
05123	I-897500	Dale Whiteman Camping Cancellation - COVID19	R	6/03/2020	114.00		039043		114.00
05023	I-901046	Ann Whitfield Camping Cancellation - COVID19	R	6/03/2020	99.00		039044		99.00
05355	1-896611	Andrew Wilkinson Camping Cancellation - COVID19	R	6/03/2020	114.00		039045		114.00
05350	I-901952	Lashawn Woods Camping Cancellation - COVID19	R	6/03/2020	114.00		039046		114.00
05376	I-884599	Cindy Worthan Camping Cancellation - COVID19	R	6/03/2020	432.00		039047		432.00
05264	I-892638	Roxanna Yanez Camping Cancellation - COVID19	R	6/03/2020	274.00		039048		274.00
05417	I-885091	Anita Zamora Camping Cancellation - COVID19	R	6/03/2020	114.00		039049		114.00
05408	I-891560	Evelyn Zaragoza Camping Cancellation - COVID19	R	6/03/2020	228.00		039050		228.00
04010	I-CS5202006011712	CALIFORNIA STATE DISBURSEMENT 200000001181291	R	6/03/2020	386.30		039051		386.30
02823	I-G08202006011712	Franchise Tax Board STATE TAX GARNISHMENT	R	6/03/2020	500.00		039052		500.00
00124	I-DCI202006011712 I-DI%202006011712	ICMA RETIREMENT TRUST - 457 DEFERRED COMP FLAT DEFERRED COMP PERCENT	R R	6/03/2020 6/03/2020	425.00 96.96		039053 039053		521.96
00985	I-CUN202006011712	NATIONWIDE RETIREMENT SOLUTION 457 CATCH UP DEFERRED COMP FLAT	R	6/03/2020 6/03/2020	499.23 5,647.10		039054 039054		
00100	I-DN%202006011712	DEFERRED COMP PERCENT	R	6/03/2020	387.01		039054		6,533.34
00180	I-COP202006011712 I-UND202006011712	S.E.I.U LOCAL 721 SEIU 721 COPE UNION DUES	R R	6/03/2020 6/03/2020	45.00 774.00		039055 039055		819.00
02823 00124	I-CS5202006011712 I-G08202006011712 I-DCI202006011712 I-DI%202006011712 I-CUN202006011712 I-DCN202006011712 I-DN%202006011712 I-COP202006011712	CALIFORNIA STATE DISBURSEMENT 20000001181291 Franchise Tax Board STATE TAX GARNISHMENT ICMA RETIREMENT TRUST - 457 DEFERRED COMP FLAT DEFERRED COMP PERCENT NATIONWIDE RETIREMENT SOLUTION 457 CATCH UP DEFERRED COMP FLAT DEFERRED COMP FLAT DEFERRED COMP PERCENT S.E.I.U LOCAL 721 SEIU 721 COPE	R R R R R R R R R	6/03/2020 6/03/2020 6/03/2020 6/03/2020 6/03/2020 6/03/2020 6/03/2020	386.30 500.00 425.00 96.96 499.23 5,647.10 387.01 45.00		039051 039052 039053 039053 039054 039054 039054 039055		386 500 521 6,53

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VENDOR SET: 01 Casitas Municipal Water D ACCOUNTS PAYABLE AP BANK: DATE RANGE: 5/28/2020 THRU 6/10/2020

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT	
1		ARDISSONI, JASON								
	1-000202006011711	UB REFUND	R	6/03/2020	20.30		039056		20.30	
05430		Gordon Abellera								
	I-888951	Camping Cancellation - COVID19	R	6/10/2020	79.00		039057		79.00	
00010		AIRGAS USA LLC								
	I-9970724557	Welding Gasses - PL	R	6/10/2020	259.50		039058		259.50	
03044		Amazon Capital Services								
	I-13DX-VVPW-6HVD	Adapter Plate Connector - EM	R	6/10/2020	17.76		039059			
	I-13DX-VVPW-PL6K	Sunscreen - PR	R	6/10/2020	31.34		039059			
	I-1DHM-C7PG-VNKK	Saw - LCRA	R	6/10/2020	120.11		039059			
	I-INVD-6HV4-34CC	Spindle Replecement - LCRA	R	6/10/2020	90.82		039059			
	I-1RXQ-6NYF-QVWH	Dirk PC Parts - EM	R	6/10/2020	35.65		039059			
	I-1YWY-9TXH-HL91	Vacuum Suction Cup - FISH	R	6/10/2020	40.24		039059		335.92	
00029		AMERICAN TOWER CORP		41041-0020						
	I-3319116	Tower Rent-Red Mnt Rincon Peak	R	6/10/2020	2,149.15		039060	2	2,149.15	
01666		AT & T								
	I-000014867306	Acct#9391051740	R	6/10/2020	728,80		039061		728.80	
00030		B&R TOOL AND SUPPLY CO								
	I-1900945599	Contact Cleaner - EM	R	6/10/2020	45.64		039062			
	1-1900945791	Paint Marker - TP	R	6/10/2020	21.28		039062		66.92	
		Cherkeneral Charles Theorem - Cold Cold								
00679		BAKERSFIELD PIPE & SUPPLY INC	-							
	I-S2707985.001	Check Valve - EM	R	6/10/2020	3,898.12		039063			
	I-S2719362.001	Cla-Val Parts - PL	R	6/10/2020	368.41		039063	4	4,266.53	
05025		Best Buy Business Advantage Ac								
	I-4540905	Dual Wan Routers - EM	R	6/10/2020	417.67		039064		417.67	
03059	8	Brenntag Pacific Inc.								
	I-BPI52407	Chlorine for Ojai Sys TP	R	6/10/2020	991.02		039065		991.02	
05421		Cj Cabrera								
05431	I-901565	Camping Cancellation - COVID19	R	6/10/2020	99.00		039066		99.00	
	्रम् सः क् लाव क्लाक् क	Story card light for a card		_,,						
00055		CASITAS BOAT RENTALS		c / 1 0 / 0 0 0 0					101.04	
	I-May 20	Gas For Boats - LCRA	R	6/10/2020	487.54		039067		487.54	

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VENDOR	I.D.	NAME	STATUS	CHECK	INVOICE AMOUNT	DISCOUNT	CHECK	CHECK	CHECK
00000					22200141	DISCOORT	NO	STATUS	AMOUNI
00511	T. C/1 4450005 4	Centers for Family Health							
	I-6/14452386-1	1102WC20000006 Dos 03/11/20	R	6/10/2020	73.64		039068		
	I-6/14452387-1	1102WC20000006 DOS 03/09/20	R	6/10/2020	94.46		039068		
	I-6/14461183-1	1102WC20000006 DOS 05/01/20	R	6/10/2020	106.38		039068		274.48
03978		Virgil Clary							
	I-Apr 20	Reimburse Expenses 04/20	R	C 120 10000					
	I-Mar 20	Reimburse Expenses 03/20		6/10/2020	118.68		039069		
	I-May 20	Reimburse Expenses 05/20	R	6/10/2020	12.19		039069		
		Neimburse Expenses 03/20	R	6/10/2020	138.63		039069		269.50
00059		COASTAL PIPCO							
	I-S2096910.001	3/8 Ball Valves - PL	R	6/10/2020	273.35		039070		273.35
05432		Manian Conton							£13.99
చాబాన బిథు	1-905158	Monica Cortez							
		Camping Cancellation - COVID19	R	6/10/2020	114.00		039071		114.00
01483		CORVEL CORPORATION							
	I-6/14452386-1	1102WC20000006 DOS 03/11/20	R	6/10/2020	11.59				
	I-6/14452387-1	1102WC20000006 DOS 03/09/20	R	6/10/2020	14.43		039072		
	I-6/14452828-1	1102WC180000001 DOS 04/22/20	R	6/10/2020			039072		
	1-6/14461183-1	1102WC20000006 DOS 05/0/20	R	6/10/2020	9.50		039072		
	I-923110	Claim 1102WC20000006	R	6/10/2020	12.39 195.00		039072 039072		
				-,,			039072		242.91
01647		JOEL COX							
	I-060520	Meals for PL - Leak at Rincon	R	6/10/2020	170.39		039073		170.39
05433		Rehalter Crease and					0330.04		210.00
00100	I-886878	Rebekah Czarnecki	223						
	1-000070	Camping Cancellation - COVID19	R	6/10/2020	1,194.00		039074	1	,194.00
05434		Justina Deleon							
	I-904208	Camping Cancellation - COVID19	R	6/10/2020	114.00				
		1 1 0012020	**	0/10/2020	114.00		039075		114.00
00740		DELL MARKETING L.P.							
	I-10367297079	Dell Inspiron 5000 - PR	R	6/10/2020	2,475.74		039076		
	I-10398802003	Latitude 5500 - LCRA	R	6/10/2020	1,131.37		039076	3	8,607.11
05435		plicine province			-,		035070	5	, 007.11
2120-12010-12012-0-1200	I-901563	Christopher Dosdos		na va a necessaria					
	1-901363	Camping Cancellation - COVID19	R	6/10/2020	99.00		039077		99.00
00095		FAMCON PIPE & SUPPLY							
	I-S100024628.001	Air Release Valve - PL	R	6/10/2020	1 447 00				
	I-S100026547.001	Safety Flange - UT	R	6/10/2020	1,447.88		039078		
	I-S100027278.001	Adapters - PL	R		2,574.00		039078		
	I-S100027313.002	Ball Valve -PL		6/10/2020	879.45		039078		
	I-S100027409.001	Adapters & CTS Joints - PL		6/10/2020	186.62		039078		
	I-S100027672.001	Gasket, Romac Bolt & Nut - PL		6/10/2020	1,029.60		039078		
	I-S100027804.001			6/10/2020	401.12		039078		
	I-S100028494.001	Adapters - PL Cochet Cland C D		6/10/2020	1,821.11		039078		
	- DT00020%34.001	Gasket, Gland & Romac - PL	R	6/10/2020	345.35		039078		

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VENDOR SET: 01 Casitas Municipal Water D BANK: AP ACCOUNTS PAYABLE DATE RANGE: 5/28/2020 THRU 6/10/2020

VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
		Gate Valve - PL	R	6/10/2020	359.29		039078		
	I-S100029269.001 I-S100029311.001	10" Romac - PL	R	6/10/2020	1,643.07		039078	10	0,687.49
00099		FGL ENVIRONMENTAL			1.57 MB		in heat la		
00000	I-005910A	THM?HAA Monitoring 05/05/20	R	6/10/2020	792.00		039079		792.00
00104		FRED'S TIRE MAN					000000		
	I~124755	Oil Service - Unit 74	R	6/10/2020	102.24		039080		007 00
	I-124874	Tires for Sweeper - LCRA	R	6/10/2020	125.69		039080		227.93
05436		Lynne Freeman					000001		107 00
	I-901918	Camping Cancellation - COVID19	R	6/10/2020	137.00		039081		137.00
05437		Angela Garcia					000000		70.00
0.00	I-892891	Camping Cancellation - COVID19	R	6/10/2020	79.00		039082		79.00
05438		Juanita Gonzalez							
	I-895223	Camping Cancellation - COVID19	R	6/10/2020	109.00		039083		109.00
05439		Vincent Gonzalez		an a star star					
	I-897544	Camping Cancellation - COVID19	R	6/10/2020	297.00		039084		297.00
05440		Ron Gout							100.00
	I-887604	Camping Cancellation - COVID19	R	6/10/2020	137.00		039085		137.00
04710		Granite Construction Company		5.15			000000		- 001 63
	I-052920	Emily & Canada Pipe Rep ENG	3 R	6/10/2020	175,291.63		039086	17	5,291.63
00596		HOME DEPOT							AFE 00
0.1.2.	I-6902782	Safety Barrier Fence - LCRA	R	6/10/2020	355.22		039087		355.22
00125		IDEXX DISTRIBUTION CORP		8.10.5.00.	144.2				
	I-3065257128	120 ML Vessel - LAB	R	6/10/2020	187.20		039088		187.20
00127		INDUSTRIAL BOLT & SUPPLY							
	I-211476-1	Washers - EM	R	6/10/2020	25.17		039089		25.17
09910		J.W. ENTERPRISES							
00020	I-323656	CT Pumping - AVE 1 PP	R	6/10/2020	78.75		039090		
	1-323657	CT Pumping - VILLANOVA	R	6/10/2020	78.75		039090		
	1-323658	CT Pumping - OVPP	R	6/10/2020	78.75		039090		
	1-323659	CT Pumping - 4M RES	R	6/10/2020	78.75		039090		
	1-323660	CT Pumping - GRAND AVE	R	6/10/2020	78.75		039090		
	1-323661	CT Pumping - 4M RES	R	6/10/2020	78.75		039090		
	1-323662	CT Pumping - SA PLANT	R	6/10/2020	157.50		039090		
	1-323663	CT Pumping - UPPER OJAI RES	R	6/10/2020	78.75		039090		
	1-323664	CT Pumping - 3M PUMP	R	6/10/2020	78.75		039090		
	1-323665	CT Pumping - SIGNAL RES	R	6/10/2020	78.75		039090		

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
	1-323666	CT Pumping - FAIRVIEW RES	R	6/10/2020	78.75		039090		
	1-323667	CT Pumping - CASITAS DAM	R	6/10/2020	78.75		039090		
	1-323668	CT Pumping - RINCON TANK	R	6/10/2020	78.75		039090		
	1-323669	CT Pumping - BATES RES	R	6/10/2020	78.75		039090		1,181.25
		and damage and shared as the		ale se half part					•
02344		Janitek Cleaning Solutions							
	I-38217A	Carpet Cleaning - ADM	R	6/10/2020	480.00		039092		480.00
00667		Kennedy/Jenks Consultants, Inc							
	I-139079	Casitas/VTA SWP Pre Design	R	6/10/2020	7,035.00		039093		7,035.00
		to any state of the second state of the second state of the			.,		0.26 - 1		.,
03146		Erik Larson							
	1-887256	Camping Cancellation - COVID19	R	6/10/2020	199.00		039094		199.00
05441		James Lintz							
	I-904334	Camping Cancellation - COVID19	R	6/10/2020	158,00		039095		158.00
		president to description of the			5,000				
05442		Tony Lugo							
	I-889794	Camping Cancellation - COVID19	R	6/10/2020	158.00		039096		158.00
00329		MCMASTER-CARR SUPPLY CO.							
000000	I-40366735	Suction Hose - EM	R	6/10/2020	232.05		039097		232.05
				0/20/2020	232.00		055051		232.03
00151		MEINERS OAKS ACE HARDWARE							
	I-922919	Acrylic Sheet & Velcro - LCRA	R	6/10/2020	58.49		039098		
	I-926298	Acrylic Sheet - LCRA	R	6/10/2020	27.31		039098		
	I-926482	Door Stop Wall - MAINT	R	6/10/2020	36.37		039098		
	I-926651	Insecticides - UT	R	6/10/2020	14.32		039098		
	I-926743	Paint Brush - TP	R	6/10/2020	17.03		039098		
	I-926858	Padlock - MAINT	R	6/10/2020	48.73		039098		
	I-926910	Bolts, Clamp & PVC Cement-LCRA		6/10/2020	109.28		039098		
	1-927074	Concrete & Wire - LCRA	R	6/10/2020	62.05		039098		
	1-927139	Acrylic Sheet &Ziploc Bag-LCRA		6/10/2020	22.21		039098		
	1-927175	Concrete & Mesure Tape-LCRA	R	6/10/2020	52.26		039098		
	1-927300	GLoves & Broom - IT	R	6/10/2020	20.86		039098		
	1-927304	Shade Cloth - EM	R	6/10/2020	39.38		039098		
	1-927718	Battery, Headlight & Tape - UT		6/10/2020	56.56		039098		564.85
	1-92//18	bactery, neadright a tape - of	R	0/10/2020	56.56		039090		504.05
03724		Michael K. Nunley & Associates							
	I-7019	Signal Tank & PS DOB - ENG	R	6/10/2020	17,120.94		039100		
	I-7034	OWS Trasmission Study - ENG	R	6/10/2020	2,756.80		039100		
	1-7036	Heidelberger Tank & Pump - ENG	1273.000	6/10/2020	7,423.81		039100		
	1-7037	Mutual Well #7 Equipment - ENG		6/10/2020	4,294.74		039100		
	1-7038	Oak View Main 42' Design - ENG		6/10/2020	1,364.75		039100		
	1-7060	Robles Prototype EvaluationENG		6/10/2020	16,421.16		039100		
	1-7093	Running Ridge Zone Impov -ENG	R	6/10/2020	8,428.80		039100	5	7,811.00
		warming wroge none mpor and	•	-1 -01 2020	0/420.00		000200	5	.,0

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK
03444		Mission Linen Supply							
03444	I-512615949	Uniform Pants - PL	R	6/10/2020	28.71		039101		
	1-512615950	Uniform Pants - MAINT	R	6/10/2020	27.00		039101		
	1-512615951	Uniform Pants - UT	R	6/10/2020	28.56		039101		
		Uniform Pants - TP	R	6/10/2020	35.98				100 05
	I-512615953	UNIFORM PARTS - TP	R	0/10/2020	35.98		039101		120.25
05443		Michael Morgan							
	I-898165	Camping Cancellation - COVID19	R	6/10/2020	137.00		039102		137.00
00149		MRC Global							
00133	1-5065062000	Freight for Flanges - UT	R	6/10/2020	217.05		039103		217.05
	1-5005002000	rergne rot rranges of	41	0/20/2020	211.00		039103		217.03
00625		OfficeTeam							
	I-55878913	Water Quality Temp - 5/23-5/29	R	6/10/2020	594.00		039104		594.00
01570		Ojai Auto Supply							
01910	I-492820	Gloves - ADM	R	6/10/2020	60.68		039105		
			R	6/10/2020	13.80				84.40
	1-492821	Adapter & Bug Wash - UT	R	6/10/2020	13.80		039105		74.48
00884		OJAI TERMITE & PEST CONTROL, I							
	1-203290	Monthly Rodent Service - MAINT		6/10/2020	75.00		039106		75.00
		pend of a spend to server the	2	12.20194250	20 ***				
00169		OJAI VALLEY SANITARY DISTRICT							
	I-22190	Cust # 20594	R	6/10/2020	287.25		039107		287.25
00169		OJAI VALLEY SANITARY DISTRICT							
00109	1-22264	Cust # 52921	R	6/10/2020	57.45		039108		57.45
	1-22204	Cust # JEJEI	-	0/10/2020	57.45		039108		57.45
05429		Tom Pallack							
	I-060420	Irrigation Controller Rebate	R	6/10/2020	250.00		039109		250.00
		malified the set particle and south							
05026		Patriot Environmental Services		a 1 a a 1 a a a a					
	I-05-20-00253-1R	Mutual Plant Pump Out - EM	R	6/10/2020	6,550.26		039110		6,550.26
04531		Peace Officers Research Associ							
	1-282657	PORAC Insurance for Rangers	R	6/10/2020	219.00		039111		219.00
				0 - 1 - 1					
00686		POLLARD WATER							
	1-0167915	Captor & Dechlor Tabs - ENG	R	6/10/2020	418.65		039112		418.65
02833		Praxair, Inc							
~~~~~	I-96887628	Liquid Oxigen - TP	R	6/10/2020	2,301.54		039113		
	1-96985402	Liquid Oxigen - TP	R	6/10/2020	2,267.65		039113		
	1-97098653	Liquid Oxigen - TP	R	6/10/2020	2,281.02		039113		6,850.21
	7-31030000	ardara Auriden er	47	01 201 2020	e, 201. V2		033273		0,000.21

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VENDOR SET: 01 Casitas Municipal Water D BANK: AP ACCOUNTS PAYABLE

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
10042	I-9830 I-9831	PSR ENVIRONMENTAL SERVICE, INC Gas Tank Inspection - DO Gas Tank Inspection - DO	R R	6/10/2020 6/10/2020	255.00 255.00		039114 039114		510.00
02475	I-868480	Rutan & Tucker, LLP Acct#029518-0003 04/20	R	6/10/2020	6,606.50		039115	6,	606.50
02756	I-1642672-IN	SC Fuels Gas - DO	R	6/10/2020	3,987.70		039116	3,	,987.70
03609	I-885581	Tim Sebek Camping Cancellation - COVID19	R	6/10/2020	569.00		039117		569.00
05444	I-888007	Julie Smith Camping Cancellation - COVID19	R	6/10/2020	137.00		039118		137.00
00215	1-060320	SOUTHERN CALIFORNIA EDISON Acct#2210502480	R	6/10/2020	16,609.31		039119		
	I-060320b I-060420a I-060420b	Acct#2210505426 Acct#2237011044 Acct#2269631768	R R R	6/10/2020 6/10/2020 6/10/2020	1,014.36 12.65 28.89		039119 039119 039119		
	1-060920	Acct# 2237789169	R	6/10/2020	18.14		039119	17,	,683.35
05445	I-887987 I-887993	Kelly Strasser Camping Cancellation - COVID19 Camping Cancellation - COVID19	R R	6/10/2020 6/10/2020	137.00 137.00		039120 039120		274.00
02703	1-101075109-0001	Sunbelt Rentals Hydro Power Supply - PL	R	6/10/2020	1,868.99		039121	1,	,868.99
05446	I-893158	Marisa Timchak Camping Cancellation - COVID19	R	6/10/2020	79.00		039122		79.00
02527	1-34561	Traffic Technologies LLC Social Distancing Signs - LCRA	R	6/10/2020	2,007.38		039123	2	,007.38
01512	I-RI20020599	TRENCH SHORING COMPANY Trench Plate Rental - PL	R	6/10/2020	638.40		039124		638.40
05447	I-888012	Dana Venneman Camping Cancellation - COVID19	R	6/10/2020	137.00		039125		137.00
00258	I-237929	VENTURA STEEL, INC 1/4" Plate -PL	R	6/10/2020	74.54		039126		74.54

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT	
09955	1-257218	VENTURA WHOLESALE ELECTRIC Compression Lug - LCRA	R	6/10/2020	68.30		039127		68.30	
01396	1-72580658	VULCAN CONSTRUCTION MATERIALS Dump Fees Aspahlt - PL	R	6/10/2020	600.00		039128		600.00	
05448	I-903147	Anna Williams Camping Cancellation - COVID19	R	6/10/2020	99.00		039129		99.00	
04733	I-Q480543	Zoom Video Communications Inc Phone Conference Service	R	6/10/2020	2,599.00		039130	2	,599.00	
1	1-000202006041713	DATO, ANNA M Refund AR REFUND	R	6/10/2020	105.00		039131		105.00	
1	I-000202006041714	STEINHILBER, JOHN J AR REFUND	R	6/10/2020	84.00		039132		84.00	
05248	I-869616	Emanuel Alvarez Camping Cancellaton - COVID19	R	6/10/2020	137.00		039133		137.00	
05286	I-891382	Gary Arteaga Camping Cancellaton - COVID19	R	6/10/2020	137.00		039134		137.00	
05284	I-891866	Reyes Avalos Camping Cancellaton - COVID19	R	6/10/2020	79.00		039135		79.00	
05221	I-891758	Rachael Belunza Camping Cancellaton - COVID19	R	6/10/2020	85.00		039136		85.00	
05293	I-891565	Carl Blum Camping Cancellaton - COVID19	R	6/10/2020	175.00		039137		175.00	
03065	I-885571	Jeremy Bolton Camping Cancellaton - COVID19	R	6/10/2020	531.00		039138		531,00	
05223	I-886015	Eric Bonner Camping Cancellaton - COVID19	R	6/10/2020	289.00		039139		289.00	
05231	I-886450	John Brito Camping Cancellaton - COVID19	R	6/10/2020	175.00		039140		175.00	
05227	I-885451 I-885453	Rogers Brooks Camping Cancellaton - COVID19 Camping Cancellaton - COVID19	R R	6/10/2020 6/10/2020	148.00 148.00		039141 039141		296.00	

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
05427		Camp Ramah							
	I-886830	Camping Cancellaton - COVID19	R	6/10/2020					
	I-887905	Camping Cancellaton - COVID19	R	6/10/2020	585.00		039142		
	I-889552	Camping Cancellaton - COVID19	R	6/10/2020	1,185.00		039142		
	I-889690	Camping Cancellaton - COVID19	R	6/10/2020	1,287.00		039142		
	I-890208	Camping Cancellaton - COVID19	R	6/10/2020	700.00		039142		
	I-892658	Camping Cancellaton - COVID19	R	6/10/2020	1,287.00		039142		
	I-893672	Camping Cancellaton - COVID19	R	6/10/2020	585.00		039142		
	I-893799	Camping Cancellaton - COVID19	R	6/10/2020	1,287.00		039142		
	I-895493	Camping Cancellaton - COVID19	R		790.00		039142		
	I-895694	Camping Cancellaton - COVID19	R	6/10/2020	440.00		039142		
	I-896259	Camping Cancellaton - COVID19	R	6/10/2020	440.00		039142		
		company cancertaton - coators	R	6/10/2020	1,287.00		039142		9,873.00
05317		Ivan Caro							
	I-901035	Camping Cancellaton - COVID19	~	c /= 0 /0000					
		camping cancertaton - covidia	R	6/10/2020	436.00		039143		436.00
05294		Andrea Casillas							
	1-895527		-						
	- 000021	Camping Cancellaton - COVID19	R	6/10/2020	309.00		039144		309.00
05323		Guillermo Casillas							
	I-896460								
	2 000400	Camping Cancellaton - COVID19	R	6/10/2020	237.00		039145		237.00
05218		Wiemen and Gradient 1							
00220	I-887056	Florence Castaneda		12 4 1 1 5 6 1 0					
	1 007000	Camping Cancellaton - COVID19	R	6/10/2020	79.00		039146		79.00
05308		Sonia Centeno							10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -
00000	I-890406								
	1 030400	Camping Cancellaton - COVID19	R	6/10/2020	114.00		039147		114.00
05322		01 Cl							
00044	I-900008	Carl Chavez		64,000,000					
	1-900008	Camping Cancellaton - COVID19	R	6/10/2020	237.00		039148		237.00
05311									
02277	I-884430	Maria Cleverley							
	T-004430	Camping Cancellaton - COVID19	R	6/10/2020	228.00		039149		228.00
04322		CATES CONTRACTS							
04322	7 000540	Lauriel Cover							
	1-900542	Camping Cancellaton - COVID19	R	6/10/2020	50.00		039150		50.00
02100		THEOREM & BAR 1							00.00
03102		Heather Cunado							
	1-885961	Camping Cancellaton - COVID19	R	6/10/2020	289.00		039151		289.00
05007		THERE AN					- ar or may de		
05291		April Davis							
	I-885557	Camping Cancellaton - COVID19	R	6/10/2020	360.00		039152		
	I-885625	Camping Cancellaton - COVID19	R	6/10/2020	180.00		039152		540.00
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V	ENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
0	5312	I-899257	Mo Dehaven Camping Cancellaton - COVID19	R	6/10/2020	114.00		039153		114.00
0	5252	I-885592	Courtney Deppen Camping Cancellaton - COVID19	R	6/10/2020	531.00		039154		531.00
0	5299	I-899864	Nancy Dice Camping Cancellaton - COVID19	R	6/10/2020	109,00		039155		109.00
0	5289	I~892387	Deborah Downey Camping Cancellaton - COVID19	R	6/10/2020	175.00		039156		175.00
0	4139	1-886271	Vivian Espinoza Camping Cancellaton - COVID19	R	6/10/2020	219.00		039157		219.00
0	5225	I-896444 I-897148	Rena Eugeni Camping Cancellaton - COVID19 Camping Cancellaton - COVID19	R	6/10/2020 6/10/2020	218.00 109.00		039158 039158		327.00
0	5251	1-901048	Donna Filancia Camping Cancellaton - COVID19	R	6/10/2020	99.00		039159		99.00
Q	5244	I-888966	Melissa Flores Camping Cancellaton - COVID19	R	6/10/2020	137.00		039160		137.00
Ċ	5288	1-889335	Valorie Flores Camping Cancellaton - COVID19	R	6/10/2020	137.00	X	039161		137.00
c	5306	I-895877	Lavonne Ford Camping Cancellaton - COVID19	R	6/10/2020	119.00		039162		119.00
C	5296	I-890029	Karen Fraker Camping Cancellaton - COVID19	R	6/10/2020	109.00		039163		109.00
(	05292	I-897109	Ryan Francisco Camping Cancellaton - COVID19	R	6/10/2020	395,00		039164		395.00
(	04560	1-889309	Mayra Garcia Camping Cancellaton - COVID19	R	6/10/2020	99.00		039165		99.00
	05287	<b>I-903166</b>	Romina Garello Camping Cancellaton - COVID19	R	6/10/2020	109.00		039166		109.00

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05210	1-886160	Montoya George Camping Cancellaton - COVID19	R	6/10/2020	201.00		039167		201.00
05301	I-892710	Octavio Gonzalez Camping Cancellaton - COVID19	R	6/10/2020	114.00		039168		114.00
05240	I-902558	Michelle Gould Camping Cancellaton - COVID19	R	6/10/2020	109.00		039169		109.00
05295	1-902556	Monica Gould Camping Cancellaton - COVID19	R	6/10/2020	109.00		039170		109.00
03679	I-886384	Cynthia Grant Camping Cancellaton - COVID19	R	6/10/2020	169.00		039171		169.00
05314	I-896140	Reginald Gray Camping Cancellaton - COVID19	R	6/10/2020	141.00		039172		141.00
05290	I-899593	Craig Gutshall Camping Cancellaton - COVID19	R	6/10/2020	198.00		039173		198.00
05220	I-899502	Jami Halpern Camping Cancellaton - COVID19	R	6/10/2020	79.00		039174		79.00
05298	I-888614	Christopher Hendricks Camping Cancellaton - COVID19	R	6/10/2020	219.00		039175		219.00
03109	I-901433 I-901443	Lotis Hervias Camping Cancellaton - COVID19 Camping Cancellaton - COVID19	R R	6/10/2020 6/10/2020	316.00 79.00		039176 039176		395.00
05304	I-891379	David Highsmith Camping Cancellaton - COVID19	R	6/10/2020	249.00		039177		249.00
05217	I-887541	John Hoffmeyer Camping Cancellaton - COVID19	R	6/10/2020	79.00		039178		79.00
05247	I-894724	Helena Horak Camping Cancellaton - COVID19	R	6/10/2020	79.00		039179		79.00
05309	I-887330	Lisa Jaskilka Camping Cancellaton - COVID19	R	6/10/2020	79.00		039180		79.00

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT	
05319	1-898342	Norma Jauregui Camping Cancellaton - COVID19	R	6/10/2020	1,140.00		039181		1,140.00	
05315	I-895335	Noemy Johnson Camping Cancellaton - COVID19	R	6/10/2020	79.00		039182		79.00	
05211	I-896531	Kelly Kelley Camping Cancellaton - COVID19	R	6/10/2020	141.00		039183		141.00	
05305	I-904894	Melinda Kranz Camping Cancellaton - COVID19	R	6/10/2020	54.00		039184		54.00	
05236	I-889037	Belinda Levy Camping Cancellaton - COVID19	R	6/10/2020	137.00		039185		137.00	
05219	I-894283	Wendy Linares Camping Cancellaton - COVID19	R	6/10/2020	79.00		039186		79.00	
05300	I-896879	Donna Lona Camping Cancellaton - COVID19	R	6/10/2020	137.00		039187	8	137.00	
05242	1-901501	Darmaris Lopez Camping Cancellaton - COVID19	R	6/10/2020	158.00		039188		158.00	
05281	I-895523	William Lopez Camping Cancellaton - COVID19	R	6/10/2020	618.00		039189		618.00	
05234	I-885968	Craig Lutes Camping Cancellaton - COVID19	R	6/10/2020	289.00		039190		289.00	
05215	I-886305 I-886312	Julian Macias Camping Cancellaton - COVID19 Camping Cancellaton - COVID19	R R	6/10/2020 6/10/2020	603.00 201.00		039191 039191		804.00	
05243	I-892995	Esmeralda Magana Camping Cancellaton - COVID19	R	6/10/2020	237,00		039192		237.00	
05209	I-890047	Ken Mas Camping Cancellaton - COVID19	R	6/10/2020	109.00		039193		109.00	
03631	I-889049	Suzanne McCabe Camping Cancellaton - COVID19	R	6/10/2020	350.00		039194		350.00	

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT	
05321	I-903091	Bonnie McGee Camping Cancellaton - COVID19	R	6/10/2020	201.00		039195		201.00	
05213	I-886528	Roberto Medina Camping Cancellaton - COVID19	R	6/10/2020	169.00		039196		169.00	
05310	I-884577	Martha Monje Camping Cancellaton - COVID19	R	6/10/2020	174.00		039197		174.00	
05245	I-891569	Christina Mulcahy Camping Cancellaton - COVID19	R	6/10/2020	137.00		039198		137.00	
04231	I-886374	Lisa Mundrake Camping Cancellaton - COVID19	R	6/10/2020	603.00		039199		603.00	
05316	I-899622	Jose Navarro Camping Cancellaton - COVID19	R	6/10/2020	342.00		039200		342.00	
03966	I-886638	Laura Nguyen Camping Cancellaton - COVID19	R	6/10/2020	79.00		039201		79.00	
05241	I-886538	Jeremy Niedens Camping Cancellaton - COVID19	R	6/10/2020	138.00		039202		138.00	
05232	I-887426	Daryuen Orourke Camping Cancellaton - COVID19	R	6/10/2020	79.00		039203		79.00	
05324	I-888640	Luis Ortega Camping Cancellaton - COVID19	R	6/10/2020	158,00		039204		158.00	
03967	I-886318	Shanna Parrelli Camping Cancellaton - COVID19	R	6/10/2020	137.00		039205		137.00	
05307	I-884531	Joel Perez Camping Cancellaton - COVID19	R	6/10/2020	114.00		039206		114.00	
05320	1-899972	Vicky Perez Camping Cancellaton - COVID19	R	6/10/2020	109.00		039207		109.00	
05228	I-885587	Brett Phillips Camping Cancellaton - COVID19	R	6/10/2020	10 M 10					
05237	1-891571	Christy Pravednikov Camping Cancellaton - COVID19	R	6/10/2020	128.00		039208		128.00	
		camping Cancertation - COVID19	K	0/10/2020	137.00		039209		137.00	

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK
05238	I-889792	Rennee Rakestraw Camping Cancellaton - COVID19	R	6/10/2020	137.00		039210		137.00
05235	I-891567	Brian Read Camping Cancellaton - COVID19	R	6/10/2020	175.00		039211		175.00
05302	I-884418	Luis Reyes Camping Cancellaton - COVID19	R	6/10/2020	114.00		039212		114.00
05216	I-898572	Michael Roberti Camping Cancellaton - COVID19	R	6/10/2020	109.00		039213		109.00
05239	I-889468	Lissette Rose Camping Cancellaton - COVID19	R	6/10/2020	137.00		039214		137.00
05226	I-886381	Cathy Runkle Camping Cancellaton - COVID19	R	6/10/2020	438.00		039215		438.00
05246	I-885457	Adam Samples Camping Cancellaton - COVID19	R	6/10/2020	180.00		039216		180.00
01940	I-885462 I-885875	Kathy Samples Camping Cancellaton - COVID19 Camping Cancellaton - COVID19	R R	6/10/2020 6/10/2020	180.00 180.00		039217 039217		360.00
03958	I-885455a	Sanger Samples Camping Cancellaton - COVID19	R	6/10/2020	181.00		039218		181.00
05107	I-900749	Julia Santiago Camping Cancellaton - COVID19	R	6/10/2020	79.00		039219		79.00
05250	I-892630	Carlos Santillan Camping Cancellaton - COVID19	R	6/10/2020	119.00		039220		119.00
05212	I-886894	Howard Schlossberg Camping Cancellaton - COVID19	R	6/10/2020	158.00		039221		158,00
05283	I-891828	Ari Sela Camping Cancellaton - COVID19	R	6/10/2020	79.00		039222		79.00
05285	I-886643	Patricia Smith Camping Cancellaton - COVID19	R	6/10/2020	219.00		039223		219,00

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VENDOR	I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
05224	I-886703	Antonia-Frank Smudd-Boyer Camping Cancellaton - COVID19	R	6/10/2020	338.00		039224		338.00
05222	I-886184	Andrew Spuur Camping Cancellaton - COVID19	R	6/10/2020	767.00		039225		767.00
04715	I-885974a	Rene Stevens Camping Cancellaton - COVID19	R	6/10/2020	142.00		039226		142.00
03095	1-895273	Lezlee Stockton Camping Cancellaton - COVID19	R	6/10/2020	59.50	p.	039227		59.50
05282	I-895256	Amy Swanson Camping Cancellaton - COVID19	R	6/10/2020	790.00		039228		790.00
04245	I-887006	Katy Thompson Camping Cancellaton - COVID19	R	6/10/2020	79.00		039229		79.00
04628	I-896257	Rick Towe Camping Cancellaton - COVID19	R	6/10/2020	141.00		039230		141.00
05297	I~886985	Patrick Trujillo Camping Cancellaton - COVID19	R	6/10/2020	69.00		039231		69.00
05229	I-891674	Irma Valdez Camping Cancellaton - COVID19	R	6/10/2020	60.00		039232		60.00
03488	1-886217	Jim Van Loo Camping Cancellaton - COVID19	R	6/10/2020	350.00		039233		350.00
05249	I-888931	Yiselle Walker Camping Cancellaton - COVID19	R	6/10/2020	141.00		039234		141.00
05233	1-886423	Amy Weber Camping Cancellaton - COVID19	R	6/10/2020	169.00		039235		169.00
05318	I-891748	Ferdinand Widjaja Camping Cancellaton - COVID19	R	6/10/2020	474.00		039236		474.00
03882	I-892461	Emily Wilson Camping Cancellaton - COVID19	R	6/10/2020	139.00		039237		139.00
05303	I-903909	Dustin Winebrenner Camping Cancellaton - COVID19	R	6/10/2020	79.00		039238		79.00

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05230 I-889075	Ramiro Zambrano Camping Cancellaton - COVID1	9 R	6/10/2020	137.00	039239
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#### CASITAS MUNICIPAL WATER DISTRICT

#### RESOLUTION REQUESTING THAT THE GENERAL DISTRICT ELECTION TO BE HELD ON NOVEMBER 3, 2020, BE CONSOLIDATED WITH OTHER ELECTIONS CALLED TO BE HELD ON THE SAME DAY AND IN THE SAME TERRITORY

WHEREAS, an election shall be conducted for the Casitas Municipal Water District pursuant to the Uniform District Election Law commencing with Section 10500 of the Elections Code on November 3, 2020, for the purpose of electing Directors; and

WHEREAS, the Board of Directors wishes the Elections Division of the Office of the County Clerk to conduct said election; and

WHEREAS, pursuant to Section 10400 et seq. of the Elections code, said elections may be consolidated with other elections to be held on the same day; and

WHEREAS, the Board of Directors acknowledges that the consolidated election will be held and conducted in the manner prescribed in Section 10418; and

WHEREAS, the Board of Directors determines that in the event of a tie vote, the winner will be determined by lot; and

WHEREAS, the Board of Directors request that this District's General Elections be consolidated with any other election which may be held on the same date and involving the same territory.

NOW THEREFORE, BE IT RESOLVED by the Board of Directors of Casitas Municipal Water District that the General District Election of this District is to be held on November 3, 2020, and consolidated with any other elections held on the same date and involving all or a portion of the territory of the District pursuant to Section 10400 et seq. of the Elections Code; and

That, a tie vote will be determined by lot; and

That, pursuant to Election Code Section 10002, the District shall reimburse the County in full for the services performed upon presentation of a bill from the County to the District.

ADOPTED this 24th day of June, 2020

Russ Baggerly, President Casitas Municipal Water District

ATTEST:

Angelo Spandrio, Secretary Casitas Municipal Water District

### MEMORANDUM

TO: Board of Directors

From: Michael L. Flood, General Manager

RE: City of Ventura Adjudication Impact Charge Hearing

Date: June 18, 2020

#### **RECOMMENDATION:**

The Board of Directors consider approval the City of Ventura Adjudication Impact Charge

#### **BACKGROUND:**

On April 9, 2020 during a Special Finance Committee Meeting, the Committee asked the District's water rate consultant to provide an analysis of a pass-through charge for the expected FY 2021 costs of the City of Ventura's groundwater adjudication.

Committee as well as public input was provided during the meeting as to the nature of the inclusion of the pass-through charge into customer water rates.

Staff subsequently provided the water rate consultant with a cost estimate of the FY 2021 costs of the adjudication (attached).

On April 23, 2020 during a Special Finance Committee Meeting, the District's water rate consultant returned with a presentation on the matter for consideration by the Committee (attached).

During the Regular Board Meeting of May 1, 2020 the Board set a hearing for the impact charge for the Regular Board Meeting of June 24, 2020.

#### **DISCUSSION:**

The Finance Committee's concern with the cost of the City of Ventura's groundwater adjudication litigation is a result of roughly \$330,000.00 in attorney costs since Casitas was served by the City in September of 2018.

Typical budgeted general counsel costs are approximately \$150,000.00 per year thus this litigation cost is expected to call on the District's reserve funds.

The FY 2021 for both attorneys and experts has been estimated by staff to be approximately \$600,000.00 (estimate is attached).

Through Committee and public comments during the meeting, the District's water rate consultant was requested to provide analysis and a presentation on four methods for recovering this cost through the District's water rates.

The District's water rate consultant subsequently provided a presentation that covered those methodologies as well as a breakdown of cost impacts on various customer classes at the April 23, 2020 Special Finance Committee Meeting.

While the Finance Committee favored one particular methodology over the others, the Committee desired that the full Board review three of the methodologies through a presentation and that a discussion amongst the Board members occur as to next steps.

The District's water rate consultant provided the presentation to the Board of Directors at the May 1, 2020 Regular Board Meeting and the Board set the hearing on the impact charge for the Regular Board Meeting of June 24, 2020 and directed staff to send out the required notices (copy attached).

The notices were subsequently sent out and staff has been collecting comments on the impact charge as well as protests and will present this information during the hearing.

A copy of the rate consultant's report on the impact charge along with the Board presentation are also attached.

"Proposed City of Ventura Adjudication Impact Charge is necessary to maintain the short-term and long-term maintenance, operational, and financial costs of the District's water service infrastructure because that the legal defense of the District's water rights and responsibilities is necessary to maintain immediately available water service to all of the District service connections."

	City of Ventura Groundwater Adjudication Cost Estimate								
	FY 2021								
	Historical Average/Month								
	(12 Months: Apr 19 - Mar 20)		High Month	L	ow Month	Hig	h-Low Average	Ye	arly Estimate
Attorneys	\$ 27,552.53	\$	54,724.83	\$	12,846.50	\$	33,785.67	\$	405,427.98
Experts	N/A		N/A		N/A		N/A	\$	200,000.00
						Total		\$	605,427.98

ω



# City of Ventura Adjudication Impact Charge

Public Hearing - June 24, 2020

# City of Ventura Adjudication History

In 2014, the Santa Barbara Channelkeepers sued the City of Ventura involving the city's pumping of water near Foster Park by Casitas Springs. The lawsuit seeks to ensure that enough water remains in the lower Ventura River for riparian and aquatic species, including the federally designated endangered Southern California steelhead.

The City of Ventura then sought to bring in other users of the river, including the Casitas Municipal Water District which was served in September of 2018.

The Casitas has been engaged in legal proceedings and mediation efforts since it was served by the City of Ventura in September of 2018 that have incurred attorney costs in excess of \$300 thousand.

Despite Casitas' call for dismissal of the case by the City of Ventura, the City appears to intend the pursuit of its complaint against Casitas. In order to properly defend its ability to serve its customer as it has in the past, Casitas will need to engage a legal team as well as groundwater experts. While the future costs are yet unknown, the District estimates that costs in the 2021 fiscal year could be as high as \$600 thousand per year to engage not only attorneys but also technical experts.

# **Financial Requirements**

The cost of this lawsuit was not contemplated by the District's last financial plan and rate study, which was completed in 2016. While the District is currently engaged in developing a new financial plan, the new rates are not expected to be adopted in the near term.

The following recommends a charge which would fund the District's costs for attorneys and experts.

The charge assumes a cost of \$600 thousand per year, however the Board would reserve the right to lower the charge if the actual costs were lower.

# Propose Charge Customer Class by Meter Size

<u>First</u> allocate costs to each *customer class* based on recent historical water usage, <u>then</u> allocate costs within each customer class based on their respective meter size.

### Customer class allocation based on historical water usage

Customer Class	% of costs	Allocated Costs
Ag-Domestic	25.9%	\$155,597
Ag	17.8%	\$106,873
Commercial	7.3%	\$44,009
Interdepartmental	1.3%	\$7,849
Industrial	0.2%	\$1,150
Other	1.9%	\$11,149
Residential	20.5%	\$123,250
Resale	25.0%	\$150,123
		\$600,000

Customer Class	Annu	al Charge
Ag-Domestic	\$113.71	per equiv. meter
Ag	\$181.24	per equiv. meter
Commercial	\$45.76	per equiv. meter
Interdepartmental	\$35.09	per equiv. meter
Industrial	\$9.30	per equiv. meter
Other	\$34.62	per equiv. meter
Residential	\$18.15	per equiv. meter
Resale	\$113.28	per equiv. meter

# Propose Charge Customer Class by Meter Size

78% of residential accounts

### SCHEDULE OF COMPLETE CHARGES (per month)

Meter Size	Ag-Domestic	Agriculture	Commercial	Inter- Departmental	Industrial	Other	Residential	Resale
5/8"-3/4"	\$9.48	\$15.10	\$3.81	\$2.92	\$0.77	\$2.89	\$1.51 [⊭]	\$9.44
1"	\$15.79	\$25.17	\$6.36	\$4.87	\$1.29	\$4.81	\$2.52	\$15.73
1-1/2"	\$31.59	\$50.35	\$12.71	\$9.75	\$2.58	\$9.62	\$5.04	\$31.47
2"	\$50.54	\$80.55	\$20.34	\$15.60	\$4.13	\$15.39	\$8.07	\$50.35
3"	\$110.55	\$176.21	\$44.49	\$34.12	\$9.04	\$33.66	\$17.65	\$110.13
4"	\$199.00	\$317.17	\$80.09	\$61.41	\$16.27	\$60.59	\$31.77	\$198.24
6"	\$410.63	\$654.49	\$165.25	\$126.72	\$33.58	\$125.03	(na)	\$409.07
12"	(na)	(na)	(na)	(na)	(na)	(na)	(na)	\$2,416.65
18"	(na)	(na)	(na)	(na)	(na)	(na)	(na)	\$4,492.52

# Next Steps

- 1. Public comment
- 2. Board deliberation
- 3. Tally protest ballots
- 4. Vote on proposed charge (unless the protest threshold is met)
- 5. Implement new charge on July 1, 2020

#### Casitas Municipal Water District

#### City of Ventura Adjudication Impact Charge

#### **Implementation Policy**

June 8, 2020

The following describes the implementation policy related to the proposed charge:

1. The City of Ventura Adjudication Impact Charge is a result of a policy to ensure that identifiable costs that are expected to incur over a period of several years should be included in the District's water rate structure.

2. Ongoing budgetary costs should not be funded through reserve accounts.

3. District reserves are intended to provide funds for emergency one-time costs as well as large future capital expenditures.

4. Revenues from the charge will be tracked and compared with costs of the City of Ventura Adjudication litigation.

5. Full costs of the City of Ventura Adjudication litigation are not fully known but are expected to include attorney fees, expert fees, and court costs.

6. The Board will create a reserve account that will contain the funds that result from the impact charge.

7. Staff will provide an accounting of the accumulated funds and adjudication costs for the Board's periodic consideration.

8. The City of Ventura Adjudication Impact Charge will be removed from the District's rate structure should the litigation be brought to a conclusion or it is dismissed entirely.

9. Unused funds collected through the impact charge will be returned to Casitas' customers.

10. The City of Ventura Adjudication Impact Charge will support Casitas' ability to continue serve its customers, as it has in the past, by protecting Casitas' water rights and ensuring those rights remain intact.



The District will hold a public hearing on a proposed new charge for water customers.

### Notice of Public Hearing on Proposed City of Ventura Adjudication Impact Charge June 24, 2020 at 3:00 pm District Board Room: 1055 Ventura Avenue, Oak View CA 93022

Due to the threat of COVID-19 this meeting will be conducted pursuant to Governor Gavin Newsom's Executive Orders N-25-20 and N-29-20, which suspend certain requirements of the Ralph M. Brown Act to support social distancing guidelines and limit the spread of the virus. The public hearing will be livestreamed on the District website at www.casitaswater.org. Once on the Board of Directors webpage, click on 'Board Meetings' and a list of broadcast meetings will appear. Members of the public may participate remotely by teleconference: Dial Toll Free (888) 788-0099 and enter Meeting ID: 984 1485 4813#

The Board of Directors for Casitas Municipal Water District will hold a public hearing at the time, date, and location specified above to consider the adoption of a new water charge.

If adopted, the charge will become effective on July 1, 2020. The public hearing will be conducted per California Constitution Article XIII D, Section 6 (also known as "Proposition 218"). This notice is being sent to all property owners and customers of record impacted by the imposed charge.

All members of the public are invited to attend the public hearing. Additionally, under California law, all Casitas' property owners and customers of record may submit a written protest to the proposed charge. Only one protest per parcel is permitted. Please refer to the "How Can I Participate?" box on the flipside of this notice for instructions on submitting a formal written protest against the proposed action.

#### WHY IS THIS CHARGE NEEDED?

Casitas Municipal Water District is actively defending and protecting its customer's water rights in the case of Santa Barbara Channelkeeper v. State Water Resources Control Board; City of San Buenaventura; City of San Buenaventura v. Duncan Abbott, et al., Cross-Complaint, Superior Court of the State of California, County of Los Angeles, Case No. 19STCP01176. The Santa Barbara Channelkeepers sued the City of Ventura involving the city's pumping of water near Foster Park by Casitas Springs. The City of Ventura then sought to bring in other users of the river, including the Casitas Municipal Water District. More information about the case can be found at: <u>http://www.venturariverwatershedadjud</u> <u>ication.com</u>

Because of its statutory responsibilities and mission, the District is defending rights related to water supplied to its customers through metered water connections. The District's existing water rates are insufficient to offset the legal costs associated with this defense since such costs were not anticipated during the District's last rate study (2016).

#### HOW WERE THE PROPOSED CHARGES CALCULATED?

The proposed City of Ventura Adjudication Impact Charge was calculated using methodologies that are aligned with industry standard practices for rate setting and all applicable laws, including California Constitution Article VIII D, Section 6 (commonly known as Proposition 218).

The annual revenue requirements that will be created by the lawsuit were estimated based on legal costs to date as well as estimates of future costs to retain legal assistance and expert consulting. The forecasted costs are \$600,000 per year.

To calculate the proposed charges, the requirements revenue were first allocated to each of the District's existing eight (8) customers classes based on their respective historical water usage. Once allocated to each customer class, the costs are further allocated among individual customers based on their meter size. The relative costs for meter sizes is based on the District's current meter equivalency schedule used to calculate the District's current Service Charges.

## HOW MUCH ARE RATES ARE RATES INCREASING?

The proposed annual charges are shown on the back of this page. The annual charges will be billed pro rata on a monthly basis. For example, a Residential customer with a 5/8" meter would pay \$18.15 per year, or \$1.51 per month.

#### WHAT IF THE LAWSUIT IS DISMISSED, SETTLED, OR LESS EXPENSIVE THAN CURRENTLY FORECASTED?

The Board may elect to reduce the charge in the future should actual costs prove to be lower than forecasted

The District is proposing the following annual charges for all customers, which would be in addition to the water rates that were adopted by the District in 2016. The proposed charge will be considered by the Board at a Public Hearing on June 24, 2020. If approved, the new charge will commence July 1, 2020. You are receiving this notification in compliance with California Constitution Article XIII C and D (commonly known as Proposition 218), which requires that all notice of proposed rate increases be mailed at least 45 days prior to a public hearing.

### Proposed "City of Ventura Adjudication Impact Charge" Annual Schedule

Meter Size	Ag-Domestic	Agriculture	Commercial	Inter- Departmental	Industrial	Other	Residential	Resale
5/8"-3/4"	\$113.71	\$181.24	\$45.76	\$35.09	\$9.30	\$34.62	\$18.15	\$113.28
1"	\$189.52	\$302.07	\$76.27	\$58.49	\$15.50	\$57.71	\$30.25	\$188.80
1-1/2"	\$379.04	\$604.14	\$152.54	\$116.97	\$30.99	\$115.41	\$60.51	\$377.60
2"	\$606.47	\$966.63	\$244.07	\$187.15	\$49.59	\$184.66	\$96.81	\$604.16
3"	\$1,326.65	\$2,114.50	\$533.90	\$409.40	\$108.48	\$403.94	\$211.77	\$1,321.61
4"	\$2,387.98	\$3,806.10	\$961.02	\$736.91	\$195.27	\$727.09	\$381.19	\$2,378.89
6"	\$4,927.57	\$7,853.86	\$1,983.06	\$1,520.62	\$402.93	\$1,500.34	(na)	\$4,908.82
12"	(na)	(na)	(na)	(na)	(na)	(na)	(na)	\$28,999.83
18"	(na)	(na)	(na)	(na)	(na)	(na)	(na)	\$53,910.22

Annual rates will be billed pro rata on a monthly basis.

#### HOW CAN I PARTICIPATE?

Proposition 218 establishes a protest process for the public to follow if they wish to oppose the rates.

Written protests on the proposed charge must be received prior to the close of the Public Hearing on June 24, 2020 and may be hand delivered during the hearing, mailed or delivered to: Casitas Municipal Water District Attn: Clerk to the Board 1055 Ventura Ave. Oak View CA 93022

E-mail protests are not accepted. Written protests on the proposed charges must be legible, identify the owner(s) or tenant of the property, provide the property address, and provide water account number or assessor's parcel number (APN). Only one protest per affected parcel will be considered. If written protests are presented from a majority of affected parcels, the District cannot approve the proposed charge.

For more information on the District's proposed City of Ventura Adjudication Impact Charge, please call: (805) 649-2251 Ext. 150

## PUBLIC HEARING NOTICE – New Water Charge

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29 Casitas Municipal Water District 1055 Ventura Ave. Oak View, CA 93022



**To:** Michael Flood, General Manager, Casitas Municipal Water District

From: Mark Hildebrand, Hildebrand Consulting, LLC

Date: June 19, 2020

Subject: City of Ventura Adjudication Impact Charge Study

Hildebrand Consulting was retained by the Casitas Municipal Water District (District) to recommend an additional charge that could be assessed to its ratepayers to offset the costs of a lawsuit that the District is defending. The following memorandum describes the revenue requirements created by the lawsuit and the methodology for calculating a proposed charge.

#### **District Background**

Formed in 1952, the District provides water service to 6,100 customer accounts in a service area that encompass the City of Ojai, Upper Ojai, the Ventura River Valley area, the City of Ventura to Mills Road, the Rincon and beach area to the ocean and Santa Barbara County line, and now the Ojai Water System (as of 2017). The District serves its potable water customers with local water from Lake Casitas and limited groundwater. The water is treated at the District's treatment plant before delivery to customers. Annual water deliveries vary considerably from year to year due to its large agricultural customer base whose demands vary based on weather and rainfall.

#### **Project Background**

The District is actively defending and protecting its customer's water rights in the case of Santa Barbara Channelkeepers v. State Water Resources Control Board; City of San Buenaventura; City of San Buenaventura v. Duncan Abbott, et al., Cross-Complaint, Superior Court of the State of California, County of Los Angeles, Case No. 19STCP01176. In 2014 the Santa Barbara Channelkeepers sued the City of Ventura involving the city's pumping of water near Foster Park by Casitas Springs. The active lawsuit seeks to ensure that enough water remains in the lower Ventura River for riparian and aquatic species, including the federally designated endangered Southern California steelhead. The City of Ventura then sought to bring in other users of the river, including the Casitas Municipal Water District which was served in September of 2018. More information about the case can be found at http://www.venturariverwatershedadjudication.com.

Because of its statutory responsibilities and mission, the District is defending rights related to water supplied through its customer's metered water connections (to be clear, not the water rights associated with the property owned by customers). The District's existing water rates are insufficient to offset the legal costs associated with this defense since such costs were not anticipated during the District's last water rate study (Stantec, 2016).

While the District has engaged Hildebrand Consulting to initiate the process of developing a new financial plan and update the District's rates, it is anticipated that the water rate study may be delayed into next year (2021). In the meantime, the District is facing immediate costs associated with the lawsuit which need to be addressed immediately.

#### **Project Objectives**

The objective of this study is to recommend an additional charge to the District's ratepayers that which equitably recover the costs associated with the above-referenced lawsuit while comporting with industry practices and legal requirements.

As directed by the District's Board, the proposed charges are proposed to be called the "City of Ventura Adjudication Impact Charge" as an acknowledgement that these new charges are being levied as a result of the financial impact of the lawsuit.

#### Methodology

The proposed City of Ventura Adjudication Impact Charge was calculated using methodologies that are aligned with industry standard practices for rate setting and all applicable laws, including California Constitution Article VIII D, Section 6 (commonly known as Proposition 218).

<u>Revenue Requirements</u> - The annual revenue requirements that will be created by the lawsuit were estimated based on legal costs to date as well as estimates of future costs to retain legal assistance and expert consulting. The District has already incurred approximately \$300 thousand. Based on these costs and staff estimates, the forecasted annual costs going forward are \$600 thousand.

<u>Cost-of-Service Allocation</u> - To calculate the proposed charges, the revenue requirements were first allocated to each of the District's existing eight (8) customers classes based on their respective historical water usage. Historic water usage behavior was used as the primary means for allocating costs due to the nature of the lawsuit, which is directly related to water resource sufficiency.

The historical water usage is based on the period from November 2017 through February 2020 (see **Table 1**). This period was chosen based on the most recent available water usage data back to the earliest month when the District has water usage records from the (newly acquired) Ojai Water System. This study did not use water usage data from earlier than November 2017 because the acquisition of

the Ojai Water System fundamentally changed the relative balance of water usage among the District's customer classes.

Customer Class	Total Water Usage*	Percent of Water Usage	Allocated Costs
Ag-Domestic	6,151.4	25.9%	\$155,597
Agriculture	4,225.1	17.8%	\$106,873
Commercial	1,739.8	7.3%	\$44,009
Interdepartmental	310.3	1.3%	\$7,849
Industrial	45.5	0.2%	\$1,150
Other	440.8	1.9%	\$11,149
Residential	4,872.6	20.5%	\$123,250
Resale	5,934.9	25.0%	\$150,123
	23,720.3		\$600,000

Table 1 - Recent Relative Historical Water Usage by Class and Subsequent Cost Allocation	on
Table I Recent Relative Instancal Water Osage by class and Subsequent cost Anotatie	

* From November 2017 through February 2020

<u>Rate Structure</u> - Once allocated to each customer class, the costs are further allocated among individual customers based on their meter size. This structure was chosen because meter size are correlated to water demand while also being a static value that provides revenue stability for the District and cost stability for customers. The relative rate charged to each meter size is based on the District's current meter equivalency schedule, which was used to calculate the District's current Service Charges (see the 2016 Water Rate Study). This rate structure was found to fairly and equitably recover the costs of the lawsuit from each customer while conforming with accepted industry practice and legal requirements.

The count of meters by size and customer class are summarized in **Table 2** below.

	5/8"-3/4"	1"	1-1/2"	2"	3"	4"	6"	12"	18"	Total Count	Equivalent Meters
Equivalency Schedule:	1.0	1.7	3.3	5.3	11.7	21.0	43.3	256.0	475.9		
Ag Domestic		13	2	120	33	15				183	1,368
Agriculture		4		36	19	6	1			66	590
Commercial	235	77	12	53	9	4	2			392	962
Industrial	2	4	1	3	1	4				15	124
Inter-departmental	8	2		5	5	4	1			25	224
Other	31	16	7	29	2	3				88	322
Resale	3	2		7	3	8	8	1	1	33	1,325
Residential	4,139	977	54	116	3	9				5,298	6,790
Total Meters	4,418	1,095	76	369	75	53	12	1	1	6,100	
Total Equivalent Meters	4,418	1,825	253	1,968	875	1,113	520	256	476	11,704	-

Table 2 – Count of meters and sum of equivalent meters by customers class

Table 3 provides a summary of the proposed monthly charges by customer class. The rate for the smallest meter was calculated by dividing the respective customer class' allocated cost (see Table 1) by

that customer class' total equivalent meters (see Table 2). The charge for the larger meters is calculated by multiplying the rate for the smallest meter by the meter equivalency schedule (see Table 2). These charges are being proposed to be <u>in addition</u> to the Volumetric Rates and Monthly Service Charges that were adopted by the District as part of the 2016 Water Rate Study.

Meter Size	Ag-Domestic	Agriculture	Commercial	Inter- Departmental	Industrial	Other	Residential	Resale
5/8"-3/4"	\$9.48	\$15.10	\$3.81	\$2.92	\$0.77	\$2.89	\$1.51	\$9.44
1"	\$15.79	\$25.17	\$6.36	\$4.87	\$1.29	\$4.81	\$2.52	\$15.73
1-1/2"	\$31.59	\$50.35	\$12.71	\$9.75	\$2.58	\$9.62	\$5.04	\$31.47
2"	\$50.54	\$80.55	\$20.34	\$15.60	\$4.13	\$15.39	\$8.07	\$50.35
3"	\$110.55	\$176.21	\$44.49	\$34.12	\$9.04	\$33.66	\$17.65	\$110.13
4"	\$199.00	\$317.17	\$80.09	\$61.41	\$16.27	\$60.59	\$31.77	\$198.24
6"	\$410.63	\$654.49	\$165.25	\$126.72	\$33.58	\$125.03	(na)	\$409.07
12"	(na)	(na)	(na)	(na)	(na)	(na)	(na)	\$2,416.65
18"	(na)	(na)	(na)	(na)	(na)	(na)	(na)	\$4,492.52

Table 3 – Proposed schedule for the City of Ventura Adjudication	on Impact Charge (monthly)
------------------------------------------------------------------	----------------------------

#### **Next Steps**

The Casitas Municipal Water District has sent out a Proposition 218 notification to all property owners and is scheduled to hold a public hearing on June 24th to consider the adoption of the new charge. If adopted, the charge will become effective on July 1, 2020. All members of the public have been invited to attend the public hearing. Additionally, under California law, all Casitas' property owners and customers of record have been invited to submit a written protest to the proposed charge. In the event that more than fifty percent of the District's property owners submit a protest, the District may not proceed with adopting the charge.

The Board of Directors has expressed that it intends to monitor the actual costs associated with the lawsuit and intended to reduce the charge in the event that costs are materially lower than the current forecast.

#### Conclusion

This study used methodologies that are aligned with industry standard practices for rate setting as promulgated by the American Water Works Association (AWWA) and all applicable laws, including California's Proposition 218. The proposed charges proportionately assign costs to each customer class and customer based on service demands and will allow the District to continue to provide reliable water service to customers.

#### DISCLAIMER

This document was produced by Hildebrand Consulting, LLC for the Casitas Municipal Water District ("District") and is based on a specific scope agreed upon by both parties. In preparing this report, Hildebrand Consulting utilized information and data obtained from the District or public and/or industry sources. Hildebrand Consulting has relied on the information and data without independent verification, except only to the extent such verification is expressly described in this document. Any projections of future conditions presented in the document are not intended as predictions, as there may be differences between forecasted and actual results, and those differences may be material.

Additionally, the purpose of this document is to summarize Hildebrand Consulting's analysis and findings related to this project, and it is not intended to address all aspects that may surround the subject area. Therefore, this document may have limitations, assumptions, or reliances on data that are not readily apparent on the face of it. Moreover, the reader should understand that Hildebrand Consulting is following industry best practices and California case law as it currently exists as of the writing of this report. Hildebrand Consulting is not responsible for anticipating future changes to legal requirements due to new laws or interpretations by courts.

# CASITAS MUNICIPAL WATER DISTRICT

# **RESOLUTION NO.**

# RESOLUTION ADOPTING THE CITY OF VENTURA ADJUDICATION IMPACT FEE

WHEREAS, Casitas Municipal Water District (Casitas) is actively defending and protecting its customer's water rights in the case of Santa Barbara Channelkeepers v. State Water Resources Control Board; City of San Buenaventura; City of San Buenaventura v. Duncan Abbott, et al., Cross-Complaint, Superior Court of the State of California, County of Los Angeles, Case No. 19STCP01176; and

WHEREAS, this active lawsuit seeks to ensure that enough water remains in the lower Ventura River for riparian and aquatic species, including the federally designated endangered Southern California steelhead; and

WHEREAS, the City of Ventura has made multiple water rights claims within the Casitas' boundaries in their complaint within aforementioned lawsuit including but not limited to pueblo rights and prescriptive rights that have serious implications as to the ability of Casitas to continue to serve its customers should the City of Ventura prevail; and

WHEREAS, since being served with this lawsuit in September of 2018, Casitas has engaged the services of consulting attorneys to advise and defend Casitas which up to this point, the costs have been paid for out of Casitas' reserve fund accounts; and

WHEREAS, Casitas expects to continue to engage the services of consulting attorneys as well as subject matter experts to advise and defend Casitas in this lawsuit in the coming months and years; and

WHEREAS, Casitas intends to preserve its reserve account funds for one-time costs such as emergencies and large capital projects; and

WHEREAS, at its May 1, 2020 Special Board Meeting, the Board of Directors of the Casitas Municipal Water District considered Staff and Water Rate Consultant recommendations regarding an impact charge that is designed to fund the ongoing costs of consulting attorneys and subject matter experts; and

WHEREAS, at its May 1, 2020 Special Board Meeting, the Board of Directors of the Casitas Municipal Water District set a public hearing on a proposed 'City of Ventura Adjudication Impact Charge' for June 24, 2020 and directed staff to provide the public notice of the hearing required by California's Proposition 218; and WHEREAS, notice of the public hearing was subsequently provided as required by California's Proposition 218; and

WHEREAS, the public hearing for the 'City of Ventura Adjudication Impact Charge' was conducted and the information provided therein was considered by the Board of Directors of the Casitas Municipal Water District; and

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Casitas Municipal Water District, that the proposed City of Ventura Adjudication Impact Charge is approved.

Adopted this 24th day of June, 2020.

Russ Baggerly, President Casitas Municipal Water District

ATTEST:

Angelo Spandrio, Secretary Casitas Municipal Water District

# MEMORANDUM

TO: Board of Directors

From: Michael L. Flood, General Manager

RE: FY 2021 Casitas MWD Budget Hearing

Date: June 19, 2020

# **RECOMMENDATION:**

The Board of Directors approve the FY 2021 Manager's Recommended Budget as presented.

# **BACKGROUND:**

Development Timeline of the FY 2021 CMWD Budget Process:

- 1. Departments began budget development January.
- 2. Department Managers presented their proposed budgets to the General Manager in February.
- 3. The General Manager made budget adjustments in concert with the Department Managers during the first two weeks of March.
- 4. The first draft budget was provided to the Finance Committee at the March 20, 2020 Committee Meeting for review and comment. The Committee asked that staff provide a balanced budget that minimizes the use of District reserves.
- 5. Staff continued to refine the budget.
- 6. The second draft budget was provided to the Finance Committee at the April 15, 2020 Committee Meeting for review and comment. This draft included adjustments to both revenues and expenses related to the closure of the Casitas Water Adventure for the 2020 season and a reduction in projected water sales. The Finance Committee asks that the budget be brought to a budget workshop for the full Board in early June.

- 7. Staff presented the FY 2021 Manager's Recommended Budget to the Board of Directors during a workshop on June 8, 2020.
- 8. Staff presented additional adjustments to the Capital Budget sections of the budget to the Finance Committee on June 19, 2020.

# FY 2021 Budget Basis:

- Revenues are based on 11,379 AF of Water Sales which is a projection based on the last two fiscal year sales and continued Stage 3 conservation restrictions.
- Water Rates and Standby Charges will be increased on July 1st via five-year rate increase approved in 2017.
- Grant funds are included in revenues.
- COVID-19 Outbreak-related FEMA reimbursements are <u>not</u> included in budgeted revenues.
- CFD 2013-1 Bond Funds are now shown as part of the District's reserves.
- Projected revenue and expense levels require the use of approximately \$16.9M in District reserves (CFD 2013-1: \$11.3M; District: \$5.6M) to balance the budget as currently presented.
- Additional reductions in capital spending were made as a result of staff recommendations at the June 19, 2020 Finance Committee meeting.
- Some ongoing projects not currently funded in the FY 2021 budget will need further research and discussion during the year.
- The District should attempt to maintain six months of operational reserves based on FY 2021 expenses.
- Staff recommends a review of the FY 2021 budget after FY 2020 year-end close in September 2020 to further analyze ongoing impacts to the District's operations and possible adjustments to the FY 2021 budget.

# **DISCUSSSION:**

The FY 2021 Budget development involved several months of consideration and revision by District staff at many levels within each department. The Department Requested budget represents each department's view on what their operational and capital needs will be over the next twelve months. The Manager Recommended budget is a result of revisions that work to align projected spending with revenues but also look to achieve completion of as many of each department's capital projects as feasible. To that end, the Manager Recommended FY 2021 budget uses existing District reserves for CMWD system capital projects and CFD 2013-1 bond funds to complete capital projects within the Ojai Water System.

# Summary of FY 2021 Manager Recommended Budget:

Expenses:

Operational: \$ 23,891,398 Revised Capital: <u>\$ 18,179,500</u> **Total: \$ 42,070,898** 

Funding Sources:

Revenues: \$ 25,715,273 CFD 13-1 Funds: \$ 11,314,296 Revised Reserves: \$ 4,241,329 Other Bond Funds<u>: \$ 800,000</u> **Total: \$ 42,070,898 Net Budget: \$0** Estimated District Reserve Fund Impact:

Estimated July 1, 2020 Reserve Funds: **\$ 32,054,868** (Current April 30, 2020 balance)

Estimated June 30, 2021 Reserve Funds: **\$ 16,499,243** (Eight-Month Operational Reserve)

During the Budget Workshop, the Board also asked for information regarding typical operational reserve policies in the water industry and a synopsis of the prioritization of Capital projects.

A presentation will be provided that will give a more in-depth look at the FY 2021 budget.

# Casitas Municipal Water District Revenue 2020 / 2021

Manager Recommended

12% Rate Increase 9,845. AF - CMWD

Revenue	1,534 AF - OJAI
Water Sales - Residential	
11-4-00 4000-00 Water Sales - Residential Gravity	9,796
11-4-00 4001-00 Water Sales - Residential Pumped	732,052
11-4-00 4001-85 Water Sales - Residential Pumped - Ojai	679,233

Water Sales - Business	
11-4-00 4010-00 Water Sales - Business Gravity	776
11-4-00 4011-00 Water Sales - Business Pumped	385,279
11-4-00 4011-85 Water Sales - Business Pumped - Ojai	257,086

Water Sales Industrial	
11-4-00 4020-00 Water Sales - Industrial Gravity	0
11-4-00 4021-00 Water Sales - Industrial Pumped	11,965
11-4-00 4021-85 Water Sales - Industrial Pumped - Ojai	1,211

Water Sales - Resale	
11-4-00 4030-00 Water Sales - Resale Gravity	1,083,900
11-4-00 4031-00 Water Sales - Resale Pumped	440,140

Water Sa	iles - Other	
11-4-00 4040-00	Water Sales - Temporary Meter - Pumped	18,459
11-4-00 4040-85	Water Sales - Temporary Meter - Pumped - Ojai	112
11-4-00 4041-00	Water Sales - Other Water Sales - Gravity	6,463
11-4-00 4042-00	Water Sales - Other Water Sales - Pumped	100,858
11-4-00 4042-85	Water Sales - Other Water Sales - Pumped - Ojai	50,900

Water Sales - Fire Prevention	
11-4-00 4050-00 Fire Prevention - General	0
11-4-00 4051-00 Fire Prevention - Hydrants	0

Water Sales - Agriculture Domestic	
11-4-00 4060-00 Water Sales - Ag Domestic - Gravity	56,955
11-4-00 4061-00 Water Sales - Ag Domestic - Pumped	1,605,129
11-4-00 4061-85 Water Sales - Ag Domestic - Pumped - Ojai	33,014

Water Sales - Agriculture	
11-4-00 4070-00 Water Sales - Agricultural - Gravity	36,816
11-4-00 4071-00 Water Sales - Agricultural - Pumped	1,116,257
11-4-00 4071-85 Water Sales - Agricultural - Pumped - Ojai	871

Water Sales - Interdepartmental	
11-4-00 4080-00 Water Sales - Recreation - Gravity	0
11-4-00 4081-00 Water Sales - Recreation - Pumped	31,029

Wa	ter Services - Other	
11-4-00 40	90-00 Capital Facilities Charge	90,865
	91-00 Energy Surcharge	0
11-4-00 40	92-00 Forfeited Deposits / Penalties	0
11-4-00 40	93-00 Meter Tests and Installations	5,604
11-4-00 40	94-00 Sale of Plans or Bid Packets	0
11-4-00 40	95-00 Temporary Installation	0
11-4-00 40	96-00 Water Storage Valuation	0
11-4-00 40	97-00 Work Order Close Revenue	0
	50-00 Meter Standby - CMWD Residential	1,570,640
11-4-00 41	51-00 Meter Standby - CMWD Commercial	128,546

11-4-00 4152-00	Meter Standby - CMWD Industrial	38,492
	Meter Standby - CMWD Agriculture	232,198
	Meter Standby - CMWD Institutional	42,429
	Meter Standby - CMWD Temporary	25,021
	Meter Standby - CMWD Ag Residential	426,204
11-4-00 4157-00	Meter Standby - CMWD Interdepartmental	19,693
11-4-00 4158-00	Meter Standby - CMWD Resale	440,270
11-4-00 4150-85	Meter Standby - Ojai Residential	1,323,455
11-4-00 4151-85	Meter Standby - Ojai Commercial	183,964
11-4-00 4152-85	Meter Standby - Ojai Industrial	1,844
11-4-00 4153-85	Meter Standby - Ojai Agriculture	0
11-4-00 4154-85	Meter Standby - Ojai Institutional	57,632
11-4-00 4155-85	Meter Standby - Ojai Temporary	0
11-4-00 4156-85	Meter Standby - Ojai Ag Residential	7,644
11-4-00 4159-00	Meter Standby - Fire Service	21,622
11-4-00 4099-00	Pump Charges	0
Revenue	- Interest	
11-4-00 4100-00	1% Tax Allocation	0
11-4-00 4105-00	Assessments - Oak View	0
11-4-00 4110-00	Interest on BPC and Taormina	0
11-4-00 4115-00	Interest on Time Deposits and Investments	450,000
11-4-00 4120-00	Protested Tax Apportionment	0

Revenue	- Taxes and Assessments	
11-4-00 4200-00	1 % - Secured Current General Fund	2,375,549
11-4-00 4205-00	1 % - Redemption & In Lieu	0
11-4-00 4210-00	1 % - Secured Prior Year General Fund	0
11-4-00 4215-00	1 % - Unsecured Current General Fund	0
11-4-00 4220-00	1 % - Unsecured Prior Year General Fund	0
11-4-00 4225-00	Availability Charge Current - Oak View	0
11-4-00 4230-00	Availability Charge Prior Year - Oak View	0
69-4-00 4010-00	MMWS - Tax Secured	19,212
11-4-00 4235-00	RDA Pass Through	108,005
75-4-00 4010-00	CFD-2013	2,713,976

Revenue - Other Governmental Agencies	
11-4-00 4300-00 Federal Disaster Assistance	128,851
11-4-00 4305-00 Grant Revenue - Federal	3,825,000
11-4-00 4310-00 Local - City of Ventura USGS	0
11-4-00 4315-00 State - Homeowners Property Tax	0
11-4-00 4320-00 State - Other	0

Revenue	- Delinquency On-Off Fees / Water	
11-4-00 4350-00	Hang Tag Fee	31,860
11-4-00 4351-00	Turn Off Fee	6,102
11-4-00 4352-00	Turn On Fee	6,048
11-4-00 4353-00	Late Fee - Residential	<mark>47,464</mark>
11-4-00 4357-00	Late Fee - Business	5,276
11-4-00 4361-00	Late Fee - Industrial	<u>382</u>
11-4-00 4365-00	Late Fee - Resale	<mark>178</mark>
11-4-00 4369-00	Late Fee - Other	<mark>1,450</mark>
11-4-00 4373-00	Late Fee - Fire Prevention	0
11-4-00 4377-00	Late Fee - Agriculture Domestic	<mark>5,432</mark>
11-4-00 4381-00	Late Fee - Agriculture	<mark>2,486</mark>
11-4-00 4385-00	Late Fee - Interdepartmental	0
11-4-00 4395-00	N.S.F Returned Check Fee	<mark>870</mark>

Revenue - Other	
11-4-00 4400-00 Flexible Storage	4,472
11-4-00 4405-00 Gain / Loss on Sale of Fixed Assets	0
11-4-00 4410-00 Grant Revenue - Other	0

11-4-00 4420-00 Miscellaneous Revenue	633,799
11-4-00 4415-00 Habitat Conservation Plan	0
11-4-00 4425-00 Sale of Fixed Assets	0
11-4-00 4430-00 Variation in Water Sales	0
11-4-00 4445-00 Energy Capacity	0
11-4-00 4450-00 SWP - Sale of Water	250,000

Reven	e - Park Entrance Fees and Permits / Recreation	
11-4-62 4500-0	00 Animal Permit	31,920
11-4-62 4510-0	00 Boat Fees - Annual	31,220
11-4-62 4515-0	00 Boat Fees - Daily	7,490
11-4-62 4525-0	00 Boat Inspection Fees - Quagga	1,989
	00 Boat Fees - Overnight	1,000
11-4-62 4535-0	00 Boat Lock Revenue - Quagga	1,404
11-4-62 4540-0	00 Boating Grant - Launching Facility - Archived	0
11-4-62 4545-0	00 Camping Fees	2,185,000
11-4-62 4550-0	00 Camping Promotion	0
11-4-62 4555-0	00 Commercials - Recreation	<mark>1,500</mark>
11-4-62 4560-0	00 Deposit Forfeit	0
11-4-62 4565-0	00 Donation vouchers	-2,500
11-4-62 4570-0	00 Events - Recreation	25,000
11-4-62 4575-0	00 Event Reimbursement - Recreation	2,500
11-4-62 4580-0	00 Federal Disaster Assistance - Recreation	0
11-4-62 4585-0	00 Gift Cards and Certificates	1,200
11-4-62 4590-0	00 Grants - Recreation	107,000
	00 Guest Pass - Recreation	0
11-4-62 4600-0	00 Kayak & Canoes Annual - Recreation	4,007
	00 Kayak and Canoes Daily - Recreation	15
11-4-62 4610-0	00 Miscellaneous Revenue	2,000
11-4-62 4620-0	00 Rain Checks - Recreation	-1,000
11-4-62 4625-0	00 Reservations	166,500
	00 Shower Facility Fees	44,000
	00 Trailer Storage Fees	278,750
	00 Vehicle Fees - Daily	410,000
	00 Violation Ordinance Fees	2,840
11-4-62 4650-0	00 Visitor Cards	155,520

Revenue - Concessions / Recreation	
11-4-62 4705-00 Boat Rental - Concession	53,000
11-4-62 4720-00 Park Store - Recreation	50,000
11-4-62 4725-00 Snack Bar - Concession	24,000
11-4-62 4740-00 Water Park Snack Bar	1,500

Re	evenue - Water Park	
11-4-65 4	805-00 Water Park - Late Day Pass	18,067
11-4-65 4	810-00 Water Park - Group Pass Fee	<mark>-1,618</mark>
11-4-65 4	815-00 Water Park - Junior Lifeguard Fee	<mark>6,430</mark>
11-4-66 4	818-00 Water Park - Lifeguard Training Materials	0
11-4-65 4	820-00 Water Park - Locker Fee	<mark>174</mark>
11-4-65 4	825-00 Water Park - Next Day Pass Fee	<mark>-814</mark>
11-4-65 4	830-00 Water Park - Gift Certificates	-375
11-4-65 4	835-00 Water Park - Rain Checks	-600
11-4-65 4	840-00 Water Park - Reservation Fee	<mark>13,850</mark>
11-4-65 4	845-00 Water Park - Season Pass Fee	<mark>12,350</mark>
11-4-65 4	850-00 Water Park - Shade Rental Fee	2,24 <mark>5</mark>
11-4-65 4	855-00 Water Park - Shower Facility Fees	0
11-4-65 4	860-00 Water Park - Single Splash Fee	186,620
11-4-65 4	865-00 Water Park - Special Event Fee	0
11-4-65 4	870-00 Water Park - Water Fitness - Fee	2,250

Revenue - Other / Recreation	]
11-4-62 4900-00 Collection Over / Short - Recreation OP	0
11-4-65 4900-00 Collection Over / Short - Recreation WP	0
Total Revenue	25,715,273

# Casitas Municipal Water District Budget Revenue, Expenses & Capital 2020 / 2021

Manager Recommended	<b>2020 / 2021</b> 9845. AF -CMWD 1,534 AF - OJAI	<b>2019 / 2020</b> 11,196 AF -CMWD 1,657 AF - OJAI
Revenue	25,715,273	25,249,404
Expenses Administration Board of Directors District Maintenance	4,398,674 273,958 596,321	2,535,725 212,963 542,691
Electrical Mechanical Engineering Fisheries	3,137,437 1,593,532 514,912	3,013,197 1,273,784 477,870
Information Technology Management Pipeline	283,675 1,756,206 1,721,164	276,669 1,337,422 1,946,900
Recreation - Operations / Maint. / PR / Water Pk Retirees Safety / Garage	4,588,786 544,397 114,311	5,683,542 542,656 47,721
Utilities Maintenance Water Conservation - P/R Water Quality, Lab Water Treatment	830,969 831,135 735,600 1,970,320	660,785 799,224 679,974 1,971,083
Total Expenses	23,891,398	22,002,208
Net	1,823,874	3,247,197
<b>Capital</b> Administration Board of Directors	•	
District Maintenance Electrical Mechanical Engineering	- 8,500 217,500 17,425,000	- 850,000 1,318,700 20,708,000
Fisheries Information Technology Management Pipeline	- - - 38,000	- 46,750 - 40,000
Recreation - Operations / Maint. / PR / Water Pk Retirees	7,000 -	250,000
Safety / Garage Utilities Maintenance Water Conservation - P/R	103,500 60,000 -	141,500 100,000 -
Water Quality, Lab Water Treatment	150,000 170,000	109,000 380,500
	18,179,500	23,944,450
Net assets, end of year	(16,355,626)	(20,697,253)
Funding Deficit from Variation of Water Sales Funding Deficit from Available Storm Damage Reserves Funding Deficit from Available Capital Imp Restricted Reserves Funding Deficit from Available Capital Imp Un Restricted Reserves Funding Deficit from Available Alternate Water Supply Studies Funding Deficit from Funds - CFD 2013-1 Improvement Fund Funding Deficet from Conservation Penalty Reserves Funding Deficit from Bonding Funding Deficit from CFD-2013-1 Bond Proceeds	1,302,347 0 5 0 5 0 5 69,296 2,938,982 800,000 10,745,000	2,360,096 850,000 2,196,395 3,860,762 - 0 0 11,430,000
Net assets, End of Year	0	0

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11 -GENERAL FUND FINANCIAL SUMMARY

	BUDGET 2019-2020	REV./EXP. T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
REVENUE SUMMARY					
NON DEPARTMENTAL					
WATER SALES	7,107,809	4,724,669	6,658,301	6,658,301	0
WATER SERVICES	2,887	19,085	5,604	5,604	0
WATER STANDBY	3,713,225	3,773,746	4,519,654	4,519,654	0
WATER DELINQUNCY	122,809	547,911	112,498	107,548	0
WATER REVENUE OTHER	4,514,113	195 <b>,</b> 301	72,070	888,271	0
CAPITAL FACILITIES	76,593	4,419	90,865	90,865	0
INTEREST	549,710	291,412	450,000	450,000	0
TAXES & ASSESSMENTS	4,917,746	2,413,526	2,375,549	2,375,549	0
OTHER GOVT. AGENCIES	0	14,671	3,953,851	3,953,851	0
MISCELLANEOUS REVENUES	94,466	138,605	108,005	108,005	0
TOTAL NON DEPARTMENTAL	21,099,358	12,123,345	18,346,397	19,157,648	0
RECREATION - OPERATIONS					
RECREATION PARK	3,040,609	1,883,996	3,457,855	3,457,355	0
RECREATION-CONCESSION	134,000	90,084	127,000	127,000	0
RECREATION OTHER	0	206	0	0	0
TOTAL RECREATION - OPERATIONS	3,174,609	1,974,285	3,584,855	3,584,355	0
RECREATION - WATER PARK					
RECREATION-CONCESSION	10,500	7,935	9,500	1,500	0
RECREATION-WATER PARK	964,940	607 <b>,</b> 987	967,310	238,579	0
RECREATION OTHER	0	( <u>144</u> )	0	0	0
TOTAL RECREATION - WATER PARK	975,440	615,778	976,810	240,079	0
TOTAL REVENUE	25,249,407	14,713,408	22,908,062	22,982,082	0

11 -GENERAL FUND FINANCIAL SUMMARY

	BUDGET 2019-2020	REV./EXP. T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
EXPENDITURE SUMMARY					
RETIREES					
Benefits	542,655	518,978	544,397	544,397	0
TOTAL RETIREES	542,655	518,978	544,397	544,397	0
BOARD OF DIRECTORS					
Salaries	113,155	74,918	118,810	118,810	0
Benefits	90,509	94,762	125,847	125,847	0
Services & Supplies	11,300	4,981	29,300	29,300	0
TOTAL BOARD OF DIRECTORS	214,964	174,660	273,957	273,957	0
MANAGEMENT					
Salaries	756,391	655,953	739,583	739,583	0
Benefits	195,765 454,250	193,538 521,382	208,164 808,460	208,164 808,460	0
Services & Supplies TOTAL MANAGEMENT	1,406,406	1,370,873	1,756,207	1,756,207	0
INFORMATION TECHNOLOGY					
Salaries	191,125	168,685	188,825	188,825	0
Benefits	52,943	67,346	56,340	56,340	0
Services & Supplies	34,600	57,833	38,510	38,510	0
Services & Supplies-W.O.	0	1,764	0	0	0
TOTAL INFORMATION TECHNOLOGY	278,668	295,628	283,675	283,675	0
WATER CONSERVATION					
Salaries	428,292	279,364	358 <b>,</b> 680	358,680	0
Benefits	132,183	148,873	143,330	143,330	0
Services & Supplies	176,267	172,173	329 <b>,</b> 125	329,125	0
Services & Supplies-W.O.	0	696	0	0	0
TOTAL WATER CONSERVATION	736,742	601,106	831,135	831,135	0
FISHERIES					
Salaries	341,965	328,783	357,252	357,252	0
Benefits Services & Surplice	101,930	133,296	108,611	108,611	0
Services & Supplies	39,475	66,226 4,365	48,750	49,050 0	
Services & Supplies-W.O. TOTAL FISHERIES	<u>0</u> 483,370	532,671	<u> </u>	514,913	<u>0</u> 0
ADMINISTRATION SERVICES					
Salaries	705,890	588,223	695,023	695,023	0
Benefits	292,888	220,321	323,072	323,072	0
Services & Supplies	1,005,439	746,444	1,115,159	1,117,159	0
Other Operating Expenses	( <u>1,544,838</u> )	( <u>146,853</u> )	( <u>1,180,245</u> )	( <u>524,236</u> )	0
TOTAL ADMINISTRATION SERVICES	459,379	1,408,135	953,009	1,611,018	0

11 -GENERAL FUND FINANCIAL SUMMARY

FINANCIAL SUMMARY					
	BUDGET 2019-2020	REV./EXP. T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
WAREHOUSE					
Salaries	9,774	4,852	8,696	8,696	0
Benefits	1,585	1,849	1,472	1,472	0
Services & Supplies	15,500	10,677	11,800	11,800	0
TOTAL WAREHOUSE	26,859	17,379	21,968	21,968	0
GARAGE					
Salaries	22,720	11,003	24,934	24,934	0
Benefits	3,683	2,915	4,221	4,221	0
Services & Supplies	( 95,718)	64,745	( 132,687)	( 115,583)	0
Services & Supplies-W.O.	141,500	127,387	134,878	103,500	0
TOTAL GARAGE	72,185	206,050	31,346	17,072	0
SAFETY					
Salaries	108,749	103,597	117,894	117,894	0
Benefits	46,722	44,120	56,614	56,614	0
Services & Supplies	15,480	13,257	41,720	41,720	0
TOTAL SAFETY	170,951	160,973	216,228	216,228	0
ENGINEERING					
Salaries	808,209	698,427	896,947	829,173	0
Benefits	241,656	255,370	265,445	255,807	0
Services & Supplies	228,920	1,112,208	552 <b>,</b> 700	508,550	0
Salaries - Work Orders	0	92 <b>,</b> 529	0	0	0
Benefits - Work Orders	0	14,121	0	0	0
Services & Supplies-W.O.	21,558,000	7,121,387	28,225,000	17,425,000	0
TOTAL ENGINEERING	22,836,785	9,294,043	29,940,092	19,018,530	0
WATER OUALITY - LAB					
Salaries	338,477	284,772	325,321	325,321	0
Benefits	100,171	139,167	135,475	135,475	0
Services & Supplies	242,976	204,634	274,802	274,802	0
Services & Supplies-W.O.	109,000	15,759	185,000	150,000	0
TOTAL WATER QUALITY - LAB	790,624	644,331	920,598	885,598	0
UTILITIES MAINTENANCE					
Salaries	385,707	431,975	569,097	500,187	0
Benefits	132,699	162 <b>,</b> 798	184,304	172,636	0
Services & Supplies	142,380	119,037	158,145	158,145	0
Services & Supplies-W.O.	100,000	50,096	60,000	60,000	0
TOTAL UTILITIES MAINTENANCE	760,786	763,906	971,546	890,968	0
ELECTRICAL MECHANICAL					
Salaries	622,643	530 <b>,</b> 281	622 <b>,</b> 963	622 <b>,</b> 963	0
Benefits	191,525	183,050	202,200	202,200	0
Services & Supplies	2,201,529	1,340,409	2,321,774	2,312,274	0
Salaries - Work Orders	0	696	0	0	0

11 -GENERAL FUND FINANCIAL SUMMARY

	BUDGET 2019-2020	REV./EXP. T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Benefits - Work Orders	0	104	0	0	0
Services & Supplies-W.O.	1,318,700	156,730	342,750	217,500	0
TOTAL ELECTRICAL MECHANICAL	4,334,397	2,211,270	3,489,687	3,354,937	0
<u>DIST MAINT - PIPELINE</u>					
Salaries	694,872	611,806	660,608	660,608	0
Benefits	250,345	264,126	252,885	252,885	0
Services & Supplies	948,215	516,133	869,482	792,182	0
Services & Supplies-W.O.	40,000	7,131	20,000	38,000	0
TOTAL DIST MAINT - PIPELINE	1,933,432	1,399,196	1,802,975	1,743,675	0
WATER TREATMENT					
Salaries	681,299	802,329	796,002	796,002	0
Benefits	325,015	363,282	317,021	317,021	0
Services & Supplies	969,120	530 <b>,</b> 979	866,297	857 <b>,</b> 297	0
Services & Supplies-W.O.	387,500	171,781	1,215,000	170,000	0
TOTAL WATER TREATMENT	2,362,934	1,868,371	3,194,320	2,140,320	0
<u> OPERATIONS - MAINTENANCE</u>					
Salaries	213,385	231,756	284,725	254,830	0
Benefits	132,776	107,628	119,240	114,180	0
Services & Supplies	189,530	903,003	227,310	227,310	0
Services & Supplies-W.O.	0	352	73,500	8,500	0
TOTAL OPERATIONS - MAINTENANCE	535,691	1,242,738	704,775	604,820	0
RECREATION - OPERATIONS					
Salaries	1,213,880	1,273,505	1,310,078	1,334,562	0
Benefits	369,280	423,998	436,079	440,225	0
Services & Supplies	343,140	221,376	309,885	309,885	0
Other Operating Expenses	756,865	0	199,423	524,236	0
Services & Supplies-W.O. TOTAL RECREATION - OPERATIONS	<u>0</u> 2,683,165	0 1,918,879	<u>82,000</u> 2,337,465	<u>2,000</u> 2,610,908	0
	270007100	1,910,019	2,00,,100	2,010,000	0
<u>RECREATION - MAINTENANCE</u> Salaries	452 157	472 764	ECA 077	E04 700	0
Benefits	453,157 129,584	473,764 156,850	564,277 144,791	504,762 140,885	0
Services & Supplies	360,155	354,752	404,390	404,390	0
Other Operating Expenses	306,171	0	448,840	0	0
Services & Supplies-W.O.	250,000	98,174	357,500	5,000	0
TOTAL RECREATION - MAINTENANCE	1,499,067	1,083,539	1,919,798	1,055,037	0
RECREATION - PUBLIC REL					
Salaries	300,000	90,395	181,404	183,105	0
Benefits	28,953	9,120	19,154	19,443	0
Services & Supplies	173,960	125,405	162,527	157,727	0
Other Operating Expenses	172,832	0	126,954	0	0
TOTAL RECREATION - PUBLIC REL	675,745	224,920	490,039	360,275	0

11 -GENERAL FUND FINANCIAL SUMMARY

	BUDGET 2019-2020	REV./EXP. T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
RECREATION - WATER PARK					
Salaries	512,359	385,391	558,719	374,196	0
Benefits	75,707	79 <b>,</b> 378	81,136	67 <b>,</b> 285	0
Services & Supplies	184,530	108,107	172,934	128,084	0
Other Operating Expenses	308,970	146,853	405,028	0	0
Services & Supplies-W.O.	0	3	146,400	0	0
TOTAL RECREATION - WATER PARK	1,081,566	719,731	1,364,217	569,565	0
TOTAL EXPENDITURES	43,886,371	26,657,378	52,562,047	39,305,203	0
REVENUE OVER/(UNDER) EXPENDITURES	( 18,636,964)	( 11,943,970)	( 29,653,985)	( 16,323,121)	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

11 -GENERAL FUND

REVENUES	BUDGET	REVENUES	DEPARTMENT	GEN MGR	BOARD
	2019-2020	T0:30Jun20	REQUESTED	RECOMMENDED	APPROVED

# NON DEPARTMENTAL

WATER SALES					
Water Sales - Residential Grav	9,735	13,899	9,796	9,796	0
Water Sales - Residential Pump	1,401,647	1,191,103	1,411,285	1,411,285	0
Water Sales - Commercial Gr	620	376	776	776	0
Water Sales - Commercial Pump	684,139	464,534	642,365	642,365	0
Water Sales - Industrial Pumpe	10,398	15,025	13,176	13,176	0
Water Sales - Resale Gravity	1,147,947	805,771	1,083,900	1,083,900	0
Water Sales - Resale Pumped	379,893	68,216	440,140	440,140	0
Water Sales - Temporary Meter	18,985	16,584	18,571	18,571	0
Water Sales - Insitutional Gr	7,242	4,617	6,463	6,463	0
Water Sales - Institutional Pu	175,000	117,187	151,758	151 <b>,</b> 758	0
Water Sales - Ag Domestic - Gr	63,785	45,149	56 <b>,</b> 955	56 <b>,</b> 955	0
Water Sales - Ag Domestic - Pu	1,848,908	1,164,782	1,638,143	1,638,143	0
Water Sales - Agricultural - G	42,341	28,836	36,816	36,816	0
Water Sales - Agricultural - P	1,282,437	756,413	1,117,128	1,117,128	0
Water Sales - Recrecation - Pu	34,732	32,178	31,029	31,029	0
TOTAL WATER SALES	7,107,809	4,724,669	6,658,301	6,658,301	0
WATER SERVICES					
Meter Tests & Installations	2,887	18,985	5,604	5,604	0
Temporary Installation	0	100	. 0	. 0	0
TOTAL WATER SERVICES	2,887	19,085	5,604	5,604	0
WATER STANDBY					
Meter Chg - CMWD Residential	2,361,941	2,413,560	2,894,095	2,894,095	0
Meter Chg - CMWD Commercial	306,706	275,476	312,510	312,510	0
Meter Chg - CMWD Industrial	32,258	33,613	40,336	40,336	0
Meter Chg - CMWD Agriculture	187,826	188,827	232,198	232,198	0
Meter Chg - CMWD Institutional	73,594	80,210	100,061	100,061	0
Meter Chg - CMWD Temporary	26,805	20,397	25,021	25,021	0
Meter Chg - CMWD Ag Residentia	344,332	360,662	433,848	433,848	0
Meter Chg - CMWD Interdepartme	17,583	18,483	19,693	19,693	0
Meter Chg - CMWD Resale	285,845	365,963	440,270	440,270	0
Meter Chg - Fire Service	76,337	16,554	21,622	21,622	0
TOTAL WATER STANDBY	3,713,225	3,773,746	4,519,654	4,519,654	0
WATER DELINQUNCY					
Hang Tag Fee	37,020	18,120	35,400	31,860	0
Turn Off Fee	7,200	3,020	6,780	6,102	0
Turn On Fee	7,080	3,260	6,780	6,048	0
Late Fee - Residential	49,042	31,639	47,464	47,464	0
Alloc Penalty - Residential	. 0	570,818	0	0	0
Alloc Penalty - Business	0	( 50,650)	0	0	0

## CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

REVENUES	BUDGET 2019-2020	REVENUES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Late Fee - Business	7,441	1,735	5,276	5,276	0
Late Fee - Industrial	371	1,735 849	382	382	0
Late Fee - Resale	229	123	178	178	0
Late Fee - Other	1,315	1,929	1,450	1,450	0
Alloc Penalty - Other	1,515	( 39,585)	1,400	1,400	0
Late Fee - Agriculture Domesti	9,424	2,879	5,432	5,432	0
Late Fee - Agriculture	2,877	2,0754	2,486	2,486	0
N.S.F Returned Check Fee	810	1,020	870	870	0
TOTAL WATER DELINQUNCY	122,809	547,911	112,498	107,548	0
WATER REVENUE OTHER					
Flexible Storage	4,472	4,472	4,472	4,472	0
Grant Revenue - Other	4,458,300	1,1,2	-,-,2	-, -, 2	0
Miscellaneous Revenue - Other	33,799	77,301	33,799	633,799	0
Bad Debt Collection Recovery	0	1,368	0	0000,700	0
Administration Fee	0	712	0	0	0
Energy Capacity Revenue	17,542	0	33,799	0	0
SWP - Sale of Water	17, 542	111,449	0	250,000	0
TOTAL WATER REVENUE OTHER	4,514,113	195,301	72,070	888,271	0
CAPITAL FACILITIES					
Capital Facilities Charge	76,593	4,419	90,865	90,865	0
TOTAL CAPITAL FACILITIES	76,593	4,419	90,865	90,865	0
INTEREST					
1% Tax Allocation	0	6,007	0	0	0
Interest on BPC and Taormina	19,192	0	0	0	0
Interest on Time Deposits and	530,518	285,405	450,000	450,000	0
TOTAL INTEREST	549,710	291,412	450,000	450,000	0
TAXES & ASSESSMENTS					
1 % - Secured Current General	2,259,862	2,326,817	2,375,549	2,375,549	0
1 % - Secured Prior Year Gener	0	16,003	0	0	0
1 % - Unsecured Current Genera	0	70,913	0	0	0
1 % - Unsecured Prior Year Gen	0	( 207)	0	0	0
CFD - 2013	2,657,884	0	0	0	0
TOTAL TAXES & ASSESSMENTS	4,917,746	2,413,526	2,375,549	2,375,549	0
OTHER GOVT. AGENCIES					
Federal Disaster Assistance	0	0	128,851	128,851	0
Grant Revenue - Federal	0	0	3,825,000	3,825,000	0
State - Homeowners Property Ta	0	14,586	0	0	0
State - Other	0	85	0	0	0
TOTAL OTHER GOVT. AGENCIES	0	14,671	3,953,851	3,953,851	0
MISCELLANEOUS REVENUES					
RDA - Pass Through	94,466	138,605	108,005	108,005	0
TOTAL MISCELLANEOUS REVENUES	94,466	138,605	108,005	108,005	0

## CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

TOTAL NON DEPARTMENTAL RECREATION - OPERATIONS	21,099,358 14,500 24,000	12,123,345	18,346,397	19,157,648	0
RECREATION PARK					
Animal Permit		11,672	31,920	31,920	0
Boat Fees - Annual		17,891	31,220	31,220	0
Boat Fees - Daily	8,500	3,948	7,490	7,490	0
Boat Inspection Fees - Quagga	2,000	1,205	1,989	1,989	0
Boat Fees - Overnight	800	205	1,000	1,000	0
Boat Lock Revenue - Quagga	500	2,204	1,404	1,404	0
Cafe Pass Fee	0	6,843	, 0	. 0	0
Camping Fees	1,835,000	996,509	2,185,000	2,185,000	0
Commercials - Recreation	1,200	1,250	1,500	1,500	0
Donation vouchers	( 2,000)	. 0	( 2,000)	-	0
Events - Recreation	42,000	23,620	25,000	25,000	0
Event Reimbursment - Recreatio	0	2,410	2,500	2,500	0
Gift Cards and Certificates	500	116	1,200	1,200	0
Grants - Recreation	121,000	106,945	107,000	107,000	0
Guest Pass - Off Season	0	( 100)	. 0	0	0
Impound Fee	0	70	0	0	0
Kayak & Canoes Annual - Recrea	3,600	2,972	4,007	4,007	0
Kayak and Canoes Daily - Recrr	. 9	73	15	15	0
Miscellaneous Revenue	0	830	2,000	2,000	0
Rain Checks - Recreation	0	( 2)	( 1,000)	( 1,000)	0
Reservations	139,000	68,167	166,500	166,500	0
Shower Facility Fees	46,000	35,013	44,000	44,000	0
Snow Bird Pumping	0	4,564	0	0	0
Trailer Storage Fees	208,000	235,152	278,750	278,750	0
Vehicle Fees - Daily	455,000	252,730	410,000	410,000	0
Violation Ordinance Fees	3,000	2,125	2,840	2,840	0
Visitor Cards	138,000	107,584	155,520	155,520	0
TOTAL RECREATION PARK	3,040,609	1,883,996	3,457,855	3,457,355	0
RECREATION-CONCESSION					
Boat Rental - Concession	58,000	36,103	53,000	53,000	0
Park Store - Recreation	52,000	38,320	50,000	50,000	0
Cafe - Concession	24,000	15,661	24,000	24,000	0
TOTAL RECREATION-CONCESSION	134,000	90,084	127,000	127,000	0
RECREATION OTHER					
Over / Short - Recreation	0	206	0	0	0
TOTAL RECREATION OTHER	0	206	0	0	0
TOTAL RECREATION - OPERATIONS	3,174,609	1,974,285	3,584,855	3,584,355	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

REVENUES		BUDGET 2019-2020		REVENUES I0:30Jun20	I	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
RECREATION - WATER PARK								
RECREATION-CONCESSION								
Water Park Snack Bar		10,500		7,935		9,500	1,500	0
TOTAL RECREATION-CONCESSION		10,500		7,935		9,500	1,500	0
RECREATION-WATER PARK								
Water Park - Late Day Pass Fee		110,000		80,275		110,740	18,067	0
Water Park - Group Pass Discou	(	1,360)	(	1,272)	(	3,700)	( 1,618)	0
Water Park - Guest Pass Hosts		0	(	153)		0	0	0
Water Park - Junior Lifeguard		6,000		2,250		10,000	6,430	0
Water Park - Lifeguard Trainin		700		588		0	0	0
Water Park - Locker Fee		1,400		906		1,000	174	0
Water Park - Next Day Pass Fee	(	700)	(	512)	(	814)	· · · · ·	0
Water Park - Promotion		500	(	208)		8,500	( 375)	0
Water Park - Rain Checks	(	300)	(	622)	(	600)	(	0
Water Park - Reservation Fee		54,000		33,671		55 <b>,</b> 500	13,850	0
Water Park - Season Pass Fee		25,000		4,445		17 <b>,</b> 934	12,350	0
Water Park - Shade Rental Fee		7,200		5,245		7,500	2,245	0
Water Park - Shower Facility F		0		14		0	0	0
Water Park - Single Splash Fee		750 <b>,</b> 000		478,361		753 <b>,</b> 250	186,620	0
Water Park - Special Event Fee		0		114		0	0	0
Water Park - Water Fitness - F	_	12,500		4,884	_	8,000	2,250	0
TOTAL RECREATION-WATER PARK		964,940		607,987		967,310	238,579	0
RECREATION OTHER								
Over / Short - Water Park	—	0	(	144)		0	0	0
TOTAL RECREATION OTHER		0	(	144)		0	0	0
TOTAL RECREATION - WATER PARK		975,440		615,778		976,810	240,079	0
TOTAL REVENUE	2	5,249,407		14,713,408	, ,	22,908,062	22,982,082	0

## CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
RETIREES					
Benefits					
Insurance - Employee Assistanc	0	15	0	0	0
Insurance - Group Life	0	355	0	0	0
Insurance - Group Health	512,542	487,802	510,659	510,659	0
Insurance - Group Dental	25,324	24,895	25,709	25,709	0
Insurance - Group Vision	4,789	5,911	8,029	8,029	0
TOTAL Benefits	542,655	518,978	544,397	544,397	0
<u>Services &amp; Supplie</u> s					
TOTAL RETIREES	542,655	518,978	544,397	544,397	0

## CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
BOARD OF DIRECTORS					
Salaries					
Regular Salaries	113,155	74,918	118,810	118,810	0
TOTAL Salaries	113,155	74,918	118,810	118,810	0
Benefits					
Social Security Expense	7,016	4,718	7,366	7,366	0
Medicare Expense	1,641	1,103	1,723	1,723	0
Insurance - Group Life	189	276	369	369	0
Insurance - Group Health	77,480	83,906	110,061	110,061	0
Insurance – Group Dental	3,657	3,885	4,952	4,952	0
Insurance - Group Vision	526	873	1,376	1,376	0
TOTAL Benefits	90,509	94,762	125,847	125,847	0
<u>Services &amp; Supplies</u>					
Service & Supplies	300	195	300	300	0
Computer Upgrades - Hardware	2,000	0	0	0	0
Communications - Radio & Telep	0	506	0	0	0
Office Supplies	0	442	0	0	0
Advertising & Legal Notices	0	191	0	0	0
Private Vehicle Mileage	3,500	2,172	3,500	3,500	0
Travel Expense	2,500	726	2,500	2,500	0
Directors Fee	0	0	20,000	20,000	0
Education & Training Seminars	3,000	750	3,000	3,000	0
TOTAL Services & Supplies	11,300	4,981	29,300	29,300	0
TOTAL BOARD OF DIRECTORS	214,964	174,660	273,957	273,957	0

## CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

# 11 -GENERAL FUND

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
MANAGEMENT =======					
Salaries	500.007				0
Regular Salaries	582,897	564,215	686,503 0	686,503	0
Part Time - Temporary Wages Vacation Pay	62,223 51,125	23,489 12,480	27,965	0 27,965	0
Jury Duty	3,007	488	304	304	0
Sick Pav	30,073	27,367	5,128	5,128	0
Holiday Pay	27,066	27,914	19,683	19,683	0
TOTAL Salaries	756,391	655,953	739,583	739,583	0
Benefits					
Insurance – Employee Assistanc	85	99	119	119	0
CalPERS Pension Exp - PEPRA	0	9,467	0	0	0
CalPERS Pension Exp - Classic	59,442	75 <b>,</b> 678	68,641	68,641	0
Social Security Expense	46,896	31,748	45,854	45,854	0
Medicare Expense	10,967	9,304	10,724	10,724	0
Insurance - Group Life	2,582	2,864	3,560	3,560	0
Insurance - Group Health	70,749	60 <b>,</b> 956	75 <b>,</b> 008	75 <b>,</b> 008	0
Insurance - Group Dental	4,649	2,784	3,340	3,340	0
Insurance - Group Vision	395	638	918	918	0
TOTAL Benefits	195,765	193,538	208,164	208,164	0
<u>Services &amp; Supplies</u>					
District Equipment	0	108	100	100	0
Service & Supplies	0	18,903	13,500	13,500	0
Computer Upgrades - Hardware	2,000	2,086	2,500	2,500	0
Computer Upgrades - Software	0	17,668	23,000	23,000	0
Outside Contracts	0	356	40,000	40,000	0
Communications - Radio & Telep	0	3,163	2,600	2,600	0
Membership & Dues	79,450 0	85,406 261	98,500	98,500 500	0
Printing & Binding Books & Publications	0	7,190	500 7,500	7,500	0
	0	889	1,000	1,000	0
Office Supplies Postage Expense	0	889 164	200	200	0
Other Professional Fees	360,000	376,347	600,000	600,000	0
Private Vehicle Mileage	0	200	6,060	6,060	0
Travel Expense	6,700	2,284	6,700	6,700	0
Education & Training Seminars	6,100	6,045	6,100	6,100	0
Pre-Employment Screening	0,100	137	0,100	0,100	0
Insurance - Aflac Service Fee	0	175	200	200	0
TOTAL Services & Supplies	454,250	521,382	808,460	808,460	0
Other Operating Expenses					

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6-15-2020 03:29 PM 11 -GENERAL FUND	REVENUE/EXPENDITUR	CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021					
EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED		
<u>Salaries - Work Order</u> s							
<u>Benefits - Work Order</u> s							
<u>Services &amp; Supplies-W.O</u> .							
TOTAL MANAGEMENT	1,406,406	1,370,873	1,756,207	1,756,207	0		

## CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

11 -GENERAL FUND

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
INFORMATION TECHNOLOGY					
<u>Salaries</u>					
Regular Salaries	110,397	131,956	114,369	114,369	0
Part Time - Temporary Wages	43,200	14,051	40,788	40,788	0
Overtime Pay	4,200	10,450	0	0	0
Vacation Pay	16,337	5,440	16,503	16,503	0
Jury Duty	317	553	321	321	0
Sick Pay	4,337	335	4,381	4,381	0
Holiday Pay	12,337	5,900	12,463	12,463	0
TOTAL Salaries	191,125	168,685	188,825	188,825	0
Benefits					
Insurance – Employee Assistanc	28	30	29	29	0
CalPERS Pension Exp - PEPRA	0	15	0	0	0
CalPERS Pension Exp - Classic	12,645	29 <b>,</b> 670	13,716	13,716	0
Social Security Expense	11,850	8,842	11,707	11,707	0
Medicare Expense	2,771	2,421	2,738	2,738	0
Insurance - Group Life	492	493	501	501	0
Insurance - Group Health	23,646	24,380	26,108	26,108	0
Insurance - Group Dental	1,286	1,273	1,312	1,312	0
Insurance - Group Vision	225	223	229	229	0
TOTAL Benefits	52,943	67,346	56,340	56,340	0
<u>Services &amp; Supplies</u>					
District Equipment	2,500	690	2,500	2,500	0
Service & Supplies	2,000	7,356	3,000	3,000	0
Computer Upgrades - Hardware	3,500	4,797	6,500	6,500	0
Computer Upgrades - Software	4,750	2,147	4,750	4,750	0
Outside Contracts	17,650	38,543	17,560	17 <b>,</b> 560	0
Clothing & Personal Supplies	500	265	500	500	0
Communications - Radio & Telep	1,500	3,329	1,500	1,500	0
Office Equipment Maintenance	0	103	0	0	0
Printing & Binding	0	0	100	100	0
Books & Publications	100	0	0	0	0
Postage Expense	0	14	0	0	0
Small Tools	100	107	100	100	0
Private Vehicle Mileage	500	245	500	500	0
Education & Training Seminars	1,500	30	1,500	1,500	0
Pre-Employment Screening	0	32	0	0	0
Insurance - Aflac Service Fee	0	175	0	0	0
TOTAL Services & Supplies	34,600	57,833	38,510	38,510	0
<u>Salaries - Work Order</u> s		<u></u>		<u> </u>	

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EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<u>Benefits - Work Order</u> s					
<u>Services &amp; Supplies-W.O.</u> Computer Upgrades - Hardware TOTAL Services & Supplies-W.O.	<u>0</u> 0	<u>    1,764</u> 1,764	<u>0</u> 0	<u>0</u> 0	<u>0</u> 0
TOTAL INFORMATION TECHNOLOGY	278,668	295,628	283,675	283,675	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
WATER CONSERVATION					
Salaries					
Regular Salaries	309 <b>,</b> 588	170,174	216,633	216,633	0
Part Time - Temporary Wages	27,958	64,185	75 <b>,</b> 691	75,691	0
Overtime Pay	0	3,263	0	0	0
Vacation Pay	41,694	16,387	30,488	30,488	0
Jury Duty	2,453	0	1,793	1,793	0
Sick Pay	24,526	12,141	17,934	17,934	0
Holiday Pay	22,073	13,214	16,141	16,141	0
TOTAL Salaries	428,292	279,364	358,680	358,680	0
Benefits					
Insurance – Employee Assistanc	85	101	116	116	0
CalPERS Pension Exp - PEPRA	0	12,089	0	0	0
CalPERS Pension Exp - Classic	30,922	32,765	26,264	26,264	0
Social Security Expense	26,554	17,360	22,238	22,238	0
Medicare Expense	6,210	4,060	5,201	5,201	0
Insurance - Group Life	1,415	857	1,124	1,124	0
Insurance - Group Health	63,053	65,407	83,463	83,463	0
Insurance - Group Dental	3,363	3,498	4,235	4,235	0
Insurance - Group Vision	581	612	688	688	0
Insurance - Unemployment	0	12,123	0	0	0
TOTAL Benefits	132,183	148,873	143,330	143,330	0
<u>Services &amp; Supplies</u>					
District Equipment	1,700	1,248	1,700	1,700	0
Service & Supplies	19,263	5,463	19,463	19,463	0
Computer Upgrades - Hardware	4,500	4,031	2,000	2,000	0
Outside Contracts	73,587	89,669	209,587	209,587	0
Clothing & Personal Supplies	0	280	500	500	0
Communications - Radio & Telep	0	1,395	1,600	1,600	0
Membership & Dues	14,305	5,200	14,305	14,305	0
Printing & Binding	22,500	50	22,500	22,500	0
Books & Publications	100	0	100	100	0
Office Supplies	5,000	3,152	1,000	1,000	0
Postage Expense	9,500	1,509	9,500	9,500	0
Licenses & Permits	0	370	0	0	0
Advertising & Legal Notices	19,470	3,088	39,470	39,470	0
Public Information Program	0	321	0	0	0
Private Vehicle Mileage	75	254	100	100	0
Travel Expense	2,850	195	3,400	3,400	0
Education & Training Seminars	3,417	2,924	3,900	3,900	0
Pre-Employment Screening	0	105	0	0	0
Insurance – Workers Compensati	0	52,917	0	0	0
TOTAL Services & Supplies	176,267	172,173	329,125	329,125	0

## CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Other Operating Expenses					
<u>Salaries - Work Order</u> s					
<u>Benefits - Work Order</u> s					
<u>Services &amp; Supplies-W.O.</u> Service & Supplies TOTAL Services & Supplies-W.O.	<u>0</u> 0	<u> </u>	<u> </u>	<u>0</u> 0	<u>0</u> 0
TOTAL WATER CONSERVATION	736,742	601,106	831,135	831,135	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
FISHERIES =======					
Salaries					
Regular Salaries	244,858	263,067	296,345	296,345	0
Part Time - Temporary Wages	29,769	27,593	29,769	29,769	0
Overtime Pay	5,000	6,293	0	0	0
Vacation Pay	28,642	15,413	16,406	16,406	0
Jury Duty	1,685	0	179	179	0
Sick Pay	16,848	3,685	3,007	3,007	0
Holiday Pay	15,163	12,732	11,546	11,546	0
TOTAL Salaries	341,965	328,783	357,252	357,252	0
Benefits					
Insurance – Employee Assistanc	85	89	87	87	0
CalPERS Pension Exp - PEPRA	0	3,733	0	0	0
CalPERS Pension Exp - Classic	25,676	49,191	29,012	29,012	0
Social Security Expense	21,202	19,575	22,150	22,150	0
Medicare Expense	4,959	4,753	5,181	5,181	0
Insurance - Group Life	1,305	5,081	1,368	1,368	0
Insurance - Group Health	46,018	41,328	47,980	47,980	0
Insurance - Group Dental	2,104	2,083	2,145	2,145	0
Insurance - Group Vision	581	733	688	688	0
Insurance – Unemployment	0	6,732	0	0	0
TOTAL Benefits	101,930	133,296	108,611	108,611	0
<u>Services &amp; Supplies</u>					
District Equipment	8,400	7,479	9,200	9,200	0
Service & Supplies	10,900	32,831	11,000	11,000	0
Computer Upgrades - Hardware	5,500	2,546	0	0	0
Computer Upgrades – Software	1,000	0	1,000	1,000	0
Outside Contracts	2,000	49	2,000	2,000	0
Clothing & Personal Supplies	1,500	820	1,500	1,500	0
Communications - Radio & Telep	2,325	2,678	2,500	2,500	0
Membership & Dues	250	105	250	250	0
Printing & Binding	250	0	250	250	0
Books & Publications	300	0	300	300	0
Postage Expense	500	807	500	500	0
Licenses & Permits	500	0	500	500	0
Private Vehicle Mileage	250	260	250	250	0
Travel Expense	1,300	15,298	15,000	15,000	0
Education & Training Seminars	4,500	2,260	4,500	4,800	0
Insurance - Workers Compensati	0	916	0	0	0
Insurance - Aflac Service Fee	0	175	0	0	0
TOTAL Services & Supplies	39,475	66,226	48,750	49,050	0

## CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Other Operating Expenses					
<u>Salaries - Work Order</u> s					
<u>Benefits - Work Order</u> s					
<u>Services &amp; Supplies-W.O.</u> Outside Contracts TOTAL Services & Supplies-W.O.	<u>0</u> 0	<u>4,365</u> 4,365	<u>0</u> 0	<u>0</u> 0	<u>0</u> 0
TOTAL FISHERIES	483,370	532,671	514,613	514,913	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
ADMINISTRATION SERVICES					
<u>Salaries</u>					
Regular Salaries	585 <b>,</b> 637	521,760	639,281	639,281	0
Part Time - Temporary Wages	0	71	0	0	0
Overtime Pay	3,000	5,037	1,500	1,500	0
Vacation Pay	53,872	23,368	28 <b>,</b> 577	28,577	0
Jury Duty	3,170	0	311	311	0
Sick Pay	31,690	13,854	5,240	5,240	0
Holiday Pay	28,521	24,133	20,114	20,114	0
TOTAL Salaries	705,890	588,223	695,023	695,023	0
Benefits					
Insurance - Employee Assistanc	226	163	232	232	0
CalPERS Pension Exp - PEPRA	0	14,096	0	0	0
CalPERS Pension Exp - Classic	60,188	79,188	64,367	64,367	0
Social Security Expense	43,765	32,792	43,092	43,092	0
Medicare Expense	10,237	8,453	10,077	10,077	0
Insurance - Group Life	3,094	2,110	3,105	3,105	0
Insurance - Group Health	166,259	78,742	193,956	193,956	0
Insurance - Group Dental	7,415	3,598	6,408	6,408	0
Insurance - Group Vision	1,704	1,179	1,835	1,835	0
TOTAL Benefits	292,888	220,321	323,072	323,072	0
Services & Supplies					
District Equipment	4,500	2,956	4,000	4,000	0
Service & Supplies	25,350	32,787	21,170	23,170	0
Utilities	37,000	20,036	28,500	28,500	0
Computer Upgrades - Hardware	8,000	15,479	3,500	3,500	0
Computer Upgrades - Software	5,000	9,316	0	0	0
Bank Charges	15,000	14,476	18,000	18,000	0
Purchased Water	3,200	1,841	2,500	2,500	0
Bad Debt Expense	5,000	0	13,000	13,000	0
Outside Contracts	153,150	169,943	187,200	187,200	0
Clothing & Personal Supplies	100,100	590	200	200	0
Communications - Radio & Telep	45,000	68,330	51,000	51,000	0
Office Equipment Maintenance	5,400	6,640	8,500	8,500	0
Membership & Dues	745	620	760	760	0
Printing & Binding	4,600	3,863	5,600	5,600	0
Office Supplies	13,000	11,892	13,200	13,200	0
Postage Expense	4,700	3,830	5,500	5,500	0
Other Professional Fees	46,000	45,630	46,000	46,000	0
Safety Program	77,228	43,030	77,228	77,228	0
Private Vehicle Mileage	150	21	500	500	0
		0	2,500		0
Travel Expense	2 500				
Travel Expense Education & Training Seminars	2,500 2,300	307	2,300	2,500 2,300	0

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Interest / Penalty Expenses	279,416	25,652	309,001	309,001	0
Credit Card Fees	36,500	45,745	40,000	40,000	0
Petty Cash Over / Short	0	136	0	0	0
Property Tax Collection Fee	5,700	5,968	6,000	6,000	0
Property Tax Administration Fe	26,000	24,614	26,000	26,000	0
Insurance - Liability Premium	65,000	70,697	75 <b>,</b> 000	75,000	0
Insurance - Workers Compensati	135,000	164,730	168,000	168,000	0
Insurance - Aflac Service Fee	0	175	0	0	0
TOTAL Services & Supplies	1,005,439	746,444	1,115,159	1,117,159	0
Other Operating Expenses					
Administration Overhead	( <u>1,544,838</u> )	( <u>146,853</u> )	(1, 180, 245)	( <u>524,236</u> )	0
TOTAL Other Operating Expenses	( 1,544,838)	( 146,853)	( 1,180,245)	( 524,236)	0
<u>Salaries - Work Order</u> s					
<u>Benefits - Work Order</u> s					
<u>Services &amp; Supplies-W.O</u> .					
TOTAL ADMINISTRATION SERVICES	459 <b>,</b> 379	1,408,135	953,009	1,611,018	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
WAREHOUSE					
<u>Salaries</u>					
Regular Salaries	7,965	4,483	7,939	7,939	0
Overtime Pay	0	29	0	0	0
Vacation Pay	831	219	399	399	0
Jury Duty	49	0	4	4	0
Sick Pay	489	48	73	73	0
Holiday Pay	440	73	281	281	0
TOTAL Salaries	9,774	4,852	8,696	8,696	0
Benefits					
CalPERS Pension Exp - Classic	837	1,449	807	807	0
Social Security Expense	606	324	539	539	0
Medicare Expense	142	76	126	126	0
TOTAL Benefits	1,585	1,849	1,472	1,472	0
<u>Services &amp; Supplies</u>					
District Equipment	0	1,008	0	0	0
Service & Supplies	3,000	6,298	3,500	3,500	0
Utilities	2,500	3,355	3,000	3,000	0
Outside Contracts	0	16	0	0	0
Education & Training Seminars	0	0	300	300	0
Gains / Losses on Inventory	10,000	0	5,000	5,000	0
TOTAL Services & Supplies	15,500	10,677	11,800	11,800	0
Other Operating Expenses					
<u>Salaries - Work Orders</u>					
<u>Benefits - Work Order</u> s					
<u>Services &amp; Supplies-W.O</u> .					
TOTAL WAREHOUSE	26,859	17,379	21,968	21,968	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
GARAGE					
<u>Salaries</u>					
Regular Salaries	18,516	10,044	22,760	22,760	0
Vacation Pay	1,931	393	1,145	1,145	0
Jury Duty	114	0	13	13	0
Sick Pay	1,136	87	210	210	0
Holiday Pay	1,023	478	806	806	0
TOTAL Salaries	22,720	11,003	24,934	24,934	0
Benefits					
CalPERS Pension Exp - PEPRA	0	771	0	0	0
CalPERS Pension Exp - Classic	1,945	1,306	2,314	2,314	0
Social Security Expense	1,408	679	1,546	1,546	0
Medicare Expense	330	159	361	361	0
TOTAL Benefits	3,683	2,915	4,221	4,221	0
<u>Services &amp; Supplies</u>					
District Equipment	9,835	3,334	23,350	3,004	0
Service & Supplies	39,685	2,818	5,335	33,685	0
Utilities	0	3,554	0	0	0
Cost Applied - Service & Suppl	( 370,920)	( 117,620)			0
Vehicle Costs Direct	183,350	132,611	175,000	175,000	0
Outside Contracts	36,132	35,007	32,132	32,132	0
Communications - Radio & Telep	0	214	0	0	0
Licenses & Permits	6,200	4,720	6,200	6,200	0
Gain / Losses on Inventory GAS	0	107	0	0	0
TOTAL Services & Supplies	( 95,718)	64,745	( 132,687)	( 115,583)	0
Other Operating Expenses					
<u>Salaries - Work Order</u> s					
<u>Benefits - Work Order</u> s					
Services & Supplies-W.O.					
Service & Supplies	141,500	127.387	134,878	103,500	0
TOTAL Services & Supplies-W.O.	141,500	127,387	134,878	103,500	0
TOTAL GARAGE	72,185	206,050	31,346	17,072	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
SAFETY					
=====					
<u>Salaries</u>					
Regular Salaries	88,630	94,591	107,618	107,618	0
Vacation Pay	9,244	3,692	5,414	5,414	0
Jury Duty	544	0	59	59	0
Sick Pay	5,437	820	993	993	0
Holiday Pay	4,894	4,493	3,810	3,810	0
TOTAL Salaries	108,749	103,597	117,894	117,894	0
Benefits					
Insurance - Employee Assistanc	28	30	29	29	0
CalPERS Pension Exp - PEPRA	0	7,263	0	0	0
CalPERS Pension Exp - Classic	9,312	0	10,942	10,942	0
Social Security Expense	6,742	6,390	7,309	7,309	0
Medicare Expense	1,577	1,494	1,709	1,709	0
Insurance - Group Life	733	732	7,402	7,402	0
Insurance - Group Health	26,912	26,761	27,682	27,682	0
Insurance - Group Dental	1,286	1,273	1,312	1,312	0
Insurance - Group Vision	132	176	229	229	0
TOTAL Benefits	46,722	44,120	56,614	56,614	0
Services & Supplies					
District Equipment	0	176	0	0	0
Services & Supplies	1,350	2,630	6,530	6,530	0
Computer Upgrades - Software	4,380	3,860	4,440	4,440	0
Outside Contracts	5,300	3,297	27,300	27,300	0
Clothing & Personal Supplies	0	81	0	0	0
Communications - Radio & Telep	0	567	0	0	0
Membership & Dues	250	230	250	250	0
Books & Publications	0	107	0	0	0
Safety Program	1,000	726	0	0	0
Private Vehicle Mileage	0	499	0	0	0
Travel Expense	1,800	873	1,800	1,800	0
Education & Training Seminars	1,400	36	1,400	1,400	0
Insurance - Aflac Service Fee	0	175	0	0	0
TOTAL Services & Supplies	15,480	13,257	41,720	41,720	0
TOTAL SAFETY	170,951	160,973	216,228	216,228	0

## CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
ENGINEERING					
Salaries					
Regular Salaries	636,886	592,031	790,694	746,901	0
Part Time - Temporary Wages	24,300	10,032	19,800	. 0	0
Overtime Pay	2,000	4,474	10,000	10,000	0
Vacation Pay	66,632	33,210	40,279	38,076	0
Jury Duty	3,920	1,058	439	415	0
Sick Pay	39,195	14,206	7,386	6,982	0
Holiday Pay	35,276	33,264	28,349	26,799	0
Seasonal Pay	0	10,153	0	0	0
TOTAL Salaries	808,209	698,427	896,947	829,173	0
Benefits					
Insurance – Employee Assistanc	169	177	174	174	0
CalPERS Pension Exp - PEPRA	0	28,170	0	0	0
CalPERS Pension Exp - Classic	66,955	68,874	80,480	76,027	0
Social Security Expense	50,109	37,063	55 <b>,</b> 611	51,409	0
Medicare Expense	11,719	10,080	13,006	12,023	0
Insurance - Group Life	2,822	2,930	3,055	3,055	0
Insurance - Group Health	103,541	101,752	106,558	106,558	0
Insurance - Group Dental	5,085	5,034	5,185	5,185	0
Insurance - Group Vision	1,256	1,290	1,376	1,376	0
TOTAL Benefits	241,656	255,370	265,445	255,807	0
<u>Services &amp; Supplies</u>					
District Equipment	6,200	8,011	9,200	14,200	0
Service & Supplies	21,700	251 <b>,</b> 398	2,000	112 <b>,</b> 350	0
Gauging Stations Agreement	0	0	6,000	6,000	0
Computer Upgrades - Hardware	5,000	3,734	0	0	0
Computer Upgrades – Software	11,000	15,836	0	24,000	0
Outside Contracts	123,200	768,325	350,000	165,000	0
Clothing & Personal Supplies	0	1,077	1,000	1,000	0
Communications - Radio & Telep	0	5,597	0	0	0
Membership & Dues	6,000	13,406	0	0	0
Office Supplies	0	350	0	0	0
Postage Expense	0	385	0	0	0
Licenses & Permits	48,820	39,651	181,000 0	181,000	0
Small Tools	500 0	0	1,000	0 1,000	0
Safety Program Private Vehicle Mileage	1,500	493	1,000	1,000	0
Private Vehicle Mileage	1,500		0	0	0
Travel Expense Education & Training Seminars	5,000	1,162 2,518	2,500	4,000	0
Pre-Employment Screening	5,000	2,310	2,300	4,000	0
Insurance - Aflac Service Fee	0	175	0	0	0
TOTAL Services & Supplies	228,920	1,112,208	552,700	508,550	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Salaries - Work Orders					
Regular Salaries	0	92,529	0	0	0
TOTAL Salaries - Work Orders	0	92,529	0	0	0
<u>Benefits - Work Orders</u>					
CalPERS Pension Exp - Classic	0	8,006	0	0	0
Social Security Expense	0	4,747	0	0	0
Medicare Expense	0	1,368	0	0	0
TOTAL Benefits - Work Orders	0	14,121	0	0	0
Services & Supplies-W.O.					
Service & Supplies	0	342,779	3,865,000	1,600,000	0
Outside Contracts	21,558,000	6,689,004	24,075,000	15,825,000	0
Licenses & Permits	0	89,604	285,000	0	0
TOTAL Services & Supplies-W.O.	21,558,000	7,121,387	28,225,000	17,425,000	0
TOTAL ENGINEERING	22,836,785	9,294,043	29,940,092	19,018,530	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
WATER QUALITY - LAB					
Salaries	050 700	000 557	0.00 050	0.00 0.50	
Regular Salaries	252,796	239,557	269,352	269,352	0
Part Time - Temporary Wages	21,375	0	19,125	19,125	0
Overtime Pay Standby Pay	6,925 0	12,723 112	11,125 0	11,125 0	0
	26,364	13,416	13,551	13,551	0
Vacation Pay Jury Duty	20,304	13,410	147	147	0
Sick Pay	15,509	7,155	2,484	2,484	0
Holiday Pay	13,957	11,808	2,404 9,537	2,404 9,537	0
TOTAL Salaries	338,477	284,772	325,321	325,321	0
<u>Benefits</u>					
Insurance – Employee Assistanc	56	96	87	87	0
CalPERS Pension Exp - PEPRA	0	10,381	0	0	0
CalPERS Pension Exp - Classic	28,790	33,692	29,264	29,264	0
Social Security Expense	20,988	17,036	20,169	20,169	0
Medicare Expense	4,908	4,053	4,717	4,717	0
Insurance - Group Life	996	1,057	801	801	0
Insurance - Group Health	42,001	68,655	75,814	75,814	0
Insurance - Group Dental	2,076	3 <b>,</b> 575	3,935	3,935	0
Insurance - Group Vision	356	622	688	688	0
TOTAL Benefits	100,171	139,167	135,475	135,475	0
<u>Services &amp; Supplies</u>					
District Equipment	8,500	6,639	8,600	8,600	0
Service & Supplies	46,601	27,087	45,672	45,672	0
Computer Upgrades - Hardware	2,050	2,505	3,275	3,275	0
Outside Contracts	141,886	128,991 946	164,245	164,245	0
Clothing & Personal Supplies Communications - Radio & Telep	1,330 2,100	946 1,910	1,430 4,400	1,430 4,400	0
Membership & Dues	2,100	144	4,400 210	4,400	0
Printing & Binding	0.00	168	300	300	0
Books & Publications	221	100	150	150	0
Postage Expense	806	787	580	580	0
Licenses & Permits	33,227	35,110	39,067	39,067	0
Advertising & Legal Notices	1,234	55,110	324	324	0
Small Tools	1,234	0	750	750	0
Private Vehicle Mileage	515	0	515	515	0
Travel Expense	1,840	ů O	2,461	2,461	0
Education & Training Seminars	2,016	211	2,823	2,823	0
Pre-Emplyment Screening	0	137	0	0	0
TOTAL Services & Supplies	242,976	204,634	274,802	274,802	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Other Operating Expenses					
<u>Salaries - Work Order</u> s					
<u>Benefits - Work Orders</u>					
<u>Services &amp; Supplies-W.O.</u>					
Services & Supplies	34,000	15,759	185,000	150,000	0
Outside Contracts	75,000	0	0	0	0
TOTAL Services & Supplies-W.O.	109,000	15,759	185,000	150,000	0
TOTAL WATER QUALITY - LAB	790,624	644,331	920,598	885,598	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
UTILITIES MAINTENANCE					
Salaries					
Regular Salaries	298,376	345,665	497,000	434,098	0
Overtime Pay	20,543	37,337	15,000	15,000	0
Standby Pay	9,000	11,230	9,640	9,640	0
Vacation Pay	21,761	11,922	25,002	21,837	0
Jury Duty	7,095	229	274	238	0
Sick Pay	17,721	10,008	4,585	4,004	0
Holiday Pay	11,211	15,585	17,596	15,370	0
TOTAL Salaries	385,707	431,975	569 <b>,</b> 097	500,187	0
Benefits					
Insurance – Employee Assistanc	113	161	0	0	0
CalPERS Pension Exp - PEPRA	0	17,076	0	0	0
CalPERS Pension Exp - Classic	32,257	24,540	51,924	45,527	0
Social Security Expense	24,473	25,355	35,882	31,609	0
Medicare Expense	5,723	6,102	8,391	7,393	0
Insurance - Group Life	829	1,267	1,231	1,231	0
Insurance - Group Health	65 <b>,</b> 510	83,276	84,498	84,498	0
Insurance Group - Dental	2,894	3,816	1,147	1,147	0
Insurance - Group Vision	900	1,206	1,231	1,231	0
TOTAL Benefits	132,699	162,798	184,304	172,636	0
<u>Services &amp; Supplies</u>					
District Equipment	35,670	31,234	32,000	32,000	0
Service & Supplies	77,500	63,703	86,010	86,010	0
Outside Contracts	8,000	4,699	8,500	8,500	0
Clothing & Personal Supplies	4,210	5,013	4,950	4,950	0
Communications - Radio & Telep	5,000	4,861	4,500	4,500	0
Licenses & Permits	1,000	340	1,000	1,000	0
Small Tools	3,800	2,538	14,600	14,600	0
Private Vehicle Mileage	0	68	0	0	0
Travel Expense	2,000	1,756	2,000	2,000	0
Education & Training Seminars	5,200	4,825	4,585	4,585	0
TOTAL Services & Supplies	142,380	119,037	158,145	158,145	0
Services & Supplies-W.O.					
Service & Supplies	60,000	49,938	60,000	60,000	0
Outside Contracts	40,000	158	0	0	0
TOTAL Services & Supplies-W.O.	100,000	50,096	60,000	60,000	0
TOTAL UTILITIES MAINTENANCE	760,786	763,906	971,546	890,968	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

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EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
ELECTRICAL MECHANICAL					
Salaries					
Regular Salaries	459,205	394,576	474,332	474,332	0
Part Time - Temporary Wages	435,205	2,240	-1- <b>-,</b> 552	-,-,552	0
Overtime Pay	32,200	61,374	32,200	32,200	0
Standby Pay	27,000	20,587	24,100	24,100	0
Vacation Pay	47,893	18,825	26,021	26,021	0
Jury Duty	2,817	10,020	283	283	0
Sick Pay	28,173	13,768	47,713	47,713	0
Holiday Pav	25,355	18,911	18,314	18,314	0
TOTAL Salaries	622,643	530,281	622,963	622,963	0
Benefits					
Insurance - Employee Assistanc	113	104	119	119	0
CalPERS Pension Exp - PEPRA	110	15,453	0	0	0
CalPERS Pension Exp - Classic	53,316	49,699	57,817	57,817	0
Social Security Expense	38,604	31,311	38,624	38,624	0
Medicare Expense	9,027	7,698	9,032	9,032	0
Insurance - Group Life	1,410	1,238	1,539	1,539	0
Insurance - Group Health	84,002	73,292	89,916	89,916	0
Insurance - Group Dental	4,153	3,475	4,235	4,235	0
Insurance - Group Vision	900	780	918	918	0
TOTAL Benefits	191,525	183,050	202,200	202,200	0
Services & Supplies					
District Equipment	20,000	15,681	20,000	20,000	0
Service & Supplies	77,200	47,897	101,800	101,800	0
Utilities	0	20,568	0	. 0	0
Power Purchased for Pumping	1,860,000	1,011,279	1,860,000	1,860,000	0
Computer Upgrades - Hardware	2,500	6,175	8,000	8,000	0
Outside Contracts	160,420	116,591	233,600	233,600	0
Clothing & Personal Supplies	5,010	3,514	5,850	5,850	0
Communications - Radio & Telep	6,950	10,367	5,660	5,660	0
Books & Publications	600	475	600	600	0
Licenses & Permits	57,099	46,964	57,444	57,444	0
Small Tools	4,850	3,186	16,100	6,600	0
Private Vehicle Mileage	500	0	500	500	0
Travel Expense	3,000	306	2,000	2,000	0
Education & Training Seminars	3,400	5,210	10,220	10,220	0
Pre-Employment Screening	0	137	0	0	0
Insurance - Workers Compensati	0	52,061	0	0	0
TOTAL Services & Supplies	2,201,529	1,340,409	2,321,774	2,312,274	0
Other Operating Expenses					

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<u>Salaries - Work Orders</u>					
Overtime Pay	0	696	0	0	0
TOTAL Salaries - Work Orders	0	696	0	0	0
<u>Benefits - Work Orders</u>					
PERS - Retirement Expense	0	51	0	0	0
Social Security Expense	0	43	0	0	0
Medicare Expense	0	10	0	0	0
TOTAL Benefits - Work Orders	0	104	0	0	0
<u>Services &amp; Supplies-W.O.</u>					
Service & Supplies	89,700	107,203	255,500	217,500	0
Outside Contracts	1,229,000	49,528	87,250	0	0
TOTAL Services & Supplies-W.O.	1,318,700	156,730	342,750	217,500	0
TOTAL ELECTRICAL MECHANICAL	4,334,397	2,211,270	3,489,687	3,354,937	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
DIST MAINT - PIPELINE					
Salaries					
Regular Salaries	459,109	456,343	500,692	500,692	0
Overtime Pay	71,700	70,016	48,000	48,000	0
Standby Pay	59 <b>,</b> 850	19 <b>,</b> 459	64,106	64,106	0
Vacation Pay	47,882	24,560	25,189	25,189	0
Jury Duty	2,818	0	274	274	0
Sick Pay	28,166	17,513	4,620	4,620	0
Holiday Pay	25,347	23,914	17,727	17,727	0
TOTAL Salaries	694,872	611,806	660,608	660,608	0
Benefits					
Insurance – Employee Assistanc	169	168	0	0	0
CalPERS Pension Exp - PEPRA	0	17,070	0	0	0
CalPERS Pension Exp - Classic	59,501	64,522	61,311	61,311	0
Social Security Expense	43,081	33,088	40,958	40,958	0
Medicare Expense	10,075	8,776	9,579	9,579	0
Insurance - Group Life	1,447	12,043	1,714	1,714	0
Insurance - Group Health	127,882	112,389	131,478	131,478	0
Insurance - Group Dental	6,840	6,259	6,469	6,469	0
Insurance - Group Vision	1,350	1,262	1,376	1,376	0
Insurance - Unemployment	0	8,550	0	0	0
TOTAL Benefits	250,345	264,126	252,885	252,885	0
<u>Services &amp; Supplies</u>					
District Equipment	56,005	47,885	56,000	56,000	0
Service & Supplies	363,270	305,498	448,870	440,870	0
Utilities	13,000	3,597	0	0	0
Computer Upgrades - Hardware	450	332	3,500	3,500	0
Outside Contracts	417,500	122,082	247,200	192,200	0
Clothing & Personal Supplies	8,190	7,780	5,890	5,890	0
Communications - Radio & Telep	4,130	5,989	12,500	3,200	0
Printing & Binding	0	367	0	0	0
Office Supplies	0	34	0	0	0
Postage Expense	0	42	0	0	0
Licenses & Permits	3,400	2,056	2,050	2,050	0
Advertising & Legal Notices	0	449	0	0	0
Small Tools	56,800	11,875	71,200	66,200	0
Travel Expense	4,000	2,033	2,000	2,000	0
Education & Training Seminars	21,470	3,076	20,095	20,095	0
Property Losses for Operations	0	( 64)	0	0	0
Pre-Employment Screening	0	477	0	0	0
Insurance - Workers Compensati	0	2,450	0	0	0
Insurance - Aflac Service Fee	0	175	177	177	0
TOTAL Services & Supplies	948,215	516,133	869,482	792,182	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Other Operating Expenses					
<u>Salaries - Work Order</u> s					
<u>Benefits - Work Orders</u>					
Services & Supplies-W.O.					
Service & Supplies	0	5,571	20,000	38,000	0
Outside Contracts	40,000	1,560	0	0	0
TOTAL Services & Supplies-W.O.	40,000	7,131	20,000	38,000	0
TOTAL DIST MAINT - PIPELINE	1,933,432	1,399,196	1,802,975	1,743,675	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
WATER TREATMENT					
Salaries					
Regular Salaries	475 <b>,</b> 552	596,097	636,472	636,472	0
Overtime Pay	84,300	92 <b>,</b> 567	84,300	84,300	0
Standby Pay	13,500	15,724	14,460	14,460	0
Vacation Pay	49,598	41,730	32,018	32,018	0
Jury Duty	2,918	0	348	348	0
Sick Pay	29,174	26 <b>,</b> 335	5,870	5,870	0
Holiday Pay	26,257	29,877	22,534	22,534	0
TOTAL Salaries	681,299	802,329	796 <b>,</b> 002	796,002	0
Benefits					
Insurance – Employee Assistanc	282	236	232	232	0
CalPERS Pension Exp - PEPRA	0	10,815	0	0	0
CalPERS Pension Exp - Classic	58,340	128,759	73,878	73,878	0
Social Security Expense	43,077	47,862	50,249	50,249	0
Medicare Expense	10,075	11,605	11,751	11,751	0
Insurance - Group Life	2,768	2,084	2,279	2,279	0
Insurance - Group Health	198,108	152 <b>,</b> 671	168,956	168,956	0
Insurance - Group Dental	10,115	7,468	7,804	7,804	0
Insurance - Group Vision	2,250	1,782	1,872	1,872	0
TOTAL Benefits	325,015	363,282	317,021	317,021	0
<u>Services &amp; Supplies</u>					
District Equipment	28,670	20,722	28,000	28,000	0
Service & Supplies	78,730	81,372	99,480	99,480	0
Utilities	134,400	100,170	114,900	114,900	0
Chlorine	120,200	61,924	108,670	108,670	0
Polymer	57,300	20,978	48,705	48,705	0
Ferric	17,120	5,622	14,552	14,552	0
Liquid Oxygen	165,000	113,377	165,000	165,000	0
Ammonia	38,500	10,794	32,725	32,725	0
Caustics	105,000	45,785	89,250	89,250	0
Computer Upgrades - Hardware	4,350	4,396	2,250	2,250	0
Outside Contracts	180,910	31,916	111,680	102,680	0
Clothing & Personal Supplies	6,110	5 <b>,</b> 637	6,250	6,250	0
Communications - Radio & Telep	6,840	9,260	18,360	18,360	0
Office Supplies	200	104	0	0	0
Postage Expense	0	513	0	0	0
Licenses & Permits	11,640	12,028	11,700	11,700	0
Small Tools	1,350	537	1,350	1,350	0
Private Vehicle Mileage	0	63	0	0	0
Travel Expense	4,200	2,177	4,200	4,200	0
Education & Training Seminars	8,600	1,853	9,225	9,225	0
Insurance - Workers Compensati	0	1,577	0	0	0
Insurance - Aflac Service Fee	0	175	0	0	0
TOTAL Services & Supplies	969 <b>,</b> 120	530,979	866 <b>,</b> 297	857 <b>,</b> 297	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Other Operating Expenses					
<u>Salaries - Work Order</u> s		<u> </u>			
<u>Benefits - Work Order</u> s					
<u>Services &amp; Supplies-W.O.</u>					
Service & Supplies	62,500	64,656	1,100,000	100,000	0
Outside Contracts	325,000	107,125	115,000	70,000	0
TOTAL Services & Supplies-W.O.	387,500	171,781	1,215,000	170,000	0
TOTAL WATER TREATMENT	2,362,934	1,868,371	3,194,320	2,140,320	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
OPERATIONS - MAINTENANCE					
<u>Salaries</u>					
Regular Salaries	165,026	170,249	259,909	232,618	0
Part Time - Temporary Wages	0	16,101	0	0	0
Overtime Pay	10,900	15 <b>,</b> 938	0	0	0
Standby Pay	0	5,564	0	0	0
Vacation Pay	17,211	10,067	13,074	11,702	0
Jury Duty	1,012	306	143	128	0
Sick Pay	10,124	5,110	2,397	2,146	0
Holiday Pay	9,112	8,421	9,202	8,236	0
TOTAL Salaries	213,385	231,756	284,725	254,830	0
Benefits					
Insurance – Employee Assistanc	113	89	87	87	0
CalPERS Pension Exp - PEPRA	0	12,267	0	0	0
CalPERS Pension Exp - Classic	18,271	10,318	26,425	23,651	0
Social Security Expense	13,231	14,120	17 <b>,</b> 653	15,800	0
Medicare Expense	3,094	3,336	4,128	3,695	0
Insurance - Group Life	733	587	632	632	0
Insurance - Group Health	91 <b>,</b> 785	63 <b>,</b> 135	66,704	66,704	0
Insurance - Group Dental	4,649	3,108	2,923	2,923	0
Insurance - Group Vision	900	668	688	688	0
TOTAL Benefits	132,776	107,628	119,240	114,180	0
<u>Services &amp; Supplies</u>					
District Equipment	20,000	14,455	20,000	20,000	0
Service & Supplies	54,420	62,660	53 <b>,</b> 500	53 <b>,</b> 500	0
SWP - CMWD Share of Expense	0	744,119	0	0	0
Outside Contracts	99,200	68,081	132,700	132,700	0
Clothing & Personal Supplies	4,760	3,540	6,060	6,060	0
Communications - Radio & Telep	1,500	1,502	1,200	1,200	0
Membership & Dues	200	0	200	200	0
Licenses & Permits	500	90	500	500	0
Small Tools	5,500	5,565	7,850	7,850	0
Private Vehicle Mileage	0	231	0	0	0
Travel Expense	0	483	0	0	0
Education & Training Seminars	3,450	2,200	5,300	5,300	0
Pre-Employment Screening TOTAL Services & Supplies	100 520	77	0	0	0
TOTAL Services & Supplies	189,530	903,003	227,310	227,310	U
<u>Other Operating Expense</u> s				<u> </u>	
<u>Salaries - Work Order</u> s					

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<u>Benefits - Work Order</u> s					
<u>Services &amp; Supplies-W.O.</u> Service & Supplies Outside Contracts TOTAL Services & Supplies-W.O.	0 0 0	352 0 352	65,000 <u>8,500</u> 73,500	0 <u> </u>	0 0 0
TOTAL OPERATIONS - MAINTENANCE	535,691	1,242,738	704,775	604,820	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
RECREATION - OPERATIONS					
<u>Salaries</u>					
Regular Salaries	759,484	852 <b>,</b> 980	877 <b>,</b> 915	900 <b>,</b> 265	0
Part Time - Temporary Wages	242,274	254,194	200,262	200,262	0
Overtime Pay	25,000	22,478	30,000	30,000	0
Shift Pay	12,000	11,151	12,000	12,000	0
Standby Pay	0	1,051	0	0	0
Vacation Pay	80,461	38,688	44,767	45,891	0
Jury Duty	4,734	1,614	487	499	0
Sick Pay	47,330	36,823	8,208	8,415	0
Holiday Pay	42,597	41,674	31,509	32,300	0
Seasonal Pay	0	12,852	104,930	104,930	
TOTAL Salaries	1,213,880	1,273,505	1,310,078	1,334,562	0
Benefits					
Insurance - Employee Assistanc	310	339	320	320	0
CalPERS Pension Exp - PEPRA	0	49,351	0	0	0
CalPERS Employer Paid for Emp	0	( 1,734)	0	0	0
CalPERS Pension Exp - Classic	83,198	60,980	93,264	95,535	0
Social Security Expense	75,260	77,147	81,224	82,743	0
Medicare Expense	17,602	18,429	18,995	19,351	0
Insurance - Group Life	3,637	4,231	4,325	4,325	0
Insurance - Group Health	178,310	201,727	224,307	224,307	0
Insurance - Group Dental	8,769	10,219	11,121	11,121	0
Insurance - Group Vision	2,194	2,423	2,523	2,523	0
Insurance - Unemployment	0	888	0	0	0
TOTAL Benefits	369,280	423,998	436,079	440,225	0
Services & Supplies					
District Equipment	97,670	32,445	85,000	85,000	0
Service & Supplies	46,150	17,250	42,450	42,450	0
Utilities	108,000	92,954	107,000	107,000	0
Computer Upgrades - Hardware	7,675	9,174	6,400	6,400	0
Computer Upgrades - Software	600	0	0	0	0
Outside Contracts	16,500	440	8,000	8,000	0
Clothing & Personal Supplies	6,800	1,079	3,800	3,800	0
Communications - Radio & Telep	11,000	17,914	11,000	11,000	0
Membership & Dues	825	767	665	665	0
Printing & Binding	500	25	5,600	5,600	0
Office Supplies	700	0	1,000	1,000	0
Postage Expense	0	13	200	200	0
Other Professional Fees	9,620	11,220	8,870	8,870	0
Licenses & Permits	0	0	250	250	0
Advertising & Legal Notices	0	205	0	0	0
Public Information Program	5,750	921	4,500	4,500	0
Private Vehicle Mileage	600	58	150	150	0

CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Travel Expense	8,000	196	6,000	6,000	0
Education & Training Seminars	11,500	4,153	8,000	8,000	0
Credit Card Fees	11,250	12,626	11,000	11,000	0
Insurance - Workers Compensati	0	19,762	0	0	0
Insurance - Aflac Service Fee	0	175	0	0	0
TOTAL Services & Supplies	343,140	221,376	309,885	309,885	0
Other Operating Expenses					
Administration Overhead	756,865	0	199,423	524,236	0
TOTAL Other Operating Expenses	756,865	0	199,423	524,236	0
<u>Salaries - Work Order</u> s					
<u>Benefits - Work Order</u> s				<u></u>	
<u>Services &amp; Supplies-W.O.</u>					
Services & Supplies	0	0	2,000	2,000	0
Outside Contracts	<u> </u>	0	80,000	0	0
TOTAL Services & Supplies-W.O.	0	0	82,000	2,000	0
TOTAL RECREATION - OPERATIONS	2,683,165	1,918,879	2,337,465	2,610,908	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
RECREATION - MAINTENANCE					
Salaries					
Regular Salaries	177,059	253,394	212,245	216,672	0
Part Time - Temporary Wages	230,407	170,634	326,266	261,900	0
Overtime Pay	5,500	4,684	5,500	5,500	0
Vacation Pay	18,466	17,986	10,677	10,900	0
Jury Duty	1,086	0	116	119	0
Sick Pay	10,863	14,816	1,958	1,999	0
Holiday Pay	9,776	12,250	7,515	7,672	<u> </u>
TOTAL Salaries	453,157	473,764	564,277	504,762	U
Benefits					
Insurance – Employee Assistanc	113	118	116	116	0
CalPERS Pension Exp - PEPRA	0	5,114	0	0	0
CalPERS Pension Exp - Classic	25,130	47,206	28,653	29,300	0
Social Security Expense	28,096	29,384	34,985	31,295	0
Medicare Expense	6,571	6,872	8,182	7,319	0
Insurance - Group Life	927	925	1,094	1,094	0
Insurance - Group Health	64,953	63,460	67 <b>,</b> 892	67 <b>,</b> 892	0
Insurance - Group Dental	2,894	2,865	2,951	2,951	0
Insurance - Group Vision	900	905	918	918	0
TOTAL Benefits	129,584	156,850	144,791	140,885	0
<u>Services &amp; Supplies</u>					
District Equipment	60,000	33,988	89,000	89,000	0
Service & Supplies	87,165	78,333	99,700	99,700	0
Utilities	3,500	2,129	1,500	1,500	0
Purchased Water	50,000	53 <b>,</b> 921	35,000	35,000	0
Outside Contracts	134,735	115,573	157,000	157,000	0
Clothing & Personal Supplies	3,500	2,823	3,000	3,000	0
Communications - Radio & Telep	500	569	3,000	3,000	0
Office Equipment Maintenance	500	145	2,000	2,000	0
Membership & Dues	300	0	90	90	0
Office Supplies	1,000	207	0	0	0
Other Professional Fees	1,500	0	0	0	0
Licenses & Permits	2,000	3,184	3,100	3,100	0
Small Tools	12,000	15,567	2,500	2,500	0
Safety Program	0	0	2,000	2,000	0
Travel Expense	1,000	0	2,000	2,000	0
Education & Training Seminars	2,455	2,342	4,500	4,500	0
Pre-Employment Screening	0	128	0	0	0
Insurance - Workers Compensati	0	45,842	0	0	0
TOTAL Services & Supplies	360,155	354,752	404,390	404,390	0

CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Other Operating Expenses					
Administration Overhead TOTAL Other Operating Expenses	<u> </u>	<u> </u>	<u>448,840</u> 448,840	<u>0</u> 0	<u>0</u> 0
<u>Salaries - Work Order</u> s					
<u>Benefits - Work Order</u> s					
<u>Services &amp; Supplies-W.O.</u>					
Service & Supplies	0	40,836	25,000	5,000	0
Outside Contracts	0	57,338	332,500	0	0
Other Professional Fees	250,000	0	0	0	0
TOTAL Services & Supplies-W.O.	250,000	98,174	357,500	5,000	0
TOTAL RECREATION - MAINTENANCE	1,499,067	1,083,539	1,919,798	1,055,037	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
RECREATION - PUBLIC REL					
Salaries					
Regular Salaries	56 <b>,</b> 322	20,386	51 <b>,</b> 903	53,456	0
Part Time - Temporary Wages	42,100	59 <b>,</b> 183	42,100	42,100	0
Overtime Pay	1,000	157	0	0	0
Vacation Pay	5,874	0	2,611	2,689	0
Jury Duty	346	0	28	29	0
Sick Pay	3,455	0	479	493	0
Holiday Pay	3,110	0	1,838	1,893	0
Seasonal Pay	187,793	10,668	82,445	82,445	0
TOTAL Salaries	300,000	90,395	181,404	183,105	0
<u>Benefits</u>					
CalPERS Pension Exp - PEPRA	0	1,654	0	0	0
CalPERS Pension Exp - Classic	6,003	0	5,277	5,435	0
Social Security Expense	18,600	6,051	11,247	11,353	0
Medicare Expense	4,350	1,415	2,630	2,655	0
TOTAL Benefits	28,953	9,120	19,154	19,443	0
Services & Supplies					
District Equipment	0	54	0	0	0
Service & Supplies	4,800	3,868	17,000	17,000	0
Computer Upgrades - Hardware	500	418	1,000	1,000	0
Computer Upgrades – Software	0	0	25,000	25,000	0
Fish Purchases	50,000	38,316	20,000	20,000	0
Outside Contracts	24,940	19 <b>,</b> 355	25 <b>,</b> 887	21,087	0
Clothing & Personal Supplies	0	0	4,500	4,500	0
Communications - Radio & Telep	0	321	400	400	0
Membership & Dues	0	0	340	340	0
Printing & Binding	8,650	6,200	8,000	8,000	0
Office Supplies	6,700	2,611	4,000	4,000	0
Postage Expense	0	1,182	0	0	0
Licenses & Permits	370	0	0	0	0
Advertising & Legal Notices	2,450	283	2,400	2,400	0
Public Information Program	14,050	2,687	6,000	6,000	0
Safety	300	0	0	0	0
Education & Training Seminars	400	0	0	0	0
Pre-Employment Screening	800	628	0	0	0
Credit Card Fees	60,000	49,480	48,000	48,000	0
TOTAL Services & Supplies	173,960	125,405	162,527	157,727	0
Other Operating Expenses					
Administration Overhead	172,832	0	126,954	0	0
TOTAL Other Operating Expenses	172,832	0	126,954	0	0

6-15-2020 03:29 PM 11 -GENERAL FUND	CASITAS MUNICIPAL W REVENUE/EXPENDITUR PROPOSED BUDGET FC	RES STATEMENT			PAGE: 43
EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
<u>Salaries - Work Order</u> s					
<u>Benefits - Work Order</u> s					
<u>Services &amp; Supplies-W.O</u> .					
TOTAL RECREATION - PUBLIC REL	675 <b>,</b> 745	224,920	490,039	360,275	0

#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
RECREATION - WATER PARK					
<u>Salaries</u>	72 770	<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	0.0 750	00.060	0
Regular Salaries	73,770	63,032	86,759	89,363	0
Part Time - Temporary Wages	404,219	112,895	436,294	248,919	0
Overtime Pay Vacation Pay	500 7,694	294 8,029	400 4,364	400 4,495	0
-	453	0,029	4,304	4,495	0
Jury Duty	453	18,685	48 800	49 824	0
Sick Pay					0
Holiday Pay	4,073	4,582	3,072	3,164	
Seasonal Pay TOTAL Salaries	<u> </u>	<u> </u>	26,982	<u>26,982</u> 374,196	0
TOTAL Salaries	512,359	385,391	558,719	3/4,190	0
Benefits					
Insurance – Employee Assistanc	28	30	29	29	0
CalPERS Pension Exp - PEPRA	0	14	0	0	0
CalPERS Pension Exp - Classic	7,794	17,866	8,858	9,123	0
Social Security Expense	31,766	26,674	34,641	23,200	0
Medicare Expense	7,429	6,238	8,101	5,426	0
Insurance - Group Life	267	270	284	284	0
Insurance - Group Health	26,912	26,761	27,682	27 <b>,</b> 682	0
Insurance - Group Dental	1,286	1,273	1,312	1,312	0
Insurance - Group Vision	225	223	229	229	0
Insurance - Unemployment	0	30	0	0	0
TOTAL Benefits	75 <b>,</b> 707	79,378	81,136	67,285	0
<u>Services &amp; Supplies</u>					
District Equipment	600	466	1,600	1,600	0
Service & Supplies	41,000	18,702	36,200	36,200	0
Utilities	39,000	29,559	38,000	20,000	0
Chlorine	30,000	14,991	24,000	14,000	0
Chemicals - Water Playground	4,500	1,683	4,200	4,200	0
Concession Supplies - Archived	0	0	1,500	1,500	0
Computer Upgrades - Hardware	2,500	1,361	0	0	0
Outside Contracts	12,300	3,188	8,040	8,040	0
Clothing & Personal Supplies	15,300	6,815	9,500	9,500	0
Communications - Radio & Telep	800	436	3,500	3,500	0
Office Equipment Maintenance	0	200	0	0	0
Membership & Dues	600	0	574	574	0
Printing & Binding	0	0	800	800	0
Office Supplies	2,000	1,212	1,000	1,000	0
Other Professional Fees	2,000	2,593	0	0	0
Licenses & Permits	360	359	0	0	0
Advertising & Legal Notices	0	0	4,070	4,070	0
Small Tools	1,000	140	300	300	0
Public Information Program	8,400	5,868	12,850	6,000	0
Safety Program	0	0	600	600	0

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Education & Training Seminars	3,370	1,625	1,500	1,500	0
Pre-Employment Screening	2,800	880	5,700	5,700	0
Credit Card Fees	18,000	17,853	19,000	9,000	0
Insurance - Miscellaneous Prem	. 0	175	. 0	0	0
TOTAL Services & Supplies	184,530	108,107	172,934	128,084	0
Other Operating Expenses					
Administration Overhead	308,970	146,853	405,028	0	0
TOTAL Other Operating Expenses	308,970	146,853	405,028	0	0
<u>Salaries - Work Order</u> s					
<u>Benefits - Work Order</u> s					
Services & Supplies-W.O.					
Service & Supplies	0	3	114,400	0	0
Outside Contracts	0	0	32,000	0	0
TOTAL Services & Supplies-W.O.	0	3	146,400	0	0
TOTAL RECREATION - WATER PARK	1,081,566	719,731	1,364,217	569,565	0
TOTAL EXPENDITURES	43,886,371	26,657,378	52,562,047	39,305,203	0
REVENUE OVER/(UNDER) EXPENDITURES	( 18,636,964)	( 11,943,970)	( 29,653,985)	( 16,323,121)	0

6-15-2020 03:29 PM 29 -USBR & SWP BONDED INDEBT FINANCIAL SUMMARY	CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021				PAGE: 1
	BUDGET 2019-2020	REV./EXP. T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
REVENUE SUMMARY					
<u>Non Departmental</u> WATER SALES TOTAL Non Departmental	<u>0</u>	<u> </u>	0 0	<u>0</u>	<u>0</u>
TOTAL REVENUE	0	765 <b>,</b> 280	0	0	0

REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021					IAGE. 2
29 -USBR & SWP BONDED INDEBT FINANCIAL SUMMARY					
	BUDGET 2019-2020	REV./EXP. T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
EXPENDITURE SUMMARY					
PROPERTY TAX					
Services & Supplies	0	2,513	0	0	0
TOTAL PROPERTY TAX	0	2,513	0	0	0
TOTAL EXPENDITURES	0	2,513	0	0	0
REVENUE OVER/(UNDER) EXPENDITURES	0	762,768	0	0	0

CASITAS MUNICIPAL WATER DISTRICT

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#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

29 -USBR & SWP BONDED INDEBT

REVENUES	BUDGET 2019-2020	REVENUES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Non Departmental					
WATER SALES					
Bonded Debt - Tax Interest	0	1,817	0	0	0
Bonded Debt - Tax Interest	0	738,055	0	0	0
Bonded Debt - Tax Secured	0	6,605	0	0	0
Bonded Debt - Unsecured	0	14,883	0	0	0
Bonded Debt - PY Secured	0	( 45)	0	0	0
Bonded Debt - Redemption	0	3,965	0	0	0
TOTAL WATER SALES	0	765,280	0	0	0
TOTAL Non Departmental	0	765,280	0	0	0
TOTAL REVENUE	0	765,280	0	0	0

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#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

29 -USBR & SWP BONDED INDEBT

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
PROPERTY TAX					
<u>Services &amp; Supplies</u> Property Tax Collection Fee Property Tax Administration Fe TOTAL Services & Supplies	0 0 0	1,869 <u>644</u> 2,513	0 0 0	0 0 0	0 0 0
TOTAL PROPERTY TAX	0	2,513	0	0	0
TOTAL EXPENDITURES	0	2,513	0	0	0
REVENUE OVER/(UNDER) EXPENDITURES	0	762,768	0	0	0

6-15-2020 03:29 PM 69 -MIRA MONTE WATER ASSESSME FINANCIAL SUMMARY	CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021			PAGE: 1	
	BUDGET 2019-2020	REV./EXP. T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
REVENUE SUMMARY					
<u>Non Departmental</u> WATER SALES TOTAL Non Departmental	<u>0</u>	<u> </u>	<u> </u>	<u> </u>	0 0
TOTAL REVENUE	0	18,164	19,212	19,212	0

0 13 2020 03.29 IM	REVENUE/EXPENDITUR PROPOSED BUDGET FO	ES STATEMENT			185. 2
69 -MIRA MONTE WATER ASSESSME FINANCIAL SUMMARY					
	BUDGET 2019-2020	REV./EXP. T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
EXPENDITURE SUMMARY					
PROPERTY TAX Services & Supplies	0	1,970	0	0	٥
TOTAL PROPERTY TAX	0	1,970 1,970	0	0	0
TOTAL EXPENDITURES	0	1,970	0	0	0
REVENUE OVER/(UNDER) EXPENDITURES	0	16,194	19,212	19,212	0

CASITAS MUNICIPAL WATER DISTRICT

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6-15-2020 03:29 PM 69 -MIRA MONTE WATER ASSESSME	CASITAS MUNICIPAL WA REVENUE/EXPENDITURE PROPOSED BUDGET FOF	ES STATEMENT			PAGE: 3
REVENUES	BUDGET 2019-2020	REVENUES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Non Departmental					
WATER SALES					
MMWS - Tax Interest	0	38	0	0	0
MMWS - Tax Secured	0 0	17,967	0 19,212	0 19,212	0
			•	-	0 0 0
MMWS - Tax Secured MMWS - Tax PY Secured/Unsecure	0	17,967 	19,212	19,212	0 0 0

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#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

69	-MIRA	MONTE	WATER	ASSESSME

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
PROPERTY TAX					
<u>Services &amp; Supplies</u> Interest / Penalty Expenses Property Tax Collection Fee TOTAL Services & Supplies	0 0 0	1,925 <u>45</u> 1,970	0 0	0 0 0	0 0 0
TOTAL PROPERTY TAX	0	1,970	0	0	0
TOTAL EXPENDITURES	0	1,970	0	0	0
REVENUE OVER/(UNDER) EXPENDITURES	0	16,194	19,212	19,212	0

6-15-2020 03:29 PM 75 -CFD -2013-1 FINANCIAL SUMMARY	CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021			PAGE: 1	
	BUDGET 2019-2020	REV./EXP. T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
REVENUE SUMMARY					
<u>Non Departmental</u> WATER SALES TOTAL Non Departmental	0	<u>2,686,660</u> 2,686,660	<u>2,713,976</u> 2,713,976	<u>2,713,976</u> 2,713,976	<u>0</u>
TOTAL REVENUE	0	2,686,660	2,713,976	2,713,976	0

	REVENUE/EXPENDITURE	S STATEMENT			
	PROPOSED BUDGET FOR	2020/2021			
75 -CFD -2013-1 FINANCIAL SUMMARY					
	BUDGET 2019-2020	REV./EXP. T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
EXPENDITURE SUMMARY					
Property Tax					
Salaries	0	2,750	0	0	0
Services & Supplies	2,057,488	380,224	2,765,688	2,765,688	0
TOTAL Property Tax	2,057,488	382,974	2,765,688	2,765,688	0
TOTAL EXPENDITURES	2,057,488	382,974	2,765,688	2,765,688	0
REVENUE OVER/(UNDER) EXPENDITURES	( 2,057,488)	2,303,686	( 51,712)	( 51,712)	0

CASITAS MUNICIPAL WATER DISTRICT

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75 -CFD -2013-1	REVENUE/EXPENDITUR PROPOSED BUDGET FO				
REVENUES	BUDGET 2019-2020	REVENUES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Non Departmental					
WATER SALES CFD 2013-1 Interest Investment CFD 2013-1 - Tax Interest CFD 2013-1 - Tax Secured CFD 2013-1 Tax PY Secured/Unse TOTAL WATER SALES TOTAL Non Departmental	0 0 0 0 0	52,308 3,219 2,606,369 <u>24,764</u> 2,686,660 2,686,660	0 0 2,713,976 0 2,713,976 2,713,976	0 0 2,713,976 0 2,713,976 2,713,976	0 0 0 0
TOTAL REVENUE	0	2,686,660		2,713,976	0

CASITAS MUNICIPAL WATER DISTRICT

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#### CASITAS MUNICIPAL WATER DISTRICT REVENUE/EXPENDITURES STATEMENT PROPOSED BUDGET FOR 2020/2021

75 -CFD -2013-1

EXPENSES	BUDGET 2019-2020	EXPENDITURES T0:30Jun20	DEPARTMENT REQUESTED	GEN MGR RECOMMENDED	BOARD APPROVED
Property Tax ========					
Salaries					
CFD 2013-1 Acquisition Exp	0	2,750	0	0	0
TOTAL Salaries	0	2,750	0	0	0
<u>Services &amp; Supplies</u>					
Cost of Issuance	0	273,840	0	0	0
Other Professional Services	20,000	0	18,000	18,000	0
Interest / Penalty Expenses	2,030,988	99,811	2,740,688	2,740,688	0
Property Tax collection Fee	6,500	6,573	7,000	7,000	0
TOTAL Services & Supplies	2,057,488	380,224	2,765,688	2,765,688	0
Other Operating Expenses					
TOTAL Property Tax	2,057,488	382,974	2,765,688	2,765,688	0
TOTAL EXPENDITURES	2,057,488	382,974	2,765,688	2,765,688	0
REVENUE OVER/(UNDER) EXPENDITURES	( 2,057,488)	2,303,686	( 51,712)	( 51,712)	0

## Casitas Municipal Water District Capital Projects 10 Year Plan

FIGOAL	VEAD
FISCAL	YEAR

Department	Replacement Ca	noital			FISCAL	TEAR					
	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	Total
21 Management	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24 Information Technology	0.00	0.00	50,000.00	0.00	0.00	0.00	0.00	50,000.00	0.00	0.00	100,000.00
25 Water Resources	0.00	0.00	0.00	0.00	25,000.00	0.00	0.00	0.00	0.00	0.00	25,000.00
28 Fisheries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30 Administration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33 Garage	0.00	138,000.00	290,000.00	255,000.00	170,000.00	123,000.00	231,000.00	190,000.00	185,000.00	260,000.00	1,842,000.00
35 Safety	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40 Engineering	16,925,000.00	9,450,000.00	6,450,000.00	8,200,000.00	5,350,000.00	8,100,000.00	6,550,000.00	5,350,000.00	4,450,000.00	4,350,000.00	75,175,000.00
42 Water Quality	0.00	100,000.00	30,000.00	35,000.00	30,000.00	0.00	0.00	0.00	0.00	0.00	195,000.00
50 Utility Maintenance	55,000.00	55,000.00	60,000.00	60,000.00	150,000.00	155,000.00	155,000.00	165,000.00	165,000.00	170,000.00	1,190,000.00
52 Electrical Mechanical	125,000.00	450,000.00	150,000.00	430,000.00	55,000.00	55,000.00	55,000.00	60,000.00	60,000.00	60,000.00	1,500,000.00
53 Pipeline	18,000.00	18,000.00	18,000.00	18,000.00	20,000.00	100,000.00	20,000.00	23,000.00	23,000.00	23,000.00	281,000.00
54 Water Treatment	170,000.00	810,000.00	1,345,000.00	962,000.00	487,000.00	702,000.00	760,000.00	105,000.00	280,000.00	110,000.00	5,731,000.00
55 District Maintenance	0.00	40,000.00	80,000.00	230,000.00	80,000.00	230,000.00	95,000.00	285,000.00	95,000.00	285,000.00	1,420,000.00
62 Recreation - Operations	0.00	30,000.00	55,000.00	0.00	65,000.00	15,000.00	65,000.00	0.00	0.00	0.00	230,000.00
63 Recreation - Maintenance	5,000.00	170,000.00	380,000.00	370,000.00	300,000.00	170,000.00	150,000.00	75,000.00	75,000.00	75,000.00	1,770,000.00
64 Recreation - Public Relations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65 Recreation - Water Playground	0.00	77,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	77,500.00
Total: Replacement	17,298,000.00	11,338,500.00	8,908,000.00	10,560,000.00	6,732,000.00	9,650,000.00	8,081,000.00	6,303,000.00	5,333,000.00	5,333,000.00	89,536,500.00
Department	New Capital										
	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	Total
21 Management	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24 Information Technology	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25 Water Conservation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28 Fisheries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30 Administration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33 Garage / Safety	103,500.00	105,378.00	50,378.00	195,378.00	145,000.00	0.00	0.00	0.00	0.00	0.00	599,634.00
35 Safety	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40 Engineering	500,000.00		23,750,000.00	66,900,000.00			0.00	100,000.00		0.00	161,550,000.00
42 Water Quality	150,000.00	150,000.00	800,000.00	0.00	0.00	550,000.00	0.00	0.00	0.00	600,000.00	2,250,000.00
50 Utility Maintenance	5,000.00	35,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40,000.00
52 Electrical Mechanical	92,500.00	603,750.00	276,000.00	28,000.00	0.00	0.00	0.00	0.00	0.00	0.00	1,000,250.00
53 Pipeline	20,000.00	0.00	25,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45,000.00
54 Water Treatment	0.00	825,000.00	1,250,000.00	75,000.00	0.00	0.00	0.00	0.00	0.00	0.00	2,150,000.00
55 District Maintenance	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8,500.00
62 Recreation - Operations	2,000.00	0.00	0.00	310,000.00	0.00	0.00	0.00	0.00	0.00	0.00	312,000.00
63 Recreation - Maintenance	0.00	1,150,000.00	900,000.00	900,000.00	900,000.00	750,000.00	0.00	0.00	0.00	0.00	4,600,000.00
64 Recreation - Public Relations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65 Recreation - Water Playground	0.00	130,000.00	500,000.00	500,000.00	800,000.00	0.00	0.00	0.00	0.00	0.00	1,930,000.00
Total: New	881,500.00	9,099,128.00	27,551,378.00	68,908,378.00	38,845,000.00	27,300,000.00	0.00	100,000.00	1,200,000.00	600,000.00	174,485,384.00
Total: Capital Improvements	18,179,500.00	20,437,628.00	36,459,378.00	79,468,378.00	45,577,000.00	36,950,000.00	8,081,000.00	6,403,000.00	6,533,000.00	5,933,000.00	264,021,884.00
* Funded by CFD-2013-1	10,745,000.00	2,825,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13,570,000.00
Funded by Grant	3,825,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,825,000.00
Funded by Bonding	800,000.00	, ,	23,650,000.00	63,000,000.00	37,000,000.00		0.00	0.00	0.00	0.00	155,600,000.00
Funded by CMWD (Reserves or Rates)	2,809,500.00	12,462,628.00	12,809,378.00	16,468,378.00	8,577,000.00	10,950,000.00	8,081,000.00	6,403,000.00	6,533,000.00	5,933,000.00	91,026,884.00

# Casitas Municipal Water District Proposed Capital Projects Proposed for 2020 / 2021

Manager Recommended

Department:		Amount	Total
01 - Retirees			
	Total Capital Projects Department - 01	0.00	0.00
11 - Board of Dire	actors		
	Total Capital Projects Department - 11	0.00	0.00
21 - Management	1		
	Total Capital Projects Department - 21	0.00	0.00
24 - Information	Technoloav		
	eplacement of District computers/Printers	0.00	
	Total Capital Projects Department - 24		0.00
25 - Water Conse	ervation		
	Total Capital Projects Department - 25	0.00	0.00
28 - Fish Biologis	st		
	Total Capital Projects Department - 28	0.00	0.00
30- Administrativ	ve Services		
	Total Capital Projects Department - 30	0.00	0.00
32- Warehouse			
	Total Capital Projects Department - 32	0.00	0.00

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33-Garage & Safety	
CARB Required Diesel Particulate Filter	50,000.00
CAT 420E Backhoe	25,000.00
Replace pressure washer in the wash rack	3,500.00
Skiploader	25,000.00
Total Capital Projects Department - 33	103,500.0

40- Engineering	CMWD Projects		
	Casitas Dam Fixed Cone Valve City of Ventura SWP Interconnection Emergency Generator at Rincon Transmission Pipeline Replacement	100,000.00 500,000.00 5,100,000.00 800,000.00	
	Total Capital CMWD Projects		6,500,000.00
40- Engineering	CFD 2013-1 Projects Funding from Bond Proceeds		
	Emily & Canada St. pipeline replacement Mutual Well #7 Mutual Wellfield & Grand Avenue pipeline improvements Pleasant & Daly pipeline replacement Running Ridge Zone Hydraulic Improvements Grand Avenue & Lion St pipeline replacement Wellfield VFD's West & East Ojai Avenue pipeline replacement West Ojai pipeline replacement	$\begin{array}{c} 500,000.00\\ 500,000.00\\ 1,000,000.00\\ 650,000.00\\ 2,900,000.00\\ 500,000.00\\ 375,000.00\\ 3,000,000.00\\ 1,500,000.00\end{array}$	
	Total Capital CFD 2013-1 Projects		10,925,000.00
	Total Capital Projects Department - 40		17,425,000.00

150,000.00	
	150,000.00
5 000 00	
	5,000.00

Omni Meter replacements 2"	55,000.00	
Total Capital Projects Department - 55		60,000.00
52 - Electrical Mechanical		
10" Jamesbury Control Valve	9,500.00	

Ave #1 VFD	25,000.00	
Building to protect new air compressor, supplies	10,000.00	
MDS Radios - OWS	6,000.00	
OWS SCADA Migration (phase 2)	42,000.00	
PLC's Cards, Power Supplies	55,000.00	
Pump #4 Rehabilitation Ave #2 Pump Plant	20,000.00	
Pump Repairs	50,000.00	
Total Capital Projects Department - 52		217,500.00

53 - Pipeline

Grizzly Rock Shaker	20,000.00	
Turn out improvements 4" or larger	18,000.00	
Total Capital Projects Department - 53		38,000

54 - Water Treatment

Filter Media Cleaning Filter	70,000.00	
PLC Automation upgrades (Marion Walker Treatement)	50,000.00	
PLC Automation upgrades (San Antonio Plant)	30,000.00	
Valve & Actuator replacements	20,000.00	
Total Capital Projects Department - 54		170,000.00

55- District Maintenance		
Fortress Reservoir Hillside Stability Assessment	8,500.00	
Total Capital Projects Department - 55		8,500.00

Barge Repair	5,000.00	
Security Lighting and Cameras	2,000.00	
Total Capital Projects Department - 62/63/64/65		7,000.00

Total Capital Projects / Budget 2020 / 2021

18,179,500.00

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								Summary C	apital Depart	ment 24
		Capital Im	provemen	t Program						
Department:	Information 7	Fechnology	ninaszeren az an							
Comments:					R BRANN MAR MAR ANN AN					
General Plan:		CATEGORIA CALINA DE LA CONTRACTACIÓN DE LA CONTRACTACIÓN DE LA CONTRACTACIÓN DE LA CONTRACTACIÓN DE LA CONTRACT CONTRACTACIÓN DE LA CONTRACTACIÓN			WANG THE MERCEN DE CONTRACTOR DE LA CONTRAC	an a		i novem na se		
								andre an		
		Total Sche	eduled Fun	ding						
	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Replacement New	0.00 0.00	0.00 0.00				0.00 0.00				
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Project Total:		0.00	50,000.00							

								Summary C	apital Depar	ment 25
		Capital Im	provemen	t Program						
Department:	Water Conse	ervation								
Comments:	Vehicle Repl	acement		1794-1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1		na and konstantin the open southers and	17 C 8 MARTIN DI MARTINI DI MARTIN	Anna i ara a cara a a cara a a a a a		
General Plan:			n a final for a final second of the constant of the speed of the second of	nen kan kan kan kan kan kan kan kan kan ka		a (na mana na sina na sina na sina na sina na sina na sina si	20122012201220000000000000000000000000			
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	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Replacement New	0.00 0.00		0.00 0.00					0.00 0.00		
such 275 Mart Bland Han Safa' earl on berfanden hafferen 1987	Standard Marce 1 and A. I. Davids Science Advances and a darks	analari ami'ni / A / A / A / A / A / A / A / A / A /	1977 and 10 and 10 and 10 and 20 and a 10 and 10 and 10	h # Pahila No. Yi ahalYi na ana habay na ma	1751175	14734 Markedon Adar (1977-1977) - 197	and dama and a construction of the source of	wenden die Franke in der die Antonika die Antonika die die	at make the transformed and a the transformed at the	""" 'n een bekende "Art'n tet All 'ne 'neen bewend
Project Total:	0.00	0.00	0.00	0.00	25,000.00	0.00	0.00	0.00		

						*****		*****	Replacemen	t Capital
		10 Year C	apital Impr	rovement P	<b>'</b> rogram					
Department:	Water Conse	ervation	]							
Project Manager:	Bryan Sando	oval	******						]	
Project Name:	Vehicle Repl	lacement							]	
Description:									]	
Justification:	Life expectar	ncy of the veh	nicle acticipate	ed after 15 ye	ars. It has ab	out 30,000 m	iles, after sev	en years.	]	
Comments: Replacement										
		Sc	cheduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024		2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
	ent Varbishot assists statutes and on the Varbish				25,000.00					Lister such tables that is such the second the second
Project Total:	0.00	0.00	0.00	0.00	25,000.00	0.00	0.00	0.00	0.00	0.00

								Summary C	apital Depar	tment 28
		Capital Im	provemen	t Program						
Department:	Managemen	t - Fisheries E	Biologist							
Comments:					*****	****				
General Plan:	[	a logon a sub franciscu a logon a composition a sub			ana kaominina dia kaominina Ny faritr'order no ben'ny tanàna mandritry dia kaominina dia kaominina dia kaominina dia kaominina dia kaominina				1	
		ad Martin Barran Caralis and Barran Barran Caral Statement	n an		70000000000000000000000000000000000000					
		Total Sche	eduled Fun	ding		*****				
	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Replacement New	0.00 0.00		0.00 0.00	0.00 0.00						
030030010730000010000000000000000000000	n Product (Pronuct data Administration data Administration data Administration data Administration data adminis	Netheral States on these short is field of Nethers and a first	urfandet fallante e de la tel 11 d'arten de 1999	1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 × 1.0 ×					*101.00107100010000000000000000000000000	171 (1 *** 4×4 aut) (1 **** 4** (1 *****)
Project Total:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

								Summary Ca	pital Departr	nent 30
		Capital Im	provement	t Program						
Department:	Administratio	n								
Comments:							******			
General Plan:						9.99.99.99.99.99.99.99.99.99.99.99.99.9	n Nichtmark Michaelen an Calapties 200			
					10070010000000000000000000000000000000	alandes da an markan construction and an	anna an ann an ann ann ann ann ann ann			
		Total Sche	eduled Fun	ding	****				44994444944444444444444444444444444444	
	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Replacement New	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00		0.00 0.00		0.00 0.00	0.00 0.00	0.00 0.00
Project Total:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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							*****	Summary C	apital Depart	ment 33
		Capital Im	provemen	t Program						
Department:	Garage	******		-	ND SITE STOCK OF STOCK STOCK STOCK			04440000 00000000000000000000000000000		
Comments:	nan ann an Anna Anna an									
General Plan:		annan ann an Annan Annan Annan an Annan	Mananan de anterna a chais en al anterna de a	and and a strategy of the stra		Hankit alik bilan karakan mana ana karakan maku		nan kanan kana Manan kanan kana		
			#*************************************						I	
		Total Sch	eduled Fun	nding						
	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Replacement New	0.00 103,500.00							190,000.00 0.00		
	4.5 cm Mitch Yorksonen atter Abdau (Sabar Aster et Boren er and Die		n Talan an Collanda ann an Chuir Chuir an Nach Tha Chuir	10.5.1999-0.000	and an an article and a the set of an art and a set of a	19 m 3 1 3 1 3 1 3 1 4 4 4 4 4 4 1 4 1 4 1 4		a 11 an ion 2003 ann an 2004 ann an 2007		la andonasia Anton (1364). A bay tahun ang 1366) ah Y
Project Total:	103,500.00	243,378.00	340,378.00	450,378.00	315,000.00	123,000.00	231,000.00	190,000.00	185,000.00	260,000.00

									Replacemen	it Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Garage		]							
Project Manager:	Greg Romey	· · · · · · · · · · · · · · · · · · ·								
Project Name:	truck equipm	ent replacem	ent							
Description:	replace distri	ct fleet of equ	lipment as ne	eded						
Justification:	equipment to repair cost.	be replaced	based on the	following; Ne	ed or use, mi	les, age of eq	uipment and	on going		
Comments:		******								
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
50 - 40 - 2014 - Ford Escape 51 - 53 - 2014 - Chevy 3500 HD 4WD 52 - 52 - 2015 - Ford 3/4 Ton Utility				35,000.00		30,000.00	25,000.00			
21 - 54 - 2018 Chevy - Colorado 44 - 62 - 2017 Ford - 1/2 Ton PU 17 - 62 - 2014 Chevy - 3/4 Ton Crw 4x4				55,000.00				55,000.00		25,000.00
53 - 55 - 2015 - 1 Ton Dump 56 - 54 - 2018 - 3/4 Ton 4x4 41 - 62 - 2013 - Chevy 1/2 Ton 18 - 2006 - Ford 1/2 Ton - Water Treatment		55,000.00		50,000.00					35,000.00	80,000.00
Project Total:	0.00	55,000.00	0.00	90,000.00	0.00	30,000.00	25,000.00	55,000.00	35,000.00	105,000.00

									Replacemen	t Capital
		10 Year C	apital Impr	ovement P	Program					
Department:	Garage		]							
Project Manager:	Ron Mercklin	ng							]	
Project Name:	fuel tank repl	lacement - Tr	uck Replacen	nent					]	
Description:	Replace flee	t to reduce m	aintenance co	osts			*****		]	
Justification:	On-going co	sts for fleet m	anagement.						]	
Comments:	above ground	d tank may as	ssist with keep	bing cost of fu	el tanks mana	agable				
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
planning 88 - 63 - Pump Truck 08 - 52 - Chevy 3/4 Ton 09 - 24 - 2010 Ford Escape 10 - 30 - 2016 Ford Escape			200,000.00		25,000.00	23,000.00	25,000.00			
11 - 55 - 2011 Ford 3/4 Ton 12 - 50 - 2018 Chevy 1/2 Ton PU 14 - 50 - 2016 Ford 3/4 Ton 4x4 15 - 50 - 2007 Chevy 3/4 Ton		23,000.00 35,000.00					20,000.00			25,000.00
16 - 50 - 2007 Ford 3/4 Ton Utility 17 - 28 - 2016 Chevy Colorado				45,000.00			26,500.00			
Project Total:	0.00	58,000.00	200,000.00	45,000.00	25,000.00	23,000.00	51,500.00	0.00	0.00	25,000.00

									Replacemen	t Capital
		10 Year C	apital Impr	ovement P	rogram					
Department:	Garage		]							
Project Manager:	Brian Taylor								]	
Project Name:	District large	fleet replacer	nent						]	
Description:	Replace dist	rict fleet as ne	eded	*****	********					
Justification:	Replace equ	ipement base	d on the follo	wing; Need or	use, miles, a	ge of equipm	ent and repai	r cost.		
Comments:	Note: CARB "normal" mile	complaince c alge factor th	an/will force t at has been t	he District to r used in the pa	remove large st.	fleet equipme	ent from servio	ce before the		
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
57 - 50 - 2018 Ford 3/4 Ton Utility 83 - 53 - Freightliner - Utility Truck 58 - 52 - 2018 Ford 3/4 Ton Utility 87 - 53 - Boom Truck 69 - 53 - 2006 Int. 4400 Dump Truck				120,000.00				100,000.00	35,000.00 35,000.00	80,000.00
126 - 53 - Welder 80 - 53 - Welding Truck 42 - 53 - 3/4 T 4x4 51 - 53 - 3500HD 4x4 84 - 53 - 2017 Ford 2 Ton F550			65,000.00		45,000.00 45,000.00		80,000.00		80,000.00	
Project Total:	0.00	0.00	65,000.00	120,000.00	90,000.00	0.00	80,000.00	100,000.00	150,000.00	80,000.00

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									Replacemen	t Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Garage									
Project Manager:									]	
Project Name:	[				*****					
Description:	Vehicle repla	cement sche	dule							
Justification:	Maintaining a	a workable fle	et and limit m	aintenance c	osts					
Comments:									]	
	L								]	
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
22 - 52 - 2007 Chevy 3/4 Ton Util 70 - 54 - 2019 Ford 3/4 Ton Util 71 - 40 - 2019 Chevy Colorado 40 - 54 - 2007 - Ford 1/2 Ton			25,000.00			35,000.00				25,000.00 25,000.00
42 - 53 - 2008 - Ford 3/4 Ton 4x4 43 - 55 - 2008 - Ford 3/4 Ton Utili 45 - 42 - 2013 - Ford 1/2 Ton 46 - 54 - 2003 - Chevy 3/4 Ton Ut 48 - 28 - 2017 - Ford 1/2 Ton 49 - 42 - 2017 - Ford 1/2 Ton	ty	25,000.00			55,000.00	35,000.00	25,000.00 26,500.00 23,000.00	35,000.00		
Project Total:	0.00	25,000.00	25,000.00	0.00	55,000.00	70,000.00	74,500.00	35,000.00	0.00	50,000.00

•

									New Capita	
		10 Year Ca	apital Impr	ovement F	rogram					
Department:	Garage		]							
Project Manager:	Brian Taylor								]	
Project Name:									]	
Description:									]	
Justification:						*****				
Comments:	New skipload	ler could be s	hared with Re	ec - Maint to a	llow 109 to be	ecome design	ated low use	in 2022.		
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Pressure Washer (Wash Rack) CARB Retrofit (2 Large Trucks) 33 AST - Diesel Fuel	3,500.00 50,000.00			25,000.00						
62 - Lake Barge (replacement) 55 - New Skiploader 104 - 53 - S250 Bobcat 116 - 53 - Case 580SM	25,000.00	55,000.00 25,378.00	25,378.00	25,378.00 120,000.00						
CAT 420E 4x4 Backhoe	25,000.00	25,000.00	25,000.00	25,000.00						
Project Total:	103,500.00	105,378.00	50,378.00	195,378.00	145,000.00	0.00	0.00	0.00	0.00	0.00

		1972-1971-1971-1971-1971-1971-1971-1971-						Summary C	apital Depart	ment 35
		Capital Im	provemen	t Program						
Department:	Safety	1	AMINGAN DE LE LINE DE LE MONTAN AL MANTAN DE LA MONTANE DE LA MONTANI DE LA MONTANI DE LA MONTANI DE LA MONTAN	Telephonia Thomas and an a strain and a strain						
Comments:					Making an					
General Plan:		1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 -	and a second second second second second second	an a			*****	*****		
		*****	an that was a second	anna de la companya d	atter tit det and atter any and a second	na tan adalah kara yang mananan kara tang mat				
		Total Sche	eduled Fun	ding		****	<u>44 97 98 99 99 99 99 99 99 99 99 99 99 99 99 </u>			
	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Replacement New	0.00 0.00			0.00 0.00						
			un de la de la compansión		1971 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		and wave and first a first case of the sease freq. First case is desce			
Project Total:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Casitas Municipal Water District** Summary Capital Department 40 **Capital Improvement Program** Department: Engineering Comments: General Plan: Scheduled Funding 2020/2021 2021/2022 2022/2023 2023/2024 2024/2025 2025/2026 2026/2027 2027/2028 2028/2029 2029/2030 Replacement 16,925,000.00 9,450,000.00 6,450,000.00 8,200,000.00 5,350,000.00 8,100,000.00 6,550,000.00 5,350,000.00 4,450,000.00 4,350,000.00 New 500,000.00 6,100,000.00 23,750,000.00 66,900,000.00 37,000,000.00 26,000,000.00 100,000.00 1,200,000.00 0.00 0.00 Project Total: 17,425,000.00 15,550,000.00 30,200,000.00 75,100,000.00 42,350,000.00 34,100,000.00 6,550,000.00 5,450,000.00 5,650,000.00 4,350,000.00

								****	Replacemen	t Capital
		10 Year C	apital Impr	ovement F	Program					
Department:	ENGINEERI	NG	]							
Project Manager:	Julia Aranda		****						]	
Project Name:	Robles Forel	bay Restoratio	on						]	
Description:	FY20-21 - 30	f sediment in ),000 CY, plus I thereafter- 2	s programmat	ic permit fees		r cutoff wall				
Justification:	Water supply	/ reliability							]	
Comments:	Deleted by G	βM								
		Sc	heduled F	unding			*****			
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction	0.00 0.00	\$			\$ 50,000 1,000,000.00	\$	\$50,000 1,000,000.00	\$     50,000 1,000,000.00	\$	\$
Project Total:	0.00	1,050,000.00	1,050,000.00	1,050,000.00	1,050,000.00	1,050,000.00	1,050,000.00	1,050,000.00	1,050,000.00	1,050,000.00

									Replacemen	t Capital
		10 Year C	apital Impr	ovement Pi	rogram					
Department:	ENGINEERI	NG	]							
Project Manager:	Julia Aranda				*****				]	
Project Name:	Lake Casitas	Bathymetric	Survey						]	
Description:	Perform bath	ymetric surve	ey of Lake Ca	sitas every thre	ee years					
Justification:	Monitor lake	capacity, imp	acts of sedim	ent inflow to la	ike				]	
	L			•••••						
Comments:	Last survey i	n March 2017	,							
	L								 	
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
		\$ 100,000			100,000.00				100,000.00	
and during an old m ^{age} for the or a thread and an interference around	un a statu a sa s		an an dach da bha a da a a bha a bha dha a bha a b				1911 - 1911 - 1911 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 -		taa ta	e Navid e e e e de 1999, de 1 e a de Sal e de aveces d'are
Project Total:	0.00	100,000.00	0.00	0.00	100,000.00	0.00	0.00	0.00	100,000.00	0.00

							an shadaa haadaa ahaa ahaa ahaa ahaa ahaa		Replacemen	nt Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	ENGINEERING									
Project Manager:	Julia Aranda		•••••••••••••••••••••••••••••••••••••••						]	
Project Name:	Transmissior	n Pipeline Rep	lacements						]	
Description:	Annual progr in Casitas Sy						rojects to be i	dentified	]	
Justification:	III Udoitao Uy	Stern Master								
Comments:										
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design		200,000.00	200,000.00	200,000.00			200,000.00	200,000.00	200,000.00	
Construction	800,000.00	800,000.00	800,000.00	800,000.00	800,000.00	800,000.00	800,000.00	800,000.00	800,000.00	800,000.00
		an ba' na an la sa ban da ma da an da an a	a fa sti fan fe fan an fe fan an fe fe fan stere							and plants in a strand second of the bind is a sum backed
Project Total:	\$ 800,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000

							*****		Replacemen	t Capital
		10 Year Ca	apital Impr	rovement P	'rogram					
Department:	ENGINEERII	NG	]							
Project Manager:	Julia Aranda	***							]	
Project Name:	Tank Fall Pro	otection Impro	vements						]	
Description:	Design and ir	nstall fall prote	ection (ladder	s, rails, etc) a	t tanks and va	aults in Casita	is and Ojai sy	stems		
Justification:	Safety									
Comments:	Address ever	y five years								
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022 100,000.00	2022/2023	2023/2024	2024/2025	2025/2026 50,000.00	2026/2027	2027/2028	2028/2029	2029/2030
		100,000.00				50,000.00				
shedd a dorfor farfar "Standa Shin Islanda far Sonn dafala far son far den se	1 ⁹ - 1	for an an advance for an add third of the form for the second second					a ba dan dan manan bara dan sala na a ta mana ta ta ta ta dan dan da			Y Sy di a sedara an Pener Serana a Viran a mare da mate
Project Total:	0.00	100,000.00	0.00	0.00	0.00	50,000.00	0.00	0.00	0.00	0.00

				*********				*****	Replacemen	t Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	ENGINEERI	NG								
Project Manager:	Julia Aranda								]	
Project Name:	Facility Pavir	ng							]	
Description:	Maintain pav	ement at Dist	rict facilities, i	ncluding offic	e, yard, reser	voirs, treatme	nt plant, Robl	es canal		
Justification:										
Justification:		f the existing p	avement.							
Comments:										
	L									
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
		100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00
the Parameters Methods is a contraction to the Architecture Parkon star and	than the state of the state of the two and the state of the			1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	. 19. e 7 de a 19. e			19. 1997 - 11. 1997 - 11. 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		5 55 6 5 6 6 7 5 6 7 5 6 7 7 6 7 7 6 7 7 6 7 7 6 7 7 6 7 7 6 7 7 6 7 7 6 7 7 7 6 7 7 7 6 7 7 7 7 6 7 7 7 7 7 6
Project Total:	0.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00	100,000.00

							alan kanan di mangin pertenan di sebagai kanan di sebagai kanan di sebagai kanan di sebagai kanan di sebagai k	Replacemen	t Capital
	10 Year	Capital Impi	rovement F	rogram					
Department:	ENGINEERING								
Project Manager:	Julia Aranda							]	
Project Name:	District Office Remodel							]	
Description:	New roof and paint (FY	2020-21); Build	ing addition (F	Y 2021-22 ar	nd 2022-23)		,		
Justification:	Original roof and fascia beyond its useful life. Ad	boards are seve Iditional staffing	erely damaged requires add	d and require itonal office/c	replacement. onference roc	Original pain om space.	t is	]	
Comments:	Proposed building addit	on would bump	out front of b	uilding near E	ngineering va	ault.			
	S	Scheduled F	unding						
Project Phase :	2020/2021 2021/202		2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction	500,000.0	200,000.00 650,000.00							
Project Total:	0.00 500,000.0	0 850,000.00	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00

				an landa da katar da marte da antiga da	an a				Replacement	t Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	ENGINEERI	NG								
Project Manager:	Julia Aranda	*********							]	
Project Name:	Tank Seismi	c Upgrades							J	
Description:		c upgrades to ipate two tank		Ojai system t	anks based o	n findings of (	Casitas Maste	r Plan		
Justification:	System reliat	oility								
Comments:										
		Sc	heduled Fi	unding		99999999999999999999999999999999999999	<u>6 - 1 m fri fan de anne e anne e</u>	******		
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction		50,000.00 250,000.00	50,000.00 250,000.00	50,000.00 250,000.00	50,000.00 250,000.00		75,000.00 275,000.00			75,000.00 275,000.00
	ala Mahadada (Mahada (Mahada (Mahada (		1			, m = 1, j = 1, m = 1, j = 2, m = 1,				nandaadaaa hay kaastiin ahaa kadaa
Project Total:	0.00	300,000.00	300,000.00	300,000.00	300,000.00	350,000.00	350,000.00	350,000.00	350,000.00	350,000.00

		*****	****				1747 2010 automatic processors and	Anno an the second s	Replacemen	t Capital
		10 Year C	apital Impr	rovement F	Program					
Department:	ENGINEERI	NG	]							
Project Manager:	Julia Aranda	 							]	
Project Name:	Ayers Creek	Pipeline Rep	acement						]	
Description:	Replace 100 Design comp	feet of 18-inc plete in FY19-;	h pipeline alc 20.	ng Rincon Ma	ain from previ	ous temporar	y repair.			
Justification:	Protect existi	ing infrastruct	ure							
Comments:	Budget inclue and engineer	des \$550,000 ring services o	for constructi during constru	ion, plus addit uction	ional for perm	nit fees, inspe	ction,			
	*****	Sc	heduled F	unding					******	
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction		700,000.00								
Project Total:	0.00	700,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									Replacemer	nt Capital
		10 Year Capi	tal Improve	ement Prog	jram					
Department:	ENGINEERII	NG	]							
Project Manager:	Julia Aranda								]	
Project Name:	Matilija Pipeli	ne Replacement							]	
Description:	Replace exis Cost is based	ting pipeline with d on estimate in t	a smaller dia he Water Sec	meter pipe. curity Project	Report (WRE/	A, 2017)				
Justification:	Current pipel pipeline regu	ine size does nol larly. A smaller p	match the cupeline would	irrent water d reduce the ai	emand. This nount of wate	results in the nee r wasted for flush	d to flush the hing operatior	is		
Comments:	Prelim Desigi	n to be complete	in FY19-20			******				
		Schee	duled Fund	ling						
Project Phase : Preliminary Design	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction					300000	1,800,000.00				
and characteristic and the first state of the first state of the first state of the first state of the first st	a and the second se	1997 - Santa S			יני איז איז איז איז איז איז איז איז איז אי				99 - F - F - F - F - F - F - F - F - F -	
Project Total:	0.00	0.00	0.00	0.00	300,000.00	1,800,000.00	0.00	0.00	0.00	0.00

	Standard Station in the state of the state o				an althe Cabing Stranger				Replacement	t Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	ENGINEERI	NG								
Project Manager:	Julia Aranda	*****							]	
Project Name:	Tank Recoat	ling							]	
Description:	Interior and e per year.	exterior coating	g replacemen	t on Casitas a	and Ojai wate	r system tank	s. Anticipate c	one tank		
Justification:	Maintain infra	astructure		*****						
Comments:										
		Sc	heduled Fi	unding	Marine Hamilton and Antonia and United and a second				64499 (J. J. J	
Project Phase : Design Construction	2020/2021	2021/2022 25,000.00 250,000.00	2022/2023 25,000.00 250,000.00		2024/2025 25,000.00 250,000.00			2027/2028 35,000.00 315,000.00		
		050.000	075 000	075 000	075 000	010 000				
Project Total:	0	250,000	275,000	275,000	275,000	350,000	350,000	350,000	350,000	350,000

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		450.000.000.000.000.000.000.000.000.000.		****			CH1247104C14C340104M1C72410415442444141		Replacemen	t Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	ENGINEERI	NG								
Project Manager:	Julia Aranda		****						]	
Project Name:	Marion Walk	er WTP Piping	g Improvemer	nts					]	
Description:	Address inte	rnal and exter	nal corrosion	of piping in p	hases through	nout the treatr	nent plant	******	]	
Justification:	Maintain exis	sting infrastruc	ture						]	
		~								
Comments:	Corrosion as	sesment com	olete in FY19-	-20						
	L									
		Sc	heduled Fi	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction		100,000 500,000	100,000 500,000	100,000 500,000						
Project Total:	0	600,000	600,000	600,000	600,000	600,000	0	0	0	0

	10draeuwaraan aharaa ahaan ahaan ahaa					***************************************	*****		Replacemen	t Capital
		10 Year Ca	apital Impro	ovement Pr	ogram					
Department:	ENGINEERI	NG								
Project Manager:	Julia Aranda				······				]	
Project Name:	Large Valve	Replacement							]	
Description:	Replacemen	t of transmiss	on pipeline va	lves, pending	completion c	of Casitas Ma	ster Plan (202	20)		
Justification:	Maintain infra	astructure, svs	stem reliability						]	
						****				
Comments:					*******					
	L	<u></u>	*******			***				
		Sc	heduled Fu	nding	*****					
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction		25,000.00 250,000.00	25,000.00 200,000.00	25,000.00 200,000.00		25,000 150,000.00	25,000 150,000.00	25,000 150,000.00	25,000 150,000.00	25,000 150,000.00
										the traction of the theory of the second second
Project Total:	0.00	275,000.00	225,000.00	225,000.00	175,000.00	175,000.00	175,000.00	175,000.00	175,000.00	175,000.00

						****			Replacemen	t Capital
		10 Year Ca	pital Impro	ovement Pr	ogram					
Department:	ENGINEERI	NG	]							
Project Manager:	Julia Aranda							****	]	
Project Name:	Del Norte Ro	ad Pipeline Re	eplacement						]	
Description:	Replace 3,00	00 feet of 8-inc	h pipe from C	uyama Road	to the north (	MKN, 2019)				
Justification:	Numerous br	reaks due to in	adequate bac	kfill						
Comments:				*****						
		Scł	neduled Fu	nding	*****					
Project Phase : Design Construction	2020/2021	2021/2022	2022/2023 150,000.00	2023/2024 950,000.00	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
				1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1			· · · · · · · · · · · · · · · · · · ·			
Project Total:	0.00	0.00	150,000.00	950,000.00	0.00	0.00	0.00	0.00	0.00	0.00

									Replacemer	it Capital
		10 Year Cap	ital Improve	ment Progr	am					
Department:	ENGINEERING									
Project Manager:	Julia Aranda								]	
Project Name:	Grand Avenue a	and Lion Street I	Pipeline Replac	ement					]	
Description:	Replace 10,000 MKN, 2019	feet of 12-inch	cast iron pipe a	long Grand Av	e between N.	Montgomery	and the Well	field		
Justification:	Replace aging ir	nfrastructure, im	iprove system h	nydraulics					]	
Comments:	CFD 2013-1								]	
	******	Sche	eduled Fund	ing						
Project Phase : Design	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction		2,000,000.00						• • • • • • • • • • • • • • • • • • •		Management from the first first second
Project Total:	500,000.00	2,000,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									Replacemen	t Capital
		10 Year C	apital Impr	ovement P	'rogram					
Department:	ENGINEERI	NG	]							
Project Manager:	Julia Aranda				*****				]	
Project Name:	Pleasant Ave	enue and Daly	/ Road Pipelir	ne Improveme	ents				]	
Description:	Replace 2,00	0 feet of 8-in	ch pipe per O	WS Master P	lan (2018). De	esign complet	e in FY19-20		]	
Justification:	Replace agin	g infrastructu	re, improve s	ystem hydrau	lics				]	
	L						•••••••••••••••••••••••••••••••••••••••			
Comments:	CFD 2013-1									
	L									
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction	650,000.00									
and the second of the Constant of the Society of the Society of Society on the			5 A		1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		******			1999 - Anna an Aristo, Anna Anna Anna Anna Anna Anna Anna Ann
Project Total:	650,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

								******	Replacemen	it Capital
		10 Year C	apital Impr	ovement F	rogram					
Department:	ENGINEERI	NG	]							
Project Manager:	Julia Aranda					******			]	
Project Name:	Casitas Dam	Drainage							]	
Description:						te in FY19-20. tion following.				
Justification:							*****	****	]	
Comments:		******								
		Sc	heduled F	unding			****	****		
Project Phase : Design	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction		750,000.00			150,000.00	1,200,000.00				
Project Total:	0.00	750,000.00	0.00	0.00	150,000.00	1,200,000.00	0.00	0.00	0.00	0.00

									Replacemer	it Capital
		10 Year C	apital Impr	ovement F	Program					
Department:	ENGINEERING	3	]							
Project Manager:	Julia Aranda								]	
Project Name:	West Ojai Pipe	line Replacer	ment						]	
Description:	Replace pipelir Master Plan (M		a, El Paseo, I	Palomar, Top	a Topa, San /	Antonio, Cres	tview per OW	Ś		
Justification:	Replace aging	infrastructure	, improve sys	tem hydraulio	cs. Design col	mplete in FY	19-20		]	
Comments:	CFD 2013-1								]	
		Sc	heduled F	unding						*****
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction	1,500,000.00	500,000.00								
	e de la moderna i aprice de sua facta de su ana des e este de s			19, 9, 19, 19, 1, 1, 1, 10, 10, 10, 10, 10, 10, 10, 1			19 A. M. M. S. M.			
Project Total:	1,500,000.00	500,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									Replacemen	t Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	ENGINEERING									
Project Manager:	Julia Aranda								]	
Project Name:	Emergency Gene	rators at Rinc	on, Avenue 1	, and Avenue	2 Pump Plan	its			]	
Description:	Install emergency	generators a	]							
Justification:									]	
Commenter		- 4							]	
Comments:	FEMA HMGP gra 75% of project co several years	nt application sts. If FEMA f	submitted, av	proved, will a	ation. If appro idjust to sprea	ved, FEMA w ad capital cost	ill reimburse. s out over			
		Sc	heduled F	unding				******		
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction	100,000.00 5,000,000.00									
										n Marana an tao kao aminina minina
Project Total:	5,100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									Replacemer	it Capital
		10 Year C	apital Impr	rovement P	rogram					
Department:	ENGINEERING	3	]							
Project Manager:	Julia Aranda								]	
Project Name:	West and East	Ojai Avenue	Pipeline Rep	lacement					]	
Description:	New 12-inch pi Bristol and Car along Ojai Ave between Signa	nada Roads, r nue between								
Justification:	Replace aging	infrastructure	, improve sys	tem hydraulic	s. Design coi	mplete in FY	19-20		]	
Comments:	CFD 2013-1									
49977999999999999999999999999999999999	99499749499999999999999999999999999999	Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction	3,000,000.00									
					1999 A. 19 C. 1997		1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	1		
Project Total:	3,000,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									Replacemen	t Capital
		10 Year C	apital Impr	ovement F	Program					
Department:	ENGINEERIN	IG	]							
Project Manager:	Julia Aranda								]	
Project Name:	Running Ridg	e Zone Hydra	ulic Improven	nents					]	
Description:	Improvements	to eliminate	tank, add boo	ster station a	nd valving. De	esign complet	e in FY 19-20	1		
Justification:	Hydraulic Imp	rovements for	r system optin	nization					]	
Comments:	CFD 2013-1								]	
		Sc	heduled F	unding						
Project Phase : Design	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction	2,900,000.00									
Project Total:	2,900,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									Replacemen	t Capital
		10 Year C	apital Impr	ovement Pi	rogram					
Department:	ENGINEERI	NG	]							
Project Manager:	Julia Aranda								]	
Project Name:	Montgomery	/Aliso 12-inch	Pipeline Rep	lacement					]	
Description:	Replace exis	sting 8-inch pip	peline with 12	-inch pipeline						
Justification:	[								]	
Justinication:										
Comments:			*****							
							·/····			
		Sc	heduled F	unding						
Project Phase : Design	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction			200,000.00	1,800,000.00						
19 de endre a des francés de la desar de la esta de la desar de					500					999 1410 1499 AN 1979 MILLION
Project Total:	0.00	0.00	200,000.00	1,800,000.00	0.00	0.00	0.00	0.00	0.00	0.00

				****	1997-2-97799-2002-2009-2009-2009-2009-200		********		Replacemen	t Capital
		10 Year C	apital Impr	ovement F	Program					
Department:	ENGINEERIN	G	]							
Project Manager:	Julia Aranda								]	
Project Name:	Mutual Wellfie	ld and Grand	Avenue Pipe	line Improven	nents				]	
Description:	Pump-to-wasto (MNS, 2019)	e piping, repla								
Justification:									]	
Comments:	CFD 2013-1									
		Sc	heduled F	unding		****	1944-1944-1944-1944-1944-1944-1944-1944			
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction	1,000,000.00									
angan asa ana ana ang ang ang ang ang ang ang an	a a su a constante de la const		19 (19 m)						•	hdy tişa fili tişa anış fili tişa dalamı ti
Project Total:	1,000,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	0.000000000000000000000000000000000000			e 7 Supelland de contracta de con	10.5.4.5.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.				Replacemen	t Capital
		10 Year C	apital Impr	ovement F	Program					
Department:	ENGINEERI	NG	]							
Project Manager:	Julia Aranda			······					]	
Project Name:	Casitas Dam	Fixed Cone	Valve		******				]	
Description:	Replacemen	t of exisitng h	ollow jet valvo	e with fixed co	one valve. US	BR to design			]	
Justification:	Safety, prope	er operation							]	
		- 				******			]	
Comments:								*****		
		Sc	heduled F	unding						
Project Phase : Design	2020/2021 100,000.00	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction	100,000.00	500,000.00								
Project Total:	100,000.00	500,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		****					****		Replacemen	t Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	ENGINEERI	NG								
Project Manager:	Julia Aranda								]	
Project Name:	Ojai Valley P	ump Plant Im	provements						]	
Description:	Preliminary c	lesign comple	ete on FY 19-2	20. Includes p	ump replacer	ment and pipi	ng reconfigur	ation		
Justification:	Pump efficier	ncy improvem	ents and hyd	raulic imporve	ements					
Comments:										
		Sc	heduled F	unding						
Project Phase : Design	2020/2021	2021/2022 100,000.00	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction		100,000.00	400,000.00	500,000.00						
s a demonstration of the test states and the states of the state of the states of the states of the states of t			1 - 10	1 1						
Project Total:	0.00	100,000.00	400,000.00	500,000.00	0.00	0.00	0.00	0.00	0.00	0.00

		*****						****	Replacemer	t Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	ENGINEERI	NG								
Project Manager:	Julia Aranda								]	
Project Name:	Pump Plant	Improvements	3							
Description:	General pum piping replac Master Plan	np plant impro ement, or upg (2020)	vements may grades of elec	v include seisr ctrical equipm	nic upgrades ent. Specific	, awnings to p projects to be	protect equipn identified in (	nent, Casitas		
Justification:	Maintain sys	tem relliability			*******					
Comments:										
	****	Sc	heduled F	unding					1998 1997 200 201 201 201 201 201 201 201 201 201	
Project Phase : Design	2020/2021	2021/2022 50,000.00	2022/2023	2023/2024	2024/2025		2026/2027	2027/2028	2028/2029	2029/2030
Construction		150,000.00		50,000.00 150,000.00			50,000.00 150,000.00	50,000.00 150,000.00	50,000.00 150,000.00	
Project Total:	0.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00

									Replacemen	t Capital
		10 Year Ca	apital Impr	ovement F	Program					
Department:	ENGINEERI	NG	]							
Project Manager:	Julia Aranda									
Project Name:	Signal Boost	er Zone Hydr	aulic Improve	ments					]	
Description:	New pump s	tation, tank, p	iping							
Justification:	Replace age	d and complie	cated infrastru	ucture, improv	ve system hyc	Iraulics				
Comments:										
	****	Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction						100,000.00	2,200,000.00	1,000,000.00		
Project Total:	0.00	0.00	0.00	0.00	0.00	100,000.00	2,200,000.00	1,000,000.00	0.00	0.00

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		10 Year C	apital Impr	ovement F	rogram					
Department:	ENGINEERI	NG	]							
Project Manager:	Julia Aranda								]	
Project Name:	Wellfield VFI	Ds							]	
Description:	Design and i	nstall Variable	e Frequency I	Orives at Ojai	System Well	field			]	
Justification:	Replace agir	ig infrastructu	re; provide e	fficient operat	ion of Wellfiel	d		****	]	
		-		•						
Comments:	CFD 2013-1	****					*****			
	L									
		So	heduled F	unding						
Project Phase : Design	2020/2021 50,000.00	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction	325,000.00	325,000.00								
Project Total:	375,000.00	325,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

						****			Replacemen	t Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	ENGINEERII	NG								
Project Manager:	Julia Aranda								]	
Project Name:	Ojai System	Main Replace	ments	*****						
Description:	Pipeline repla and by Distric	acements to n ct staff	eplace aging	infrastructure	as identified	in OWS Mast	er Plan (WSC	C, 2018)		
Justification:	Maintain syst	tem reliability								
Comments:		Drive, Lion S St, Verano St		ar Rd connect	or, Bristol Rd	, Matilija St, E	I Paseo Rd,			
		Sc	heduled F	unding				****		
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction			200,000.00 800,000.00	200,000.00 800,000.00				200,000.00 800,000.00		200,000.00 800,000.00
									5 Mart 19 Mart	
Project Total:	0.00	0.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00

	****		References and the second second						Replacemen	t Capital
		10 Year C	apital Impr	rovement F	'rogram					
Department:	ENGINEERI	NG	]							
Project Manager:	Julia Aranda	******	•		*****				]	
Project Name:	Emily and Ca	anada Street I	Pipeline Repla	acement					]	
Description:	Replace pipe	lines in Emily	and Canada	St					]	
Justification:					*****	•••••••••••••••••••••••••••••••••••••••			]	
Comments:	CFD 2013-1									
				<del>17 17 11 11 11 11 11 11 11 11 11 11 11 1</del>						
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction	500,000.00									
			:	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
Project Total:	500,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		***************************************				******			Replacemen	t Capital
		10 Year C	apital Impr	ovement P	rogram					
Department:	ENGINEERII	NG	]							
Project Manager:	Julia Aranda	****							]	
Project Name:	Robles Crane	9							]	
Description:	Evaluation of	Gantry Cran	e versus two	fixed cranes to	o be complete	ed in FY19-20				
				*****	*****					
Justification:					***					
Comments:	Deleted by G	M								
		Sc	heduled F	unding					<u></u>	
Project Phase : Design Construction	2020/2021 0.00 0.00	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
		0.00			0.00					
Project Total:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

				1			******		Replacemen	t Capital
		10 Year C	apital Impr	ovement P	rogram					
Department:	ENGINEERI	NG	]							
Project Manager:	Julia Aranda		*****						]	
Project Name:	Mutual Repla	cement Well	#7						]	
Description:	Well drilling c constructed in		Y19-20. Well	equipping and	d site work de	sign complete	e in FY19-20 a	and		
Justification:										
Comments:	CFD 2013-1					•				
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction	500,000.00									
Project Total:	500,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									Replacement	t Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	ENGINEERI	NG								
Project Manager:	Julia Aranda									
Project Name:	Robles Cana	I Maintenance	•				······			
Description:	Annual progr	am to replace	/seal cracks o	on unreinforce	ed concrete pa	anels in Roble	s Canal			
Justification:	Maintain exis	ting infrastruc	ture							
Comments:										
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022 100,000.00	2022/2023 100,000.00	2023/2024 100,000.00	2024/2025 100,000.00	2025/2026 125,000.00	2026/2027 125,000.00	2027/2028 125,000.00		2029/2030 125,000.00
a dan bahar sebada sa ana di dan sebada da ang										
Project Total:	0.00	100,000.00	100,000.00	100,000.00	100,000.00	125,000.00	125,000.00	125,000.00	125,000.00	125,000.00

		****							New Capital	
		10 Year Ca	apital Impro	ovement Pr	ogram					
Department:	ENGINEERI	NG								
Project Manager:	Julia Aranda								]	
Project Name:	Casitas-Vent	ura State Wa	ter Project Inte	erconnection (	VENTURA LE	D)			]	
Description:			PROJECT - pa eguas and eas	articipation in s st Ventura	studies, desig	n and constru	ction to cons	ruct		
Justification:	Water reliabi	lity							]	
Comments:	Funded by no	on-rate reveni	le						]	
		Sc	heduled Fu	Inding					******	*******
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design/CEQA Construction	500,000.00	500,000.00	5,000,000.00	13,000,000.00						
	1									
Project Total:	500,000.00	500,000.00	5,000,000.00	13,000,000.00	0.00	0.00	0.00	0.00	0.00	0.00

									New Capital	
		10 Year Ca	apital Impro	ovement Progr	ram					
Department:	ENGINEERIN	١G								
Project Manager:	Julia Aranda								]	
Project Name:	Casitas-Ventu	ura State Wa	ter Project Inte	erconnection (CA	SITAS LED)				]	
Description:	30 cfs "pipelir complete in F		eries pump sta	ations, two 2-MG r	eservoirs. Prelin	ninary design				
Justification:	Water supply	reliability								
Comments:	Funded by no	on-rate revent	Je Je							
		Sci	heduled Fu	Inding			*****			
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction		650000	650,000.00	24,000,000.00	11,000,000.00					
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Project Total:	0.00	650000.00	650000.00	24000000.00	11000000.00	0.00	0.00	0.00	0.00	0.00

			*****				******		New Capital	
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	ENGINEERI	NG								
Project Manager:	Julia Aranda		*****						]	
Project Name:	MWWTP Bu	ilding Expans	ion						]	
Description:	Addition to tr	eatment plant	building. De	sign complete	FY19-20, co	nstruction FY	20-21			
Justification:									]	
Comments:										
	L									
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction		150,000.00								
										1999 (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999)
Project Total:	0.00	150,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

					****			*****	New Capital	****
		10 Year Ca	apital Impr	ovement F	rogram					
Department:	ENGINEERI	NG								
Project Manager:	Julia Aranda								]	
Project Name:	Ventura-San	ta Barbara Co	ounties Interti	е			*****		]	
Description:		line, 2 pump s er Project wat					r District			
Justification:	Water supply	y reliability							]	
Comments:	Design starte	ed in FY 19-20	), may extend	l to 20-21						
		Sc	heduled F	unding		*****				
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction		300,000.00	1,500,000.00	3,500,000.00						
Project Total:	0.00	300,000.00	1,500,000.00	3,500,000.00	0.00	0.00	0.00	0.00	0.00	0.00

									New Capital	
		10 Year C	apital Impr	rovement F	rogram					
Department:	ENGINEERI	NG	]							
Project Manager:	Julia Aranda								]	
Project Name:	New Ojai Sy	stem Well							]	
Description:	·····									
1										
Justification:										
Comments:										
		Sc	heduled F	unding						****
Project Phase : Design	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction								100,000.00	1,200,000.00	
Project Total:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100,000.00	1,200,000.00	0.00

									New Capital	
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	ENGINEERI	NG								
Project Manager:	Julia Aranda								]	
Project Name:	Heidelberger	Pump Plant	Improvement	S					]	
Description:	Replace sur	ge tank, add c	ycle-stop pur	nps, site work						
Justification:	Protect existi	ng facilities				<u></u>				
Comments:										
							·····			
		Sc	heduled F	unding						<u> </u>
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction			100,000.00	400,000.00						
Newton Marcal Marcal Marcal Marcal Marcal Marca										
Project Total:	0.00	0.00	100,000.00	400,000.00	0.00	0.00	0.00	0.00	0.00	0.00

									New Capital	
		10 Year Ca	pital Impro	ovement Pr	ogram					
Department:	ENGINEERIN	IG								
Project Manager:	Julia Aranda								]	
Project Name:	Matilija Forma	ation Deep We	I (Robles Ver	tical)	*****				]	
Description:	7,000 feet der	ep well with pot	ential to be u	sed in drough	t conditions					
Justification:	Water supply	reliability	********	18. V. H. H. V. H. V. H.						
Comments:	Funded by no	n-rate revenue								
		Sch	eduled Fu	nding					<del>Wanto I. antona antona a</del>	
Project Phase : Design Construction	2020/2021	2021/2022 1,000,000.00	2022/2023 13,000,000.00	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
										1999 (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (1999) (199
Project Total:	0.00	1,000,000.00	13,000,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

					****			*******	New Capital	
		10 Year Capi	tal Improve	ement Progra	am					
Department:	ENGINEERIN	IG								
Project Manager:	Julia Aranda								]	
Project Name:	Casitas-Calle	guas SWP Interc	onnection						]	
Description:	Dedicated 36-	-inch pipeline acr	oss City of Ve	ntura to connec	et Casitas to Ca	lleguas		*****		
Justification:	Water supply	reliability								
Comments:	Funded by no	on-rate revenue								
		Sche	duled Fund	ling					*******	*****
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction		1,500,000.00	1,500,000.00	26,000,000.00	26,000,000.00					
Project Total:	0.00	1,500,000.00	1,500,000.00	26,000,000.00	26,000,000.00	26,000,000.00	0.00	0.00	0.00	0.00

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								****	New Capital	
		10 Year Capi	tal Improve	ement Progra	am					
Department:	ENGINEERIN	١G	]							
Project Manager:	Julia Aranda								]	
Project Name:	Robles Divers	sion Fish Passag	e Improvemen	its					]	
Description:		provements to fis enance/cleaning v								
Justification:	Water supply	reliability								
Comments:		ed on fixed manif April 2019). Adde								
		Sche	duled Func	ling						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction		\$ 300,000 1,500,000.00	2,000,000.00							
Project Total:	0.00	1,800,000.00	2,000,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									New Capital	
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	ENGINEERI	NG								
Project Manager:	Julia Aranda								]	
Project Name:	Casitas Mas	ter Plan							]	
Description:	Complete Ma	aster Plan by I	December 31	, 2020					]	
Justification:	[							*****	]	
Justinication.										
Comments:										
		Sc	heduled F	unding						
Project Phase : Design	2020/2021	2021/2022 200,000.00	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction		200,000.00								
		.,						,		
Project Total:	0.00	200,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

					***************************************			Summary C	apital Depar	tment 42
		Capital Imp	provement	Program						
Department:	Water Qualit	<u>y</u>					n an	an a		
Comments:		<u> 27.92.72.27.72.77.77.77.77.77.77.77.77.77.77</u>	*****		400 /					
General Plan:		in a fair an	an in a star an	and and a second se	en personal en ante a ser a se a se a se a se a se a se a	****	allanda oga oga oga oga oga oga oga oga oga og	99999999999999999999999999999999999999		
				07074777777777777777777777777777777777						
		Total Schee	duled Fund	ling						
	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Replacement New	0.00 150,000.00		30,000.00 800,000.00	35,000.00 0.00				0.00 0.00		
1										
Project Total:	150,000.00	250,000.00	830,000.00	35,000.00	30,000.00	550,000.00	0.00	0.00	0.00	600,000.00

									Replacemen	ť
		10 Year Ca	apital Impi	rovement F	Program					
Department:	Water Qualit	y - Lab								
Project Manager:	Water Qualit	y Supervisor (	(Jordan Switz	er)					]	
Project Name:	Replace Aera	ation (Bubbler	) System						]	
Description:	Modification diffusser repl		ration system	infastructure	inclusive of c	compressors,	docks, hoses	, and	]	
Justification:		ation system h des. Enhance							ī J	
Comments:										
		Sc	heduled F	unding					-	
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
		65,000.00								
Project Total:	0.00	65,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

								*****	Replacemen	t
		10 Year Ca	apital Impr	ovement F	rogram					
Department:	Water Quality	/ - Lab								
Project Manager:	Water Quality	/ Supervisor (	(Jordan Switz	er)					]	
Project Name:	Tank Mixers								]	
Description:	Replacement	of Aging Tar	nk Mixers							
Justification:	Impove mixin	g reliability ar	nd uniform dis	sinfectant resi	dual.					
Comments:	Deleted by G	M								
		Sc	heduled F	unding	****					
Project Phase :	2020/2021	2021/2022 35,000.00	2022/2023 30,000.00	2023/2024 35,000.00	2024/2025 30,000.00	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Project Total:	0.00	35,000.00	30,000.00	35,000.00	30,000.00	0.00	0.00	0.00	0.00	0.00

									New	
		10 Year C	apital Imp	rovement l	Program					
Department:	Water Qualit	y - Lab	]							
Project Manager:	Water Qualit	y Supervisor	(Jordan Switz	zer)					]	
Project Name:	Oxygenation	(HOS) Diffus	er Extension						]	
Description:	Extending cutherefore en	urrent diffuser hancing wate	s out further i r quality and r	nto the lake v educing the p	vill provide ox ootential harm	ygen to a muo ful effects fro	ch larger port m algae bloor	on ns.	]	
Justification:	Improved res	servoir water	quality						]	
Comments:	GM request	to further rese	earch grant fu	inding for this	project (2-20	-20)			]	
		Sc	cheduled F	unding				******		
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
			300,000.00							
Project Total:	0.00	0.00	300,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									New	
		10 Year C	apital Imp	rovement	Program					
Department:	Water Quali	ty - Lab	]							
Project Manager:	Water Quali	ty Supervisor	(Jordan Swit	zer)					]	
Project Name:	Vegetation F	Removal- Lak	e Casitas Re	servoir					]	
Description:	Improve wat	er quality, rer	nove toc/nutr	ient cycling to	reduce DBP	formation po	tential.		]	
Justification:	Maintain cor	npliance with	state and fec	leral water qu	ality regulation	ons.			]	
Comments:								***	]	
					*****			•••••	J	
		Sc	cheduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction Planning-Permitting		150,000.00	500,000.00			550,000.00				600,000.00
								1971 - 1971 - 1971 - 1971 - 1971 - 1971 - 1971 - 1971 - 1971 - 1971 - 1971 - 1971 - 1971 - 1971 - 1971 - 1971 -		a tatun ana ta ta a da ba ba a
Project Total:	0.00	150,000.00	500,000.00	0.00	0.00	550,000.00	0.00	0.00	0.00	600,000.00

									New	
		10 Year C	apital Imp	rovement F	Program					
Department:	Water Qualit	ty - Lab	]							
Project Manager:	Water Qualit	ty Supervisor (	(Jordan Swit:	zer)					]	
Project Name:	Tank Residu	al Manageme	ent System						]	
Description:	Modular onli	ne dosing syst	tem to mainta	ain residuals,	reduce nitrific	ation potentia	al and DBP's.	·····	]	
Justification:	Maintain con	npliance with s	state and fed	eral water qua	ality regulation	ns.			]	
Comments:									]	
		Sc	cheduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
	150,000.00									
										·
Project Total:	150,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

								Summary Ca	apital Depart	ment 50
		Capital Imp	orovement	Program						
Department:	Utilities Maint	tenance			en men av de men de participantes En seguencementes de la civit	na na sa	nn an airdean geolaga sealath ann an an ann a			
Comments:			**********	******	*****	**************		a, a 1, a		
General Plan:		499229-000-000-000-000-000-000-000-000-00	an menanda kanang ka		gade gadan dan kumanan kumanan kumanan Kateron kateron kumanan kumanan kumanan	napitalise point se per an plana and se se				
					nassus charanna hannanda se a Bridenicana	oni da anti anti anti da anti anti da anti anti anti anti anti anti anti ant				
		Total Scheo	duled Fund	ling						
	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2027/2028	2028/2029	2029/2030
Replacement New	55,000.00 5,000.00	55,000.00 35,000.00		60,000.00 0.00			155,000.00 0.00	165,000.00 0.00	165,000.00 0.00	170,000.00 0.00
Project Total:	60,000.00	90,000.00	60,000.00	60,000.00	150,000.00	155,000.00	155,000.00	165,000.00	165,000.00	170,000.00

				****	*****				Replacement	
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Utilities Maint	tenance								
Project Manager:	Utility Superv	visor (Gerry He	errera)							
Project Name:	2" thru 6" Om	ıni Meter Rep	lacements							
Description:	Replacement	of existing 2"	' thru 6" Roci	kwell turbine r	neters.					
Justification:	Meter replace	ement program	m (ongoing)							
Comments:	Smaller mete	er replacemen	ts (under 2")	are included i	n the normal	operating buc	lget.			
		Sc	heduled F	unding		*****				
Project Phase :	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2027/2028	2028/2029	2029/2030
					60,000.00	65,000.00	65,000.00	65,000.00	65,000.00	70,000.00
	55,000.00	55,000.00	60,000.00	60,000.00						1119-11-11-11-11-11-11-11-11-11-11-11-11
Project Total:	55,000.00	55,000.00	60,000.00	60,000.00	60,000.00	65,000.00	65,000.00	65,000.00	65,000.00	70,000.00

			******						Replacemen	t
		10 Year Ca	apital Impr	ovement F	rogram					
Department:	Utilities Main	itenance	]							
Project Manager:	Utility Superv	visor (Gerry H	errera)						]	
Project Name:	MXU Battery	/ Replacemen	t			*****		****	]	
Description:						<del></del>				
Justification:		*****	1991 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -					***		-
Comments:										
	L									
		Sc	heduled F	unding						
Project Phase :	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2027/2028	2028/2029	2029/2030
					90,000.00	90,000.00	90,000.00	100,000.00	100,000.00	100,000.00
Project Total:	0.00	0.00	0.00	0.00	90,000.00	90,000.00	90,000.00	100,000.00	100,000.00	100,000.00

									New	
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Utilities Main	tenance								
Project Manager:	Utility Superv	visor (Gerry H	errera)						]	
Project Name:	AMI Tower for	or Ojai Water	System						]	
Description:	Phase 1 - Sti Phase 2 - Co	udy & Design	Activation				, 	***	]	
Justification:	Reduced sta	ff time and en	hanced wate	r conservatio	٦.			nde ver en als aus en anter en de la de de activit et de la de La de la d	]	
Comments:									]	
		Sc	heduled F	unding						
Project Phase :	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2027/2028	2028/2029	2029/2030
Study and Design Installation	5,000.00	35,000.00								
				· · · · · · · · · · · · · · ·						
Project Total:	5,000.00	35,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

								Summary Ca	apital Depart	ment 52
		Capital Imp	provement	Program						
Department:	Electrical Mec	hanical			ning a subject of the second					
Comments:					21 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	5.500,000,000,000,000,000,000,000,000,00	******	NEWSON CONTRACTOR STATES ST		
General Plan:										
		Scł	neduled Fu	nding						
	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Replacement New	125,000.00 92,500.00			430,000.00 28,000.00			55,000.00 0.00	60,000.00 0.00	60,000.00 0.00	
Project Total:	217,500.00	1,053,750.00	426,000.00	458,000.00	55,000.00	55,000.00	55,000.00	60,000.00	60,000.00	60,000.00

									Replacment	Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Electrical Me	chanical								
Project Manager:	E&M Supervi	sor (Eric Beh	rendt)		*****					
Project Name:	Pump repairs	and mechan	ical seal insta	ills						
Description:	Repair variou	is pumps as n	needed detern	nined by pum	p test results,	add mechani	cals when po	ssible.		
Justification:	Mechanical s Pumps with r				also possible	e reduction in	maintenance	labor.		
Comments:										
	L									
		Sc	heduled Fi	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
	50,000.00	50,000.00	50,000.00	55,000.00	55,000.00	55,000.00	55,000.00	60,000.00	60,000.00	60,000.00
				ta stata a ante	a kata na na ta ta tana i	an a	· · · · ·	: 	a a a a a	
Project Total:	50,000.00	50,000.00	50,000.00	55,000.00	55,000.00	55,000.00	55,000.00	60,000.00	60,000.00	60,000.00

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		12101122201121101210000000000000000000							Replacment	Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Electrical Me	chanical								
Project Manager:	E&M Supervi	sor (Eric Behi	rendt)						]	
Project Name:	PLC and SC/	ADA Hardward	e Upgrades						]	
Description:	Replacement	components	for Pump Pla	int, Reservoir	, and Remote	SCADA pane	els.			
Justification:	Improve relia	bility of Casita	as SCADA pa	nel compone	nts		****	<u>Mile ( ( ( ) ) ) ( ) ( ) ( ) ( ) ( ) ( ) ( </u>		
Comments:	1									
				***				***		
		Sc	heduled F	unding		499999999999999999999999999999999999999			france (france and a second	
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
	55,000.00	65,000.00	50,000.00	50,000.00						
Project Total:	55,000.00	65,000.00	50,000.00	50,000.00	0.00	0.00	0.00	0.00	0.00	0.0

						*****			Replacment	Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Electrical Me	chanical								
Project Manager:	E&M Superv	isor (Eric Beh	rendt)						]	
Project Name:	Upgrade For	tress Pump P	lant							
Description:	Electrical Up	grade & Pum	o Upgrade, In	clusive of Pos	sible Relocat	ion and Meter	Installation.			
Justification:		*****						*****		
Comments:	Last Casitas	System 480V	Pump Plant	to Be Upgrade	ed					
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction				250,000.00						
Design			25,000.00							
Project Total:	0.00	0.00	25,000.00	250,000.00	0.00	0.00	0.00	0.00	0.00	0.00

	-	N-10-2412-020-042-11421-020-044-044-04-04							Replacment	Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Electrical Me	chanical								
Project Manager:	E&M Superv	isor (Eric Beh	rendt)						]	
Project Name:	SCADA Com	munication U	pgrades						]	
Description:							• ····			
Justification:	L									
Comments:									]	
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022 25,000.00	2022/2023 25,000.00	2023/2024 25,000.00	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Project Total:	0.00	25,000.00	25,000.00	25,000.00	0.00	0.00	0.00	0.00	0.00	0.00

				******			*******		Replacment	Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Electrical Me	chanical								
Project Manager:	E&M Superv	isor (Eric Behi	rendt)	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					]	
Project Name:	Automation-E	Engineering S	ervices						]	
Description:		tudy to comple ining, material				ntrologix Platf	orm at MWTF	2.		
Justification:										
Comments:	CARRYOVE	R								
					and a lot of the order of the factor of t			******		
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
		60,000.00								
Project Total:	0.00	60,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									Replacemen	t Capital
		10 Year C	apital Impi	rovement F	rogram					
Department:	Electrical Me	echanical	]							
Project Manager:	E&M Superv	isor (Eric Beh	irendt)	*******					]	
Project Name:	Gardens Zor	ne Improveme	ent Project						]	
Description:	VFD Booster	Pump To Eli	minate Need	For Tank and	Additional Te	elemetry				
Justification:	Improved rel	iabilty, reduce	ed infrastructu	re, reduced s	taff time.					
Comments:	Design & Co	nstruction - S	implify Garde	ns Zone (7 Ci	ustomers In Z	one)				
		Sc	heduled F	unding					1	
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024 50,000.00	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Project Total:	0.00	0.00	0.00	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00

						*****			Replacment	Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Electrical Me	chanical								
Project Manager:	E&M Supervi	sor (Eric Beh	rendt)						]	
Project Name:	Pump #4 Ref	nabilitation Av	enue #2 Pun	ip Plant					]	
Description:	Necessary U Facilitate low			Existing Unit #	4 Back Into O	perational St	atus -MCC, P	ump, Etc.		
Justification:	Optimize Mira Assist with W					Augmentatio	n In Distributio	on System		
Comments:	Target Pump	Flow = 3-5cfs	5							
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction Design	20,000.00	250,000.00								
Project Total:	20,000.00	250,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	******								Replacment	Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Electrical Me	chanical								
Project Manager:	E&M Supervi	isor (Eric Beh	rendt)	<u></u>					]	
Project Name:	Upgrade Pan	elview on VF	D at Rincon F	p		****			]	
Description:	Replacement	t of existing pa	anelview.						]	
Justification:		bility, current otential downt		olete, require:	s installation b	oy manufactur	re's Rep (engi	ineer),	]	
Comments:	Deleted by G	M			****				]	
		Sc	heduled F	unding	*******	<u></u>				
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
	0.00									
Project Total:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

W. T. M. State Content of Content		and the state of the state of the state			Malmille all more marked and marked				New Capital	
		10 Year Ca	apital Impr	rovement F	Program					
Department:	Electrical Me	chanical	]							
Project Manager:	E&M Superv	isor (Eric Beh	rendt)						]	
Project Name:	Ave #1 VFD								]	
Description:	Incorporate \	/FD Into Exist	ling Unit #4 P	ump (Small U	nit)					
Justification:	Financial Sav	vings & Opera	ational Benefi	ts						
Comments:			*****							
		Sc	heduled F	unding			****			
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction	25,000.00	375,000.00								
	n (	·								
Project Total:	25,000.00	375,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*******			Hidrofile and an	2-11010/040010-0000040-000-000-000-000-000-000-0					New Capital	
		10 Year Ca	apital Impr	ovement F	Program					
Department:	Electrical Me	chanical	]							
Project Manager:	E&M Superv	isor (Eric Beh	rendt)						]	
Project Name:	San Antonio	Booster C							]	
Description:	Expansion P	ump For Wint	er Time San /	Antonio Boos	ter Plant Op's					
Justification:	Energy Savir	ngs, Distirbutio	on System Pr	essure Manag	gement, Decr	ease Wellfield	d Cycling			
Comments:		and Subgrad					Manifold Pipir	ng	]	
		Sc	heduled F	unding					****	
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Design Construction		20,000.00	150,000.00							
Project Total:	0.00	20,000.00	150,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

				***************************************		*******			New Capital	
		10 Year Ca	apital Impr	ovement F	rogram					
Department:	Electrical Me	chanical								
Project Manager:	E&M Supervi	sor (Eric Beh	rendt)						]	
Project Name:	OWS SCADA	A Migration (F	hase 2)		4 - Martin De Le Johnson (1910 - 1914) - Eine eine Antonio - Eine eine Antonio - Eine eine Antonio - Eine eine				]	
Description:	Integrate OW	/S SCADA to	Casitas SCA	DA						
Justification:	Improved mo Common plat			oumping and	system surve	illance.			]	
Comments:										
		Sc	heduled F	unding					-	
Project Phase :	2020/2021 42,000.00	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
	42,000.00									
Project Total:	42,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									New Capital	
		10 Year C	apital Impr	rovement F	Program					
Department:	Electrical Me	echanical								
Project Manager:	Eric Behrenc	it							]	
Project Name:	Pump Plant	Emergency G	enerator						]	
Description:	350KW Porta	able Generato	or							
Justification:	Minimize risk	of water out	ages (PSPS,	Edison Mainte	enance, Etc.)					
Comments:		****			1999-1999 - 1995 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997					
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022 200,000.00	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
		200,000.00								
				a na tanàna taona dia 1970.				ana ana ara a		the theat they there is a second
Project Total:	0.00	200,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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							inite and a second s		New Capital	
		10 Year C	apital Impr	ovement F	Program					
Department:	Electrical Me	echanical	]							
Project Manager:	Eric Behrenc	it							]	
Project Name:	Heidelberger	· Booster Stat	ion and Rese	rvoir Slope S	ability				]	
Description:	Implement st	tudy recomme	enadations to	mitigate hillsi	de sloughing	and erosion.				
Justification:			1999							
Comments:							*****			
		<b></b>	*****	47.44147.6 virgs to the two management of a start pro-						
	99444949999999999999999999999999999999	Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023 100,000.00	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Project Total:	0.00	0.00	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

				mi di konstanta desta constanta	and a subscription of the subscription of the				New Capital	
		10 Year C	apital Imp	rovement l	Program					
Department:	Electrical Me	chanical	]							
Project Manager:	Eric Behrenc	it							]	
Project Name:	Foundation (	Concrete Sla	b) and Buildir	ng for New Ail	Compressor	at Rincon PF	5		]	
Description:	Concrete fou	indation to pro	otect new air	compressor,	supplies Surg	je Tank, move	es unit closer	to tank inlet	]	
Justification:			**********			999,			]	
Comments:	······			19				*****		
		Sc	heduled F	unding						<b></b>
Project Phase :	2020/2021 10,000.00	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Project Total:	10,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		****			*****		***		New Capital	
		10 Year C	apital Impr	rovement F	Program					
Department:	Electrical Me	chanical	]							
Project Manager:	Eric Behrend	t							]	
Project Name:	10" Jamesbu	ry Control Va	lve				*****		]	
Description:	For Rincon P	P Units 2, 3,	4. Controls f	lows on startu	up and shutdo	own during pu	mping operat	ions.		
Justification:				99999999999999999999999999999999999999	*****					
Comments:			₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩	99999999999999999999999999999999999999	*****	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -				
		Sc	heduled F	unding						
Project Phase :	2020/2021 9,500.00	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
								· · · · ·		
Project Total:	9,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									New Capital	
		10 Year C	apital Impr	ovement F	Program					
Department:	Electrical Me	chanical	]							
Project Manager:	Eric Behrend	t	******						]	
Project Name:	Purchase MD	S Radios-O	NS						]	
Description:	Replacement	t of outdated	radio hardwa	re.				<del></del>		
Justification:	Replace 210 Includes long						vity.		]	
Comments:	Reduced fror	n \$26,000 to	\$6,000. by G	M						
			*****	*****	**************************************					
		Sc	heduled F	unding	*******		40 Augusta		*****	
Project Phase :	2020/2021 6,000.00	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
										************
Project Total:	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									New Capital	SAN STRAND COMPANY AND
		10 Year Ca	apital Impr	ovement P	Program					
Department:	Electrical Me	echanical	]							
Project Manager:	Eric Behrenc	it		****				*****	]	
Project Name:	Pump Plant	Motor Awning	S			-			]	
Description:	Awning Cove	ers For Distric	t Pump Plant	Motors						
Justification:	Protection of	existing pum	p plant motor	s from heat/ra	ain. Facilitate	safer access	during inclem	ient weather.		
Comments:		Jnit #3 (Ave #		22/23 = Units	1,2,3 (Ave #2	2 PP)		9869 98949999999999999999999999999999999		
	FY 23/24 = L	Jnits 2,3,4 (Ri	ncon PP)							
		Sc	heduled F	unding				*****		
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Phase 1 (Ave #1) Phase 2 (Ave #2) Phase 3 (Rincon)		8,750.00	26,000.00	28,000.00						
							an a			
Dania at Tatak		0.750.00								
Project Total:	0.00	8,750.00	26,000.00	28,000.00	0.00	0.00	0.00	0.00	0.00	0.00

		***							New Capital	
		10 Year Ca	apital Impr	rovement P	'rogram					
Department:	Electrical Me	chanical	]							
Project Manager:	Eric Behrend	it							]	
Project Name:									]	
Description:										
Justification:	[							;		
Comments:										
		Meretalik wash kata da da kata a sana ang ma		*****						
		Sc	cheduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Project Total:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	******					****		Summary Ca	apital Depart	ment 53
		Capital Im	provemen	t Program						
Department:	Pipeline									
Comments:			<u>u.u.u.u.u.</u>							
General Plan:						***				
	L									
		Total Scho	eduled Fur	ding						
	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Replacement New	18,000.00 20,000.00						20,000.00 0.00			23,000.00 0.00
Project Total:	38,000.00	18,000.00	43,000.00	18,000.00	20,000.00	100,000.00	20,000.00	23,000.00	23,000.00	23,000.00

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									Replacemen	t Capital
		10 Year Ca	apital Impr	ovement F	Program					
Department:	Pipeline									
Project Manager:	Pipeline Sup	ervisor (Brian	Taylor)						]	
Project Name:	La Luna Ticc	Main Pressu	re Reducing	Station Modif	cations				]	
Description:	Pipeline/Valv	e Improveme	nts - Demoliti	on of Uneces	sary Infrastru	cture				
Justification:										
Comments:									]	
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
						80,000.00				
ann ann a' chuir a ta tha la tha an ann ambainn a th' thann tha a	end – e 15 ferende oor een eeftereter				a ann an Anna an Anna Anna	1997 - Noran I. (1997) - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19	a an an a shenna a shen a an san sa		ata manana ana sa si tama t	a ato na anti tana anti a
Project Total:	0.00	0.00	0.00	0.00	0.00	80,000.00	0.00	0.00	0.00	0.00

									Replacemen	t Capital
		10 Year C	apital Impr	ovement F	Program					
Department:	Pipeline	****	]							
Project Manager:	Pipeline Sup	ervisor (Brian	Taylor)						]	
Project Name:	Turnout Impr	ovements	****						]	
Description:	Improvemen	ts on Existing	Customer T	urnouts (4" ar	nd Larger)					
Justification:										
Comments:				44444444444444444444444444444444444444						
	Internally per	formed by sta	ıff.							
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
	18,000.00	18,000.00	18,000.00	18,000.00	20,000.00	20,000.00	20,000.00	23,000.00	23,000.00	23,000.00
Project Total:	18,000.00	18,000.00	18,000.00	18,000.00	20,000.00	20,000.00	20,000.00	23,000.00	23,000.00	23,000.00

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									New Capital	
		10 Year C	apital Impr	rovement F	<b>'</b> rogram					
Department:	Pipeline		]							
Project Manager:	Pipeline Sup	ervisor (Brian	i Taylor)						]	
Project Name:	Grizzly Shak	er							]	
Description:	Separate cor	crete and as	sphalt from spo	oils.	*****	******				
Justification:					****					
Comments:		1994 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19		*****				••••••••••••••••••••••••••••••••••••••		
	L									
		Sc	cheduled F	unding						
Project Phase :	2020/2021 20,000.00	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
	20,000.00									
Project Total:	20,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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									New Capital	
		10 Year C	apital Impi	ovement F	Program					
Department:	Pipeline		]							
Project Manager:	Pipeline Sup	ervisor (Brian	Taylor)					******	]	
Project Name:	Fortress Res	ervoir Backfe	ed Regulator						]	
Description:	Installation o	f PRV Valve 1	o Backfeed 2	M Zone Durir	ng Short Term	Water Repa	irs			
Justification:										
Comments:	Installation p	erformed inte	rnally by staff							
	*****	So	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023 25,000.00	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Project Total:	0.00	0.00	25,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

						*********	****	Summary Ca	apital Depart	ment 54
		Capital Imp	provement F	Program						
Department:	Operations			nin kirke bidar oli teleparatura konjung apaga para una mana 1971 di waka dan kira wana na para pang apaga pang mata pang						
Comments:			*****	in the first of the test of the second s		******				
General Plan:			44 - 24 - 24 - 24 - 24 - 24 - 24 - 24 -	anten Morgen en van Senten (en de Senten Norden de Senten (en de Sente						
		Sch	neduled Fur	iding				Yerde desare the barr and the device of a second		
	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Replacement New	170,000.00 0.00	810,000.00 825,000.00	1,345,000.00 1,250,000.00	962,000.00 75,000.00		702,000.00 0.00	760,000.00 0.00	105,000.00 0.00		110,000.00 0.00
Project Total:	170,000.00	1,635,000.00	2,595,000.00	1,037,000.00	487,000.00	702,000.00	760,000.00	105,000.00	280,000.00	110,000.00

								010/11/11/11/11/11/11/11/11/11/11/11/11/	Replacemen	t Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Water Treatr	ment	]							
Project Manager:	Treatment St	upervisor (Wil	llis Hand)						]	
Project Name	Pipeline Ass	essment and	Rehabilitatior	1					]	
Description:	Based on rec replace exist	commendation ing pipelines.	ns from the P (dam intake,	ipeline Asses subgrade filte	sment Study, er influent/effl	repair corros uent headers	ion deficienci tp gallery ma	es and/or anifolds)	]	
Justification:	Provide long infastructure.		y of the casita	as dam intake	e structure and	d associated t	treatment plar	nt pipeline	]	
Comments:	Note: funding	n, and/or repla g amounts sul is currently ur	bject to chang	ge based upo	n assessmen	t findings.	ive year perio	d.		
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Dam Intake Structure Subgrade (Effluent) Subgrade (Influent) Filter Manifold (phase2)				450,000.00	300,000.00	300,000.00	600,000.00			
Filter Manifold (phase1) Design		150,000.00	450,000.00							··· ·· ·· ·· · · · · ·
Project Total:	0.00	150,000.00	450,000.00	450,000.00	300,000.00	300,000.00	600,000.00	0.00	0.00	0.00

							*****		Replacemen	t Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Water Treatr	nent								
Project Manager:	Treatment S	upervisor (Wil	lis Hand)							
Project Name	Filter Media	Removal and	Cleaning.							
Description:		ment plant filter						ove, clean		
Justification:	Maintain efflu	uent water qua	ality that mee	ts/exceeds st	ate and feder	al standards.				
Comments:	Maintenance	of existing as	ssets. Part of	an ongoing m	aintenance ro	outine cycle ir	nitiated in FY	2012/13		
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
MWTP	70,000.00	70,000.00	70,000.00	72,000.00	72,000.00	72,000.00	75,000.00	75,000.00	75,000.00	75,000.00
Project Total:	70,000.00	70,000.00	70,000.00	72,000.00	72,000.00	72,000.00	75,000.00	75,000.00	75.000.00	75 000 00
roject rolai.	70,000.00	70,000.00	70,000.00	12,000.00	12,000.00	12,000.00	10,000.00	75,000.00	75,000.00	75,000.00

									Replacemen	t Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Water Treatr	nent								
Project Manager:	Treatment S	upervisor (Wi	llis Hand)	•••••••••				*****		
Project Name	Paint Exterio	r and Interior	of Marion Wa	alker Treatme	nt Plant					
Description:			Treatment Pluilding exterio			terior filter ga	llery manifold	, and		
Justification:		ing is 20+ yea int infastructu		II require reco	pating in the r	near future in	order to main	tain		
Comments:	Maintenance	on existing a	sset. Project	will be compl	eted over a fo	our year perio	d.	*****		
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Backwash Tank "A" Filter Gallery Manifold Plant Exterior		45,000.00	200,000.00	125,000.00						
			·							·
Project Total:	0.00	45,000.00	200,000.00	125,000.00	0.00	0.00	0.00	0.00	0.00	0.00

			81	aktionistematomountationatuma estatomatom	CTL:0125170522110010144444000000000000000000000000	10-11-11-11-11-11-11-11-11-11-11-11-11-1		***	Replacement	t Capital
		10 Year Ca	apital Impr	rovement P	rogram					
Department:	Water Treatn	nent	]							
Project Manager:	Treatment Sr	upervisor (Wil	llis Hand)		***				]	
Project Name	Chemical Do	sing Equipme	ent Replacem	ent					]	
Description:				h a designatio esses. Reliabi				ist provides		
Justification:				e become obso es optimum ef			. Providing ar	n ongoing		
Comments:	Replacement	t frequency ba	ased on a life	cycle of 12 ye	ars.					
		Sc	cheduled F	unding					1	
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Post-chlor system Ferric pumps Poly pumps Pre-chlor system		· · · · · · · · ·	45,000.00	40,000.00	40,000.00	45,000.00				
Project Total:	0.00	0.00	45,000.00	40,000.00	40,000.00	45,000.00	0.00	0.00	0.00	0.00

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				****					Replacemen	t Capital
		10 Year C	apital Impr	ovement F	Program					
Department:	Water Treatr	nent	]							
Project Manager:	Treatment S	upervisor (Wi	llis Hand)					******	]	
Project Name	San Antonio	Filter Upgrad	е						]	
Description:	Media Clean	ing/Repalcem	nent/Rehab, M	1anway Updg	rade, Filter C	atwalk				~
Justification:										
Comments:							******		]	
	9.49.40.40.40.40.40.40.40.40.40.40.40.40.40.	Sc	heduled F	unding						*****
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
		300,000.00								
Project Total:	0.00	300,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

			the state of the s						Replacemen	t Capital
		10 Year C	apital Impr	ovement F	Program					
Department:	Water Treatr	nent	]							
Project Manager:	Treatment S	upervisor (Wi	llis Hand)						]	
Project Name	Chlorination	Station Scale	Replacemen	t and Upgrad	9				]	
Description:	Replace agir replacement	ng infastructur New scales	e at chlorinat will integrate	ion station; e: up- to date te	kisting scales chnology and	are over 55 y interface with	ears old and the SCADA	in need of system.		
Justification:	Provide an o	ngoing equipr	ment replacer	nent program	ensures opti	mum effluent	water quality.			
Comments:	Six chlorine	scales, elevat	ed pedestals,	drip trays, ar	nd digital weig	ht indicators v	with 4-20mA	outputs.		
		Sc	heduled F	unding		*****			*****	
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
					····		· · · · · · · · ·			
Project Total:	0.00	0.00	60,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									Replacemen	t Capital
		10 Year Ca	apital Impr	ovement P	Program					
Department:	Water Treatr	ment								
Project Manager:	Treatment S	upervisor (Wi	llis Hand)						]	
Project Name	Backwash S	urge Tank "B'	Coating and	Restoration					]	
Description:	Structural re	pair, interior c	oating and ex	terior coating	of Backwash	Surge Tank	"B"			
Justification:	Maintenance	of the water	treatment rec	laim system.						
Comments:										
									]	***
		So	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
			160,000.00							
Project Total:	0.00	0.00	160,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									Replacemen	t Capital
		10 Year Ca	apital Impr	ovement P	rogram					
Department:	Water Treat	ment								
Project Manager:	Treatment S	upervisor (Wil	llis Hand)						]	
Project Name	Dam Intake	Structure Res	toration and I	Rehab					]	
Description:	Paint + Struc	ture Repairs								
Justification:		*****				*****				
Comments:	Painting Proj	ects Dictated	By Lake Leve	el					]	
		Sc	heduled F	unding					*****	
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Intake Screen Whee Structure Painting	els	100,000.00	50,000.00	250,000.00	50,000.00	150,000.00	55,000.00		55,000.00	
Project Total:	0.00	100,000.00	50,000.00	250,000.00	50,000.00	150,000.00	55,000.00	0.00	55,000.00	0.00

-									Replacemer	nt Capital
		10 Year C	apital Impr	ovement F	Program					
Department:	Water Traeti	ment	]							
Project Manager:	Treatment S	upervisor (Wi	llis Hand)						]	
Project Name	B.W. Residu	als Drying Be	d Rehabilitati	ons					]	
Description:	Phase 2 & 3	BW Resid	ual Drying Be	ed Rehabilaita	tions.				]	
Justification:										
Comments:	Phase 1 Ref	nab Ocurred in	n Fy 19/20						]	
*****	*******	So	heduled F	unding						
Project Phase :	2020/2021	2021/2022 45,000.00	2022/2023 45,000.00	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
		45,000.00	43,000.00							
Project Total:	0.00	45,000.00	45,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									Replacemer	nt Capital
		10 Year C	apital Impr	ovement F	Program					
Department:	Water Treatr	nent								
Project Manager:	Treatment S	upervisor (Wi	llis Hand)						]	
Project Name	PLC Automa	tion Upgrade:	s (Marion Wa	Iker Treatmei	nt Plant)				1	
Description:	Phased upda	ate of PLC an	d SCADA sys	tems					]	
Justification:	Maintain relia	able communi	cation and co	ontrol of treatr	ment plant op	erations.			]	
Comments:	L		********						]	
	L		······································							
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
	50,000.00	50,000.00	50,000.00							
	v									
Project Total:	50,000.00	50,000.00	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		*****		*****					Replacemen	t Capital
		10 Year C	apital Impr	ovement F	Program					
Department:	Water Treat	ment	]							
Project Manager:	Treatment S	upervisor (Wi	llis Hand)						]	
Project Name	Mira Monte \	Vell Bleach T	ank						]	
Description:	Hypochlorite	Tank, Bleach	Injection Ma	nifold, Secon	dary Containr	ment at Well \$	Site	· · · · · · · · · · · · · · · · · · ·		
Justification:		porary faciliti containment							-	
Comments:										
	***	Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023 25,000.00	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
						to a second				
Project Total:	0.00	0.00	25,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		ana and an and a state of the s							Replacemer	nt Capital
		10 Year C	apital Impr	ovement F	Program					
Department:	Water Treatr	nent	]							
Project Manager:	Treatment S	upervisor (Wi	llis Hand)						]	
Project Name	PLC Automa	tion Upgrade	s (San Antoni	o Plant)					]	
Description:	Phased upda	ate of PLC an	d SCADA sys	tems					-	
Justification:	Maintain relia	able communi	ication and co	ontrol of treatr	ment plant op	erations.				
Comments:	[		*****				*****			
	***************************************	Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
	30,000.00	30,000.00	30,000.00							
	L				l					L

			400.300.000.000.000.000.000.000.000.000.				****		Replacemer	nt Capital
		10 Year C	apital Impr	rovement F	Program					
Department:	Water Treat	ment	]							
Project Manager:	Treatment S	upervisor (Wi	llis Hand)						]	
Project Name	Boat Ramp								]	
Description:	Restoration	of Boat Ramp	On South Er	nd Of Lake (C	losed Buoy A	rea)	*****		]	
Justification:									]	
Comments:									]	
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
			40,000.00							
Project Total:	0.00	0.00	40,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

									Replacemen	t Capital
		10 Year C	apital Impr	rovement F	Program					
Department:	Water Traet	ment	]							
Project Manager:	Treatment S	upervisor (Wi	llis Hand)						]	
Project Name	Treatment P	lant Valve and	d Actuator Re	placements					]	
Description:	Phased Proj	ect								
Justification:			******							
Comments:								*****		
	L	······			•					
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
	20,000.00	20,000.00	20,000.00	25,000.00	25,000.00	25,000.00	30,000.00	30,000.00	30,000.00	35,000.00
Project Total:	20,000.00	20,000.00	20,000.00	25,000.00	25,000.00	25,000.00	30,000.00	30,000.00	30,000.00	35,000.00

Water Traetr		apital Impr	rovement F	Program					
•	nent	1							
Treatment S		J							
	upervisor (Wi	llis Hand)						]	
Well Rehabil	litation							]	
								]	
L			*****					]	
[								-	
								-	
	Sc	heduled F	unding						
2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
		100,000.00			110,000.00			120,000.00	
0.00	0.00	100,000.00	0.00	0.00	110.000.00	0.00	0.00	120 000 00	0.00
	2020/2021	2020/2021 2021/2022	Scheduled F 2020/2021 2021/2022 2022/2023 100,000.00	Scheduled Funding           2020/2021         2021/2022         2022/2023         2023/2024           100,000.00         100,000.00         100,000.00         100,000.00	Scheduled Funding           2020/2021         2021/2022         2022/2023         2023/2024         2024/2025           100,000.00         100,000.00         100,000.00         100,000.00         100,000.00	Scheduled Funding           2020/2021         2021/2022         2022/2023         2023/2024         2024/2025         2025/2026           100,000.00         110,000.00         110,000.00         110,000.00         110,000.00	Scheduled Funding           2020/2021         2021/2022         2022/2023         2023/2024         2024/2025         2025/2026         2026/2027           100,000.00         110,000.00         110,000.00         110,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         <	Scheduled Funding           2020/2021         2021/2022         2022/2023         2023/2024         2024/2025         2025/2026         2026/2027         2027/2028           100,000.00         110,000.00         110,000.00         110,000.00         110,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00         100,000.00 <t< td=""><td>2020/2021       2021/2022       2022/2023       2023/2024       2024/2025       2025/2026       2026/2027       2027/2028       2028/2029         100,000.00       100,000.00       110,000.00       110,000.00       120,000.00       120,000.00</td></t<>	2020/2021       2021/2022       2022/2023       2023/2024       2024/2025       2025/2026       2026/2027       2027/2028       2028/2029         100,000.00       100,000.00       110,000.00       110,000.00       120,000.00       120,000.00

									New Capital	
		10 Year C	apital Impr	rovement F	Program					
Department:	Water Treat	ment	]							
Project Manager:	Treatment S	upervisor (Wi	llis Hand)						]	
Project Name	MWTP DBP	Augmentation	1						]	
Description:		ost Fat Pipe C eclaim System								
Justification:	DBP Augme	ntation (Maint	ain compliand	ce with federa	al and state re	gulations)			]	
Comments:	Conceptual of (2-7-20 Tech Deleted by	Memo - Opti	nstruction co on 2a)	st estimates o	develpoed by	Kennedy Jen	ks		]	
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Phase 2 Phase 1	0.00	300,000.00								
^o roject Total:	0.00	300,000.00	0.00	0.00						

									New Capital	
		10 Year C	apital Impr	rovement F	Program					
Department:	Operations		]							
Project Manager:	Willis Hand								]	
Project Name	BW Residua	ls Drying Bed							]	
Description:	Construction	of overhead	shelter in vici	nity of backwa	ash residual c	lrying beds.	****		]	
Justification:	Rainwater pr residuals. Ar	oduces an ad overhead sh	lverse affect o elter utilized o	on reclaim wa during tempo	ter quality an ary wet weat	d effective dry ner would elin	ving of backw ninate the abo	ash ove impact.	]	
Comments:									]	
	L								]	
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022	2022/2023 25,000.00	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
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									New Capital	******
		10 Year C	apital Impr	ovement F	Program					
Department:	Operations		]							
Project Manager:	Willis Hand								]	
Project Name	Canopy Stru	cture							]	
Description:	Overhead St	ructure (Awni	ng) For Treat	ment Plant/C	asitas Dam E	quipment & V	ehicles		]	
Justification:	L								]	
Comments:	[									
	L									
		Sc	heduled F	unding			****	410-11-11-11-11-11-11-11-11-11-11-11-11-1	*****	
Project Phase :	2020/2021	2021/2022	2022/2023 25,000.00	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Project Total:	0.00	0.00	25,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

			*****						New Capital	
		10 Year C	apital Impro	ovement Pr	rogram					
Department:	Treatment P	lant	]							
Project Manager:	Treatment S	upervisor (Wi	llis Hand)	······································					]	
Project Name	Spillway Dra	inage System	ı / Stilling Basir	n Cleanout / I	Drainage Moc	lifications			]	
Description:	Includes pro present at th	jects that prov e treatment p	vide embankme lant and casita	ent protection s dam locatio	and mitigatio	on of detrimen	tal drainage i	ssues	]	
Justification:	USBR CR/P	FR Recomme	ndations							
Comments:		construction p limate (1-21-2							]	
		Sc	heduled Fu	nding						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Construction Study-Design		150,000.00	1,200,000.00			н н н				
Project Total:	0.00	150,000.00	1,200,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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		10 Year C	apital Impr	rovement F	Program					
Department:	Water Treat	ment	]							
Project Manager:	Treatment S	upervisor (Wi	llis Hand)						]	
Project Name	Remote Disr	nfection Boos	ter Station						]	
Description:	Hypochlorite	Chlorination	Station @ Av	enue #2 and/	or Ojai Valley	Booster Plan	it		]	
Justification:	Improve dist	ribution syste	m disinfectior	ı residuals.				****	]	
Comments:	System Chlo	prine Residual	s Declining D	ue to Historic	: Low Demand	and Improve	ed Public Con	servation	]	
		So	heduled F	unding						
Project Phase :	2020/2021	2021/2022 75,000.00	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
		ana ang ang ang ang ang ang ang ang ang								
Project Total:	0.00	75,000.00	0.00	75,000.00	0.00	0.00	0.00	0.00	0.00	0.00

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		10 Year C	apital Impr	ovement F	Program					
Department:	Water Treat	ment	]							
Project Manager:	Treatment S	upervisor (Wi	llis Hand)						]	
Project Name	San Antonio	Building							]	
Description:	Permanent b room.	ouilding for Sa	n Antonio Pla	ant operations	, inclusive of	operations co	entrol room ar	nd server	]	
Justification:										
Comments:	Design perfo	rmed in FY 2	019/2020							
		So	heduled F	unding		******	****	·		
Project Phase :	2020/2021	2021/2022 300,000.00	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Project Total:	0.00	300,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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		Capital Imp	provement	Program						
Department:	District - Mai	ntenance								
Comments:		n men open for de la secter de la constant de la secter de			1977) 					
General Plan:		nya manana kanana kana kana kana kana kana		1999-1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -	n daaraa daa gaala daa daa daa daa daa daa daa daa daa	den van skriver skriver af de begen om		94999999999999999999999999999999999999		
			2000-000-000-000-000-00-00-00-00-00-00-0				*****			
		Total Schee	duled Fund	ding						
	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Replacement New	0.00 8,500.00	40,000.00 0.00	80,000.00 0.00		80,000.00 0.00		95,000.00 0.00	285,000.00 0.00		
								ана алы алан талар Талар		
Project Total:	8,500.00	40,000.00	80,000.00	230,000.00	80,000.00	230,000.00	95,000.00	285,000.00	95,000.00	285,000.00

	il Thursday and a state of the			270-470-477-477-477-477-477-477-477-477-4		NATION CLOSED AND AND AND AND AND AND AND AND AND AN			Replacemen	t Capital
		10 Year C	apital Impr	rovement F	Program					
Department:	District Main	tenance	]							
Project Manager:	Maintenance	e Supervisor (	Dave Pope)							
Project Name:	Pump Plant	and Chlorinat	ion Station Bu	ilding Improv	ements					
Description:	Replace old CL2, Ave #1	roof, soffits, f , Ave #2, Upp	ascia, gutters per Ojai, Ojai \	, downspouts /alley, Matilija	and paint wh 2, Casitas 2	ole building. Chlorination	Locations: Ri Station (Asbe	ncon, Rincon stos removal		
Justification:	Existing roof	is in need of	replacement o	due to leeks a	nd other asso	ociated compo	onents failing			
Comments:	Will do one a	a year starting	in 2022/23							
		So	heduled F	unding						
Project Phase :	2020/21	2021/22	2022/23 30,000.00	2023/24 30,000.00	2024/25 30,000.00	2025/26 30,000.00	2026/27 35,000.00	2027/28 35,000.00	2028/29 35,000.00	2029/30 35,000.00
	,, , , , , , , , , , , , , , , , , , ,									
Project Total:	0.00	0.00	30,000.00	30,000.00	30,000.00	30,000.00	35,000.00	35,000.00	35,000.00	35,000.00

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									Replacemen	t Capital
		10 Year C	apital Imp	rovement l	Program					
Department:	District Maint	tenance	]							
Project Manager:	Maintenance	Supervisor (	Dave Pope)						]	
Project Name:	Mutual Plant	Building Imp	rovements						]	
Description:	Partition Add	ition, HVAC F	For MCC's, R	oof Replacen	nent		**************************************			
Justification:		· · · · · · ·							1	
Comments:	Deleted by G	M								
	/ <u></u>	Sc	heduled F	unding						
Project Phase : Phase 1	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Phase 2	0.00	40,000.00								
Project Total:	0.00	40,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	-	*****		27.17.111.9.100.00.00.00.00.00.00.00.00.00.00.00.00					Replacemen	t Capital
		10 Year C	apital Imp	rovement F	Program					
Department:	District Main	tenance	]							
Project Manager:	Maintenance	e Supervisor (I	Dave Pope)		·····				]	
Project Name:	O&M Lower	Yard Building	s and Facilitie	es Remodel					]	
Description:	Garage Faci	lity, E&M, Wa	rehouse, Pip	eline Shop						
Justification:	······		*****	*****					]	
Comments:	Design/Cons	truction Sequ	encing Over	8 Year Period						
		Sc	heduled F	unding	******					
Project Phase :	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Design Construction			50,000.00	200,000.00	50,000.00	200,000.00	60,000.00	250,000.00	60,000.00	250,000.00
Project Total:	0.00	0.00	50 000 00	200.000.00	£0,000,00	200.000.00				
FTOJECT TOLAI.	0.00	0.00	50,000.00	200,000.00	50,000.00	200,000.00	60,000.00	250,000.00	60,000.00	250,000.00

	89,000,002,028,000,000,000,000,000,000,000	en mandatan an a		lähkeuteisuuraantaan eessa varaa					New Capital	
		10 Year Ca	apital Impr	rovement I	Program					
Department:	District Mainte	ance	ł							
								······	]	
Project Name:	Fortress Rese	rvoir Hillside	Stabilty Asse	essment					1	
Description:	Study-Design	to mitigate h	illside slough	ing at Fortres	s reservoir sit	te.	****			
Justification:	Preserve struc	ctural integrit	y of reservoir	•						
Comments:			₩			<b></b>				
	L									
		Sc	heduled F	unding						
Project Phase :	2020/21 8,500.00	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
I										
I.										
Project Total:	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

								Summary C	apital Depar	ment 62
		Capital Im	provemen	t Program						
Department:	Recreation -	Operations					******		]	
Comments:		<u>a kolon az szeren tertek kenesetetetetetetetetetetetetetetetetetet</u>		M (1) COMMINISTING OF THE STREET OF THE S	2027.0000000000000000000000000000000000					
General Plan:			in an an ann an an an an an an an an an a	aktiikoitekseksekseksekseksekseksekseksekseksekse	ekiteken ar en ber setten alter av skraunen ar e			artania atan mangalan atan ma		
			1999-00-00-00-00-00-00-00-00-00-00-00-00-			tak kanalan da kanala kanala da da sa kanala				
		Total Sche	eduled Fun	ding	**********					<b>And</b> (1)
	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Replacement New	0.00 2,000.00		55,000.00 0.00	0.00 310,000.00						
				• • • • • • • •						
Project Total:	2,000.00	30,000.00	55,000.00	310,000.00	315,000.00	15,000.00	75,000.00	0.00	0.00	0.00

					****				Replacemer	it Capital
		10 Year C	apital Impr	rovement F	٥rogram					
Department:	Recreation		]							
Project Manager:	Belser/Engin	neering	***************************************						]	
Project Name:	Park Ranger	r Vehicle Repl	lacement					****	]	
Description:	Transportatio	on for resourc	e protection a	and customer	service. Patro	ol the Lake Ca	asitas recreat	ion and open	space.	
Justification:				· · ·			14 - 74 - 75 - 75 - 75 - 75 - 75 - 75 - 7		]	
Comments:	2022/2023 R	Replace 2006 Replace 2013 Replace 2014	Unit 41	nolds water ta	2026/2027 R	Replace Unit 1 Replace Unit 4		×4	]	
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022 30,000.00	2022/2023 55,000.00	2023/2024	2024/2025 65,000.00	2025/2026 15,000.00	2026/2027 65,000.00	2027/2028	2028/2029	2029/2030
Project Total:	0.00	30,000.00	55,000.00	0.00	65,000.00	15,000.00	65,000.00	0.00	0.00	0.00

			****		and Antohologopologopologopologopologopologopologopologopologopologopologopologopologopologopologopologopologop	******	****		New Capital	
		10 Year C	apital Impi	rovement F	Program					
Department:	Recreation		]							
Project Manager:	Civil Enginee	ər							]	
Project Name:	Invasive Spe	cies Inspectio	on Station						]	
Description:	Decontamina	nd administration station for	or vessels su	ch as algeacid	de application	. Office and s	torage space	for employee	tag program. es dedicated t	o the
Justification:	Inspections a work space,	cies preventic are a priority f training space	or combating and equipm	invasive specient storage. \	cies. Staff deo Vork stations	licated to prog and meeting	gram require space will be		]	
Comments:	Associate en 2020/2021Sł Possible new	vice interaction igineer develp nade structure v BOR Grant i onfiguration, r	ed prelimina for inspectic n 2023. State	ry specificatio on is first proje of Califoirnia d colors same	ns and cost e ect. In BOR bu grant was de	stimate. udget for 50% mied in 2019,	reimburseme partial fundir	ig could be av	agreement R vailable.	18AP00028
				unung						
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024 300,000.00	2024/2025 250,000.00	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Project Total:	0.00	0.00	0.00	300,000.00	250,000.00	0.00				
	0.00	0.00	0.00	500,000.00	230,000.00	0.00	0.00	0.00	0.00	0.00

	*****	and an and the second contract of the second			*****				New Capital	
		10 Year C	apital Impi	rovement P	Program					
Department:	Recreation	***	]							
Project Manager:	Belser								]	
Project Name:	Security Car	neras							]	
Description:	Improve plac	cement of sec	curity cameras	s, increase nu	mber of secu	rity cameras.			]	
Justification:	Security carr	neras are inte	gral in resour	ce protection.	*****			******	]	
Comments:	BOR will pay May pay for	/ half cost of F furture needs	TY 2020/2021 , but the new	included in c grant cycle wi	urrent grant F Ill not be avail	18AP00028 able until 202	3.		]	
		Sc	cheduled F	unding						
Project Phase :	2020/2021 2000	2021/2022	2022/2023	2023/2024 10,000.00	2024/2025	2025/2026	2026/2027 10,000.00	2027/2028	2028/2029	2029/2030
Project Total:	2,000.00	0.00	0.00	10,000.00	0.00	0.00	10,000.00	0.00	0.00	0.00

				27 <u>2-4000000000000000000000000000000000000</u>				Summary C	apital Depar	tment 63
		Capital Imp	provement f	Program						
Department:	Recreation -	Maintenance					*****			
Comments:	[	*****								
General Plan:		******		takan cun suka aki kata kata kata kata kata kata kat						
			an a	Madde with a state of the state			*****			
								***************		
		Total Scheo	duled Fund	ing						
	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Replacement New	5,000.00 0.00	170,000.00 1,150,000.00	380,000.00 900,000.00	370,000.00 900,000.00			150,000.00 0.00		75,000.00 0.00	75,000.00 0.00
Project Total:	5,000.00	1,320,000.00	1,280,000.00	1,270,000.00	1,200,000.00	920,000.00	150,000.00	75,000.00	75,000.00	75,000.00

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									Replacemer	nt Capital	
		10 Year C	apital Impi	rovement i	Program						
Department:	Recreation-N	Aaintenance	]								
Project Manager:	Maintenance	Supervisor							]		
Project Name:	Maintenance	Maintenance Vehicles Replacement / Barge Repair 2020/2021									
Description:	Replace as r Replace 199	Replace as needed and continue to receive District's replaced vehicles already depreciated. Replace 1999 Units 23, 1998 Unit 4, 1997 Unit 19, 1997 Unit 20 and 1999 Unit 24 still in use but do not have AC.									
Justification:	Need to remo pump and tra 2020/2021 B	ansfer all sew	age and wast	er water (from	n showers, sir	nt facility. Lar iks, café, etc)	ge tank vehic	le required to	- ]		
Comments:	2022/2023 R 2021/2022 2022/2023	eplace year 2 Replace 2 m Replace 2 m	2007 Unit 88 aintenance ve aintenance ve	ehicles ehicles	25K in DPF i 2026/2027 F	leplace 2 mai	dget for 2020/ ntenance veh large pump tr	icles	1	ater truck low	
			heduled F								
Project Phase :	2020/2021 5,000.00	2021/2022 75,000.00	2022/2023 75,000.00 180,000.00	2023/2024	2024/2025	2025/2026	2026/2027 75,000.00	2027/2028	2028/2029	2029/2030	
	Barge Repair										
Project Total:	5,000.00	75,000.00	255,000.00	0.00	0.00	0.00	75,000.00	0.00	0.00	0.00	
							-,		0.00		

			0/10/10/10/10/10/10/10/10/10/10/10/10/10	With an and the second second second	***		Tollinkounty and the descent success		Replacemen	t Capital		
		10 Year C	apital Impi	rovement F	Program							
Department:	Recreation-	Maintenance	]									
Project Manager:	Engineering								]			
Project Name:	Road Improv	vements		]								
Description:	Repair and r and chip sea	Repair and refurface roads throughout the Recreation Area. A Base applied in some areas, ashpalt and chip seal in other areas.										
Justification	Roads in goo	od repair allow	ustomers, an v for easy acc	d required for ess to areas	staff and em in the park an	ercency perso d reduce wea	onnel. Ir on the road	s preventing i	 major			
Comments:	repair proble BOR approv BOR addition Deleted by G	ed grant reiml nal grant fund	burse half cos s may be ava	sts as funds a ilable in 2023	re available ir /2024.	n grant # R18/	AP00028 thro	ugh 2023.				
		Sc	heduled F	unding								
Project Phase :	2020/2021 0.00	2021/2022 75,000.00	2022/2023 75,000.00	2023/2024 300,000.00	2024/2025 150,000.00	2025/2026 150,000.00	2026/2027 75,000.00	2027/2028 75,000.00	2028/2029 75,000.00	2029/2030 75,000.00		
Project Total:	0.00	75,000.00	75,000.00	300,000.00	150,000.00	150,000.00	75,000.00	75,000.00	75,000.00	75,000.00		

	9115-001-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-						and the second secon		Replacemer	it Capital
		10 Year C	apital Impi	rovement F	Program					
Department:	Recreation		]							
Project Manager:	Engineering	/Belser							]	
Project Name:	Replace Pla	]								
Description:	Replace all 7		]							
Justification:	The playgrou Replace with	unds were ins n rustic feature	talled in the e es such as cli	arly 1990's. F mbing rocks a	Part replacement	ent is virtually for children t	impossible. o play on.		]	
Comments:	We have dor	, for two years ne very well ir ce replaceme	keeping the	playgrounds	functional and	l in complianc Plan to keep a	e for thirty ye s much exist	ars. Recent ing play surfa	ce	
		So	heduled F	unding			*****			******
Project Phase :	2020/2021	2021/2022	2022/2023 50,000.00	2023/2024 50,000.00	2024/2025 150,000.00	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Project Total:	0.00	0.00	50,000.00	50,000.00	150,000.00	0.00	0.00	0.00	0.00	0.00

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0				COLUMN DE	Contractory of the second second second				Replacemen	it Capital		
		10 Year C	apital Impr	ovement F	Program							
tment:	Recreation		]									
t Manager:	Belser								]			
t Name:	Restroom Bu	estroom Building Reburbishment										
iption:		strooms used daily. Need for ongoing maintenance and repair. rk completed in-house.										
cation:	Creekside an Other restroc			0/2021.					]			
ients:	Restroom rep the need for I	pair status are hauling sewa	e a customer ge outside the	priority. A sev e park to treat	ver line will de tment facilities	ecrease s. Buildings re	quire repair a	ind maintenar	] nce. ]			
		Sc	heduled F	unding								
t Phase :	2020/2021 0.00	2021/2022 20,000.00	2022/2023	2023/2024 20,000.00	2024/2025	2025/2026 20,000.00	2026/2027	2027/2028	2028/2029	2029/2030		
t Total:	0.00	20.000.00	0.00	20.000.00	0.00	20,000.00		0.00	0.00	0.00		
t Total:	0.00	20,000.00	0.00	20,000.00	0.00	20,0	00.00	00.00 0.00	00.00 0.00 0.00	00.00 0.00 0.00		

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		and the second secon							New Capita			
		10 Year Capi	tal Improv	ement Pro	gram							
Department:	Recreation		]									
Project Manager:	Engineering/I	Belser	·····						]			
Project Name:	Sewer Impler	Sewer Implementation										
Description:	Consulting fir to the Casitas	Consulting firm to assess linking in-park facilities to Ojai Sanitation District for in-park sewer lines to the Casitas Water Adventure. Also site for in-park collection - low pressure force main and multiple lift statio										
Justification:	Elimination of Protection of many times a	f a majority of the lake water quality	need for puny. Protection of	np/haul of wa of enviroment	stewater - still by eliminating	will depend og need to hau	on CT's for re I truck of 350	note areas. 0 gallons of se	ewage to Ven	tura		
Comments:	Assumed 5-y First year con	ear construction istruction include didate for Prop 68	s major electr	ical upgrades	from SCE.	ludes CEQA/I	NEPA complia	ance.				
		Sche	duled Fund	ding								
Project Phase :	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030		
Design Construction		150,000.00 1,000,000.00	150,000.00 750,000.00									
Project Total:	0.00	1,150,000.00	900.000.00	900.000.00	900 000 00	750 000 00	0.00	0.00	0.00	0.00		

				Ristania/isanijojx0/ramia/sanistor		a		Summary C	apital Depar	tment 64
		Capital Im	provemen	t Program						
Department:	Recreation -	Public Relation	ons							
Comments:					*******			84, F		
General Plan:		99999999999999999999999999999999999999	9009-024945-0449-0449-0449-0449-0449-0449-0449-	E E E E E E E E E E E E E E E E E E E	ntinette en entennette betre nette tennette bereken en	2020-00-00-00-00-00-00-00-00-00-00-00-00		an de la companya de La companya de la comp		
		Total Sche	eduled Fun	ding						
	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Replacement New	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00		0.00 0.00	0.00 0.00			0.00 0.00
Project Total:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

								Summary C	apital Depar	tment 65
		Capital Im	provemen	t Program						
Department:	Recreation -	Waterplaygro	und			n an			]	
Comments:							ann ar san ann an	XIII Adamatika Kalendara Kalendara Kalendara Kalendara Kalendara Kalendara Kalendara Kalendara Kalendara Kalend		
General Plan:		an na han an a	977 - 1974 - 1974 - 1975 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1988 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 - 1976 -	an a sha ka ay an a sha an	an a	EN COMMUNICATION CONTRACTOR CONTRACTOR			]	
			<del></del>						1	
		Total Sche	eduled Fur	iding						
	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Replacement New	0.00 0.00		0.00 500,000.00	0.00 500,000.00		0.00 0.00				
		-								
Project Total:	0.00	207,500.00	500,000.00	500,000.00	800,000.00	0.00	0.00	0.00	0.00	0.00

					WARFAGGINGUNGAN MANAGAN				Replacement	Capital		
		10 Year C	apital Imp	rovement l	Program							
Department:	Recreation		]									
Project Manager:	Engineering/	Belser							]			
Project Name:	CWA Repair	s / Replacem	ent Parts / Im	provement P	anning				]			
Description:	Repair and rong repaired	pair and recoat Lazy River, repair and replace Playground parts. Plan for future and and implement w, repaired and expanded facilities.										
Justification:	and water fea	Maintenance a ature parts. M eemly popular	ajority of worl	k can be com	pleted in-hous	eather and us se, with some	se degrades ti outside contr	ne CWA act work.				
,	2021 A mast (restrooms a for example v	nd showers, s	taff areas) ar	nd considerati	on to expand	the footproint	xpansion of fa to include fea 25.	acilities atures that	Deleted by G	М		
		Sc	heduled F	unding								
Project Phase :	2020/2021	2021/2022 77,500.00	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030		

									New Capita	ļ
		10 Year C	apital Impi	rovement F	Program					
Department:	Recreation C	Casitas Water	Adventure							
Project Manager:	Belser								]	
Project Name:	Master Plan								]	
Description:	reconfigure p	perimeter fend	ce and entran	ce/exit and sr	nack bar. Also	address parl	king/entry/res	for improvem trooms/showe	net to the CW	/A to space.
Justification:	The current of	entrance impa	acts the ability	to place a pe	ermanent sna	A Model Aquick bar adjace	nt to the CW/	Code) A. es will provide	guidance	
Comments:	Master plans Master Plan	are often ver to be conduct	ry helpful in se ted when pos	ecuring grant sible then pha	funds. Include ase implemen	e entire Recre tation.	eation Area if	possible.	]	
		Sc	heduled F	unding						
Project Phase :	2020/2021	2021/2022 130,000.00	2022/2023 500,000.00	2023/2024	2024/2025 800,000.00	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Project Total:	0.00	130,000.00	500,000.00	500,000.00	800,000.00	0.00	0.00	0.00	0.00	0.00

	NIGER STATE AND		***					****	New Capita	
		10 Year C	apital Impi	rovement F	Program					
Department:	Recreation C	asitas Water	Adventure	]						
Project Manager:	Engineering		· · · · · · · · · · · · · · · · · · ·						]	
Project Name:	WaterSMAR	WaterSMART Small-scale Water Efficiency Projects								
Description:	USBR Water water and en	USBR WaterSMART Small-scale Water Efficiency Projects to replace the existing filtration system for the water and energy efficinet system. Water conservation a priority and ability to conform with MAHC (CA M								ith a more Health Code)
Justification:	Facilities at 0 Water saving	CWA are very is estimated a	popular and at 70%. Curre	Casitas has a ent use of 7 ad	a prioroty to in cre feed can b	nprove water be reduced to	conservation. 2 acre feet.			
Comments:	BOR grant a		process - BOF	R will pay half					]	
		Sc	heduled F	unding						
Project Phase :	2020/2021 0.00	2021/2022	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030
Project Total:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## RESOLUTION ADOPTING THE FINAL GENERAL FUND BUDGET DEBT SERVICE FUND AND MIRA MONTE WATER ASSESSMENT DISTRICT FUND BUDGETS FOR THE FISCAL YEAR ENDING JUNE 30, 2021

#### **RESOLUTION NO.**

WHEREAS, District staff has prepared a proposed budget for the 2020 / 2021 fiscal year;

WHEREAS, the General Manager has made modifications to the proposal made by the various section supervisors; and

WHEREAS, the resultant budget has been reviewed by the Finance Committee; and

WHEREAS, three public meetings have been held to go over the budget with the public;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Casitas Municipal Water District, that the proposed budget per Board recommendations for the 2020 / 2021 fiscal year is here by approved for the General Fund Budget broken down as follows; Revenue \$25,715,273., SWP Indebtedness Fund Budget Revenue \$744,119., Mira Monte Water Assessment District Fund Revenue of \$19,236., and 1% secured levy tax apportionment of \$2,375,549., Expenses \$23,891,398., Capital \$18,179,500.

Adopted this 24th day of June, 2020.

Russ Baggerly, President Casitas Municipal Water District

ATTEST:

Angelo Spandrio, Secretary Casitas Municipal Water District

Resolution No.

## Resolution of Appreciation Honoring Denise Collin Upon Her Retirement and Fifteen Years of Service to Casitas

**WHEREAS**, Denise Collin was hired on April 4, 2005 and has served the District for 15 years as a management employee; and

WHEREAS, Denise Collin has been a key employee on the District's management team, serving in the position of Accounting Manager, District Treasurer and finishing her career as the Chief Financial Officer; and

**WHEREAS**, Denise Collin has consistently earned the annual Government Finance Officers Award; and

**WHEREAS**, Denise Collin was instrumental in administering the State Water Project for Casitas, United and the City of Ventura, and implementation of the comprehensive accounting system; and

**WHEREAS**, Denise Collin and her team integrated the Ojai System into the Casitas billing and accounting systems; and

WHEREAS, Denise Collin has chosen to retire effective June 6, 2020; and

**WHEREAS**, the Board of Directors wishes to take proper notice and express its appreciation for the faithful and dedicated service that Denise Collin has rendered to Casitas.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors of Casitas Municipal Water District as follows:

The Board of Directors hereby expresses sincere appreciation to Denise Collin upon her retirement after 15 years of service to Casitas.

ADOPTED this 24th day of June, 2020

Pete Kaiser

Russ Baggerly

Brian Brennan

Angelo Spandrio

## RESOLUTION FIXING A TAX RATE FOR FISCAL YEAR 2020-2021 AND AUTHORIZING AND DIRECTING THE PRESIDENT OF THE BOARD TO EXECUTE A CERIFICATE REQUESTING THE VENTURA COUNTY BOARD OF SUPERVISORS TO LEVY SUCH TAX

#### **RESOLUTION NO.**

WHEREAS, the voters of the State of California passed Proposition 13 on June 6, 1978; and

WHEREAS, Proposition 13 limits tax rates to voter-approved indebtedness; and

WHEREAS, the indebtedness for the State Water Project was approved by the voters of Ventura county along with all the voters of the State of California on November 8, 1960, and December 19, 1933 and the payments for fiscal year 2020-2021 totals \$744,119.; and

WHEREAS, the Ventura county collection and administrative fees are estimated to be \$2,707.00.; and are voter-approved, authorized expenditures; and

WHEREAS, on the basis of valuation figures furnished by the Ventura County Auditor, the amount to be raised by tax levy on unsecured personal property is \$41,267.; and

WHEREAS, on the basis of information furnished by the Ventura County Auditor, the amount to be raised by State subventions for voter-approved indebtedness amounts to \$4,248.; and

WHEREAS, it is estimated that \$25,736.; will be received from the County in prior year tax delinquencies; and

WHEREAS, taking account of the amount to be raised by tax levy on unsecured personal property, the amount to be raised by state subventions, and the amount to be received in prior delinquencies, the amount to be raised by taxation on secured property for voter-approved indebtedness of \$708,042.; and

WHEREAS, on the basis of figures furnished by the Ventura county Auditor, the net assessed/market valuation of local secured property, exclusive of the utility roll, is \$9,959,042,530.; and the net assessed/market valuation of secured property on the utility roll is estimated at \$108,692.; and the net assessed/market valuation of all secured property in Casitas is estimated at \$9,893,042,330.; and

WHEREAS, with a 2.500 percent allowance for delinquency on net local secured property of \$10,886,327,716.; the current year delinquencies are estimated at \$272,158,193.; and

WHEREAS, the reduction for redevelopment assessments is \$721,127,193.; and

WHEREAS, the addition for the Homeowners Property Tax Relief exemption is \$66,000,200.; and

WHEREAS, the tax rate required to raise the necessary funds of \$0.006437 per hundred dollars of assessed/market valuation on all property within Casitas' boundaries;

WHEREAS, the tax rate in the previous year was \$0.006123 per hundred dollars of assessed/market valuation;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Casitas Municipal Water District as follows:

- 1. The tax rate of Casitas Municipal Water District on all property within Casitas' boundaries for fiscal year 2020-2021 is hereby fixed at \$0.006437 per hundred dollars of assessed/market valuation for voter-approved indebtedness.
- 2. The president of the Board of Directors is hereby authorized and directed to execute a certificate in the form attached hereto.

Adopted this 24th day of June, 2020.

Russ Baggerly - President Casitas Municipal Water District

ATTEST:

Angelo Spandrio Casitas Municipal Water District

## **CERTIFICATE**

The Board of Directors of Casitas Municipal Water District hereby certifies to the Board of Supervisors and Auditor of the County of Ventura as follows:

- 1. Casitas has voter-approved indebtedness for fiscal year 2020-21 for the following:
  - a. \$744,119. for the State Water Project indebtedness which was approved by the voters of the State of California on November 8, 1960 and December 19, 1933.
- 2. It is hereby directed that at the time and in the manner required by law for the levying of taxes for County purposes for fiscal year 2020-21, the Board of Supervisors of Ventura county shall levy, in addition to such other tax as may be levied by such Board, a tax on all property within Casitas' boundaries at the rate of \$0.006437 per hundred dollars of assessed/market valuation.

IN WITNESS WHEREOF this certificate has been executed on behalf of and at the direction of the Board of Directors of Casitas Municipal Water District by the President thereof this 24th day of June, 2020.

Russ Baggerly - President Casitas Municipal Water District June 24, 2020

Board of Supervisors County of Ventura 800 South Victoria Avenue Ventura, California 93009

**RE:** Tax Certificate

The Honorable Board of Supervisors:

Enclosed please find the Certificate of the Casitas Municipal water District requesting that the Board of Supervisors levy a tax on all property within Casitas' boundaries at the rate of \$0.006437 hundred dollars of assessed/market valuation.

This Certificate was adopted by Resolution 20-?? at a regular meeting of the Board of Directors held June 24, 2020. A certified copy of that resolution is also enclosed.

Should you need any further information from Casitas, please do not hesitate to contact me at 649-2251 x 103.

Very truly yours,

Denise Collin Chief Financial Officer

# CASITAS MUNICIPAL WATER DISTRICT MEMORANDUM

TO: BOARD OF DIRECTORS

**FROM:** MICHAEL L FLOOD – GENERAL MANAGER

**SUBJECT:** PROPOSITION 4 – RESOLUTION TO ADOPT THE 2020 / 2021 ESTABLISHMENT OF APPROPRIATIONS LIMIT OF \$15.034.621.

**DATE:** 06/19/2020

## **RECOMMENDATION:**

It is recommended that the Board of Directors adopt the Resolution for the 2020 / 2021 Establishment of Appropriations limit of \$15,034,621.

# BACKGROUND AND OVERVIEW:

Voters approved Proposition 4, also called the Gann Initiative in November 1979. The late 1970s were a time of surplus state revenues in California, and voter exasperation at the inability of the legislature and the governor to agree on a plan to return the tax surplus to the taxpayers in the form of refunds or property tax relief.

Proposition 4 requires an Establishment of Appropriations limit each year that is equal to the prior year's spending with upward adjustments allowed for changes in population and the cost of living. The law exempts certain appropriations from the limit including capital outlay and debt service.

When the limit is exceeded, Proposition 4 requires the tax surplus to be returned to the taxpayers within two years. Casitas Municipal Water District to date has not exceeded the established limit.

## A RESOLUTION ESTABLISHING THE APPROPRIATIONS LIMIT FOR THE CASITAS MUNICIPAL WATER DISTRICT FOR THE FISCAL YEAR ENDING JUNE 30, 2021

### **RESOLUTION NO.**

WHEREAS, Section 7910 of the Government Code requires each local jurisdiction to establish its appropriations limit by resolution for the following fiscal year pursuant to Article XIII B of the California constitution at a regularly scheduled meeting or noticed special meeting; and

WHEREAS, 15 days prior to such meeting, documentation used in the determination of the appropriations limit has been made available to the public; and

WHEREAS, the determination of the appropriations limit is a legislative act;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of Casitas Municipal Water District hereby establishes the appropriations limit of \$15,034,621. for Casitas Municipal Water District for the fiscal year ending June 30, 2021, pursuant to Article XIII B of the California Constitution.

ADOPTED this 24th day of June, 2020

Russ Baggerly, President Casitas Municipal Water District

ATTEST:

Angelo Spandrio, Secretary Casitas Municipal Water District

# **Proposition 4**

Modern spending limits in California began in 1979 with the passage of Proposition 4* (Article XIII B of the California Constitution). Also called the Gann Initiative after its chief sponsor, Paul Gann, Proposition 4 places an <u>appropriations limit</u> on most spending from tax proceeds. The limit for each year is equal to the prior year's spending with upward adjustments allowed for changes in population and the cost of living. Most state and local government appropriations are subject to the limit. However, the law exempts certain appropriations from the limit including capital outlay, debt service and local government subventions. When the limit is exceeded, Proposition 4 requires the surplus to be returned to the taxpayers within two years. Appropriations in the two year period can be averaged before becoming subject to the excess revenue provisions of the Gann limit.

Voters approved the Gann limit in a November 1979 special election by a 74% margin. The late 1970s were a time of surplus state revenues in California, and voter exasperation at the inability of the legislature and the governor to agree on a plan to return the surplus to the taxpayers in the form of refunds or property tax relief helped fuel the tax revolt that led first to Proposition 13 and then to Proposition 4. With the Gann limit, voters took the matter of spending limits into their own hands, and ignored objections that spending limit formulas are an artificial constraint on policy making and hamper the government's ability to address citizen needs.

During the early 1980s, increases in population and the consumer price index outpaced the growth in state revenue, and the Gann limit was not reached. However, a surge in state revenues in 1987 caused the limit to be breached, and led to the first--and so far, only--refund to taxpayers.

Voters have modified the Gann limit in a series of initiative measures. Proposition 99* (1988) and Proposition 10* (1998) exempted new tobacco taxes from the Gann limit. Proposition 98* (1988) required public schools to receive a share of revenues exceeding the Gann limit. That share was changed to a flat 50% by Proposition 111* (1990). Proposition 111 also added three exemptions to the Gann limit: capital outlay spending, appropriations supported by increased gas taxes, and appropriations resulting from national disasters. Most significantly, Proposition 111 changed the formula used for calculating annual adjustments to the Gann limit. Under Proposition 111, the population factor is based on a weighted average of population and K-14 school enrollment growth (instead of population only), and the cost of living factor is based solely on California per-capita personal income growth (and no longer takes into account the Consumer Price Index).

The changes to the Gann limit formula under Proposition 111 substantially raised the Gann limit, making it less likely that the limit will be reached in the future. Many observers believe that in its current weakened state the Gann limit has ceased to be a meaningful constraint on state spending.

For an overview of developments regarding spending limits in the Schwarzenegger era (Nov. 2003- ), see the related *Hot Topic* <u>Spending Limits: the California Live</u> <u>Within Our Means Act</u>

### RESOLUTION NO. [____]

## A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CASITAS MUNICIPAL WATER DISTRICT, ACTING IN ITS CAPACITY AS THE LEGISLATIVE BODY OF CASITAS MUNICIPAL WATER DISTRICT COMMUNITY FACILITIES DISTRICT NO. 2013-1 (OJAI), AUTHORIZING THE LEVY OF A SPECIAL TAX FOR FISCAL YEAR 2020-2021

WHEREAS, on January 29, 2013 this Board of Directors (the "Board") adopted Resolution No. 13-08, entitled "Resolution of the Board of Directors of the Casitas Municipal Water District, California Declaring Its Intention to Establish Community Facilities District No. 2013-1 (OJAI), to Authorize the Levy of Special Taxes Therein" (the "Resolution of Intention"), stating its intention to form Casitas Municipal Water District Community Facilities District No. 2013-1 (OJAI) (the "CFD") pursuant to the Mello-Roos Community Facilities Act of 1982, as amended, Section 53311 *et seq.* of the California Government Code (the "Act"); and

WHEREAS, on March 13, 2013, after providing all notice required by the Act, the Board held a noticed public hearing required by the Act relative to the formation of Community Facilities District No. 2013-1 (OJAI), the proposed levy of a special tax within Community Facilities District No. 2013-1 (OJAI) to finance certain improvements within the CFD as described in Resolution No. 13-08 and to secure the payment of any bonded indebtedness of the CFD, and the proposed issuance of up to \$60,000,000 of bonded indebtedness for Community Facilities District No. 2013-1 (OJAI); and

WHEREAS, on March 13, 2013, following the close of the public hearing, the Board adopted Resolution Nos. 13-12 (the "Resolution of Formation") and 13-13 (the "Resolution to Incur Bonded Indebtedness") which called a special election on August 27, 2013 within Community Facilities District No. 2013-1 (OJAI) on Measure V relating to the levying of a special tax, the incurring of bonded indebtedness and the establishment of an appropriations limit for the Community Facilities District No. 2013-1 (OJAI); and

WHEREAS, on August 27, 2013, a special election was held within Community Facilities District No. 2013-1 (OJAI) at which the qualified electors approved by more than a two-thirds vote Measure V authorizing the levy of a special tax within the Community Facilities District No. 2013-1 (OJAI) for the purposes described in the Resolution of Intention and the Resolution of Formation and the issuance of bonded indebtedness for Community Facilities District No. 2013-1 (OJAI) as described in the Resolution to Incur Bonded Indebtedness; and

WHEREAS, on November 13, 2013, the Board adopted Resolution No. 13-38 declaring the results of the special election, which results showed that the issues presented at said special election were approved by the qualified electors of the CFD by more than two-thirds of the votes cast at said special election; and

WHEREAS, on November 27, 2013 the Board adopted Ordinance No. 13-01 which authorized the levy of a special tax within Community Facilities District No. 2013-1 (OJAI) (the "Ordinance"); and

WHEREAS, this Board hereby certifies that the Ordinance authorizing the levy of the special taxes within Community Facilities District No. 2013-1 (OJAI) has been duly adopted in accordance with law and is legal and valid; and

WHEREAS, the Ordinance provides that the Board is further authorized to determine each year, by ordinance, or by resolution if permitted by then applicable law, on or before August 10 of each year, or such later date as is permitted by the law, the specific special tax rate and amount to be levied on each parcel of land in Community Facilities District No. 2013-1 (OJAI) pursuant to the rate and method of apportionment set forth for Community Facilities District No. 2013-1 (OJAI) in Exhibit "B" to Resolution No. 13-12 (the "Rate and Method"). The special tax rate to be levied pursuant to the Rate and Method shall not exceed the applicable maximum rates set forth therein, but the special tax may be levied at a lower rate; and

WHEREAS, it is now necessary and appropriate that the Board levy and collect the special taxes for Fiscal Year 2020-2021 for the purpose specified in the Ordinance, by the adoption of a resolution as specified by the Act and the Ordinance; and

NOW, therefore, the Board of Directors of the Casitas Municipal Water District acting in its capacity as the legislative body of Community Facilities District No. 2013-1 (OJAI) does hereby resolve as follows:

<u>Section 1.</u> The above recitals are all true and correct.

In accordance with Section 53340 of the Act and the Ordinance, there is Section 2. hereby levied upon the parcels within the CFD which are not otherwise exempt from taxation under the Act or the Ordinance the special taxes for Fiscal Year 2020-2021 (the "Special Taxes"), at the tax rates set forth in Exhibit 1 hereto. The Special Tax Consultant shall apportion the Special Taxes in the manner specified in Resolution Nos. 13-12 and 13-13. Such rates do not exceed the maximum rates set forth in the Ordinance. After adoption of this Resolution, but no later than July 6, 2020 (the County's deadline of accepting direct assessment enrollments for tax year 2020-2021), or such later date as is permitted by the law, the Special Tax Consultant shall deliver the certified list of all parcels subject to the special tax levy, including the amount of the Special Taxes to be levied on each parcel in Fiscal Year 2020-2021 (the "Certified List"), to the Accounting Manager or designee, and thereafter, but in no event later than July 6, 2020, or such later date as is permitted by the law, the Accounting Manager or designee, shall cause a certified copy of this Resolution, together with the Certified List, to be filed with the County Auditor-Controller, or in the case of direct billing, at a different time or in a different manner if necessary to meet its financial obligations. The Certified List may contain tax rates lower than those set forth in Exhibit 1 if the Accounting Manager determines that such lower rates are adequate to accomplish the purposes of the CFD in Fiscal Year 2020-2021. The Accounting Manager or designee and the County Auditor-Controller are hereby authorized to make changes to the Certified List from time to time to correct any error in the amount of the levy on any parcel to make it consistent with the Rate and Method, including, but not limited to, adding any parcels omitted from the Certified List or deleting any parcels included in the Certified List.

<u>Section 3.</u> Properties or entities of the state, federal or other local governments shall be exempt from the special tax, except as otherwise provided in Sections 53317.3 and 53317.5 of the Act and the Rate and Method. No other properties or entities are exempt from the special tax unless the properties or entities are expressly exempted in the Resolution of Formation, or in a resolution of consideration to levy a new special tax or special taxes or to alter the rate or method of apportionment of an existing special tax as provided in Section 53334 of the Act.

<u>Section 4.</u> All of the collections of the special tax pursuant to the Rate and Method shall be used as provided for in the Act and the Resolution of Formation. The special tax shall be levied within Community Facilities District No. 2013-1 (OJAI) only so long as needed for the purposes described in the Resolution of Formation.

<u>Section 5.</u> The special tax levied pursuant to the Rate and Method shall be collected in the same manner as ordinary *ad valorem* property taxes are collected and shall be subject to the same penalties and the same procedure, sale and lien priority in case of delinquency as is provided for ad valorem taxes (which such procedures include the exercise of all rights and remedies permitted by law to make corrections, including, but not limited to, the issuance of amended or supplemental tax bills), as such procedure may be modified by law or by this Board from time to time.

<u>Section 6.</u> As a cumulative remedy, if any amount levied as a special tax for payment of the interest or principal of any bonded indebtedness of Community Facilities District No. 2013-1 (OJAI) (the "Bonds"), together with any penalties and other charges accruing under the Ordinance, are not paid when due, the Board may, not later than four years after the due date of the last installment of principal on the Bonds, order that the same be collected by an action brought in the superior court to foreclose the lien of such special tax.

<u>Section 7.</u> The Accounting Manager or designee is hereby authorized to transmit a certified copy of this Resolution, together with the Certified List, to the County Assessor and/or the Treasurer-Tax Collector, together with other supporting documentation as may be required to place the Special Taxes on the secured property tax roll for Fiscal Year 2020-2021 and for the collection of the Special Taxes in the same manner as ordinary ad valorem property taxes and to perform all other acts which are required by the Act, the Ordinance, or by law or deemed necessary by the Accounting Manager in order to accomplish the purpose of this Resolution, the Act, or Bond covenants, or in the case of direct billing, the Accounting Manager or designer is hereby authorized to mail the applicable tax bill to the individual taxpayer.

<u>Section 8.</u> This Resolution shall be effective upon its adoption.

PASSED and ADOPTED by the Board of Directors of the Casitas Municipal Water District at a regular meeting held on the 24th day of June 2020.

# CASITAS MUNICIPAL WATER DISTRICT

By:

Russ Baggerly, President Board of Directors

ATTEST:

By:

Angelo Spandrio, Secretary Board of Directors

# Exhibit 1

# Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2020-2021 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
010-0-070-110	Single Family Detached	1	638,154	1	-	\$2,404.20	\$2,404.20
010-0-070-210	Single Family Detached	1	871,200	1	-	\$2,404.20	\$2,404.20
010-0-070-220	Single Family Detached	1	412,513	1	-	\$2,404.20	\$2,404.20
010-0-070-220	Single Family Detached	1	436,471	1	-	\$2,404.20	\$2,404.20
010-0-120-020	Single Family Detached	1	116,305	1	-	\$2,404.20	\$2,404.20
010-0-120-020	Single Family Detached	1	180,774	1	-	\$2,404.20	\$2,404.20
010-0-120-145	Single Family Detached	1	103,672	1	-	\$2,404.20	\$2,404.20
010-0-120-145	Single Family Detached	1	112,384	1	-	\$2,404.20	\$2,404.20
010-0-120-165	Single Family Detached	1	93,654	1	-	\$2,404.20	\$2,404.20
010-0-120-105	Single Family Detached	1	87,120	1	-	\$2,404.20	\$2,404.20
010-0-120-200	Single Family Detached	2	35,600	1	-	\$1,418.63	\$1,418.62
010-0-120-210	Single Family Detached	1	512,266	1	-	\$2,404.20	\$2,404.20
010-0-130-040	Single Family Detached	1	134,600	1	-	\$2,404.20	\$2,404.20
010-0-130-100	Single Family Detached	2	24,800	1	-	\$1,418.63	\$1,418.62
010-0-130-130	Single Family Detached	3	21,390	1	-	\$851.18	\$851.18
010-0-130-150	Single Family Detached	1	93,593	1	-	\$2,404.20	\$2,404.20
010-0-130-170	Single Family Detached	3	20,470	1	_	\$851.18	\$851.18
010-0-130-190	Single Family Detached	2	22,310	1	_	\$1,418.63	\$1,418.62
010-0-130-210	Single Family Detached	1	159,429	1	_	\$2,404.20	\$2,404.20
010-0-130-220	Single Family Detached	2	26,789	1	_	\$1,418.63	\$1,418.62
010-0-130-230	Single Family Detached	1	49,223	1	-	\$2,404.20	\$2,404.20
010-0-130-250	Single Family Detached	1	70,200	1	-	\$2,404.20	\$2,404.20
010-0-130-265	Single Family Detached	1	47,480	1	-	\$2,404.20	\$2,404.20
010-0-130-275	Single Family Detached	1	45,302	1	-	\$2,404.20	\$2,404.20
010-0-130-330	Single Family Detached	1	143,657	1	-	\$2,404.20	\$2,404.20
010-0-130-350	Single Family Detached	1	139,483	1	-	\$2,404.20	\$2,404.20
010-0-140-035	Single Family Detached	1	76,665	1	-	\$2,404.20	\$2,404.20
010-0-140-055	Single Family Detached	1	60,984	1	-	\$2,404.20	\$2,404.20
010-0-140-065	Single Family Detached	1	55,321	1	-	\$2,404.20	\$2,404.20
010-0-140-075	Single Family Detached	2	33,900	1	-	\$1,418.63	\$1,418.62
010-0-140-080	Single Family Detached	1	69,696	1	-	\$2,404.20	\$2,404.20
010-0-140-115	Single Family Detached	1	48,787	1	-	\$2,404.20	\$2,404.20
010-0-140-125	Single Family Detached	1	47,916	1	_	\$2,404.20	\$2,404.20
010-0-140-150	Single Family Detached	1	57,934	1	-	\$2,404.20	\$2,404.20
010-0-140-165	Single Family Detached	1	51,836	1	-	\$2,404.20	\$2,404.20
010-0-140-170	Single Family Detached	1	57,934	1	-	\$2,404.20	\$2,404.20
010-0-140-180	Single Family Detached	3	19,800	1	_	\$851.18	\$851.18
010-0-140-235	Single Family Detached	1	73,484	1	-	\$2,404.20	\$2,404.20
010-0-140-245	Single Family Detached	1	73,718	1	-	\$2,404.20	\$2,404.20
010-0-150-050	Single Family Detached	2	36,150	1	-	\$1,418.63	\$1,418.62
010-0-150-060	Single Family Detached	2	31,500	1	-	\$1,418.63	\$1,418.62
010-0-150-090	Single Family Detached	2	24,256	1	-	\$1,418.63	\$1,418.62
010-0-150-110	Single Family Detached	2	22,500	1	-	\$1,418.63	\$1,418.62
010-0-150-120	Single Family Detached	3	20,200	1	-	\$851.18	\$851.18
010-0-150-120	Single Family Detached	1	245,543	1	-	\$2,404.20	\$2,404.20
010-0-150-190	Single Family Detached	1	225,316	1	-	\$2,404.20	\$2,404.20
	Single Funnty Demened	1	220,010	1		<i>_</i> , 101.20	<i>q2</i> , 101.20

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
010-0-150-200	Single Family Detached	2	23,124	1	-	\$1,418.63	\$1,418.62
010-0-150-230	Single Family Detached	1	43,610	1	-	\$2,404.20	\$2,404.20
010-0-150-240	Single Family Detached	1	235,191	1	-	\$2,404.20	\$2,404.20
010-0-160-020	Single Family Detached	3	21,780	1	-	\$851.18	\$851.18
010-0-160-040	Single Family Detached	1	227,383	1	-	\$2,404.20	\$2,404.20
010-0-160-050	Single Family Detached	1	71,874	1	-	\$2,404.20	\$2,404.20
010-0-160-060	Single Family Detached	1	130,244	1	-	\$2,404.20	\$2,404.20
010-0-160-080	Single Family Detached	1	43,995	1	-	\$2,404.20	\$2,404.20
010-0-160-120	Single Family Detached	2	23,800	1	-	\$1,418.63	\$1,418.62
010-0-160-130	Single Family Detached	2	33,015	1	-	\$1,418.63	\$1,418.62
010-0-160-160	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
010-0-201-010	Single Family Detached	1	229,126	1	-	\$2,404.20	\$2,404.20
010-0-201-060	Single Family Detached	1	48,787	1	-	\$2,404.20	\$2,404.20
010-0-201-070	Single Family Detached	1	50,094	1	-	\$2,404.20	\$2,404.20
010-0-201-080	Single Family Detached	2	38,000	1	-	\$1,418.63	\$1,418.62
010-0-201-090	Single Family Detached	2	25,600	1	-	\$1,418.63	\$1,418.62
010-0-201-100	Single Family Detached	2	32,435	1	-	\$1,418.63	\$1,418.62
010-0-201-110	Single Family Detached	2	27,817	1	-	\$1,418.63	\$1,418.62
010-0-201-120	Single Family Detached	2	24,600	1	-	\$1,418.63	\$1,418.62
010-0-201-130	Single Family Detached	2	31,800	1	-	\$1,418.63	\$1,418.62
010-0-201-140	Single Family Detached	2	34,400	1	-	\$1,418.63	\$1,418.62
010-0-201-150	Single Family Detached	2	27,484	1	-	\$1,418.63	\$1,418.62
010-0-201-160	Single Family Detached	2	37,200	1	-	\$1,418.63	\$1,418.62
010-0-201-170	Single Family Detached	1	66,211	1	-	\$2,404.20	\$2,404.20
010-0-201-180	Single Family Detached	1	81,892	1	-	\$2,404.20	\$2,404.20
010-0-201-190	Single Family Detached	2	36,824	1	-	\$1,418.63	\$1,418.62
010-0-201-200	Single Family Detached	1	46,173	1	-	\$2,404.20	\$2,404.20
010-0-201-210	Single Family Detached	2	42,776	1	-	\$1,418.63	\$1,418.62
010-0-201-240	Single Family Detached	2	40,800	1	-	\$1,418.63	\$1,418.62
010-0-201-250	Single Family Detached	1	43,995	1	-	\$2,404.20	\$2,404.20
010-0-201-260	Single Family Detached	1	48,351	1	-	\$2,404.20	\$2,404.20
010-0-201-290	Single Family Detached	1	80,586	1	-	\$2,404.20	\$2,404.20
010-0-201-300	Single Family Detached	1	46,789	1	-	\$2,404.20	\$2,404.20
010-0-201-350	Single Family Detached	1	74,358	1	-	\$2,404.20	\$2,404.20
010-0-210-040	Single Family Detached	1	44,431	1	-	\$2,404.20	\$2,404.20
010-0-210-070	Single Family Detached	2	38,350	1	-	\$1,418.63	\$1,418.62
010-0-210-120	Single Family Detached	1	59,241	1	-	\$2,404.20	\$2,404.20
010-0-210-150	Single Family Detached	1	51,836	1	-	\$2,404.20	\$2,404.20
010-0-210-170	Single Family Detached	1	48,352	1	-	\$2,404.20	\$2,404.20
010-0-210-200	Single Family Detached	1	53,709	1	-	\$2,404.20	\$2,404.20
010-0-210-240	Single Family Detached	2	38,333	1	-	\$1,418.63	\$1,418.62
010-0-220-020	Single Family Detached	1	57,063	1	-	\$2,404.20	\$2,404.20
010-0-220-030	Single Family Detached	2	39,800	1	-	\$1,418.63	\$1,418.62
010-0-220-050	Single Family Detached	1	50,094	1	-	\$2,404.20	\$2,404.20
010-0-220-060	Single Family Detached	1	49,658	1	-	\$2,404.20	\$2,404.20
010-0-220-070	Single Family Detached	1	51,400	1	-	\$2,404.20	\$2,404.20

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
010-0-220-080	Single Family Detached	1	54,014	1		\$2,404.20	\$2,404.20
010-0-220-080	Single Family Detached Single Family Detached	1	41,700	1 1	-	\$2,404.20 \$1,418.63	\$2,404.20 \$1,418.62
010-0-220-090	Single Family Detached	2	34,500	1	-		\$1,418.62
010-0-220-120	Single Family Detached	2	20,280	1	-	\$1,418.63 \$851.18	\$1,418.02
010-0-231-050	Single Family Detached	3	20,280 19,950	1	-	\$851.18 \$851.18	\$851.18 \$851.18
010-0-231-000	Single Family Detached	3	20,612	1		\$851.18 \$851.18	\$851.18 \$851.18
010-0-231-070	Single Family Detached	3	20,012	1	-	\$851.18 \$851.18	\$851.18 \$851.18
	e ,	3	20,731 20,592	1	-	\$851.18 \$851.18	\$851.18 \$851.18
010-0-232-030	Single Family Detached	3			-		
010-0-232-040	Single Family Detached	3	19,718	1	-	\$851.18 \$851.18	\$851.18
010-0-232-050	Single Family Detached	3	20,034	1	-	\$851.18	\$851.18
010-0-232-060	Single Family Detached	3	20,280	1	-	\$851.18 \$2,404.20	\$851.18 \$2.404.20
019-0-020-050	Single Family Detached	1	93,418	1	-	\$2,404.20 \$2,404.20	\$2,404.20 \$2,404.20
019-0-020-140	Single Family Detached	1	60,984	1	-	\$2,404.20 \$2,404.20	\$2,404.20 \$2,404.20
019-0-020-150	Single Family Detached	1	109,771	1	-	\$2,404.20	\$2,404.20
019-0-020-300	Single Family Detached	1	236,530	1	-	\$2,404.20	\$2,404.20
019-0-020-310	Single Family Detached	1	438,213	1	-	\$2,404.20	\$2,404.20
019-0-020-350	Single Family Detached	1	234,788	1	-	\$2,404.20	\$2,404.20
019-0-020-370	Single Family Detached	1	304,786	1	-	\$2,404.20	\$2,404.20
019-0-020-390	Single Family Detached	1	46,609	1	-	\$2,404.20	\$2,404.20
019-0-020-410	Single Family Detached	1	229,749	1	-	\$2,404.20	\$2,404.20
019-0-030-040	Single Family Detached	1	58,806	1	-	\$2,404.20	\$2,404.20
019-0-030-050	Single Family Detached	1	53,143	1	-	\$2,404.20	\$2,404.20
019-0-030-060	Single Family Detached	1	58,806	1	-	\$2,404.20	\$2,404.20
019-0-030-070	Single Family Detached	1	48,351	1	-	\$2,404.20	\$2,404.20
019-0-030-080	Single Family Detached	1	51,836	1	-	\$2,404.20	\$2,404.20
019-0-030-120	Single Family Detached	1	46,609	1	-	\$2,404.20	\$2,404.20
019-0-030-130	Single Family Detached	1	45,738	1	-	\$2,404.20	\$2,404.20
019-0-030-300	Single Family Detached	1	60,548	1	-	\$2,404.20	\$2,404.20
019-0-030-310	Single Family Detached	1	46,609	1	-	\$2,404.20	\$2,404.20
019-0-030-320	Single Family Detached	1	79,279	1	-	\$2,404.20	\$2,404.20
019-0-030-330	Single Family Detached	1	57,063	1	-	\$2,404.20	\$2,404.20
019-0-041-020	Single Family Detached	1	145,054	1	-	\$2,404.20	\$2,404.20
019-0-041-030	Single Family Detached	1	43,995	1	-	\$2,404.20	\$2,404.20
019-0-042-020	Single Family Detached	1	72,745	1	-	\$2,404.20	\$2,404.20
019-0-042-050	Single Family Detached	1	80,150	1	-	\$2,404.20	\$2,404.20
019-0-042-060	Single Family Detached	1	164,962	1	-	\$2,404.20	\$2,404.20
019-0-042-070	Single Family Detached	1	110,686	1	-	\$2,404.20	\$2,404.20
019-0-051-010	Single Family Detached	2	40,994	1	-	\$1,418.63	\$1,418.62
019-0-051-020	Single Family Detached	2	41,560	1	-	\$1,418.63	\$1,418.62
019-0-051-030	Single Family Detached	1	46,173	1	-	\$2,404.20	\$2,404.20
019-0-051-040	Single Family Detached	2	41,200	1	-	\$1,418.63	\$1,418.62
019-0-051-050	Single Family Detached	1	48,351	1	-	\$2,404.20	\$2,404.20
019-0-051-060	Single Family Detached	1	43,995	1	-	\$2,404.20	\$2,404.20
019-0-051-070	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
019-0-051-080	Single Family Detached	1	48,787	1	-	\$2,404.20	\$2,404.20
019-0-051-090	Single Family Detached	2	38,100	1	-	\$1,418.63	\$1,418.62

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
019-0-051-100	Single Family Detached	2	42,900	1	_	\$1,418.63	\$1,418.62
019-0-051-110	Single Family Detached	2	41,200	1	-	\$1,418.63	\$1,418.62
019-0-051-120	Single Family Detached	2	39,784	1	-	\$1,418.63	\$1,418.62
019-0-051-130	Single Family Detached	2	39,784	1	-	\$1,418.63	\$1,418.62
019-0-051-140	Single Family Detached	2	41,600	1	-	\$1,418.63	\$1,418.62
019-0-051-150	Single Family Detached	1	48,787	1	-	\$2,404.20	\$2,404.20
019-0-052-010	Single Family Detached	2	37,428	1	-	\$1,418.63	\$1,418.62
019-0-052-020	Single Family Detached	2	39,600	1	-	\$1,418.63	\$1,418.62
019-0-052-030	Single Family Detached	2	39,600	1	-	\$1,418.63	\$1,418.62
019-0-052-040	Single Family Detached	2	39,600	1	-	\$1,418.63	\$1,418.62
019-0-052-050	Single Family Detached	2	41,241	1	-	\$1,418.63	\$1,418.62
019-0-052-060	Single Family Detached	2	39,433	1	-	\$1,418.63	\$1,418.62
019-0-061-010	Single Family Detached	1	149,410	1	-	\$2,404.20	\$2,404.20
019-0-061-030	Single Family Detached	1	47,044	1	-	\$2,404.20	\$2,404.20
019-0-061-040	Single Family Detached	1	52,272	1	-	\$2,404.20	\$2,404.20
019-0-061-070	Single Family Detached	1	90,169	1	-	\$2,404.20	\$2,404.20
019-0-061-080	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
019-0-061-090	Single Family Detached	1	58,663	1	-	\$2,404.20	\$2,404.20
019-0-061-100	Single Family Detached	1	53,613	1	-	\$2,404.20	\$2,404.20
019-0-061-110	Single Family Detached	1	201,660	1	-	\$2,404.20	\$2,404.20
019-0-062-010	Single Family Detached	1	164,221	1	-	\$2,404.20	\$2,404.20
019-0-062-030	Single Family Detached	1	48,351	1	-	\$2,404.20	\$2,404.20
019-0-062-040	Single Family Detached	1	49,658	1	-	\$2,404.20	\$2,404.20
019-0-062-050	Single Family Detached	1	47,480	1	-	\$2,404.20	\$2,404.20
019-0-062-070	Single Family Detached	1	47,044	1	-	\$2,404.20	\$2,404.20
019-0-062-080	Single Family Detached	1	44,431	1	-	\$2,404.20	\$2,404.20
019-0-062-110	Single Family Detached	1	47,044	1	-	\$2,404.20	\$2,404.20
019-0-062-120	Single Family Detached	1	46,609	1	-	\$2,404.20	\$2,404.20
019-0-062-130	Single Family Detached	2	43,168	1	-	\$1,418.63	\$1,418.62
019-0-062-160	Single Family Detached	1	199,504	1	-	\$2,404.20	\$2,404.20
019-0-070-010	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
019-0-070-020	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
019-0-070-030	Single Family Detached	1	51,400	1	-	\$2,404.20	\$2,404.20
019-0-070-050	Single Family Detached	2	40,358	1	-	\$1,418.63	\$1,418.62
019-0-070-060	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
019-0-070-070	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
019-0-070-080	Single Family Detached	1	57,934	1	-	\$2,404.20	\$2,404.20
019-0-070-110	Single Family Detached	2	42,133	1	-	\$1,418.63	\$1,418.62
019-0-070-120	Single Family Detached	2	39,250	1	-	\$1,418.63	\$1,418.62
019-0-070-130	Single Family Detached	1	65,340	1	-	\$2,404.20	\$2,404.20
019-0-070-170	Single Family Detached	2	43,200	1	-	\$1,418.63	\$1,418.62
019-0-070-180	Single Family Detached	1	47,916	1	-	\$2,404.20	\$2,404.20
019-0-070-190	Single Family Detached	1	60,548	1	-	\$2,404.20	\$2,404.20
019-0-070-200	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
019-0-070-210	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
019-0-070-220	Single Family Detached	2	43,430	1	-	\$1,418.63	\$1,418.62

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
019-0-070-230	Single Family Detached	1	51,400	1	-	\$2,404.20	\$2,404.20
019-0-081-010	Single Family Detached	1	46,609	1	-	\$2,404.20	\$2,404.20
019-0-081-020	Single Family Detached	1	48,351	1	-	\$2,404.20	\$2,404.20
019-0-081-020	Single Family Detached	1	47,916	1	-	\$2,404.20	\$2,404.20
019-0-081-040	Single Family Detached	1	47,480	1	-	\$2,404.20	\$2,404.20
019-0-081-040	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
019-0-082-010	Single Family Detached	1	47,916	1	-	\$2,404.20	\$2,404.20
019-0-082-020	Single Family Detached	1	208,216	1	-	\$2,404.20	\$2,404.20
019-0-082-020	Single Family Detached		43,995	1	-	\$2,404.20	\$2,404.20
019-0-082-120	Single Family Detached	1	43,995	1	-	\$2,404.20 \$2,404.20	\$2,404.20 \$2,404.20
019-0-082-130	Single Family Detached	1	43,993 44,866	1		\$2,404.20 \$2,404.20	\$2,404.20 \$2,404.20
019-0-082-140	Single Family Detached	1	44,800 44,866	1	-	\$2,404.20 \$2,404.20	\$2,404.20 \$2,404.20
019-0-082-150		1	44,800 62,290	1		-	\$2,404.20 \$2,404.20
019-0-082-180	Single Family Detached	1			-	\$2,404.20 \$2,404.20	
	Single Family Detached	1	60,984	1	-	\$2,404.20 \$2,404.20	\$2,404.20
019-0-082-180 019-0-092-010	Single Family Detached Commercial Property	1	47,916	1	-	\$2,404.20	\$2,404.20
	1 2	7	-	-	1,056	\$367.59 \$2,404.20	\$367.58 \$2,404.20
019-0-092-030	Single Family Detached	1	74,923	1	-	\$2,404.20	\$2,404.20
019-0-092-040	Single Family Detached	1	51,836	1	-	\$2,404.20	\$2,404.20
019-0-092-050	Single Family Detached	2	39,800	1	-	\$1,418.63	\$1,418.62
019-0-092-060	Single Family Detached	1	45,738	1	-	\$2,404.20	\$2,404.20
019-0-092-070	Single Family Detached	2	42,000	1	-	\$1,418.63	\$1,418.62
019-0-092-120	Single Family Detached	2	38,000	1	-	\$1,418.63	\$1,418.62
019-0-092-140	Single Family Detached	2	33,200	1	-	\$1,418.63	\$1,418.62
019-0-092-150	Single Family Detached	2	35,600	1	-	\$1,418.63	\$1,418.62
019-0-092-160	Single Family Detached	2	32,000	1	-	\$1,418.63	\$1,418.62
019-0-092-170	Single Family Detached	2	37,600	1	-	\$1,418.63	\$1,418.62
019-0-092-190	Commercial Property	7		-	5,240	\$1,824.04	\$1,824.04
019-0-092-210	Single Family Detached	2	36,000	1	-	\$1,418.63	\$1,418.62
019-0-092-230	Single Family Detached	2	24,788	1	-	\$1,418.63	\$1,418.62
019-0-092-240	Single Family Detached	2	39,445	1	-	\$1,418.63	\$1,418.62
019-0-093-010	Single Family Detached	1	44,431	1	-	\$2,404.20	\$2,404.20
019-0-093-030	Single Family Detached	1	52,272	1	-	\$2,404.20	\$2,404.20
019-0-093-040	Single Family Detached	1	49,658	1	-	\$2,404.20	\$2,404.20
019-0-093-050	Single Family Detached	1	44,533	1	-	\$2,404.20	\$2,404.20
019-0-094-010	Single Family Detached	2	35,000	1	-	\$1,418.63	\$1,418.62
019-0-094-020	Single Family Detached	2	41,333	1	-	\$1,418.63	\$1,418.62
019-0-094-030	Single Family Detached	1	59,241	1	-	\$2,404.20	\$2,404.20
019-0-094-040	Single Family Detached	1	55,756	1	-	\$2,404.20	\$2,404.20
019-0-094-050	Single Family Detached	1	59,677	1	-	\$2,404.20	\$2,404.20
019-0-094-060	Single Family Detached	1	50,094	1	-	\$2,404.20	\$2,404.20
019-0-094-070	Single Family Detached	1	59,677	1	-	\$2,404.20	\$2,404.20
019-0-094-080	Single Family Detached	1	62,290	1	-	\$2,404.20	\$2,404.20
019-0-094-090	Single Family Detached	1	48,787	1	-	\$2,404.20	\$2,404.20
019-0-100-260	Single Family Detached	1	44,431	1	-	\$2,404.20	\$2,404.20
019-0-100-270	Single Family Detached	1	47,480	1	-	\$2,404.20	\$2,404.20
019-0-100-280	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
019-0-110-260	Commercial Property	7	-	_	11,445	\$3,984.00	\$3,984.00
019-0-110-335	Commercial Property	, 7	-	-	25,301	\$8,807.28	\$8,807.28
019-0-110-420	Commercial Property	7	_	_	3,538	\$1,231.58	\$1,231.58
019-0-110-470	Commercial Property	7	-	_	16,317	\$5,679.95	\$5,679.94
019-0-110-485	Commercial Property	7	-	_	17,992	\$6,263.02	\$6,263.02
019-0-180-010	Single Family Detached	2	29,732	1		\$1,418.63	\$1,418.62
019-0-180-020	Single Family Detached	1	55,756	1	-	\$2,404.20	\$2,404.20
019-0-180-030	Single Family Detached	3	19,166	1	-	\$851.18	\$851.18
019-0-180-040	Single Family Detached	3	16,552	1	-	\$851.18	\$851.18
019-0-180-060	Commercial Property	7		-	4,660	\$1,622.15	\$1,622.14
019-0-180-070	Commercial Property	, 7	-	-	1,056	\$367.59	\$367.58
019-0-180-080	Commercial Property	, 7	-	-	35,576	\$12,384.01	\$12,384.00
019-0-190-010	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-020	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-030	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-040	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-050	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-060	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-070	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-080	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-090	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-100	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-110	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-120	Condominium	5	-	1	-	\$467.52	\$467.52
019-0-190-130	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-140	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-150	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-160	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-170	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-180	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-190	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-200	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-190-210	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-010	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-020	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-030	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-040	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-050	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-060	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-070	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-080	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-090	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-100	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-110	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-120	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-130	Multifamily Attached	6	-	1	-	\$400.89	\$400.88

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
019-0-200-140	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-150	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-160	Multifamily Attached	6	-	1	_	\$400.89	\$400.88
019-0-200-170	Multifamily Attached	6	-	1	_	\$400.89	\$400.88
019-0-200-180	Multifamily Attached	6	-	1	_	\$400.89	\$400.88
019-0-200-190	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-200	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-200-210	Multifamily Attached	6	-	1	_	\$400.89	\$400.88
019-0-200-220	Multifamily Attached	6	-	1	_	\$400.89	\$400.88
019-0-200-230	Multifamily Attached	6	-	1	_	\$400.89	\$400.88
019-0-200-240	Multifamily Attached	6	-	1	_	\$400.89	\$400.88
019-0-200-250	Multifamily Attached	6	-	1	_	\$400.89	\$400.88
019-0-200-260	Multifamily Attached	6	-	1	_	\$400.89	\$400.88
019-0-210-010	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-210-020	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-210-020	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-210-030	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-210-040	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-210-050	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-210-000	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-210-070	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-210-080	Multifamily Attached	6	-	1	-	\$400.89	\$400.88
019-0-210-090	Multifamily Attached		-	1	-	\$400.89	\$400.88
019-0-210-110	Multifamily Attached	6				\$400.89 \$400.89	\$400.88 \$400.88
019-0-210-110	Multifamily Attached	6	-	1	-	\$400.89 \$400.89	\$400.88 \$400.88
019-0-210-120	Multifamily Attached	6	-	1	-	\$400.89 \$400.89	\$400.88 \$400.88
019-0-210-130	Multifamily Attached	6	-	1	-	\$400.89 \$400.89	\$400.88 \$400.88
019-0-210-140	Multifamily Attached	6	-	1	-	\$400.89 \$400.89	\$400.88 \$400.88
019-0-210-150	Multifamily Attached	6	-	1	-	\$400.89 \$400.89	\$400.88 \$400.88
019-0-210-100	•	6	-	1		\$400.89 \$400.89	
019-0-210-170	Multifamily Attached	6	-		-		\$400.88 \$400.88
	Multifamily Attached Multifamily Attached	6	-	1	-	\$400.89 \$400.80	\$400.88 \$400.88
019-0-210-190	5	6	-	1	-	\$400.89 \$400.80	\$400.88 \$400.88
019-0-210-200	Multifamily Attached	6	-	1	-	\$400.89 \$400.80	\$400.88
019-0-210-210	Multifamily Attached	6	-	1	-	\$400.89 \$400.80	\$400.88
019-0-210-220	Multifamily Attached	6	42 005	1	-	\$400.89 \$2,404,20	\$400.88
020-0-010-035	Single Family Detached	1	43,995	1	-	\$2,404.20 \$2,404.20	\$2,404.20
020-0-010-100	Single Family Detached	1	121,532	1	-	\$2,404.20 \$2,404.20	\$2,404.20 \$2,404.20
020-0-010-110	Single Family Detached	1	44,431	1	-	\$2,404.20	\$2,404.20
020-0-010-140	Single Family Detached	2	42,863	1	-	\$1,418.63	\$1,418.62
020-0-010-310	Single Family Detached	2	37,430	1	-	\$1,418.63	\$1,418.62
020-0-010-320	Single Family Detached	2	36,872	1	-	\$1,418.63 \$1,418.62	\$1,418.62 \$1,418.62
020-0-010-330	Single Family Detached	2	36,930	1	-	\$1,418.63 \$1,418.62	\$1,418.62 \$1,418.62
020-0-010-340	Single Family Detached	2	40,660	1	-	\$1,418.63 \$2,404.20	\$1,418.62 \$2,404.20
020-0-010-350	Single Family Detached	1	44,862	1	-	\$2,404.20 \$1,418.62	\$2,404.20
020-0-010-360	Single Family Detached	2	43,200	1	-	\$1,418.63	\$1,418.62
020-0-010-370	Single Family Detached	2	39,700	1	-	\$1,418.63	\$1,418.62

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
020-0-010-380	Single Family Detached	2	40,885	1	_	\$1,418.63	\$1,418.62
020-0-010-390	Single Family Detached	2	39,039	1	-	\$1,418.63	\$1,418.62
020-0-010-390	Single Family Detached	2	37,974	1	_	\$1,418.63	\$1,418.62
020-0-010-400	Single Family Detached	1	174,937	1	-	\$2,404.20	\$2,404.20
020-0-010-430	Single Family Detached	1	197,326	1	_	\$2,404.20	\$2,404.20
020-0-010-440	Single Family Detached	1	189,050	1	-	\$2,404.20	\$2,404.20
020-0-010-450	Single Family Detached	1	188,614	1	-	\$2,404.20	\$2,404.20
020-0-010-470	Single Family Detached	1	52,269	1	-	\$2,404.20	\$2,404.20
020-0-010-480	Single Family Detached	1	116,741	1	-	\$2,404.20	\$2,404.20
020-0-021-020	Single Family Detached	3	17,314	1	-	\$851.18	\$851.18
020-0-021-020	Single Family Detached	1	54,014	1	-	\$2,404.20	\$2,404.20
020-0-021-050	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-021-060	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-021-070	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-021-080	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-021-110	Single Family Detached	1	60,548	1	-	\$2,404.20	\$2,404.20
020-0-021-120	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-021-120	Single Family Detached	2	36,853	1	-	\$1,418.63	\$1,418.62
020-0-021-150	Single Family Detached	1	85,409	1	-	\$2,404.20	\$2,404.20
020-0-021-205	Single Family Detached	1	44,350	1	-	\$2,404.20	\$2,404.20
020-0-021-210	Single Family Detached	1	74,568	1	-	\$2,404.20	\$2,404.20
020-0-022-010	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-022-020	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-022-030	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-022-050	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-030-010	Single Family Detached	1	50,965	1	-	\$2,404.20	\$2,404.20
020-0-030-030	Single Family Detached	1	72,745	1	-	\$2,404.20	\$2,404.20
020-0-030-050	Single Family Detached	1	96,465	1	-	\$2,404.20	\$2,404.20
020-0-030-060	Single Family Detached	1	43,726	1	-	\$2,404.20	\$2,404.20
020-0-030-070	Single Family Detached	1	79,364	3	-	\$7,212.60	\$7,212.60
020-0-030-080	Single Family Detached	2	23,475	3	-	\$4,255.89	\$4,255.86
020-0-040-030	Single Family Detached	1	51,400	1	-	\$2,404.20	\$2,404.20
020-0-040-040	Single Family Detached	2	25,078	1	-	\$1,418.63	\$1,418.62
020-0-040-050	Single Family Detached	2	26,630	1	-	\$1,418.63	\$1,418.62
020-0-040-080	Single Family Detached	1	60,112	1	-	\$2,404.20	\$2,404.20
020-0-040-150	Single Family Detached	3	17,550	1	-	\$851.18	\$851.18
020-0-040-160	Single Family Detached	1	104,108	1	-	\$2,404.20	\$2,404.20
020-0-052-010	Single Family Detached	1	52,707	1	-	\$2,404.20	\$2,404.20
020-0-052-020	Single Family Detached	1	51,836	1	-	\$2,404.20	\$2,404.20
020-0-052-040	Single Family Detached	2	32,000	1	-	\$1,418.63	\$1,418.62
020-0-052-050	Single Family Detached	2	34,575	1	-	\$1,418.63	\$1,418.62
020-0-052-060	Single Family Detached	1	53,578	1	-	\$2,404.20	\$2,404.20
020-0-052-070	Single Family Detached	2	35,150	1	-	\$1,418.63	\$1,418.62
020-0-052-080	Single Family Detached	1	43,585	1	-	\$2,404.20	\$2,404.20
020-0-052-090	Single Family Detached	1	45,028	1	-	\$2,404.20	\$2,404.20
020-0-053-010	Single Family Detached	1	46,609	1	-	\$2,404.20	\$2,404.20

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
020-0-053-020	Single Family Detached	2	37,400	1	-	\$1,418.63	\$1,418.62
020-0-053-030	Single Family Detached	1	47,480	1	_	\$2,404.20	\$2,404.20
020-0-053-060	Single Family Detached	1	48,351	1	-	\$2,404.20	\$2,404.20
020-0-061-030	Single Family Detached	1	50,965	1	-	\$2,404.20	\$2,404.20
020-0-061-040	Single Family Detached	2	42,250	1	-	\$1,418.63	\$1,418.62
020-0-061-050	Single Family Detached	2	39,100	1	-	\$1,418.63	\$1,418.62
020-0-061-140	Single Family Detached	1	50,094	1	-	\$2,404.20	\$2,404.20
020-0-061-150	Single Family Detached	2	34,700	1	-	\$1,418.63	\$1,418.62
020-0-061-160	Single Family Detached	2	42,070	1	_	\$1,418.63	\$1,418.62
020-0-061-170	Single Family Detached	1	47,480	1	-	\$2,404.20	\$2,404.20
020-0-061-180	Single Family Detached	1	46,609	1	-	\$2,404.20	\$2,404.20
020-0-062-010	Single Family Detached	1	58,806	1	-	\$2,404.20	\$2,404.20
020-0-062-020	Single Family Detached	1	71,874	1	-	\$2,404.20	\$2,404.20
020-0-062-030	Single Family Detached	1	63,162	1	-	\$2,404.20	\$2,404.20
020-0-062-040	Single Family Detached	2	35,360	1	-	\$1,418.63	\$1,418.62
020-0-062-060	Single Family Detached	1	46,173	1	-	\$2,404.20	\$2,404.20
020-0-062-070	Single Family Detached	1	76,230	1	-	\$2,404.20	\$2,404.20
020-0-071-120	Multifamily Attached	6	-	2	-	\$801.78	\$801.76
020-0-071-130	Single Family Detached	4	7,000	1	-	\$551.37	\$551.36
020-0-071-160	Single Family Detached	3	15,654	1	-	\$851.18	\$851.18
020-0-071-200	Single Family Detached	4	8,325	1	_	\$551.37	\$551.36
020-0-071-210	Single Family Detached	3	16,650	1	-	\$851.18	\$851.18
020-0-071-220	Single Family Detached	3	16,656	1	-	\$851.18	\$851.18
020-0-071-230	Single Family Detached	4	3,843	1	-	\$551.37	\$551.36
020-0-071-240	Single Family Detached	4	6,248	1	-	\$551.37	\$551.36
020-0-071-250	Single Family Detached	3	12,218	2	-	\$1,702.36	\$1,702.36
020-0-071-260	Single Family Detached	3	11,100	2	-	\$1,702.36	\$1,702.36
020-0-071-270	Single Family Detached	4	7,462	1	-	\$551.37	\$551.36
020-0-071-280	Single Family Detached	4	7,538	1	-	\$551.37	\$551.36
020-0-071-290	Single Family Detached	4	4,971	1	-	\$551.37	\$551.36
020-0-071-300	Single Family Detached	4	2,486	1	-	\$551.37	\$551.36
020-0-071-310	Single Family Detached	3	10,786	3	-	\$2,553.54	\$2,553.54
020-0-071-370	Multifamily Attached	6	-	24	-	\$9,621.36	\$9,621.12
020-0-071-390	Single Family Detached	4	8,358	1	-	\$551.37	\$551.36
020-0-071-400	Single Family Detached	3	18,373	1	-	\$851.18	\$851.18
020-0-071-450	Single Family Detached	4	7,528	1	-	\$551.37	\$551.36
020-0-071-460	Single Family Detached	4	7,650	1	-	\$551.37	\$551.36
020-0-071-470	Multifamily Attached	6	-	10	-	\$4,008.90	\$4,008.80
020-0-071-530	Single Family Detached	4	7,000	1	-	\$551.37	\$551.36
020-0-071-540	Single Family Detached	4	7,000	1	-	\$551.37	\$551.36
020-0-072-010	Single Family Detached	3	15,083	1	-	\$851.18	\$851.18
020-0-072-030	Single Family Detached	4	9,823	1	-	\$551.37	\$551.36
020-0-072-050	Single Family Detached	4	6,102	2	-	\$1,102.74	\$1,102.72
020-0-072-065	Condominium	5	-	1	-	\$467.52	\$467.52
020-0-072-075	Condominium	5	-	1	-	\$467.52	\$467.52
020-0-072-085	Condominium	5	-	1	-	\$467.52	\$467.52

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
020-0-072-095	Condominium	5	-	1	-	\$467.52	\$467.52
020-0-072-105	Condominium	5	-	1	-	\$467.52 \$467.52	\$467.52
020-0-072-115	Condominium	5	-	1	-	\$407.52 \$467.52	\$467.52 \$467.52
020-0-072-113	Condominium	5 5	-	1	-	\$407.52 \$467.52	\$467.52 \$467.52
020-0-072-125	Condominium	5	-	1	-	\$467.52 \$467.52	\$467.52 \$467.52
020-0-073-010	Single Family Detached		17,200	1	-	\$407.32 \$851.18	\$851.18
020-0-073-020	Single Family Detached	3	22,500	1			
020-0-073-020	Single Family Detached	2	6,566	1	-	\$1,418.63 \$551.37	\$1,418.62 \$551.36
	- ·	4			-		
020-0-073-040	Single Family Detached	3	13,171	1	-	\$851.18 \$551.27	\$851.18 \$551.26
020-0-073-050	Single Family Detached	4	6,594 7,202	1	-	\$551.37 \$551.27	\$551.36 \$551.26
020-0-073-060	Single Family Detached	4	7,392	1	-	\$551.37 \$951.19	\$551.36 \$851.18
020-0-073-070	Single Family Detached	3	10,598	1	-	\$851.18	\$851.18
020-0-073-080	Single Family Detached	3	16,712	1	-	\$851.18	\$851.18
020-0-073-090	Single Family Detached	4	3,981	1	-	\$551.37	\$551.36
020-0-073-100	Single Family Detached	3	13,193	1	-	\$851.18	\$851.18
020-0-073-110	Single Family Detached	3	13,193	2	-	\$1,702.36	\$1,702.36
020-0-073-120	Single Family Detached	4	6,187	1	-	\$551.37	\$551.36
020-0-080-180	Single Family Detached	1	608,032	1	-	\$2,404.20	\$2,404.20
020-0-080-190	Single Family Detached	1	145,926	1	-	\$2,404.20	\$2,404.20
020-0-080-200	Single Family Detached	1	60,113	1	-	\$2,404.20	\$2,404.20
020-0-080-210	Single Family Detached	1	80,586	1	-	\$2,404.20	\$2,404.20
020-0-080-225	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-080-235	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-080-245	Single Family Detached	1	43,996	1	-	\$2,404.20	\$2,404.20
020-0-080-255	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-080-265	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-080-275	Single Family Detached	1	50,530	1	-	\$2,404.20	\$2,404.20
020-0-080-310	Single Family Detached	1	74,187	1	-	\$2,404.20	\$2,404.20
020-0-080-330	Single Family Detached	1	74,118	1	-	\$2,404.20	\$2,404.20
020-0-090-050	Single Family Detached	1	47,044	1	-	\$2,404.20	\$2,404.20
020-0-090-060	Single Family Detached	2	33,400	1	-	\$1,418.63	\$1,418.62
020-0-090-070	Single Family Detached	2	30,800	1	-	\$1,418.63	\$1,418.62
020-0-090-080	Single Family Detached	2	31,250	1	-	\$1,418.63	\$1,418.62
020-0-090-110	Single Family Detached	2	31,600	1	-	\$1,418.63	\$1,418.62
020-0-090-120	Single Family Detached	1	44,431	1	-	\$2,404.20	\$2,404.20
020-0-090-150	Single Family Detached	1	47,480	1	-	\$2,404.20	\$2,404.20
020-0-090-160	Single Family Detached	1	73,616	1	-	\$2,404.20	\$2,404.20
020-0-090-170	Single Family Detached	2	27,250	1	-	\$1,418.63	\$1,418.62
020-0-090-180	Single Family Detached	2	40,400	1	-	\$1,418.63	\$1,418.62
020-0-090-190	Single Family Detached	2	31,950	1	-	\$1,418.63	\$1,418.62
020-0-090-200	Single Family Detached	1	55,321	1	-	\$2,404.20	\$2,404.20
020-0-100-030	Single Family Detached	2	31,350	1	-	\$1,418.63	\$1,418.62
020-0-100-050	Single Family Detached	1	63,597	1	-	\$2,404.20	\$2,404.20
020-0-100-060	Single Family Detached	1	49,658	1	-	\$2,404.20	\$2,404.20
020-0-100-070	Single Family Detached	1	62,726	1	-	\$2,404.20	\$2,404.20
020-0-100-090	Single Family Detached	1	59,241	1	-	\$2,404.20	\$2,404.20

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
020-0-110-030	Single Family Detached	1	48,787	1	-	\$2,404.20	\$2,404.20
020-0-110-040	Single Family Detached	1	65,340	1	-	\$2,404.20	\$2,404.20
020-0-110-050	Single Family Detached	1	78,843	1	-	\$2,404.20	\$2,404.20
020-0-110-070	Single Family Detached	1	65,340	1	-	\$2,404.20	\$2,404.20
020-0-110-080	Single Family Detached	1	56,628	1	-	\$2,404.20	\$2,404.20
020-0-110-090	Single Family Detached	1	48,351	1	-	\$2,404.20	\$2,404.20
020-0-110-100	Single Family Detached	1	50,529	1	-	\$2,404.20	\$2,404.20
020-0-110-110	Single Family Detached	1	61,855	1	-	\$2,404.20	\$2,404.20
020-0-110-120	Single Family Detached	2	42,688	1	-	\$1,418.63	\$1,418.62
020-0-130-010	Single Family Detached	2	41,600	1	-	\$1,418.63	\$1,418.62
020-0-130-020	Single Family Detached	2	31,560	1	-	\$1,418.63	\$1,418.62
020-0-130-050	Single Family Detached	2	33,420	1	-	\$1,418.63	\$1,418.62
020-0-130-060	Single Family Detached	2	34,000	1	-	\$1,418.63	\$1,418.62
020-0-130-070	Single Family Detached	2	32,500	1	-	\$1,418.63	\$1,418.62
020-0-130-080	Single Family Detached	2	39,830	1	-	\$1,418.63	\$1,418.62
020-0-130-090	Single Family Detached	2	33,660	1	-	\$1,418.63	\$1,418.62
020-0-130-100	Single Family Detached	2	33,000	1	-	\$1,418.63	\$1,418.62
020-0-130-110	Single Family Detached	2	31,400	1	-	\$1,418.63	\$1,418.62
020-0-130-140	Single Family Detached	2	25,800	1	-	\$1,418.63	\$1,418.62
020-0-130-150	Single Family Detached	2	31,860	1	-	\$1,418.63	\$1,418.62
020-0-130-160	Multifamily Attached	6	-	2	-	\$801.78	\$801.76
020-0-141-010	Single Family Detached	2	39,450	1	-	\$1,418.63	\$1,418.62
020-0-141-020	Single Family Detached	2	26,900	1	-	\$1,418.63	\$1,418.62
020-0-141-030	Single Family Detached	2	27,950	1	-	\$1,418.63	\$1,418.62
020-0-141-040	Single Family Detached	2	33,900	1	-	\$1,418.63	\$1,418.62
020-0-141-050	Single Family Detached	2	34,480	1	-	\$1,418.63	\$1,418.62
020-0-141-060	Single Family Detached	2	40,650	1	-	\$1,418.63	\$1,418.62
020-0-141-070	Single Family Detached	2	23,800	1	-	\$1,418.63	\$1,418.62
020-0-141-080	Single Family Detached	2	22,550	1	-	\$1,418.63	\$1,418.62
020-0-141-090	Single Family Detached	2	23,800	1	-	\$1,418.63	\$1,418.62
020-0-141-100	Single Family Detached	2	26,385	1	-	\$1,418.63	\$1,418.62
020-0-142-010	Single Family Detached	2	36,850	1	-	\$1,418.63	\$1,418.62
020-0-142-020	Single Family Detached	3	19,097	1	-	\$851.18	\$851.18
020-0-142-040	Single Family Detached	2	35,850	1	-	\$1,418.63	\$1,418.62
020-0-142-050	Single Family Detached	2	31,400	1	-	\$1,418.63	\$1,418.62
020-0-142-060	Single Family Detached	2	29,350	1	-	\$1,418.63	\$1,418.62
020-0-142-070	Single Family Detached	2	27,400	1	-	\$1,418.63	\$1,418.62
020-0-142-080	Single Family Detached	2	25,312	1	-	\$1,418.63	\$1,418.62
020-0-142-090	Single Family Detached	3	16,639	1	-	\$851.18	\$851.18
020-0-142-100	Single Family Detached	2	25,750	1	-	\$1,418.63	\$1,418.62
020-0-142-110	Single Family Detached	2	25,947	1	-	\$1,418.63	\$1,418.62
020-0-170-020	Single Family Detached	2	40,075	1	-	\$1,418.63	\$1,418.62
020-0-170-050	Single Family Detached	2	34,848	1	-	\$1,418.63	\$1,418.62
020-0-181-010	Single Family Detached	2	37,050	1	-	\$1,418.63	\$1,418.62
020-0-181-020	Single Family Detached	3	12,300	1	-	\$851.18	\$851.18
020-0-181-030	Single Family Detached	3	10,867	1	-	\$851.18	\$851.18

020-0-181-040Single Family Detached318,5501-\$851.18020-0-181-050Single Family Detached316,3251-\$851.18	\$851.18 \$851.18 \$683.66 \$823.60 \$4,188.34
	\$851.18 \$683.66 \$823.60
	\$683.66 \$823.60
020-0-181-070 Commercial Property 7 1,964 \$683.67	\$823.60
020-0-181-080 Commercial Property 7 2,366 \$823.60	
020-0-181-090 Commercial Property 7 12,032 \$4,188.34	N4 I XX N4
020-0-181-110 Commercial Property 7 7,920 \$2,756.95	\$2,756.94
020-0-181-120 Multifamily Attached 6 - 6 - \$2,405.34	\$2,405.28
020-0-181-160 Commercial Property 7 8,968 \$3,121.76	\$3,121.76
020-0-191-010 Single Family Detached 1 50,094 1 - \$2,404.20	\$2,404.20
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	\$2,404.20
020-0-191-030 Single Family Detached 3 21,582 1 - \$851.18	\$851.18
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	\$1,418.62
020-0-192-010 Single Family Detached 2 27,550 1 - \$1,418.63	\$1,418.62
020-0-192-020 Single Family Detached 3 16,533 1 - \$851.18	\$851.18
020-0-192-030 Single Family Detached 3 17,050 1 - \$851.18	\$851.18
020-0-192-040 Single Family Detached 3 13,575 1 - \$851.18	\$851.18
020-0-192-060 Single Family Detached 3 12,666 1 - \$851.18	\$851.18
020-0-192-070 Single Family Detached 3 10,338 1 - \$851.18	\$851.18
020-0-192-080 Single Family Detached 4 7,859 1 - \$551.37	\$551.36
020-0-192-090 Single Family Detached 2 25,821 3 - \$4,255.89	\$4,255.86
020-0-192-120 Single Family Detached 1 62,804 1 - \$2,404.20	\$2,404.20
020-0-192-160 Single Family Detached 2 22,693 1 - \$1,418.63	\$1,418.62
020-0-201-010 Single Family Detached 4 7,085 1 - \$551.37	\$551.36
020-0-201-030 Single Family Detached 4 6,679 1 - \$551.37	\$551.36
020-0-201-040 Single Family Detached 4 5,477 1 - \$551.37	\$551.36
020-0-201-050 Single Family Detached 4 5,626 1 - \$551.37	\$551.36
020-0-201-060 Single Family Detached 4 5,696 1 - \$551.37	\$551.36
020-0-201-070 Single Family Detached 3 12,829 3 - \$2,553.54	\$2,553.54
020-0-201-090 Single Family Detached 4 6,460 1 - \$551.37	\$551.36
020-0-201-100 Single Family Detached 4 6,860 1 - \$551.37	\$551.36
020-0-201-120 Single Family Detached 4 7,115 1 - \$551.37	\$551.36
020-0-201-130 Multifamily Attached 6 - 3 - \$1,202.67	\$1,202.64
020-0-201-140 Single Family Detached 4 7,499 1 - \$551.37	\$551.36
020-0-201-150 Single Family Detached 4 7,201 1 - \$551.37	\$551.36
020-0-201-160 Single Family Detached 4 7,003 1 - \$551.37	\$551.36
020-0-201-170 Single Family Detached 4 8,036 1 - \$551.37	\$551.36
020-0-201-190 Single Family Detached 4 8,940 1 - \$551.37	\$551.36
020-0-201-200 Single Family Detached 4 8,066 1 - \$551.37	\$551.36
020-0-202-010 Single Family Detached 3 14,700 1 - \$851.18	\$851.18
020-0-202-030 Single Family Detached 3 11,250 1 - \$851.18	\$851.18
020-0-202-040 Single Family Detached 3 11,250 1 - \$851.18	\$851.18
020-0-202-050 Single Family Detached 3 11,229 1 - \$851.18	\$851.18
020-0-202-060 Single Family Detached 3 11,250 1 - \$851.18	\$851.18
020-0-202-070 Single Family Detached 3 11,241 1 - \$851.18	\$851.18
020-0-202-080 Single Family Detached 3 11,231 1 - \$851.18	\$851.18
020-0-202-090 Single Family Detached 3 11,249 1 - \$851.18	\$851.18

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
020-0-202-100	Single Family Detached	3	11,225	1	-	\$851.18	\$851.18
020-0-202-110	Single Family Detached	3	11,242	1	-	\$851.18	\$851.18
020-0-202-120	Single Family Detached	3	11,239	1	-	\$851.18	\$851.18
020-0-202-120	Single Family Detached	3	11,236	1	_	\$851.18	\$851.18
020-0-202-140	Single Family Detached	3	14,000	1	_	\$851.18	\$851.18
020-0-202-150	Single Family Detached	3	11,250	1	_	\$851.18	\$851.18
020-0-202-160	Single Family Detached	3	11,250	1	_	\$851.18	\$851.18
020-0-203-010	Single Family Detached	3	19,200	1	-	\$851.18	\$851.18
020-0-203-020	Single Family Detached	3	11,222	1	-	\$851.18	\$851.18
020-0-203-030	Single Family Detached	3	11,224	1	-	\$851.18	\$851.18
020-0-203-040	Single Family Detached	3	11,226	1	-	\$851.18	\$851.18
020-0-203-050	Single Family Detached	3	11,225	1	-	\$851.18	\$851.18
020-0-203-060	Multifamily Attached	6	-	4	-	\$1,603.56	\$1,603.52
020-0-203-070	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
020-0-203-080	Single Family Detached	3	11,250	1	_	\$851.18	\$851.18
020-0-203-090	Single Family Detached	3	11,250	1	_	\$851.18	\$851.18
020-0-203-100	Single Family Detached	3	14,100	1	-	\$851.18	\$851.18
020-0-211-010	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-211-025	Single Family Detached	2	43,200	1	-	\$1,418.63	\$1,418.62
020-0-212-010	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-212-020	Single Family Detached	1	43,560	1	_	\$2,404.20	\$2,404.20
020-0-212-030	Single Family Detached	1	43,560	1	_	\$2,404.20	\$2,404.20
020-0-213-010	Single Family Detached	1	43,560	1	_	\$2,404.20	\$2,404.20
020-0-213-020	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-213-030	Single Family Detached	2	43,200	1	-	\$1,418.63	\$1,418.62
020-0-213-040	Single Family Detached	2	43,300	1	-	\$1,418.63	\$1,418.62
020-0-213-050	Single Family Detached	2	43,200	1	-	\$1,418.63	\$1,418.62
020-0-213-060	Single Family Detached	1	43,995	1	-	\$2,404.20	\$2,404.20
020-0-213-070	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-213-080	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-213-090	Single Family Detached	2	43,300	1	-	\$1,418.63	\$1,418.62
020-0-213-100	Single Family Detached	2	43,200	1	-	\$1,418.63	\$1,418.62
020-0-214-010	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-214-020	Single Family Detached	1	43,560	1	_	\$2,404.20	\$2,404.20
020-0-214-030	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-221-010	Single Family Detached	2	41,300	1	-	\$1,418.63	\$1,418.62
020-0-221-030	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
020-0-221-040	Single Family Detached	1	43,560	1	_	\$2,404.20	\$2,404.20
020-0-221-050	Single Family Detached	1	43,560	1	_	\$2,404.20	\$2,404.20
020-0-221-060	Single Family Detached	1	43,560	1	_	\$2,404.20	\$2,404.20
020-0-221-070	Single Family Detached	1	47,916	1	_	\$2,404.20	\$2,404.20
020-0-221-080	Single Family Detached	1	49,460	1	-	\$2,404.20	\$2,404.20
020-0-222-020	Single Family Detached	2	39,100	1	-	\$1,418.63	\$1,418.62
020-0-230-015	Condominium	5	,100	1	-	\$467.52	\$467.52
020-0-230-025	Condominium	5	-	1	-	\$467.52	\$467.52
020-0-230-035	Condominium	5	-	1	-	\$467.52	\$467.52

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
020-0-230-045	Condominium	5	-	1	_	\$467.52	\$467.52
020-0-230-055	Condominium	5	-	1	-	\$467.52	\$467.52
020-0-230-065	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-230-075	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-230-085	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-230-095	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-240-015	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-240-025	Condominium	5	-	1	-	\$467.52	\$467.52
020-0-240-035	Condominium	5	-	1	-	\$467.52	\$467.52
020-0-240-045	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-240-055	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-240-065	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-250-015	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-250-025	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-250-035	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-250-045	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-250-055	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-250-065	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-250-075	Condominium	5	_	1	-	\$467.52	\$467.52
020-0-250-085	Condominium	5	_	1	-	\$467.52	\$467.52
021-0-011-050	Single Family Detached	1	90,532	1	-	\$2,404.20	\$2,404.20
021-0-011-060	Single Family Detached	1	57,499	1	-	\$2,404.20	\$2,404.20
021-0-011-070	Single Family Detached	1	96,935	1	-	\$2,404.20	\$2,404.20
021-0-011-100	Single Family Detached	3	20,134	1	-	\$851.18	\$851.18
021-0-011-110	Single Family Detached	3	19,995	1	-	\$851.18	\$851.18
021-0-011-120	Single Family Detached	2	35,980	1	-	\$1,418.63	\$1,418.62
021-0-011-130	Single Family Detached	2	30,726	1	-	\$1,418.63	\$1,418.62
021-0-011-140	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
021-0-011-150	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
021-0-011-160	Single Family Detached	1	99,752	1	-	\$2,404.20	\$2,404.20
021-0-011-170	Single Family Detached	1	51,401	1	-	\$2,404.20	\$2,404.20
021-0-011-180	Single Family Detached	1	66,211	1	-	\$2,404.20	\$2,404.20
021-0-011-190	Single Family Detached	1	78,071	1	_	\$2,404.20	\$2,404.20
021-0-011-215	Single Family Detached	1	358,687	1	-	\$2,404.20	\$2,404.20
021-0-011-225	Single Family Detached	1	87,377	1	-	\$2,404.20	\$2,404.20
021-0-011-235	Single Family Detached	1	88,131	1	-	\$2,404.20	\$2,404.20
021-0-011-240	Single Family Detached	1	68,290	1	-	\$2,404.20	\$2,404.20
021-0-031-030	Single Family Detached	4	6,000	1	-	\$551.37	\$551.36
021-0-031-040	Single Family Detached	4	6,824	1	-	\$551.37	\$551.36
021-0-031-050	Single Family Detached	4	6,544	1	-	\$551.37	\$551.36
021-0-031-070	Single Family Detached	4	4,771	1	-	\$551.37	\$551.36
021-0-031-080	Single Family Detached	4	7,772	1	-	\$551.37	\$551.36
021-0-031-090	Single Family Detached	3	14,044	2	-	\$1,702.36	\$1,702.36
021-0-031-100	Single Family Detached	3	12,694	2	-	\$1,702.36	\$1,702.36
021-0-031-110	Single Family Detached	3	11,801	1	-	\$851.18	\$851.18
021-0-031-120	Single Family Detached	3	12,101	1	-	\$851.18	\$851.18
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Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
021-0-031-130	Single Family Detached	3	11,350	1	-	\$851.18	\$851.18
021-0-031-150	Single Family Detached	3	12,290	1	-	\$851.18	\$851.18
021-0-031-160	Commercial Property	7		-	14,352	\$4,995.93	\$4,995.92
021-0-031-180	Single Family Detached	3	17,581	1		\$851.18	\$851.18
021-0-031-190	Multifamily Attached	6	-	3	-	\$1,202.67	\$1,202.64
021-0-031-200	Single Family Detached	3	13,697	1	-	\$851.18	\$851.18
021-0-032-010	Single Family Detached	3	10,516	1	_	\$851.18	\$851.18
021-0-032-020	Multifamily Attached	6	-	2	-	\$801.78	\$801.76
021-0-032-030	Single Family Detached	4	5,110	2	-	\$1,102.74	\$1,102.72
021-0-032-040	Single Family Detached	4	5,110	1	-	\$551.37	\$551.36
021-0-032-050	Single Family Detached	3	15,000	1	_	\$851.18	\$851.18
021-0-032-080	Single Family Detached	4	5,600	1	-	\$551.37	\$551.36
021-0-032-090	Single Family Detached	4	8,429	1	-	\$551.37	\$551.36
021-0-032-100	Single Family Detached	3	10,490	1	-	\$851.18	\$851.18
021-0-033-010	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-033-020	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-033-030	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-033-050	Multifamily Attached	6		21	-	\$8,418.69	\$8,418.48
021-0-034-080	Multifamily Attached	6	-	2	-	\$801.78	\$801.76
021-0-034-090	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-034-100	Single Family Detached	3	10,000	2	-	\$1,702.36	\$1,702.36
021-0-034-110	Single Family Detached	4	5,000	1	-	\$551.37	\$551.36
021-0-034-170	Commercial Property	7	-	_	6,900	\$2,401.89	\$2,401.88
021-0-034-190	Multifamily Attached	6	-	4	-	\$1,603.56	\$1,603.52
021-0-034-210	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-034-220	Multifamily Attached	6	-	4	-	\$1,603.56	\$1,603.52
021-0-034-230	Multifamily Attached	6	-	4	-	\$1,603.56	\$1,603.52
021-0-041-030	Single Family Detached	4	9,750	2	-	\$1,102.74	\$1,102.72
021-0-041-040	Single Family Detached	4	9,750	2	-	\$1,102.74	\$1,102.72
021-0-041-060	Single Family Detached	4	7,218	1	-	\$551.37	\$551.36
021-0-041-070	Single Family Detached	3	13,109	2	-	\$1,702.36	\$1,702.36
021-0-042-010	Single Family Detached	3	15,000	1	-	\$851.18	\$851.18
021-0-042-030	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-042-050	Single Family Detached	4	4,500	1	-	\$551.37	\$551.36
021-0-042-060	Single Family Detached	3	18,750	1	-	\$851.18	\$851.18
021-0-042-070	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-042-080	Single Family Detached	4	3,750	1	-	\$551.37	\$551.36
021-0-042-100	Single Family Detached	4	6,750	1	-	\$551.37	\$551.36
021-0-042-110	Single Family Detached	3	11,250	2	-	\$1,702.36	\$1,702.36
021-0-042-120	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-042-130	Single Family Detached	4	7,452	2	-	\$1,102.74	\$1,102.72
021-0-043-040	Multifamily Attached	6	-	4	-	\$1,603.56	\$1,603.52
021-0-043-050	Single Family Detached	4	7,085	1	-	\$551.37	\$551.36
021-0-043-120	Single Family Detached	3	15,013	1	-	\$851.18	\$851.18
021-0-043-140	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
021-0-043-150	Single Family Detached	4	8,100	2	-	\$1,102.74	\$1,102.72

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$\begin{array}{cccccccccccccccccccccccccccccccccccc$	021-0-043-160	Single Family Detached	4	6,711	1	-	\$551.37	\$551.36
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021-0-051-250       Multifamily Attached       6       -       4       -       \$1,603.56       \$1,603.52         021-0-051-280       Commercial Property       7       -       -       20,828       \$7,250.23       \$7,250.22         021-0-051-290       Single Family Detached       4       9,029       1       -       \$551.37       \$551.36         021-0-052-010       Multifamily Attached       6       -       3       -       \$1,202.67       \$1,202.64         021-0-052-020       Single Family Detached       3       11,564       1       -       \$851.18       \$851.18         021-0-052-040       Single Family Detached       3       14,826       1       -       \$851.18       \$851.18         021-0-052-050       Multifamily Attached       6       -       21       -       \$8418.69       \$8,418.48         021-0-052-060       Multifamily Attached       6       -       21       -       \$8,418.48         021-0-052-060       Multifamily Detached       3       10,140       1       -       \$851.18       \$851.18         021-0-061-020       Single Family Detached       3       10,140       1       -       \$851.18       \$851.18         021					2	-		
021-0-051-280         Commercial Property         7         -         -         20,828         \$7,250.23         \$7,250.22           021-0-051-290         Single Family Detached         4         9,029         1         -         \$551.37         \$551.36           021-0-052-010         Multifamily Attached         6         -         3         -         \$1,202.67         \$1,202.64           021-0-052-020         Single Family Detached         3         11,564         1         -         \$881.18         \$8851.18           021-0-052-030         Multifamily Attached         6         -         2         -         \$8801.78         \$8801.76           021-0-052-040         Single Family Detached         3         14,826         1         -         \$851.18         \$851.18           021-0-052-050         Multifamily Attached         6         -         21         -         \$84.18.69         \$84.18.48           021-0-061-010         Commercial Property         7         -         -         4,904         \$1,707.08         \$1,707.08           021-0-061-020         Single Family Detached         3         10,140         1         -         \$851.18         \$851.18           021-0-061-030         Single Famil				-		-		
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021-0-052-030Multifamily Attached6-2-\$801.78\$801.76021-0-052-040Single Family Detached314,8261-\$851.18\$851.18021-0-052-050Multifamily Attached6-4-\$1,603.56\$1,603.52021-0-052-060Multifamily Attached6-21-\$8,418.69\$8,418.48021-0-052-060Multifamily Attached6-21-\$8,418.69\$8,418.48021-0-061-010Commercial Property74,904\$1,707.08\$1,707.08021-0-061-020Single Family Detached310,1401-\$851.18\$851.18021-0-061-030Single Family Detached48,2802-\$1,102.74\$1,102.72021-0-061-040Single Family Detached318,0131-\$851.18\$851.18021-0-061-050Single Family Detached312,8821-\$551.37\$551.36021-0-062-010Single Family Detached40,8181-\$551.37\$551.36021-0-062-040Single Family Detached47,5001-\$551.37\$551.36021-0-062-050Single Family Detached47,5001-\$551.37\$551.36021-0-062-060Single Family Detached47,5001-\$551.37\$551.36021-0-062-070Commercial Property74,858\$1,69				11,564		-		
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021-0-062-070         Commercial Property         7         -         4,858         \$1,691.07         \$1,691.06           021-0-063-010         Single Family Detached         4         6,156         1         -         \$551.37         \$551.36						-		
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		1 1		6,156	1	-		
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Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
021-0-063-030	Single Family Detached	3	11,250	1	_	\$851.18	\$851.18
021-0-063-040	Single Family Detached		7,500	1	-	\$551.37	\$551.36
021-0-063-040	Single Family Detached	4	8,250	1	-	\$551.37	\$551.36
021-0-063-080	Single Family Detached	4	5,328	1	-	\$551.37	\$551.36
021-0-063-090	Single Family Detached	4 4	8,400	1	-	\$551.37	\$551.36
021-0-063-100	Single Family Detached	4	8,400 8,400	1	-	\$551.37	\$551.36
021-0-063-110	Multifamily Attached	4 6	0,400	6	-	\$2,405.34	\$2,405.28
021-0-063-120	Single Family Detached	3	10,480	1	-	\$851.18	\$851.18
021-0-064-010	Single Family Detached	4	6,145	1	-	\$551.37	\$551.36
021-0-064-020	Single Family Detached	4	6,397	1	-	\$551.37	\$551.36
021-0-064-020	Single Family Detached		6,661	1	-	\$551.37	\$551.36
021-0-064-060	Multifamily Attached	4	0,001	1 7	-	\$2,806.23	\$2,806.16
021-0-064-070	Multifamily Attached	6 6	-	9	-	\$3,608.01	\$3,607.92
021-0-064-080	Single Family Detached	2	23,524	1	-	\$1,418.63	\$1,418.62
021-0-071-010	Single Family Detached	4	5,600	2	-	\$1,102.74	\$1,102.72
021-0-071-020	Multifamily Attached	4 6	5,000	2	-	\$801.78	\$801.76
021-0-071-020	Multifamily Attached	6	-	4	-	\$1,603.56	\$1,603.52
021-0-071-040	Single Family Detached	8 4	9,450	1	-	\$1,003.30	\$1,005.52
021-0-071-040	Single Family Detached	4	6,550	1	-	\$551.37	\$551.36
021-0-071-070	Single Family Detached	4	6,550	1	-	\$551.37	\$551.36
021-0-071-090	Single Family Detached	4	13,350	1	-	\$851.18	\$851.18
021-0-071-100	Single Family Detached	4	6,502	1	-	\$551.37	\$551.36
021-0-071-110	Single Family Detached	4	10,604	1	-	\$851.18	\$851.18
021-0-071-120	Single Family Detached	4	9,046	2	-	\$1,102.74	\$1,102.72
021-0-072-010	Single Family Detached	4	9,040 6,000	1	-	\$551.37	\$551.36
021-0-072-020	Single Family Detached	4	6,000	1	-	\$551.37	\$551.36
021-0-072-020	Single Family Detached	4	0,000 7,500	1	-	\$551.37	\$551.36
021-0-072-040	Single Family Detached	3	11,250	1	-	\$851.18	\$851.18
021-0-072-040	Multifamily Attached	6	11,250	16	-	\$6,414.24	\$6,414.08
021-0-072-070	Single Family Detached	3	15,000	1	-	\$851.18	\$851.18
021-0-072-080	Commercial Property	3 7	13,000	-	2,621	\$912.37	\$912.36
021-0-072-090	Single Family Detached	4	8,500	-	2,021	\$551.37	\$551.36
021-0-072-100	Single Family Detached	4	5,625	1	-	\$551.37	\$551.36
021-0-072-110	Single Family Detached		5,625	1	-	\$551.37	\$551.36
021-0-073-020	Single Family Detached	4 4	7,500	1	-	\$551.37	\$551.36
021-0-073-030	Single Family Detached	4	7,500	1	_	\$551.37	\$551.36
021-0-073-060	Single Family Detached	4	7,500	2	_	\$1,102.74	\$1,102.72
021-0-073-070	Single Family Detached	4	7,500	1	_	\$551.37	\$551.36
021-0-073-100	Single Family Detached	4	7,000	1	-	\$551.37	\$551.36
021-0-073-110	Single Family Detached	4	7,000	1	-	\$551.37	\$551.36
021-0-073-120	Single Family Detached	4	7,000	1	_	\$551.37	\$551.36
021-0-073-120	Single Family Detached	4	5,000	1	-	\$551.37	\$551.36
021-0-073-140	Single Family Detached	4	5,000	1	-	\$551.37	\$551.36
021-0-073-140	Single Family Detached	4	6,100	1	-	\$551.37	\$551.36
021-0-073-160	Commercial Property	4 7	0,100	-	1,362	\$474.11	\$474.10
021-0-073-170	Single Family Detached	4	5,643	-	1,502	\$551.37	\$551.36
021 0-075-170	Single I anny Detached	7	5,045	1	-	ψυυ1.υ/	ψυυ1.00

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
021-0-073-180	Multifamily Attached	6	-	5	-	\$2,004.45	\$2,004.40
021-0-073-200	Single Family Detached	4	8,400	1	-	\$551.37	\$551.36
021-0-073-210	Single Family Detached	4	6,185	1	_	\$551.37	\$551.36
021-0-073-220	Single Family Detached	4	9,489	1	_	\$551.37	\$551.36
021-0-073-230	Single Family Detached	4	7,500	1	_	\$551.37	\$551.36
021-0-073-240	Single Family Detached	3	10,329	1	-	\$851.18	\$851.18
021-0-073-250	Multifamily Attached	6	-	5	-	\$2,004.45	\$2,004.40
021-0-074-020	Multifamily Attached	6	-	2	-	\$801.78	\$801.76
021-0-074-030	Multifamily Attached	6	-	6	-	\$2,405.34	\$2,405.28
021-0-074-040	Single Family Detached	3	17,500	1	-	\$851.18	\$851.18
021-0-074-050	Single Family Detached	4	7,500	2	-	\$1,102.74	\$1,102.72
021-0-074-060	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-074-070	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-074-100	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-074-110	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-074-120	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-074-130	Single Family Detached	4	6,250	1	-	\$551.37	\$551.36
021-0-074-140	Multifamily Attached	6		10	-	\$4,008.90	\$4,008.80
021-0-074-150	Single Family Detached	4	6,250	1	-	\$551.37	\$551.36
021-0-074-160	Multifamily Attached	6		4	-	\$1,603.56	\$1,603.52
021-0-074-170	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
021-0-074-180	Single Family Detached	4	9,525	1	-	\$551.37	\$551.36
021-0-074-190	Commercial Property	7	-	-	1,705	\$593.51	\$593.50
021-0-081-040	Single Family Detached	3	10,400	1	-	\$851.18	\$851.18
021-0-081-050	Commercial Property	7	-	-	1,232	\$428.86	\$428.86
021-0-081-070	Commercial Property	7	-	-	7,129	\$2,481.60	\$2,481.60
021-0-081-080	Single Family Detached	4	5,921	1	-	\$551.37	\$551.36
021-0-081-120	Single Family Detached	4	8,250	1	-	\$551.37	\$551.36
021-0-081-130	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-081-140	Single Family Detached	4	9,000	1	-	\$551.37	\$551.36
021-0-081-150	Single Family Detached	4	6,000	1	-	\$551.37	\$551.36
021-0-081-170	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-081-180	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-081-220	Single Family Detached	3	10,273	1	-	\$851.18	\$851.18
021-0-081-230	Commercial Property	7	-	-	2,112	\$735.19	\$735.18
021-0-081-240	Single Family Detached	4	8,325	1	-	\$551.37	\$551.36
021-0-081-250	Multifamily Attached	6	-	3	-	\$1,202.67	\$1,202.64
021-0-081-335	Condominium	5	-	1	-	\$467.52	\$467.52
021-0-081-345	Condominium	5	-	1	-	\$467.52	\$467.52
021-0-081-355	Condominium	5	-	1	-	\$467.52	\$467.52
021-0-081-365	Condominium	5	-	1	-	\$467.52	\$467.52
021-0-081-375	Condominium	5	-	1	-	\$467.52	\$467.52
021-0-081-385	Condominium	5	-	1	-	\$467.52	\$467.52
021-0-081-395	Condominium	5	-	1	-	\$467.52	\$467.52
021-0-081-405	Condominium	5	-	1	-	\$467.52	\$467.52
021-0-081-430	Commercial Property	7	-	-	1,863	\$648.51	\$648.50

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
021-0-082-010	Multifamily Attached	6	-	2	_	\$801.78	\$801.76
021-0-082-020	Single Family Detached	4	4,291	1	_	\$551.37	\$551.36
021-0-082-030	Commercial Property	7		-	770	\$268.04	\$268.04
021-0-082-060	Multifamily Attached	6	_	4	-	\$1,603.56	\$1,603.52
021-0-082-070	Single Family Detached	4	8,353	1	-	\$551.37	\$551.36
021-0-082-080	Single Family Detached	4	8,353	1	-	\$551.37	\$551.36
021-0-082-090	Single Family Detached	3	10,180	2	-	\$1,702.36	\$1,702.36
021-0-082-100	Single Family Detached	3	10,200	1	-	\$851.18	\$851.18
021-0-082-110	Single Family Detached	4	9,760	2	-	\$1,102.74	\$1,102.72
021-0-082-120	Single Family Detached	4	9,554	1	_	\$551.37	\$551.36
021-0-082-130	Single Family Detached	4	8,509	1	_	\$551.37	\$551.36
021-0-082-140	Commercial Property	7		-	1,685	\$586.55	\$586.54
021-0-082-150	Multifamily Attached	6	-	2	-	\$801.78	\$801.76
021-0-082-160	Multifamily Attached	6	-	16	-	\$6,414.24	\$6,414.08
021-0-091-010	Multifamily Attached	6	-	4	-	\$1,603.56	\$1,603.52
021-0-091-020	Single Family Detached	4	4,880	1	-	\$551.37	\$551.36
021-0-091-030	Single Family Detached	4	4,796	1	-	\$551.37	\$551.36
021-0-091-040	Single Family Detached	4	4,796	1	-	\$551.37	\$551.36
021-0-091-050	Single Family Detached	4	4,769	1	-	\$551.37	\$551.36
021-0-091-060	Single Family Detached	4	4,889	1	-	\$551.37	\$551.36
021-0-092-020	Single Family Detached	4	4,989	1	-	\$551.37	\$551.36
021-0-092-030	Single Family Detached	4	5,078	1	-	\$551.37	\$551.36
021-0-092-040	Single Family Detached	4	5,078	1	-	\$551.37	\$551.36
021-0-092-050	Single Family Detached	4	5,078	1	-	\$551.37	\$551.36
021-0-092-060	Single Family Detached	4	5,121	1	-	\$551.37	\$551.36
021-0-092-070	Multifamily Attached	6	- ,	2	-	\$801.78	\$801.76
021-0-092-080	Single Family Detached	3	14,280	1	-	\$851.18	\$851.18
021-0-092-090	Single Family Detached	4	6,000	1	-	\$551.37	\$551.36
021-0-092-100	Single Family Detached	3	12,000	3	-	\$2,553.54	\$2,553.54
021-0-092-110	Commercial Property	7	-	_	3,852	\$1,340.88	\$1,340.88
021-0-092-120	Single Family Detached	3	11,250	1		\$851.18	\$851.18
021-0-101-010	Single Family Detached	3	13,500	1	-	\$851.18	\$851.18
021-0-101-020	Single Family Detached	4	9,000	3	-	\$1,654.11	\$1,654.08
021-0-101-050	Single Family Detached	4	7,500	2	-	\$1,102.74	\$1,102.72
021-0-101-080	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-101-090	Multifamily Attached	6	-	2	-	\$801.78	\$801.76
021-0-101-100	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-101-110	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-101-120	Multifamily Attached	6	-	2	-	\$801.78	\$801.76
021-0-101-130	Single Family Detached	3	15,000	3	-	\$2,553.54	\$2,553.54
021-0-102-010	Multifamily Attached	6	-	7	-	\$2,806.23	\$2,806.16
021-0-102-040	Single Family Detached	3	10,000	1	-	\$851.18	\$851.18
021-0-102-060	Single Family Detached	3	13,500	1	-	\$851.18	\$851.18
021-0-102-070	Commercial Property	7	-	-	2,650	\$922.47	\$922.46
021-0-102-090	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-102-100	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
021-0-102-110	Commercial Property	7	-	_	4,710	\$1,639.55	\$1,639.54
021-0-103-020	Commercial Property	, 7	-	_	3,915	\$1,362.81	\$1,362.80
021-0-103-030	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-103-040	Commercial Property	7	-	-	1,760	\$612.66	\$612.66
021-0-104-010	Single Family Detached	4	5,000	1	-	\$551.37	\$551.36
021-0-104-020	Commercial Property	7		-	792	\$275.70	\$275.70
021-0-104-030	Commercial Property	7	-	_	1,676	\$583.42	\$583.42
021-0-104-050	Commercial Property	7	-	_	5,000	\$1,740.50	\$1,740.50
021-0-104-060	Commercial Property	7	-	_	3,500	\$1,218.35	\$1,218.34
021-0-104-080	Commercial Property	7	_	_	3,011	\$1,048.13	\$1,048.12
021-0-104-090	Commercial Property	7	-	_	11,665	\$4,060.59	\$4,060.58
021-0-105-010	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-105-040	Single Family Detached	4	7,500	1	_	\$551.37	\$551.36
021-0-105-060	Multifamily Attached	6	-	6	-	\$2,405.34	\$2,405.28
021-0-105-070	Single Family Detached	4	7,500	1	_	\$551.37	\$551.36
021-0-105-080	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
021-0-105-100	Commercial Property	7	-	-	2,467	\$858.76	\$858.76
021-0-105-110	Single Family Detached	4	5,000	1		\$551.37	\$551.36
021-0-105-120	Single Family Detached	4	4,914	1	_	\$551.37	\$551.36
021-0-106-020	Single Family Detached	4	7,500	1	_	\$551.37	\$551.36
021-0-106-100	Commercial Property	7	-	-	1,736	\$604.30	\$604.30
021-0-111-010	Single Family Detached	3	12,000	1		\$851.18	\$851.18
021-0-111-030	Commercial Property	7		-	980	\$341.14	\$341.14
021-0-111-040	Commercial Property	, 7	-	_	2,290	\$797.15	\$797.14
021-0-111-050	Commercial Property	, 7	-	_	3,566	\$1,241.32	\$1,241.32
021-0-111-070	Multifamily Attached	6	-	4	-	\$1,603.56	\$1,603.52
021-0-111-080	Single Family Detached	4	6,000	2	-	\$1,102.74	\$1,102.72
021-0-111-100	Multifamily Attached	6	-	2	-	\$801.78	\$801.76
021-0-111-110	Single Family Detached	4	9,000	1	-	\$551.37	\$551.36
021-0-112-020	Commercial Property	7	-	-	34,500	\$12,009.45	\$12,009.44
021-0-113-040	Single Family Detached	4	7,700	1	-	\$551.37	\$551.36
021-0-113-050	Single Family Detached	4	7,000	1	-	\$551.37	\$551.36
021-0-113-060	Single Family Detached	4	7,700	1	-	\$551.37	\$551.36
021-0-113-070	Single Family Detached	4	8,400	1	-	\$551.37	\$551.36
021-0-113-100	Multifamily Attached	6	-	2	-	\$801.78	\$801.76
021-0-113-110	Multifamily Attached	6	-	2	-	\$801.78	\$801.76
021-0-113-120	Commercial Property	7	-	_	4,784	\$1,665.31	\$1,665.30
021-0-113-130	Commercial Property	, 7	-	_	2,654	\$923.86	\$923.86
021-0-113-150	Commercial Property	, 7	-	-	2,212	\$770.00	\$770.00
021-0-113-180	Commercial Property	, 7	-	_	1,955	\$680.54	\$680.54
021-0-113-200	Commercial Property	, 7	-	_	3,843	\$1,337.75	\$1,337.74
021-0-113-230	Commercial Property	7	-	-	1,254	\$436.52	\$436.52
021-0-113-250	Commercial Property	7	-	-	13,926	\$4,847.64	\$4,847.64
021-0-113-260	Commercial Property	7	-	-	9,600	\$3,341.76	\$3,341.76
021-0-113-270	Commercial Property	7	-	_	1,240	\$431.64	\$431.64
021-0-113-280	Commercial Property	7	-	-	4,429	\$1,541.73	\$1,541.72

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$\begin{array}{cccccccccccccccccccccccccccccccccccc$	021-0-113-290	Commercial Property	7	-	_	3.065	\$1.066.93	\$1.066.92
021-0-113-310         Single Family Detached         4         8,739         1         -         \$551.37         \$551.36           021-0-131-010         Multifamily Attached         6         -         34         -         \$13,630.26         \$13,629.92           021-0-131-020         Single Family Detached         1         378,100         1         -         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,118         \$\$851.18         \$\$851.18         \$\$851.18         \$\$851.18         \$\$851.18         \$\$851.18         \$\$851.18         \$\$21.0-131.060         \$ingle Family Detached         2         \$\$2,8108         1         -         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2,404.20         \$\$2				-	-		-	
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021-0-131-110         Single Family Detached         1         49,658         1         -         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.20         \$2,404.2								
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021-0-140-380 Commercial Property 7 2 500 \$870.25 \$870.24		1 2	7	-	-			
	021-0-140-380	Commercial Property	7	-	-	2,500	\$870.25	\$870.24
021-0-140-400 Commercial Property 7 2,400 \$835.44 \$835.44			7	-	-			
021-0-140-410 Commercial Property 7 337 \$117.31 \$117.30	021-0-140-410		7	-	-	337	\$117.31	\$117.30
021-0-140-420 Commercial Property 7 3,800 \$1,322.78 \$1,322.78	021-0-140-420	1 2	7	-	-			\$1,322.78
021-0-140-430 Commercial Property 7 650 \$226.27 \$226.26	021-0-140-430	Commercial Property	7	-	-	650	\$226.27	\$226.26
021-0-140-440 Commercial Property 7 5,814 \$2,023.85 \$2,023.84	021-0-140-440	Commercial Property	7	-	-	5,814	\$2,023.85	\$2,023.84
021-0-140-450 Commercial Property 7 2,759 \$960.41 \$960.40	021-0-140-450	Commercial Property	7	-	-	2,759	\$960.41	\$960.40
021-0-140-460 Commercial Property 7 1,102 \$383.61 \$383.60	021-0-140-460	Commercial Property	7	-	-	1,102	\$383.61	\$383.60
021-0-140-490 Commercial Property 7 942 \$327.91 \$327.90	021-0-140-490	Commercial Property	7	-	-	942	\$327.91	\$327.90
021-0-140-500 Commercial Property 7 19,674 \$6,848.52 \$6,848.52	021-0-140-500			-	-	19,674	\$6,848.52	\$6,848.52
021-0-140-510 Commercial Property 7 7,128 \$2,481.26 \$2,481.26		1 2		-	-			
021-0-150-015 Condominium 5 - 1 - \$467.52 \$467.52				-	1			
021-0-150-025 Condominium 5 - 1 - \$467.52 \$467.52				-		-		
021-0-150-035 Condominium 5 - 1 - \$467.52 \$467.52				-		-		

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
021-0-160-015	Condominium	5	-	1	-	\$467.52	\$467.52
021-0-160-015	Condominium	5	-	1	-	\$467.52 \$467.52	\$467.52
021-0-160-025	Condominium	5	-	1	-	\$407.52 \$467.52	\$467.52 \$467.52
021-0-160-035	Condominium	5	-	1	-	\$407.52 \$467.52	\$467.52 \$467.52
022-0-012-010	Single Family Detached	5	- 186,001	1	-	\$407.32	\$407.32
022-0-012-010	Single Family Detached	1	36,400	1	-	\$2,404.20 \$1,418.63	\$2,404.20 \$1,418.62
022-0-012-020	Single Family Detached	2	36,400 86,248	1	-	\$1,418.03	\$2,404.20
022-0-012-030	Single Family Detached	1	43,108	1		\$2,404.20 \$1,418.63	\$2,404.20 \$1,418.62
022-0-012-040	- ·	2	-		-		
	Single Family Detached	1	43,560	1	-	\$2,404.20 \$2,404.20	\$2,404.20 \$2,404.20
022-0-012-060	Single Family Detached	1	75,358	1	-	\$2,404.20 \$2,404.20	\$2,404.20 \$2,404.20
022-0-012-070	Single Family Detached	1	81,021	1	-	\$2,404.20	\$2,404.20
022-0-012-080	Single Family Detached	2	42,000	1	-	\$1,418.63	\$1,418.62
022-0-012-090	Single Family Detached	1	61,419	1	-	\$2,404.20	\$2,404.20 \$2,404.20
022-0-012-100	Single Family Detached	1	179,249	1	-	\$2,404.20	\$2,404.20
022-0-012-110	Single Family Detached	1	188,436	1	-	\$2,404.20	\$2,404.20
022-0-012-120	Single Family Detached	2	25,920	1	-	\$1,418.63	\$1,418.62
022-0-012-160	Single Family Detached	2	24,300	1	-	\$1,418.63	\$1,418.62
022-0-012-170	Single Family Detached	3	17,010	1	-	\$851.18	\$851.18
022-0-012-180	Single Family Detached	3	17,010	1	-	\$851.18	\$851.18
022-0-012-230	Single Family Detached	1	116,740	3	-	\$7,212.60	\$7,212.60
022-0-012-240	Single Family Detached	3	11,200	1	-	\$851.18	\$851.18
022-0-012-250	Single Family Detached	3	10,500	1	-	\$851.18	\$851.18
022-0-012-260	Single Family Detached	3	10,500	1	-	\$851.18	\$851.18
022-0-012-270	Single Family Detached	3	10,500	1	-	\$851.18	\$851.18
022-0-012-280	Single Family Detached	3	11,795	1	-	\$851.18	\$851.18
022-0-012-290	Single Family Detached	3	11,795	1	-	\$851.18	\$851.18
022-0-012-300	Single Family Detached	3	17,715	1	-	\$851.18	\$851.18
022-0-012-320	Single Family Detached	3	13,200	1	-	\$851.18	\$851.18
022-0-012-330	Single Family Detached	3	13,198	1	-	\$851.18	\$851.18
022-0-012-340	Single Family Detached	3	14,965	1	-	\$851.18	\$851.18
022-0-012-350	Single Family Detached	3	15,068	1	-	\$851.18	\$851.18
022-0-012-360	Single Family Detached	3	14,934	1	-	\$851.18	\$851.18
022-0-012-370	Single Family Detached	3	14,232	1	-	\$851.18	\$851.18
022-0-012-380	Single Family Detached	3	16,291	1	-	\$851.18	\$851.18
022-0-012-390	Single Family Detached	2	37,276	1	-	\$1,418.63	\$1,418.62
022-0-012-400	Single Family Detached	3	18,096	1	-	\$851.18	\$851.18
022-0-012-410	Single Family Detached	2	22,195	1	-	\$1,418.63	\$1,418.62
022-0-012-420	Single Family Detached	3	21,843	1	-	\$851.18	\$851.18
022-0-012-430	Single Family Detached	2	23,895	1	-	\$1,418.63	\$1,418.62
022-0-012-440	Single Family Detached	2	25,233	1	-	\$1,418.63	\$1,418.62
022-0-012-450	Single Family Detached	2	25,237	1	-	\$1,418.63	\$1,418.62
022-0-012-460	Single Family Detached	1	101,494	1	-	\$2,404.20	\$2,404.20
022-0-012-480	Single Family Detached	1	47,044	1	-	\$2,404.20	\$2,404.20
022-0-012-490	Single Family Detached	3	16,553	1	-	\$851.18	\$851.18
022-0-012-500	Single Family Detached	1	64,468	1	-	\$2,404.20	\$2,404.20
022-0-012-525	Single Family Detached	1	53,579	1	-	\$2,404.20	\$2,404.20

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-012-535	Single Family Detached	1	63,597	1	_	\$2,404.20	\$2,404.20
022-0-012-545	Single Family Detached	1	74,052	1	_	\$2,404.20	\$2,404.20
022-0-012-555	Single Family Detached	1	236,531	1	-	\$2,404.20	\$2,404.20
022-0-012-565	Single Family Detached	1	88,862	1	-	\$2,404.20	\$2,404.20
022-0-012-575	Single Family Detached	1	46,173	1	-	\$2,404.20	\$2,404.20
022-0-012-615	Single Family Detached	1	81,783	1	-	\$2,404.20	\$2,404.20
022-0-012-625	Single Family Detached	1	63,813	1	-	\$2,404.20	\$2,404.20
022-0-012-640	Single Family Detached	1	264,942	1	-	\$2,404.20	\$2,404.20
022-0-012-665	Single Family Detached	1	89,298	1	-	\$2,404.20	\$2,404.20
022-0-013-015	Single Family Detached	1	46,174	1	-	\$2,404.20	\$2,404.20
022-0-013-025	Single Family Detached	1	43,996	1	-	\$2,404.20	\$2,404.20
022-0-013-035	Single Family Detached	1	43,996	1	-	\$2,404.20	\$2,404.20
022-0-013-045	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
022-0-013-055	Single Family Detached	3	14,972	1	-	\$851.18	\$851.18
022-0-013-060	Single Family Detached	3	12,632	1	-	\$851.18	\$851.18
022-0-013-070	Single Family Detached	3	14,912	1	-	\$851.18	\$851.18
022-0-013-080	Single Family Detached	3	13,033	1	-	\$851.18	\$851.18
022-0-013-090	Single Family Detached	3	14,512	1	-	\$851.18	\$851.18
022-0-013-105	Single Family Detached	3	15,000	1	-	\$851.18	\$851.18
022-0-013-110	Single Family Detached	3	14,906	1	-	\$851.18	\$851.18
022-0-013-120	Single Family Detached	3	15,000	1	-	\$851.18	\$851.18
022-0-013-130	Single Family Detached	3	15,128	1	-	\$851.18	\$851.18
022-0-013-140	Single Family Detached	3	15,019	1	-	\$851.18	\$851.18
022-0-013-150	Single Family Detached	3	14,506	1	-	\$851.18	\$851.18
022-0-013-160	Single Family Detached	3	14,289	1	-	\$851.18	\$851.18
022-0-021-020	Single Family Detached	1	62,290	1	_	\$2,404.20	\$2,404.20
022-0-021-030	Single Family Detached	3	12,150	1	_	\$851.18	\$851.18
022-0-021-040	Single Family Detached	4	8,100	1	-	\$551.37	\$551.36
022-0-021-050	Single Family Detached	4	8,019	1	-	\$551.37	\$551.36
022-0-021-060	Single Family Detached	4	7,919	1	-	\$551.37	\$551.36
022-0-021-070	Single Family Detached	3	12,150	1	_	\$851.18	\$851.18
022-0-021-080	Single Family Detached	3	20,250	1	_	\$851.18	\$851.18
022-0-021-090	Single Family Detached	3	12,150	1	-	\$851.18	\$851.18
022-0-022-040	Single Family Detached	3	12,555	2	-	\$1,702.36	\$1,702.36
022-0-022-060	Single Family Detached	2	23,683	1	-	\$1,418.63	\$1,418.62
022-0-022-070	Single Family Detached	3	15,531	1	-	\$851.18	\$851.18
022-0-022-090	Single Family Detached	4	7,912	1	-	\$551.37	\$551.36
022-0-022-100	Single Family Detached	4	8,100	1	-	\$551.37	\$551.36
022-0-022-110	Single Family Detached	2	26,247	1	-	\$1,418.63	\$1,418.62
022-0-023-020	Commercial Property	7	- -	-	54,703	\$19,042.11	\$19,042.10
022-0-024-020	Single Family Detached	4	6,297	2	-	\$1,102.74	\$1,102.72
022-0-024-030	Single Family Detached	4	5,585	1	-	\$551.37	\$551.36
022-0-024-050	Single Family Detached	3	12,015	1	-	\$851.18	\$851.18
022-0-024-080	Single Family Detached	3	13,737	1	-	\$851.18	\$851.18
022-0-024-090	Single Family Detached	3	13,740	1	-	\$851.18	\$851.18
022-0-024-110	Single Family Detached	2	33,450	1	-	\$1,418.63	\$1,418.62

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-024-120	Single Family Detached	2	12,605	1	_	\$851.18	\$851.18
022-0-024-120	Single Family Detached	3	5,348	1	-	\$551.37	\$551.36
022-0-024-130	Single Family Detached	4	7,859	1		\$551.37	\$551.36
022-0-024-140	Single Family Detached	4	7,839 9,686	1	-	\$551.37 \$551.37	\$551.36
022-0-025-020	Single Family Detached	4	9,080 12,010	2	-	\$1,702.36	\$331.30
022-0-025-040	Single Family Detached	3 3	12,010	1	-	\$1,702.30	\$1,702.30
022-0-025-040	Single Family Detached		12,700	1	-	\$851.18 \$851.18	\$851.18
022-0-025-060	Single Family Detached	3	9,793	1		\$551.18	\$551.36
	- ·	4	-		-		
022-0-025-100	Single Family Detached	4	7,267	1	-	\$551.37 \$551.27	\$551.36
022-0-025-110	Single Family Detached	4	8,902	1	-	\$551.37	\$551.36
022-0-025-120	Single Family Detached	4	8,902	1	-	\$551.37	\$551.36
022-0-025-150	Single Family Detached	4	8,340	1	-	\$551.37	\$551.36
022-0-025-180	Single Family Detached	3	10,594	1	-	\$851.18	\$851.18
022-0-025-190	Commercial Property	7	-	-	5,095	\$1,773.57	\$1,773.56
022-0-025-200	Multifamily Attached	6	-	2	-	\$801.78	\$801.76
022-0-030-030	Single Family Detached	1	65,340	1	-	\$2,404.20	\$2,404.20
022-0-030-070	Single Family Detached	3	10,548	1	-	\$851.18	\$851.18
022-0-030-080	Single Family Detached	3	11,250	1	-	\$851.18	\$851.18
022-0-030-090	Single Family Detached	3	11,250	1	-	\$851.18	\$851.18
022-0-030-100	Single Family Detached	3	11,250	1	-	\$851.18	\$851.18
022-0-030-110	Single Family Detached	4	9,954	1	-	\$551.37	\$551.36
022-0-030-120	Single Family Detached	3	11,700	1	-	\$851.18	\$851.18
022-0-030-130	Single Family Detached	4	7,964	1	-	\$551.37	\$551.36
022-0-030-140	Single Family Detached	4	7,800	1	-	\$551.37	\$551.36
022-0-030-150	Single Family Detached	4	9,900	1	-	\$551.37	\$551.36
022-0-030-180	Single Family Detached	3	18,757	1	-	\$851.18	\$851.18
022-0-030-190	Single Family Detached	3	19,169	1	-	\$851.18	\$851.18
022-0-030-210	Single Family Detached	4	5,800	1	-	\$551.37	\$551.36
022-0-030-220	Single Family Detached	4	5,800	1	-	\$551.37	\$551.36
022-0-030-230	Single Family Detached	4	5,800	1	-	\$551.37	\$551.36
022-0-030-240	Single Family Detached	4	6,052	1	-	\$551.37	\$551.36
022-0-030-250	Single Family Detached	4	8,046	1	-	\$551.37	\$551.36
022-0-030-260	Single Family Detached	4	8,047	1	-	\$551.37	\$551.36
022-0-030-300	Single Family Detached	1	68,824	1	-	\$2,404.20	\$2,404.20
022-0-030-340	Single Family Detached	3	12,064	1	-	\$851.18	\$851.18
022-0-030-350	Single Family Detached	3	12,064	1	-	\$851.18	\$851.18
022-0-030-360	Single Family Detached	1	59,677	1	-	\$2,404.20	\$2,404.20
022-0-030-370	Single Family Detached	2	27,362	1	-	\$1,418.63	\$1,418.62
022-0-030-380	Single Family Detached	1	60,112	1	-	\$2,404.20	\$2,404.20
022-0-030-390	Single Family Detached	2	22,053	1	-	\$1,418.63	\$1,418.62
022-0-030-400	Single Family Detached	3	12,350	1	-	\$851.18	\$851.18
022-0-030-410	Single Family Detached	3	12,196	1	-	\$851.18	\$851.18
022-0-030-460	Single Family Detached	2	40,162	1	-	\$1,418.63	\$1,418.62
022-0-030-490	Single Family Detached	3	17,300	1	-	\$851.18	\$851.18
022-0-030-500	Single Family Detached	3	21,733	1	-	\$851.18	\$851.18
022-0-030-510	Single Family Detached	3	12,014	1	-	\$851.18	\$851.18

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-030-520	Single Family Detached	3	12,986	1	-	\$851.18	\$851.18
022-0-030-535	Single Family Detached	3	12,000	1	_	\$851.18	\$851.18
022-0-030-545	Single Family Detached	3	12,065	1	-	\$851.18	\$851.18
022-0-030-555	Single Family Detached	3	12,058	1	-	\$851.18	\$851.18
022-0-030-565	Single Family Detached	3	13,774	1	-	\$851.18	\$851.18
022-0-030-575	Single Family Detached	3	12,011	1	_	\$851.18	\$851.18
022-0-030-585	Single Family Detached	3	15,340	1	_	\$851.18	\$851.18
022-0-030-595	Single Family Detached	3	12,781	1	_	\$851.18	\$851.18
022-0-030-605	Single Family Detached	3	12,024	1	_	\$851.18	\$851.18
022-0-030-615	Single Family Detached	3	12,000	1	-	\$851.18	\$851.18
022-0-030-625	Single Family Detached	3	12,026	1	-	\$851.18	\$851.18
022-0-030-635	Single Family Detached	3	14,340	1	-	\$851.18	\$851.18
022-0-030-645	Single Family Detached	3	12,002	1	-	\$851.18	\$851.18
022-0-030-655	Single Family Detached	3	15,431	1	-	\$851.18	\$851.18
022-0-030-665	Single Family Detached	3	12,152	1	-	\$851.18	\$851.18
022-0-030-675	Single Family Detached	3	18,557	1	-	\$851.18	\$851.18
022-0-040-020	Single Family Detached	2	34,857	1	-	\$1,418.63	\$1,418.62
022-0-040-030	Single Family Detached	2	34,842	1	-	\$1,418.63	\$1,418.62
022-0-040-060	Single Family Detached	2	27,847	1	-	\$1,418.63	\$1,418.62
022-0-040-070	Single Family Detached	3	20,877	1	-	\$851.18	\$851.18
022-0-040-080	Single Family Detached	2	22,612	1	_	\$1,418.63	\$1,418.62
022-0-040-100	Single Family Detached	2	31,274	1	_	\$1,418.63	\$1,418.62
022-0-040-110	Single Family Detached	2	24,318	1	_	\$1,418.63	\$1,418.62
022-0-040-120	Single Family Detached	3	20,835	1	-	\$851.18	\$851.18
022-0-040-130	Single Family Detached	2	28,562	1	-	\$1,418.63	\$1,418.62
022-0-040-150	Single Family Detached	3	15,024	1	_	\$851.18	\$851.18
022-0-040-190	Single Family Detached	1	46,609	1	_	\$2,404.20	\$2,404.20
022-0-040-210	Single Family Detached	2	33,507	1	_	\$1,418.63	\$1,418.62
022-0-040-220	Single Family Detached	3	19,975	1	_	\$851.18	\$851.18
022-0-040-230	Single Family Detached	3	14,855	1	_	\$851.18	\$851.18
022-0-040-240	Single Family Detached	3	18,233	1	-	\$851.18	\$851.18
022-0-040-250	Single Family Detached	3	13,800	1	_	\$851.18	\$851.18
022-0-040-260	Single Family Detached	2	37,452	1	_	\$1,418.63	\$1,418.62
022-0-051-030	Single Family Detached	4	5,950	1	_	\$551.37	\$551.36
022-0-051-040	Single Family Detached	4	6,459	1	_	\$551.37	\$551.36
022-0-051-050	Single Family Detached	4	8,318	1	_	\$551.37	\$551.36
022-0-051-080	Multifamily Attached	6	-	12	_	\$4,810.68	\$4,810.56
022-0-051-090	Single Family Detached	3	19,820	1	-	\$851.18	\$851.18
022-0-051-100	Single Family Detached	1	78,843	1	_	\$2,404.20	\$2,404.20
022-0-051-110	Single Family Detached	3	21,804	1	_	\$851.18	\$851.18
022-0-051-120	Single Family Detached	3	21,804	1	_	\$851.18	\$851.18
022-0-051-130	Single Family Detached	2	28,745	1	-	\$1,418.63	\$1,418.62
022-0-051-140	Single Family Detached	3	11,139	1	-	\$851.18	\$851.18
022-0-051-150	Single Family Detached	3	11,139	1	-	\$851.18	\$851.18
022-0-051-180	Single Family Detached	3	11,209	1	-	\$851.18	\$851.18
022-0-051-190	Multifamily Attached	6	-	2	-	\$801.78	\$801.76

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-051-230	Single Family Detached	1	7,960	1	_	\$551.37	\$551.36
022-0-051-260	Single Family Detached	4	14,000	1	-	\$851.18	\$851.18
022-0-051-200	Single Family Detached	3	14,000	1		\$851.18 \$851.18	\$851.18
022-0-051-270	Single Family Detached	3	24,265	3	-	\$4,255.89	\$4,255.86
022-0-051-280	Single Family Detached	2	58,372	1	-	\$4,233.89 \$2,404.20	\$4,233.80 \$2,404.20
022-0-051-290	Multifamily Attached	1	38,372	1 7	-	\$2,404.20	\$2,404.20 \$2,806.16
022-0-052-010	2	6	- 54,450	1	-	-	\$2,800.10 \$2,404.20
022-0-052-020	Single Family Detached	1	54,430 6,940		-	\$2,404.20 \$551.37	\$2,404.20 \$551.36
	Single Family Detached	4		1	-		
022-0-052-060	Single Family Detached	4	6,798	1	-	\$551.37 \$551.27	\$551.36
022-0-052-070	Single Family Detached	4	6,798	1	-	\$551.37	\$551.36
022-0-052-080	Single Family Detached	3	10,164	1	-	\$851.18	\$851.18 \$551.26
022-0-052-090	Single Family Detached	4	6,535	1	-	\$551.37	\$551.36
022-0-052-100	Single Family Detached	4	7,108	1	-	\$551.37	\$551.36
022-0-052-120	Single Family Detached	3	12,001	1	-	\$851.18	\$851.18
022-0-052-130	Single Family Detached	3	15,437	1	-	\$851.18	\$851.18
022-0-052-140	Single Family Detached	3	18,667	1	-	\$851.18	\$851.18
022-0-061-025	Single Family Detached	3	14,000	1	-	\$851.18	\$851.18
022-0-061-035	Single Family Detached	4	7,620	1	-	\$551.37	\$551.36
022-0-061-045	Single Family Detached	4	7,639	1	-	\$551.37	\$551.36
022-0-061-055	Single Family Detached	4	7,639	1	-	\$551.37	\$551.36
022-0-061-065	Single Family Detached	4	7,639	1	-	\$551.37	\$551.36
022-0-061-075	Single Family Detached	4	7,639	1	-	\$551.37	\$551.36
022-0-061-085	Single Family Detached	4	7,639	1	-	\$551.37	\$551.36
022-0-061-095	Single Family Detached	4	7,639	1	-	\$551.37	\$551.36
022-0-061-105	Single Family Detached	4	7,639	1	-	\$551.37	\$551.36
022-0-061-115	Single Family Detached	4	7,639	1	-	\$551.37	\$551.36
022-0-061-125	Single Family Detached	4	8,624	1	-	\$551.37	\$551.36
022-0-061-135	Single Family Detached	3	12,850	1	-	\$851.18	\$851.18
022-0-061-145	Single Family Detached	4	9,872	1	-	\$551.37	\$551.36
022-0-061-155	Single Family Detached	4	7,184	1	-	\$551.37	\$551.36
022-0-061-165	Single Family Detached	4	9,404	1	-	\$551.37	\$551.36
022-0-061-180	Single Family Detached	3	16,563	1	-	\$851.18	\$851.18
022-0-062-015	Single Family Detached	4	7,206	1	-	\$551.37	\$551.36
022-0-062-025	Single Family Detached	4	6,972	1	-	\$551.37	\$551.36
022-0-062-035	Single Family Detached	4	6,972	1	-	\$551.37	\$551.36
022-0-062-045	Single Family Detached	4	6,972	1	-	\$551.37	\$551.36
022-0-062-055	Single Family Detached	4	6,972	1	-	\$551.37	\$551.36
022-0-062-065	Single Family Detached	4	6,972	1	-	\$551.37	\$551.36
022-0-062-075	Single Family Detached	4	6,972	1	-	\$551.37	\$551.36
022-0-062-085	Single Family Detached	4	6,972	1	-	\$551.37	\$551.36
022-0-062-095	Single Family Detached	4	6,972	1	-	\$551.37	\$551.36
022-0-062-105	Single Family Detached	4	7,206	1	-	\$551.37	\$551.36
022-0-062-115	Single Family Detached	4	7,206	1	-	\$551.37	\$551.36
022-0-062-125	Single Family Detached	4	6,972	1	-	\$551.37	\$551.36
022-0-062-135	Single Family Detached	4	6,972	1	-	\$551.37	\$551.36
022-0-062-145	Single Family Detached	4	6,972	1	-	\$551.37	\$551.36

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	022-0-062-155	Single Family Detached	4	6.972	1	_	\$551.37	\$551.36
022-0-062-175       Single Family Detached       4       6.972       1       -       \$\$51.37       \$\$551.36         022-0-062-185       Single Family Detached       4       6.972       1       -       \$\$551.37       \$\$551.36         022-0-062-105       Single Family Detached       4       7.206       1       -       \$\$551.37       \$\$551.36         022-0-063-015       Single Family Detached       4       7.179       1       -       \$\$551.37       \$\$551.36         022-0-063-025       Single Family Detached       4       7.095       1       -       \$\$551.37       \$\$551.36         022-0-063-065       Single Family Detached       4       7.644       1       -       \$\$551.37       \$\$551.36         022-0-063-065       Single Family Detached       4       7.644       1       -       \$\$551.37       \$\$551.36         022-0-063-065       Single Family Detached       4       7.644       1       -       \$\$551.37       \$\$551.36         022-0-063-015       Single Family Detached       4       7.644       1       -       \$\$551.37       \$\$551.36         022-0-063-115       Single Family Detached       4       7.644       1       -       \$\$551.37 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td></td<>						-		
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022-0-062-195       Single Family Detached       4       6.972       1       -       \$\$51.37       \$\$51.36         022-0-063-015       Single Family Detached       4       7.206       1       -       \$\$51.37       \$\$551.36         022-0-063-015       Single Family Detached       4       7.179       1       -       \$\$551.37       \$\$551.36         022-0-063-035       Single Family Detached       4       7.940       1       -       \$\$551.37       \$\$551.36         022-0-063-045       Single Family Detached       4       7.644       1       -       \$\$551.37       \$\$551.36         022-0-063-068       Single Family Detached       4       7.644       1       -       \$\$551.37       \$\$551.36         022-0-063-068       Single Family Detached       4       7.644       1       -       \$\$551.37       \$\$551.36         022-0-063-068       Single Family Detached       4       7.644       1       -       \$\$551.37       \$\$551.36         022-0-063-105       Single Family Detached       4       7.644       1       -       \$\$551.37       \$\$551.36         022-0-063-115       Single Family Detached       4       7.206       1       -       \$\$551.37       \$		e :				-		
022-0-063-015       Single Family Detached       4       7,766       1       -       \$\$51.37       \$\$51.36         022-0-063-025       Single Family Detached       4       7,766       1       -       \$\$51.37       \$\$51.36         022-0-063-025       Single Family Detached       4       7,095       1       -       \$\$51.37       \$\$51.36         022-0-063-045       Single Family Detached       4       7,644       1       -       \$\$51.37       \$\$51.36         022-0-063-075       Single Family Detached       4       7,644       1       -       \$\$51.37       \$\$51.36         022-0-063-075       Single Family Detached       4       7,644       1       -       \$\$51.37       \$\$51.36         022-0-063-075       Single Family Detached       4       7,644       1       -       \$\$51.37       \$\$51.36         022-0-063-105       Single Family Detached       4       7,644       1       -       \$\$51.37       \$\$51.36         022-0-063-115       Single Family Detached       4       7,644       1       -       \$\$51.37       \$\$51.36         022-0-064-015       Single Family Detached       4       7,644       1       -       \$\$51.37       \$\$51.36						-		
022-0-063-015       Single Family Detached       4       7,766       1       -       \$S51.37       \$S51.36         022-0-063-035       Single Family Detached       4       7,179       1       -       \$S51.37       \$S51.36         022-0-063-055       Single Family Detached       4       7,040       1       -       \$S51.37       \$S51.36         022-0-063-055       Single Family Detached       4       7,644       1       -       \$S51.37       \$S51.36         022-0-063-055       Single Family Detached       4       7,644       1       -       \$S51.37       \$S51.36         022-0-063-055       Single Family Detached       4       7,644       1       -       \$S51.37       \$S51.36         022-0-063-055       Single Family Detached       4       7,644       1       -       \$S51.37       \$S51.36         022-0-063-105       Single Family Detached       4       7,644       1       -       \$S51.37       \$S51.36         022-0-063-125       Single Family Detached       4       7,644       1       -       \$S51.37       \$S51.36         022-0-063-145       Single Family Detached       4       7,644       1       -       \$S51.37       \$S51.36						-		
022-0-063-025       Single Family Detached       4       7,179       1       -       \$\$\$\$1.37       \$\$\$51.36         022-0-063-035       Single Family Detached       4       7,095       1       -       \$\$\$51.37       \$\$\$51.36         022-0-063-055       Single Family Detached       4       7,644       1       -       \$\$\$51.37       \$\$\$51.36         022-0-063-065       Single Family Detached       4       7,644       1       -       \$\$\$51.37       \$\$\$51.36         022-0-063-075       Single Family Detached       4       7,644       1       -       \$\$\$51.37       \$\$\$51.36         022-0-063-095       Single Family Detached       4       7,644       1       -       \$\$\$51.37       \$\$\$51.36         022-0-063-105       Single Family Detached       4       7,644       1       -       \$\$\$51.37       \$\$\$51.36         022-0-063-115       Single Family Detached       4       7,644       1       -       \$\$\$51.37       \$\$\$51.36         022-0-063-135       Single Family Detached       4       7,644       1       -       \$\$\$51.37       \$\$\$51.36         022-0-064-015       Single Family Detached       4       7,644       1       -       \$\$\$51.37 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td></t<>						-		
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022-0-063-065         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-063-085         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-063-085         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-063-105         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-063-125         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-063-125         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-063-125         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-064-015         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-065-015         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-065-025         Single Famil						-		
022-0-063-075         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-063-095         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-063-105         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-063-125         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-063-125         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-063-135         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-064-015         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-065-015         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-065-025         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-065-035         Single Famil						-		
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022-0-063-125       Single Family Detached       4       7,644       1       -       \$\$51.37       \$\$51.36         022-0-063-135       Single Family Detached       4       7,206       1       -       \$\$51.37       \$\$51.36         022-0-064-015       Single Family Detached       4       7,206       1       -       \$\$551.37       \$\$551.36         022-0-064-015       Single Family Detached       4       7,684       1       -       \$\$551.37       \$\$551.36         022-0-065-015       Single Family Detached       4       7,644       1       -       \$\$551.37       \$\$551.36         022-0-065-025       Single Family Detached       4       7,644       1       -       \$\$551.37       \$\$551.36         022-0-065-035       Single Family Detached       4       7,644       1       -       \$\$551.37       \$\$551.36         022-0-066-015       Single Family Detached       4       7,644       1       -       \$\$551.37       \$\$551.36         022-0-066-015       Single Family Detached       4       7,644       1       -       \$\$551.37       \$\$551.36         022-0-071-010       Single Family Detached       4       9,061       1       -       \$\$551.37       \$\$				-	1	-		
022-0-063-135       Single Family Detached       4       7,644       1       -       \$\$51.37       \$\$51.36         022-0-063-145       Single Family Detached       4       7,206       1       -       \$\$51.37       \$\$551.36         022-0-064-025       Single Family Detached       4       8,624       1       -       \$\$551.37       \$\$551.36         022-0-064-025       Single Family Detached       4       7,684       1       -       \$\$551.37       \$\$551.36         022-0-065-025       Single Family Detached       4       7,644       1       -       \$\$551.37       \$\$551.36         022-0-065-035       Single Family Detached       4       7,644       1       -       \$\$551.37       \$\$551.36         022-0-065-045       Single Family Detached       4       7,644       1       -       \$\$551.37       \$\$51.36         022-0-066-015       Single Family Detached       4       7,644       1       -       \$\$551.37       \$\$51.36         022-0-066-025       Single Family Detached       4       7,644       1       -       \$\$551.37       \$\$51.36         022-0-071-010       Single Family Detached       4       9,061       1       -       \$\$551.37       \$\$55						-		
022-0-063-145         Single Family Detached         4         7,206         1         -         \$551.37         \$551.36           022-0-064-015         Single Family Detached         4         8,624         1         -         \$551.37         \$551.36           022-0-064-025         Single Family Detached         4         7,684         1         -         \$551.37         \$551.36           022-0-065-015         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-065-025         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-066-015         Single Family Detached         4         7,206         1         -         \$551.37         \$551.36           022-0-066-015         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-071-010         Single Family Detached         4         9,061         1         -         \$551.37         \$551.36           022-0-071-020         Single Family Detached         4         9,061         1         -         \$551.37         \$551.36           022-0-071-050         Single Famil						-		
022-0-064-015         Single Family Detached         4         8,624         1         -         \$551.37         \$551.36           022-0-064-025         Single Family Detached         4         7,684         1         -         \$551.37         \$551.36           022-0-065-025         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-065-025         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-065-015         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-066-015         Single Family Detached         4         7,206         1         -         \$551.37         \$551.36           022-0-066-015         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-071-010         Single Family Detached         4         9,714         1         -         \$551.37         \$551.36           022-0-071-020         Single Family Detached         4         9,061         1         -         \$551.37         \$551.36           022-0-071-050         Single Famil						-		
022-0-064-025         Single Family Detached         4         7,684         1         -         \$551.37         \$551.36           022-0-065-015         Single Family Detached         4         7,206         1         -         \$551.37         \$551.36           022-0-065-025         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-065-035         Single Family Detached         4         7,206         1         -         \$551.37         \$551.36           022-0-066-015         Single Family Detached         4         7,206         1         -         \$551.37         \$551.36           022-0-066-025         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-071-010         Single Family Detached         4         9,714         1         -         \$551.37         \$551.36           022-0-071-020         Single Family Detached         4         9,061         1         -         \$551.37         \$551.36           022-0-071-040         Single Family Detached         4         9,061         1         -         \$551.37         \$551.36           022-0-071-060         Single Famil						-		
022-0-065-015         Single Family Detached         4         7,206         1         -         \$551.37         \$551.36           022-0-065-025         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-065-035         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-066-015         Single Family Detached         4         7,206         1         -         \$551.37         \$551.36           022-0-066-015         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-066-025         Single Family Detached         4         7,644         1         -         \$551.37         \$551.36           022-0-071-010         Single Family Detached         4         9,061         1         -         \$551.37         \$551.36           022-0-071-040         Single Family Detached         4         9,061         1         -         \$551.37         \$551.36           022-0-071-060         Single Family Detached         3         10,706         1         -         \$851.18         \$851.18           022-0-071-080         Single Fami						-		
022-0-065-025Single Family Detached4 $7,644$ 1- $$551.37$ $$551.36$ $022-0-065-035$ Single Family Detached4 $7,644$ 1- $$551.37$ $$551.36$ $022-0-065-045$ Single Family Detached4 $7,206$ 1- $$551.37$ $$551.36$ $022-0-066-015$ Single Family Detached4 $7,644$ 1- $$551.37$ $$551.36$ $022-0-066-025$ Single Family Detached4 $7,644$ 1- $$551.37$ $$551.36$ $022-0-071-010$ Single Family Detached4 $9,714$ 1- $$551.37$ $$551.36$ $022-0-071-020$ Single Family Detached4 $9,061$ 1- $$551.37$ $$551.36$ $022-0-071-030$ Single Family Detached4 $9,061$ 1- $$551.37$ $$551.36$ $022-0-071-040$ Single Family Detached4 $9,061$ 1- $$551.37$ $$551.36$ $022-0-071-050$ Single Family Detached4 $9,061$ 1- $$551.37$ $$551.36$ $022-0-071-060$ Single Family Detached3 $10,706$ 1- $$851.18$ $$851.18$ $022-0-071-070$ Single Family Detached3 $10,706$ 1- $$851.18$ $$851.18$ $022-0-071-080$ Single Family Detached3 $10,706$ 1- $$851.18$ $$851.18$ $022-0-071-100$ Single Family Detached3 $10,706$ 1- $$851.18$ $$851.18$						-		
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022-0-065-045Single Family Detached47,2061-\$551.37\$551.36022-0-066-015Single Family Detached47,2061-\$551.37\$551.36022-0-066-025Single Family Detached47,6441-\$551.37\$551.36022-0-071-010Single Family Detached49,7141-\$551.37\$551.36022-0-071-020Single Family Detached49,0611-\$551.37\$551.36022-0-071-030Single Family Detached49,0611-\$551.37\$551.36022-0-071-040Single Family Detached49,0611-\$551.37\$551.36022-0-071-050Single Family Detached49,0611-\$551.37\$551.36022-0-071-060Single Family Detached49,0611-\$551.37\$551.36022-0-071-070Single Family Detached49,0611-\$551.37\$551.36022-0-071-080Single Family Detached310,7061-\$851.18\$851.18022-0-071-090Single Family Detached310,7061-\$851.37\$551.36022-0-071-100Single Family Detached310,7061-\$851.18\$851.18022-0-071-100Single Family Detached310,7061-\$851.37\$551.36022-0-072-010Single Family Detached47,9521-<						-		
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Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-072-080	Single Family Detached	3	10,090	1	_	\$851.18	\$851.18
022-0-072-090	Single Family Detached	3	10,090	1	-	\$851.18	\$851.18
022-0-072-100	Single Family Detached	3	10,090	1	-	\$851.18	\$851.18
022-0-072-110	Single Family Detached	3	10,042	1	-	\$851.18	\$851.18
022-0-081-010	Single Family Detached	3 4	8,626	1	-	\$551.37	\$551.36
022-0-081-010	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-081-020	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-081-040	Single Family Detached	4	8,185	1	-	\$551.37	\$551.36
022-0-081-040	Single Family Detached	4	8,185	1	-	\$551.37	\$551.36
022-0-081-050	Single Family Detached	4	8,185	1	-	\$551.37	\$551.36
022-0-081-000	Single Family Detached	4	8,168	1	-	\$551.37	\$551.36
022-0-081-080	Single Family Detached	4	9,050	1	-	\$551.37	\$551.36
022-0-081-090	Single Family Detached	4	12,600	1	-	\$851.18	\$851.18
022-0-081-090	Single Family Detached	3	11,008	1	-	\$851.18	\$851.18
022-0-081-110	Single Family Detached	3	11,008	1	-	\$851.18	\$851.18
022-0-081-120	Single Family Detached	3 4	8,541	1	-	\$551.37	\$551.36
022-0-081-120	Single Family Detached	4	8,541	1	-	\$551.37	\$551.36
022-0-081-150	Single Family Detached	4	8,541	1	-	\$551.37	\$551.36
022-0-081-140	Single Family Detached	4	8,493	1	-	\$551.37	\$551.36
022-0-081-130	Single Family Detached	4	48,787	1	-	\$2,404.20	\$2,404.20
022-0-081-240	Single Family Detached	4	7,988	1	-	\$551.37	\$551.36
022-0-081-250	Single Family Detached	4	8,025	1	-	\$551.37	\$551.36
022-0-081-260	Single Family Detached	4	7,875	1	-	\$551.37	\$551.36
022-0-081-200	Single Family Detached	4	8,231	1	-	\$551.37	\$551.36
022-0-081-280	Single Family Detached	4	8,125	1	-	\$551.37	\$551.36
022-0-081-290	Single Family Detached	4	7,662	1	-	\$551.37	\$551.36
022-0-081-200	Single Family Detached	4	8,988	1	-	\$551.37	\$551.36
022-0-081-310	Single Family Detached	4	8,838	1	-	\$551.37	\$551.36
022-0-081-320	Single Family Detached	4	8,009	1	-	\$551.37	\$551.36
022-0-081-320	Single Family Detached	4	8,500	1	-	\$551.37	\$551.36
022-0-081-340	Single Family Detached	4	7,950	1	-	\$551.37	\$551.36
022-0-081-340	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-081-360	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-081-370	Single Family Detached	4	8,002	1	_	\$551.37	\$551.36
022-0-081-380	Single Family Detached	4	8,002	1	-	\$551.37	\$551.36
022-0-081-390	Single Family Detached	4	8,020	1	_	\$551.37	\$551.36
022-0-081-400	Single Family Detached	4	8,938	1	-	\$551.37	\$551.36
022-0-082-010	Single Family Detached	4	8,631	1	-	\$551.37	\$551.36
022-0-082-020	Single Family Detached	4	8,050	1	-	\$551.37	\$551.36
022-0-082-020	Single Family Detached	4	8,050	1	-	\$551.37	\$551.36
022-0-082-030	Single Family Detached	4	8,050	1	_	\$551.37	\$551.36
022-0-082-040	Single Family Detached	4	8,050	1	-	\$551.37	\$551.36
022-0-082-050	Single Family Detached	4	8,050 8,050	1	-	\$551.37	\$551.36
022-0-082-000	Single Family Detached	4	8,050	1	-	\$551.37	\$551.36
022-0-082-080	Single Family Detached	4	8,050	1	-	\$551.37	\$551.36
022-0-082-080	Single Family Detached	4	8,050	1	-	\$551.37	\$551.36
022-0-002-090	Single I anniy Detached	4	0,050	1	-	ψυυ1.υ/	ψυυ1.00

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-082-100	Single Family Detached	4	8,050	1	-	\$551.37	\$551.36
022-0-082-110	Single Family Detached	4	8,050	1	-	\$551.37	\$551.36
022-0-082-120	Single Family Detached	4	8,050	1	-	\$551.37	\$551.36
022-0-082-130	Single Family Detached	4	8,050	1	-	\$551.37	\$551.36
022-0-082-140	Single Family Detached	4	8,050	1	-	\$551.37	\$551.36
022-0-082-150	Single Family Detached	4	8,002	1	-	\$551.37	\$551.36
022-0-083-020	Single Family Detached	4	8,100	1	-	\$551.37	\$551.36
022-0-083-030	Single Family Detached	4	8,312	1	-	\$551.37	\$551.36
022-0-083-040	Single Family Detached	4	8,200	1	-	\$551.37	\$551.36
022-0-083-050	Single Family Detached	4	9,375	1	-	\$551.37	\$551.36
022-0-083-060	Single Family Detached	4	9,888	1	-	\$551.37	\$551.36
022-0-083-070	Single Family Detached	3	10,125	1	-	\$851.18	\$851.18
022-0-083-080	Single Family Detached	4	8,425	1	-	\$551.37	\$551.36
022-0-083-090	Single Family Detached	4	8,064	1	-	\$551.37	\$551.36
022-0-083-100	Single Family Detached	4	8,036	1	-	\$551.37	\$551.36
022-0-083-110	Single Family Detached	4	8,036	1	-	\$551.37	\$551.36
022-0-083-120	Single Family Detached	4	8,036	1	-	\$551.37	\$551.36
022-0-083-130	Single Family Detached	4	8,011	1	-	\$551.37	\$551.36
022-0-083-140	Single Family Detached	4	8,150	1	-	\$551.37	\$551.36
022-0-084-010	Single Family Detached	4	8,675	1	-	\$551.37	\$551.36
022-0-084-020	Single Family Detached	4	8,325	1	-	\$551.37	\$551.36
022-0-084-030	Single Family Detached	4	7,875	1	-	\$551.37	\$551.36
022-0-084-040	Single Family Detached	4	8,250	1	-	\$551.37	\$551.36
022-0-084-070	Single Family Detached	4	8,438	1	-	\$551.37	\$551.36
022-0-084-080	Single Family Detached	4	8,700	1	-	\$551.37	\$551.36
022-0-084-090	Single Family Detached	4	8,488	1	-	\$551.37	\$551.36
022-0-084-100	Single Family Detached	4	8,038	1	-	\$551.37	\$551.36
022-0-084-110	Single Family Detached	4	8,603	1	-	\$551.37	\$551.36
022-0-084-130	Single Family Detached	4	8,258	1	-	\$551.37	\$551.36
022-0-090-010	Multifamily Attached	6	-	3	-	\$1,202.67	\$1,202.64
022-0-090-040	Single Family Detached	1	158,994	1	-	\$2,404.20	\$2,404.20
022-0-090-070	Single Family Detached	4	6,096	1	-	\$551.37	\$551.36
022-0-090-080	Single Family Detached	4	9,828	1	-	\$551.37	\$551.36
022-0-090-100	Single Family Detached	4	7,835	1	-	\$551.37	\$551.36
022-0-090-110	Single Family Detached	4	8,219	1	-	\$551.37	\$551.36
022-0-090-120	Single Family Detached	4	7,822	1	-	\$551.37	\$551.36
022-0-090-140	Single Family Detached	4	7,115	1	-	\$551.37	\$551.36
022-0-090-150	Single Family Detached	4	7,100	1	-	\$551.37	\$551.36
022-0-090-160	Single Family Detached	4	7,261	1	-	\$551.37	\$551.36
022-0-090-180	Single Family Detached	4	8,834	1	-	\$551.37	\$551.36
022-0-090-190	Single Family Detached	4	9,018	1	-	\$551.37	\$551.36
022-0-090-200	Single Family Detached	4	8,671	1	-	\$551.37	\$551.36
022-0-090-210	Single Family Detached	4	6,739	1	-	\$551.37	\$551.36
022-0-090-220	Single Family Detached	4	7,045	1	-	\$551.37	\$551.36
022-0-090-230	Single Family Detached	4	7,609	2	-	\$1,102.74	\$1,102.72
022-0-090-250	Multifamily Attached	6	-	16	-	\$6,414.24	\$6,414.08

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-090-260	Multifamily Attached	6	_	5	_	\$2,004.45	\$2,004.40
022-0-090-270	Single Family Detached	4	7,464	1	-	\$551.37	\$551.36
022-0-090-280	Multifamily Attached	6	-	3	-	\$1,202.67	\$1,202.64
022-0-090-290	Single Family Detached	3	10,164	1	-	\$851.18	\$851.18
022-0-090-300	Single Family Detached	3	10,164	1	-	\$851.18	\$851.18
022-0-090-400	Single Family Detached	3	10,106	1	-	\$851.18	\$851.18
022-0-090-410	Single Family Detached	4	5,677	1	-	\$551.37	\$551.36
022-0-090-420	Single Family Detached	3	13,497	2	-	\$1,702.36	\$1,702.36
022-0-090-450	Multifamily Attached	6	-	16	-	\$6,414.24	\$6,414.08
022-0-090-480	Single Family Detached	4	7,267	1	-	\$551.37	\$551.36
022-0-090-490	Single Family Detached	4	7,546	1	_	\$551.37	\$551.36
022-0-090-500	Single Family Detached	4	8,122	1	-	\$551.37	\$551.36
022-0-090-520	Commercial Property	7		-	8,079	\$2,812.30	\$2,812.30
022-0-100-020	Single Family Detached	4	6,500	1		\$551.37	\$551.36
022-0-100-030	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-100-080	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-100-090	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-100-000	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-100-100	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-100-110	Single Family Detached	4	6,562	1	-	\$551.37	\$551.36
022-0-100-150	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-100-150	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-100-100	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-100-170	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-100-180	Single Family Detached	4	0,500 7,500	1	-	\$551.37	\$551.36
022-0-100-190	Single Family Detached	4	7,500	1	_	\$551.37	\$551.36
022-0-100-230	Single Family Detached	4	7,500	1	_	\$551.37	\$551.36
022-0-100-240	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-100-250	Single Family Detached	4	8,250	1	-	\$551.37	\$551.36
022-0-100-250	Single Family Detached	4	6,750	1	-	\$551.37	\$551.36
022-0-100-200	Single Family Detached		0,730 7,500	1	-	\$551.37	\$551.36
022-0-100-270	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-100-290	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-100-290	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-100-310	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-100-310	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-100-320	Single Family Detached	4	6,706	1	-	\$551.37	\$551.36
022-0-100-340	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-100-340	Single Family Detached	4		1			
022-0-100-350	Single Family Detached	4	8,228 6,580		-	\$551.37 \$551.37	\$551.36 \$551.36
		4		1	-	\$551.37 \$551.37	\$551.36 \$551.26
022-0-100-380	Single Family Detached	4	6,500	1	-		\$551.36 \$551.26
022-0-100-390	Single Family Detached	4	6,500 31,050	1	-	\$551.37 \$1.418.63	\$551.36 \$1.418.62
022-0-100-420	Single Family Detached	2	31,050	1	-	\$1,418.63 \$551.37	\$1,418.62 \$551.36
022-0-100-430	Single Family Detached Single Family Detached	4	7,500 6,500	1 1	-	\$551.37 \$551.37	\$551.36 \$551.36
022-0-100-440		4	0,500			\$551.37 \$1.202.67	\$551.36 \$1.202.64
022-0-100-450	Multifamily Attached	6	-	3	-	\$1,202.67	\$1,202.64

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-100-460	Single Family Detached	4	5,036	1	-	\$551.37	\$551.36
022-0-100-470	Commercial Property	7	-	_	3,070	\$1,068.67	\$1,068.66
022-0-110-010	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-110-020	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-110-040	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-110-060	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-110-070	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-110-090	Single Family Detached	4	7,184	1	-	\$551.37	\$551.36
022-0-110-100	Single Family Detached	4	7,815	1	-	\$551.37	\$551.36
022-0-110-130	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-110-150	Single Family Detached	4	8,577	1	-	\$551.37	\$551.36
022-0-110-160	Single Family Detached	4	8,160	1	-	\$551.37	\$551.36
022-0-110-190	Single Family Detached	4	7,871	1	-	\$551.37	\$551.36
022-0-110-200	Single Family Detached	2	27,543	1	-	\$1,418.63	\$1,418.62
022-0-110-210	Single Family Detached	3	17,649	1	-	\$851.18	\$851.18
022-0-110-220	Single Family Detached	3	14,618	1	-	\$851.18	\$851.18
022-0-110-230	Single Family Detached	2	26,665	1	-	\$1,418.63	\$1,418.62
022-0-110-240	Single Family Detached	3	19,100	1	-	\$851.18	\$851.18
022-0-110-250	Single Family Detached	4	8,982	1	-	\$551.37	\$551.36
022-0-110-260	Single Family Detached	4	9,846	1	-	\$551.37	\$551.36
022-0-110-300	Single Family Detached	4	7,475	1	-	\$551.37	\$551.36
022-0-110-320	Single Family Detached	4	7,465	1	-	\$551.37	\$551.36
022-0-110-330	Single Family Detached	4	7,465	1	-	\$551.37	\$551.36
022-0-110-340	Single Family Detached	3	10,909	1	-	\$851.18	\$851.18
022-0-110-350	Single Family Detached	3	10,909	1	-	\$851.18	\$851.18
022-0-110-380	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-110-390	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-110-400	Single Family Detached	4	7,200	1	-	\$551.37	\$551.36
022-0-110-410	Single Family Detached	4	8,100	1	-	\$551.37	\$551.36
022-0-110-430	Single Family Detached	3	13,778	1	-	\$851.18	\$851.18
022-0-110-440	Single Family Detached	4	7,465	1	-	\$551.37	\$551.36
022-0-110-460	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-110-470	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-110-480	Single Family Detached	4	8,866	1	-	\$551.37	\$551.36
022-0-110-490	Single Family Detached	4	7,920	1	-	\$551.37	\$551.36
022-0-110-520	Single Family Detached	4	9,000	1	-	\$551.37	\$551.36
022-0-110-530	Single Family Detached	3	11,778	1	-	\$851.18	\$851.18
022-0-110-540	Single Family Detached	4	9,929	2	-	\$1,102.74	\$1,102.72
022-0-110-550	Single Family Detached	4	7,918	1	-	\$551.37	\$551.36
022-0-110-560	Single Family Detached	3	11,714	1	-	\$851.18	\$851.18
022-0-110-570	Single Family Detached	3	14,003	1	-	\$851.18	\$851.18
022-0-120-040	Single Family Detached	2	28,300	1	-	\$1,418.63	\$1,418.62
022-0-120-050	Single Family Detached	3	20,264	1	-	\$851.18	\$851.18
022-0-120-065	Single Family Detached	4	6,815	1	-	\$551.37	\$551.36
022-0-120-075	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-085	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-120-095	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-095	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-105	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-115	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-125	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-145	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-155	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-165	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-175	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-185	Single Family Detached	4	8,773	1	_	\$551.37	\$551.36
022-0-120-195	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-205	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-215	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-225	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-235	Single Family Detached	4	8,773	1	_	\$551.37	\$551.36
022-0-120-245	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-255	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-265	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-275	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-285	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-120-290	Single Family Detached	4	6,958	1	_	\$551.37	\$551.36
022-0-120-300	Single Family Detached	3	10,289	1	-	\$851.18	\$851.18
022-0-120-330	Single Family Detached	4	6,431	1	-	\$551.37	\$551.36
022-0-120-340	Single Family Detached	4	6,431	1	_	\$551.37	\$551.36
022-0-120-350	Single Family Detached	4	6,431	1	_	\$551.37	\$551.36
022-0-120-360	Single Family Detached	4	6,431	1	-	\$551.37	\$551.36
022-0-120-370	Single Family Detached	4	6,128	1	-	\$551.37	\$551.36
022-0-120-380	Single Family Detached	4	6,030	1	-	\$551.37	\$551.36
022-0-120-390	Single Family Detached	4	9,003	1	-	\$551.37	\$551.36
022-0-120-400	Single Family Detached	4	9,563	1	-	\$551.37	\$551.36
022-0-120-410	Single Family Detached	4	9,285	1	-	\$551.37	\$551.36
022-0-130-015	Single Family Detached	4	8,520	1	-	\$551.37	\$551.36
022-0-130-025	Single Family Detached	4	8,519	1	-	\$551.37	\$551.36
022-0-130-035	Single Family Detached	4	8,518	1	-	\$551.37	\$551.36
022-0-130-045	Single Family Detached	4	8,516	1	-	\$551.37	\$551.36
022-0-130-055	Single Family Detached	4	8,515	1	-	\$551.37	\$551.36
022-0-130-065	Single Family Detached	4	8,514	1	-	\$551.37	\$551.36
022-0-130-075	Single Family Detached	4	8,513	1	-	\$551.37	\$551.36
022-0-130-085	Single Family Detached	4	8,512	1	-	\$551.37	\$551.36
022-0-130-095	Single Family Detached	4	8,511	1	-	\$551.37	\$551.36
022-0-130-105	Single Family Detached	4	8,510	1	-	\$551.37	\$551.36
022-0-130-115	Single Family Detached	4	8,509	1	-	\$551.37	\$551.36
022-0-130-125	Single Family Detached	4	8,508	1	-	\$551.37	\$551.36
022-0-130-135	Single Family Detached	4	8,507	1	-	\$551.37	\$551.36
022-0-130-145	Single Family Detached	4	8,506	1	-	\$551.37	\$551.36
022-0-130-155	Single Family Detached	4	8,504	1	-	\$551.37	\$551.36

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-130-165	Single Family Detached	4	8,503	1	-	\$551.37	\$551.36
022-0-130-175	Single Family Detached	4	8,502	1	-	\$551.37	\$551.36
022-0-130-185	Single Family Detached	4	8,501	1	-	\$551.37	\$551.36
022-0-130-195	Single Family Detached	4	8,500	1	-	\$551.37	\$551.36
022-0-130-205	Single Family Detached	4	8,499	1	-	\$551.37	\$551.36
022-0-130-215	Single Family Detached	4	8,498	1	-	\$551.37	\$551.36
022-0-130-225	Single Family Detached	4	8,497	1	-	\$551.37	\$551.36
022-0-130-235	Single Family Detached	3	10,208	1	-	\$851.18	\$851.18
022-0-140-030	Single Family Detached	3	12,768	1	-	\$851.18	\$851.18
022-0-140-040	Single Family Detached	3	11,130	1	-	\$851.18	\$851.18
022-0-140-050	Single Family Detached	3	11,130	1	-	\$851.18	\$851.18
022-0-140-060	Single Family Detached	3	11,450	1	-	\$851.18	\$851.18
022-0-140-080	Single Family Detached	4	7,750	1	-	\$551.37	\$551.36
022-0-140-090	Single Family Detached	3	11,950	1	-	\$851.18	\$851.18
022-0-140-100	Single Family Detached	4	7,807	1	-	\$551.37	\$551.36
022-0-140-110	Single Family Detached	4	7,576	1	-	\$551.37	\$551.36
022-0-140-120	Single Family Detached	4	6,907	1	-	\$551.37	\$551.36
022-0-140-140	Single Family Detached	4	8,123	1	-	\$551.37	\$551.36
022-0-140-150	Single Family Detached	4	8,726	1	-	\$551.37	\$551.36
022-0-140-160	Multifamily Attached	6	_	2	-	\$801.78	\$801.76
022-0-140-170	Single Family Detached	3	10,187	1	-	\$851.18	\$851.18
022-0-140-180	Single Family Detached	4	9,837	1	-	\$551.37	\$551.36
022-0-140-190	Single Family Detached	4	8,544	2	-	\$1,102.74	\$1,102.72
022-0-140-200	Single Family Detached	4	8,296	1	-	\$551.37	\$551.36
022-0-140-210	Single Family Detached	4	8,388	1	-	\$551.37	\$551.36
022-0-140-220	Single Family Detached	4	8,175	1	-	\$551.37	\$551.36
022-0-140-230	Multifamily Attached	6	-	6	-	\$2,405.34	\$2,405.28
022-0-140-260	Single Family Detached	4	6,959	1	-	\$551.37	\$551.36
022-0-140-270	Single Family Detached	4	6,000	1	-	\$551.37	\$551.36
022-0-140-290	Single Family Detached	4	5,000	1	-	\$551.37	\$551.36
022-0-140-300	Single Family Detached	4	5,000	1	-	\$551.37	\$551.36
022-0-140-310	Single Family Detached	4	5,814	1	-	\$551.37	\$551.36
022-0-140-320	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-140-330	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-140-340	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-140-350	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-140-365	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-140-370	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-140-380	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-140-390	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-140-400	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-140-410	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-140-470	Commercial Property	7	-	-	3,220	\$1,120.88	\$1,120.88
022-0-140-490	Single Family Detached	3	10,047	2	-	\$1,702.36	\$1,702.36
022-0-140-500	Single Family Detached	4	9,490	1	-	\$551.37	\$551.36
022-0-140-510	Multifamily Attached	6	-	3	-	\$1,202.67	\$1,202.64

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-140-520	Multifamily Attached	6	-	4	-	\$1,603.56	\$1,603.52
022-0-140-530	Single Family Detached	4	6,705	1	-	\$551.37	\$551.36
022-0-140-540	Single Family Detached	4	6,000	1	-	\$551.37	\$551.36
022-0-140-550	Single Family Detached	4	6,000	1	-	\$551.37	\$551.36
022-0-140-560	Single Family Detached	4	6,000	1	-	\$551.37	\$551.36
022-0-140-570	Single Family Detached	4	5,878	1	-	\$551.37	\$551.36
022-0-140-580	Single Family Detached	4	5,933	1	-	\$551.37	\$551.36
022-0-140-590	Commercial Property	7		-	1,000	\$348.10	\$348.10
022-0-140-600	Commercial Property	7	-	_	730	\$254.11	\$254.10
022-0-140-610	Single Family Detached	4	4,650	1		\$551.37	\$551.36
022-0-140-630	Multifamily Attached	6	-,050	3	_	\$1,202.67	\$1,202.64
022-0-140-640	Commercial Property	0 7	_	-	1,000	\$348.10	\$348.10
022-0-151-010	Commercial Property	7	_	_	4,302	\$1,497.53	\$1,497.52
022-0-151-020	Single Family Detached	4	6,500	1		\$551.37	\$551.36
022-0-151-020	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-151-040	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-151-050	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-151-050	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-151-000	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-151-080	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-151-090	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-151-100	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-151-110	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-151-120	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-151-120	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-151-140	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-151-150	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-151-160	Single Family Detached	4	6,500	1	-	\$551.37	\$551.36
022-0-151-170	Single Family Detached	4	6,071	1	-	\$551.37	\$551.36
022-0-151-180	Single Family Detached	4	6,476	1	-	\$551.37	\$551.36
022-0-151-190	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-151-200	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-151-210	Single Family Detached	4	7,500	1	_	\$551.37	\$551.36
022-0-151-220	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-151-230	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-151-240	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-151-250	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-151-260	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-151-270	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-151-280	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-151-290	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-151-300	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-151-310	Single Family Detached	4	7,500	2	-	\$1,102.74	\$1,102.72
022-0-151-320	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-151-330	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-151-340	Single Family Detached	3	11,250	1	-	\$851.18	\$851.18
522 0 151 510	Engle I anny Detached	5	11,200	1		ψ021.10	ψ021.10

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-151-350	Single Family Detached	3	11,250	1	-	\$851.18	\$851.18
022-0-151-360	Commercial Property	7		-	1,800	\$626.58	\$626.58
022-0-152-010	Commercial Property	7	_	_	8,236	\$2,866.95	\$2,866.94
022-0-152-020	Single Family Detached	4	7,500	1		\$551.37	\$551.36
022-0-152-030	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-152-040	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-152-050	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-152-070	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-152-080	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-152-090	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-152-100	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-152-110	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-152-120	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-152-130	Single Family Detached	4	7,373	1	-	\$551.37	\$551.36
022-0-152-140	Single Family Detached	4	7,627	1	-	\$551.37	\$551.36
022-0-152-150	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-152-160	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-152-170	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-152-180	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
022-0-152-190	Single Family Detached	3	10,910	1	-	\$851.18	\$851.18
022-0-152-200	Single Family Detached	3	10,908	1	-	\$851.18	\$851.18
022-0-152-210	Single Family Detached	4	8,702	1	-	\$551.37	\$551.36
022-0-152-220	Single Family Detached	4	8,509	1	-	\$551.37	\$551.36
022-0-152-230	Single Family Detached	4	8,509	2	-	\$1,102.74	\$1,102.72
022-0-152-240	Single Family Detached	4	8,957	1	-	\$551.37	\$551.36
022-0-152-250	Single Family Detached	4	8,957	1	-	\$551.37	\$551.36
022-0-152-280	Single Family Detached	3	10,301	1	-	\$851.18	\$851.18
022-0-152-290	Single Family Detached	3	10,301	1	-	\$851.18	\$851.18
022-0-152-300	Commercial Property	7	-	-	3,857	\$1,342.62	\$1,342.62
022-0-152-310	Commercial Property	7	-	-	1,188	\$413.54	\$413.54
022-0-152-320	Single Family Detached	3	10,400	1	-	\$851.18	\$851.18
022-0-152-330	Single Family Detached	3	10,301	1	-	\$851.18	\$851.18
022-0-152-340	Single Family Detached	3	12,764	1	-	\$851.18	\$851.18
022-0-152-350	Single Family Detached	4	7,912	1	-	\$551.37	\$551.36
022-0-152-360	Single Family Detached	4	7,464	1	-	\$551.37	\$551.36
022-0-152-370	Single Family Detached	4	7,464	1	-	\$551.37	\$551.36
022-0-161-015	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-161-025	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-161-035	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-161-040	Single Family Detached	3	11,301	1	-	\$851.18	\$851.18
022-0-161-060	Single Family Detached	4	9,443	1	-	\$551.37	\$551.36
022-0-161-070	Single Family Detached	4	9,443	1	-	\$551.37	\$551.36
022-0-161-080	Single Family Detached	4	6,295	1	-	\$551.37	\$551.36
022-0-161-090	Single Family Detached	4	6,628	1	-	\$551.37	\$551.36
022-0-161-100	Single Family Detached	4	6,998	1	-	\$551.37	\$551.36
022-0-161-110	Single Family Detached	4	7,320	1	-	\$551.37	\$551.36

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-161-120	Single Family Detached	4	7,646	1	-	\$551.37	\$551.36
022-0-161-130	Single Family Detached	4	6,295	1	-	\$551.37	\$551.36
022-0-161-140	Single Family Detached	4	6,295	1	-	\$551.37	\$551.36
022-0-161-150	Single Family Detached	4	6,295	1	-	\$551.37	\$551.36
022-0-161-160	Single Family Detached	4	6,295	1	-	\$551.37	\$551.36
022-0-161-170	Single Family Detached	3	12,590	1	-	\$851.18	\$851.18
022-0-161-180	Single Family Detached	3	10,018	1	-	\$851.18	\$851.18
022-0-161-195	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-161-205	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-161-215	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-161-225	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-161-235	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-161-240	Single Family Detached	4	8,092	1	-	\$551.37	\$551.36
022-0-161-250	Single Family Detached	4	6,188	1	-	\$551.37	\$551.36
022-0-161-270	Single Family Detached	4	6,226	1	-	\$551.37	\$551.36
022-0-161-280	Single Family Detached	4	6,240	1	-	\$551.37	\$551.36
022-0-161-290	Single Family Detached	4	6,252	1	-	\$551.37	\$551.36
022-0-161-300	Single Family Detached	4	6,266	1	-	\$551.37	\$551.36
022-0-161-310	Single Family Detached	4	5,025	1	-	\$551.37	\$551.36
022-0-161-320	Single Family Detached	4	5,379	1	-	\$551.37	\$551.36
022-0-161-330	Commercial Property	7	-	-	5,058	\$1,760.69	\$1,760.68
022-0-161-340	Commercial Property	7	-	-	1,693	\$589.33	\$589.32
022-0-161-350	Commercial Property	7	-	-	2,328	\$810.38	\$810.38
022-0-161-370	Commercial Property	7	-	-	2,898	\$1,008.79	\$1,008.78
022-0-161-380	Commercial Property	7	-	-	1,707	\$594.21	\$594.20
022-0-161-390	Commercial Property	7	-	-	6,048	\$2,105.31	\$2,105.30
022-0-161-405	Single Family Detached	4	8,773	1	-	\$551.37	\$551.36
022-0-161-415	Commercial Property	7	-	-	3,375	\$1,174.84	\$1,174.84
022-0-161-420	Single Family Detached	4	6,295	1	-	\$551.37	\$551.36
022-0-161-430	Single Family Detached	4	6,295	1	-	\$551.37	\$551.36
022-0-161-440	Single Family Detached	4	6,200	1	-	\$551.37	\$551.36
022-0-161-450	Single Family Detached	4	6,213	1	-	\$551.37	\$551.36
022-0-162-015	Single Family Detached	4	8,521	1	-	\$551.37	\$551.36
022-0-162-035	Single Family Detached	4	8,522	1	-	\$551.37	\$551.36
022-0-162-045	Single Family Detached	4	8,523	1	-	\$551.37	\$551.36
022-0-162-055	Single Family Detached	4	8,524	1	-	\$551.37	\$551.36
022-0-162-065	Single Family Detached	4	8,525	1	-	\$551.37	\$551.36
022-0-162-075	Single Family Detached	4	8,526	1	-	\$551.37	\$551.36
022-0-162-085	Single Family Detached	4	8,527	1	-	\$551.37	\$551.36
022-0-162-095	Single Family Detached	4	8,528	1	-	\$551.37	\$551.36
022-0-162-105	Single Family Detached	4	8,528	1	-	\$551.37	\$551.36
022-0-162-145	Commercial Property	7	-	-	5,407	\$1,882.18	\$1,882.18
022-0-171-015	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-171-025	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-171-035	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-171-045	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-171-055	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-171-065	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-171-075	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-171-085	Single Family Detached	4	8,626	1	-	\$551.37	\$551.36
022-0-172-015	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-172-025	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-172-035	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-172-045	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-172-055	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-172-065	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-172-075	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-172-085	Single Family Detached	4	8,631	1	-	\$551.37	\$551.36
022-0-172-095	Single Family Detached	4	8,631	1	-	\$551.37	\$551.36
022-0-172-105	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-172-115	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-172-125	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-172-135	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-172-145	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-172-155	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-172-165	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-173-015	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-173-025	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-173-035	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-173-045	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-173-055	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-173-065	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-173-075	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-173-085	Single Family Detached	4	8,631	1	-	\$551.37	\$551.36
022-0-181-015	Single Family Detached	4	8,626	1	-	\$551.37	\$551.36
022-0-181-025	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-181-035	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-181-045	Single Family Detached	4	8,185	1	-	\$551.37	\$551.36
022-0-181-055	Single Family Detached	4	8,185	1	-	\$551.37	\$551.36
022-0-181-065	Single Family Detached	4	8,186	1	-	\$551.37	\$551.36
022-0-181-075	Single Family Detached	4	8,160	1	-	\$551.37	\$551.36
022-0-181-085	Single Family Detached	4	9,378	1	-	\$551.37	\$551.36
022-0-181-095	Single Family Detached	3	13,008	1	-	\$851.18	\$851.18
022-0-181-105	Single Family Detached	3	11,010	1	-	\$851.18	\$851.18
022-0-181-115	Single Family Detached	3	11,088	1	-	\$851.18	\$851.18
022-0-182-015	Single Family Detached	4	8,631	1	-	\$551.37	\$551.36
022-0-182-025	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-182-035	Single Family Detached	4	8,008	1	-	\$551.37	\$551.36
022-0-182-045	Single Family Detached	4	8,190	1	-	\$551.37	\$551.36
022-0-182-055	Single Family Detached	4	8,190	1	-	\$551.37	\$551.36
022-0-182-065	Single Family Detached	4	8,190	1	-	\$551.37	\$551.36
022-0-182-075	Single Family Detached	4	9,086	1	-	\$551.37	\$551.36
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022-0-182-095       Single Family Detached       4       8,190       1       -       \$551.37       \$5         022-0-182-105       Single Family Detached       4       8,190       1       -       \$551.37       \$5         022-0-182-105       Single Family Detached       4       8,190       1       -       \$551.37       \$5         022-0-182-115       Single Family Detached       4       8,190       1       -       \$551.37       \$5         022-0-182-125       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-182-135       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-182-145       Single Family Detached       4       8,631       1       -       \$551.37       \$5         022-0-183-015       Single Family Detached       4       8,631       1       -       \$551.37       \$5         022-0-183-025       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-183-035       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-183-035	oroved al Tax
022-0-182-095       Single Family Detached       4       8,190       1       -       \$551.37       \$5         022-0-182-105       Single Family Detached       4       8,190       1       -       \$551.37       \$5         022-0-182-105       Single Family Detached       4       8,190       1       -       \$551.37       \$5         022-0-182-115       Single Family Detached       4       8,190       1       -       \$551.37       \$5         022-0-182-125       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-182-135       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-182-145       Single Family Detached       4       8,631       1       -       \$551.37       \$5         022-0-183-015       Single Family Detached       4       8,631       1       -       \$551.37       \$5         022-0-183-025       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-183-035       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-183-035	51.36
022-0-182-105       Single Family Detached       4       8,190       1       -       \$551.37       \$5         022-0-182-115       Single Family Detached       4       8,190       1       -       \$551.37       \$5         022-0-182-115       Single Family Detached       4       8,190       1       -       \$551.37       \$5         022-0-182-125       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-182-135       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-182-145       Single Family Detached       4       8,631       1       -       \$551.37       \$5         022-0-183-015       Single Family Detached       4       8,631       1       -       \$551.37       \$5         022-0-183-025       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-183-025       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-183-035       Single Family Detached       4       8,008       1       -       \$551.37       \$5	51.36
022-0-182-115       Single Family Detached       4       8,190       1       -       \$551.37       \$5         022-0-182-125       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-182-125       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-182-135       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-182-145       Single Family Detached       4       8,631       1       -       \$551.37       \$5         022-0-183-015       Single Family Detached       4       8,631       1       -       \$551.37       \$5         022-0-183-025       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-183-025       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-183-035       Single Family Detached       4       8,008       1       -       \$551.37       \$5	51.36
022-0-182-125Single Family Detached48,0081-\$551.37\$5022-0-182-135Single Family Detached48,0081-\$551.37\$5022-0-182-145Single Family Detached48,6311-\$551.37\$5022-0-183-015Single Family Detached48,6311-\$551.37\$5022-0-183-025Single Family Detached48,0081-\$551.37\$5022-0-183-025Single Family Detached48,0081-\$551.37\$5022-0-183-035Single Family Detached48,0081-\$551.37\$5	51.36
022-0-182-135       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-182-145       Single Family Detached       4       8,631       1       -       \$551.37       \$5         022-0-183-015       Single Family Detached       4       8,631       1       -       \$551.37       \$5         022-0-183-015       Single Family Detached       4       8,631       1       -       \$551.37       \$5         022-0-183-025       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-183-025       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-183-035       Single Family Detached       4       8,008       1       -       \$551.37       \$5	51.36
022-0-182-145       Single Family Detached       4       8,631       1       -       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37       \$551.37	51.36
022-0-183-015       Single Family Detached       4       8,631       1       -       \$551.37       \$5         022-0-183-025       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-183-025       Single Family Detached       4       8,008       1       -       \$551.37       \$5         022-0-183-035       Single Family Detached       4       8,008       1       -       \$551.37       \$5	51.36
022-0-183-025         Single Family Detached         4         8,008         1         -         \$551.37         \$5           022-0-183-035         Single Family Detached         4         8,008         1         -         \$551.37         \$5	51.36
022-0-183-035 Single Family Detached 4 8,008 1 - \$551.37 \$5	51.36
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Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-192-115	Single Family Detached	4	8,800	1	_	\$551.37	\$551.36
022-0-192-115	Single Family Detached	4	9,600	1	-	\$551.37	\$551.36
022-0-192-125	Single Family Detached	4	9,000 8,659	1	-	\$551.37	\$551.36
022-0-192-135	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-192-149	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-192-160	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-192-170	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-192-180	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-192-190	Single Family Detached	4	8,103	1	-	\$551.37	\$551.36
022-0-192-205	Single Family Detached	4	8,103	1	_	\$551.37	\$551.36
022-0-192-215	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-192-225	Single Family Detached	4	8,050	1	-	\$551.37	\$551.36
022-0-192-245	Single Family Detached	4	9,958	1	-	\$551.37	\$551.36
022-0-192-255	Single Family Detached	4	8,876	1	-	\$551.37	\$551.36
022-0-192-265	Single Family Detached	4	9,880	1	-	\$551.37	\$551.36
022-0-192-275	Single Family Detached	3	17,367	1	-	\$851.18	\$851.18
022-0-192-285	Single Family Detached	3	16,750	1	_	\$851.18	\$851.18
022-0-192-295	Single Family Detached	4	8,600	1	_	\$551.37	\$551.36
022-0-192-305	Single Family Detached	4	8,322	1	-	\$551.37	\$551.36
022-0-192-315	Single Family Detached	4	8,433	1	-	\$551.37	\$551.36
022-0-192-325	Single Family Detached	4	8,545	1	-	\$551.37	\$551.36
022-0-192-335	Single Family Detached	4	8,657	1	-	\$551.37	\$551.36
022-0-192-345	Single Family Detached	4	9,100	1	_	\$551.37	\$551.36
022-0-192-355	Single Family Detached	3	15,250	1	_	\$851.18	\$851.18
022-0-192-365	Single Family Detached	4	9,000	1	_	\$551.37	\$551.36
022-0-192-375	Single Family Detached	4	8,010	1	-	\$551.37	\$551.36
022-0-192-385	Single Family Detached	4	8,010	1	-	\$551.37	\$551.36
022-0-192-395	Single Family Detached	4	8,010	1	-	\$551.37	\$551.36
022-0-192-405	Single Family Detached	4	8,010	1	-	\$551.37	\$551.36
022-0-192-415	Single Family Detached	4	8,010	1	-	\$551.37	\$551.36
022-0-192-425	Single Family Detached	4	7,962	1	_	\$551.37	\$551.36
022-0-193-015	Single Family Detached	4	8,100	1	_	\$551.37	\$551.36
022-0-193-025	Single Family Detached	4	8,150	1	_	\$551.37	\$551.36
022-0-193-035	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-193-045	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-193-055	Single Family Detached	4	8,000	1	_	\$551.37	\$551.36
022-0-193-060	Single Family Detached	4	7,952	1	_	\$551.37	\$551.36
022-0-193-075	Single Family Detached	4	7,952	1	-	\$551.37	\$551.36
022-0-193-080	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-193-095	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-193-105	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-194-015	Single Family Detached	4	8,300	1	-	\$551.37	\$551.36
022-0-194-025	Single Family Detached	4	8,300	1	-	\$551.37	\$551.36
022-0-194-035	Single Family Detached	4	8,006	1	-	\$551.37	\$551.36
022-0-194-045	Single Family Detached	4	8,006	1	-	\$551.37	\$551.36
022-0-194-055	Single Family Detached	4	8,006	1	-	\$551.37	\$551.36
		•	-,000	-		<i>4001.01</i>	<i></i>

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-194-065	Single Family Detached	4	8,006	1	_	\$551.37	\$551.36
022-0-194-075	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-194-079	Single Family Detached	4	8,000 8,006	1	-	\$551.37	\$551.36
022-0-194-080	Single Family Detached	4	8,000 7,958	1	-	\$551.37	\$551.36
022-0-194-105	Single Family Detached	4	7,958	1	-	\$551.37	\$551.36
022-0-194-103	Single Family Detached	4	8,006	1	-	\$551.37	\$551.36
022-0-194-110	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-194-120	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-194-145	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-194-145	Single Family Detached	4	8,000 8,006	1	-	\$551.37	\$551.36
022-0-194-155	Single Family Detached		8,000 8,006	1	-	\$551.37	\$551.36
022-0-194-105	Single Family Detached	4	8,000 8,001	1		\$551.37	\$551.36
022-0-195-010	Single Family Detached	4	8,001	1	-	\$551.37	\$551.36
022-0-195-020	Single Family Detached	4	8,027 8,150		-	\$551.37	\$551.36
	Single Family Detached	4	13,400	1	-	\$351.37 \$851.18	\$331.30 \$851.18
022-0-195-045	Single Family Detached	3	8,400	1	-	\$851.18 \$551.37	\$851.18 \$551.36
022-0-195-055		4	-	1	-		
022-0-196-015 022-0-196-020	Single Family Detached	4	8,225	1	-	\$551.37 \$551.27	\$551.36 \$551.26
	Single Family Detached	4	8,003	1	-	\$551.37 \$551.27	\$551.36 \$551.26
022-0-196-030	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-196-040	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-196-050	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-196-060	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-196-070	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-196-080	Single Family Detached	4	8,003	1	-	\$551.37	\$551.36
022-0-196-090	Single Family Detached	4	8,001	1	-	\$551.37	\$551.36
022-0-200-035	Single Family Detached	4	7,985	1	-	\$551.37	\$551.36
022-0-200-045	Single Family Detached	4	8,128	1	-	\$551.37	\$551.36
022-0-200-055	Single Family Detached	4	8,128	1	-	\$551.37	\$551.36
022-0-200-065	Single Family Detached	4	8,128	1	-	\$551.37	\$551.36
022-0-200-075	Single Family Detached	4	8,084	1	-	\$551.37	\$551.36
022-0-200-085	Single Family Detached	4	8,091	1	-	\$551.37	\$551.36
022-0-200-095	Single Family Detached	4	8,173	1	-	\$551.37	\$551.36
022-0-200-105	Single Family Detached	4	8,173	1	-	\$551.37	\$551.36
022-0-200-115	Single Family Detached	4	8,173	1	-	\$551.37	\$551.36
022-0-200-125	Single Family Detached	4	8,173	1	-	\$551.37	\$551.36
022-0-200-135	Single Family Detached	4	8,173	1	-	\$551.37	\$551.36
022-0-200-145	Single Family Detached	4	8,173	1	-	\$551.37	\$551.36
022-0-200-155	Single Family Detached	4	8,173	1	-	\$551.37	\$551.36
022-0-200-165	Single Family Detached	4	8,173	1	-	\$551.37	\$551.36
022-0-200-175	Single Family Detached	4	8,315	1	-	\$551.37	\$551.36
022-0-200-185	Single Family Detached	4	7,862	1	-	\$551.37	\$551.36
022-0-200-195	Single Family Detached	4	8,001	1	-	\$551.37	\$551.36
022-0-200-205	Single Family Detached	4	8,001	1	-	\$551.37	\$551.36
022-0-200-215	Single Family Detached	4	8,001	1	-	\$551.37	\$551.36
022-0-200-225	Single Family Detached	4	8,194	1	-	\$551.37	\$551.36
022-0-200-235	Single Family Detached	4	7,750	1	-	\$551.37	\$551.36

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
022-0-200-245	Single Family Detached	4	9,750	1	_	\$551.37	\$551.36
022-0-200-245	Single Family Detached	4	8,150	1	-	\$551.37	\$551.36
022-0-200-265	Single Family Detached	4	9,750	1	-	\$551.37	\$551.36
022-0-200-205	Single Family Detached	4	7,750	1	-	\$551.37	\$551.36
022-0-200-275	Single Family Detached	4	8,060	1	-	\$551.37	\$551.36
022-0-200-205	Single Family Detached	4	8,070	1	-	\$551.37	\$551.36
022-0-200-205	Single Family Detached	4	8,146	1	-	\$551.37	\$551.36
022-0-200-305	Single Family Detached	4	8,279	1	-	\$551.37	\$551.36
022-0-200-315	Single Family Detached	4	8,412	1	-	\$551.37	\$551.36
022-0-200-325	Single Family Detached	4	8,483	1	-	\$551.37	\$551.36
022-0-200-335	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-200-345	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-200-365	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-200-305	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-200-385	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-200-395	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-200-405	Single Family Detached	4	8,085	1	-	\$551.37	\$551.36
022-0-200-405	Single Family Detached	4	7,916	1	-	\$551.37	\$551.36
022-0-200-415	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-200-435	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-200-445	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-200-455	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-200-465	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-200-405	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-200-485	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-200-495	Single Family Detached	4	8,000	1	-	\$551.37	\$551.36
022-0-200-505	Single Family Detached	4	8,085	1	-	\$551.37	\$551.36
022-0-200-505	Single Family Detached	4	7,952	1	-	\$551.37	\$551.36
022-0-200-535	Single Family Detached	4	9,585	1	-	\$551.37	\$551.36
022-0-210-020	Single Family Detached	4	458,251	1	-	\$2,404.20	\$2,404.20
022-0-210-020	Single Family Detached	3	11,429	1	-	\$851.18	\$851.18
022-0-210-170	Single Family Detached	2	26,021	1	-	\$1,418.63	\$1,418.62
022-0-210-180	Single Family Detached	3	13,556	1	_	\$851.18	\$851.18
022-0-210-190	Single Family Detached	3	12,626	1	_	\$851.18	\$851.18
022-0-210-200	Single Family Detached	1	43,560	1	_	\$2,404.20	\$2,404.20
022-0-210-210	Single Family Detached	1	364,030	1	_	\$2,404.20	\$2,404.20
023-0-010-010	Single Family Detached	2	32,673	1	-	\$1,418.63	\$1,418.62
023-0-010-080	Single Family Detached	2	32,500	1	-	\$1,418.63	\$1,418.62
023-0-010-000	Single Family Detached	2	38,850	1	-	\$1,418.63	\$1,418.62
023-0-010-100	Single Family Detached	2	39,361	1	_	\$1,418.63	\$1,418.62
023-0-020-010	Commercial Property	2 7	57,501	-	3,065	\$1,066.93	\$1,066.92
023-0-020-020	Single Family Detached	2	31,940	-	5,005	\$1,000.93	\$1,418.62
023-0-020-020	Single Family Detached	2	32,053	1	-	\$1,418.63	\$1,418.62
023-0-020-050	Single Family Detached	2	32,033	1	-	\$1,418.63	\$1,418.62
023-0-020-060	Single Family Detached	2	23,292	1	-	\$1,418.63	\$1,418.62
023-0-020-080	Single Family Detached	2	32,500	1	-	\$1,418.63	\$1,418.62
025-0-020-000	Single I anniy Detached	2	52,500	1	-	ψ1,+10.05	ψ1,10.02

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
023-0-020-100	Single Family Detached	2	32,500	1	-	\$1,418.63	\$1,418.62
023-0-020-130	Single Family Detached	2	32,500	1	-	\$1,418.63	\$1,418.62
023-0-020-150	Single Family Detached	2	32,500	1	_	\$1,418.63	\$1,418.62
023-0-020-160	Single Family Detached	2	32,500	1	-	\$1,418.63	\$1,418.62
023-0-020-170	Commercial Property	7		-	21,998	\$7,657.50	\$7,657.50
023-0-020-180	Single Family Detached	3	16,250	1	-	\$851.18	\$851.18
023-0-020-200	Single Family Detached	2	33,813	1	_	\$1,418.63	\$1,418.62
023-0-030-020	Single Family Detached	3	15,580	1	_	\$851.18	\$851.18
023-0-030-030	Single Family Detached	3	15,580	1	-	\$851.18	\$851.18
023-0-030-040	Commercial Property	7	-	-	19,515	\$6,793.17	\$6,793.16
023-0-030-050	Single Family Detached	1	45,738	1		\$2,404.20	\$2,404.20
023-0-030-060	Single Family Detached	2	24,162	1	-	\$1,418.63	\$1,418.62
023-0-030-140	Commercial Property	7		-	4,413	\$1,536.17	\$1,536.16
023-0-030-150	Multifamily Attached	6	-	12		\$4,810.68	\$4,810.56
023-0-030-180	Commercial Property	7	-	-	8,115	\$2,824.83	\$2,824.82
023-0-030-190	Commercial Property	, 7	-	_	3,008	\$1,047.08	\$1,047.08
023-0-040-040	Single Family Detached	3	13,825	1	-	\$851.18	\$851.18
023-0-040-060	Single Family Detached	2	29,850	1	-	\$1,418.63	\$1,418.62
023-0-050-010	Single Family Detached	1	47,916	1	-	\$2,404.20	\$2,404.20
023-0-050-020	Single Family Detached	1	47,916	1	-	\$2,404.20	\$2,404.20
023-0-050-080	Single Family Detached	1	75,358	1	-	\$2,404.20	\$2,404.20
023-0-050-130	Single Family Detached	1	71,002	1	-	\$2,404.20	\$2,404.20
023-0-061-040	Commercial Property	7	-	_	1,670	\$581.33	\$581.32
023-0-061-050	Single Family Detached	4	7,537	1	-	\$551.37	\$551.36
023-0-061-080	Single Family Detached	4	5,674	1	-	\$551.37	\$551.36
023-0-061-090	Single Family Detached	4	6,750	1	-	\$551.37	\$551.36
023-0-061-100	Single Family Detached	4	5,300	1	-	\$551.37	\$551.36
023-0-061-110	Single Family Detached	4	8,059	1	-	\$551.37	\$551.36
023-0-061-120	Single Family Detached	4	7,504	1	-	\$551.37	\$551.36
023-0-061-130	Single Family Detached	4	7,226	1	-	\$551.37	\$551.36
023-0-061-140	Single Family Detached	4	6,948	1	-	\$551.37	\$551.36
023-0-061-150	Single Family Detached	3	13,062	1	-	\$851.18	\$851.18
023-0-061-160	Commercial Property	7	-	-	1,388	\$483.16	\$483.16
023-0-061-170	Single Family Detached	4	6,988	1	-	\$551.37	\$551.36
023-0-061-210	Commercial Property	7	-	-	2,708	\$942.65	\$942.64
023-0-061-220	Single Family Detached	4	7,781	1	-	\$551.37	\$551.36
023-0-061-230	Commercial Property	7	-	-	3,144	\$1,094.43	\$1,094.42
023-0-061-250	Single Family Detached	4	6,114	1	-	\$551.37	\$551.36
023-0-061-260	Single Family Detached	4	5,836	1	-	\$551.37	\$551.36
023-0-061-270	Commercial Property	7	-	-	2,062	\$717.78	\$717.78
023-0-061-280	Commercial Property	7	-	-	1,397	\$486.30	\$486.30
023-0-062-010	Single Family Detached	3	12,952	1	-	\$851.18	\$851.18
023-0-062-020	Single Family Detached	4	8,022	1	-	\$551.37	\$551.36
023-0-062-030	Single Family Detached	4	7,868	1	-	\$551.37	\$551.36
023-0-062-040	Single Family Detached	4	7,713	1	-	\$551.37	\$551.36
023-0-062-050	Single Family Detached	4	7,559	1	-	\$551.37	\$551.36

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
023-0-062-060	Single Family Detached	4	9,800	1	_	\$551.37	\$551.36
023-0-062-070	Single Family Detached	4	9,700	1	-	\$551.37	\$551.36
023-0-062-080	Single Family Detached	4	6,176	1	-	\$551.37	\$551.36
023-0-062-090	Single Family Detached	4	6,390	1	-	\$551.37	\$551.36
023-0-062-100	Single Family Detached	4	6,745	1	-	\$551.37	\$551.36
023-0-062-110	Single Family Detached	4	7,246	1	-	\$551.37	\$551.36
023-0-062-120	Single Family Detached	2	22,900	1	-	\$1,418.63	\$1,418.62
023-0-062-130	Single Family Detached	4	9,200	1	-	\$551.37	\$551.36
023-0-062-150	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
023-0-062-160	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
023-0-062-170	Single Family Detached	4	7,500	2	-	\$1,102.74	\$1,102.72
023-0-062-240	Single Family Detached	4	4,256	1	-	\$551.37	\$551.36
023-0-062-250	Single Family Detached	4	7,492	1	-	\$551.37	\$551.36
023-0-062-270	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
023-0-063-060	Single Family Detached	4	6,736	1	-	\$551.37	\$551.36
023-0-063-070	Single Family Detached	4	5,819	1	-	\$551.37	\$551.36
023-0-063-080	Single Family Detached	4	8,088	1	-	\$551.37	\$551.36
023-0-063-140	Commercial Property	7	-	-	5,296	\$1,843.54	\$1,843.54
023-0-063-170	Commercial Property	, 7	-	_	5,107	\$1,777.75	\$1,777.74
023-0-063-220	Single Family Detached	4	7,800	1	-	\$551.37	\$551.36
023-0-063-230	Commercial Property	7	-	_	2,100	\$731.01	\$731.00
023-0-063-240	Single Family Detached	4	7,075	1	_,	\$551.37	\$551.36
023-0-071-030	Single Family Detached	2	22,500	2	-	\$2,837.26	\$2,837.24
023-0-071-050	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
023-0-072-020	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
023-0-072-030	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
023-0-072-040	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
023-0-072-050	Single Family Detached	3	11,250	2	-	\$1,702.36	\$1,702.36
023-0-072-060	Single Family Detached	2	22,500	1	-	\$1,418.63	\$1,418.62
023-0-073-010	Single Family Detached	4	6,000	1	-	\$551.37	\$551.36
023-0-073-020	Single Family Detached	4	5,500	1	-	\$551.37	\$551.36
023-0-073-030	Single Family Detached	4	5,500	1	-	\$551.37	\$551.36
023-0-073-050	Single Family Detached	4	6,195	1	-	\$551.37	\$551.36
023-0-073-060	Single Family Detached	4	5,725	1	-	\$551.37	\$551.36
023-0-073-070	Single Family Detached	4	5,433	1	-	\$551.37	\$551.36
023-0-073-080	Single Family Detached	4	5,175	1	-	\$551.37	\$551.36
023-0-073-090	Single Family Detached	4	5,400	1	-	\$551.37	\$551.36
023-0-073-100	Single Family Detached	4	5,500	1	-	\$551.37	\$551.36
023-0-073-110	Single Family Detached	4	6,376	1	-	\$551.37	\$551.36
023-0-074-010	Single Family Detached	3	11,250	1	-	\$851.18	\$851.18
023-0-074-020	Single Family Detached	3	18,750	1	-	\$851.18	\$851.18
023-0-074-030	Commercial Property	7		-	4,964	\$1,727.97	\$1,727.96
023-0-074-050	Single Family Detached	3	18,000	1		\$851.18	\$851.18
023-0-074-060	Single Family Detached	4	9,000	1	-	\$551.37	\$551.36
023-0-074-070	Single Family Detached	3	18,000	1	-	\$851.18	\$851.18
023-0-075-185	Condominium	5	-,	1	-	\$467.52	\$467.52

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
023-0-075-195	Condominium	5	_	1	_	\$467.52	\$467.52
023-0-075-205	Condominium	5	_	1	-	\$467.52	\$467.52
023-0-075-220	Commercial Property	7	-	-	1,532	\$533.29	\$533.28
023-0-076-020	Commercial Property	7	-	-	21,040	\$7,324.02	\$7,324.02
023-0-077-040	Commercial Property	7	_	_	2,406	\$837.53	\$837.52
023-0-077-050	Commercial Property	7	_	_	6,076	\$2,115.06	\$2,115.06
023-0-077-060	Commercial Property	7	_	_	1,990	\$692.72	\$692.72
023-0-077-070	Commercial Property	7	-	-	2,329	\$810.72	\$810.72
023-0-077-080	Commercial Property	7	-	-	1,539	\$535.73	\$535.72
023-0-081-010	Single Family Detached	3	13,850	1	-	\$851.18	\$851.18
023-0-081-020	Single Family Detached	4	6,496	1	-	\$551.37	\$551.36
023-0-081-030	Single Family Detached	4	5,850	1	-	\$551.37	\$551.36
023-0-081-040	Single Family Detached	4	5,850	1	-	\$551.37	\$551.36
023-0-081-050	Single Family Detached	4	5,850	1	-	\$551.37	\$551.36
023-0-081-060	Single Family Detached	4	5,850	1	-	\$551.37	\$551.36
023-0-081-070	Single Family Detached	4	6,000	1	-	\$551.37	\$551.36
023-0-081-080	Single Family Detached	4	7,200	1	-	\$551.37	\$551.36
023-0-081-090	Single Family Detached	4	5,850	1	-	\$551.37	\$551.36
023-0-081-100	Single Family Detached	4	5,850	1	-	\$551.37	\$551.36
023-0-081-110	Single Family Detached	4	5,850	1	-	\$551.37	\$551.36
023-0-081-120	Single Family Detached	4	5,850	1	-	\$551.37	\$551.36
023-0-081-130	Single Family Detached	3	11,750	1	-	\$851.18	\$851.18
023-0-081-145	Single Family Detached	4	9,100	1	-	\$551.37	\$551.36
023-0-081-150	Single Family Detached	3	19,600	1	-	\$851.18	\$851.18
023-0-081-160	Single Family Detached	3	20,450	1	-	\$851.18	\$851.18
023-0-081-300	Single Family Detached	3	19,800	1	-	\$851.18	\$851.18
023-0-081-315	Single Family Detached	3	17,900	1	-	\$851.18	\$851.18
023-0-081-325	Single Family Detached	3	13,900	1	-	\$851.18	\$851.18
023-0-081-335	Single Family Detached	3	16,400	1	-	\$851.18	\$851.18
023-0-081-345	Single Family Detached	2	26,300	1	-	\$1,418.63	\$1,418.62
023-0-081-355	Single Family Detached	2	36,700	1	-	\$1,418.63	\$1,418.62
023-0-081-365	Single Family Detached	3	12,400	1	-	\$851.18	\$851.18
023-0-081-370	Single Family Detached	3	10,300	1	-	\$851.18	\$851.18
023-0-081-400	Single Family Detached	3	10,856	1	-	\$851.18	\$851.18
023-0-081-410	Single Family Detached	3	10,500	1	-	\$851.18	\$851.18
023-0-081-420	Single Family Detached	3	12,150	1	-	\$851.18	\$851.18
023-0-081-430	Single Family Detached	3	13,420	1	-	\$851.18	\$851.18
023-0-081-440	Single Family Detached	3	12,786	1	-	\$851.18	\$851.18
023-0-081-450	Single Family Detached	3	12,152	1	-	\$851.18	\$851.18
023-0-081-460	Single Family Detached	3	10,800	1	-	\$851.18	\$851.18
023-0-082-010	Single Family Detached	4	8,250	1	-	\$551.37	\$551.36
023-0-082-020	Single Family Detached	4	8,560	1	-	\$551.37	\$551.36
023-0-082-030	Single Family Detached	4	8,414	1	-	\$551.37	\$551.36
023-0-082-040	Single Family Detached	4	8,220	1	-	\$551.37	\$551.36
023-0-082-050	Single Family Detached	3	10,050	1	-	\$851.18	\$851.18
023-0-082-070	Single Family Detached	3	15,100	1	-	\$851.18	\$851.18

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
023-0-082-105	Single Family Detached	3	11,524	1	_	\$851.18	\$851.18
023-0-082-120	Single Family Detached	3	17,339	1	_	\$851.18	\$851.18
023-0-082-130	Single Family Detached	3	19,650	1	-	\$851.18	\$851.18
023-0-083-010	Single Family Detached	3	10,568	1	-	\$851.18	\$851.18
023-0-083-020	Single Family Detached	3	10,000	1	-	\$851.18	\$851.18
023-0-083-030	Single Family Detached	3	10,300	1	-	\$851.18	\$851.18
023-0-083-040	Single Family Detached	3	13,400	1	-	\$851.18	\$851.18
023-0-083-050	Single Family Detached	4	7,854	1	_	\$551.37	\$551.36
023-0-083-060	Single Family Detached	4	8,500	1	_	\$551.37	\$551.36
023-0-083-070	Single Family Detached	4	7,262	1	-	\$551.37	\$551.36
023-0-083-080	Single Family Detached	4	5,850	1	_	\$551.37	\$551.36
023-0-083-090	Single Family Detached	4	5,850	1	_	\$551.37	\$551.36
023-0-083-100	Single Family Detached	4	5,850	1	_	\$551.37	\$551.36
023-0-083-110	Single Family Detached	4	5,850	1	_	\$551.37	\$551.36
023-0-083-120	Single Family Detached	4	5,850	1	_	\$551.37	\$551.36
023-0-083-130	Single Family Detached	4	6,750	1	_	\$551.37	\$551.36
023-0-083-140	Single Family Detached	4	6,550	1	-	\$551.37	\$551.36
023-0-083-150	Single Family Detached	4	5,525	1	_	\$551.37	\$551.36
023-0-090-040	Single Family Detached	4	9,105	1	_	\$551.37	\$551.36
023-0-090-060	Single Family Detached	2	23,250	1	_	\$1,418.63	\$1,418.62
023-0-090-080	Single Family Detached	2	36,080	1	-	\$1,418.63	\$1,418.62
023-0-090-140	Single Family Detached	3	11,128	1	-	\$851.18	\$851.18
023-0-090-150	Multifamily Attached	6	-	2	-	\$801.78	\$801.76
023-0-090-235	Single Family Detached	4	9,674	1	-	\$551.37	\$551.36
023-0-090-295	Single Family Detached	4	9,955	1	-	\$551.37	\$551.36
023-0-090-305	Single Family Detached	3	10,125	1	-	\$851.18	\$851.18
023-0-090-310	Single Family Detached	3	21,453	1	-	\$851.18	\$851.18
023-0-090-320	Single Family Detached	2	42,681	1	-	\$1,418.63	\$1,418.62
023-0-090-330	Single Family Detached	3	14,483	1	-	\$851.18	\$851.18
023-0-090-345	Single Family Detached	2	31,871	1	-	\$1,418.63	\$1,418.62
023-0-100-040	Commercial Property	7	-	-	2,002	\$696.90	\$696.90
023-0-100-050	Commercial Property	7	-	-	1,482	\$515.88	\$515.88
023-0-100-060	Commercial Property	7	-	-	7,380	\$2,568.98	\$2,568.98
023-0-100-080	Commercial Property	7	-	-	4,999	\$1,740.15	\$1,740.14
023-0-100-140	Single Family Detached	4	7,500	1	-	\$551.37	\$551.36
023-0-100-150	Single Family Detached	4	6,000	1	-	\$551.37	\$551.36
023-0-100-160	Single Family Detached	4	6,700	1	-	\$551.37	\$551.36
023-0-100-170	Single Family Detached	4	7,700	1	-	\$551.37	\$551.36
023-0-100-180	Single Family Detached	3	10,500	1	-	\$851.18	\$851.18
023-0-100-190	Single Family Detached	4	7,700	1	-	\$551.37	\$551.36
023-0-100-220	Commercial Property	7	-	-	5,500	\$1,914.55	\$1,914.54
023-0-100-230	Commercial Property	7	-	-	6,050	\$2,106.01	\$2,106.00
023-0-100-240	Commercial Property	7	-	-	10,244	\$3,565.94	\$3,565.94
023-0-110-040	Single Family Detached	3	20,000	1	-	\$851.18	\$851.18
023-0-110-080	Commercial Property	7	-	-	2,214	\$770.69	\$770.68
023-0-110-120	Commercial Property	7	-	-	2,877	\$1,001.48	\$1,001.48

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$\begin{array}{cccccccccccccccccccccccccccccccccccc$	023-0-110-130	Commercial Property	7	_	_	2 504	\$871.64	\$871.64
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023-0-110-180         Single Family Detached         4         7,500         1         -         \$\$51.37         \$\$551.36           023-0-110-200         Single Family Detached         4         5,200         1         -         \$\$551.37         \$\$551.36           023-0-110-200         Single Family Detached         4         5,200         1         -         \$\$551.37         \$\$551.36           023-0-110-200         Single Family Detached         4         5,575         1         -         \$\$551.37         \$\$551.36           023-0-110-200         Single Family Detached         4         5,575         1         -         \$\$551.37         \$\$551.36           023-0-110-200         Single Family Detached         4         7,500         1         -         \$\$551.37         \$\$551.36           023-0-110-280         Single Family Detached         3         10,350         1         -         \$\$551.37         \$\$551.36           023-0-110-310         Single Family Detached         4         7,160         1         -         \$\$551.37         \$\$551.36           023-0-110-310         Single Family Detached         2         7,374         1         -         \$\$1,48.63         \$1,48.62           023-0-110-340		e :						
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023-0-110-200         Single Family Detached         4         5,200         1         -         \$\$51.37         \$\$51.36           023-0-110-220         Single Family Detached         4         5,200         1         -         \$\$51.37         \$\$51.36           023-0-110-220         Single Family Detached         4         5,575         1         -         \$\$51.37         \$\$51.36           023-0-110-200         Single Family Detached         4         5,575         1         -         \$\$51.37         \$\$51.36           023-0-110-200         Single Family Detached         4         7,500         1         -         \$\$51.37         \$\$51.36           023-0-110-200         Single Family Detached         4         7,500         1         -         \$\$51.37         \$\$51.36           023-0-110-310         Single Family Detached         3         14,302         -         \$\$851.18         \$\$851.18           023-0-110-310         Single Family Detached         4         7,161         -         \$\$51.37         \$\$51.36           023-0-110-310         Single Family Detached         4         7,161         -         \$\$51.37         \$\$51.36           023-0-110-40         Commercial Property         7         -								
023-0-110-210         Commercial Property         7         -         -         2,140         \$744.93         \$\$744.92           023-0-110-220         Commercial Property         7         -         -         \$982         \$531.37         \$\$551.37           023-0-110-240         Single Family Detached         4         \$5,75         1         -         \$\$551.37         \$\$551.37           023-0-110-260         Single Family Detached         4         \$5,75         1         -         \$\$551.37         \$\$551.36           023-0-110-260         Single Family Detached         4         7,500         2         -         \$1,102.74         \$1,102.72           023-0-110-280         Single Family Detached         3         10,350         1         -         \$\$51.37         \$\$551.37           023-0-110-310         Single Family Detached         3         10,350         1         -         \$\$51.37         \$\$551.36           023-0-110-310         Single Family Detached         4         7,160         1         -         \$\$51.37         \$\$551.36           023-0-110-340         Single Family Detached         2         7,374         1         -         \$1,418.63         \$1,418.62           023-0-110-400								
023-0-110-220         Single Family Detached         4         5,200         1         -         \$\$\$1.37         \$\$\$51.36           023-0-110-240         Single Family Detached         4         5,575         1         -         \$\$\$51.37         \$\$551.36           023-0-110-260         Single Family Detached         4         5,575         1         -         \$\$551.37         \$\$551.37           023-0-110-260         Single Family Detached         4         7,500         1         -         \$\$551.37         \$\$551.37           023-0-110-270         Single Family Detached         4         7,500         1         -         \$\$51.37         \$\$551.36           023-0-110-280         Single Family Detached         3<10,302				5,200				
023-0-110-230         Commercial Property         7         -         982         \$341.83         \$\$341.82           023-0-110-250         Single Family Detached         4         5,575         1         -         \$\$551.37         \$\$551.36           023-0-110-260         Single Family Detached         4         7,500         1         -         \$\$551.37         \$\$551.36           023-0-110-280         Single Family Detached         4         7,500         1         -         \$\$551.37         \$\$551.36           023-0-110-280         Single Family Detached         3         10,350         1         -         \$\$551.37         \$\$551.36           023-0-110-310         Single Family Detached         3         14,302         1         -         \$\$551.37         \$\$551.36           023-0-110-340         Single Family Detached         4         7,151         1         -         \$\$551.37         \$\$551.36           023-0-110-300         Commercial Property         7         -         -         \$\$1,418.63         \$\$1,418.63         \$\$1,418.63         \$\$1,418.63         \$\$1,418.63         \$\$1,418.63         \$\$1,418.63         \$\$1,418.62           023-0-110-400         Commercial Property         7         -         4,575		1 1		5 200		2,140		
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023-0-110-260         Single Family Detached         4         7,500         1         -         \$551.37         \$551.36           023-0-110-280         Single Family Detached         4         7,500         2         -         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,102.74         \$1,10						_		
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023-0-110-280         Single Family Detached         4         7,500         1         -         \$\$51.37         \$\$51.36           023-0-110-290         Single Family Detached         3         10,350         1         -         \$\$851.18         \$\$851.18           023-0-110-330         Single Family Detached         4         7,151         -         \$\$551.37         \$\$551.36           023-0-110-300         Single Family Detached         4         7,160         -         \$\$1,418.63         \$\$1,418.62           023-0-110-300         Commercial Property         7         -         -         3,756         \$\$1,307.46         \$\$1,307.46           023-0-110-400         Commercial Property         7         -         -         5,619         \$\$1,955.97         \$1,955.96           023-0-110-400         Commercial Property         7         -         -         4,872         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,236.45         \$1,236.44         \$2,3-0-110-450         Commercial Property         7         -         -         4,872         \$1,695.94         \$1,695.94         \$1,695.94         \$1,435.90         \$2,3-0-120.400         Multifamily Detached         31,3.94								
023-0-110-290         Single Family Detached         3         10,350         1         -         \$851.18         \$851.18           023-0-110-310         Single Family Detached         3         14,302         1         -         \$851.18         \$851.18           023-0-110-330         Single Family Detached         4         7,151         1         -         \$551.37         \$551.36           023-0-110-340         Single Family Detached         2         27,374         1         -         \$1,418.63         \$1,418.62           023-0-110-400         Commercial Property         7         -         -         5,619         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,955.97         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94         \$1,695.94		e :						
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023-0-110-460         Commercial Property         7         -         -         4,125         \$1,435.91         \$1,435.90           023-0-110-470         Commercial Property         7         -         -         3,552         \$1,236.45         \$1,236.44           023-0-120-010         Single Family Detached         3         13,940         1         -         \$851.18         \$851.18           023-0-120-040         Multifamily Attached         6         -         2         -         \$801.78         \$801.76           023-0-120-090         Single Family Detached         3         11,300         1         -         \$851.18         \$851.18           023-0-120-105         Single Family Detached         3         11,285         1         -         \$851.18         \$851.18           023-0-120-100         Single Family Detached         4         8,118         1         -         \$551.37         \$551.36           023-0-120-200         Multifamily Attached         6         -         2         -         \$801.78         \$801.76           023-0-120-210         Multifamily Attached         6         -         2         -         \$801.78         \$801.76           023-0-132-070         Single Family Detached <td></td> <td>1 1</td> <td></td> <td>-</td> <td>_</td> <td>-</td> <td></td> <td></td>		1 1		-	_	-		
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023-0-120-010       Single Family Detached       3       13,940       1       -       \$851.18       \$851.18         023-0-120-040       Multifamily Attached       6       -       2       -       \$801.78       \$801.76         023-0-120-090       Single Family Detached       3       11,300       1       -       \$851.18       \$851.18         023-0-120-105       Single Family Detached       3       11,285       1       -       \$851.18       \$851.18         023-0-120-105       Single Family Detached       4       9,857       1       -       \$551.37       \$551.36         023-0-120-100       Single Family Detached       4       8,118       1       -       \$551.37       \$551.36         023-0-120-200       Multifamily Attached       6       -       2       -       \$801.78       \$801.76         023-0-120-200       Multifamily Attached       6       -       2       -       \$801.78       \$801.76         023-0-120-200       Multifamily Attached       6       -       2       -       \$801.78       \$801.76         023-0-132-070       Single Family Detached       2       41,000       1       -       \$1,418.63       \$1,418.62		1 1		-	_			
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023-0-120-090Single Family Detached311,3001-\$851.18\$851.18023-0-120-105Single Family Detached311,2851-\$851.18\$851.18023-0-120-110Single Family Detached49,8571-\$551.37\$551.36023-0-120-190Single Family Detached48,1181-\$551.37\$551.36023-0-120-200Multifamily Attached6-2-\$801.78\$801.76023-0-120-210Multifamily Attached6-2-\$801.78\$801.76023-0-120-220Multifamily Attached6-2-\$801.78\$801.76023-0-120-220Multifamily Attached6-2-\$801.78\$801.76023-0-120-230Multifamily Attached6-2-\$801.78\$801.76023-0-132-070Single Family Detached241,0001-\$1,418.63\$1,418.62023-0-132-090Multifamily Attached6-8-\$3,207.12\$3,207.04023-0-132-100Multifamily Attached6-3-\$1,202.67\$1,202.64023-0-132-120Single Family Detached227,0001-\$1,418.63\$1,418.62023-0-132-120Single Family Detached315,2001-\$851.18\$851.18023-0-132-170Single Family Detached314,6001-\$851.18\$851.						-		
023-0-120-105       Single Family Detached       3       11,285       1       -       \$851.18       \$851.18         023-0-120-110       Single Family Detached       4       9,857       1       -       \$551.37       \$551.36         023-0-120-190       Single Family Detached       4       8,118       1       -       \$551.37       \$551.36         023-0-120-200       Multifamily Attached       6       -       2       -       \$801.78       \$801.76         023-0-120-210       Multifamily Attached       6       -       2       -       \$801.78       \$801.76         023-0-120-220       Multifamily Attached       6       -       2       -       \$801.78       \$801.76         023-0-120-230       Multifamily Attached       6       -       2       -       \$801.78       \$801.76         023-0-132-070       Single Family Detached       2       41,000       1       -       \$1,418.63       \$1,418.62         023-0-132-070       Single Family Detached       2       27,000       1       -       \$1,418.63       \$1,418.62         023-0-132-100       Multifamily Attached       6       -       3       -       \$1,202.67       \$1,202.64		-		11.300		-		
023-0-120-110Single Family Detached49,8571-\$551.37\$551.36023-0-120-190Single Family Detached48,1181-\$551.37\$551.36023-0-120-200Multifamily Attached6-2-\$801.78\$801.76023-0-120-210Multifamily Attached6-2-\$801.78\$801.76023-0-120-220Multifamily Attached6-2-\$801.78\$801.76023-0-120-230Multifamily Attached6-2-\$801.78\$801.76023-0-132-070Single Family Detached241,0001-\$1,418.63\$1,418.62023-0-132-070Single Family Detached6-8-\$3,207.12\$3,207.04023-0-132-070Single Family Detached6-8-\$1,202.67\$1,202.64023-0-132-090Multifamily Attached6-8-\$3,207.12\$3,207.04023-0-132-100Multifamily Detached227,0001-\$1,418.63\$1,418.62023-0-132-120Single Family Detached315,2001-\$851.18\$851.18023-0-132-170Single Family Detached314,6001-\$851.18\$851.18023-0-132-180Single Family Detached234,1661-\$1,418.63\$1,418.62023-0-141-010Single Family Detached48,4001-\$551.37				,		-		
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Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
023-0-141-040	Single Family Detached	4	4,226	1	-	\$551.37	\$551.36
023-0-141-050	Single Family Detached	4	6,930	1	-	\$551.37	\$551.36
023-0-141-060	Industrial Property	8	-	-	4,074	\$743.91	\$743.90
023-0-141-070	Single Family Detached	4	7,350	1	-	\$551.37	\$551.36
023-0-141-080	Single Family Detached	4	5,250	1	-	\$551.37	\$551.36
023-0-141-090	Single Family Detached	4	4,867	1	-	\$551.37	\$551.36
023-0-141-100	Single Family Detached	4	7,350	1	-	\$551.37	\$551.36
023-0-141-110	Single Family Detached	4	5,250	1	-	\$551.37	\$551.36
023-0-141-120	Single Family Detached	4	5,250	1	-	\$551.37	\$551.36
023-0-141-130	Commercial Property	7	-	-	2,078	\$723.35	\$723.34
023-0-141-140	Commercial Property	7	-	-	3,148	\$1,095.82	\$1,095.82
023-0-141-170	Single Family Detached	4	8,102	1	-	\$551.37	\$551.36
023-0-141-200	Single Family Detached	4	6,481	1	-	\$551.37	\$551.36
023-0-141-210	Single Family Detached	3	12,152	1	-	\$851.18	\$851.18
023-0-141-220	Single Family Detached	3	12,152	1	-	\$851.18	\$851.18
023-0-141-230	Single Family Detached	4	8,131	1	-	\$551.37	\$551.36
023-0-141-240	Single Family Detached	4	8,131	1	-	\$551.37	\$551.36
023-0-141-250	Single Family Detached	4	8,131	1	-	\$551.37	\$551.36
023-0-141-260	Single Family Detached	4	8,133	1	-	\$551.37	\$551.36
023-0-141-270	Single Family Detached	4	8,133	1	-	\$551.37	\$551.36
023-0-141-280	Single Family Detached	4	8,133	1	-	\$551.37	\$551.36
023-0-141-310	Multifamily Attached	6	-	4	-	\$1,603.56	\$1,603.52
023-0-141-330	Multifamily Attached	6	-	6	-	\$2,405.34	\$2,405.28
023-0-141-340	Commercial Property	7	-	-	4,933	\$1,717.18	\$1,717.18
023-0-141-410	Single Family Detached	2	33,015	1	-	\$1,418.63	\$1,418.62
023-0-141-430	Commercial Property	7	-	-	2,690	\$936.39	\$936.38
023-0-141-430	Multifamily Attached	6	-	6	-	\$2,405.34	\$2,405.28
023-0-142-010	Single Family Detached	4	5,377	1	-	\$551.37	\$551.36
023-0-142-020	Single Family Detached	4	6,050	1	-	\$551.37	\$551.36
023-0-142-030	Single Family Detached	4	8,521	1	-	\$551.37	\$551.36
023-0-142-040	Single Family Detached	3	14,259	1	-	\$851.18	\$851.18
023-0-142-050	Single Family Detached	4	8,102	1	-	\$551.37	\$551.36
023-0-142-060	Single Family Detached	4	8,102	1	-	\$551.37	\$551.36
023-0-142-070	Single Family Detached	4	8,102	1	-	\$551.37	\$551.36
023-0-142-080	Multifamily Attached	6	-	3	-	\$1,202.67	\$1,202.64
023-0-142-090	Multifamily Attached	6	-	10	-	\$4,008.90	\$4,008.80
023-0-142-150	Single Family Detached	4	5,100	1	-	\$551.37	\$551.36
023-0-142-170	Commercial Property	7	-	-	8,488	\$2,954.67	\$2,954.66
023-0-150-030	Commercial Property	7	-	-	1,865	\$649.21	\$649.20
023-0-150-040	Single Family Detached	4	7,200	1	-	\$551.37	\$551.36
023-0-150-050	Single Family Detached	3	13,314	1	-	\$851.18	\$851.18
023-0-150-060	Commercial Property	7	-	-	1,996	\$694.81	\$694.80
023-0-150-070	Single Family Detached	2	35,800	1	-	\$1,418.63	\$1,418.62
023-0-150-175	Single Family Detached	2	25,620	1	-	\$1,418.63	\$1,418.62
023-0-150-205	Commercial Property	7	-	-	1,312	\$456.71	\$456.70
023-0-150-250	Commercial Property	7	-	-	845	\$294.14	\$294.14

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
023-0-150-285	Commercial Property	7	_	_	3,900	\$1,357.59	\$1,357.58
023-0-150-295	Industrial Property	8	-	-	6,156	\$1,124.09	\$1,124.08
023-0-150-315	Commercial Property	7	-	-	11,148	\$3,880.62	\$3,880.62
023-0-150-345	Commercial Property	7	-	-	1,658	\$577.15	\$577.14
023-0-150-405	Commercial Property	7	-	-	1,287	\$448.00	\$448.00
023-0-150-415	Industrial Property	8	-	-	11,705	\$2,137.33	\$2,137.32
023-0-150-425	Industrial Property	8	-	-	11,705	\$2,137.33	\$2,137.32
023-0-150-435	Commercial Property	7	-	-	2,735	\$952.05	\$952.04
023-0-150-455	Commercial Property	7	-	-	2,613	\$909.59	\$909.58
023-0-150-475	Industrial Property	8	-	-	29,147	\$5,322.24	\$5,322.24
023-0-150-480	Single Family Detached	2	35,719	1	-	\$1,418.63	\$1,418.62
023-0-150-490	Single Family Detached	3	10,019	1	-	\$851.18	\$851.18
023-0-150-500	Single Family Detached	3	10,019	1	-	\$851.18	\$851.18
023-0-150-510	Commercial Property	7	-	-	6,848	\$2,383.79	\$2,383.78
023-0-160-075	Commercial Property	7	-	-	2,293	\$798.19	\$798.18
023-0-160-115	Commercial Property	7	-	-	2,795	\$972.94	\$972.94
023-0-160-125	Industrial Property	8	-	-	1,184	\$216.20	\$216.20
023-0-160-195	Industrial Property	8	-	-	832	\$151.92	\$151.92
023-0-160-205	Single Family Detached	4	5,676	1	-	\$551.37	\$551.36
023-0-160-255	Industrial Property	8	-	-	4,180	\$763.27	\$763.26
023-0-160-285	Industrial Property	8	-	-	5,115	\$934.00	\$934.00
023-0-160-315	Industrial Property	8	-	-	6,143	\$1,121.71	\$1,121.70
023-0-160-335	Industrial Property	8	-	-	9,321	\$1,702.01	\$1,702.00
023-0-160-345	Commercial Property	7	-	-	3,707	\$1,290.41	\$1,290.40
023-0-160-365	Commercial Property	7	-	-	6,164	\$2,145.69	\$2,145.68
023-0-172-055	Industrial Property	8	-	-	76,188	\$13,911.93	\$13,911.92
023-0-173-030	Industrial Property	8	-	-	736	\$134.39	\$134.38
023-0-180-010	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-180-020	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-180-030	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-180-040	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-180-050	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-180-060	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-180-070	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-180-080	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-190-110	Commercial Property	7	-	-	23,196	\$8,074.53	\$8,074.52
023-0-190-120	Commercial Property	7	-	-	12,831	\$4,466.47	\$4,466.46
023-0-200-015	Single Family Detached	4	3,611	1	-	\$551.37	\$551.36
023-0-200-025	Single Family Detached	4	3,905	1	-	\$551.37	\$551.36
023-0-200-035	Single Family Detached	4	3,868	1	-	\$551.37	\$551.36
023-0-200-045	Single Family Detached	4	3,979	1	-	\$551.37	\$551.36
023-0-200-055	Single Family Detached	4	3,869	1	-	\$551.37	\$551.36
023-0-200-065	Single Family Detached	4	3,869	1	-	\$551.37	\$551.36
023-0-200-075	Single Family Detached	4	3,979	1	-	\$551.37	\$551.36
023-0-200-085	Single Family Detached	4	3,390	1	-	\$551.37	\$551.36
023-0-200-095	Single Family Detached	4	4,769	1	-	\$551.37	\$551.36

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
023-0-200-105	Single Family Detached	4	4,095	1	-	\$551.37	\$551.36
023-0-200-115	Single Family Detached	4	4,076	1	_	\$551.37	\$551.36
023-0-200-115	Single Family Detached	4	4,070	1	-	\$551.37	\$551.36
023-0-200-125	Single Family Detached	4	4,258	1	-	\$551.37	\$551.36
023-0-200-135	Single Family Detached	4	4,114	1	-	\$551.37	\$551.36
023-0-200-145	Single Family Detached	4	4,077	1	-	\$551.37	\$551.36
023-0-200-165	Single Family Detached	4	4,040	1	-	\$551.37	\$551.36
023-0-200-105	Single Family Detached	4	4,204	1	-	\$551.37	\$551.36
023-0-200-185	Single Family Detached	4	4,501	1	-	\$551.37	\$551.36
023-0-200-195	Single Family Detached	4	3,622	1	_	\$551.37	\$551.36
023-0-200-205	Single Family Detached	4	3,338	1	_	\$551.37	\$551.36
023-0-200-205	Single Family Detached	4	3,309	1	_	\$551.37	\$551.36
023-0-200-215	Single Family Detached	4	3,338	1	_	\$551.37	\$551.36
023-0-200-225	Single Family Detached	4	3,309	1	_	\$551.37	\$551.36
023-0-200-255	Single Family Detached	4	3,338	1	_	\$551.37	\$551.36
023-0-200-249	Single Family Detached	4	6,498	1	_	\$551.37	\$551.36
023-0-200-290	Industrial Property	4	0,470	-	3,575	\$652.80	\$652.80
023-0-210-015	Condominium	8 5		1	5,575	\$467.52	\$467.52
023-0-210-015	Condominium	5	_	1	_	\$467.52	\$467.52
023-0-210-025	Condominium	5	_	1	_	\$467.52	\$467.52
023-0-210-045	Condominium	5	_	1	_	\$467.52	\$467.52
023-0-210-045	Condominium	5	_	1	_	\$467.52	\$467.52
023-0-210-065	Condominium	5	_	1	_	\$467.52	\$467.52
023-0-210-075	Condominium	5	_	1	-	\$467.52	\$467.52
023-0-210-085	Condominium	5	_	1	-	\$467.52	\$467.52
023-0-210-095	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-210-105	Condominium	5	-	1	_	\$467.52	\$467.52
023-0-210-115	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-210-125	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-210-135	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-210-145	Condominium	5	-	1	_	\$467.52	\$467.52
023-0-210-155	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-210-165	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-210-175	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-210-185	Condominium	5	_	1	-	\$467.52	\$467.52
023-0-210-195	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-210-205	Condominium	5	_	1	-	\$467.52	\$467.52
023-0-210-215	Condominium	5	-	1	-	\$467.52	\$467.52
023-0-210-225	Condominium	5	_	1	-	\$467.52	\$467.52
023-0-210-235	Condominium	5	-	1	-	\$467.52	\$467.52
024-0-010-020	Commercial Property	7	-	-	59,329	\$20,652.42	\$20,652.42
024-0-010-090	Commercial Property	7	-	-	10,233	\$3,562.11	\$3,562.10
024-0-010-110	Commercial Property	7	-	-	44,879	\$15,622.38	\$15,622.38
024-0-020-100	Commercial Property	7	-	-	6,402	\$2,228.54	\$2,228.54
024-0-031-020	Single Family Detached	1	94,089	1	-	\$2,404.20	\$2,404.20
024-0-031-030	Single Family Detached	1	103,237	1	-	\$2,404.20	\$2,404.20

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
024-0-031-060	Single Family Detached	1	85,377	1	-	\$2,404.20	\$2,404.20
024-0-031-070	Single Family Detached	1	94,525	1	-	\$2,404.20	\$2,404.20
024-0-031-150	Single Family Detached	1	255,822	1	-	\$2,404.20	\$2,404.20
024-0-031-160	Single Family Detached	1	203,300	1	-	\$2,404.20	\$2,404.20
024-0-031-170	Single Family Detached	3	19,707	1	-	\$851.18	\$851.18
024-0-031-180	Single Family Detached	1	48,869	1	-	\$2,404.20	\$2,404.20
024-0-033-020	Single Family Detached	1	175,546	1	-	\$2,404.20	\$2,404.20
024-0-033-040	Single Family Detached	1	71,438	1	-	\$2,404.20	\$2,404.20
024-0-033-070	Single Family Detached	1	110,642	1	_	\$2,404.20	\$2,404.20
024-0-033-080	Single Family Detached	1	111,513	1	-	\$2,404.20	\$2,404.20
024-0-033-100	Single Family Detached	1	105,850	1	-	\$2,404.20	\$2,404.20
024-0-033-130	Single Family Detached	1	135,471	1	-	\$2,404.20	\$2,404.20
024-0-033-150	Single Family Detached	1	132,422	1	-	\$2,404.20	\$2,404.20
024-0-033-160	Single Family Detached	2	41,817	1	-	\$1,418.63	\$1,418.62
024-0-033-170	Single Family Detached	2	43,124	1	-	\$1,418.63	\$1,418.62
024-0-033-180	Single Family Detached	2	43,124	1	-	\$1,418.63	\$1,418.62
024-0-033-230	Single Family Detached	1	94,960	1	-	\$2,404.20	\$2,404.20
024-0-033-240	Single Family Detached	1	53,578	1	-	\$2,404.20	\$2,404.20
024-0-042-040	Single Family Detached	1	125,017	1	-	\$2,404.20	\$2,404.20
024-0-071-085	Single Family Detached	2	22,331	1	-	\$1,418.63	\$1,418.62
024-0-071-095	Single Family Detached	2	22,331	1	_	\$1,418.63	\$1,418.62
024-0-071-105	Single Family Detached	2	22,331	1	_	\$1,418.63	\$1,418.62
024-0-072-015	Single Family Detached	3	19,762	1	-	\$851.18	\$851.18
024-0-072-025	Single Family Detached	2	39,525	1	-	\$1,418.63	\$1,418.62
024-0-072-035	Single Family Detached	2	22,088	1	-	\$1,418.63	\$1,418.62
024-0-072-055	Single Family Detached	1	347,173	1	-	\$2,404.20	\$2,404.20
024-0-072-155	Single Family Detached	2	36,000	1	-	\$1,418.63	\$1,418.62
024-0-072-245	Single Family Detached	3	18,400	1	-	\$851.18	\$851.18
024-0-072-265	Single Family Detached	2	23,275	1	-	\$1,418.63	\$1,418.62
024-0-072-305	Single Family Detached	3	20,000	1	-	\$851.18	\$851.18
024-0-072-335	Single Family Detached	2	26,500	1	-	\$1,418.63	\$1,418.62
024-0-072-345	Single Family Detached	1	47,916	1	-	\$2,404.20	\$2,404.20
024-0-072-385	Single Family Detached	3	17,000	1	-	\$851.18	\$851.18
024-0-072-395	Single Family Detached	3	17,000	1	-	\$851.18	\$851.18
024-0-072-445	Single Family Detached	3	18,000	1	_	\$851.18	\$851.18
024-0-072-465	Single Family Detached	2	26,136	1	_	\$1,418.63	\$1,418.62
024-0-072-475	Single Family Detached	2	26,500	1	_	\$1,418.63	\$1,418.62
024-0-072-485	Single Family Detached	3	20,000	1	-	\$851.18	\$851.18
024-0-072-505	Single Family Detached	3	18,000	1	_	\$851.18	\$851.18
024-0-072-525	Single Family Detached	2	26,500	1	_	\$1,418.63	\$1,418.62
024-0-072-535	Single Family Detached	2	26,500	1	-	\$1,418.63	\$1,418.62
024-0-072-545	Single Family Detached	2	26,136	1	-	\$1,418.63	\$1,418.62
024-0-072-555	Single Family Detached	2	26,500	1	-	\$1,418.63	\$1,418.62
024-0-072-565	Single Family Detached	2	24,910	1	-	\$1,418.63	\$1,418.62
024-0-072-705	Single Family Detached	1	57,020	1	-	\$2,404.20	\$2,404.20
024-0-072-715	Single Family Detached	2	26,789	1	-	\$1,418.63	\$1,418.62
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Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
024-0-120-025	Single Family Detached	1	278,348	1	-	\$2,404.20	\$2,404.20
024-0-120-035	Single Family Detached	1	203,425	1	-	\$2,404.20	\$2,404.20
024-0-120-045	Single Family Detached	1	213,880	1	-	\$2,404.20	\$2,404.20
024-0-120-055	Single Family Detached	1	232,175	1	-	\$2,404.20	\$2,404.20
024-0-120-105	Industrial Property	8	252,175	-	56,446	\$10,307.04	\$10,307.04
024-0-120-145	Industrial Property	8	-	_	48,906	\$8,930.24	\$8,930.24
024-0-120-155	Industrial Property	8	-	_	16,206	\$2,959.22	\$2,959.22
024-0-120-165	Industrial Property	8	-	-	16,110	\$2,941.69	\$2,941.68
024-0-120-175	Industrial Property	8	-	-	19,089	\$3,485.65	\$3,485.64
024-0-120-225	Industrial Property	8	-	_	28,103	\$5,131.61	\$5,131.60
024-0-120-285	Industrial Property	8	-	_	30,960	\$5,653.30	\$5,653.30
024-0-120-295	Commercial Property	7	-	-	25,467	\$8,865.06	\$8,865.06
024-0-131-015	Single Family Detached	1	194,278	1		\$2,404.20	\$2,404.20
024-0-131-025	Single Family Detached	1	206,039	1	-	\$2,404.20	\$2,404.20
024-0-131-035	Single Family Detached	1	165,528	1	-	\$2,404.20	\$2,404.20
024-0-131-045	Single Family Detached	1	165,092	1	-	\$2,404.20	\$2,404.20
024-0-131-055	Single Family Detached	1	163,350	1	-	\$2,404.20	\$2,404.20
024-0-131-065	Single Family Detached	1	168,577	1	-	\$2,404.20	\$2,404.20
024-0-132-015	Single Family Detached	1	100,544	1	-	\$2,404.20	\$2,404.20
024-0-132-025	Single Family Detached	1	153,767	1	-	\$2,404.20	\$2,404.20
024-0-132-035	Single Family Detached	1	148,540	1	-	\$2,404.20	\$2,404.20
024-0-132-045	Single Family Detached	1	157,687	1	-	\$2,404.20	\$2,404.20
024-0-132-055	Single Family Detached	1	144,619	1	-	\$2,404.20	\$2,404.20
024-0-132-065	Single Family Detached	1	152,024	1	-	\$2,404.20	\$2,404.20
024-0-132-075	Single Family Detached	1	106,722	1	-	\$2,404.20	\$2,404.20
024-0-133-015	Single Family Detached	1	100,722	1	-	\$2,404.20	\$2,404.20
024-0-133-025	Single Family Detached	1	106,286	1	-	\$2,404.20	\$2,404.20
024-0-133-035	Single Family Detached	1	137,214	1	-	\$2,404.20	\$2,404.20
024-0-133-045	Single Family Detached	1	132,422	1	-	\$2,404.20	\$2,404.20
024-0-133-055	Single Family Detached	1	119,354	1	-	\$2,404.20	\$2,404.20
024-0-133-065	Single Family Detached	1	130,680	1	-	\$2,404.20	\$2,404.20
024-0-133-075	Single Family Detached	1	121,097	1	-	\$2,404.20	\$2,404.20
024-0-141-015	Single Family Detached	1	94,525	1	_	\$2,404.20	\$2,404.20
024-0-141-025	Single Family Detached	1	91,912	1	-	\$2,404.20	\$2,404.20
024-0-141-035	Single Family Detached	1	99,752	1	-	\$2,404.20	\$2,404.20
024-0-141-045	Single Family Detached	1	107,158	1	-	\$2,404.20	\$2,404.20
024-0-141-055	Single Family Detached	1	128,938	1	-	\$2,404.20	\$2,404.20
024-0-141-065	Single Family Detached	1	118,483	1	-	\$2,404.20	\$2,404.20
024-0-142-015	Single Family Detached	1	159,430	1	-	\$2,404.20	\$2,404.20
024-0-142-025	Single Family Detached	1	184,259	1	-	\$2,404.20	\$2,404.20
024-0-142-035	Single Family Detached	1	140,699	1	-	\$2,404.20	\$2,404.20
024-0-142-045	Single Family Detached	1	147,233	1	-	\$2,404.20	\$2,404.20
024-0-142-055	Single Family Detached	1	129,373	1	-	\$2,404.20	\$2,404.20
024-0-142-065	Single Family Detached	1	170,755	1	-	\$2,404.20	\$2,404.20
024-0-142-075	Single Family Detached	1	168,577	1	-	\$2,404.20	\$2,404.20
024-0-142-085	Single Family Detached	1	168,577	1	-	\$2,404.20	\$2,404.20
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Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
024-0-142-110	Single Family Detached	3	14,086	1	-	\$851.18	\$851.18
024-0-143-015	Single Family Detached	1	92,783	1	-	\$2,404.20	\$2,404.20
024-0-143-025	Single Family Detached	1	104,544	1	-	\$2,404.20	\$2,404.20
024-0-143-035	Single Family Detached	1	99,317	1	-	\$2,404.20	\$2,404.20
024-0-143-045	Single Family Detached	1	105,851	1	-	\$2,404.20	\$2,404.20
024-0-151-015	Industrial Property	8	-	-	1,868	\$341.10	\$341.10
024-0-151-025	Industrial Property	8	-	-	1,176	\$214.74	\$214.74
024-0-151-035	Industrial Property	8	-	-	1,257	\$229.53	\$229.52
024-0-151-045	Industrial Property	8	-	-	1,500	\$273.90	\$273.90
024-0-151-055	Industrial Property	8	-	_	1,721	\$314.25	\$314.24
024-0-151-065	Industrial Property	8	-	_	1,756	\$320.65	\$320.64
024-0-151-075	Industrial Property	8	-	-	1,764	\$322.11	\$322.10
024-0-151-085	Industrial Property	8	-	-	1,412	\$257.83	\$257.82
024-0-151-095	Industrial Property	8	-	_	1,156	\$211.09	\$211.08
024-0-151-105	Industrial Property	8	-	_	1,259	\$229.89	\$229.88
024-0-151-115	Industrial Property	8	-	_	1,308	\$238.84	\$238.84
024-0-160-015	Commercial Property	7	-	_	3,296	\$1,147.34	\$1,147.34
024-0-160-025	Commercial Property	, 7	-	_	2,968	\$1,033.16	\$1,033.16
024-0-160-035	Commercial Property	7	-	_	2,868	\$998.35	\$998.34
024-0-160-045	Commercial Property	7	-	_	3,183	\$1,108.00	\$1,108.00
024-0-160-055	Commercial Property	7	-	_	2,676	\$931.52	\$931.52
024-0-160-065	Commercial Property	, 7	-	_	2,765	\$962.50	\$962.50
024-0-160-075	Commercial Property	, 7	-	_	2,250	\$783.23	\$783.22
024-0-160-085	Commercial Property	7	-	_	2,406	\$837.53	\$837.52
028-0-072-030	Single Family Detached	2	23,303	1		\$1,418.63	\$1,418.62
028-0-072-040	Single Family Detached	1	43,560	1	-	\$2,404.20	\$2,404.20
028-0-072-050	Single Family Detached	2	42,540	1	-	\$1,418.63	\$1,418.62
028-0-072-060	Single Family Detached	2	28,571	1	-	\$1,418.63	\$1,418.62
028-0-072-070	Single Family Detached	3	14,286	1	-	\$851.18	\$851.18
028-0-072-080	Single Family Detached	2	22,111	1	-	\$1,418.63	\$1,418.62
028-0-072-090	Single Family Detached	2	22,119	1	-	\$1,418.63	\$1,418.62
028-0-072-100	Single Family Detached	3	20,012	1	-	\$851.18	\$851.18
028-0-072-110	Single Family Detached	2	22,550	1	-	\$1,418.63	\$1,418.62
028-0-072-120	Single Family Detached	3	20,224	1	-	\$851.18	\$851.18
028-0-072-130	Single Family Detached	2	22,335	1	-	\$1,418.63	\$1,418.62
028-0-072-180	Single Family Detached	3	20,452	1	-	\$851.18	\$851.18
028-0-072-190	Single Family Detached	3	20,059	1	-	\$851.18	\$851.18
028-0-072-200	Single Family Detached	3	20,441	1	-	\$851.18	\$851.18
028-0-072-220	Single Family Detached	3	20,045	1	-	\$851.18	\$851.18
028-0-072-230	Single Family Detached	2	32,061	1	-	\$1,418.63	\$1,418.62
028-0-072-240	Single Family Detached	3	10,563	1	-	\$851.18	\$851.18
028-0-072-250	Single Family Detached	3	10,563	1	-	\$851.18	\$851.18
028-0-072-260	Single Family Detached	4	8,712	1	-	\$551.37	\$551.36
028-0-072-290	Commercial Property	7	-	-	17,934	\$6,242.83	\$6,242.82
028-0-072-300	Commercial Property	7	-	-	711	\$247.50	\$247.50
028-0-072-310	Commercial Property	7	-	-	19,863	\$6,914.31	\$6,914.30

028-0-072-350Single Family Detached320,0261-\$851.18028-0-072-360Single Family Detached320,4951-\$851.18028-0-072-370Single Family Detached320,0141-\$851.18028-0-072-390Single Family Detached320,0031-\$851.18028-0-072-400Single Family Detached320,5031-\$851.18028-0-072-410Single Family Detached310,0001-\$851.18028-0-072-420Single Family Detached310,2971-\$851.18	
028-0-072-350Single Family Detached320,0261-\$851.18028-0-072-360Single Family Detached320,4951-\$851.18028-0-072-370Single Family Detached320,0141-\$851.18028-0-072-390Single Family Detached320,0031-\$851.18028-0-072-400Single Family Detached320,5031-\$851.18028-0-072-410Single Family Detached310,0001-\$851.18028-0-072-420Single Family Detached310,2971-\$851.18	1,418.62
028-0-072-360Single Family Detached320,4951-\$851.18028-0-072-370Single Family Detached320,0141-\$851.18028-0-072-390Single Family Detached320,0031-\$851.18028-0-072-400Single Family Detached320,5031-\$851.18028-0-072-410Single Family Detached310,0001-\$851.18028-0-072-420Single Family Detached310,2971-\$851.18	\$851.18
028-0-072-370Single Family Detached320,0141-\$851.18028-0-072-390Single Family Detached320,0031-\$851.18028-0-072-400Single Family Detached320,5031-\$851.18028-0-072-410Single Family Detached310,0001-\$851.18028-0-072-420Single Family Detached310,2971-\$851.18	\$851.18
028-0-072-390Single Family Detached320,0031-\$851.18028-0-072-400Single Family Detached320,5031-\$851.18028-0-072-410Single Family Detached310,0001-\$851.18028-0-072-420Single Family Detached310,2971-\$851.18	\$851.18
028-0-072-400Single Family Detached320,5031-\$851.18028-0-072-410Single Family Detached310,0001-\$851.18028-0-072-420Single Family Detached310,2971-\$851.18	\$851.18
028-0-072-410         Single Family Detached         3         10,000         1         -         \$851.18           028-0-072-420         Single Family Detached         3         10,297         1         -         \$851.18	\$851.18
028-0-072-420 Single Family Detached 3 10,297 1 - \$851.18	\$851.18
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028-0-100-120 Single Family Detached 3 20,318 1 - \$851.18	\$851.18
028-0-100-130 Single Family Detached 3 20,404 1 - \$851.18	\$851.18
	7,212.60
028-0-151-035 Single Family Detached 4 2,178 1 - \$551.37	\$551.36
028-0-151-045 Single Family Detached 4 3,920 1 - \$551.37	\$551.36
028-0-151-055 Single Family Detached 4 3,920 1 - \$551.37	\$551.36
028-0-151-065 Single Family Detached 4 4,356 1 - \$551.37	\$551.36
028-0-152-125 Single Family Detached 4 4,463 1 - \$551.37	\$551.36
028-0-152-135 Single Family Detached 4 3,920 1 - \$551.37	\$551.36
028-0-152-145 Single Family Detached 4 3,920 1 - \$551.37	\$551.36
028-0-152-155 Single Family Detached 4 3,920 1 - \$551.37	\$551.36
028-0-152-165 Single Family Detached 4 3,920 1 - \$551.37	\$551.36
028-0-152-175 Single Family Detached 4 4,356 1 - \$551.37	\$551.36
028-0-152-185 Single Family Detached 4 3,920 1 - \$551.37	\$551.36
028-0-152-195 Single Family Detached 4 4,356 1 - \$551.37	\$551.36
028-0-152-205 Single Family Detached 4 4,356 1 - \$551.37	\$551.36

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
028-0-152-215	Single Family Detached	4	4,356	1	_	\$551.37	\$551.36
028-0-152-225	Single Family Detached	4	3,920	1	_	\$551.37	\$551.36
028-0-152-235	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-152-245	Single Family Detached	4	5,227	1	-	\$551.37	\$551.36
028-0-152-255	Single Family Detached	4	6,098	1	-	\$551.37	\$551.36
028-0-152-265	Single Family Detached	4	6,969	1	-	\$551.37	\$551.36
028-0-152-275	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-152-285	Single Family Detached	4	4,356	1	-	\$551.37	\$551.36
028-0-152-295	Single Family Detached	4	3,484	1	-	\$551.37	\$551.36
028-0-152-305	Single Family Detached	4	2,178	1	-	\$551.37	\$551.36
028-0-152-315	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-152-325	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-152-335	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-153-185	Single Family Detached	4	4,356	1	-	\$551.37	\$551.36
028-0-153-195	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-153-205	Single Family Detached	4	5,227	1	-	\$551.37	\$551.36
028-0-153-215	Single Family Detached	4	3,484	1	-	\$551.37	\$551.36
028-0-153-225	Single Family Detached	4	4,791	1	-	\$551.37	\$551.36
028-0-153-235	Single Family Detached	4	2,613	1	-	\$551.37	\$551.36
028-0-153-245	Single Family Detached	4	2,613	1	-	\$551.37	\$551.36
028-0-153-255	Single Family Detached	4	6,098	1	-	\$551.37	\$551.36
028-0-153-265	Single Family Detached	4	3,484	1	-	\$551.37	\$551.36
028-0-153-275	Single Family Detached	4	4,791	1	-	\$551.37	\$551.36
028-0-153-285	Single Family Detached	4	6,098	1	-	\$551.37	\$551.36
028-0-153-295	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-153-305	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-153-315	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-153-325	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-153-335	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-153-345	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-153-355	Single Family Detached	4	4,356	1	-	\$551.37	\$551.36
028-0-153-365	Single Family Detached	4	4,356	1	-	\$551.37	\$551.36
028-0-153-375	Single Family Detached	4	3,920	1	_	\$551.37	\$551.36
028-0-153-385	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-153-395	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-153-405	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-153-415	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-153-425	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-153-435	Single Family Detached	4	1,742	1	-	\$551.37	\$551.36
028-0-153-445	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
028-0-153-455	Single Family Detached	4	4,356	1	-	\$551.37	\$551.36
028-0-153-465	Single Family Detached	4	3,920	1	_	\$551.37	\$551.36
028-0-153-475	Single Family Detached	4	6,098	1	_	\$551.37	\$551.36
028-0-153-485	Single Family Detached	4	5,227	1	-	\$551.37	\$551.36
028-0-153-495	Single Family Detached	4	4,356	1	-	\$551.37	\$551.36
028-0-153-505	Single Family Detached	4	3,920	1	-	\$551.37	\$551.36
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$\begin{array}{llllllllllllllllllllllllllllllllllll$	028-0-153-515	Single Family Detached	4	4.356	1	-	\$551.37	\$551.36
028-0-154-105       Single Family Detached       4       4,356       1       -       \$\$51.37       \$\$551.36         028-0-154-125       Single Family Detached       4       3,484       1       -       \$\$51.37       \$\$551.36         028-0-154-145       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$551.36         028-0-154-145       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$551.36         028-0-154-155       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$551.36         028-0-154-195       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$551.36         028-0-154-195       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$551.36         028-0-154-215       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$551.36         028-0-154-225       Single Family Detached       4       3,550       -       \$\$551.37       \$\$551.36         028-0-154-245       Single Family Detached       4       3,560       -       \$\$551.37       \$\$551.36		<b>e</b> .						
028-0-154-115       Single Family Detached       4       3,484       1       -       \$\$51.37       \$\$551.36         028-0-154-125       Single Family Detached       4       2,178       1       -       \$\$551.37       \$\$551.36         028-0-154-145       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$551.36         028-0-154-155       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$551.36         028-0-154-155       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$551.36         028-0-154-155       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$551.36         028-0-154-215       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$551.36         028-0-154-215       Single Family Detached       4       5,227       1       -       \$\$551.37       \$\$551.36         028-0-154-215       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$551.36         028-0-155-055       Single Family Detached       4       3,920       1       -       \$\$551.37 <td< td=""><td></td><td><b>e</b> .</td><td></td><td>-</td><td></td><td></td><td></td><td></td></td<>		<b>e</b> .		-				
028-0-154-125         Single Family Detached         4         4,356         1         -         \$\$51.37         \$\$51.36           028-0-154-135         Single Family Detached         4         3,920         1         -         \$\$551.37         \$\$551.36           028-0-154-165         Single Family Detached         4         3,920         1         -         \$\$551.37         \$\$551.36           028-0-154-165         Single Family Detached         4         3,920         1         -         \$\$551.37         \$\$551.36           028-0-154-175         Single Family Detached         4         3,920         1         -         \$\$551.37         \$\$551.36           028-0-154-215         Single Family Detached         4         3,920         1         -         \$\$551.37         \$\$551.36           028-0-154-215         Single Family Detached         4         2,613         1         -         \$\$551.37         \$\$551.36           028-0-154-225         Single Family Detached         4         3,920         1         -         \$\$551.37         \$\$551.36           028-0-155-055         Single Family Detached         4         3,920         1         -         \$\$551.37         \$\$551.36           028-0-155-055		e .						
028-0-154-135       Single Family Detached       4       2,178       1       -       \$551.37       \$\$51.36         028-0-154-145       Single Family Detached       4       3,920       1       -       \$551.37       \$\$51.36         028-0-154-165       Single Family Detached       4       4,356       1       -       \$551.37       \$\$551.36         028-0-154-175       Single Family Detached       4       3,920       1       -       \$551.37       \$\$51.36         028-0-154-205       Single Family Detached       4       3,920       1       -       \$551.37       \$\$51.36         028-0-154-215       Single Family Detached       4       2,613       1       -       \$551.37       \$\$51.36         028-0-154-225       Single Family Detached       4       2,613       1       -       \$551.37       \$\$51.36         028-0-154-235       Single Family Detached       4       4,356       1       -       \$551.37       \$\$51.36         028-0-155-055       Single Family Detached       4       4,356       1       -       \$551.37       \$551.36         028-0-155-055       Single Family Detached       4       3,920       1       -       \$551.37       \$551.36								
028-0-154-145         Single Family Detached         4         3.920         1         -         \$\$51.37         \$\$51.36           028-0-154-165         Single Family Detached         4         3.920         1         -         \$\$551.37         \$\$51.36           028-0-154-165         Single Family Detached         4         3.920         1         -         \$\$551.37         \$\$551.36           028-0-154-195         Single Family Detached         4         3.920         1         -         \$\$551.37         \$\$551.36           028-0-154-195         Single Family Detached         4         2.613         1         -         \$\$551.37         \$\$551.36           028-0-154-25         Single Family Detached         4         2.613         -         \$\$551.37         \$\$551.36           028-0-154-225         Single Family Detached         4         3.920         1         -         \$\$551.37         \$\$551.36           028-0-154-245         Single Family Detached         4         4.356         1         -         \$\$551.37         \$\$51.36           028-0-155-075         Single Family Detached         4         3.920         1         -         \$\$551.37         \$\$51.36           028-0-155-085         Single Family Detac								
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028-0-154-195         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-154-215         Single Family Detached         4         2,613         1         -         \$551.37         \$551.36           028-0-154-225         Single Family Detached         4         7,840         1         -         \$551.37         \$551.36           028-0-154-245         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-154-245         Single Family Detached         4         4,356         1         -         \$551.37         \$551.36           028-0-154-257         Single Family Detached         4         3,520         1         -         \$551.37         \$551.36           028-0-155-055         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-155-05         Single Family Detached         3,920         1         -         \$551.37         \$551.36           028-0-155-05         Single Family Detached         3,920         1         -         \$551.37         \$551.36           028-0-161-05         Single Family Detached         3,920								
028-0-154-205         Single Family Detached         4         2,613         1         -         \$551.37         \$551.36           028-0-154-225         Single Family Detached         4         5,227         1         -         \$551.37         \$551.36           028-0-154-225         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-155-055         Single Family Detached         4         4,356         1         -         \$551.37         \$551.36           028-0-155-055         Single Family Detached         4         4,356         1         -         \$551.37         \$551.36           028-0-155-055         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-155-055         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-155-055         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-155-105         Single Family Detached         3         9,200         1         -         \$551.37         \$551.36           028-0-161-015         Single Famil								
028-0-154-215         Single Family Detached         4         5.227         1         -         \$551.37         \$551.36           028-0-154-225         Single Family Detached         4         7,840         1         -         \$551.37         \$551.36           028-0-154-245         Single Family Detached         4         4,356         1         -         \$551.37         \$551.36           028-0-155-055         Single Family Detached         4         4,356         1         -         \$551.37         \$551.36           028-0-155-055         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-155-075         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-155-075         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-155-105         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-161-015         Single Family Detached         3         0,350         1         -         \$851.18         \$851.18           028-0-161-025         Single Famil								
028-0-154-225         Single Family Detached         4         7,840         1         -         \$551.37         \$551.36           028-0-154-245         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-154-245         Single Family Detached         4         4,356         1         -         \$551.37         \$551.36           028-0-155-065         Single Family Detached         4         4,356         1         -         \$551.37         \$551.36           028-0-155-065         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-155-075         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-155-105         Single Family Detached         4         3,920         1         -         \$551.37         \$551.36           028-0-155-115         Single Family Detached         3         10,350         1         -         \$851.18         \$851.18           028-0-161-025         Single Family Detached         3         10,350         1         -         \$851.18         \$851.18           028-0-161-025         Single Fam								
028-0-154-235         Single Family Detached         4         3,920         1         -         \$\$51.37         \$\$551.36           028-0-154-245         Single Family Detached         4         4,356         -         \$\$551.37         \$\$551.36           028-0-155-065         Single Family Detached         4         4,356         -         \$\$551.37         \$\$551.36           028-0-155-065         Single Family Detached         4         3,920         1         -         \$\$551.37         \$\$551.36           028-0-155-095         Single Family Detached         3,920         1         -         \$\$551.37         \$\$551.36           028-0-155-095         Single Family Detached         4         3,920         1         -         \$\$551.37         \$\$551.36           028-0-155-105         Single Family Detached         4         3,920         1         -         \$\$551.37         \$\$551.36           028-0-161-015         Single Family Detached         3,020         1         -         \$\$51.37         \$\$551.36           028-0-161-015         Single Family Detached         3,0250         1         -         \$\$851.18         \$\$851.18           028-0-161-025         Single Family Detached         3,0,350         1         -								
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028-0-155-055       Single Family Detached       4       6,534       1       -       \$\$51.37       \$\$51.36         028-0-155-065       Single Family Detached       4       3,920       1       -       \$\$51.37       \$\$51.36         028-0-155-085       Single Family Detached       4       3,920       1       -       \$\$51.37       \$\$51.36         028-0-155-095       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$51.36         028-0-155-105       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$551.36         028-0-155-115       Single Family Detached       4       3,920       1       -       \$\$551.37       \$\$551.36         028-0-155-125       Single Family Detached       3       10,350       1       -       \$\$51.18       \$\$851.18         028-0-161-025       Single Family Detached       3       10,350       1       -       \$\$851.18       \$\$851.18         028-0-161-045       Single Family Detached       3       10,350       1       -       \$\$851.18       \$\$851.18         028-0-161-045       Single Family Detached       3       10,350       1       -       \$\$851.18       \$\$		<b>e</b> .				_		
028-0-155-065       Single Family Detached       4       4,356       1       -       \$551.37       \$551.36         028-0-155-075       Single Family Detached       4       3,920       1       -       \$551.37       \$551.36         028-0-155-095       Single Family Detached       4       3,920       1       -       \$551.37       \$551.36         028-0-155-095       Single Family Detached       4       3,920       1       -       \$551.37       \$551.36         028-0-155-105       Single Family Detached       4       3,920       1       -       \$551.37       \$551.36         028-0-155-115       Single Family Detached       4       3,920       1       -       \$551.37       \$551.36         028-0-161-015       Single Family Detached       3       10,350       1       -       \$851.18       \$851.18         028-0-161-025       Single Family Detached       3       10,350       1       -       \$851.18       \$851.18         028-0-161-045       Single Family Detached       3       10,350       1       -       \$851.18       \$851.18         028-0-161-045       Single Family Detached       3       10,350       1       -       \$851.18       \$851.18								
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028-0-155-085       Single Family Detached       4       3,920       1       -       \$551.37       \$551.36         028-0-155-095       Single Family Detached       4       3,920       1       -       \$551.37       \$551.36         028-0-155-105       Single Family Detached       4       3,920       1       -       \$551.37       \$551.36         028-0-155-125       Single Family Detached       4       3,920       1       -       \$551.37       \$551.36         028-0-155-125       Single Family Detached       4       4,791       1       -       \$\$551.37       \$\$551.36         028-0-161-015       Single Family Detached       3       10,350       1       -       \$\$851.18       \$\$851.18         028-0-161-025       Single Family Detached       3       10,350       1       -       \$\$851.18       \$\$851.18         028-0-161-045       Single Family Detached       3       10,350       1       -       \$\$851.18       \$\$851.18         028-0-161-045       Single Family Detached       3       11,219       1       -       \$\$851.18       \$\$851.18         028-0-161-055       Single Family Detached       3       10,101       1       -       \$\$851.18       \$		<b>e</b> .						
028-0-155-095       Single Family Detached       4       3,920       1       -       \$551.37       \$551.36         028-0-155-105       Single Family Detached       4       3,920       1       -       \$551.37       \$551.36         028-0-155-115       Single Family Detached       4       3,920       1       -       \$551.37       \$551.36         028-0-161-015       Single Family Detached       4       4,791       -       \$551.37       \$551.36         028-0-161-015       Single Family Detached       3       10,350       1       -       \$851.18       \$881.18         028-0-161-025       Single Family Detached       3       10,350       1       -       \$851.18       \$881.18         028-0-161-045       Single Family Detached       3       10,350       1       -       \$851.18       \$851.18         028-0-161-055       Single Family Detached       3       10,350       1       -       \$851.18       \$851.18         028-0-161-055       Single Family Detached       3       11,219       1       -       \$851.18       \$851.18         028-0-161-055       Single Family Detached       3       10,101       1       -       \$851.18       \$851.18      <		<b>e</b> .						
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028-0-155-115Single Family Detached43,9201-\$551.37\$551.36028-0-155-125Single Family Detached310,3501-\$851.18\$851.18028-0-161-015Single Family Detached310,3501-\$851.18\$851.18028-0-161-025Single Family Detached310,3501-\$851.18\$851.18028-0-161-035Single Family Detached310,3501-\$851.18\$851.18028-0-161-045Single Family Detached310,3501-\$851.18\$851.18028-0-161-055Single Family Detached310,3501-\$851.18\$851.18028-0-161-065Single Family Detached311,2191-\$851.18\$851.18028-0-161-075Single Family Detached310,101-\$851.18\$851.18028-0-161-085Single Family Detached310,006-\$851.18\$851.18028-0-161-105Single Family Detached310,006-\$851.18\$851.18028-0-161-115Single Family Detached310,006-\$851.18\$851.18028-0-161-125Single Family Detached310,006-\$851.18\$851.18028-0-161-135Single Family Detached310,006-\$851.18\$851.18028-0-161-145Single Family Detached310,650-\$851.18\$851.18028-0-161-155 <td></td> <td><b>e</b> .</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td>		<b>e</b> .				-		
028-0-155-125Single Family Detached44,7911-\$551.37\$551.36028-0-161-015Single Family Detached310,3501-\$851.18\$851.18028-0-161-025Single Family Detached310,3501-\$851.18\$851.18028-0-161-035Single Family Detached310,3501-\$851.18\$851.18028-0-161-045Single Family Detached310,3501-\$851.18\$851.18028-0-161-055Single Family Detached311,2191-\$851.18\$851.18028-0-161-065Single Family Detached310,3501-\$851.18\$851.18028-0-161-075Single Family Detached311,2191-\$851.18\$851.18028-0-161-085Single Family Detached310,1011-\$851.18\$851.18028-0-161-095Single Family Detached310,0061-\$851.18\$851.18028-0-161-105Single Family Detached310,0061-\$851.18\$851.18028-0-161-125Single Family Detached310,0061-\$851.18\$851.18028-0-161-135Single Family Detached310,0061-\$851.18\$851.18028-0-161-145Single Family Detached310,5001-\$851.18\$851.18028-0-161-155Single Family Detached310,5101<		•				-		
028-0-161-015Single Family Detached310,3501-\$851.18\$851.18028-0-161-025Single Family Detached310,3501-\$851.18\$851.18028-0-161-035Single Family Detached310,3501-\$851.18\$851.18028-0-161-045Single Family Detached310,3501-\$851.18\$851.18028-0-161-055Single Family Detached310,3501-\$851.18\$851.18028-0-161-065Single Family Detached311,2191-\$851.18\$851.18028-0-161-075Single Family Detached320,4681-\$851.18\$851.18028-0-161-085Single Family Detached310,1011-\$851.18\$851.18028-0-161-095Single Family Detached310,0061-\$851.18\$851.18028-0-161-105Single Family Detached310,0061-\$851.18\$851.18028-0-161-125Single Family Detached310,0061-\$851.18\$851.18028-0-161-125Single Family Detached310,0061-\$851.18\$851.18028-0-161-125Single Family Detached310,1501-\$851.18\$851.18028-0-161-135Single Family Detached310,5161-\$851.18\$851.18028-0-161-145Single Family Detached310,5161		<b>e</b> .				-		
028-0-161-025Single Family Detached310,3501-\$851.18\$851.18028-0-161-035Single Family Detached310,3501-\$851.18\$851.18028-0-161-045Single Family Detached310,3501-\$851.18\$851.18028-0-161-055Single Family Detached310,3501-\$851.18\$851.18028-0-161-055Single Family Detached311,2191-\$851.18\$851.18028-0-161-075Single Family Detached320,4681-\$851.18\$851.18028-0-161-085Single Family Detached310,1011-\$851.18\$851.18028-0-161-095Single Family Detached310,1011-\$851.18\$851.18028-0-161-105Single Family Detached310,0061-\$851.18\$851.18028-0-161-115Single Family Detached310,0061-\$851.18\$851.18028-0-161-125Single Family Detached310,5061-\$851.18\$851.18028-0-161-135Single Family Detached310,5161-\$851.18\$851.18028-0-161-145Single Family Detached310,5161-\$851.18\$851.18028-0-161-155Single Family Detached310,5161-\$851.18\$851.18028-0-161-165Single Family Detached310,5451		<b>e</b> .				-		
028-0-161-035Single Family Detached310,3501-\$851.18\$851.18028-0-161-045Single Family Detached310,3501-\$851.18\$851.18028-0-161-055Single Family Detached310,3501-\$851.18\$851.18028-0-161-065Single Family Detached311,2191-\$851.18\$851.18028-0-161-075Single Family Detached320,4681-\$851.18\$851.18028-0-161-085Single Family Detached310,1011-\$851.18\$851.18028-0-161-095Single Family Detached310,0061-\$851.18\$851.18028-0-161-105Single Family Detached310,0061-\$851.18\$851.18028-0-161-115Single Family Detached310,0061-\$851.18\$851.18028-0-161-125Single Family Detached310,1501-\$851.18\$851.18028-0-161-135Single Family Detached310,5001-\$851.18\$851.18028-0-161-145Single Family Detached310,5161-\$851.18\$851.18028-0-161-155Single Family Detached310,5161-\$851.18\$851.18028-0-161-155Single Family Detached310,5161-\$851.18\$851.18028-0-161-155Single Family Detached310,5451		<b>e</b> .				-		
028-0-161-045Single Family Detached310,3501-\$851.18\$851.18028-0-161-055Single Family Detached310,3501-\$851.18\$851.18028-0-161-065Single Family Detached311,2191-\$851.18\$851.18028-0-161-075Single Family Detached320,4681-\$851.18\$851.18028-0-161-085Single Family Detached310,1011-\$851.18\$851.18028-0-161-095Single Family Detached310,0061-\$851.18\$851.18028-0-161-105Single Family Detached310,0061-\$851.18\$851.18028-0-161-115Single Family Detached310,0061-\$851.18\$851.18028-0-161-125Single Family Detached310,0061-\$851.18\$851.18028-0-161-135Single Family Detached310,1501-\$851.18\$851.18028-0-161-145Single Family Detached310,6501-\$851.18\$851.18028-0-161-155Single Family Detached310,5161-\$851.18\$851.18028-0-161-175Single Family Detached310,5451-\$851.18\$851.18028-0-161-175Single Family Detached310,5451-\$851.18\$851.18028-0-161-175Single Family Detached310,0211						-		
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Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
028-0-162-045	Single Family Detached	3	10,350	1	-	\$851.18	\$851.18
028-0-162-055	Single Family Detached	3	10,350	1	-	\$851.18	\$851.18
028-0-162-065	Single Family Detached	3	10,076	1	-	\$851.18 \$851.18	\$851.18
028-0-162-075	Single Family Detached	3	10,070	1	-	\$851.18	\$851.18
028-0-162-085	Single Family Detached	3	10,240	1	-	\$851.18	\$851.18
028-0-162-095	Single Family Detached	3	10,350	1	-	\$851.18	\$851.18
028-0-162-105	Single Family Detached	3	10,350	1	-	\$851.18	\$851.18
028-0-162-115	Single Family Detached	3	10,359	1	-	\$851.18	\$851.18
028-0-162-125	Single Family Detached	3	12,023	1	-	\$851.18	\$851.18
028-0-162-135	Single Family Detached	3	15,828	1	-	\$851.18	\$851.18
028-0-162-145	Single Family Detached	3	13,266	1	-	\$851.18	\$851.18
028-0-162-155	Single Family Detached	3	10,911	1	-	\$851.18	\$851.18
028-0-171-010	Single Family Detached	3	10,780	1	-	\$851.18	\$851.18
028-0-171-020	Single Family Detached	3	10,000	1	-	\$851.18	\$851.18
028-0-171-030	Single Family Detached	3	10,000	1	-	\$851.18	\$851.18
028-0-171-040	Single Family Detached	3	10,613	1	-	\$851.18	\$851.18
028-0-171-050	Single Family Detached	3	10,463	1	-	\$851.18	\$851.18
028-0-171-060	Single Family Detached	3	10,403	1	-	\$851.18	\$851.18
028-0-171-070	Single Family Detached	3	10,439	1	-	\$851.18	\$851.18
028-0-171-080	Single Family Detached	3	10,000	1	-	\$851.18	\$851.18
028-0-171-090	Single Family Detached	3	10,000	1	-	\$851.18 \$851.18	\$851.18
028-0-171-100	Single Family Detached	3	10,000	1	-	\$851.18 \$851.18	\$851.18
028-0-171-110	Single Family Detached	3	10,914	1	-	\$851.18 \$851.18	\$851.18
028-0-171-120	Single Family Detached	3	10,000	1	-	\$851.18 \$851.18	\$851.18
028-0-171-120	Single Family Detached	3	10,000	1	-	\$851.18 \$851.18	\$851.18
028-0-171-140	Single Family Detached	3	10,000	1	-	\$851.18 \$851.18	\$851.18
028-0-171-140	Single Family Detached	3	10,353	1	-	\$851.18	\$851.18
028-0-171-160	Single Family Detached	3	10,403	1	-	\$851.18	\$851.18
028-0-171-170	Single Family Detached	3	10,439	1	-	\$851.18	\$851.18
028-0-171-180	Single Family Detached	3	10,000	1	-	\$851.18	\$851.18
028-0-171-190	Single Family Detached	3	10,000	1	-	\$851.18 \$851.18	\$851.18
028-0-171-200	Single Family Detached	3	10,000	1	-	\$851.18	\$851.18
028-0-171-210	Single Family Detached	3	10,914		-	\$851.18 \$851.18	\$851.18
028-0-171-220	Single Family Detached		10,085	1 1	-	\$851.18	\$851.18
028-0-171-230	Single Family Detached	3 3	10,135	1	-	\$851.18	\$851.18
028-0-171-240	Single Family Detached	3	10,019	1	-	\$851.18	\$851.18
028-0-171-250	Single Family Detached	3	15,017	1	-	\$851.18	\$851.18
028-0-171-260	Single Family Detached	3	10,309	1	-	\$851.18	\$851.18
028-0-171-270	Single Family Detached	3	10,069	1	_	\$851.18	\$851.18
028-0-171-280	Single Family Detached	3	10,701	1	_	\$851.18	\$851.18
028-0-172-010	Single Family Detached	3	10,161	1	_	\$851.18	\$851.18
028-0-172-020	Single Family Detached	3	10,000	1	-	\$851.18	\$851.18
028-0-172-020	Single Family Detached	3	12,370	1	-	\$851.18	\$851.18
028-0-172-040	Single Family Detached	3	10,000	1	-	\$851.18	\$851.18
028-0-172-050	Single Family Detached	3	10,066	1	-	\$851.18	\$851.18
028-0-172-060	Single Family Detached	3	10,000	1	-	\$851.18	\$851.18
020 0 172-000	Single I anniy Detached	5	10,114	1	-	ψ021.10	ψ0,51.10

# Casitas Municipal Water District Community Facilities District No. 2013-1 (Ojai) Fiscal Year 2020-2021 Special Tax Levy

Assessor's Parcel Number	Description	Tax Class	Parcel Square Footage	No. of Residential Units	Non- Residential Floor Area	Maximum Special Tax	Approved Special Tax
028-0-172-070	Single Family Detached	3	10,000	1	-	\$851.18	\$851.18
028-0-172-080	Single Family Detached	3	10,911	1	-	\$851.18	\$851.18
028-0-172-090	Single Family Detached	3	12,320	1	-	\$851.18	\$851.18
028-0-172-100	Single Family Detached	3	10,000	1	-	\$851.18	\$851.18
028-0-172-110	Single Family Detached	3	10,053	1	-	\$851.18	\$851.18
028-0-172-120	Single Family Detached	3	10,787	1	-	\$851.18	\$851.18
028-0-172-130	Single Family Detached	3	12,314	1	-	\$851.18	\$851.18
028-0-172-140	Single Family Detached	3	10,911	1	-	\$851.18	\$851.18
028-0-172-150	Single Family Detached	3	10,000	1	-	\$851.18	\$851.18
028-0-172-160	Single Family Detached	3	10,114	1	-	\$851.18	\$851.18
028-0-173-010	Single Family Detached	1	67,500	1	-	\$2,404.20	\$2,404.20
028-0-173-020	Single Family Detached	3	11,988	1	-	\$851.18	\$851.18
028-0-173-030	Single Family Detached	3	12,003	1	-	\$851.18	\$851.18
028-0-173-040	Single Family Detached	3	12,019	1	-	\$851.18	\$851.18
028-0-173-050	Single Family Detached	3	12,034	1	-	\$851.18	\$851.18
028-0-173-060	Single Family Detached	3	12,050	1	-	\$851.18	\$851.18
028-0-173-070	Single Family Detached	3	11,698	1	-	\$851.18	\$851.18
028-0-173-080	Single Family Detached	3	10,066	1	-	\$851.18	\$851.18
028-0-173-090	Single Family Detached	3	10,014	1	-	\$851.18	\$851.18
028-0-173-100	Single Family Detached	3	15,210	1	-	\$851.18	\$851.18
028-0-173-110	Single Family Detached	3	15,442	1	-	\$851.18	\$851.18
028-0-173-120	Single Family Detached	3	10,004	1	-	\$851.18	\$851.18
028-0-173-130	Single Family Detached	3	10,000	1	-	\$851.18	\$851.18
028-0-173-140	Single Family Detached	3	10,013	1	-	\$851.18	\$851.18
028-0-181-065	Single Family Detached	3	11,970	1	-	\$851.18	\$851.18
028-0-181-075	Single Family Detached	3	10,002	1	-	\$851.18	\$851.18
028-0-181-085	Single Family Detached	3	10,003	1	-	\$851.18	\$851.18
028-0-181-095	Single Family Detached	3	12,508	1	-	\$851.18	\$851.18
028-0-181-105	Single Family Detached	3	12,493	1	-	\$851.18	\$851.18
028-0-181-115	Single Family Detached	3	10,143	1	-	\$851.18	\$851.18
028-0-181-125	Single Family Detached	3	10,001	1	-	\$851.18	\$851.18
028-0-182-015	Single Family Detached	3	10,001	1	-	\$851.18	\$851.18
028-0-182-025	Single Family Detached	3	10,001	1	-	\$851.18	\$851.18
028-0-182-035	Single Family Detached	3	10,040	1	-	\$851.18	\$851.18
028-0-182-045	Single Family Detached	3	10,043	1	-	\$851.18	\$851.18
028-0-182-055	Single Family Detached	3	10,002	1	-	\$851.18	\$851.18
028-0-182-065	Single Family Detached	3	10,002	1	-	\$851.18	\$851.18

**Totals:** 

\$3,077,728.89 \$3,077,708.94

Percentage Levy of Maximum Special Tax: 100.00%

Printed: 6/8/2020

TO:	BOARD OF DIRECTORS
FROM:	MICHAEL FLOOD, GENERAL MANAGER
SUBJECT:	ON-CALL ENGINEERING, ELECTRICAL ENGINEERING, ENVIRONMENTAL, AND GEOTECHNICAL SERVICES FOR FY 2020-21
DATE:	6/24/2020

### **RECOMMENDATION:**

- Approve, and Authorize Board President to sign, Agreements with: Michael K. Nunley & Associates, Inc.; Water Works Engineers, LLC; MNS Engineers, Inc.; and Cannon Corporation, for on-call engineering services for Fiscal Year 2020-21
- Approve, and Authorize Board President to sign, Agreements with: GHD, Inc. and IRJ Engineers, Inc, for on-call electrical engineering services for Fiscal Year 2020-21.
- Approve, and Authorize Board President to sign, an Agreement with Rincon Consultants, Inc to provide on-call environmental consulting services for Fiscal Year 2020-21
- Approve, and Authorize Board President to sign, Agreements with Oakridge Geoscience, Inc. and Yeh and Associates, Inc. to provide on-call geotechnical support services for Fiscal Year 2020-21

### **BACKGROUND:**

The Board authorized annual Agreements with several engineering firms, as well as electrical engineering, environmental, and geotechnical consultants, to support implementation of capital, operations, and maintenance projects throughout the District. All the agreements include provisions to extend the term of each Agreement for additional one-year terms. Based on current projects underway and anticipated projects in FY 20-21, these services are necessary for the District to continue capital projects and provide support to Operations and Maintenance.

### FUNDING SOURCE:

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The Board authorized annual Agreements with several engineering firms, as well as electrical engineering, environmental, and geotechnical consultants, to support implementation of capital, operations, and maintenance projects throughout the District. All the agreements include provisions to extend the term of each Agreement for additional one-year terms. Based on current projects underway and anticipated projects in FY 20-21, these services are necessary for the District to continue capital projects and provide support to Operations and Maintenance.

### FUNDING SOURCE:

TO: BOARD OF DIRECTORS

**FROM:** MICHAEL L. FLOOD, GENERAL MANAGER

**SUBJECT:** AWARD A CONTRACT TO BEST DRILLING AND PUMP, INC. FOR EMERGENCY REPAIR OF MUTUAL WELL #6

**DATE:** 6/24/2020

#### **RECOMMENDATION:**

Award the contract to Best Drilling and Pump, Inc. for emergency repair of Mutual Well #6 in the amount of \$57,155.00.

#### **BACKGROUND:**

Mutual Well #6 has had issues with motor failures of the submersible well configuration since acquisition of the Ojai Water System in 2017. The first failure occurred immediately upon acquisition of the facilities in July 2017 and improvements were performed by Golden State Water Company. The second failure occurred in April 2019 and the pump and motor were replaced. The most recent failure occurred in May 2020. Currently staff is investigating as to the source of the failure of the submersible well to prevent future failures. The District's wellfield is a critical facility and production recovery is extremely important to reduce demand from Lake Casitas.

The work includes procurement and installation of a 60 horsepower motor, a 9 stage vertical turbine pump, 490 feet of column piping, and related appurtenances.

Three quotes were received as shown in Table 1.

Table 1 – Base Bids Summary			
Contractor	Total		
Best Drilling and Pump, Inc.	\$57,155.00		
General Pump Company, Inc.	\$94,319.00		
Zim Industries	\$58,313.00		

The lowest quote is from Best Drilling and Pump, Inc. and is recommended for award.

### **BUDGET IMPACT:**

The FY 2019-20 budget includes \$1,250,000 for the Mutual Replacement Well project. Funding will come from CFD 2013-1 funds.

Attachments: Quote from General Pump dated June 11, 2020 Quote from Best Drilling and Pump Company dated June 18, 2020 Quote from Zim Industries dated June 19, 2020



159 N. ACACIA STREET * SAN DIMAS, CA 91773 PHONE: (909) 599-9606 * FAX: (909) 599-6238

CAMARILLO, CA 93010 * PHONE: (805) 482-1215 www.genpump.com

WELL & PUMP SERVICE SINCE 1952 Serving Southern California and Central Coast Lic. #496765

June 11, 2020

Via Email: vclary@casitaswater.com

Casitas Municipal Water District (CMWD) 1055 Ventura Ave. Oak View, CA 93022 *Attn: Virgil Clary* 

### Subject: Ojai Mutual Well No. 6 – Inspection Report and Recommendations Revision 1

General Pump Company is pleased to provide our engineering inspection and recommendations for the recently removed submersible pump assembly within Ojai Mutual Well No. 6. GPC was not able to test the well or pump prior to removal of the unit from the well as the electrical conduit wiring megged 0 to ground upon our recent site visit.

Upon removal, the pump was transported to GPC and disassembled & inspected. The submersible motor suffered a critical failure. It is difficult to determine the root cause due to the inability to observe the operation of the pump or motor prior to removal. It is our belief based on data collected thus far and experience that the failure was caused by a slow ramp up time of the soft start and/or cascading water conditions which lead to aeration/cavitation overheating the motor. Our goal is to determine and understand the cause so we can engineer any future equipment to avoid the same fate. We do not recommend reinstalling a new submersible pump without an understanding of previous failures, but we understand CMWD's need for water resources currently.

Recent data provided by CMWD was used to design a new oil lubricated pump assembly to replace the existing submersible assembly. We are optimizing the pump design by providing a pump capable of operating within the safety factor of a 50 HP motor at CMWD request. Please note that CMWD operators must place back pressure onto the pump assembly via manual valves to limit the motor from overloading. We would recommend upgrading to a 60 HP motor to protect from overloading during operation. At this time our standard two-year warranty on materials could not be honored if a 50 HP motor is selected or current motor issues stem from incoming power issues.

We also recommend a video survey be conducted prior to installation to observe the well casing integrity following the discovery of two column pipe holes during pump removal.

### **Engineering Inspection**

- Grundfos 365S500 stainless steel submersible pump contains worn bearings; rotates by hand freely; recommend replacement due to poor performance against pump curve design (>20% loss). Confirmed by 2019 Edison Test.
- #4 Submersible motor cable in good condition; insulation still intact; reusable.



- Motor megs 0 megohms @ 500 volts; castings show corrosion and some external weld markings on SS casting; replacement recommended.
- Ductile iron check valve corroded; iron oxide accumulations inside and out; replace.
- 6" Stainless Steel Drop Pipe, 4 joints; in good condition and reusable
- 6" Steel Coated Drop Pipe, 20-21 ft & 1-10 ft length joints; replacement is highly recommended due to pitting and significant corrosion. 2 joints had visible holes (~440' & 460' bgs). Iron oxide deposit accumulations outside and inside of piping.
- Well discharge head in great condition; Reusable if staying with submersible pump.
- Single PVC cooling sleeve; needed to be cut during removal and took extra time to uncouple to enable transport to shop; replace.

### SCOPE OF WORK

### <u>Shop Labor</u>

• Pressure wash pump and prepare for disassembly, handling	6 Hours
• Remove pump head from bowls, remove stretch housing, disassemble	
pump, handling	5 Hours
• Machine, polish and balance new head shaft	7 Hours
• Machine, polish and balance new top tube	5 Hours
Remove and replace bronze sleeve oil receiver bearing	7 Hours
• Machine Head base for tubes & faces parallel and concentric	5 Hours
Clean, primer, and paint discharge head	4 Hours
• Inspect new column pipe, tube, and shafting for quality assurance	6 Hours
• Assemble pump bowls and head assembly, prep for installation	4 Hours
• Clean base bolting & intake pipe and weld cone strainer	4 Hours
• Fabricate, fit, mount and install Cal OSHA approved 316	
Shaft guard screens.	5 Hours
Receive motor and inspect, quality assurance	5 Hours
<ul> <li>Assembly tube stretch assembly and oil receiver bearing</li> </ul>	6 Hours
<ul> <li>Scrap and dispose of existing unusable pump components</li> </ul>	3 Hours
• Engineering inspection and report (included)	
72 Hrs. @ \$109/Hr.	\$7,848.00
<u>Field Labor</u>	
New Pump Installation	
• Mobilize to site, verify lock-out / tag-out electrical.	

- Set up rig, install pump assembly equipment.
- Land head, wire up motor, perform startup; Clean Site.

Three Man Crew & Rig, Flatbed – Est. 24 Hrs. @ \$599/Hr.	\$14,376.00
Two Man Crew & Service Truck – Est. 6 Hrs. @ \$336/Hr.	\$2,016.00



### **Discharge Pipe Fabrication**

- Inspect landed discharge pipe.
- Fabricate discharge pipe and make all piping connections.

One Pipeline Fabricator – Est. 12 Hrs. @ \$214/Hr.	\$2,568.00
----------------------------------------------------	------------

### Materials/Rentals (Taxable);

• 10 ft x 6" suction pipe with stainless steel cone strainer	\$1,167.00
• Pump Assembly Designed for 378 GPM @ 476' TDH	\$12,599.00
• 2" X 1-3/16" x 20' Tube and Shaft Assembly (500 ft setting)	\$14,584.00
• 6" x 2" Retainers (Black Widow Spiders)	\$600.00
• 6"x 20 ft Oil Lube Column Pipe	\$13,125.00
SS Airline Gauge and fittings	\$1,315.00
• 1-1/4" PVC Sounding Tube	\$1,875.00
• 50 HP,1800 RPM Motor (60 HP Recommended, \$1,300 not included)	\$5,625.00
• 6"x14" Discharge Head with Stretch Assembly	\$2,984.00
• Head shaft material, 416SS	\$542.00
Top Tube Material, Steel	\$109.00
Oil Solenoid & By-Pass Material	\$1,145.00
• 6" 150# GR5 nut, bolt, and full face gasket kit	\$75.00
• Pipe fabrication materials, flanges, & restraints	\$834.00
• Misc Consumable including fittings, screens, tape & banding	\$500.00
Estimated Freight	\$2,854.00
Estimated Local Tax	\$3,578.00
<i>Outside Service (Taxable)</i>	<u>\$63,511.00</u>

•	Video Survey (Qty 1)	\$1,200.00
٠	Field Balance of Pump and Motor (if necessary)	\$1,500.00

### Estimated Total Labor, Service & Materials \$ 93,019.00

### Estimated Total Labor, Service & Materials (with 60 HP Motor Adder) \$ 94,319.00

General Pump Company's Standard Terms and Conditions apply and all invoices are Net 30-Days from date of invoice. General Pump Company's Estimated charges will not be exceeded without prior written authorization from the Owner. Current material lead time is <u>2-3 weeks</u>.

Sincerely,

### GENERAL PUMP COMPANY, INC.

*Luis Busso, P.G.* Sr. Project Geologist



#### **Quotation Form**

Customer:Casitas Municipal Water DistrictProposal No.321581055 N Ventura AveContact:Virgil ClaryOak View, CA 93022Date:6/18/2020T: (805) 649-2251Contact:6/18/2020

#### **Well or Description of Work:** Mutual Well #6 - Emergency Pump and Motor Replacement (60HP)

Quantity	Description	Price	Unit	Total
	378GPM @ 476' TDH @ 1800RPM			
1	Video survey	\$1,400.00	EA	\$1,400.00
1	Mobilization & demobilization of all tooling, equipment, material, and personnel required to furnish and install a 490' x 6" x 2" x 1-3/16" oil lubricated line shaft vertical turbine pump assembly	\$3,580.00	LS	\$3,580.00
1	US Motors 60HP, 1800RPM, 460V/3PH, premium efficient, inverter duty VHS electric motor with non-reverse ratchet	\$5,665.00	EA	\$5,665.00
1	Flowise 6" x 6" x 12" x 16" oil lubricated discharge head assembly Includes: Tension nut and tension tube assembly, 1-gallon oil pot and oil dripper, 24" x 6" column pipe nipple	\$1,760.00	EA	\$1,760.00
1	490' x 6" x 2" x 1-3/16" oil lubricated column pipe, oil tube and line shaft assembly with bronze bearings and rubber centralizers	\$23,600.00	EA	\$23,600.00
1	Flowise 10KC-9 stage oil lubricated vertical line shaft turbine bowl assembly with 304SS impellers Design Point: 378GPM @ 476'TDH @ 1800RPM	\$9,500.00	EA	\$9,500.00
1	6" x 10' suction pipe with 6" 316SS cone strainer	\$550.00	EA	\$550.00
1	490' x 1-1/4" SCH40 flush-thread PVC sounding tube	\$1,060.00	EA	\$1,060.00
1	490' x 1/4" PVC jacketed stainless steel airline assembly	\$1,200.00	EA	\$1,200.00
1	Miscellaneous materials	\$500.00	EA	\$500.00
1	Pump rig, crew and fuel: Install 490' x 6" x 2" x 1-3/16" oil lube vertical line shaft turbine pump assembly; perform start-up	\$8,340.00	LS	\$8,340.00
	Comments & Exceptions: • Quote assumes two days (20 hours) to install new pump assembly. If required, additional rig and crew hours will be invoiced at \$405.00 per hour • Modification of discharge piping, electrical conduits and wiring, and all related appurtenances by others • Best Drilling and Pump, Inc.'s work will end at the pump's discharge head			
	Taxes and Freight Included	TOTAL		\$57,155.00

Terms: Due Upon Receipt



The undersigned Purchaser instructs Best Drilling & Pump, Inc. to proceed with the work described with the understanding that the Terms and Conditions shown on the attached sheet are hereby incorporated as part of this Confirming Order.

Work to be performed is as follows:

Furnish and install a 490' x 6" x 2" x 1-3/16" oil lubricated vertical line shaft turbine pump assembly with at 60HP 460V 364TP NRR 16.5 US VHS Motor, 5700# Down Thrust 1800RPM, as detailed on attached Quotation Form (Proposal No. 32158)

Project Total: \$57,155.00 Taxes and Freight Included

Comments & Exceptions:

• Quote assumes two days (20 hours) to install new pump assembly. If required, additional rig and crew hours will be invoiced at \$405.00 per hour

• Modification of discharge piping, electrical conduits and wiring, and all related appurtenances by others

° Best Drilling and Pump, Inc.'s work will end at the pump's discharge head

### Best Drilling & Pump, Inc. Sand Clause (if applicable):

### Permanent pump installation:

In the case of permanent pump installation, if a client well produces more than 5-PPM sand content, the client is aware of voiding the manufacturers warranty on the pump and/or motor. Client is aware of applicable material and labor prices on pull and repair of pump and/or motor.

### Test pumping of new wells, rehabilitated wells, and existing wells (all wells).

In the case of test pumping a new well, rehabilitated well or existing well (all wells), if clients well produces more than 30-PPM sand content, the client is aware of all charges related to sand damage for repair of the test pump. This includes but is not limited to material, labor, or curve testing charges.

Purchaser	Contractor
	Best Drilling & Pump, Inc.
By:	By: <u>Tim Garcia</u>
Title:	Title: Pump Sales
Date:	Date: <u>6/18/2020</u>

Best Drilling & Pump, Inc. 1640 Pellisier Road Colton, CA 92324 PH: 951-684-1952 FX: 951-684-3852



Effective January 4. 2010

**LIABILITY OF CONTRACTOR:** Contractor shall not be liable for any bodily injury, death, or injury to or destruction of tangible property except, as the same may have been caused by the negligence of Contractor. In no event shall Contractor be liable for any delays or special, indirect, incidental or consequential damages. Purchaser agrees that the total limit of Contractor's liability (whether based on negligence, warranty, strict liability or otherwise) hereunder, shall not exceed the aggregate amount due Contractor for services rendered under this contract. All claims, including claims for negligence or any other cause whatsoever, shall be deemed waived unless made in writing and received by Contractor within one (1) year after Contractor's completion of work hereunder.

**INSURANCE:** Contractor shall provide worker's compensation insurance, public liability and property damage insurance covering its employees and operation. Purchaser, at its option, may maintain such insurance as will protect it against claims arising out of the work.

**PRICE ADJUSTMENT:** Any cost estimates or time frames stated herein are subject to equitable adjustment in the event of differing or unforeseeable conditions, changes in applicable laws after the date of this contract, unforeseeable delays or difficulties caused by acts of God, Purchaser or any third parties. Prices of goods acquired by Contractor from others shall be adjusted to reflect Contractor's price in effect at time of shipment. The price of Contractor's goods will be adjusted to the price in effect at time of shipment in accordance with Contractor's current escalation policies or as specifically covered in this contract.

**TERMS:** Due upon Receipt. For extended projects, Contractor shall submit invoices on a monthly basis for any and all work completed and materials or equipment provided during the previous month. Past due invoices shall be subject to a delinquency charge of one and one-half percent (1-1/2%) per month (eighteen percent (18%) per annum) unless a lower charge is required under applicable law, in which case the lower rate shall apply. Purchaser agrees to pay all collection fees, attorneys' fees and costs incurred in the collection of any past due amounts arising out of this contract. Contractor shall have the right to immediately terminate this contract without further liability if Purchaser fails to make timely payment or otherwise materially breaches this contract.

**MATERIAL SHORTAGES AND COST INCREASES:** If any portion of materials or equipment which Contractor is required to furnish becomes unavailable, either temporarily or permanently, through causes beyond the control and without the fault of Contractor, then in the case of temporary unavailability any completion time frames shall be extended for such period of time as Contractor shall be delayed by such above-described unavailability, and in the case of permanent unavailability Contractor shall be excused from the requirement of furnishing such materials or equipment. Purchaser agrees to pay Contractor any increase in cost between the cost of the materials or equipment, which become permanently unavailable and the cost of the closest substitute, which is then reasonably available.

**DELAYS:** If Contractor is delayed at any time in the progress of work by labor disputes, fire, unusual delays in transportation, unavoidable casualties, weather, or any cause beyond Contractor's reasonable control, then any completion time frames shall be extended by a reasonable period of time, at least equal to the period of delay.

**CHANGED CONDITIONS:** The discovery of any hazardous waste, substances, pollutants, contaminants, underground obstructions or utilities on or in the job-site which were not brought to the attention of Contractor prior to the date of this contract will constitute a materially different site



condition entitling Contractor, at its sole discretion to immediately terminate this contract without further liability.

**GUARANTEE AND LIABILITY:** Contractor warrants that its labor supplied hereunder shall be free from defect and shall conform to the standards of care in effect in its industry at the time of performance of such labor for a period of twelve (12) months after substantial completion of Contractor's work. Contractor agrees, to the extent it is permitted, to pass on any warranties provided by the manufactures of materials and/or equipment furnished under this contract. Contractor itself provides no warranty, express, implied or otherwise, on any such materials or equipment. Contractor will not be responsible for; work done, material or equipment furnished or repairs or alterations made by others.

For any breach hereunder, Contractor shall be liable only for the values of the installation work or, if it wrongfully fails to install, then its liability is limited to the difference between the contract price herein, and the value of other similar installation work. If Contractor's breach damages any materials or equipment furnished hereunder, Contractor shall only be liable for the value of such materials or equipment. Under no circumstances will Contractor be liable for consequential, special or indirect damages, including without limitation, any crop loss or damage to other equipment, structures or property, nor for any other similar or dissimilar damages or losses whether due to delay, failure to furnish or install, delay in installation, defective material or equipment, defective workmanship, defective installation, delay in replacing, nor for any cause or breach whatsoever. In any event, Contractor's total liability towards Purchaser for alleged faulty performance or nonperformance under this contract shall be limited to the total contract price. No materials, equipment or services contracted herein carries any guarantee not mentioned in this contract. THE ABOVE WARRANTY IS INLIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED.

**TITLE AND OWNERSHIP:** In case of default on Purchaser's part, Contractor shall have the right to enter the premises upon which any material or equipment furnished herein have been installed and retake such goods not then paid for and pursue any further remedy provided by law, including recovery of attorney's fees and any deficiency to the maximum extent and in the manner provided by law. Such materials and equipment shall retain their character as personal property of Contractor until Contractor receives payment in full, regardless of their mode of attachment. Unless prior specific written instructions are received to the contrary, surplus and replaced materials and equipment resulting from repair of installation work shall become the property of Contractor.

**DELIVERY:** Shipment schedules and dates, express or implied, are contingent on normal conditions. Contractor will not be responsible for any delays in shipment or completion caused by factors beyond its control such as, but not limited to, suppliers' failures, accidents, work stoppages or operation of or changes in the law. Shipments will be made as promptly as Contractor's ability to obtain materials and/or equipment and scheduling will permit. No delay in shipments or variances from shipping schedule shall be cause of cancellation or any claim for damage. Any changes in layout or design requested after acceptance of this contract will be made at Purchaser's additional cost. Any such change and/or time taken to supply engineering data or to approve drawings will automatically extend shipping schedules. Equipment will be shipped "knocked down" to the extent Contractor considers necessary, with small parts stripped from equipment and crated. On and after delivery to the carrier for transportation to the Purchaser's site, Purchaser shall be responsible for all loss or damage to materials or equipment due to any cause, including but not limited to loss or damage resulting from casualty.



**INDEMNIFICATION:** Purchaser agrees to indemnify and hold Contractor, its directors, officers, stockholders, employees, agents and subcontractors, harmless from and against any and all claims, demands, causes of action (including third party claims, demands or causes of actions for contribution or indemnification), liability and costs (including attorneys' fees and other costs of defense) asserted and/or filed by Purchaser or any third party(ies), including without limitation Purchaser's employees, and arising out of or as a result of: (I) the presence of Contractor or its subcontractors at the job-site, (ii) the work performed by Contractor or its subcontractors, or (iii) any negligent act or omission of Purchaser, its employees, agents, consultants, or other contractors or any person or entity under Purchaser's control; except to the extent that such claims, demands, causes of action, liabilities or costs are caused by the negligence of Contractor or its subcontractors.

**INTERPRETATION:** This contract shall be governed by and construed in accordance with the laws of the state of the job-site location. In any term, provision or condition contained herein shall, to any extent, be invalid or unenforceable, pursuant to state law or otherwise, the remainder of the terms, provisions and conditions herein (or the application of such term, provision, or condition to persons or circumstances other than those in respect of which it is invalid or unenforceable) shall not be affected thereby, and each term, provision and condition of this contact shall be valid and enforceable to the fullest extent permitted by law.

**ASSIGNMENT AND SUBLETTING:** Purchaser shall not have the right to transfer or assign its rights and/or obligations under this contract to any third party, related or unrelated, without the express written consent of Contractor. Contractor shall have the right to transfer, assign or sublet all or any portion of its rights or obligations hereunder, but such transfer, assignment or subletting shall not relieve Contractor from its full obligations to Purchaser unless such transfer, assignment or subletting is pursuant to the sale of Contractor, or the division of Contractor responsible for this contract, to a third party.

**MISCELLANEOUS:** The terms and conditions set forth herein constitute the entire understanding of the parties relating to the work to be performed, and materials and equipment to be provided, by Contractor for the Purchaser. All previous proposals, offers and other communications relative to the provisions of the subject work, oral or written, are hereby superseded, except to the extent that they have been expressly incorporated herein. Any modifications or revisions of any provisions herein or any additional provisions contained in any purchase order, acknowledgement, or other form of the Purchaser are hereby expressly objected to by Contractor and shall not operate to modify this contract. This contract shall take effect upon acceptance and execution by both parties.

#### Company: Name: Date: 06/16/2020

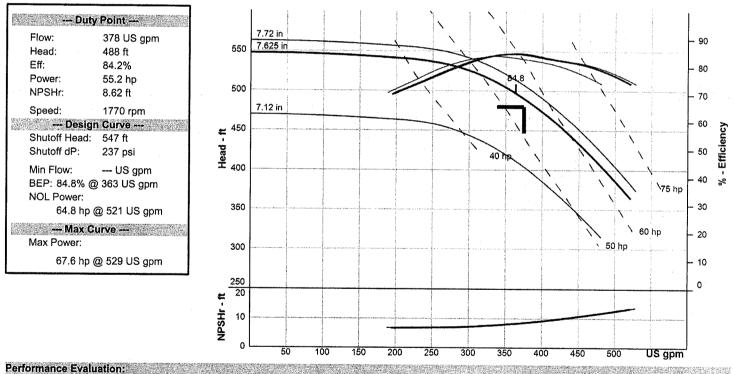


Pump:		이 같은 가장은 가장 같이 같이 같	$(A_{i}) \in \{0, 1\}$
Size:	FW10KC (stages	9) <u>Dimensions:</u>	
Туре:	Vertical Turbine	Suction:	8 in
Synch Speed:	1800 rpm	Discharge:	8 in
Dia:	7.625 in	Vertical Turbi	ne:
Curve:	FT6410KC0	Eye Area:	8.64 in ²
Impeller Style:	Enclosed	Bowl Size:	9.5 in
		Max Lateral:	0.63 in
,		Thrust K Fac	tor: 4.6 lb/ft
Search Criteria:	d het het skille		等人在学家展表。
Flow:	375 US gpm	Near Miss:	
Head:	480 ft	Static Head:	0 ft

Name:	Water	an na manana ang kanang ka Kanang kanang	e source and constant of the sources
SG:	1	Vapor Pressure:	0.256 psi a
Density:	62.4 lb/ft ³	Atm Pressure:	14.7 psi a
Viscosity:	1.1 cP		·
Temperature:	60 °F	Margin Ratio:	1
Pump Limits:			
Temperature:		Sphere Size:	0.45 in
Wkg Pressure:	375 psi g	•	
Motor:			
Standard:	NEMA	Size:	75 hp
Enclosure:	TEFC	Speed:	1800 rpm
Frame:	365T		•
Sizing Criteria:	Max Power on I	Desian Curve	

Fluid:

Pump Selection Warnings: None



Flow	Speed	Head	Efficiency	Power	NPSHr
US gpm	rpm	ft	%	hp	ft
450	1770	432	80.9	60.5	10.8
375	1770	490	84.3	54.9	8.54
300	1770	525	81.6	48.7	7.17
225	1770	539	73.6	41.6	6.74
150	1770	543	65.1	32.5	6.67

# DEEP SETTING PUMP ANALYSIS

Customer :

Job Name :

2.375

1 3/16

Column Assembly :

Column Setting (ft) :	490	
Column Pipe O.D. (in) :	6 5/8	Tubing Size <b>OD</b> (in) :
Column Pipe Wall Thickness (in) :	0.280	Shaft Size (in) :

Bowl Assembly :

1	0KC - 9 Stage	Bowl Assembly Weight (lbs) :	710
Standard Lateral	0.625	Bowl Rotor Weight (lbs) :	131
Maximum Lateral	0.750		

Constant Loss (in) :	0.5172		
Tubing Tension Required (in) :	0.5032		
Shaft Rise Due to Applied Tubing Tension (in) :	0.1652		
Required Shaft Pull-up to Clear Impeller From Bottom (in) :			

THE SHAFT STRETCH, PIPE STRETCH AND THE NET IMPELLER DOWNWARD MOVEMENT ARE SUMMARIZED AS FOLLOWS:

<u>GPM</u>	<u>TDH</u>	K Factor	Shaft Stretch	Pipe Stretch	Net Stretch	<u>Thrust</u>
0	567	4.65	0.4829	0.0386	0.4443	4656
50	558	4.65	0.4753	0.0387	0.4366	4614
100	558	4.65	0.4753	0.0387	0.4366	4614
150	558	4.65	0.4753	0.0387	0.4366	4614
200	553.5	4.65	0.4714	0.0387	0.4327	4593
250	553,5	4.65	0.4714	0.0387	0.4327	4593
300	540	4.65	0.4599	0.0389	0.4210	4531
350	522	4.65	0.4446	0.0391	0.4055	4447
400	490.5	4.65	0.4178	0.0394	0.3784	4300
500	405	4.65	0.3449	0.0402	0.3047	3903

Note - above values do not include any assembly losses (assume .062" loss for the first ten stages and .125" for pumps over 10 stage). Also note that the standard impeller clearance (run position - typically 1/8" off the bottom for enclosed impellers) has to be added to the above values. Add above NET STRETCH and run position to get the amount of lateral you will have to have available in the bowl after assembly for the condition you are concerned with!

### Bakersfield Well & Pump Co.

7212 Fruitvale Avenue Bakersfield, CA 93308

#### To: Casitas Municipal Water District

Bid Date:

**Pre-Bid Meeting:** 

Bid #1

19-Jun-20

## BID

Virgil Clary

805 649-2251 ext. 109

#### Job Description:

#### Mutual Well #6 Equipping

Item #	Bid Item Description	Qty	Units	Ur	it Bid Price	Qty This Period	Period Total	Qty to Date	Total to Date
	60hp US, VHS, 1800rpm, 460v/60Hz/3ph, WP-1, Premimum Efficient Type RUSI, Inverter-Duty, SRC, 5700# Down Thurst.	1	Ea	\$	5,332.00	1	\$ 5,332.00	1	\$ 5,332.00
2	FW8-OL-16x2x1.25" CI Discharge Head	1	Ea	\$	3,070.00	1	\$ 3,070.00	1	\$ 3,070.00
-	Flowise 10KC-9 Stage Bowl Assembly 378gpm @ 477' tdh	1	Ea	\$	9,743.00	1	\$ 9,743.00	1	\$ 9,743.00
	6" .280"wall x 2" x 1-1/4" x 20' OL T&C Column, Tube & Shaft Assly. Reuse Existing 60' of 6" stainless steel column pipe at site.	440	LF	\$	495.00	22	\$ 10,890.00	22	\$ 10,890.00
5	2" x 1-1/4" x 20' Tube & Shaft Assemblies.	500	LF	\$	517.00	25	\$ 12,925.00	25	\$ 12,925.00
6	6" x 10' Suction Pipe w/6" 316ss Cone Strainer	1	Ea	\$	653.00	1	\$ 653.00	1	\$ 653.00
7	Misc: Neoprene head gasket, nuts & bolts	1	LS	\$	500.00	1	\$ 500.00	1	\$ 500.00
8		1	LS	\$	-	1	\$ -	1	\$ -
9	Mob/Demob	1	LS	\$	4,000.00	1	\$ 4,000.00	1	\$ 4,000.00
10	Install Well Pump - 500'	1	LS	\$	10,000.00	1	\$ 10,000.00	1	\$ 10,000.00
11	Startup & Test	1	LS	\$	1,200.00	1	\$ 1,200.00	1	\$ 1,200.00

TOTALS

ALS

58,313.00

\$

Prepared By: ___

Oscar Macias

Signed By: ________ John C. Zimmerer

Approved By: _____

Date

\$

Date

Date

58,313.00

### CASITAS MUNICIPAL WATER DISTRICT MEMORANDUM

TO: BOARD OF DIRECTORS

FROM: MICHAEL FLOOD, GENERAL MANAGER

**SUBJECT:** APPROVE THE RELEASE OF THE DRAFT COMPREHENSIVE WATER RESOURCES PLAN REPORT FOR PUBLIC REVIEW

**DATE:** 06/24/20

#### **RECOMMENDATION:**

It is recommended the Board of Directors approve the release of the Draft Comprehensive Water Resources Plan Report on the District website for a public comment period.

#### **BACKGROUND AND DISCUSSION:**

The Board of Directors authorized a consulting services agreement with Stantec in January 2019 to prepare the Comprehensive Water Resources Plan (CWRP). The CWRP presents a strategy for addressing current and future water supply challenges, risks, and opportunities to meet the needs of Casitas customers.

Several public meetings have been held with the Water Resources Committee throughout the CWRP process, and an overview of the draft plan was presented at a Board Workshop held on February 8, 2020. Recent work efforts have been focused on preparing the draft report for public review.

The Water Resources Committee reviewed the draft report on May 19th, 2020 and on June 5, 2020, and comments have been incorporated into the attached final draft version dated June 8, 2020.

Staff is recommending the draft report and appendices be posted on the District's website with a 45-day public comment period. Due to COVID-19 social distancing requirements, public workshops related to the CWRP are not being scheduled at this time. In order to encourage public participation, staff is recommending postcards be mailed to all properties within District boundaries with information about the opportunity to comment.

Once public comments on the Draft CWRP have been reviewed and compiled, staff will return to the Board for further discussion.

DRAFT CASITAS MUNICIPAL WATER DISTRICT COMPREHENSIVE WATER RESOURCES PLAN (CWRP)

JUNE 8, 2020

**Prepared by Stantec** 

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## **Abbreviations**

AF	acre-foot/acre-feet
AFY	acre-foot per year/acre-feet per year
С	Conservation (Project Alternatives category)
Casitas or District	Casitas Municipal Water District
Calleguas	Calleguas Municipal Water District
CIMIS	California Irrigation Management Information System
DCF	Delta Conveyance Facility
CWRP	Comprehensive Water Resources Plan
GSWC	Golden State Water Company
GW	Groundwater (Project Alternatives category)
НОВО	Matilija Deep Aquifer, Horizontal Bore
МО	Maintenance and Operation (Project Alternatives category)
0&M	Operation and Maintenance
OBGMA	Ojai Basin Groundwater Management Agency
OVSD	Ojai Valley Sanitary District
SWP	State Water Project
UVRGA	Upper Ventura River Groundwater Agency
UWMP	Urban Water Management Plan
VRBO	Matilija Deep Aquifer, Vertical Bore
WEAP	Water Efficiency and Allocation Program

## Definitions

**Conditional option** – water supply option that is not needed to meet the CWRP objectives but that should be tracked and implemented if recommended options cannot be implemented or fail to deliver the anticipated yield

**Consumption water demand** – customer water use "at the tap" or metered water sales; excludes all water distribution system losses

**Dead pool** – storage level below which water cannot be withdrawn through existing outlet facilities; for Lake Casitas this is 950 acre-feet

**Decision support tool** – Excel-based tool to evaluate and compare water supply options and portfolios on a semi-quantitative basis using technical, environmental, economic and social criteria

Historical hydrology – Lake Casitas operations and streamflows over the historical period of 1944-2018

**Hydrologic trace** – one set of 75-year period input data to the Lake Casitas Yield Model, generated from the synthetic hydrology analysis using 1944-2018 data

Local option - water supply option deriving water from the local Ventura River watershed

**Long-term supply gap** – difference between average annual 2040 water demand and current supply based on 95% reliable safe demand from Lake Casitas

**Minimum allowable storage** – minimum Lake Casitas storage volume allowed during simulation of normal (non-emergency) operations; provides a storage buffer for emergency or unplanned conditions

**No-regret water supply option** – project, program or policy that would be effective and should be implemented under any future conditions

Portfolio - collection of water supply options that together meet all CWRP objectives

**Probabilistic analysis** – analysis that accounts for the possibility of having different outcomes with different probabilities of occurrence based on a range of possible input parameters

**Production water demand** – water that must be produced from wells or at the Casitas water treatment plant to meet all consumption water demands and satisfy all water distribution system and water treatment plant losses

**Risk-based planning** – approach to planning that accounts for future threats and uncertainties in decision-making and involves probabilistic analyses of supply and/or demand

**Safe demand** – the largest base demand – i.e., the production water demand when the Lake is full – that could be met in every year in the period of record when demand reductions are applied during periods of low lake levels in accordance with the Casitas Water Efficiency and Allocation Program, and without storage dropping below the minimum allowable storage level

**Safe yield** – the largest amount of water that can be drawn from Lake Casitas every year in the period of record without storage dropping below the minimum allowable storage level



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**Short-term supply gap** – volume of water needed in the next five years to mitigate risk of Lake Casitas storage falling below the minimum allowable storage level

**Supplemental water option** – water supply option deriving water from outside the local Ventura River watershed

**Synthetic hydrology** – sequences of streamflow and evaporation data generated using computer simulations that maintain key statistics (e.g., mean, standard deviation, serial correlation) in the historical hydrologic record

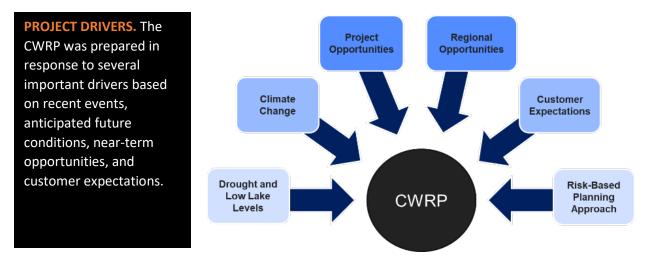
**Water supply option** – infrastructure project, program, policy or strategy that could meet a portion of Casitas' future needs



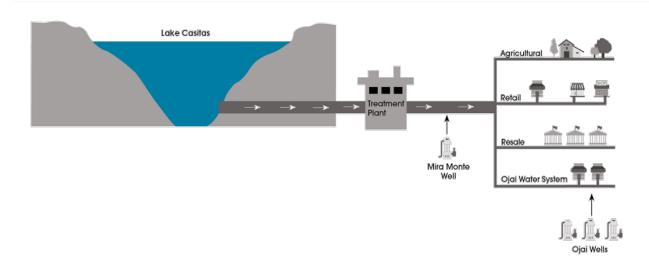
## **Executive Summary**

THE CASITAS MUNICIPAL WATER DISRICT COMPREHENSIVE WATER RESOURCES PLAN (CWRP) presents

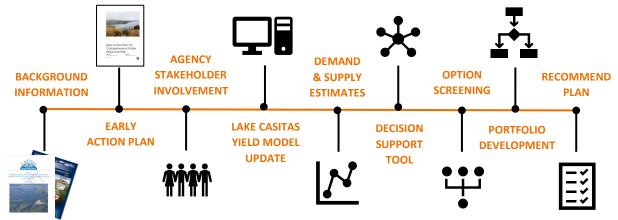
a strategy for addressing current and future water supply challenges, risks, and opportunities to meet the needs of Casitas Municipal Water District (Casitas) customers. The CWRP is based on a review of a wide range of available options and strategies, and consists of an adaptive approach to providing a reliable and sustainable water supply for Casitas.



**CASITAS MUNICIPAL WATER DISTRICT SYSTEM.** Casitas serves water to four categories of customers: retail residential and commercial, agricultural, resale (i.e., through water delivery contracts), and Ojai Water System customers that were previously served by Golden State Water Company. The Casitas System is primarily supplied by Lake Casitas, and has one well (Mira Monte well in the Upper Ventura River Groundwater Basin). The Ojai System is supplied primarily by groundwater wells in the Ojai Groundwater Basin, and receives supplemental water from Lake Casitas via the Casitas System. These surface and groundwater resources are all dependent on rainfall and runoff in the Ventura River watershed.



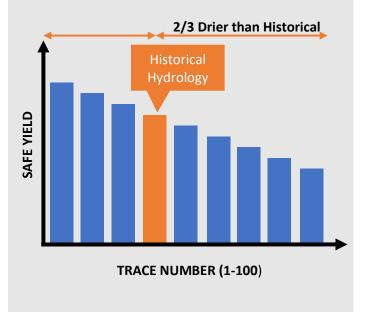
**PROJECT APPROACH.** The CWRP was developed using a systematic approach based on industry practices for risk-based planning, new and updated analytical tools, and stakeholder input. Stakeholder input was received through two stakeholder workshops, 12 Water Resources Committee meetings which were open to the public, and one Board workshop.



**FUTURE DEMAND.** Future 2040 water demand was estimated using a combination of past estimates and analysis of recent water use. Casitas System and Ojai Water System estimated demands are lower than previous estimates and reflect recent water use patterns from the last several years.

16,000 AFY2,350 AFYCasitas WaterOjai WaterSystem FutureSystemDemands2040 Demand

LAKE CASITAS MODELING. Lake Casitas is the primary source of supply for Casitas Municipal Water District. Yield estimates for Lake Casitas were developed using a computer model to simulates all inflows and outflows on a monthly time step for a 74-year period (1945-2018). Lake Casitas annual yield for water supply planning was based on the concept of safe demand. This is the largest base demand – i.e., the customer demand when the Lake is full – that could be met in every year when **CLIMATE VARIABILITY.** Operation of Lake Casitas was simulated for **100 future hydrologic conditions** (hydrologic traces) developed based on reshuffled historical hydrology and an adjustment for the impact of future climate change in Ventura County. The results showed there is a 67% chance that projected future hydrology will be drier than historical hydrology.



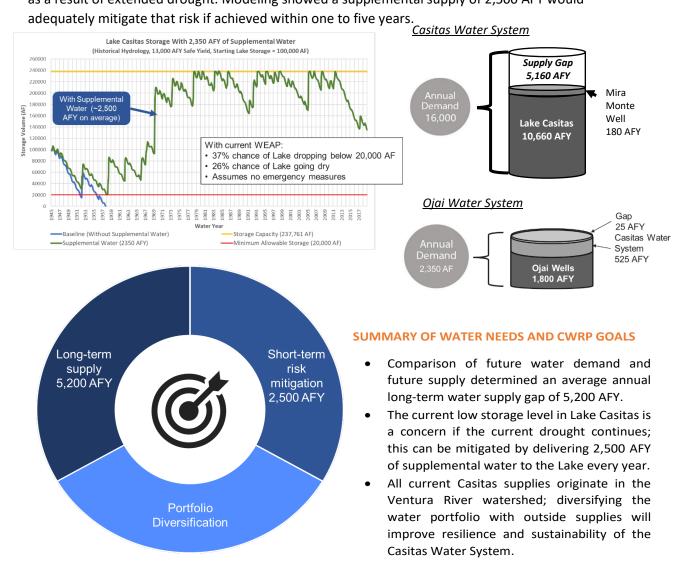
demand reductions are applied during periods of low lake levels in accordance with the Casitas Water Efficiency and Allocation Program. A minimum allowable lake storage level was set at 20,000 AF (8.4% of total storage) to provide a buffer against unforeseen emergency conditions.

**AVAILABLE WATER SUPPLY.** The safe demand from Lake Casitas was evaluated based on a minimum storage of 20,000 AF and a climate-adjusted risk-based hydrology approach. The safe demand that could be delivered for 95 of the 100 synthetic hydrologic traces is 10,660 AFY; this was adopted as the Lake Casitas yield for the CWRP. The Mira Monte Well capacity based on recent experience is 180 AFY. The available supply for the Ojai Water System is estimated to be 2,325 AFY (1,800 AFY from groundwater wells and an average of 525 AFY from the Casitas System).

**FUTURE WATER SUPPLY GAPS.** The **long-term supply gap** is the difference between estimated 2040 demand and available supply from all current sources. This gap is about 5,200 AFY for the Casitas System; there is no significant gap for the Ojai Water System.



The **short-term supply gap** is based on mitigating the risk of Lake Casitas dropping to critically low levels as a result of extended drought. Modeling showed a supplemental supply of 2,500 AFY would

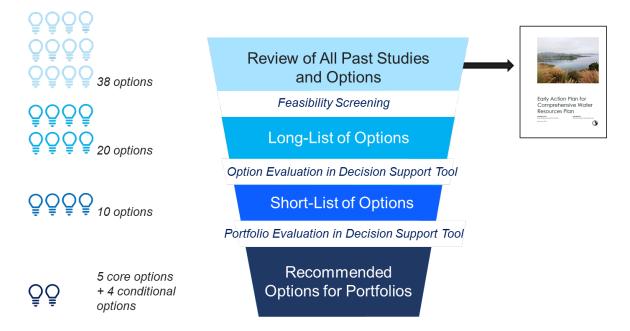


**WATER SUPPLY OPTIONS.** A comprehensive range of structural/non-structural, surface/groundwater, and local/imported water options were considered to address future water supply needs.



WATER SUPPLY OPTIONS ANALYSIS. A thorough and deliberate process was used to evaluate potential water supply options to address the CWRP goals. Over **30** structural and non-structural projects and programs were evaluated using a decision support tool based on technical, economic, environmental, and social criteria. The most feasible options were selected for further analysis and for combining into comprehensive water supply portfolios.





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#### **PLANNING POLICIES**

- Supply and Demand Estimates
- Minimum Allowable Lake Storage
- Risk Based Planning

#### **PORTFOLIO OF PROJECTS**

- Local Options
- Supplemental Water Options
- Conditional Options

#### **NEW AND UPDATED PROGRAMS**

- Water Conservation Plan
- WEAP Policy Updates
- Supplemental Water Integration Plan

**PORTFOLIO OF PROJECTS.** The recommended portfolio of projects includes both local and supplemental water options. Two local projects will maximize yield from Ventura River water resources. Two regional interconnections to State Water Project infrastructure - one in Ventura and one in Santa Barbara County - will allow access to Casitas' current State Water Project contracted supply, as well as other supplemental water sources such as City of Santa Barbara desalinated water or in-lieu transfers with Ventura. Conditional options will be tracked in case one or more of the recommended projects cannot be implemented as planned. The capital cost of the recommended plan projects is \$155 million, which would likely need to be funded by non-rate revenue sources such as bonds or grants. Local projects are recommended to be completed in 2 years, the Ventura-Santa Barbara Interconnection is recommended to be completed in 5 years, and the Casitas-Calleguas Interconnection and other supplemental water acquisitions are recommended to be completed in 10 years.

## **RECOMMENDED PLAN**

The recommended plan consists of a coordinated set of planning policies, projects, and new and updated programs.

**PLANNING POLICIES.** Casitas has adopted new policies for water supply planning.

- CWRP supply and demand estimates will be used for **future planning**.
- The minimum operating volume in Lake Casitas during normal operations will be 20,000 acre-feet (8.5% of total storage).
- Adequate average annual supply will be developed to meet 95% of anticipated future hydrologic conditions. Emergency measures will be implemented during more extreme conditions.

### LOCAL, NEAR TERM, NO-REGRETS OPTIONS

- GW 08 Ojai Basin Well Rehabilitation and Replacement
   MO 08 – Robles Fish
- Screen Improvements

#### PREFERRED SUPPLEMENTAL WATER OPTIONS

- SWP 03 Ventura-Santa Barbara Interconnection
- SWP 04 Casitas-Calleguas
  - Interconnection 3. SWP 05/DW 01 Supplemental Water

#### **CONDITIONAL OPTIONS – TRACK ONLY**

- 1. C 01 Demand Management 5%-10%
- 2. MO 01 Watershed Management/Arundo Removal
- 3. GW 01 Matilija Deep Formation Wells
- 4. SWP 05/DW 01 Additional Supplemental Water Options

**NEW AND UPDATED PROGRAMS.** It is recommended that Casitas: (1) Develop a Water Conservation Plan to maintain current low customer water use. (2) Update the existing Water Efficiency and Allocation Program to include emergency operations and revised drought stages corresponding to lake levels. (3) Prepare a Supplemental Water Integration Plan to integrate State Water Project water and other supplemental sources into the Casitas Water System.

## INTRODUCTION

## Section 1 Introduction

The Casitas Comprehensive Water Resources Plan (CWRP) presents a strategy for addressing current and future water supply challenges, risks and opportunities to meet the needs of all Casitas Municipal

Water District customers. The CWRP considers water supply needs based on risks, threats and challenges, then develops water supply solutions based on individual options, broader strategies, and immediate opportunities (Figure 1-1). This report describes the approach used to develop the CWRP, and the elements of the recommended plan. The focus of the report is on justification for selection of the projects, programs and policies making up the recommended water supply strategy, and on outlining considerations in implementing the recommended actions. The majority of the documentation for the detailed technical studies that support the development of the plan (e.g., future demand estimates, water supply modeling, alternative evaluation) is presented in technical appendices to the CWRP Report.



Figure 1-1: CWRP Links Water Supply Needs and Solutions

### 1.1 The Casitas System

The CWRP is a plan for meeting future water needs for all customers of the District using all water supply resources currently available to the District as well as potential new sources. This includes customers and facilities of the Ojai Water System, which was acquired by the District from Golden State Water Company (GSWC) in 2017. Casitas serves water to the following four categories of customers.

- Agricultural customers
- Retail residential and commercial customers
- Resale customers (i.e., other water providers with whom Casitas has a water delivery contract)
- Ojai Water System customers

Current water supplies are provided by three local sources: Lake Casitas, Mira Monte Well, and the Ojai Wellfield. These surface and groundwater resources are all dependent on rainfall and runoff in the Ventura River watershed. Water from Lake Casitas is treated at the District water treatment plant and delivered to retail, agricultural and resale customers, as well as Ojai Water System customers. Water from the Mira Monte Well is blended with treated Lake Casitas Water. Water supplies from the Ojai

Wellfield can only be used within the Ojai Water System based on current Ojai Groundwater Basin regulations. **Figure 1-2**. is an overview of the Casitas system.

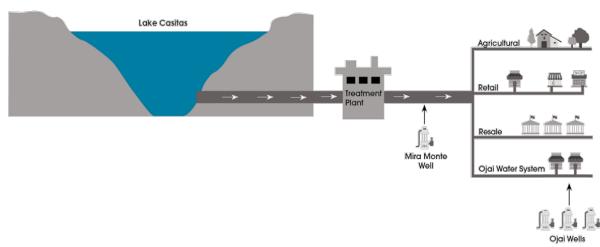


Figure 1-2. Casitas Water System Overview

### 1.2 Project Objectives and Drivers

Casitas Municipal Water District developed this CWRP to identify, analyze, and prioritize strategies for providing a reliable water supply to meet the future water needs of Casitas' retail and contract (resale) customers. The objective was to lay out a strategic plan for addressing current and future water supply needs through a combination of effective policies, projects and programs with the support of the local community.

The CWRP was prepared in response to the recent extended drought in California, which resulted in historic low storage levels in Lake Casitas, the primary local water supply source. It was driven by concerns over supply reliability in the face of possible future climate change, and expectations of customers who had borne the brunt of several years of aggressive water use reductions. Casitas is facing important

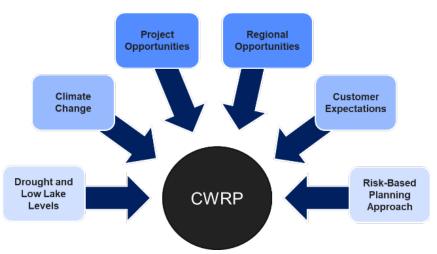


Figure 1-3: Drivers for Preparing the Comprehensive Water Resources Plan

decisions on local projects and large, expensive regional projects, and needed a rational approach for assessing its options. In addition, the CWRP marks a new approach to water supply planning that embraces risk and uncertainty, including an updated analysis of the available yield from Lake Casitas that incorporates the impacts of future climate variability.

Figure 1-3 highlights the drivers for preparing the Comprehensive Water Resources Plan.

### 1.3 Overview of the CWRP Process

The process used to develop the CWRP was deliberate, rigorous, and transparent. It incorporated principles of risk-based water supply planning currently being adopted widely throughout the water resources planning and management industry (Water Research Foundation, 2016). The primary steps in the CWRP planning process are briefly described in **Figure 1-4**.

#### **BACKGROUND INFORMATION** - Collected and

reviewed previous plans and project reports related to potential water supply options for Casitas and the surrounding region; identified potentially feasible options to be included in the CWRP alternative evaluation phase.



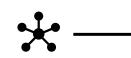
#### **AGENCY STAKEHOLDER INVOVLEMENT -**

Engaged stakeholders across a broad range of public and private interest groups to determine their key issues and preferences for the types of solutions to be considered in the CWRP.

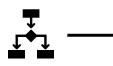


#### **DEMAND & SUPPLY ESTIMATES** - Adopted

estimates of water demand in the Casitas service area for use in CWRP planning and calculated new Lake Casitas yield estimates based on a risk-based approach that accounts for hydrologic variability and climate change.



**OPTIONS SCREENING** - Evaluated and screened a long-list of potentially feasible water supply options using the Decision Support Tool to identify options suitable for including in water supply portfolios.



**RECOMMENDED PLAN** - Selected a preferred portfolio consisting of near-term and no-regrets projects, imported water options, and conditional projects that would be required if the recommended projects could not be implemented or generated less supply than planned; identified water supply planning policies to be adopted and programs to be developed or updated.

Figure 1-4: Overview of the CWRP Process

**EARLY ACTION PLAN** - Identified projects that could be implemented by Casitas within 12 months to respond to serious concerns over low water levels in Lake Casitas due to the extended drought of the 2000s.



#### LAKE CASITAS YIELD MODEL

**DEVELOPMENT** - Updated a previous water supply model of Lake Casitas to reflect current conditions and incorporate functionality for risk-based planning analyses.



**DECISION SUPPORT TOOL** - Developed a spreadsheet tool to evaluate and prioritize water supply options and portfolios (collections of options) based on weighted technical, environmental, social, and cost criteria selected by the District.



#### **PORTFOLIO DEVELOPMENT** - Combined feasible options into portfolios of local and imported water projects, programs and policies that satisfied the short- and long-term goals of the CWRP.



## Section 2 Stakeholder Involvement

As part of the CWRP, a stakeholder engagement program was created and implemented. Stakeholders included community members, local officials, water agencies (federal, state, and local), agricultural users, environmental groups, nongovernmental organizations, major water users, and other stakeholders to discuss the challenges and opportunities for water supply reliability within the region. The stakeholder involvement process and input are described in more detail in Appendix B Stakeholder Engagement Documentation Technical Memorandum.

A comprehensive key stakeholder database was created in collaboration with Casitas and local elected officials that represent the Casitas Water System service area. The stakeholder engagement strategy included a mixture of various digital and in-person engagement tactics with the following goals:

- Facilitate stakeholder meetings to gather input on community priorities for water supply projects
- Build trust in the engagement process among key stakeholders and the communities served by the District by providing regular and ongoing progress updates
- Organize and document the feedback received throughout the process



Two stakeholder workshops were held in July 2019 in Oak View, CA. These workshops were used to engage stakeholders in a collaborative discussion around water supply concerns within the region. There were several recurring themes during these discussions which included the following:

- Importance of communication with elected officials
- Environmental concerns
- Identifying cost-effective solutions that work
- Impact of water shortages on residents and businesses
- Navigating a complex web of multiple water agencies
- Risks of reliance only on a local water source
- Importance of stable water price and sustainability

Key feedback regarding future water supplies and planning strategies included:

- 1. Diversify the Casitas Water supply portfolio.
- Evaluate the State Water Project (SWP) alternatives since Casitas has an existing contract for SWP water, and has been paying for its share of the SWP costs since 1963.



Your Participation is Key to Developing a Reliable Water Source for the Future

With the community's help, a plan will be developed and circulated for public comment. Our team will then review community feedback, address key points raised and refine recommendations before preparing the final Comprehensive Water Resources Plan.

But first, we want to hear from you! Get involved by providing your input and suggestions on the water supply options available to the Casitas community.

Email us your comments and input, and attend our upcoming public meetings.

A webpage example from Casitas' Microwebsite.



3. Implement regional solutions that could be mutually beneficial to other water providers in the region.

Monthly CWRP updates were provided to the Casitas Water Resources Committee (WRC), which consists of two Casitas Board members. These meetings were open to the public and were attended by Casitas staff and the CWRP consulting team. CWRP updates were provided at 12 WRC meetings over the course of the project. At these meetings the WRC provided project direction in a number of important areas, including alternatives to be studied, approaches to incorporating climate variability, alternative evaluation criteria, supply and demand estimates, and the recommended plan.

During preparation of the draft CWRP report a Board workshop was held to brief the entire Board on the study process and the draft recommendations. This meeting was open to the public.



## Section 3 Demand Analysis

Future water demands were estimated for the Casitas Municipal Water District service area, which includes the Casitas Water System and the Ojai Water System. The CWRP water demand analysis is described in detail in Appendix C Water Demand Estimate for Casitas Municipal Water District Technical Memorandum.

The analysis treated the Casitas Water System separately from the Ojai Water System because the potential sources of supply to the two areas are different. Demands in areas served by the Casitas system are primarily met by water supplied by Lake Casitas, with a small supply from the Mira Monte Well located in the Upper Ventura River Groundwater Basin. Demands in the Ojai Water System are met primarily by Ojai Groundwater Basin wells and supplemented by Casitas Water System as needed.

In this report, water demand refers to water that must be delivered to the Casitas water treatment plant or produced by Ojai Groundwater Basin wells. It thus accounts for both the customer uses and losses in water delivery systems. This is termed "production" water demand as distinguished from "consumption" water demand which captures only customer use "at the tap" and not water delivery system losses. The connection between Casitas sources and demand centers is summarized in **Figure 3-1**.

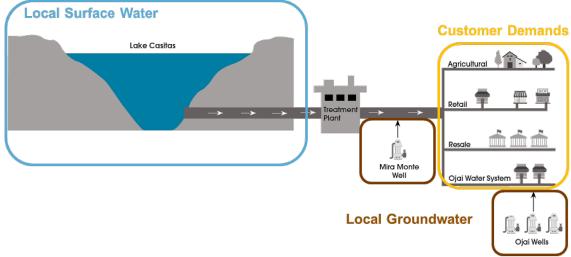


Figure 3-1: Connection Between Casitas Sources and Demand Centers

The CWRP was based on future water demands representing estimated conditions in 2040. For both the Casitas Water System and the Ojai Water System, future demands were estimated based on an average of the most recent published Urban Water Management Plan (UWMP) demand forecast and an extrapolation from recent historical demand data (**Figure 3-2**). This approach allowed for incorporation of the influence of the recent severe drought and corresponding long-term water use reductions by Casitas customers.

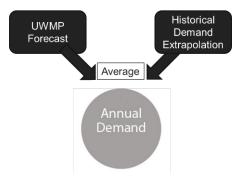


Figure 3-2: Method for Estimating Future Demand for CWRP

### 3.1 Casitas Water System Future Demands

The 2016 Casitas Municipal Water District Urban Water Management Plan (Casitas 2016) reported a 2020 water demand of 17,200 acre-feet per year (AFY) and a 2040 water demand estimate of 17,500 AFY for the Casitas Water System, including all residential, commercial, agricultural, and resale customers. This demand estimate was based on Ventura County population estimates, which forecasted essentially no growth in the Casitas service area over the planning period. Casitas water demand in the past five years has been considerably lower than 17,500 AFY, reflecting the willingness of Casitas

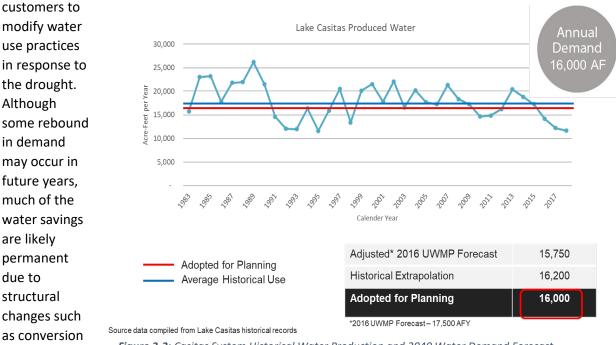


Figure 3-3: Casitas System Historical Water Production and 2040 Water Demand Forecast

landscaping and replacement of old fixtures and appliances with water-efficient fixtures and appliances. Casitas staff felt it was reasonable to assume a permanent savings of 10% from the 2016 UWMP forecast. Thus, the effective Casitas UWMP demand estimate used in the CWRP analysis was 15,750 AFY.



of turf to xeriscape Recent historical water use data was also analyzed as part of the water demand forecast approach. Data for produced water from Lake Casitas and the Mira Monte Well was averaged over the past 8 years. This average of 15,860 AFY was increased by 300 AFY based on the increase in the UWMP demand forecast between 2020 and 2040, resulting in a historical extrapolation of 16,160 AFY.

For purposes of the CWRP, the assumed 2040 demand was the average of the adjusted 2016 UWMP estimate and the historical extrapolation, which was rounded to 16,000 AFY (**Figure 3-3**). Because population is not expected to increase in the study area based on Ventura County growth studies, this water demand estimate should be valid for years past 2040.

### 3.2 Ojai Water System Future Demands

The most recent UWMP for the Ojai Water System is the 2010 Golden State Water Company UWMP.

That report had a future water use estimate for 2035 of 2,570 AFY. This included effects of assumed population growth and reduction in per capita use due to conservation measures.

Historical water consumption in the Ojai Water System service area over the past 5 years has averaged 1,560 AFY. Adjusting for future

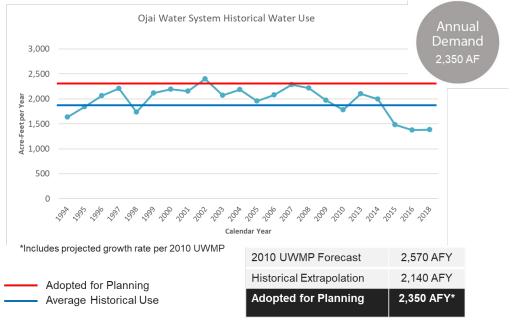


Figure 3-4: Ojai Water System Historical Water Production and 2040 Water Demand Forecast

growth assumed in the UWMP and water system losses, the 2040 water demand estimate based on extrapolation of recent historical data is 2,140 AFY.

The CWRP adopted the average of the UWMP estimate and the historical extrapolation, or 2,350 AFY. Because Ventura County forecasts little growth in Ojai Valley, the estimated demand of 2,350 AFY should be a valid estimate for future years beyond 2040 (**Figure 3-4**). The Ojai Water System demand includes demand met from Ojai Basin wells, which produced an average of 1,360 AFY over the past 8 years, and water purchased from Casitas.

### 3.3 CWRP Demand Summary

Future water demands adopted for CWRP planning are summarized in **Table 3-1**. When combining the Casitas Water System and Ojai Water System demands, it is necessary to account for the portion of Ojai Water System demands met from the Casitas Water System, so this volume of water is not double counted. On average Casitas has supplied 525 AFY to Ojai, which represents about 20% of Ojai's



demand. Adjusting for this shared volume of water, the total estimated 2040 demand for the Casitas service area is 17,825 AFY.

 Table 3-1: Summary of Future Water Demands Adopted for CWRP

DEMAND PARAMETER	CASITAS SYSTEM	OJAI WATER SYSTEM	TOTAL
UWMP 2040 Forecast (AFY)	15,750	2,570	-
Historical Extrapolation (AFY)	16,200	2,140	-
Adopted for CWRP (AFY)	16,000	2,350	18,350
Ojai Demand Included in Casitas Demand (AFY)	-	-	525
Net Casitas Municipal Water District Demand (AFY)	-	-	17,825



# WATER SUPPLY ANALYSIS

## Section 4 Water Supply Analysis

This section describes the components of the analysis performed to estimate the long-term water supply available for the Casitas Water System and the Ojai Water System. The Casitas System water supply was estimated using a simulation model of Lake Casitas; the Ojai Water System supply was estimated based on past production of Ojai Groundwater Basin wells. A detailed description of the water supply and modeling analysis is provided in Appendix D Lake Casitas Water Supply Analysis Technical Memorandum.

### 4.1 Casitas System Water Supply Analysis

The analysis of available water supply to the portion of the Casitas service area served from Lake Casitas (called the Casitas System herein) was performed using the Lake Casitas Yield Model. Casitas developed the first version of this simulation model for Lake Casitas in 2004. This model was used by Casitas in the past to estimate the safe yield for Lake Casitas based on historical hydrology from 1945 to 2004.

The Lake Casitas Yield Model simulates lake inflows, outflows, and operations. The setting for the model is shown in **Figure 4-1.** Key inputs are direct inflows to the lake from Coyote Creek and Santa Ana Creek, and diversions from the Ventura River at the Robles Diversion. Key outflows are water releases to meet water supply needs and evaporation. The model is a set of Excel spreadsheets, and is described in detail in the Casitas Water Supply and Use Report (Casitas, 2004).

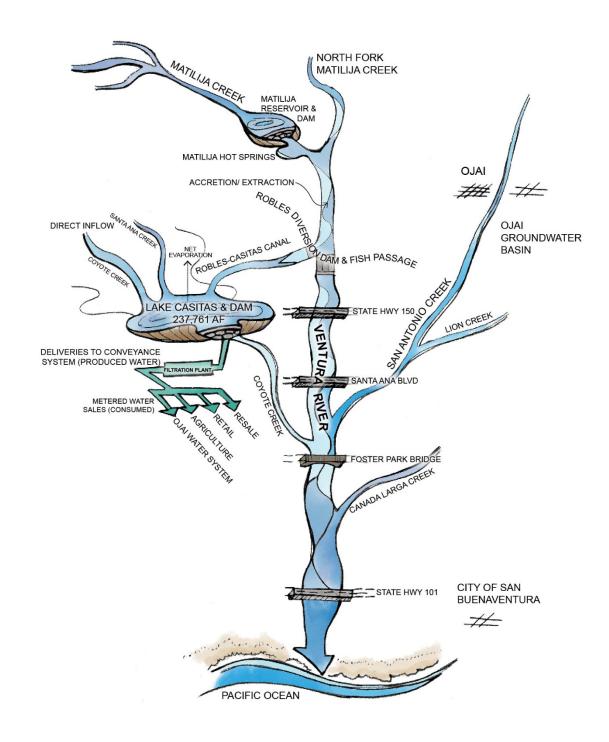


Figure 4-1. Schematic representation of Lake Casitas Yield Model setting

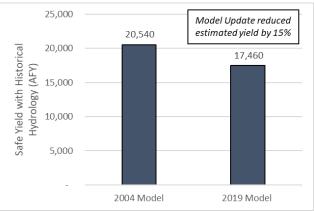
### 4.1.1 Casitas Yield Model Update

The Lake Casitas Yield Model was updated for the CWRP (**Figure 4-2**) by making the following improvements:

- Extended the model to a 74-year period of record through 2018; this captured the recent California drought.
- Incorporated the 2003 non-jeopardy Biological Opinion Operating Criteria for steelhead trout into the simulation of the Robles Diversion Structure; this reduced the volume of water diverted into Lake Casitas in the model during most conditions, at the same time keeping the fish in good condition downstream and protecting downstream water rights
- Updated the Lake Casitas reservoir elevation-area-capacity table based on the recent 2017 bathymetric survey; this reduced the maximum capacity of the Lake from the original volume of 254,000 AF to 237,761 AF.

The updates to the Lake Casitas Yield Model reduced the estimated safe yield of the Lake from 20,540 AFY to 17,460 AFY. This is a significant reduction of 15% in the estimated safe yield just from updating the model.

The next step in the Lake Casitas yield analysis for the CWRP incorporated new planning policies adopted by the Casitas Board during the CWRP process. These policies and their effect on the Lake Casitas yield analysis are described in the following sections.





### 4.1.2 Incorporation of the WEAP Policy and the Concept of Safe Demand

The Casitas Water Efficiency and Allocation Program (WEAP) was first developed in 1992 as a strategy for managing demand in response to periods of low supply from Lake Casitas. The most recent revision of the WEAP is dated May 2018. The WEAP establishes water use allocations for each Casitas customer based on either 80% of actual use in FY 1989-90 or actual use in FY 2012-13, whichever was less. When Casitas acquired the GSWC system, Ojai customers' allocations were based on estimates of structures and landscaped area on each parcel. The WEAP also defines five Lake Casitas storage stages and provides guidelines for setting lower allocations when storage volumes in Lake Casitas are below certain levels. The Casitas Board declares the WEAP stage based on lake storage, anticipated runoff in coming months, customer demands, and other factors.

SAFE YIELD – the largest amount of water that can be drawn from Lake Casitas every year in the period of record, without storage dropping below the minimum allowable storage level

SAFE DEMAND – the largest amount of water that can be drawn from Lake Casitas every year in the period of record when demand is reduced based on Lake level according to the WEAP policy, without storage dropping below the minimum allowable storage level

		Lake Storage	Lake Storage (% of	Allocation Reduction
		(AF)	Capacity)	(%)
Lake Casitas	Stage 1	237,761	100%	20%*
	Stage 2	118,881	50%	20%
	Stage 3	95,104	40%	30%
	Stage 4	71,328	30%	40%
	Stage 5	59,440	25%	50%
		950 AF	0%	

#### Figure 4-3: Lake Casitas WEAP Stages

Because Board declarations of WEAP stages are intended to reduce customer demands, and because Casitas customers have responded positively to shortage declarations and reduced their water use in the past, the Lake Casitas yield analysis was changed to reflect reduced water demands consistent with the WEAP target demands at each lake stage. That is, as the lake level dropped during dry periods in the simulation, the total water demand was set to not exceed the target demand in the WEAP policy. The largest base demand – i.e., the demand when the Lake is full – that *Voluntary Reduction

NEW SAFE DEMAND POLICY: Lake Casitas long-term yield is based on the concept of safe demand, in which customer demands are reduced in dry periods when lake levels are low, consistent with the current WEAP guidelines.

could be met in every year when the WEAP reductions are applied for low lake levels was referred to as the "safe demand". The safe demand was used in the CWRP to represent the long-term annual yield from Lake Casitas.

### 4.1.3 Minimum Allowable Storage Level in Lake Casitas

Past Lake Casitas yield estimates were based on simulations that allowed the Lake storage to be drawn down to the dead pool level, which is approximately 950 AF (0%). This provides no buffer for emergency conditions. As part of the CWRP, the Lake Casitas operation policy was changed to establish a minimum allowable storage level below which the Lake would not be drawn down during normal operations (**Figure 4-4**). The volume of water below the minimum allowable storage would be reserved for emergency conditions

NEW MINIMUM ALLOWABLE STORAGE POLICY: Lake Casitas will be managed to maintain a minimum allowable storage volume of 20,000 AF in all periods of normal operation. A plan will be developed for emergency conditions when the Lake falls below 20,000 AF.

beyond the planning assumptions in the CWRP, e.g., more severe droughts or outages of critical infrastructure such as the Robles Diversion.

Casitas set the minimum allowable storage volume at 20,000 AF. Excluding the dead pool, this provides about 19,000 AF of emergency storage. This volume is equivalent to 1.1 years of future Casitas Water System demand, or 1.4 years of the WEAP Stage 5 demand. In all Lake simulations of safe yield or safe demand, the goal was to **maintain lake storage above 20,000 AF at all times**. Calculations of the water supply gap described later in this report were based on maintaining a minimum allowable storage of 20,000 AF.

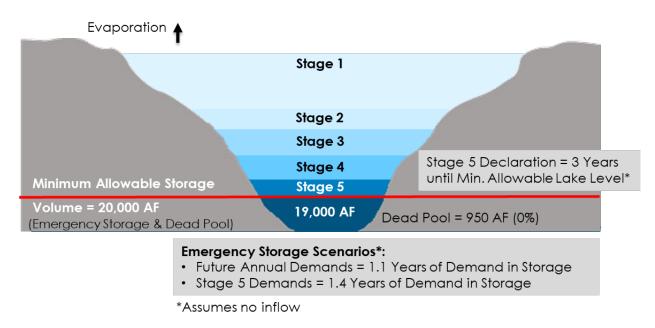
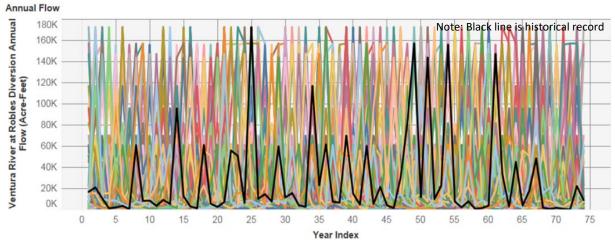


Figure 4-4: Minimum Allowable Lake Level

### 4.1.4 Climate Variability and Climate Change Analysis

Estimates of future Lake Casitas yield account for climate variability (annual variation in climate and streamflow based on historical records) and climate change (shift in temperature and precipitation due to global climate drivers).



*Figure 4-5:* Plot of 100 74-year Monthly Time Series for Ventura River Streamflow at Robles Diversion, Based on Historical Record

Natural hydrologic variability was incorporated into the Lake Casitas yield analysis by generating one hundred 74-year hydrologic datasets (traces) derived from the historical dataset and having the same basic statistics (e.g., standard deviation and serial correlation of annual streamflows) as the historical record (**Figure 4-5**). Annual historical natural inflows to the lake and Ventura River streamflows at the Robles Diversion structure were reshuffled 100 times, maintaining the long-term serial correlation between annual streamflows. Monthly distribution of flows within each year was unchanged. The result was 100 hydrologic datasets that were used as input for the Lake Casitas Yield Model.

Downscaled climate change information for Ventura County (Western Regional Climate Center, 2019) was used to adjust Lake Casitas yield estimates for potential future changes in climate conditions (temperature and precipitation). Key findings for Ventura County climate change include:

- > Increased average temperature
- Increased maximum temperatures by 3-5 degrees F
- > Increased and/or decreased average annual precipitation
- > Increased number of dry days (3-4 per year)
- Increased precipitation intensity; wettest 5% of days will contribute 10% more to annual precipitation
- Increased evapotranspiration by 2.5 to 6.5 inches/year, with highest increases in inland areas
- > **Decreased** runoff production (conversion of rainfall to runoff)

Some potential climate change conditions could decrease Lake Casitas inflow and others could increase it. These effects were assumed to generally compensate for each other. Increased evaporation of six inches/year was found to reduce the Lake Casitas safe yield for historical inflow hydrology by 4.3 percent. This factor was applied to results of yield simulations to account for potential future climate change.

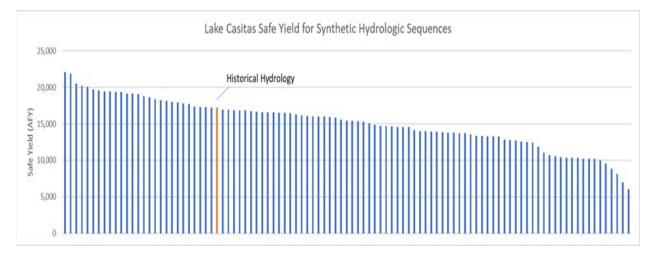
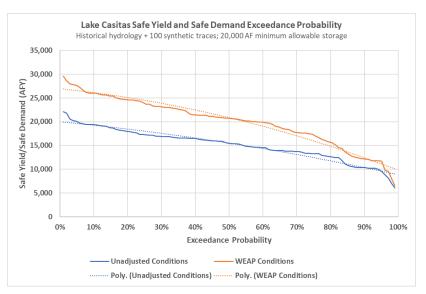


Figure 4-6: Lake Casitas Safe Yield for Synthetic Hydrologic Sequences

Of the 100 synthetic hydrologic traces generated for the CWRP, about two-thirds result in lower Lake Casitas safe yield than the historical hydrology (**Figure 4-6**). This persistence toward drier conditions has a significant effect on the reliable yield the Lake could supply in the future.

### 4.1.5 Reliability Analysis

The 100 synthetic hydrology traces were used to develop safe demand estimates with different reliabilities. The 2019 Lake Casitas Yield Model was used to simulate the safe yield and safe demand (maximum annual withdrawal when demands are reduced according to WEAP policy) for each of the 100 traces. Results are shown in **Figure 4-7** and **Table 4-1**: Lake Casitas Safe Demand and



indicate the percentage of potential future hydrologic conditions for which the given safe demand could be met.



Casitas considered the reliability results and determined that developing supplies to produce safe demand to meet all future hydrologic conditions would be very expensive and unnecessary with the adopted minimum allowable storage in Lake Casitas of 20,000 AF. The Board selected a reliability of 95% to balance a conservative approach to water supply planning against prudent financial planning. When the climate change adjustment described previously was applied, the 95% reliable safe demand from Lake Casitas used for the CWRP was 10,660 AFY.

Table 4-1: Lake Casitas Safe Demand (AFY)

RELIABILITY	SAFE DEMAND WITHOUT CLIMATE CHANGE ADJUSTMENT (AFY)	-
90%	12,420	11,890
95%	11,140	10,660
99%	10,090	9,650

Note: 100 hydrologic traces, application of WEAP demand reductions for low lake levels, minimum allowable storage of 20,000 AF

### 4.2 Water Supply Needs Analysis

Future water supply needs were based on three factors:

- 1. The water supply gap (difference between future annual demand and available annual supply)
- 2. The **immediate risk of shortages** due to the current low storage volume in Lake Casitas after the extended California drought

NEW RELIABILITY POLICY: Lake Casitas safe demand used for planning will be based on a reliability of 95%.

There is a 95% chance that in the future we will be able to support a base demand of 10,660 AFY from Lake Casitas under our current WEAP policy with our current supplies and a 20,000 AF minimum allowable storage pool.



3. The desire for a more **diversified water supply portfolio** to better prepare for future uncertainty

### 4.2.1 Water Supply Gap Analysis

The future water supply gap was estimated separately for the Casitas System and the Ojai water System.

#### **Casitas Water System**

The CWRP adopted an average annual demand for the Casitas system of 16,000 AFY (see Section 3,

**Casitas Water System Future** Demands). The available annual supply is the sum of the Lake Casitas 95% reliable safe yield of 10,660 AFY and the Mira Monte Well¹ yield of 180 AFY. The Mira Monte Well is located in the Upper Ventura River Groundwater Basin, which is managed by the Upper Ventura River Groundwater Agency (UVRGA). The resulting long-term water supply gap for the Casitas system is 5,160 AFY (rounded to 5,200 AFY), as depicted in Figure 4-8.

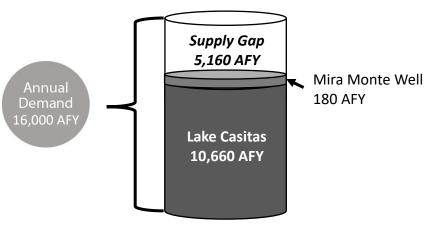
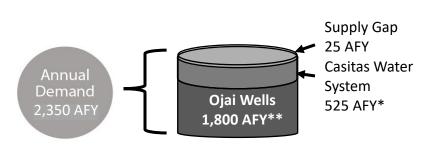


Figure 4-8: Casitas System Water Supply Gap

#### **Ojai Water System**

The Ojai Water System average annual future demand for the CWRP is 2,350 AFY (see Section 3, **Ojai Water System Future** Demands). The available supply for the Ojai Water System is estimated to be 2,325 AFY (1,800 AFY from groundwater wells² and an average of 525 AFY from the Casitas System (based on



*Typical historical value; included in demand on Lake Casitas System ** Assumed safe yield from current well system. Permitted production = 4,404 AFY.

Figure 4-9: Ojai Water System Water Supply Gap

historical deliveries)). The groundwater wells are in the Ojai Basin, which is managed by the Ojai Basin Groundwater Management Agency (OBGMA). The resulting gap of 25 AFY was assumed to be within the

¹ The Mira Monte Well is located in the Upper Ventura River Groundwater Basin, which is managed by the Upper Ventura River Groundwater Agency (UVRGA).

² The Ojai system groundwater wells are in the Ojai Basin, which is managed by the Ojai Basin Groundwater Management Agency. Assumed safe yield is 1,800 AFY, and Casitas has a permitted capacity of up to 4,404 AFY.

accuracy of the supply and demand analyses, and could be met with a small additional delivery from the Casitas System if needed (Figure 4-9).

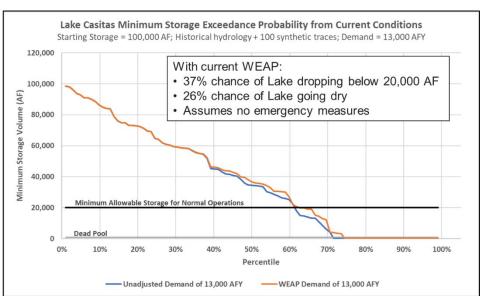
 Table 4-2 summarizes the water supply gap in both the Casitas and Ojai Water Systems.

WATER SYSTEM	AVERAGE ANNUAL FUTURE DEMAND (AFY)	AVERAGE ANNUAL SUPPLY (AFY)	ASSUMED WATER SUPPLY GAP (AFY)	COMMENTS
Casitas System	16,000	10,840	5,200	Rounded from 5,160
Ojai Water System	2,350	2,325	0	Negligible; could be met from Casitas System

Table 4-2: Summary of Water Supply Gap Analysis

### 4.2.2 Immediate Risk of Shortages

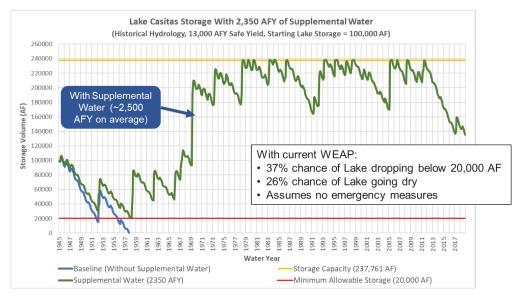
At the beginning of the CWRP study the Lake Casitas storage was about 78,000 AF, which triggered a Stage 3 declaration and caused concern for Casitas water managers and the community. Although the Lake had recovered to about 100,000 by late 2019, concern of future shortages remained if the drought were to continue.



*Figure 4-10*: Exceedance Probability of Lake Casitas Minimum Storage Occurring At Least Once Over the Simulation Period for 100 Hydrologic Traces with Starting Lake Storage of 100,000 AF

The risk of critically

low Lake levels was investigated by simulating Lake Casitas operation for the 100 synthetic hydrologic traces and historical hydrology with a demand of 13,000 AFY. This demand is higher than the 2019 observed demand but lower than the long-term estimate of 16,000 AFY. The Lake Casitas risk shortage analysis is described in Appendix E Analysis of the Risk of Lake Casitas Being Drawn Down to the Minimum Pool Level Technical Memorandum. Thirty-seven percent (37%) of the 100 hydrologic traces caused the Lake to fall to the 20,000 AF minimum storage level, and 26% of the traces caused the Lake to fall to the 20,000 Internet.



This level of risk prompted development of a CWRP objective to take steps to secure a new water supply in the near term in the event the recent drought continues. Simulations with different constant annual volumes of supplemental water showed that 2,500 AFY provides

*Figure 4-11*: Plot of Lake Casitas Storage for Historical Hydrology with Addition of 2,500 AFY of Supplemental Water in Every Year

reasonable protection against critically low Lake levels in the next decade (**Figure 4-11**). The CWRP goal was to add 2,500 AFY of new supply in 5 years.

### 4.2.3 Portfolio Diversification

All existing Casitas surface and groundwater supplies for both the Casitas System and Ojai Water System originate in the local Ventura River watershed. This places Casitas at risk from droughts or emergencies that affect the local watershed. A strategy to address this risk is to diversify the Casitas water supply portfolios. Diversification involves adding supplies from sources other than the local watershed, e.g., the State Water Project, desalinated seawater, water imported from an adjacent watershed (**Figure 4-12**). The CWRP adopted a goal of diversifying the Casitas water supply portfolio, since a desire for portfolio diversification was one of the main themes from the stakeholder engagement process.

## BENEFITS OF WATER SUPPLY DIVERSIFICATION

- Improve reliability during shortage periods
- Provide flexibility in system operations
- Forge regional partnerships

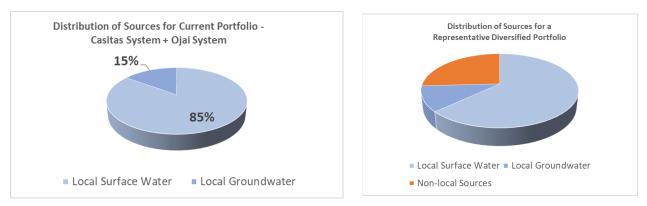


Figure 4-12: Conceptual Representation of a Diversified Portfolio



### 4.2.4 Water Supply Planning Goals

As a result of the water needs assessment, the Board adopted goals for long-term water supply augmentation, short-term risk mitigation, and portfolio diversification (**Figure 4-13**). These goals were the basis for investigating potential water supply options and developing future water supply portfolios.



Figure 4-13: Summary of CWRP Planning Goals



## Section 5 Water Supply Options Analysis

Potential strategies to address the CWRP goals were developed by first identifying all potential supply options, then screening those to select the most feasible options, and finally combining those feasible options into portfolios that satisfied the CWRP goals. This section describes the process used to select feasible water supply options, which is depicted in **Figure 5-1**.

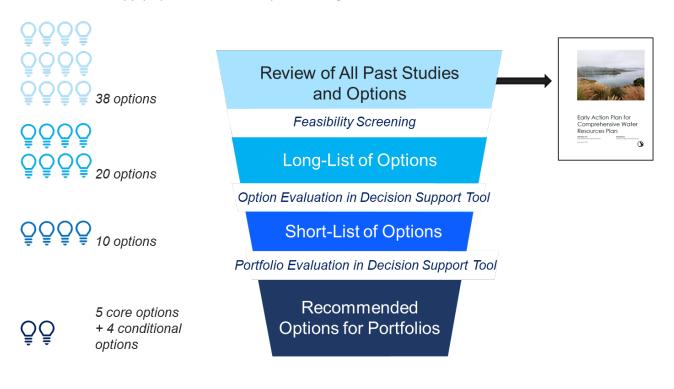


Figure 5-1: Water Supply Option Screening and Evaluation Process

### 5.1 Water Supply Options Considered

An extensive list of water supply options was prepared by reviewing past water supply planning reports and identifying options considered previously. This included planning reports by Casitas and other agencies, including the recent Casitas Water Security Project analysis (WREA et al, 2016). This process is described in Appendix A Background Information Technical Memorandum. Other concepts were added by the project team, and a list of projects suitable for consideration in the CWRP was developed. This list is shown on the next page, with water supply options categorized based on the project type and water source.

### STATE WATER PROJECT



**SWP 01** Transfers via City of Ventura State Water Project Interconnect and Casitas-Ventura State Water Project Interconnection

SWP 02 Calleguas Emergency Interconnection with Casitas

**SWP 03** Ventura-Santa Barbara Counties Interconnection

SWP 04 Casitas-Calleguas Interconnection

SWP 05 City of Ventura Supplemental Water or In-Lieu



SURFACE WATER

**SW 01** San Antonio Creek Spreading Basin Rehabilitation

**SW 02** Debris Basin "Enhanced" Percolation **SW 03** Matilija Dam Groundwater/Surface Water

SW 04 Expansion of Robles Canal

**SW 05** Construction of a New Dam Upstream of Lake Casitas

SW 06 Robles Forebay Restoration



### GROUNDWATER

**GW 01** Matilija Formation Deep Wells (VRBO, HOBO)

**GW 02** Abandoned Wells and Inspection Program **GW 03** Data Collection and Storage

**GW 04** Renovate Senior Canyon Mutual Water Company Horizontal Well

**GW 05** Continuous Groundwater Level and Quality Monitoring in Ventura River Watershed **GW 06** Ojai Basin Desalter Project

**GW 07** Santa Ana Road Underground Stream **GW 08** Well Improvements in Ojai Groundwater Basin



### WATER CONSERVATION

C 01 Conservation/Enhanced Demand Management Programs (5 percent)
C 02 Conservation/Enhanced Demand Management Programs (10 percent) **RW 01** Recycled Water from Ojai Valley Sanitary District (OVSD)

**RW 02** Scalping Plant on OVSD Collector Main for Re-Use at Ojai Valley Inn

**RW 03** Secondary Reclaimed Water to the Ojai Valley **RW 04** Tertiary Reclaimed Water to Rincon Orchards **RW 05** Spray Field in Canada Larga

**SW 06** Ojai East Septic Collection, Package Treatment, Recharge



### LOCAL AGREEMENTS

**RECYCLED WATER** 

LA 01 Ojai Basin Groundwater Management Agency (OBGMA) Co-operation Agreement (Inter-basin) with Upper Ventura River Groundwater Basin Sustainability Agency

LA 02 Conjunctive Use Agreement with OBGMA



### MAINTENANCE AND OPERATIONS

**MO 01** Environmental/Habitat Modification **MO 02** Ventura River Watershed Infrastructure Improvements

MO 03 Fire Hydrant and Dead-End Flush Re-Use MO 04 Resale Water Company System

Retrofit/Rehabilitation

**MO 05** Casitas Leak Detection and Repair Program **MO 06** Sediment Removal at North End of Lake Casitas

**MO 07** Pipeline from Matilija Chlorinator to Hot Springs

MO 08 Robles Diversion Fish Passage Improvements



### DESALINATED WATER

DW 01 Desalinated Water from City of Santa
Barbara
DW 02 Casitas Desalinated Water Plant
DW 03 Ventura County Regional Desalinated Water
Plant



### 5.2 Water Supply Options Screening

A Decision Support Tool was developed to allow Casitas to evaluate, compare and screen water supply options. The Decision Support Tool implements a multi-criteria weighted scoring approach to standardize the process for assessing options. Development and application of the Decision Support Tool for the CWRP are described in Appendix F Decision Support Tool Documentation Technical Memorandum.

Casitas staff and the Water Resources Committee selected the individual criteria and criteria weights for evaluating water supply options. Criteria were selected in technical, cost, environmental, and social categories. Different criteria weights were explored to test possible outcomes with different stakeholder group preferences (e.g., higher weights for environmental or cost criteria). In the weighting scheme adopted by Casitas the technical and cost categories were given the most importance (highest weights) in the multi-criteria scoring process. The evaluation criteria and the assigned weights are shown in **Table 5-1**.

CRITERIA CATEGORY	INDIVIDUAL CRITERIA	CRITERIA WEIGHTS	CATEGORY WEIGHTS
	Annual Yield	15%	
	Technical Feasibility	5%	
Technical	Reliability	5%	30%
	Time to Implement	5%	
	Phased Construction	-	
	Construction Cost	15%	
Cost	O&M Cost	5%	30%
	Overall Cost Effectiveness	10%	
	Water Quality	10%	
Environmental	Permitting and Regulatory Constraints	8%	25%
	Energy Efficiency	7%	
	Casitas Control	5%	
Social	Stakeholder Support	5%	15%
	Regional and Ancillary Benefits	5%	

Table 5-1: Decision Support Tool Criteria and Weights for Evaluating Water Supply Options

Each of the potentially feasible water supply options was evaluated using the Decision Support Tool. Results are shown in **Figure 5-2**, which ranks the options from most preferred (highest score) to least preferred (lowest score). The top 10 scoring options were selected for building portfolios. Since the feasibility of the Matilija Deep Wells option is not fully understood, this option was also included in further portfolio analysis. Selected water supply options are described in the following subsections.

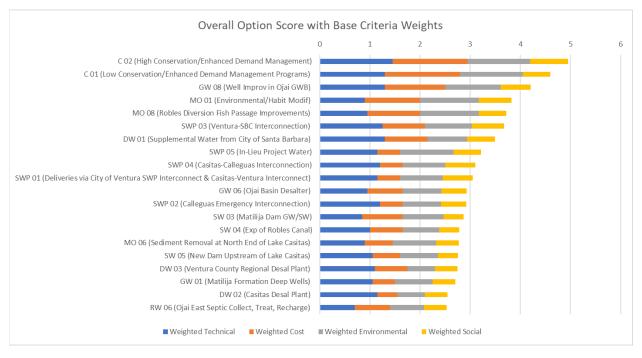


Figure 5-2: Decision Support Tool Scoring of Water Supply Options Using Base Weights Selected by Casitas

Note: High scores denote best performance relative to the evaluation criteria

### 5.3 Local Water Supply Options

Water supply options to be used in forming portfolios were divided into two groups: Local Options that derive their supply from the Ventura River watershed, and Supplemental Water Options that derive their supply from outside the Ventura River watershed. The Local Options adopted for the CWRP portfolios are listed in **Table 5-2** in the order in which they were ranked in the Decision Support Tool. Detailed descriptions of the Local Options follow the table.

Table 5-2: Summary of Local Options Carried forward to Portfolio Analyses

LOCAL OPTION	BRIEF DESCRIPTION	ESTIMATED AVERAGE ANNUAL YIELD (AFY)	ESTIMATED CAPITAL COST
C 01 / C 02 - Enhanced Conservation/Demand Management	Conservation and demand management practices above and beyond those currently implemented by Casitas and its resale customers. Could include increased rebates, education and outreach, or other conservation incentives. Two levels: 5% savings (C 01) and 10% savings (C 02) compared to planned water use. Can be implemented immediately.	800 – 1,600	\$80k - \$170k (Grants may be available)
GW 08 - Ojai Basin Well Improvements	Rehabilitation or replacement of existing wells to recover original design yield. Can be implemented in one year.	500	\$1.5M
MO 01 - Watershed Management (Arundo removal)	Casitas participation in regional efforts to manage watershed conditions upstream of Lake Casitas to increase runoff. Example: Arundo removal. Can be implemented immediately but benefits will not be realized for several years.	300	-
MO 08 - Robles Diversion Fish Screen Improvements	Improvements to Robles Diversion fish screen to allow more efficient operation and increased diversions to Lake Casitas. Can be implemented immediately.	350	\$500K to \$10M
GW 01 - Matilija Formation Deep Wells (VRBO, HOBO)	Wells to recover water from the Matilija Deep Aquifer. Horizontal Bore (HRBO) and Vertical Bore (VRBO) options have been considered. Pilot tests are needed to confirm well yields and long-term supply. Significant uncertainty around project feasibility.	Unknown – requires further study	Unknown – requires further study

### C 01/C 02 – Conservation/Enhanced Demand Management Programs

Casitas has a long history of implementing conservation policies and demand management measures (DMMs). These policies and DMMs are remarkably effective in reducing water demand during drought periods. During the most recent drought, Casitas customers reduced their water use by about 40%, and over 9,000 AFY of water was saved in 2019 compared with pre-drought demands 2013. In response to the recent drought, Casitas implemented its Water Efficiency Allocation Program, and overuse penalties were implemented as part of the allocation program under the more severe stages of drought. As of April 2019, the State of California declared the drought over, but Casitas has remained in a Stage 3 declaration due to conditions in the local watershed.

Even in non-drought periods, Casitas has a long-standing commitment to water use efficiency. Casitas was a signatory to the Memorandum of Understanding with the California Urban Water Conservation Council, which is now known as the California Water Efficiency Partnership (CalWEP). Some of the programs implemented by the Casitas water conservation section include:

- Water surveys available to all customers
- Free water saving devices including low flow showerheads, faucet aerators, toilet flappers, shower timers, etc.
- Washing machine and toilet rebates through partnership with CalWEP
- Turf removal rebates (previous regional grant funded program)
- System water loss audits and leak detection and repair
- Smart Irrigation Controller rebates
- Agricultural and hobby farm rebates for implementing water efficiency recommendations
- California Irrigation Management Information System (CIMIS) stations
- Outreach using social media
- Water Conservation Demonstration Garden at District Headquarters
- Public education and community outreach through banners newsletters, bill inserts, workshops, tours, etc.
- Water waste investigations (and enforcement of adopted ordinance prohibiting waste of water)

The State has also adopted several initiatives to increase conservation such as the Water Conservation Act of 2009 and, more recently, the Making Conservation a Way of Life legislation passed in 2018. In accordance with State guidelines, Casitas prepares an Urban Water Management Plan every five years, which outlines demand management programs and demonstrates water use efficiency consistent with State policy.

While some of the water savings achieved during the recent drought are expected to be permanent, customers may return to previous behaviors as the pressure to conserve in direct response to an ongoing drought is relaxed. The CWRP assumes that demands will rebound but will remain 10 percent lower than previously planned UWMP demands (refer to **Section 3** for a description of planned long=term demands).

Option C 01/C 02 consists of implementing additional demand measures to drive average water use even lower on a long-term basis. For the CWRP, two levels of additional demand reduction were considered: 5% and 10% below the average annual demands of 16,000 AFY for the Casitas System and 2,350 AFY for the Ojai Valley System. **Figure 5-3** shows recent historical demands, the CWRP planned demand, and a 10% additional conservation scenario. Specific methods or programs to achieve these reductions have not been specified, but would be part of the Water Conservation Plan proposed as a CWRP recommended program. It is anticipated this program, in addition to measures targeting municipal uses, would include incentives to help promote agricultural water efficiency and ensure the Casitas resale entities continue to aggressively promote conservation among their customers.

The estimated cost of additional demand management was based on the cost of the current Casitas conservation program, which is about \$170,000/year excluding salaries and other costs. Gaining an additional permanent 5% savings was assumed to require an increased spending of 50% (\$85,000/year); additional permanent 10% savings was assumed to require additional spending of 100% (\$170,000/year).

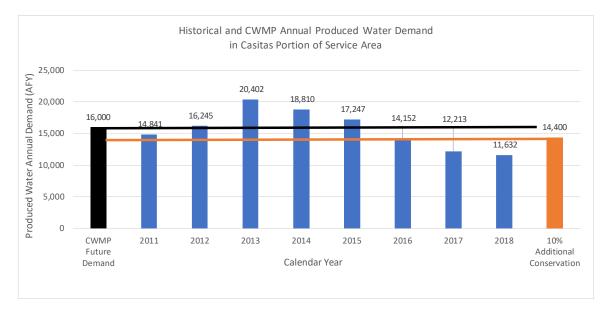


Figure 5-3: Historical and CWRP Annual Produced Water Demand in Casitas Service Area Compared to 10% Conservation Option

### GW 08 – Well Improvements in Ojai Groundwater Basin

Casitas acquired GSWC's Ojai Water System in June 2017. Included in the acquisition were six groundwater production wells consisting of the Mutual #4, Mutual #5, Mutual #6, San Antonio #3, San Antonio #4, and the Gorham well.



Figure 5-4. Ojai Wellfield Location

Casitas operates these wells on two parcels located on either side of San Antonio Creek, south of Grand Avenue, as shown in **Figure 5-4.** The wells range in age from 6 to 47 years old and produce between 70 and 250 gallons per minute (gpm).

Since the acquisition of the wells from Golden State in 2017, Casitas has performed multiple studies on the wellfield with the intent of characterizing the condition of the wells, quantifying interference between the wells, and identifying projects that could be undertaken to improve the production and operation of the existing wells. These studies identified several projects specific to the Ojai Wellfield. Respective locations from the wells can be found in **Figure 5-4** (Figure 1 of the Ojai Well Assessment Report Pueblo Water Resources, 2018). The anticipated yield is approximately 500 AFY.

### MO 01 - Environmental/Habitat Modifications

The Environmental/Habitat Modification project consists of activities to reduce the amount of a major water-consuming plant in the Casitas service area and contributing watershed, *Arundo donax* (*Arundo*). Turfgrass is also considered a major water consuming plant, but to a considerably lesser extent and is part of regular conservation measures. Therefore, this project focuses only on removal of *Arundo*.

*Arundo* is an invasive species with very high water consumption; the rate of water loss is estimated at approximately six times more than that of the native riparian vegetation. Estimates of *Arundo* water use vary between 1 and 48 AFY/acre, with a reasonable estimate of 24 AFY/acre water use (California Invasive Plant Council, 2011). *Arundo* removal and replacement with native riparian plants reduces evapotranspiration losses and results in net savings of approximately 20 AFY per acre of *Arundo* removed. This improves recharge to the groundwater basin as well as helps to keep the river alluvium more saturated.

*Arundo* removal and replacement with native species can vary in cost based on method of removal. Methods meeting all County requirements has a cost of approximately \$20,000 per acre, and other methods could cost as much as \$579,000 per acre (Ventura County Watershed Protection District, 2010; WREA & KG, 2016). However, *Arundo* removal is not permanent and ongoing management programs are required to control this invasive species. The Ventura River Watershed Council has included an Arundo-Free Watershed Campaign as one of their top six priority projects per the 2015 Ventura River Watershed Management Plan.

For purposes of the CWRP, this project was assumed to remove 45 acres of *Arundo* per year for an annual average water savings of 300 AFY. Actual increase in supply accruing to the Casitas system would be very difficult to document. If implemented as a water supply project, Casitas would not be responsible for managing *Arundo* removal activities. Casitas would participate with the Ventura County Watershed Protection District and other agencies involved in watershed management projects.

### MO 08 – Robles Diversion Fish Passage Improvements

In order to augment the natural inflow to Lake Casitas, Casitas operates the Robles Diversion Dam along the Ventura River. The facility is shown in Figure 5-5. The Robles Diversion Dam diverts water to the Robles Diversion Canal, which in turn feeds Lake Casitas. Due to the Biological **Opinion from the National** Marine Fisheries Service regarding the endangered steelhead trout, Casitas was required to install and operate a fish screen at the Robles Diversion Dam. After the installation of the fish screen in



Figure 5-5. Robles Diversion Fish Screen (MKN Associates, 2019)

2004, the Robles Diversion no longer could divert the maximum design flows into Lake Casitas due to restrictions in the Biological Opinion and due to frequent clogging and blockage of the fish screens by debris in the river, especially during high flows. The existing cleaning equipment cannot keep up with the debris loading, which limits the amount of water diverted into the Robles Diversion Canal. This is especially problematic after wildfires in the tributary watershed such as the recent Thomas Fire when the sediment and debris load significantly increased. The existing operations reduce the flow through the screens or shut the diversion down in order to perform manual cleaning, both of which significantly reduce the amount of flow diverted to the lake during storm runoff.

To optimize the operation of the Robles Diversion Dam and maximize the intake of the diversion structure into the Robles Diversion Canal, several alternatives were proposed in the Robles Diversion Fish Screen Alternatives Feasibility Study (MKN Associates, 2019):

- Improve the existing brush system.
- Replace the vertical wedge-wire screens with horizontal wedge-wire screens to improve cleaning efficiency
- Install a fixed manifold back-spray system to work in tandem with an improved brush system.
- Replace the existing fixed screen system with a traveling screen.
- Reduce the load on the existing screen system by suppling the fish ladder auxiliary flow separately from the screened v-channel flow. This is intended to be used in combination with Alternative 1.

The costs range from \$30,000 to \$12M depending on the alternative and selected components. Pilot studies are being performed to determine the preferred alternative. The CWRP assumes a cost of \$3 million for a mid-range alternative.

The additional yield that would be captured after implementing Robles fish screen improvements was estimated by improving the efficiency of the Robles Diversion in the Lake Casitas Yield Model. Results indicated an improvement in average annual yield of 350 AFY based on a 10% increase in overall diversion efficiency (i.e., the percentage of legally available diversions that can be physically diverted from the Ventura River to Lake Casitas).

### GW 01 – Matilija Formation Deep Wells

The Matilija Formation Deep Wells project consists of the construction of one or more deep water wells in the Matilija sandstone. This formation contains groundwater that recharged over very long time periods. The project includes the exploration of both horizontal (HOBO) and vertical (VRBO) wells and allows for drought-period production of groundwater directly to Casitas' water transmission system and/or the Robles Canal. Production capacity and long-term yield is currently unknown and would require a pilot project to estimate.

This is a potential resource with incomplete information on geologic characteristics, well feasibility, and other factors. Casitas contracted a team of professionals to provide a peer review of the feasibility of the proposed project. While findings were promising in some cases, further analysis is required. In addition, the District will need to understand the water rights associated with this water source and the impacts to the overlying landowners.

### 5.4 Supplemental Water Supply Options

Supplemental water supply options develop water from sources outside the Ventura River watershed. The primary supplemental water supply option is connection to the California State Water Project.

### 5.4.1 State Water Project Overview

According to the California Department of Water Resources (DWR), California's State Water Project (SWP) was constructed in the 1960s and 1970s to supply water to more than 27 million people and 750,000 acres of farmland. Planned, constructed, and operated by DWR, the SWP is one of the world's largest water, power, and conveyance systems. In the past decade it has conveyed an annual average of 2.9 million acre-feet of water. The SWP relies on a delivery system of reservoirs, aqueducts, power plants, and pumping plants that extend more than 700 miles (California Department of Water Resources, 2015). The SWP allows the movement of water from northern to southern California and the ability to exchange water with SWP contractors throughout the state. The SWP also provides flood control, power generation, recreation and environmental benefits to the State of California. The SWP primary water delivery facilities are shown in **Figure 5-6**.

In 1963, the Ventura County Flood Control District (VCFCD) contracted with the State of California for 20,000 AFY of water from the SWP. In 1971, the VCFCD assigned the administration of the Water Supply Contract to Casitas for the three agencies. Casitas' contractual share is 5,000 AFY, the City of Ventura has 10,000 AFY and United Water Conservation District (UWCD) has 5,000 AFY. To date the infrastructure is not in place to deliver the contractual share to Casitas and the City of Ventura. UWCD can access SWP through Lake Piru. Infrastructure requirements are being evaluated from agencies currently receiving SWP water from north and south of Ventura County.

To the north of Ventura County, the SWP serves Santa Barbara County through the Coastal Branch Aqueduct and a 42-mile long Central Coast Water Authority pipeline shown in **Figure 5-7** (California Department of Water Resources, 2012). This pipeline allows for the SWP to deliver water to Lake Cachuma for conveyance to South Santa Barbara County agencies via Tecolote Tunnel and the South Coast Conduit, which extend as far south as Carpinteria Reservoir. This allows for opportunities to be explored for delivering SWP to Casitas.

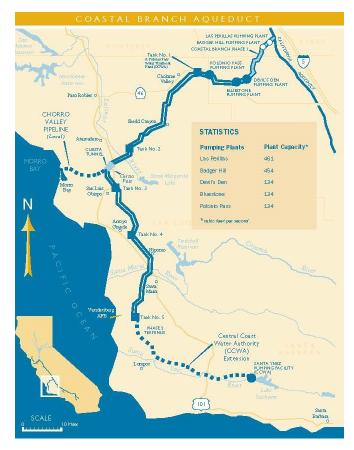


Figure 1-1 Names and Locations of Primary Water Delivery Facilities, December 31, 2012

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Figure 5-6 State Water Project Primary Water Delivery Facilities (California Department of Water Resources, 2015)

To the south of Ventura County, the Metropolitan Water District of Southern California (MWD) is a regional wholesaler that provides water to 26 member public agencies (The Metropolitan Water District of Southern California, 2020). MWD imports water from both the SWP and the Colorado River Aqueduct. Calleguas Municipal Water District (Calleguas) is a member agency of MWD and receives their SWP water through a complex delivery system. Water delivered to Calleguas is treated by MWD at the Joseph Jensen Filtration Plant in Granada Hills. Once SWP water reaches Calleguas via the East Portal Facility in Chatsworth, it is distributed through the potable water distribution system (Figure 5-8), stored in Lake Bard, or injected into the Fox Canyon aquifer. (Calleguas Municipal Water District, 2015).



*Figure 5-7* State Water Project Coastal Branch Aqueduct (The Metropolitan Water District of Southern California, 2020)

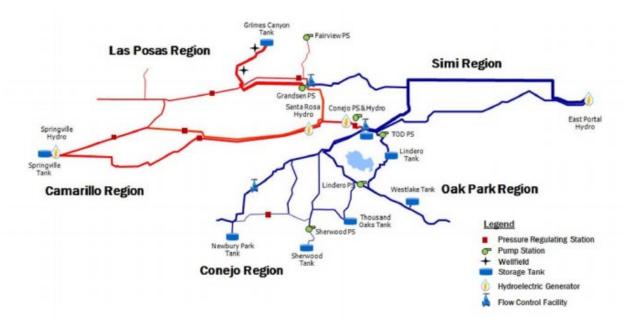


Figure 5-8 Calleguas Municipal Water District Potable Water Distribution System (Calleguas Municipal Water District, 2015)

### 5.4.2 Casitas State Water Project Options

While Casitas' water has historically come from local supplies, Casitas has contracted and paid the fixed contractual costs for the full allocation of 5,000 AFY of imported water from the SWP. The contracted amount of up to 5,000 AFY is referred to "Table A" water, which is a table in the contract referring to the maximum amount to be delivered. Imported water has not been supplied to Casitas due to lack of local conveyance infrastructure to deliver the water.

Supplemental Water Options include projects that give Casitas access to supplies from outside the Ventura River watershed. **Table 5-3** lists the Supplemental Water Options considered for the CWRP. They include connections to existing and proposed water infrastructure in either the Ventura area or Santa Barbara County to provide access to SWP water and other sources.

Average annual yields of State Water Project options were based on State Water Project system modeling performed by the State of California and the Casitas SWP Table A contract amount of up to 5,000 AFY. Due to hydrologic variability and complex operational criteria, the State has estimated the average long-term Table A yield to SWP contractors is 62% of the Table A amount (Department of Water Resources, 2018). This estimate of future reliability is slightly about the same as the historical Table A deliveries for 2000-2019 shown in Figure 5-9. The average allocation in the last ten years has been reduced due to extreme drought and environmental restrictions. For the Casitas Table A amount of 5,000 AFY, 62% reliability translates to a long-term average SWP yield of 3,100 AFY. These estimates assume the Delta Conveyance Facility (DCF) is completed as currently proposed. If the DCF is not completed, or if Casitas chooses not to participate in DCF funding, the long-term reliability of its State Water Project deliveries would be reduced to about 40% for an average annual yield to Casitas about 2,000 AFY.

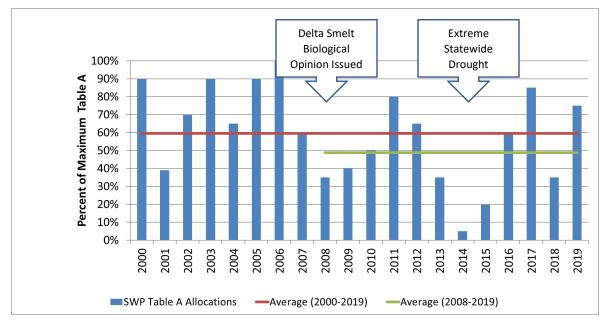


Figure 5-9: Historical SWP Table A Deliveries, 2000-2019

SUPPLEMENTAL WATER OPTIONS	BRIEF DESCRIPTION	ESTIMATED CAPACITY (AFY)	ESTIMATED AVERAGE ANNUAL YIELD (AFY)	ESTIMATED CAPITAL COST
SWP 01 - Deliveries via City of Ventura SWP Interconnection and Casitas-Ventura SWP Interconnection	SWP water delivered from Calleguas Municipal Water District to the City of Ventura through a proposed 30- inch pipeline. The City of Ventura will make upgrades to their distribution system to allow State Water Project water to reach the west side of Ventura where Casitas will construct a 10 cfs pump station to distribute into the Casitas water system.	2,000	2,000	\$33M
SWP 03 -Ventura- Santa Barbara Counties Interconnection	SWP water delivered from the Carpinteria Valley Water District to Casitas through a proposed 16-inch interconnection pipeline and two pump stations.	2,000	2,000	\$14.5M
SWP 04 - Casitas- Calleguas Interconnection	SWP water delivered from Calleguas Municipal Water District through the City of Ventura through a proposed 36-inch pipeline to allow SWP water to reach the west side of Ventura where Casitas will construct a 30 cfs pump station to distribute into the Casitas water system.	5,000	3,100*	\$136M
SWP 05 - City of Ventura Supplemental or In-Lieu Water	After the implementation of SWP 01 or parts of SWP 04, Casitas would have ability to use the infrastructure to access other supplemental water sources, such as in-lieu transfer of SWP water with the City of Ventura to offset their demands from Lake Casitas.	2,000	2,000	Cost for SWP 04 makes this option possible
DW 01 - Supplemental Water or Desalinated Water from City of Santa Barbara	After the implementation of SWP 03, Casitas would have the ability to use the infrastructure to access other supplemental water sources such as City of Santa Barbara desalinated water or other future supplemental sources.	2,000	2,000	Cost for SWP 03 makes this option possible

Table 5-3: Summary of Supplemental Water Options Carried Forward to Portfolio Analyses

*Average annual yield limited to Casitas Table A allocation for State Water Project



Figure 5-10 Casitas State Water Project Interconnection Options

# SWP 01 – Deliveries Via City of Ventura State Water Project Interconnection & Casitas-Ventura State Water Project Interconnection

This State Water Project (SWP) option, referred to as the Deliveries via City of Ventura SWP Interconnection and Casitas-Ventura SWP Interconnection, involves the combination of two proposed projects (1) the City of Ventura SWP Interconnection and (2) the Casitas-Ventura SWP Interconnection. The first project involves the City of Ventura and other partner agencies including Casitas designing and constructing a 30-inch bi-directional pipeline to connect Calleguas Municipal Water District (Calleguas) and the City of Ventura. Casitas has shared in the cost of the City of Ventura's SWP Interconnection Alignment Study and Environmental Impact Report. The interconnection would allow for the delivery of SWP water to be wheeled through Calleguas and allow for in-lieu use of SWP water by the City of Ventura, which reduces their use of water from Lake Casitas. The City of Ventura would also upgrade their existing infrastructure to allow for the delivery of SWP water to reach the west side of their distribution system and ultimately to a proposed Casitas pump station and the second project. This second project involves Casitas constructing a 10 cubic feet per second (cfs) pump station at Olive Street and Ramona Street in the City of Ventura. In early 2019, Casitas retained an engineering firm to prepare the Casitas-Ventura SWP Interconnection Preliminary Design and investigate how to convey water from the west side of Ventura to connect to Casitas' transmission pipelines near Foster Park, to supplement water supply from Lake Casitas. The Casitas-Ventura SWP Interconnection would be dependent on the City of Ventura's SWP Interconnection Project being completed.

This project would give Casitas access to its SWP Table A allocation. The Casitas SWP Table A contract amount is 5,000 AFY. However, the SWP annual allocations are typically less due to hydrologic variability and complexity of operations. Analyses by the California Department of Water Resources

(Department of Water Resources, 2018) estimate future long-term Table A deliveries to be 62% of the Table A contract amount. This estimate assumed construction of the Delta Conveyance Facility (DCF), which would address some of the existing and future hydrologic and regulatory constraints to SWP operations. Infrastructure being contemplated for SWP 01 would be capable of delivering 2,000 AFY (40% of Table A) to Casitas. For the CWRP the long-term average SWP yield from this connection was assumed to be 2,000 AFY.

In addition to Table A water, Casitas would have access to Article 21 surplus water when available. Option SWP 01 would also allow Casitas to enter into contracts with the City of Ventura for future surplus water based on some of their future City water projects.

### SWP 03 – Ventura-Santa Barbara Counties Interconnection

This SWP option, referred to as the Ventura-Santa Barbara Counties Interconnection, involves a bidirectional potable water pipeline to connect with Carpinteria Valley Water District (CVWD) to allow for Casitas to receive SWP water via two proposed booster pump stations and minor treatment facilities. Preliminary design is complete and involves a high-capacity and high-pressure 8,000 linear feet pipeline to connect the transmission mains between the CVWD system and the Casitas water distribution system.

State Water would be delivered through facilities owned by various entities, including California DWR, Central Coast Water Authority, Bureau of Reclamation (Lake Cachuma and South Coast Conduit), City of Santa Barbara (treatment plant), and Carpinteria Valley Water District pipelines. Therefore, several wheeling agreements would be necessary.

The Casitas SWP Table A contract amount is 5,000 AFY. However, the SWP annual allocations are typically less due to hydrologic variability and complexity of operations. Analyses by the California Department of Water Resources (Department of Water Resources, 2018) estimate future long-term Table A deliveries to be 62% of the Table A contract amount. Operational modeling results provided in the report appendix for each State Water contractor show the Central Coast Branch SWP supplies have a long-term average of about 61% of the contracted Table A amount. This estimate assumed construction of the Delta Conveyance Facility (DCF), which would address some of the existing and future hydrologic and regulatory constraints to SWP operations. Infrastructure being contemplated for SWP 03 would be capable of delivering 2,000 AFY to Casitas (40% of Table A). For the CWRP the long-term average SWP yield from this connection was assumed to be 2,000 AFY.

This project would give Casitas access to its SWP Table A allocation as well as Article 21 surplus water when available. Option SWP 03 would also allow Casitas to enter into contracts with Santa Barbara County entities for surplus water or water produced from the Santa Barbara seawater desalination plant.

It is estimated the Ventura-Santa Barbara Counties Interconnection could be constructed in 3-5 years.

### SWP 04 – Casitas-Calleguas Interconnection

This SWP option, referred to as the Casitas-Calleguas Interconnection, involves the combination of three proposed projects (1) the City of Ventura SWP Interconnection and (2) the Casitas-Calleguas Interconnection and (3) the Casitas-Ventura SWP Interconnection. The first project involves the City of Ventura and other partner agencies including Casitas designing and constructing a 36-inch bi-directional

pipeline to connect Calleguas and the City of Ventura. Casitas has shared in the cost of the City of Ventura's SWP Interconnection Alignment Study and Environmental Impact Report. The interconnection would allow for the delivery of SWP water to be wheeled through Calleguas and allow for in-lieu use of SWP water by the City of Ventura, which reduces their use of water from Lake Casitas. The second project is a direct connection from the end of the City of Ventura SWP Interconnection to the Casitas-Ventura SWP Interconnection. The third project involves Casitas constructing a 30 cfs pump station at Olive Street and Ramona Street in the City of Ventura. In early 2019, Casitas retained an engineering firm to prepare the Casitas-Ventura SWP Interconnection Preliminary Design and investigate how to convey water from the west side of Ventura to connect to Casitas' transmission pipelines near Foster Park, to supplement water supply from Lake Casitas. The Casitas-Ventura SWP Interconnection would be dependent on the City of Ventura's SWP Interconnection Project being completed.

State Water would be delivered through facilities owned by various entities, including California DWR, Metropolitan Water District of Southern California, Calleguas, and the City of Ventura. Therefore, several wheeling agreements would be necessary.

The Casitas SWP Table A contract amount is 5,000 AFY. However, the SWP annual allocations are typically less due to hydrologic variability and complexity of operations. Analyses by the California Department of Water Resources (Department of Water Resources, 2018) estimate future long-term Table A deliveries to be 62% of the Table A contract amount. This estimate assumed construction of the Delta Conveyance Facility (DCF), which would address some of the existing and future hydrologic and regulatory constraints to SWP operations. Infrastructure being contemplated for SWP 04 would be capable of delivering 5,000 AFY to Casitas. For the CWRP the long-term average SWP yield from this connection was assumed to be 3,100 AFY (62% of Table A).

In addition to delivering its SWP Table A allocation and Article 21 surplus water when available, the Casitas-Calleguas Interconnection would create opportunities for Casitas to consider agreements with other water entities in the Ventura/Oxnard area for exchange or other cooperative water management strategies. The interconnection would also allow Calleguas to receive water from Lake Casitas during emergencies.

The Casitas-Calleguas Interconnection makes use of Ventura's proposed SWP facilities, either as planned or through required upgrades to increase capacity. Thus, this option requires coordination and costsharing with Ventura to accomplish its SWP connection. Casitas is actively engaged in this project with Ventura at this time.

It is estimated the Casitas-Calleguas Interconnection would be constructed in a 5- to 10-year timeframe.

### SWP 05/DW 01 - Supplemental Water

This alternative involves access to supplemental water from a variety of possible sources through SWP 03 and SWP 04 infrastructure. Planned pipeline capacity in connections to Ventura or Santa Barbara County would be sized for maximum deliveries of SWP water. In non-peak delivery months and in years when the State Water Table A allocation is less than the full contract amount, these pipelines would not be operated at capacity and could be used to convey water from other sources such as supplemental water purchases and water transfers. Examples of possible supplemental water sources that could be delivered using SWP connection infrastructure are briefly described below.

**Article 21 Water from SWP.** Article 21 supply is water that is surplus to the needs of the SWP under certain conditions and is made available for purchase by State Water Contractors. When available, this surplus supply is allocated to the requesting State Water Contractors using a calculation that is based on their respective Table A allocations. The Department of Water Resources (2018) modeling analyses indicates the long-term annual average of Article 21 water available for the SWP system is 50,000 AFY. Casitas could choose to take delivery of a portion of the Article 21 water to supplement its Table A deliveries if needed, and convey that water through the same SWP connection infrastructure up to the capacity in **Table 5-3**.

**In-lieu Water Transfers with Ventura.** Casitas has shared in the cost of the City of Ventura's SWP Interconnection Alignment Study and Environmental Impact Report. The City of Ventura's Interconnection Project allows for in-lieu use of State Water by the City of Ventura, which reduces the use of water in Lake Casitas.

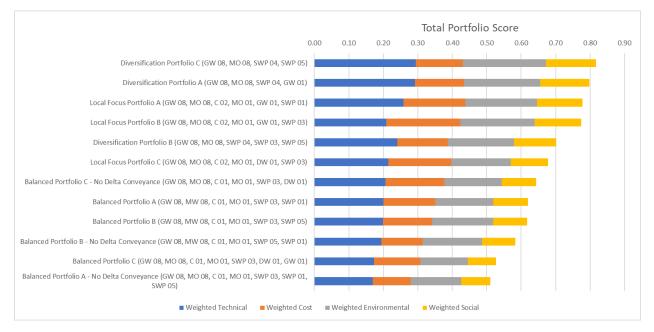
**Santa Barbara Desalination and Other Regional Supplies.** The City of Santa Barbara reactivated its desalination plant in late 2017. The Desalination Plant has a full build-out capacity of 10,000 AFY but is currently operating around 3,125 AFY. Desalinated water or other supplies conveyed through regional facilities could potentially be provided to the Casitas service area through the proposed Ventura-Santa Barbara Counties Interconnection facilities and reduce the demand on Lake Casitas.

These are just examples of possible supplemental water sources in addition to SWP supplies. Once the SWP delivery infrastructure is in place, Casitas will have the ability to explore several possible supplemental supply or water transfer opportunities. Some may become part of Casitas' annual water portfolio, while others may be viewed as short-term emergency supplies.

# Section 6 Portfolio Development and Ranking

Water supply options were combined in different ways to meet the three CWRP objectives for long-term augmentation supply, short-term mitigation supply, and portfolio diversification. Three portfolio strategies were applied: Local Focus Portfolios that emphasized more Local Options; Diversification Portfolios that emphasized more Supplemental Water Options; and Balanced Portfolios that used a balanced blend of the other two strategies. As a sensitivity analysis, some portfolios were evaluated assuming the proposed Delta Conveyance Facility (DCF) Project is not constructed by the State of California. This assumption lowers both the yield and the cost of portfolios with supplemental water derived from State Water Project options. Because only a few Supplemental Water Options were available for portfolios, and only one could be implemented in time to meet the short-term mitigation objective (SWP 03 – Ventura-Santa Barbara Counties Connection), most portfolios were comprised of similar projects.

The Decision Support Tool was used to rank portfolios using the same criteria and weights as were used to rank water supply options. Portfolio scores were computed as the sum of the product of the score of each individual option in the portfolio multiplied by the fraction of the total portfolio yield provided by that option. Portfolio scoring and ranking is shown in **Figure 6-1**. Options included in the top portfolios were incorporated into the recommended long-term strategic water supply plan, described in **Section 7**.





# Section 7 Recommended Plan

The CWRP recommended plan consists of three types of components: new planning policies, a portfolio of new water supply projects, and new and updated programs. Each group of recommendations is described in this section.

### PLANNING POLICIES

- Supply and Demand Estimates
- Minimum Allowable
   Lake Storage

Risk Based Planning

### PORTFOLIO OF PROJECTS

- Local Options
- Supplemental Water Options
- Conditional Options

### NEW AND UPDATED PROGRAMS

- Water Conservation Plan
- ➢ WEAP Policy Update
- Supplemental Water Integration Plan

### 7.1 Planning Policies

The CWRP recommended plan includes several new policies that should become part of the District's approach to future water supply planning. These policies will assure Casitas has a robust risk-based approach to meeting future water supply and demand conditions. Recommended new policies are depicted in **Figure 7-1** and listed below. Adoption of these policies was assumed for development of the portfolio of projects included in the recommended plan and is recommended as the basis for future planning documents such as the 2020 Urban Water Management Plan and Casitas System Master Plan.

- Future Annual Demand: The Casitas System forecasted 2040 water demand is 16,000 AFY, reduced from the previous estimate of 17,500 AFY.
- **Future Hydrology:** The hydrology used for estimating Lake Casitas yield is 100 synthetic traces based on the statistics of the observed historical hydrology to incorporate uncertainty around future climate variability, rather than historical hydrology alone.
- Safe Demand from Lake Casitas: Lake Casitas yield for water supply planning is based on the concept of safe demand, in which Casitas System demand is reduced as Lake storage falls in accordance with the target demands in the WEAP policy. Previous plans were based on an estimate of safe yield, in which demands were assumed to be constant every year.
- Reliability of Lake Casitas Supply: The 95% reliable safe demand with an adjustment for climate change is adopted as the Lake Casitas yield for supply and water needs analyses. The 95% reliable safe demand for Lake Casitas is 10,660 AFY, compared to the previous safe yield (100% reliable) estimate of 20,440 AFY.
- Minimum Allowable Storage: The minimum storage volume allowed in Lake Casitas for nonemergency operations is 20,000 AF, rather than the dead pool storage of 950 AF.

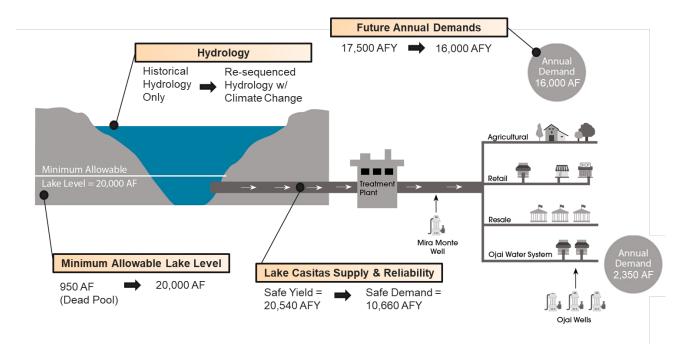


Figure 7-1: Graphical summary of new and revised planning policies

### 7.2 Portfolio of Projects

The recommended portfolio of projects satisfies the goals of the CWRP. It is a best-fit blend of the portfolios evaluated in the previous section. It provides at least 5,200 AFY of long-term supply, at least 2,500 AFY of additional supply within 5 years to address immediate risk, and diversifies the Casitas portfolio (**Figure 7-2**).

Projects were classified in one of three categories.

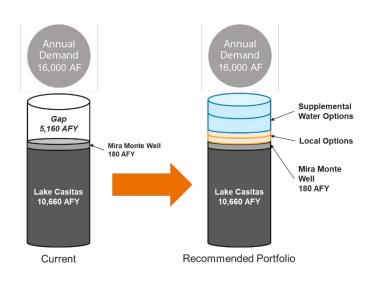


Figure 7-2: Summary of recommended portfolio components

LOCAL NEAR-TERM, NO-REGRET OPTIONS are recommended for implementation as part of the plan PREFERRED SUPPLEMENTAL

WATER OPTIONS are recommended for implementation as part of the plan **CONDITIONAL OPTIONS** should be tracked for possible

implementation later if one or more of the recommended options cannot be implemented or produces less average annual yield than planned

### 7.2.1 Meet Long-Term Supply Gap of 5,200 AFY

The options from the top scoring portfolio "Diversification Portfolio C" (Section 6) are recommended for implementation. The options included in the top portfolio are:

- GW 08 Ojai Basin Well Rehabilitation and Replacement (500 AFY average annual supply)
- MO 08 Robles Fish Screen Improvements (350 AFY average annual supply)
- SWP 04 Casitas-Calleguas Interconnection (up to 3,100 AFY average annual supply)
- SWP 05 Supplemental Water (up to 1,250 AFY average annual supply)

Some SWP 04 facilities provide an opportunity to also implement SWP 01 (in-lieu deliveries). This could be considered for a phased implementation approach. However, SWP 04 cannot be implemented within 5 years so it does not help address the 2,500 AFY near-term goal.

### 7.2.2 Meet Short-Term Risk Mitigation of 2,500 AFY

While the options in the top portfolio meet the long-term goal of an additional 5,200 AFY of supply, the Casitas-Calleguas interconnection is expected to take 5-10 years to construct. In order to meet the CWRP goal of 2,500 AFY supply in the near term, Casitas should pursue implementation of the following options, which have a shorter implementation timeline:

- SWP 03 Ventura-Santa Barbara Interconnection (3,100 AFY average annual supply when combined with SWP 04)
- DW 01 Supplemental Water (1,250 AFY average annual supply when combined with SWP 05)

The Ventura-Santa Barbara Interconnection meets all three of the CWRP goals. By building interconnections to the north (Santa Barbara) and to the south (Calleguas), Casitas would have increased opportunities for regional partnerships, improved reliability during emergencies, and operational flexibility. Once SWP 03 is constructed, Casitas would have the opportunity for supplemental water (Option DW 01).

### 7.2.3 Portfolio Diversification

The recommended portfolio of projects meets the goal for diversifying the Casitas water supplies. Based on the average annual yield available from each source of supply, 26% of the future portfolio is comprised of non-Ventura River watershed sources, as shown in **Figure 7-3**.

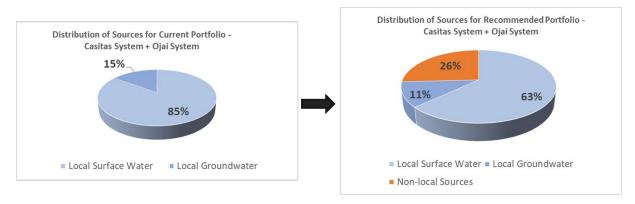


Figure 7-3: Conversion of Current All-Local Supply Portfolio to a Diversified Portfolio

### 7.2.4 Adaptive Management with Conditional Options

Conditional options would be tracked and implemented only if one of the local or supplemental water options either could not be implemented as planned or delivered less average annual yield than planned. The following options were in the top 5 portfolios, and should be tracked and implemented as needed.

- Matilija Formation Deep Wells (VRBO or HOBO): Due to many uncertainties surrounding this option, it was included in the Conditional Options category until additional studies are performed to further define its feasibility.
- Watershed Management/*Arundo* Removal: Because the benefits of this option would be difficult to quantify for Casitas, this option is considered conditional. Other governmental and non-profit agencies are currently implementing *Arundo* removal in the Ventura River watershed, and Casitas could form partnerships and provide funding for enhanced programs implemented by others (e.g. Ventura County Watershed Protection District) that would prioritize watershed management efforts in the Lake Casitas watershed.
- Additional Demand Management: Because the CWRP planning policies already include a 10% demand reduction compared to the most recent UWMP, the long-term supply gap was addressed through developing new water supply projects and additional demand management was recommended as a conditional strategy. It is recommended that Casitas develop a Water Conservation Plan to evaluate the potential savings and cost effectiveness of various conservation measures.
- Additional Supplemental Water: The supplemental water option involves access to water through SWP 03 and SWP 04 infrastructure via in-lieu transfers from Ventura or other supplies such as desalinated water from the City of Santa Barbara. The recommended plan includes 1,250 AFY of supplemental water on an average annual basis to meet the requirement for 5,200 AFY of additional average annual supply. As a conditional option, Casitas could pursue more supplemental water as needed for droughts and emergencies.



In addition to monitoring performance of the recommended local and supplemental water options, tracking of these conditional options may include activities such as performing preliminary feasibility studies, revisiting cost estimates, or exploring interagency partnerships.

### 7.2.5 Summary of Recommended Portfolio

**Figure 7-4** summarizes the Local Options, Supplemental Water Options, and Conditional Options comprising the CWRP recommended portfolio.

Figure 7-5 depicts how the

recommended portfolio

align with the three CWRP

goals. Only option SWP 03 Ventura – Santa Barbara

**County Interconnection** 

addresses all three CWRP

options in the

goals.

Local,	nec	ar t	erm	۱,
no-reg	rets	op	otior	าร

- 1. **GW 08** Ojai Basin Well Rehabilitation and Replacement (500 AFY)
- 2. MO 08 Robles Fish Screen Improvements (350 AFY)

Preferred supplemental water options

- 1. SWP 03 Ventura-Santa Barbara Interconnection*
- 2. SWP 04 Casitas-Calleguas Interconnection*
- 3. SWP 05/DW 01 Supplemental Water (1,250 AFY)

### Conditional options – track only

- 1. C 01 Demand Management: 5%-10% (800-1,600 AFY)
- 2. MO 01 Watershed Management/Arundo Removal (300 AFY)
- 3. GW 01 Matilija Deep Formation Wells (Unknown)
- 4. SWP 05/DW 01 Supplemental Water Options (up to 4,000 AFY)

*Combined average annual yield of SWP 03 and SWP 04 is 3,100 AFY

MO 08: Robles Fish GW 08: Ojai Screen Basin Well Improvements Replace/Rehab C 01: Demand Management Short-Term Long-Term MO 01: **Risk** Watershed **Supply Gap** Mitigation Management SWP 03: Ventura GW 01: Matiliia Deep Formation Santa Barbara Wells Interconnection SWP 04: Casitas -Portfolio Calleauas Interconnection Diversification SWP 01 / DW 01: Supplemental Water via Local, near term, no-regrets options Ventura or Santa Barbara Interconnection Preferred supplemental water options Conditional options – track only

Figure 7-4: Water Supply Options in the Recommended Portfolio

Figure 7-5: Correlation between Recommended Options and CWRP Goals

### 7.2.6 Verification of Recommended Portfolio

The recommended portfolio was tested in the Lake Casitas Yield Model by simulating additional yield from the recommended projects come online in the following years:

• Ojai well rehabilitation – Year 1



- Robles fish screen improvements Year 1
- Ventura-Santa Barbara County Interconnection Year 5
- Casitas-Calleguas Interconnection with additional supplemental water Year 10

**Figure 7-6** shows the performance of the Lake with historical hydrology, and **Figure 7-7** shows the performance of the Lake with dry hydrologic trace from among the 100 synthetic traces. In both cases Lake Casitas would have gone dry without the additional water projects, and with the projects the Lake can be effectively maintained above the minimum allowable storage level of 20,000 AF.

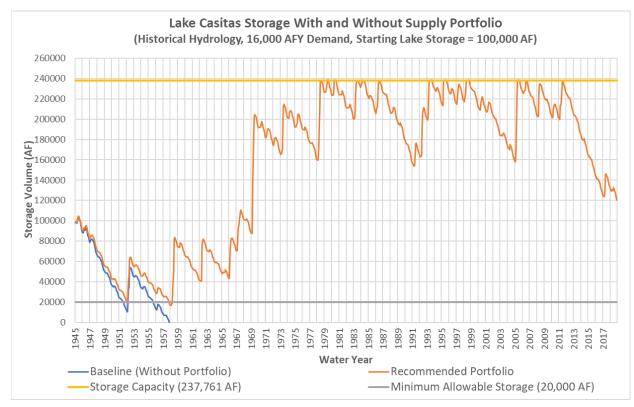


Figure 7-6 Lake Casitas Storage Volume for Historical Hydrology with and without Recommended Portfolio Projects

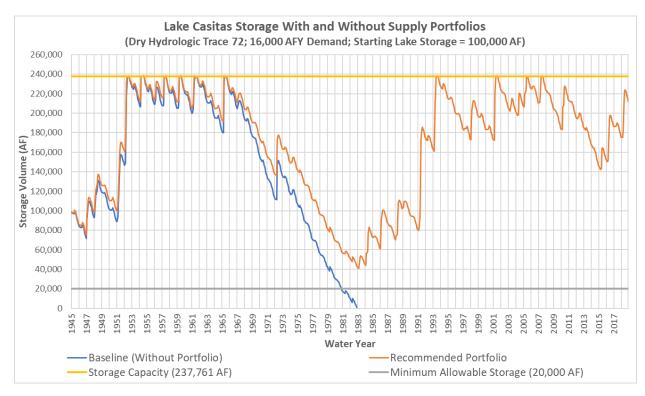


Figure 7-7: Lake Casitas Storage Volume for Dry Hydrologic Trace 72 with and without Recommended Portfolio Projects

### 7.3 New and Updated Programs

The recommended plan includes developing and implementing new or updated programs in three important areas:

- Updated Water Conservation Plan
- Updated Water Efficiency and Allocation Program
- New Supplemental Water Integration Program

These programs are described in the following sections.

### 7.3.1 Water Conservation Plan

It is recommended Casitas develop a Water Conservation Plan, which would be a planning document to:

- 1. Evaluate existing and potential future ongoing conservation measures (e.g. various rebate programs could be evaluated for cost effectiveness),
- 2. Assure conservation programs are consistent with State requirements such as Making Conservation a Way of Life legislation, and
- 3. Outline demand strategies (such as the WEAP) to be employed in response to potential future supply shortages during droughts or emergencies.

The Water Conservation Plan should identify demand management measures that would provide for the CWRP planned demand (which was reduced from previous planned UWMP demands), as well as the conditional option for additional 5-10% conservation on average. Development of the Water



Conservation Plan should be coordinated closely with the planned 2020 update to the Casitas Urban Water Management Plan.

### 7.3.2 Updated Water Efficiency and Allocation Program

The Water Efficiency and Allocation Program (WEAP) establishes water use allocations for each Casitas customer and provides guidelines for setting lower allocations when storage volumes in Lake Casitas are

below certain levels. Based on the new policies recommended in the CWRP, Casitas should update the WEAP to:

- Improve clarity in how allocations are set and when and how reduced allocations are triggered;
- Be more conservative in specifying when stages are declared and management actions are triggered; and
- Align WEAP allocations and target allocation reductions with current customer use patterns.

Because of the current low Lake Casitas storage volume, adopting an interim revised WEAP may be prudent while a more comprehensive update with its associated policies is being developed.

Considerations for interim and permanent updates to the WEAP are briefly described below. Updating the WEAP is a separate programmatic action from this CWRP.

### Interim WEAP Policies

Factors to be included in the Updated Water Efficiency and Allocation Program

- Interim policies to address near-term risk of low Lake levels
- Review of water allocation in light of current water use rates
- Determine acceptable frequency of being in each WEAP stage
- Adopt management strategies for periods of critically low Lake levels

Lake Casitas is currently less than half full (around 100,000 AF in January 2020) and is at risk of being drawn down to critical levels if the next few years are dry or have below normal runoff. A strategy for managing this risk is to adopt interim guidelines for setting Lake Casitas stages that are more conservative than the current WEAP stages. In simple terms this could involve "shifting the stages up" such that Stages 2-5 would be declared at higher lake storage levels. "Shifting the levels up" on an interim basis would provide a more conservative lake management framework until the lake recovers or a permanent WEAP update can be adopted.

The current WEAP does not have provisions for management actions to be taken when the lake is well below 25% full. Stage 5 applies when lake storage is between 25% full (59,440 AF) and dead pool (950 AF). Casitas managers would benefit from having interim policies in place in case the lake falls to critical levels below 59,440 AF to minimize the risk of the lake falling to the CWRP minimum allowable storage level of 20,000 AF.

### Permanent WEAP Update

An update of the WEAP could involve the following steps.

Consider establishing new water allocations based on current use rates. Customer use in the Casitas service area changed dramatically as a result of the recent California drought. While some of these changes may not be permanent, others may be permanent due to structural

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changes (e.g., removal of turfgrass and replacement with xeriscape). Water allocations should be benchmarked to current use patterns in the Casitas service area.

- Determine acceptable frequency of being in different WEAP stages. The "other side of the coin" of having conservative lake storage stages in the WEAP policy is that the Board would be declaring Stage 2 or greater conditions with greater frequency. Customers have a limit to their tolerance for being asked to conserve. Casitas will need to gauge public perception on this topic when the WEAP is updated.
- Adopt management practices for critically low Lake Casitas storage periods. Additional demand management strategies are necessary for Board and Staff to manage the system during critical periods when the lake is below 25% full. In addition, emergency strategies for demand management or supply augmentation should be defined during extreme dry periods more severe than conditions assumed for the CWRP when lake storage falls below the minimum allowable storage volume of 20,000 AF.

### 7.3.3 Supplemental Water Integration Plan

Prior to delivery of water to the Casitas system from new outside sources, a "Supplemental Water Integration Plan" should be prepared. This plan should lay out the technical, operational, and financial aspects of introducing new water sources to the Casitas service area. The following components should be included in this plan.

**Criteria for importing supplemental water.** Simulations of the Lake Casitas system with the recommended portfolio conducted for the CWRP include taking supplemental water from connections to Ventura and/or Santa Barbara State Water Project facilities in every year of operation. However, when Lake Casitas is already full or close to full, supplemental water would not be needed. There may be other situations in which State Water Project water or other supplemental supplies would not be purchased by Casitas. Because these resources are significantly more expensive than any local

### Factors to be included in the Supplemental Water Integration Plan

- Criteria for importing supplemental water
- Integration of different water quality
- Preliminary infrastructure designs and costs
- Operation plan with new interconnections
- Financial plan and rate study

sources, they should be imported judiciously. Therefore, an operational plan is needed to specify the criteria (e.g., Lake Casitas storage, recent and anticipated Lake inflows, current system demands, anticipated yields from other supply sources) under which imported water would be purchased through the Ventura or Santa Barbara SWP connections. The plan should also define criteria for the distribution of SWP and supplemental water purchases from each connection after both are implemented (that is, how much SWP water to take through the Ventura connection, how much SWP water to take through the Santa Barbara connection, etc.).

**Integration of different quality water.** Water delivered through SWP connections, whether from Casitas' SWP allocation or other supplemental sources, would be different quality than water currently used by Casitas from Lake Casitas and the local groundwater basin. Because these supplies are treated water, it is assumed they would be delivered to the Casitas distribution system rather than to Lake Casitas. An assessment is needed of the potential effects of new supplies on the Casitas distribution system and characteristics of water delivered to Casitas customers.

**Preliminary infrastructure designs and costs.** Preliminary designs are needed for infrastructure required to accomplish the proposed connections to Ventura and Santa Barbara SWP facilities. Some of those preliminary designs are completed or are currently in progress; other components still need to be evaluated. Preliminary designs should be used to support refined cost estimates for required facilities.

**Financial plan and rate study.** An outline is needed for the recommended financial strategy to support construction and operation of the proposed SWP connections. Capital and Operation and Maintenance (O&M) costs should be considered. O&M costs differ between the Ventura and Santa Barbara connections due to different pumping requirements and different lengths of conveyance. In addition, the cost of SWP water is higher through the Santa Barbara connection (about \$2,500/AF) than the Ventura connection (about \$1,200 to \$1,500/AF) because different SWP facilities are involved. Ultimately a new rate study is needed to allocate costs of the SWP connections and supplemental water supplies to Casitas' retail (municipal and industrial), agricultural and resale customers.

### 7.4 Stakeholder Feedback Addressed in the Plan

The CWRP recommended plan addresses the key stakeholder issues raised during the outreach process, and also addresses many of the secondary issues identified in stakeholder meetings. The key and secondary stakeholder issues and how they are addressed in the recommended plan are summarized in **Table 7-1**.

Stakeholder Issue	How Issue is Addressed in the Plan
Key Issues	
Diversify the Casitas water	The recommended plan includes 26% of non-local supply on an
supply portfolio	average annual basis.
Evaluate State Water Project	Five SWP options were considered in the CWRP studies, and two
alternatives	were included in the recommended plan.
Implement regional solutions	The recommended plan includes interconnections with Ventura and
that could be mutually	Santa Barbara County, which provide Casitas access to its SWP
beneficial to other water	water and also create possibilities for water trades and acquisition
providers	of supplemental water supplies from regional entities.
Secondary Issues	
Environmental concerns	The Robles fish passage improvement project will maintain
	environmental flows in the Ventura River while improving the
	ability of Casitas to make its legally allowed diversions.
	The conditional watershed management/Arundo removal project
	would help manage the spread of invasive species in the Ventura
	River watershed.
Water price	Local options are cost effective but do not provide much additional
	supply. Supplemental water options are more expensive, and
	include cost of infrastructure as well as cost of water. Cost of water
	can be managed by only taking supplemental supplies when
	needed. Casitas will be performing a separate rate study to assess
	the impact of planned improvements on costs and rates.

Table 7-1: Stakeholder Issues Proposed Resolutions per the CWRP

Stakeholder Issue	How Issue is Addressed in the Plan							
Key Issues								
Water sustainability	The recommended plan substantially improves the sustainability of Casitas' supply portfolio by stretching local supplies and adding supplemental supplies from multiple sources.							



# Section 8 Implementation of Recommended Plan

The CWRP includes an overall implementation schedule to assist Casitas in implementing the plan recommendations. The implementation schedule is phased over the next ten years and described in more detail in this section.

### 8.1 Cost Estimates for Recommended Water Supply Options

**Table 8-1** lists the estimated capital costs of all project options in the recommended portfolio. Capital cost estimates were based on previous planning information developed by Casitas, supplemented by additional conceptual cost studies performed for the CWRP. This is described in more detail in Appendix A Background Information Technical Memorandum and Appendix G Water Supply Options Selected for Additional Analysis. These costs would likely need to be funded by non-rate revenue such as bonds or grants. Refer to Appendix H for potential funding options. It is recommended Casitas perform a rate study to evaluate impacts of projected operational costs.

Project Option	Approximate Capital Cost	Long Term Average Annual Yield (AFY)						
GW 08 – Well Improvements in Ojai Groundwater Basin	\$1,500,000	500						
MO 08 – Robles Diversion Fish Passage	\$3,000,000	350						
SWP 03 – Ventura-Santa Barbara Counties Interconnection	\$14,500,000	2,000*						
SWP 04 – Casitas – Calleguas Interconnection	\$136,000,000	3,100*						
SWP 05/DW 01 Supplemental Water (via SWP Connections)	Included in State Water Project alternatives	1,250						
Total Portfolio	\$155,000,000	5,200						

 Table 8-1: Capital Costs of Project Options in the Recommended Portfolio

*SWP average annual supply with DCF from Casitas Table A allocation for all SWP connections is 3,100 AFY

### 8.2 Phased Portfolio Implementation

Projects in the recommended portfolios can be phased based on the minimum anticipated time required for permitting, design and construction. Proposed project phasing is described below.

- Year 1-2 Ojai well rehabilitation and minor Robles fish screen improvements not needing permitting
- Year 2-5 Ventura-Santa Barbara County Interconnection and complete Robles fish screen improvements needing permitting
- Year 5-10 Casitas-Calleguas Interconnection and additional supplemental water

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Implementation of Recommended Plan | 65

With the current low storage volume in Lake Casitas the District should adopt this aggressive implementation schedule. If the next several years are wet years and the Lake recovers, the Interconnection projects could be implemented on a more extended schedule.

**Table 8-2** summarizes the overall implementation timeline for the policies, projects and programs in the recommended plan. Key activities are described for the first 2 years, the first 5 years, and the first 10 years of the plan. Because key projects are regional and involve coordination with other water agencies, activities associated with those projects may need to shifted earlier or later to align with the needs of the other agencies. In addition, unique opportunities may arise that would cause implementation priorities to shift.

Timeframe	Policy Implementation	Project Implementation	Program Implementation
2020-2022	<ul> <li>If Lake Casitas level does not recover, adopt Interim WEAP Policy</li> <li>Use new demand and supply forecasts in UWMP update</li> <li>Adopt 20,000 AF minimum allowable storage for Lake management</li> </ul>	<ul> <li>Complete Ojai Basin well rehabilitation and replacement</li> <li>Complete minor Robles Diversion fish screen improvements not needed permitting</li> <li>Coordinate with Ventura and Santa Barbara County on interconnections</li> <li>Design and permitting of Ventura- Santa Barbara Interconnection</li> </ul>	<ul> <li>Update WEAP based on new policies</li> <li>Prepare Water Conservation Plan</li> </ul>
2022-2025		<ul> <li>Complete final Robles Diversion fish screen improvements needing permitting</li> <li>Complete Ventura-Santa Barbara County Interconnection by 2026</li> <li>Participate in Ventura SWP connection</li> <li>Perform pilot testing for Matilija Formation Deep Well alternatives (Conditional Option)</li> </ul>	<ul> <li>Prepare Supplemental Water Integration Plan</li> <li>Explore options for in-lieu trades with Ventura SWP water (Conditional Option)</li> </ul>
2026-2030		<ul> <li>Design and permitting of Casitas portions of Casitas-Calleguas Interconnection</li> <li>Complete Casitas-Calleguas Interconnection by 2030</li> <li>Implement watershed management project or other options if other projects do not provide planned yield (Conditional Option)</li> <li>Enter into contracts for supplemental water from Ventura and/or Santa Barbara County if not already done</li> </ul>	<ul> <li>Implement additional demand management measures if other projects do not provide planned yield (Conditional Option)</li> </ul>

Table 8-2: Overall Implementation	Timeline for Recommended Plan
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# Casitas Municipal Water District Comprehensive Water Resources Plan - Recommended Plan Implementation Schedule

	Y	ear 1 (2020	0)	Y	'ear 2 (1	2021)		Ye	ar 3 (2	022)		Year 4 (2023)				Year 5 (2024)			Year 6 (2025)				Year 7 (2026)			Year 8		Ye	ear 9 (	(2028)	)	Year	10 (20	29)	Year	11 (2030	))	
	Q1	Q2 Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3 (	Q4	Q1	Q2 C	(3 C	Q4 Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1 Q2	Q3 (	Q4 (	Q1 Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1 Q	2 Q.	3 Q4	Q1 Q2	2 Q3	Q4
TASK																																						
GW 08 - Ojai Well Rehabilitation																																						
Construction																																						
MO 08 - Robles Fish Screen																																						
Improvements (Minor Modification																																						
does not need permitting)																																						
Minor Modification																																						
Construction/Implementation																																						
MO 08 - Robles Fish Screen																																						
Improvements (Major modification needs permitting)																																						
Prototype Testing																																						
Preliminary Design																																						
CEQA											_					_						_													_			
Permitting																																						
Design																													_									
Construction																																						
SWP 03 - Ventura-Santa Barbara																																						
County Interconnection																																						
Preliminary Design																																						
CEQA																																						
Permitting																																						
Design																																						
Construction																																						
SWP - O4 Casitas-Calleguas																																						
Interconnection																																						
Preliminary Design/Alignment Study																																						
CEQA																							_															
Permitting																							_		_													
Design																															1							
Construction																												_										
SWP 05/DW 01 - Supplemental Water																																						
Planning Contract Negotiations																																						
GW 01 - Matilija Wells (Conditional																																						
Option)																																						
Perform pilot testing for well																																						

Planning, permitting, and design of major water projects can require many years, particularly when state and federal environmental permits or coordination are involved. Thus, these activities need to be started early to assure the projects are online when needed. The SWP options involve obtaining outside funding in the form of bonds or loans for construction; however, planning, permitting and design can be initiated early so the projects are 'shovel-ready' for construction when funds become available.

**Figure 8-1** is a conceptual schedule for the anticipated timing of planning/permitting, design and construction for the water supply options in the recommended plan. Conditional Options are included because due diligence will be required on those options in case they are needed in the future.

Some of the recommended water supply options have unique implementation challenges. These are briefly highlighted below.

**GW 08 – Well Improvements in Ojai Groundwater Basin** – No unique challenges affect implementation of this water supply option. Casitas was making progress on the planned groundwater well improvements as the CWRP was being prepared, and is on track to complete the planned improvements within the next two years.

**MO 08 – Robles Diversion Fish Passage Modifications** – Minor improvements to improve the existing brush/screen system of the Robles diversion structure to optimize the operation of the Robles Diversion Dam can be accomplished within current regulatory approvals and are scheduled to be completed by 2021. The more comprehensive modification alternative cleaning system will require more time for prototyping, regulatory agency coordination, design and implementation.

**SWP 03 – Ventura-Santa Barbara Counties Interconnection** – Casitas is coordinating with CVWD on design and permitting of the interconnection to allow delivery of State Water and other supplemental water. No significant permitting challenges are anticipated for this option. Casitas is currently planning to pursue bonds to finance construction of SWP 03 and SWP 04, the two SWP interconnections. Implementation will be dependent on securing those bonds.

**SWP 04 – Casitas-Calleguas Interconnection** - This is the major new facility in the CWRP, and by far the most expensive water supply option. This alternative involves Casitas designing and constructing a crosstown interconnection pipeline to connect the Ventura State Water Project Interconnection pipeline to the Casitas-Ventura State Water Project Interconnection pipeline would be sized to allow for Casitas to receive their full allocation of 5,000 AF each year. Casitas will begin with an alternative study to determine potential alignments for this project.

**SWP 05/DW 01 – Supplemental Water via SWP Interconnections** – The timing of deliveries of supplemental water is dependent on completion of the proposed SWP interconnection infrastructure, either to Ventura or to Santa Barbara County (SWP 04 or SWP 03). However, coordination with those entities on terms of water supply agreements could take several months or years and should begin well before the facilities are scheduled to be online. Of particular importance will be agreement on schedules of when supplemental water deliveries could be requested by Casitas, the source water comprising those deliveries (as that may affect the quality of water delivered to Casitas), and pricing structures.

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# 

# APPENDICIES



### Appendix A Draft Background Information Technical Memorandum

Casitas Comprehensive Water Resources Plan

June 8, 2020

Prepared for:

Casitas Municipal Water District

Prepared by:

Stantec Consulting Services Inc.

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# **Executive Summary**

# **Executive Summary**

# Introduction

Casitas Municipal Water District (Casitas) is preparing a Comprehensive Water Resources Plan (CWRP) to chart the course for assuring future water reliability. The CWRP will present a long-term plan for implementing strategic water projects and is the next stage in a long history of water supply planning and management on the part of Casitas.

This Background Information Technical Memorandum (TM) is a deliverable for Task 2 for the CWRP contract. It summarizes the review of previous water supply and demand estimates for the Casitas service area, water supply options previously considered by Casitas and other water agencies in the Casitas region, and the current status of water security projects actively being pursued by Casitas. The TM discusses the advantages and disadvantages of the options as described in the previous studies and evaluates whether they are viable options to consider as part of the CWRP evaluation.

# Historical Safe Yield of Lake Casitas

Lake Casitas was constructed by the U.S. Bureau of Reclamation (Reclamation) in 1959 as a source of supplemental municipal and irrigation water for the region. Lake Casitas is the primary source of water supply for Casitas Municipal Water District and will remain the cornerstone of Casitas' water supply portfolio in the future as outlined by the CWRP. The lake first filled completely in 1978 and last spilled in 1998.

The annual safe yield (largest yield that can be delivered in every year) of Lake Casitas has been estimated several times in the past 50 years as conditions have changed. The current estimate is 20,540 acre-feet per year (AFY).

# Water Supply and Demand

The current firm water supply available to Casitas is estimated in the most recent Urban Water Management Plan (UWMP, 2016) to be 20,840 AFY (20,540 AFY from Lake Casitas and 300 AFY from the Mira Monte well). This does not include the yield of the Ojai Basin wells acquired from Golden State Water Company in 2017, which has an estimated average safe yield of 5,000 AFY (Ojai GWMP, 2018).



The 2016 UWMP estimates the future demand in the Casitas service area to be 17,200 AFY in 2020 and 17,500 AFY in 2040.

If these future supply and demand estimates hold true, Casitas has an average annual surplus of 3,340 AFY. However, as the last drought has shown, extended dry periods caused by climate variability or climate change can severely stress the Casitas water supply system and threaten its ability to meet future demands.

# Water Supply Projects from Background Documents

Casitas has prepared various water supply option studies over the years since the construction of Lake Casitas. **Figure 0-1** shows a timeline of significant events since the construction of Lake Casitas in comparison to the lake levels and rainfall. Many of the historical studies were prepared as the lake levels dropped or as demands reached values above the published safe yield. The options proposed in those studies had a wide range of benefits, and the projects that resulted in the largest supply of water also came with a significant capital cost. An example is the many options for connecting to the State Water Project. As Lake Casitas filled up during wet periods, the urgency of implementing expensive water supply alternatives waned and Casitas maintained a conservative approach to financial commitments.

This Background Information TM presents a summary of the water supply project options studied by Casitas over the years and recommends which projects should be carried forward and evaluated in the current CWRP. The TM breaks the projects into the following categories:

- State Water
- Surface Water
- Groundwater
- Recycled Water
- Local Agreement
- Maintenance and Operation
- Conservation
- Desalinated Water

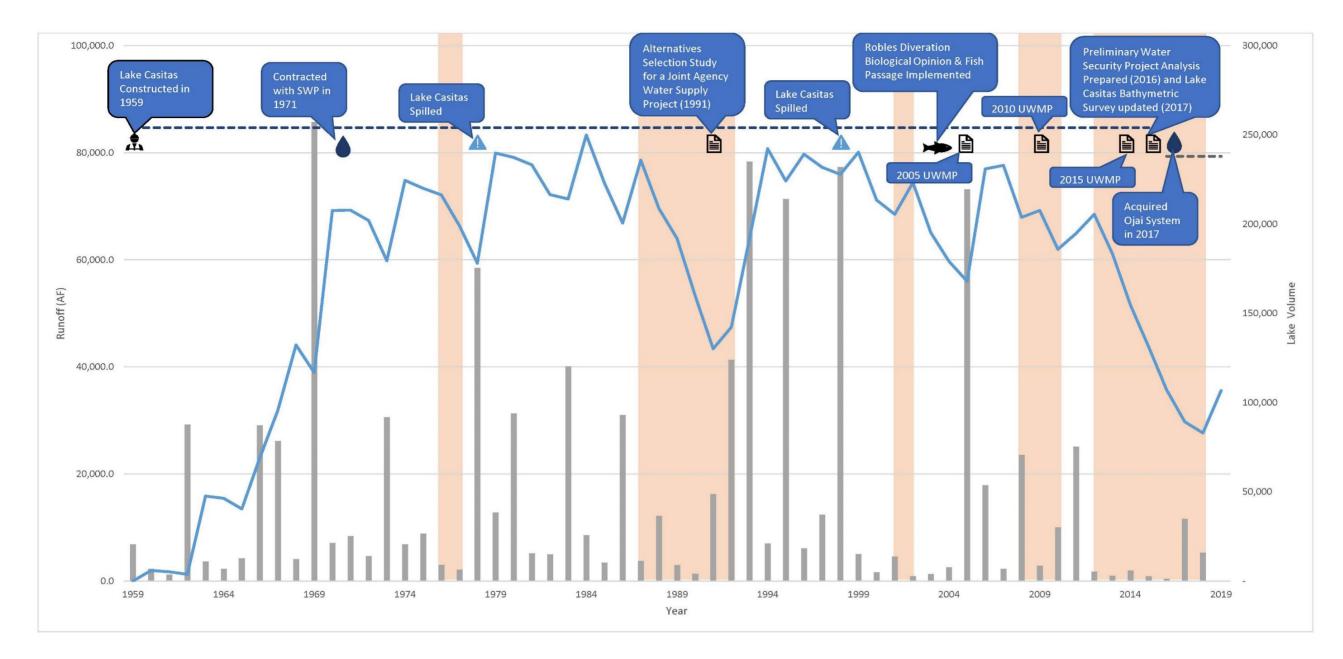
**Table 0-1** lists the water supply projects reviewed in this TM. It provides key data for each project if available, including cost and annual yield. It also indicates whether the project is a current Water Security Project as identified by Casitas, an Early Action Plan project as identified in this CWRP, and if the project is recommended for inclusion in the CWRP option analysis. Many of the projects were only described conceptually in past reports, and there was little specific data available.

# Conclusions

Casitas has considered a wide range of water supply enhancement projects in the past 50 years. These have included large capital projects such as improvements to the Robles Diversion Canal and a connection to the State Water Project; small capital projects including improvements to wellfields and recycled water options; and non-structural projects such as water conservation and agreements with resale customers and regional agencies.



Because Lake Casitas and groundwater wells were a reliable source of supply under historical hydrologic conditions and demand management measures were effective, Casitas was not required to implement any of the major, expensive and complex water supply projects considered to date. However, risks to water supply reliability posed by future climate variability, environmental threats such as wildfires, and future demand require a more robust water supply portfolio. The supply projects identified in this TM for consideration in the CWRP option analysis offer a broad array of options for evaluation and comparison.



# **LEGEND**



Drought Period

Figure 0-1 Casitas Water Supply Timeline

# Table 0-1 Water Supply Project Options Summary

Option No.	Project	Estimated Capital Cost	Estimated Annual Yield	Current Water Security Project	Early Action Plan Project	Current Status	Viable for CWRP Option
SWP			State Water Project O	ptions			
SWP 01	Deliveries via City of Ventura State Water Project Interconnection and Casitas-Ventura State Water Project Interconnection	Unit Capital Cost = \$1,710/AFY ¹ Capital cost = \$1,645/AFY ¹ (Unit Capital Cost = \$1,560/AFY) ² (Capital cost = \$1,500/AFY) ²	3,100 AFY ¹²	~	(included as a No Regrets option)	Design Phase Preliminary Design Phase	~
SWP 02	Calleguas Emergency Interconnection with Casitas	Not Available	Not Available	~	(included as a No Regrets option)	Pre-Planning Phase	~
SWP 03	Ventura-Santa Barbara Counties Interconnection	Capital Cost = \$14,500,000 ¹²	2,000 AFY ¹²	~	(included as a No Regrets option)	Preliminary Design Phase	~
SWP 04	Calleguas - Ventura Interconnection	Capital Cost = \$136,000,000 ¹²	3,100 AFY ¹²	$\checkmark$	×	Planning Phase	$\checkmark$
SWP 05	City of Ventura Supplemental or In-Lieu Water	Capital Costs are part of SWP 01 or SWP 04	2,000 AFY ¹²	$\checkmark$	X	Planning Phase	$\checkmark$
SW			Surface Water Project	Options			
SW 01	San Antonio Creek Spreading Basin Rehabilitation ( <i>Not a Casitas facility</i> )	Not Available	Not Available	×	$\checkmark$	This groundwater recharge facility is not currently operating due to accumulation of ash and silt from the Thomas Fire.	×
SW 02	Debris Basin "Enhanced" Percolation	Not Available	Assumed minimal ²	X	X	Debris basin "enhanced" percolation practices are currently utilized	X
SW 03	Matilija Dam Groundwater/Surface Water	Not Available	500 AF (available every two years) ²	×	×	Not currently being pursued by Casitas.	$\checkmark$
SW 04	Expansion of Robles Canal	Unit Capital Cost =\$1,305/AFY ¹ ( <i>Unit Capital Cost = \$556/AFY</i> ) ² (Capital Cost = Not Available)	Not Available (Canal capacity to increase up to 1,700 cfs) ²	×	×	Not currently being pursued by Casitas.	$\checkmark$
SW 05	Construction of a New Dam Upstream of Lake Casitas	Unit Capital Costs Range from \$2,210/AFY to \$2,530/AFY ¹ (Unit Capital Cost = \$941 – \$1,078/AFY) ² (Capital Cost = Not Available)	Ranges from 2,600 AFY to 4,300 AFY ²	×	×	Not currently being pursued by Casitas.	~
SW 06	Robles Forebay Restoration	Capital Cost = \$850,000 ¹²	Not Available	~	~	Casitas anticipates releasing the plans and specifications by May 2019 to be awarded for construction in July 2019.	×

# Appendix A Draft Background Information Technical Memorandum

Option No.	Project	Estimated Capital Cost	Estimated Annual Yield	Current Water Security Project	Early Action Plan Project	Current Status	Viable for CWRP Option
GW			Groundwater Project	Options			
GW 01	Matilija Formation Deep Wells	Capital Cost = \$6.2M/well (Capital Cost = \$5.6 M/well for drilling & construction O&M = \$10,000/year) ²	Yield is unknown	~	×	HOBO: Awaiting approval from the US Forest Service. VRBO: Casitas has selected a team to perform a peer review of the feasibility of this project.	~
GW 02	Abandoned Wells and Inspection Program	Not Available	No additional yield	×	×	The is not a project in which Casitas is active.	×
GW 03	Data Collection and Storage (Additional Depth- discrete Monitoring Wells and Additional Data Loggers)	Not Available	No additional yield	×	×	The is not a project in which Casitas is active.	×
GW 04	Renovate Senior Canyon Mutual Water Company Horizontal Well	Unit Capital Cost = $460/AFY^1$ Capital Cost = $147,000^1$ (Unit Capital cost = $419/AFY^2$ (Capital cost = $334,000^2$	Reduction of supply from Lake Casitas of approx. 320 AFY ²	×	×	The is not a project in which Casitas is active.	×
GW 05	Continuous Groundwater Level and Quality Monitoring in Ventura River Watershed	Not Available	No additional yield	×	×	Not currently being pursued by Casitas.	×
GW 06	Ojai Basin Desalter Project	Unit Capital Cost = $$8,286/AFY^1$ Capital Cost = $$2.9M^1$ (Unit Capital Cost = $$7,429/AFY$ ) ² (Capital Cost = $$2.6M$ ) ²	350 AFY ²	×	×	Not currently being pursued by Casitas.	~
GW 07	Santa Ana Road Underground Stream	Not Available	Not available	×	×	Discounted as a potential new water source for Casitas.	×
GW 08	Well Improvements in Ojai Groundwater Basin	Unit Capital Cost = \$3,000/AFY Capital Cost = \$ 1.5M ⁵	500 AFY⁵	~	~	Casitas is currently underway for well improvements in the Ojai Basin	~
RW			Recycled Water Projec	t Options			
RW 01	Recycled Water from Ojai Valley Sanitary District (OVSD)	Not Available ³	Not Available	×	×	The project is not in active status. OVSD prepared a board memorandum detailing their concerns and potential constraints for them to begin providing recycled water.	×

# Appendix A Draft Background Information Technical Memorandum

Option No.	Project	Estimated Capital Cost	Estimated Annual Yield	Current Water Security Project	Early Action Plan Project	Current Status	Viable for CWRP Option
RW 02	Scalping Plant on OVSD Collector Main for Re- Use at Ojai Valley Inn	Unit Capital Cost = $$63,514/AFY^1$ Capital Cost = $$4.7M^1$ (Unit Capital Cost = $$27,027/AFY$ ) ² (Capital Cost = $$2,000,000$ O&M = \$150,000/year) ²	74 AFY ²	×	×	Not currently being pursued by Casitas.	×
RW 03	Secondary Reclaimed Water to the Ojai Valley	Unit Capital Cost = \$21,563/AFY ¹ Capital Cost = \$48.3M ¹ (Unit Capital Cost = \$9,286/AFY) ² (Capital Cost = \$20.8M) ²	2,240 AFY ²	×	×	The project is not in active status. OVSD prepared a board memorandum detailing their concerns and potential constraints for them to begin providing recycled water.	×
RW 04	Tertiary Reclaimed Water to Rincon Orchards	Unit Capital Cost = \$10,508/AFY ¹ Capital Cost = \$20.7M ¹ (Unit Capital Cost = \$4,517/AF) (Capital Cost = \$8.9M) ²	1,970 AFY ²	×	×	The project is not in active status. OVSD prepared a board memorandum detailing their concerns and potential constraints for them to begin providing recycled water.	×
RW 05	Spray Fields in Canada Larga	Unit Capital Cost = \$11,160/AFY ¹ Capital Cost = \$25.0M ¹ (Unit Capital Cost = \$4,777/AFY) (Capital Cost = \$10.7M) ⁶	2,240 AFY ⁶	×	×	Not currently being pursued by Casitas.	×
RW 06	Ojai East Septic Collection, Package Treatment, Recharge	Unit Capital Cost = $$345,714/AFY^1$ Capital Cost = $$12.1M^1$ ((Unit Capital Cost = $$314,286/AFY$ ) ² (Capital Cost = $$11M$ Annual O&M = $$100,000$ ) ²	35 AFY ²	×	×	Not currently being pursued by Casitas.	~
LA			Local Agreement O	ptions			
LA 01	Ojai Basin Groundwater Management Agency Co-operation Agreement (Inter-basin) with Upper Ventura River Groundwater Basin Sustainability Agency	Not Available	Not Available	×	×	In Progress.	×
LA 02	Conjunctive Use Agreement with OBGMA	Not Available	Not Available	×	×	OBGMA is developing a draft agreement.	×
МО			Maintenance and Operation				
MO 01	Environmental/Habitat Modifications	Capital Cost = Arundo removal ~\$20,000/acre ²	20 AFY/acre ^{2,8}	×	×	Casitas offers rebates for direct customers for certain environmental/habitat modifications.	$\checkmark$
MO 02	Ventura River Watershed Infrastructure Improvements	Various per annual fiscal year budget	Not Available	×	×	These projects are projects and or programs proposed by Ventura River Watershed Management Plan. Casitas participates as necessary for projects directly involving Casitas.	×

#### Appendix A Draft Background Information Technical Memorandum

Option No.	Project	Estimated Capital Cost	Estimated Annual Yield	Current Water Security Project	Early Action Plan Project	Current Status	Viable for CWRP Option
MO 03	Fire Hydrant and Dead-End Flush Re-Use	Not Available	0.3 AFY ²	X	×	Not enough to represent new water for Casitas.	×
MO 04	Resale Water Company System Retrofit/Rehabilitation	Various per annual fiscal year budget	650 AFY ⁹	×	×	Casitas has assisted Senior Canyon Mutual Water Company to improve reliability of groundwater resources.	×
MO 05	Casitas Leak Detection and Repair Program	Variable costs	Not Available	X	×	Program in progress.	×
MO 06	Sediment Removal at North End of Lake Casitas	Not Available	Not Available	×	×	Not implemented, environmental and financial feasibility and justification assessment is needed.	$\checkmark$
MO 07	Pipeline from Matilija Chlorinator to Hot Springs	Unit Capital Cost = $$125,000/AFY^1$ Capital Cost = $$1.2M^1$ (Unit Capital Cost = $$116,667/AFY$ ) ²	9.6 AFY ²	×	×	This project is currently scheduled for implementation by Casitas in 2020-2022.	×
MO 08	Robles Diversion Fish Passage Improvements	(Capital Cost = \$1,120,000) ² Capital Cost = Various alternatives ranging from \$4M to \$12M	Annual yield values have not been determined	~	~	Initial stages is being implemented this summer. Pilot study beginning winter 2019	~
С			Conservation Project	Options			
C 01	Conservation/Enhanced Demand Management Programs (5 percent reduction)	Not Available	Reduced demand; Estimate not available	~	$\checkmark$	Ongoing	~
C 02	Conservation/Enhanced Demand Management Programs (10 percent reduction)	Not Available	Reduced demand; Estimate not available	$\checkmark$	$\checkmark$	Ongoing	$\checkmark$
DW			Desalinated Water Proje	ct Options			
DW 01	Desalinated Water from City of Santa Barbara	Not Available	Not Available	×	×	None of the desalination options are currently being pursued by Casitas.	$\checkmark$
DW 02	Casitas Desalinated Water Plant	Not Available	1,121 AFY ¹⁰	×	×	None of the desalination options are currently being pursued by Casitas.	~
DW 03	Ventura County Regional Desalinated Water Plant	Not Available	Not Available	×	×	None of the desalination options are currently being pursued by Casitas.	~

¹2019 dollars based on RSMeans Historical Cost Index (RSMeans, n.d.)

² Original 2016 Estimate (WREA & KG, 2016)

³ To comply with the Nutrient TMDL, OVSD estimates that it will have to spend \$10-15 million over the next 7 years

⁴ Original 1991 estimate (Boyle, 1991) ⁵ 2019 estimate (Pueblo, 2018)

⁶ Original 1992 estimate (Boyle, 1992)

⁷ Casitas anticipates providing around 10 AFY to CVWD but considers this water part of the Casitas annual customer demand and not a transfer. The 2005 UWMP states Casitas could purchase 500 AF from CVWD and an emergency water exchange agreement remains in place.

⁸20 AFY/acre of arundo removal estimated to recharge groundwater

⁹ Assuming a 10 percent reduction in estaimted annual supply to resale customers. (UWMP, 2016)

¹⁰ Estimate per 2005 UWMP. However, the 2016 Final UWMP states no feasibility study has been done, production rate is unknown

¹¹ Includes annual budget in Casitas' ten-year plan.

¹² Provided by Casitas.

# **Abbreviations**

AF	acre-foot
AFY	acre-foot per year
AWMP	Agricultural Water Management Plan
Casitas	Casitas Municipal Water District
Calleguas	Calleguas Municipal Water District
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CVWD	Carpinteria Valley Water District
CWRP	Comprehensive Water Resources Plan
DDMW	depth discrete monitoring well
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ETO	Evapotranspiration (crop)
gpm	gallons per minute
GSP	Groundwater Sustainability Plan
GSWC	Golden State Water Company
G/Y	gallons per year
mg/l	milligrams per liter
MOU	Memorandum of Understanding
MWD	Metropolitan Water District of Southern California
NEPA	National Environmental Policy Act
OBGMA	Ojai Basin Groundwater Management Agency
0&M	Operation and Maintenance



OVSD	Ojai Valley Sanitary District
Reclamation	U.S. Bureau of Reclamation
RWQCB	Regional Water Quality Control Board
SACSGRP	San Antonio Creek Spreading Grounds Rehabilitation Program
SMC	Senior Canyon Mutual Water Company
SWP	State Water Project
TDS	total dissolved solids
ТМ	Background Information Technical Memorandum
USACE	U.S. Army Corps of Engineers
UVRB	Upper Ventura River Basin
UVRGA	Upper Ventura River Groundwater Basin Sustainability Agency
UWCD	United Water Conservation District
UWMP	Urban Water Management Plan
VCFCD	Ventura County Flood Control District
VCWPD	Ventura County Watershed Protection District
VRWC	Ventura River Watershed Council
VRWMP	Ventura River Watershed Management Plan





# INTRODUCTION

# Section 1 Introduction

This Background Information Technical Memorandum (TM) is a deliverable for Task 2 for the Casitas Municipal Water District (Casitas) Comprehensive Water Resources Plan (CWRP) contract. It summarizes the review of previous water supply and demand estimates for the Casitas service area, water supply options previously considered by Casitas and other water agencies in the Casitas region, and the current status of water security projects actively being pursued by Casitas. The TM discusses the advantages and disadvantages of the options as described in the previous studies and evaluates whether they are viable options to consider as part of the CWRP evaluation. In addition to narrative summaries, the information is presented in a format that can be presented to the general public as an informational tool. The TM recommends options to be evaluated further in Task 3, which will involve a comparative evaluation and screening of water supply options and recommendations for projects to be included in the CWRP.

The summary of previous supply and demand estimates and water supply project options was based on a review of published reports provided by Casitas and collected from other agencies. Key references are listed below, organized by the primary region they address. A number of older reports are not listed because they are no longer relevant, or their findings were superseded by subsequent reports.

- Casitas
  - Final Urban Water Management Plan and Agricultural Water Management Plan, Casitas Municipal Water District, 2016
  - 2016 Reconnaissance Level Preliminary Water Security Project Analysis/CMWD Preliminary Water Security Project Analysis
  - o Preliminary Water Security Project Analysis, Casitas Municipal Water District, 2016
  - o 2010 Urban Water Management Plan, Casitas Municipal Water District, 2010
  - o 2005 Urban Water Management Plan, Casitas Municipal Water District, 2005
- City or County of Ventura
  - 2015 Urban Water Management Plan for City of Ventura, Kennedy/Jenks Consultants, 2016
  - Water Shortage Event Contingency Plan, Ventura Water, 2015
  - Ventura River Watershed Management Plan, Ventura River Watershed Coordinator, 2015



- San Antonio Creek Spreading Grounds Rehabilitation Project Component Report, Ventura County Watershed Protection District, 2014
- o Ventura County Water Management Plan, 1994
- Water Supply and Demand Status Report, 1989
- Feasibility of Importing State Water Project Water into Ventura County Executive Summary, James M. Montgomery, Consulting Engineers, Inc., 1987
- Ojai Valley
  - A Cooperative Regional Approach to Improving Ventura County's Water Supply Reliability, Richard H. Hajas for Ojai Valley Water Advisory Group, 2018
  - Groundwater Management Plan, Ojai Valley Groundwater Basin Management Agency, 2018
  - o Treatment Plant Effluent Considerations, Ojai Valley Sanitation District, 2018
  - o Urban Water Management Plan, Kennedy/Jenks Consultants, 2010
  - o 2010 Urban Water Management Plan Ojai, Golden State Water Company, 2010
  - o Ojai Valley Sanitary District Reclaimed Water Feasibility/Marketing Study, 1992





# HISTORICAL SAFE YIELD OF LAKE CASITAS

# Section 2 Historical Safe Yield of Lake Casitas

Lake Casitas was constructed by the U.S. Bureau of Reclamation (Reclamation) in 1959 as a source of supplemental municipal and irrigation water for the region. Lake Casitas is the primary source of water supply for Casitas Municipal Water District and will remain the cornerstone of Casitas' water supply portfolio in the future as outlined by the CWRP.

Lake Casitas currently has a capacity of 237,760 acre-feet (AF). The original capacity was 254,000 AF, but the capacity was reduced by sediment accumulation. In 1959, Reclamation estimated a safe yield of 27,800 acre-feet per year (AFY) for Lake Casitas when integrated with the operation of Lake Matilija. The safe yield is defined as the largest amount of water that can be withdrawn in every of year of operation assuming the reservoir is drawn down to the dead pool level during the critical drought period. It is a common water supply metric used for planning by water agencies because it is a conservative estimate of the yield available with a 100 percent reliability.

The estimate of the Lake Casitas safe yield was revised several times in the past 50 years. In 1968, Reclamation reduced its safe yield estimate for Lake Casitas from 27,800 AFY to 20,350 AFY. This change was prompted by several changes in circumstances including a new critical drought period, a larger evaporation rate determined by operations at the time of the study, and a significant reduction in Lake Matilija storage capacity.

A follow up study was completed by Casitas in 1988, identified as Study Number D-20 (MBK, 1989), which reevaluated the safe yield and developed a new estimate of 21,500 AFY. This evaluation differed from the 1968 study by eliminating Lake Matilija storage altogether and decreasing the evaporation rate based on historical documentation.

Finally, in 2004 a Lake Casitas reservoir operation model was developed by Casitas and was used to revise the safe yield estimate based on changes to operation of the Robles Diversion and the assumption that Lake Matilija is removed. The resulting safe yield estimate was 20,540 AFY based on operations during a 21-year drought period from 1944-1965.

**Table 2-1** summarizes the past safe yield estimates for Lake Casitas. The most recent estimate of 20,540

 AFY is currently used by Casitas for water supply planning. As part of this CWRP project, the Lake Casitas



safe yield will be re-evaluated based on the hydrology of the recent drought, new operating rules for the Robles Diversion during severe dry years, and the potential effects of climate change.

Table 2-1 Historical Lake Casitas Safe Yield Values

Source of Safe Yield Estimate (Reporting Year)	Lake Casitas Safe Yield (AFY)
1959 Operating Criteria with Integrated Matilija (1959) (Supply and Demand Memo, 1989)	27,800
1959 Operating Criteria with Integrated Matilija (1968) (Supply and Demand Memo, 1989)	20,350
D-20 Study without Integrated Matilija (20-year drought) (1988) (Supply and Demand Memo, 1989)	21,500
Robles BO Operating Criteria without Integrated Matilija (21-year drought) (2004) (UWMP, 2005)	20,540





# HISTORICAL WATER SUPPLY AND DEMAND DATA

# Section 3 Historical Water Supply and Demand Data

# 3.1 Casitas Service Area Water Supply

The main supply for Casitas is surface water captured in Lake Casitas with a small percentage supplied from local groundwater. **Table 3** lists the water produced by Casitas from its surface and groundwater sources from 2011 to 2018. During this timeframe the annual water produced varied by up to 28 percent, demonstrating the high variability experienced by precipitation-dependent systems in Ventura County watersheds. Both surface water and groundwater supplies were less than the long-term average annual yield estimates of 20,540 AFY and 300 AFY, respectively, in each year during this time period. The Ojai Groundwater Basin is included in the produced water totals for 2017 and 2018 after Casitas acquired the Ojai Water System from Golden State Water Company (GSWC) in 2017.

For future water supply planning, Casitas has adopted the long-term average surface and groundwater yield estimates as shown in **Table 4** (UWMP, 2016). **Table 4** does not include the estimated annual yield from wells supplying the Ojai Water system.



Water Supply Sources	2011	2012	2013	2014	2015	2016	2017	2018
Local surface water (Lake Casitas) ^{1,}	14,841	16,244	20,402	18,811	17,246	14,151	12,214	11,633
Local groundwater (Mira Monte Well) ^{2,3}	67	232	173	42	54	35	164	151
Ojai Groundwater Basin4	N/A	N/A	N/A	N/A	N/A	N/A	1,381	1,381
TOTAL	14,908	16,476	20,575	18,853	17,300	14,186	13,759	13,165

#### Table 3-1 Casitas Produced Water (2011-2018 calendar year)

#### Table 3-2 Projected Water Supplies 2020-2040 (UWMP, 2016)

Water Supply Sources (1)	2020	2025	2030	2035	2040
Local surface water (Lake Casitas)	20,540	20,540	20,540	20,540	20,540
Local groundwater (Mira Monte Well)	300	300	300	300	300
TOTAL	20,840	20,840	20,840	20,840	20,840
Notes:					
Sources, CMWD, 2016. All values in AF, rounded. Fiscal Years.					

# 3.2 Casitas Service Area Water Demands

**Figure 3-1** shows the Casitas service area in western Ventura County. The service area includes the City of Ojai, small communities between Ventura and Ojai, and coastal areas.

⁴ Ojai Water System Large Water System 2017 and 2018 Annual Report



¹ (Casitas Municipal Water District)

² (UWMP, 2016). All values in AF, rounded.

³ CMWD Large Water System 2016, 2017, and 2018 Annual Report

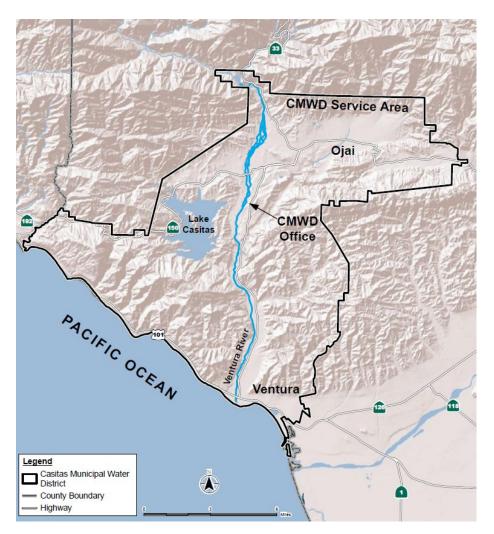
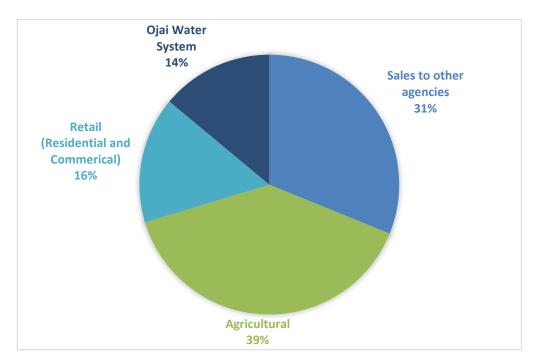


Figure 3-1 Casitas Service Water Area

Casitas serves a population of approximately 70,000 through over 6,000 service connections. Casitas serves three main water customer sectors: municipal and commercial (retail customers), agricultural, and resale (i.e., other water providers that deliver Casitas water to their own customers). **Figure 3-2** shows the 2018 customer distribution.





#### Figure 3-2 2018 Casitas Customer Distribution

**Figure 3-3** shows the forecasted demands from various studies from 1987 to 2016. The historical trend of Casitas water demand projection was steadily increasing from the1960s to the 1990s. The demands were growing primarily due to new agricultural lands being put into production. By 1990, the total demand on Lake Casitas began to exceed the safe yield of the lake. (Boyle, 1991) As a result of the growing demands which were exceeding the safe yield and the drought during this time, Casitas declared a water shortage emergency which helped to bring demands within safe yield limits. By 2005, the projected demands were significantly lower than demands in the 1990s. Several factors may be responsible for the change in demand pattern, including a wet period in the 1990s that caused Lake Casitas to spill in 1998; a water conservation ethic that became more prominent in the Western United States beginning in the 2000s; and customer response to drought conservation measures during an extended dry period in the 2010s. In addition, water quality issues that occurred during the 1990's reduced the amount of water the City of Ventura used significantly below their minimum 6,000 acrefeet contracted value in the mid-1990s. **Figure 3-4** shows Lake Casitas produced water (AF) between 1983 to 2018.



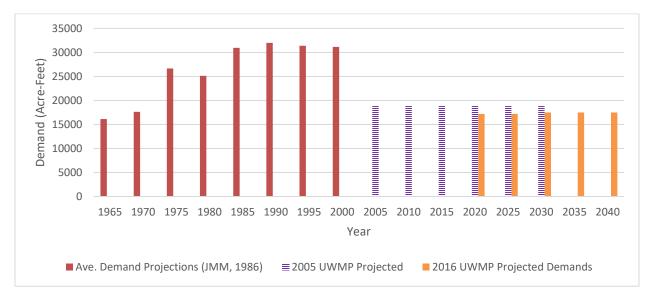


Figure 3-3 Comparison of Forecasted Demand Projections

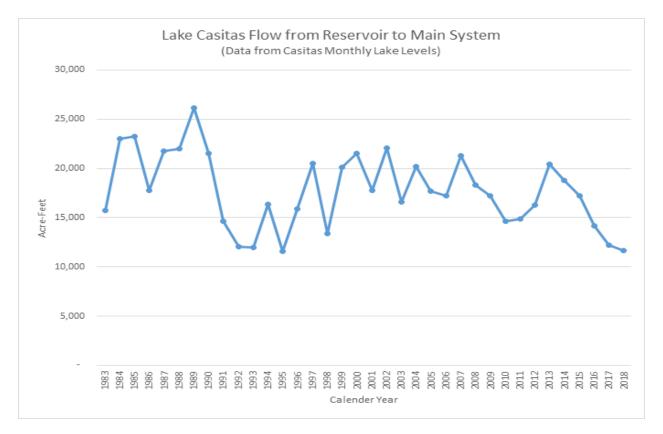


Figure 3-4 Lake Casitas Produced Water (1983-2018 Calendar Years)



**Table 3-3** shows potable water use sales for Casitas between 2000 and 2015 and is evidence of the declining water use in the Casitas service area in recent years.

**Table** 3-4 shows the most recent potable water use between 2016 and 2018, including the Ojai WaterSystem which was purchased from Golden State Water Company (GSWC) in 2017.

Category (1)	2000	2005	2010	2015	
Sales to other agencies	7,186	7,118	6,482	6,192	
Agricultural sales (2)	9,115	8,939	6,398	8,048	
Retail sales (2)	3,088	2,821	2,427	2,507	
TOTAL	19,389	18,877	15,307	16,747	
Notes:					
Source, CMWD, 2016. All values in AF, rounded. Data does not include water losses.					
Direct sales to CMWD customers.					

Table 3-3 Past Potable Water Uses 2000-2015 (UWMP, 2016)

#### Table 3-4 2016-2018 Potable Water Deliveries 5,6

Category	2016	2017	2018
Sales to other agencies	3,926	2,742	3,284
Agricultural	6,973	6,404	4,552
Retail	1,836	2,974	3,136
Ojai Water System	0	513	1,792
TOTAL	12,735	12,633	12,764

The general reduction in per capita water use over the past two decades has resulted in lower water demand forecasts in recent studies compared to forecasts developed prior to 1990. **Table 3-5** shows the projected demands from 2020 to 2040 from the 2016 UWMP, which are currently used by Casitas for water supply planning. This projection assumes population in the Casitas retail service area remains relatively constant based on the Ventura County population forecast. It also assumes agricultural water demand is unchanged and there is a small increase in current deliveries to resale customers. The Ojai Water System was not included in the projections in the 2016 UWMP, though it is expected to be included in the next UWMP update.

⁵ CMWD Consumption Report 2016-2017, 2017-2018, 2018-2019

⁶ Ojai Large Water System 2017 and 2018 Annual Report to the Drinking Water Program

Category (1)	2020	2025	2030	2035	2040
Sales to other agencies	6,200	6,200	6,500	6,500	6,500
Agricultural sales (2)	8,000	8,000	8,000	8,000	8,000
Retail sales (2)	3,000	3,000	3,000	3,000	3,000
TOTAL	17,200	17,200	17,500	17,500	17,500
Notes:					
Source, CMWD, 2016. All values in AF, rounded. Data does not include water losses.					
Direct sales to CMWD customers.					

#### Table 3-5 Projected Casitas Water Demands (UWMP, 2016)





# WATER SUPPLY PROJECTS FROM BACKGROUND DOCUMENTS

# Section 4 Water Supply Projects from Background Documents

Casitas has a long history of considering improvements to its water supply portfolio. This section summarizes the water supply projects evaluated in the past by Casitas and other regional water agencies in Ventura County. It highlights the advantages and disadvantages of water supply options considered in the past and recommends whether those options should be considered for evaluation in the CWRP option analysis.

Projects are categorized as:

- State Water Project
- Surface Water
- Groundwater
- Recycled Water
- Local Agreement
- Maintenance and Operation
- Conservation
- Desalinated Water

Each section below begins with a description of each water supply option in the respective category, followed by a table summarizing the options. Each table lists project cost (capital cost and/or unit cost per acre-ft of annual yield) and estimated yield if available. Many projects were not described in detail in previous reports and specific information on cost and yield was not available. The tables also indicate whether each project is a current Casitas Water Security project or CWRP Early Action Plan project and specifies if each project is recommended for the CWRP option evaluation task.



# 4.1 State Water Project (SWP) Options

# 4.1.1 Introduction

In 1963, the Ventura County Flood Control District (VCFCD) contracted with the State of California for 20,000 acre-feet per year of water from the State Water Project (SWP). In 1971, the VCFCD assigned the administration of the Water Supply Contract to Casitas. Casitas' allocation is 5,000 acre-feet, the City of Ventura has 10,000 acre-feet and United Water Conservation District (UWCD) has 5,000 acre-feet (JMM). Historically, there has not been a practical way to deliver the allocation to these entities; no State Water Project water has been delivered to Casitas or the City of Ventura due to lack of connecting infrastructure. UWCD has been able to since connect into the SWP.

In 1987 the "Feasibility of Importing State Water Project Water into Ventura County" report was prepared by James M. Montgomery, Consulting Engineers Inc. (JMM) to evaluate alternatives for accessing State Water Project water for Casitas, City of Ventura, and United Water Conservation District. Following the completion of the 1987 feasibility study and a subsequent 1988 study, "Evaluation of Alternatives Involving a Castaic Lake Delivery Point" was prepared by JMM in 1988 due to the interest of Castaic Lake Water Agency and Metropolitan Water District of Southern California (MWD). Various alternatives were developed, and further study was recommended.

In 1991, Casitas, City of Ventura, and UWCD contracted with Boyle Engineering Corporation to prepare an Alternatives Selection Study for a Joint Agency Water Supply Project to review the previous reports and select the alternatives that met the joint agencies needs and goals. This study referenced a program level Environmental Impact Report (EIR) planned for the selected alternatives. Per the Alternatives Selection Study, the alternatives shown in **Table 4-1** went through a screening process and were selected to be studied in a programmatic EIR. Cost per yield values are shown, but no capital costs were provided in the historical documents.

Alternative	Description	Cost/AF
Alt. 1A	Pipeline from Castaic to Ventura with a Joint Agency treatment plant	\$1,022 (1991)
Alt. 1B	Treated water pipeline from Castaic Lake Water Agency to Ventura	\$872 (1991)
Alt. 2A	Pipeline from Castaic to Upper Ojai with a Joint Agency Treatment Plant	\$1,117 (1991)

Table 4-1 Alternatives	Selected for	the Program	FIR (Bo	vle)
		une i regrunn		y 10 j



Alt. 2B	Treated water pipeline from Castaic Lake Water Agency to Upper Ojai	\$959 (1991)
Alt. 3	SWP water received at Lake Piru with delivery by flow down the Santa Clara River and/or a pipeline, with desalination treatment.	\$1,199 (1991)
Alt. 4	Seawater desalination plant	\$2,038 (1991)
Alt. 5	No project alternative	N/A

Other ideas were considered such as "wheeling" State Water Project water from MWD through Calleguas and the City of Oxnard, but this was deemed unacceptable without Casitas being annexed to MWD's service area.

# 4.1.2 Options

SWP 01 – Deliveries via City of Ventura State Water Project Interconnection and Casitas-Ventura State Water Project Interconnection

# **Project Description**

Between 2014 and 2016, wheeling without annexation was reconsidered by Calleguas and deemed acceptable. As a result, the City of Ventura's State Water Interconnection Project (with Calleguas) was determined as a viable option to study. The estimated cost is \$1,560/AFY (after approximately \$1,500/AF of capital expenses). (WREA & KG, 2016)

Casitas has shared in the cost of the City of Ventura's State Water Interconnection Alignment Study and Environmental Impact Report. This project would allow for in-lieu use of water by the City of Ventura, which reduces the use of water in Lake Casitas.

In early 2019, Casitas retained an engineering firm to prepare the Casitas-Ventura State Water Project Interconnection Preliminary Design and investigate how to convey water from the west side of Ventura to connect to Casitas' transmission pipelines near Foster Park, eventually extending to Lake Casitas (see **Figure 4-1**). The Casitas-Ventura State Water Project Interconnection would be dependent on the City of Ventura's State Water Interconnection Project being completed.



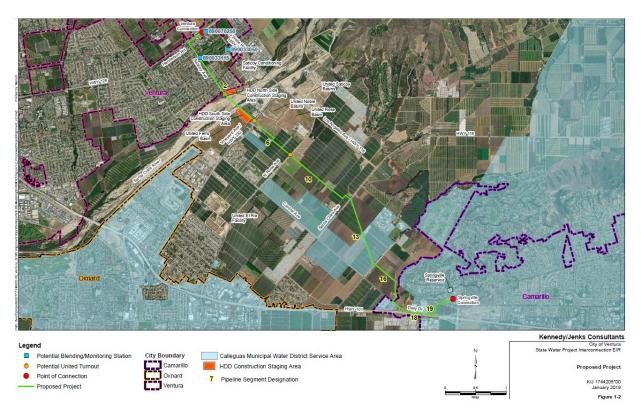


Figure 4-1 City of Ventura State Water Interconnection Project Proposed Alignment (Kennedy/Jenks Consultants, 2018)

**Table 4-2** lists the advantages and disadvantages of Deliveries via City of Ventura State Water ProjectInterconnection and Casitas-Ventura State Water Project Interconnection.

Table 4-2 Advantages and Disadvantages of Deliveries via City of Ventura State Water Project Interconnection and Casitas-Ventura State Water Project Interconnection

Advantages	Disadvantages
<ul> <li>Uses the 3,100 AFY allocation currently owned by Casitas.</li> <li>Reduces demand on Lake Casitas.</li> <li>Benefits multiple agencies and spreads costs to other beneficiaries.</li> <li>Diversifies Casitas' water portfolio by accessing water supplies originating outside Ventura County.</li> <li>Represents the culmination of decades of planning and past investments.</li> <li>Can be used if SWP Article 21 becomes available.</li> </ul>	<ul> <li>Casitas is dependent on other agencies committing funds and constructing infrastructure.</li> <li>Currently a three to five-year timeframe for implementation, which is relatively short for a project of this magnitude but might not meet immediate demands in the near term.</li> <li>The reliability of SWP water has come into question recently as a result of the extended California drought.</li> <li>Preliminary costs are very high.</li> </ul>



## **Current Status**

The City of Ventura is the lead agency for this project. Casitas has participated and is a partner in this project. The Draft EIR recently completed the 45-day review and comment period. The EIR document will be used as a decision-making tool for local, state, and federal agencies in considering this project. Simultaneously, Casitas has contracted with Kennedy Jenks for the Casitas-Ventura State Water Project Interconnection Preliminary Design for the infrastructure to convey water from West Ventura to Lake Casitas. The Casitas-Ventura State Water Project Interconnection project is dependent on the City of Ventura State Water Interconnection Project moving forward.

## **Recommendations Summary**

Casitas and other neighboring water providers in Ventura County made significant investments in the past to investigate feasible methods of accessing their State Water Project allocations. Many alternatives were considered over the past 50 years, and recommendations in past studies were superseded by more current thinking. This SWP option currently appears to have merit and is in the environmental/permitting phase and the preliminary design phase of evaluation by Casitas and other entities in the region. Therefore, the CWRP includes this option in the list of water supply options considered in the option evaluation process.

## SWP 02 - Calleguas Emergency Interconnection with Casitas

## **Project Description**

Simultaneously, a second option is being evaluated at a pre-planning level. It is part of Calleguas Municipal Water District's (Calleguas) Water Supply Alternatives Study and would include a bidirectional pipeline to deliver State Water Project water to Lake Casitas during normal operations and deliver Lake Casitas water to Calleguas during emergencies. This option, referred to as the Calleguas Emergency Interconnection with Casitas, would allow for a direct connection between Calleguas Municipal Water District (Calleguas) and Casitas.

Table 4-3 lists the advantages and disadvantages of Calleguas Emergency Interconnection with Casitas.



Advantages	Disadvantages
<ul> <li>Benefits multiple agencies and spreads costs to other beneficiaries.</li> <li>Diversifies Casitas' water portfolio by accessing water supplies originating outside Ventura County.</li> <li>Can be used to purchase SWP Article 21 water when it becomes available.</li> <li>Allows for regional emergency storage.</li> </ul>	<ul> <li>Casitas is dependent on other agencies committing funds and constructing infrastructure.</li> <li>Currently a three to five-year timeframe for implementation, which is relatively short for a project of this magnitude but might not meet immediate demands in the near term.</li> <li>The reliability of SWP water has come into question recently as a result of the extended California drought.</li> <li>Preliminary costs are very high.</li> </ul>

#### Table 4-3 Advantages and Disadvantages of Calleguas Emergency Interconnection with Casitas

## **Current Status**

Calleguas is in the process of studying various alternatives. The Inter-Tie with Casitas is one of those alternatives to allow for storing SWP water in Lake Casitas for emergencies.

## **Recommendations Summary**

This SWP option is in the pre-planning phase of evaluation by Casitas and other entities in the region. Therefore, the CWRP includes this option in the list of water supply options considered in the option evaluation process.

## SWP 03 - Ventura-Santa Barbara Counties Interconnection

## **Project Description**

A third SWP option, referred to as the Ventura-Santa Barbara Counties Interconnection, involves exploring an existing emergency transfer agreement with Carpinteria Valley Water District to improve the existing connection with the Casitas water system and allow for Casitas to receive SWP water from the Central Coast Branch. This is a new idea as of early 2019 and preliminary design is currently underway with an expected completion of July 2019.

Table 4-4 lists the advantages and disadvantages of the Ventura-Santa Barbara Counties Interconnection.

Table 4-4 Advantages and Disadvantages of Ve	entura-Santa Barbara Counties Interconnection
----------------------------------------------	-----------------------------------------------

Advantages	Disadvantages
<ul> <li>Diversifies Casitas' water portfolio by accessing water supplies from the Central Coast Branch.</li> <li>Can be used if SWP Article 21 becomes available.</li> <li>Reduces demand on Lake Casitas.</li> <li>Casitas has more control over infrastructure and implementation.</li> </ul>	<ul> <li>Currently a three to five-year timeframe for implementation, which is relatively short for a project of this magnitude but might not meet immediate demands in the near term.</li> <li>The reliability of SWP water has come into question recently as a result of the extended California drought.</li> </ul>



## **Current Status**

Casitas recently retained consultants to perform preliminary design and environmental/permitting services to support a grant application for this project.

#### **Recommendations Summary**

This SWP option is in the preliminary design phase of evaluation by Casitas and other entities in the region. Therefore, the CWRP includes this option in the list of water supply options considered in the option evaluation process.

#### SWP 04 - Casitas-Calleguas Interconnection

#### **Project Description**

This SWP option, referred to as the Casitas-Calleguas Interconnection, involves the combination of three proposed projects (1) the City of Ventura SWP Interconnection and (2) the Casitas-Calleguas Interconnection and (3) the Casitas-Ventura SWP Interconnection. The first project involves the City of Ventura and other partner agencies including Casitas designing and constructing a 36-inch bi-directional pipeline to connect Calleguas and the City of Ventura. Casitas has shared in the cost of the City of Ventura's SWP Interconnection Alignment Study and Environmental Impact Report. The interconnection would allow for the delivery of SWP water to be wheeled through Calleguas and allow for in-lieu use of SWP water by the City of Ventura, which reduces their use of water from Lake Casitas. The second project is a direct connection. The third project involves Casitas constructing a 30 cfs pump station at Olive Street and Ramona Street in the City of Ventura. In early 2019, Casitas retained an engineering firm to prepare the Casitas-Ventura SWP Interconnection Preliminary Design and investigate how to convey water from the west side of Ventura to connect to Casitas' transmission pipelines near Foster Park, to supplement water supply from Lake Casitas. The Casitas-Ventura SWP Interconnection would be dependent on the City of Ventura's SWP Interconnection Project being completed.

In addition to delivering its SWP Table A allocation and Article 21 surplus water when available, the interconnection would create opportunities for Casitas to consider agreements with other water entities in the Ventura/Oxnard area for exchange or other cooperative water management strategies. The interconnection would also allow Calleguas to receive water from Lake Casitas during emergencies.

State Water would be delivered through facilities owned by various entities, including California DWR, Metropolitan Water District of Southern California, Calleguas, and the City of Ventura. Therefore, several agreements would be necessary.

The Casitas-Calleguas Interconnection makes use of Ventura's proposed SWP facilities, either as planned or through required upgrades to increase capacity. Thus, this option requires coordination and costsharing with Ventura to accomplish its SWP connection. Casitas is actively engaged in this project with Ventura at this time.

It is estimated the Casitas-Calleguas Interconnection would be constructed in a 5- to 10-year timeframe.



**Table 4-5** lists the advantages and disadvantages of the Ventura-Santa Barbara CountiesInterconnection.

<ul> <li>Uses the 3,100 AFY allocation currently owned by Casitas.</li> <li>Reduces demand on Lake Casitas.</li> <li>Benefits multiple agencies and spreads costs to other beneficiaries.</li> <li>Diversifies Casitas' water portfolio by accessing water supplies originating outside Ventura County.</li> <li>Represents the culmination of decades of planning and past investments.</li> <li>Other supplemental water options become available</li> <li>Currently a10-year timeframe for implementation, which will not meet immediate demands in the near term.</li> <li>The reliability of SWP water has come into question recently as a result of the extended California drought.</li> <li>Preliminary costs are very high.</li> </ul>	Advantages	Disadvantages
	<ul> <li>owned by Casitas.</li> <li>Reduces demand on Lake Casitas.</li> <li>Benefits multiple agencies and spreads costs to other beneficiaries.</li> <li>Diversifies Casitas' water portfolio by accessing water supplies originating outside Ventura County.</li> <li>Represents the culmination of decades of planning and past investments.</li> <li>Other supplemental water options become</li> </ul>	<ul> <li>implementation, which will not meet immediate demands in the near term.</li> <li>The reliability of SWP water has come into question recently as a result of the extended California drought.</li> </ul>

## **Current Status**

Casitas is exploring funding options and is in the pre-planning stages for this project.

## **Recommendations Summary**

This SWP option is in the pre-planning phase of evaluation by Casitas. Therefore, the CWRP includes this option in the list of water supply options considered in the option evaluation process.

#### SWP 05 – Supplemental or In-Lieu Water from Ventura

## **Project Description**

This option involves access to supplemental water from a variety of possible sources through SWP 01 and SWP 04 infrastructure. Planned pipeline capacity in a connection in Ventura County would be sized for maximum deliveries of SWP water. In non-peak delivery months and in years when the State Water Table A allocation is less than the full contract amount, this pipeline would not be operated at capacity and could be used to convey water from other sources such as supplemental water purchases and water transfers. Examples of possible supplemental water sources that could be delivered using SWP connection infrastructure are briefly described below.

**Article 21 Water from SWP.** Article 21 supply is water that is surplus to the needs of the SWP under certain conditions and is made available for purchase by State Water Contractors. When available, this surplus supply is allocated to the requesting State Water Contractors using a calculation that is based on their respective Table A allocations. The Department of Water Resources (2018) indicates the long-term annual average of Article 21 water available for the SWP system is 50,000 AFY. Casitas could choose to purchase Article 21 water to supplement its Table A deliveries if needed and convey that water through the same SWP connection infrastructure.



**In-lieu Water Transfers with Ventura.** Casitas has shared in the cost of the City of Ventura's SWP Interconnection Alignment Study and Environmental Impact Report. The City of Ventura's Interconnection Project allows for in-lieu use of State Water by the City of Ventura, which reduces the use of water in Lake Casitas.

**Table 4-6** lists the advantages and disadvantages of the Ventura-Santa Barbara CountiesInterconnection.

Table 4-6 Advantages and Disadvantages of Su	upplemental or In-Lieu Water from Ventura
----------------------------------------------	-------------------------------------------

Advantages	Disadvantages
<ul> <li>Uses the 3,100 AFY allocation currently owned by Casitas.</li> <li>Reduces demand on Lake Casitas.</li> <li>Benefits multiple agencies and spreads costs to other beneficiaries.</li> <li>Diversifies Casitas' water portfolio by accessing water supplies originating outside Ventura County.</li> <li>Represents the culmination of decades of planning and past investments.</li> <li>Other supplemental water options become available</li> </ul>	<ul> <li>Currently a10-year timeframe for implementation, which will not meet immediate demands in the near term.</li> <li>The reliability of SWP water has come into question recently as a result of the extended California drought.</li> <li>Preliminary costs are very high.</li> </ul>

## **Current Status**

Casitas is exploring funding options and is in the pre-planning and preliminary design stages for other SWP that would construct the infrastructure needed for this option.

## **Recommendations Summary**

This SWP option is dependent on other SWP options. Therefore, the CWRP includes this option in the list of water supply options considered in the option evaluation process as an additional option paired with the other SWP infrastructure options.

# 4.1.3 Summary

**Table 4-7** below summarizes all state water project alternatives reviewed in this document and significant criteria associated with each.



#### **Table 4-7 Active State Water Project Options**

Option No.	Project	Cost	Estimated Annual Yield	Current Water Security Project	Early Action Plan Project	Current Status	Viable for CWRP Option
SWP 01	Deliveries via City of Ventura State Water Project Interconnection and Casitas- Ventura State Water Project Interconnection	\$1,710/AFY ¹ Capital cost = \$1,645/AFY ¹ (\$1,560/AFY) ² (Capital cost = \$1,500/AFY) ²	3,100 AFY ¹²	~	(included as a No Regrets option)	Design Phase Preliminary Design Phase	~
SWP 02	Calleguas Emergency Interconnection with Casitas	Not Available	Not Available	~	(included as a No Regrets option)	Pre-Planning Phase	~
SWP 03	Ventura-Santa Barbara Counties Interconnection	Capital Cost = \$14,500,000 ¹²	2,000 AFY ¹²	~	(included as a No Regrets option)	Preliminary Design Phase	~
SWP 04	Calleguas - Ventura Interconnection	Capital Cost = \$136,000,000 ¹²	3,100 AFY ¹²	~	×	Pre-Planning Phase	~
SWP 05	City of Ventura Supplemental or In-Lieu Water	Capital Costs is part of SWP 01 or SWP 04	3,100 AFY ¹²	~	×	Planning Phase	~

¹2019 dollars based on RSMeans Historical Cost Index (RSMeans, n.d.)

² Original 2016 Estimate (WREA & KG, 2016)

¹² Provided by Casitas.

# 4.2 Surface Water Project (SW) Options

# 4.2.1 Introduction

Surface water currently serves as the main source of supply to Lake Casitas. Improving existing surface water facilities (and/or constructing new projects) could therefore optimize Casitas' overall yield. The alternatives listed below in **Table 4-8** describe six surface water projects explored historically, the current status of each, and recommendations moving forward.

## **Table 4-8 Surface Water Project Options**

Option No.	Project
SW 01	San Antonio Creek Spreading Basin Rehabilitation (Not a Casitas facility)
SW 02	Debris Basin "Enhanced" Percolation
SW 03	Matilija Dam Groundwater/Surface Water
SW 04	Expansion of Robles Canal
SW 05	Construction of a New Dam
SW 06	Robles Forebay Restoration



### 4.2.2 Options

### SW 01 – San Antonio Creek Recharge Basin Rehabilitation

### **Project Description**

The San Antonio Creek Recharge Basin Rehabilitation Project is meant to increase groundwater storage

and recharge in the Ojai Basin by rebuilding the abandoned diversion works, rehabilitating the existing spreading ground basins, and constructing aquifer recharge wells adjacent to San Antonio Creek. The primary purpose of the project is to capture 25 cubic feet per second (cfs) of surface flow from San Antonio Creek to recharge groundwater in the Ojai Basin. (Ojai Basin Groundwater Management Agency, 2018)

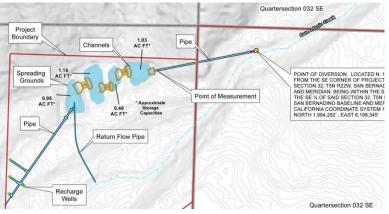


Figure 4-2 San Antonio Creek Spreading Grounds ( (OBGMA, n.d.)

Based on the available information at the time of this report, further study is required to determine pertinent information for evaluation in the CWRP. **Table 4-9** lists the advantages and disadvantages of this project.

	Advantages		Disadvantages
•	Would recharge the Ojai Basin and offset the demand on Lake Casitas.	•	Regular maintenance needed to mitigate debris from Thomas Fire burned area.
•	Was highly successful until the Wheeler Fire in 1985.	•	Outside of Casitas jurisdiction. Ojai Basin Groundwater Management Agency would be responsible for project implementation.

### **Current Status**

This groundwater recharge facility is not currently operating due to accumulation of ash and silt from the Thomas Fire. The facility could be rehabilitated to function as originally designed to recharge the eastern portion of the Ojai Basin. Casitas should continue participating with Ventura County Watershed Protection District, which is responsible for this facility.

### **Recommendations Summary**

Recent plans and decisions by other regional water entities have recommended pursuing his project. Casitas is not involved in this project but could indirectly benefit from this facility operating. At this it is



not recommended this project be included in the CWRP list of options for evaluation since it is not a Casitas project and would be implemented by the County of Ventura.

#### SW 02 – Debris Basin "Enhanced" Percolation

### **Project Description**

This project enhances percolation of storm runoff into local groundwater aquifers by changing management practices at existing debris basins. There are three existing debris basins in the Ventura River Watershed which may aid in recharging the groundwater basin. Percolation could be enhanced by scarifying the bottom of the basins with a spring-tooth or ripper after accumulated debris is removed during normal maintenance activities. With proper debris basin maintenance, there should be no significant difference in recharge from cleanout to cleanout. (WREA & KG, 2016)

Based on the available information at the time of this report, further study is required to determine pertinent information for evaluation if carried forward into the CWRP. **Table 4-10** lists the advantages and disadvantages of this project.

Advantages	Disadvantages
<ul> <li>Improves benefits from existing infrastructure in the watershed.</li> <li>Minimal additional operation and maintenance expense.</li> <li>Costs would not be borne by Casitas.</li> <li>Provides benefits to any groundwater users in the aquifers in which enhanced percolation would occur.</li> </ul>	<ul> <li>Project is not in Casitas' control.</li> <li>Water supply benefits are very minimal.</li> </ul>

#### Table 4-10 Advantages and Disadvantages of Debris Basin "Enhanced" Percolation

### **Current Status**

Debris basin "enhanced" percolation practices are currently being followed by Ventura County Watershed Protection District (VCWPD). Casitas has concluded there is little if any benefit to doing more, so this option is not currently being pursued. (WREA & KG, 2016)

### **Recommendations Summary**

This project was identified by Casitas in the 2016 Water Security Analysis, but there was no recommendation to implement it. Since debris basin "enhanced" percolation practices are being followed presently, there may be little if any water supply benefit associated with this option. Therefore, it is recommended this option not be carried forward to the CWRP option evaluation process.



### SW 03 – Matilija Dam Groundwater/Surface Water

#### **Project Description**

The Matilija Dam Groundwater/Surface Water project involves collecting and transmitting water to Lake Casitas that currently exists in the shallow sediments in and near Matilija Lake and in the ponding area behind the dam. Matilija Dam no longer functions as it was designed due to the buildup of sediment and loss of water storage availability. The dam has been notched a few times and at present, water spills over the dam and flows into the Upper Ventura River groundwater basin and is used by several retail purveyors and private parties as a supply source downstream. Additionally, it helps support the diverse habitat along the river in the vicinity of Matilija Lake (WREA & KG, 2016). In 2015, the Ventura County Watershed Protection District (VCWPD) hired AECOM and Stillwater Sciences to evaluate a range of dam removal concepts. At this time, the Matilija Dam removal, Sediment Transport, and Robles Diversion Mitigation Project are in the pre-planning stages.

It is estimated there is approximately 500 AF in surface and subsurface storage behind the dam which could be piped directly to the Robles Diversion, then directed into the Robles Diversion Canal to be stored in Lake Casitas. While this water may be accessible for short-term use, it is estimated if the entire 500 AF were extracted, it would take approximately two years for that amount to be available again during dry periods. Additionally, there are several issues with its extraction, including dam stability, hydro-compaction of sediment materials, and water quality, as well as the fact that the water in subsurface storage helps to maintain Matilija Lake 'full' and promotes spills over the modified dam in accordance with the current operating strategy.

Table 4-11 lists the advantages and disadvantages of this project.

Advantages	Disadvantages
<ul> <li>Would supplement the supply to Lake Casitas.</li> <li>Provides 250 AFY of new yield for Casitas (500 AF every two years).</li> <li>Retains a small water supply benefit from the reconfigured Matilija Dam and Lake.</li> </ul>	<ul> <li>Extracting the stored water behind the dam would take an estimated 2 years to re-collect.</li> <li>Issues with its extraction include dam stability, hydro-compaction of sediment materials and water quality.</li> <li>Subsurface storage water helps to maintain the Lake 'full' and promotes spills consistent with the current management plan.</li> <li>Groundwater and surface water in Matilija Lake helps support the diverse habitat on the local portion of the River.</li> <li>The proposed removal of Matilija Dam could orphan facilities constructed for this project at a later date.</li> </ul>

Table 4-11 Advantages and Disadvantages of Matilija Dam Groundwater/Surface Water Project



### **Current Status**

Although identified as a 2016 Water Security Project, this option is not currently being pursued by Casitas.

### **Recommendations Summary**

The groundwater and surface water resources of Matilija Lake and the sediments therein were discounted as a significant 'new' potential water source for Casitas in the 2016 Water Security evaluation and thus were not recommended for further consideration (WREA & KG, 2016). If Matilija Dam is eventually removed in accordance with past studies, this project would become ineffective and its associated constructed infrastructure would have to be abandoned or repurposed. Despite these shortcomings, the Matilija Dam Groundwater/Surface Water Project will be carried forward into the CWRP project evaluation so it can be compared to other supply options currently available to Casitas.

### SW 04 - Expansion of Robles Canal

### **Project Description**

The Robles Canal is part of Reclamation's Ventura River water supply project and diverts water from the Ventura River to Lake Casitas. The present capacity of the Robles diversion canal is 500 cfs. Expansion of the Robles Canal was considered by Reclamation in 1968. The proposed project enlarges the existing canal and headworks capacity to 2,200 cfs, thereby allowing greater diversions to Lake Casitas during high flow periods. The estimated unit cost for the additional delivered water is \$556/AFY (Boyle, 1991).

Expansion of the Robles Canal requires approvals and permits from Reclamation and environmental regulatory agencies. The 2003 Biological Opinion related to operation of the Robles Diversion to accommodate fish habitat objectives may reduce estimated project yield and complicate future permitting requirements.

Table 4-12 lists the advantages and disadvantages of this project.

#### Table 4-12 Advantages and Disadvantages of Expansion of Robles Canal

Advantages	Disadvantages
<ul> <li>Supplements the supply to Lake Casitas.</li> <li>Increases the yield available from the current Robles Diversion project.</li> <li>If future climate is characterized by fewer storms but larger severe events, having greater diversion capacity would mitigate the potential for reduced yield from the Ventura River due to fewer storms reaching the threshold for making diversions.</li> </ul>	<ul> <li>Is not considered a new supply source.</li> <li>Actual yield is dependent on water rights and permitted operations.</li> <li>Increases sedimentation in Lake Casitas and the canal.</li> <li>Requires approvals from Reclamation and challenging environmental permits.</li> </ul>

### **Current Status**

This is not an active project.



### **Recommendations Summary**

This project was a preferred alternative in the 1968 Reclamation Report but was not selected as a preferred alternative in the 1991 Boyle Alternative Selection Study. Based on the limited information provided in previous studies, it is recommended this alternative be carried forward to the CWRP alternative evaluation process.

### SW 05 - Construction of a New Dam Upstream of Lake Casitas

### **Project Description**

The 1991 Alternatives Selection Study for a Joint Agency Water Supply Project prepared by Boyle Engineering Corporation includes five project alternatives for new dam and reservoir construction considered in the 1968 Bureau of Reclamation Report. These five projects were proposed as viable alternatives in anticipation of the Matilija Dam silting over time and losing its role in aiding supply to Lake Casitas. The projects are listed and described below.

### SW 05A – New Matilija Dam and Reservoir

The New Matilija Dam and Reservoir project is a dam on Matilija Creek about 700 feet downstream from the current Matilija Dam. It would provide a 50,000 AF reservoir, with water delivered to Lake Casitas via the existing Robles-Casitas diversion canal. Features of the project include a diversion dam on the North Fork of Matilija Creek (about three miles upstream of its confluence with Matilija Creek), with a 1,000 cfs second diversion canal from this north fork diversion to the new reservoir. Estimated annual yield is 4,300 AFY, and estimated cost is \$941/AFY of additional delivered water. (Boyle, 1991)

### SW 05B – Nordhoff Dam and Reservoir on the Ventura River near Friend's Ranch

The Nordhoff Dam and Reservoir project is a dam about a quarter mile upstream from the Robles Diversion dam (near Friend's Ranch) providing a 33,000 AF storage reservoir. Similar to the New Matilija Dam, water would be delivered to Lake Casitas via the existing Robles-Casitas diversion canal. Estimated annual yield is 3,600 AFY, and estimated cost is \$969/AFY of additional delivered water. (Boyle, 1991)

### SW 05C – Murietta Dam and Reservoir on Matilija Creek

The Murietta Dam and Reservoir is approximately three miles upstream from the current Matilija Dam and would provide a 25,000 AF storage reservoir. Water would be delivered to Lake Casitas first by controlled releases into Matilija Creek, and then by diversion at the existing Robles-Casitas diversion canal. Estimated annual yield is 2,600 AFY, and estimated cost is \$1,078/AFY of additional delivered water. (Boyle, 1991)

### SW 05D – Upper San Antonio Creek Dam and Reservoir

The Upper San Antonio Creek Dam and Reservoir includes a dam on the San Antonio Creek about three miles upstream from the confluence of the San Antonio Creek and the Ventura River. Similar to the New Matilija dam, it would provide a 50,000 AF storage reservoir. Due to water treatment requirements, a



pipeline would need to be constructed from the dam to a treatment plant before entering Lake Casitas. Estimated annual yield is 4,000 AFY, and estimated cost is \$1,074/AFY of additional delivered water. (Boyle, 1991)

### SW 05F – Lower San Antonio Creek Dam and Reservoir

The Lower San Antonio Creek Dam and Reservoir includes a dam on the San Antonio Creek about one mile upstream from the confluence of the San Antonio Creek and the Ventura River. It would provide a 32,000 AF storage reservoir. Due to water treatment requirements, a pipeline would need to be constructed from the dam to a treatment plant before entering Lake Casitas. Estimated annual yield is 3,000 AFY, and estimated cost is \$1,074/AFY of additional delivered water. (Boyle, 1991)

**Table 4-13** lists the advantages and disadvantages of the five New Dam alternatives considered in 1991.

Advantages	Disadvantages
<ul> <li>Estimated additional average annual yield ranges from 2,600 AFY to 4,300 AFY (not including what would be reduced due to water rights).</li> <li>The known water quality for all alternatives is good.</li> <li>The operational simplicity is good for all alternatives (except for the Upper San Antonio Creek Dam and Reservoir, which only has adequate operational simplicity).</li> </ul>	<ul> <li>Estimated cost ranges from \$2,210/AFY7 to \$2,530/AFY8.</li> <li>Most alternatives do not provide a backup supply.</li> <li>The institutional feasibility is poor for most alternatives, due to community impacts and environmental concerns.</li> <li>Would cause possible flooding to nearby roads and structures.</li> </ul>

### **Current Status**

Not an active project.

### **Recommendations Summary**

Any of these dam construction projects would need to be evaluated with detailed engineering and environmental reports to determine feasibility. Based on the limited information provided in previous studies contrasted with the potentially significant new yield compared to other supply options, it is recommended this option be carried forward to the CWRP option evaluation process.

⁷ 2019 dollars based on RSMeans Historical Cost Index

⁸ 2019 dollars based on RSMeans Historical Cost Index

### SW 06 – Robles Forebay Restoration Project

#### **Project Description**

As part of the Robles Diversion, the forebay was constructed in the late 1950's with the Lake Casitas construction. The Robles forebay is located upstream of the Robles Diversion and the 2004 Fish Passage facility and upstream of the timber cut-off wall in the Ventura River, see **Figure 4-3**.

Per the 2003 Biological Opinion, the Robles Diversion forebay is an important part of the diversion activities and is required to fill to an elevation of 764.5 feet above mean sea level prior to any diversions. Inflows into the Robles Diversion forebay are not constant and therefore operations change as needed per the 2003 Biological Opinion.

The sedimentation loading following the Thomas Fire has inundated the forebay and therefore decreased the available capacity. (Rincon Consultants, 2019) According to the 2003



Figure 4-3 Robles Forebay Restoration Area (Rincon Consultants, 2019)

Biological Opinion, maintenance of the forebay may be required and will require the use of heavy equipment and disturbance within the channel. Therefore, this work can take place during the dry season to avoid potential impacts to the steelhead. This project includes the removal an estimated 80,000 to 100,000 cubic yards of sediment. (Rincon Consultants, 2019)



Advantages	Disadvantages
Improves effectiveness of existing Robles Diversion.	Significant ongoing maintenance will be required to keep the Forebay operational at the design
Does not involve construction of new capital projects.	conditions. Requires a large volume of sediment disposal.
Once obtained, permits are valid for five years and sediment can be removed annually.	Work in the Ventura River will involve significant permitting challenges.

### Table 4-14 Advantages and Disadvantages of Robles Forebay Restoration Project

### **Current Status**

Casitas anticipates releasing the plans and specifications by May 2019 to be awarded for construction in July 2019. Annual sediment removals will be budgeted as part of regular operations and maintenance program.

### **Recommendations Summary**

It is recommended this option remains a maintenance project and should be performed at regular intervals. This project is important in the overall effectiveness of the diversion. As a result, this project is not recommended to be carried forward to the CWRP option evaluation process.

### 4.2.3 Summary

**Table 4-15** below summarizes the surface water project options reviewed in this document andsignificant criteria associated with each. Three of the six options are being recommended for evaluationin the CWRP as potential long-term water supply options.

#### **Table 4-15 Summary of Surface Water Project Options**

Option No.	Project	Cost	Estimated Annual Yield	Current Water Security Project	Early Action Plan Project	Current Status	Viable for CWRP Option
SW 01	San Antonio Creek Spreading Basin Rehabilitation (Not a Casitas facility)	Not Available	Not Available	×	~	This groundwater recharge facility is not currently operating due to accumulation of	×



						ash and silt from the Thomas Fire.	
SW 02	Debris Basin "Enhanced" Percolation	Not Available	Assumed minimal ²	×	×	Debris basin "enhanced" percolation practices are currently utilized	×
SW 03	Matilija Dam Groundwater/ Surface Water	Not Available	500 AF (available every two years) ²	×	×	Not currently being pursued by Casitas.	~
SW 04	Expansion of Robles Canal	Unit Capital Cost = $$1,305/AFY^1$ ( <i>Unit Capital Cost</i> = $$556/AFY^4$ (Capital Cost = Not Available)	Not Available (Canal capacity to increase up to 1,700 cfs) ⁴	×	×	Not currently being pursued by Casitas.	~
SW 05	Construction of a New Dam Upstream of Lake Casitas	Unit Capital Costs Range from \$2,210/AFY to \$2,530/AFY ¹ (Unit Capital Cost = \$941 - \$1,078/AFY) ⁴ (Capital Cost = Not Available)	Ranges from 2,600 AFY to 4,300 AFY ⁴	×	×	Not currently being pursued by Casitas.	~
SW 06	Robles Forebay Restoration	Capital Cost = \$850,000 ¹¹	Not Available	~	~	Casitas anticipates project to be awarded for construction in July 2019.	×

¹2019 dollars based on RSMeans Historical Cost Index (RSMeans, n.d.)

² Original 2016 Estimate (WREA & KG, 2016)

⁶ Original 1992 estimate (Boyle, 1992)

¹¹ Includes annual budget in Casitas' ten-year plan.

# 4.3 Groundwater Project (GW) Options

### 4.3.1 Introduction

New or rehabilitated groundwater project possibilities in the Ojai region have been explored to either provide new water sources for Casitas or to maximize the efficiency of existing facilities. In addition, data collection, continuous groundwater level monitoring and well inspection programs were considered as tools to gauge the overall health of Ojai groundwater. The alternatives reviewed are listed below in **Table 4-16**. This section includes a project description, current project status, and recommendations moving forward.

#### **Table 4-16 Groundwater Projects**

Option No.	Project		
GW 01	Matilija Formation Deep Wells		
GW 02	Abandoned Wells and Inspection Program		
GW 03	Data Collection and Storage (Additional Depth-discrete Monitoring Wells and Additional Data Loggers)		
GW 04	Renovate Senior Canyon Mutual Water Company Horizontal Well		
GW 05	Continuous Groundwater Level and Quality Monitoring in Ventura River Watershed		
GW 06	Ojai Basin Desalter Project		
GW 07	Santa Ana Road Underground Stream		
GW 08 Well Improvements in Ojai Groundwater Basin			



### 4.3.2 Options Project Descriptions

### GW 01 – Matilija Formation Deep Wells

### **Project Description**

The Matilija Formation Deep Wells project consists of the construction of one or more deep water wells in the Matilija sandstone. This formation contains groundwater that recharged over very long time periods. The project includes the exploration of both horizontal and vertical wells and allows for drought-period production of groundwater directly to Casitas' water transmission system and/or the Robles Canal. The production estimate is currently unknown and would require a pilot project to estimate the yield. This is an untapped resource with no known well details. Further analysis is required to determine when Casitas would rely on this water supply and what drought stage would initiate the production. In addition, the District will need to understand the water rights associated with this water source and the impacts to the landowners. Based on initial evaluation, the anticipated capital cost of the project is \$5.6 million per well for drilling and construction. The number of wells is undetermined currently. The project implementation period is estimated to be 5 years including design.

The potential locations for the horizontal bore being considered are located on U.S. Forest Service land. Casitas has requested permission from the U.S. Forest Service to allow the installation of stream monitoring gauges to assess the viability of the project. Casitas has not received a response from the U.S. Forest Service.

Casitas is also considering installing a pilot vertical deep bore (VRBO) to gauge water quality and quantity in the Matilija formation. The VRBO well site is located on property owned by Casitas, west of the Robles Diversion facility. Preliminary design and CEQA compliance are underway and are expected to be complete by December 2019.

Table 4-17 lists the advantages and disadvantages of this project.

Advantages	Disadvantages
<ul> <li>The water quality is not expected to be a concern.</li> <li>Anticipated to be recharged during extended wet periods.</li> <li>Cost is reasonable for return (estimated \$696/AFY (WREA &amp; KG, 2016)).</li> <li>Diversifies Casitas' water portfolio by adding supply from an entirely new source.</li> </ul>	<ul> <li>Yield is unknown.</li> <li>Five years to implement.</li> <li>Project is used only when drought triggers are met</li> <li>Wells are shut down during wet periods to allow for replenishment.</li> <li>USDA FS 299 permit, further evaluation of California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) compliance to determine level of effort.</li> <li>Water rights may need to be evaluated.</li> </ul>

Table 4-17 Advantages and Disadvantages of Matilija Formation Deep Wells



### **Current Status**

Casitas is awaiting approval from the US Forest Service on its FS299 permit application to install stream monitoring gauges for the HOBO (Casitas Water Security, n.d.).

Casitas has awarded a contract to a team of professionals to provide a peer review of the feasibility of the proposed project. The project is currently on hold pending further funding for a pilot study.

### **Recommendations Summary**

The Matilija Horizontal Bores Project was on the Casitas 2016 Water Security Project list, and it continues to be investigated. The project would only be used during drought periods, so would be considered a source of emergency supply. The project develops previously untapped groundwater resources so provides an opportunity for Casitas to diversify its water portfolio. Although this could be an expensive intermittent supply, it is recommended this option be carried forward to the CWRP option evaluation process.

### GW 02 – Abandoned Wells and Inspection Program

### **Project Description**

The County of Ventura has an existing program to address abandoned wells as part of the water well ordinance. (Ojai Basin Groundwater Management Agency, 2018) OBGMA is recommending this to the County. This project involves evaluating all abandoned wells within the Ojai Basin to determine if they can be converted to monitoring wells, rehabilitated, or properly destroyed. This will mitigate losses to the regional water supply and potential hazards to the quality of the groundwater and will make the most efficient use of the existing well systems (Ojai Basin Groundwater Management Agency, 2018).

Table 4-18 lists the advantages and disadvantages of this project.

Advantages	Disadvantages		
<ul> <li>Rehabilitating abandoned wells could help protect water quality and quantity.</li> <li>Maximizes benefits from existing wellfield infrastructure.</li> </ul>	<ul> <li>Project is not within Casitas' jurisdiction since the County of Ventura oversees the water well ordinance.</li> <li>Project may not create a new supply if wells become monitoring wells.</li> </ul>		

### **Current Status**

The County of Ventura is responsible for well permitting and has an established program to address abandoned wells, but a special program in the Ojai Basin has not been established. At this time Casitas has not been involved with this option.



### **Recommendations Summary**

OBGMA recommends the County move forward with this program because it allows them to review proposed well modifications prior to changes in conditions. Some of the abandoned wells may be ideal candidates to convert to depth-discrete monitoring wells or other monitoring uses, as agreeable with the property owners, county, city, or funding agencies (Ojai Basin Groundwater Management Agency, 2018). However, this type of conversion would not be a benefit to the Casitas water supply. Although this project may have benefits for improved groundwater basin management and aquifer assessments, it is recommended this option not be carried forward to the CWRP water supply option evaluation process.

# GW 03 – Data Collection and Storage (Additional Depth-discrete Monitoring Wells and Additional Data Loggers)

### **Project Description**

OBGMA plans to expand upon the efforts of Ventura County to routinely collect information on water levels and quality for wells in the Ojai Basin. This proposed project will expand the system of six existing monitored wells to ten monitored wells.

A depth discrete monitoring well DDMW near the south side of the basin would provide information on deep water salinity, production zone use and storage, and shallow zone storage and discharge to surface water and habitats. One such well is planned in the Hansen Well Drilling yard, near the OBGMA offices. This would be a partner effort between the City of Ojai, the OBGMA, the county, private constituents, and a funding agency (Ojai Basin Groundwater Management Agency, 2018).

Additional loggers in new wells, especially depth-discrete monitoring wells, and a near discharge point shallow well, are planned. Water level, temperature, and conductivity are parameters that can be monitored via this network, and telemetry systems should be included in future settings to minimize time demands of data collection efforts.

Table 4-19 lists the advantages and disadvantages of this project

Table 4-19 Advantages and Disadvantages of Data Collection and Storage Project

Advantages	Disadvantages			
<ul> <li>Provides information on deep water salinity, production zone and storage</li> <li>Provides information on deep water salinity, production zone and storage</li> <li>Provides information on shallow zone storage and discharge to surface water and habitats.</li> <li>Minimizes time demands on collection efforts.</li> </ul>	<ul> <li>Only provides data does not conserve or increase supply.</li> </ul>			

### **Current Status**

This is not a project in which Casitas is actively involved.



### **Recommendations Summary**

Although data collection provides an overview on the health of the Ojai Basin, it would not directly increase Casitas' water supply. Therefore, it is not recommended to be included in the CWRP water supply option evaluation process.

### GW 04 - Renovate Senior Canyon Mutual Water Company Horizontal Well

### **Project Description**

Senior Canyon Mutual Water Company (SCM) owns a 3,000 ft long horizontal well or tunnel constructed in 1929 that initially was the main supply for the SCM system. The horizontal well has supplied water virtually on an uninterrupted basis. Records from 30 years ago show the tunnel occasionally produced in excess of 400 gallons per minute (gpm). With the recent extended drought the flow rate has been reduced to approximately 50 gpm. SCM has three metered connections to Casitas initially installed as emergency backup and auxiliary supply to the horizontal well system.

As the drought progressed and the flow from the tunnel decreased, SCM has used Casitas water almost exclusively. Periodic inspections revealed substantial debris on the tunnel floor, calcification scale on the tunnel walls and a major rock fall at approximately 2200 feet from the entrance. Dr. James Scott, a Mining Engineer who had been involved in the tunnels in Santa Barbara, visited the site in 1994 (when presumably the flow was approximately 200 gpm). He reported the condition of the tunnel had a direct impact on the tunnel yield, and it may be possible to double flow quantities from the tunnel if improved.

Assuming Dr. Scott is correct, during normal years, the increase of 200 gpm would result in a theoretical "production" of approximately 320 AFY. This would reduce the demand on the Casitas system by an equivalent amount. Casitas assisted SCM with design plans and applying for a grant. Anticipated capital cost of the project is \$134,000. The project implementation time is estimated at one year (WREA & KG, 2016).

Table 4-20 lists the advantages and disadvantages of this project.

Advantages	Disadvantages
<ul> <li>Project may be exempt from CEQA but will depend on final improvements.</li> <li>Reduces SCMWC demand from Lake Casitas.</li> <li>Benefits SCMWC and improves their main source of water.</li> <li>The project completion time is estimated to be only one year.</li> <li>Reasonable cost for return (estimated \$419/AFY (WREA &amp; KG, 2016))</li> </ul>	<ul> <li>New yield from renovation is uncertain.</li> <li>Tunnel conditions could be worse than documented in 1994.</li> </ul>



### **Current Status**

This project was included in the preliminary Water Security Project list. Casitas in conjunction with Senior Canyon Mutual Water Company, received a grant for this project through the Ventura County Watershed Coalition for Proposition 50 regional grant funds. The grant will be used to improve the reliability of Senior Canyon Mutual Water Company's horizontal well so they would rely less on Casitas' surface water supply. This project will improve conjunctive use of local groundwater and surface water supplies (UWMP, 2016).

### **Recommendations Summary**

The previous investigation in 1994 recommended rehabilitation of the horizontal well included cleaning, descaling, partial sealing, additional lateral drilling, and the potential of a separate bore. The project would benefit SCM first, which reduces demand on Lake Casitas water (WREA & KG, 2016). This project would indirectly benefit Lake Casitas but is not a project within Casitas' control. It is not recommended this project be included in the list of options to be evaluated in the CWRP.

### GW 05 - Continuous Groundwater Level and Quality Monitoring in Ventura River Watershed

### **Project Description**

This project allows for continuous groundwater level and quality monitoring in the Ventura River Watershed by installing new monitoring instruments in the basin's wells. It was proposed by the Ventura River Watershed Council to advance the intent of Resiliency Through Infrastructure Campaign (Ventura River Watershed Coordinator, 2015).

Table 4-21 lists the advantages and disadvantages of this project.

Table 4-21 Advantages and Disadvantages of Continuous Groundwater Level and Quality Monitoring in Ventura River Watershed

Advantages	Disadvantages
Improved data for well system improves operations and maximize safe groundwater production. Improved monitoring capabilities could be required to support future conjunctive use or aquifer storage and recovery programs.	Benefits to average annual yield have not been estimated. Casitas may have limited influence over how the monitoring data is used to manage groundwater resources.

### **Current Status**

Casitas is not actively involved in this project.



### **Recommendations Summary**

This project would improve data available for groundwater basin management in aquifers serving the Casitas service area but would not substantially improve water supplies available to Casitas. This project is outside of Casitas' control, and is not recommended for further evaluation in the CWRP. (Ventura River Watershed Coordinator, 2015)

### GW 06 – Ojai Basin Desalter Project

### **Project Description**

This project conceptually targets otherwise unusable high chloride water from the lowest aquifers in the Ojai Basin to allow for its potable use and allow for recharge water to replace the poorest quality water over time.

Casitas would own and operate the desalter project infrastructure. Delivering the water acquired from the Ojai Desalter Project requires installation of a membrane treatment system, and connection to the existing Casitas Ojai transmission system, as well as targeting a well (existing or new) to supply the high chloride water. Additionally, the brine from the treatment process would be delivered to the existing Ojai Valley Sanitary District (OVSD) collector lines in the project area. Production for the Ojai Basin Desalter Project is estimated to range from 300 to 400 AFY. Estimated maximum flow rate to be used in conceptual facility design is approximately 200 gpm.

Produced water prior to treatment is expected to be sodium-chloride in character, with total dissolved solids (TDS) in the near brackish state (around 2,000 milligrams per liter, or mg/l, TDS). Desalting would result in water quality of 500 mg/l TDS added to the distribution system. Anticipated cost of the Ojai Desalter Project ranges from \$2.6 million to \$2.9 million, depending on whether an existing well can be used or if a new well has to be drilled. The time required from conception to completion if allowed to progress without delay is estimated at one year if a Categorical Exemption is available for CEQA compliance and an existing well can be used. Additional time may be required if a new well or wells are to be constructed.

By using existing wells for sources that may not be usable untreated, treating the water through a reverse osmosis desalination facility, and discharging the brine to the OVSD, the produced water could be used to augment the municipal and/or agricultural supply of the valley. Because the extracted water could be replaced naturally with fresher water from shallower aquifers or recharge, a long-term benefit would be the desalination of the lower aquifers and increase in usable groundwater from the basin. (Richard H. Hajas, 2018)

 Table 4-22 lists the advantages and disadvantages of this project.

#### Table 4-22 Ojai Basin Desalter Project

Advantages	Disadvantages			
<ul><li>May use existing wells.</li><li>Estimated production of 300-400 AFY.</li></ul>	Requires reverse osmosis desalination facility.			



•	About five times the cost of the State Water Project Transfer/Inter-tie (at \$7,429/AFY (WREA & KG, 2016))
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### **Current Status**

Not currently being pursued by Casitas.

### **Recommendations Summary**

This project was recommended by Casitas for its 2016 Water Security Project list. It makes additional water usable to Casitas, offsets potential 'undesirable results' of groundwater extraction during droughts and may be able to use existing well infrastructure. It would provide an estimated additional 300-400 AFY. (WREA & KG, 2016)

A more detailed feasibility study is recommended; partners such as Casitas, the City of Ojai, the Ojai Water Conservation District, and OVSD could all contribute and benefit from such a project. (Ojai GWMP) It is recommended this project be considered in the CWRP evaluation of water supply options.

### GW 07 – Santa Ana Road Underground Stream

### **Project Description**

Based largely on anecdotal information, the Santa Ana Road "underground stream" is a term given to a portion of subsurface water draining into the Upper Ventura River groundwater basin near Oak View. This water has been indicated by observations of a relatively shallow and stable water level in a local, lightly-used groundwater well.

This water is likely of limited utility due to low production capacity if stressed. High and consistent water levels reported in the past are likely a result of low use and bedrock/alluvium morphology rather than a significant resource that may be available to Casitas.

Water flowing into the Upper Ventura River Basin (UVRB) via the local creeks and streams, including subsurface flow like the 'Underground Stream', would be subject to management or allocation under the UVRB groundwater sustainability plan (GSP). Any additional withdrawal may be subject to review per the tenets of the GSP and/or challenge by downstream users.

 Table 4-23 lists the advantages and disadvantages of this project.

### Table 4-23 Advantages and Disadvantages of Santa Ana Road Underground Stream

Advantages	Disadvantages				
New source of local supply.	<ul><li>Subject to management by outside agencie</li><li>Reliability and yield are unproven.</li></ul>				



### **Current Status**

This was a lower tier project per the 2016 Preliminary Water Security Project Analysis. It has since been discounted as a potential new water source for Casitas.

#### **Recommendations Summary**

The Santa Ana Road 'Underground Stream' has been discounted as a potential new water source for Casitas and is not recommended for evaluation in the CWRP.

#### GW 08 – Well Improvements in Ojai Groundwater Basin

### **Project Description**

Casitas acquired GSWC's Ojai Water System in June 2017. Included in the acquisition were six existing groundwater production wells consisting of the Mutual #4, Mutual #5, Mutual #6, San Antonio #3, San Antonio #4, and the Gorman well. Along with the wells, Casitas also acquired equipment and appurtenances associated with the wells, including pumping equipment, controls, and pipelines.

Casitas operates these wells on two parcels located on either side of San Antonio Creek, south of Grand Avenue. The eastern parcel is approximately 4 acres and the western parcel is approximately 5.7 acres. The distance between wells ranges from 230 to 892 feet, and they range in age from 6 to 47 years old. The wells produce between 70 and 250 gallons per minute (gpm).

Since the acquisition of the wells from Golden State in 2017, Casitas has performed multiple studies on the wellfield with the intent of characterizing the condition of the wells, quantifying interference between the wells, and identifying projects that could be undertaken to improve the production and operation of the existing wells. These studies include the Ojai Wellfield Assessment Report (May 2018), the Ojai Wellfield Interference Assessment (November 2018), and the Groundwater Supply Augmentation Assessment: Analysis of Alternatives (January 2019). All studies were completed by Pueblo Water Resources, Inc. (Pueblo). These studies identified several projects specific to the Ojai Wellfield. Respective locations from the wells can be found in Figure 4-4., per the Pueblo Ojai Well Assessment Report. The projects that can be implemented within a 12-month time period were included in the Early Action Plan (EAP). The remaining project was a new well replacing Mutual #4 at Grand Avenue Wellfield. This project is estimated at \$1.5M and \$1.25M, which is budged for fiscal years 2018-2019 and 2019-2020. The anticipated yield is approximately 500 AFY.





Figure 4-4 Ojai Wellfield Location Map (Pueblo, 2018)

Table 4-24 lists the advantages and disadvantages of this project.

Table 4-24 Advantages and Disadvantages of Well Improvements in Ojai Groundwater Basin

Advantages	Disadvantages
<ul> <li>Improvements may produce additional yield from existing production wells.</li> <li>Rehabilitation costs are relatively low in comparison to drilling a new well.</li> <li>Maximizes efficiency of existing capital facilities.</li> </ul>	• Loss of production during construction.

### **Current Status**

Casitas recently awarded a construction contract to Legend Well & Pump for rehabilitation of Gorham Well #1 and is working on plans and specifications for rehabilitation of San Antonio Well #4. Casitas is also in the design phase for a well replacement for fiscal year 2019-2020.

### **Recommendations Summary**

This project was a recommended to be included in the Early Action Plan and it is recommended the long-term groundwater projects be included in the list of options to be evaluated in the CWRP.



### 4.3.3 Summary

**Table 4-25** below summarizes all groundwater project options reviewed in this document and significantcriteria associated with each.

### Table 4-25 Summary of Groundwater Project Options

Option No.	Project	Cost	Estimated Annual Yield	Current Water Security Project	Early Action Plan Project	Current Status	Viable for CWRP Option
GW 01	Matilija Formation Deep Wells	Capital Cost = \$6.2M/well ¹ (Capital Cost = \$5.6 M/well for drilling & construction O&M = \$10,000/year) ²	Yield is unknown	~	×	HOBO: Awaiting approval from the US Forest Service. VRBO: Casitas has selected a team to perform a peer review of the feasibility of this project.	~
GW 02	Abandoned Wells and Inspection Program	Not Available	No additional yield	×	×	The is not a project in which Casitas is active.	×
GW 03	Data Collection and Storage (Additional Depth-discrete Monitoring Wells and Additional Data Loggers)	Not Available	No additional yield	×	×	The is not a project in which Casitas is active.	×
GW 04	Renovate Senior Canyon Mutual Water Company Horizontal Well	Unit Capital Cost = $$460/AFY^1$ Capital Cost = $$147,000^1$ (Unit Capital cost = \$419/AFY) ² (Capital cost = \$134,000) ²	Reduction of supply from Lake Casitas of approx. 320 AFY ²	×	×	The is not a project in which Casitas is active.	×



GW 05	Continuous Groundwater Level and Quality Monitoring in Ventura River Watershed	Not Available	No additional yield	×	×	Not currently being pursued by Casitas.	×
GW 06	Ojai Basin Desalter Project	Unit Capital Cost = \$8,286/AFY ¹ Capital Cost = \$2.9M ¹ (Unit Capital Cost = \$7,429/AFY) ² (Capital Cost = \$2.6M) ²	350 AFY ²	×	×	Not currently being pursued by Casitas.	~
GW 07	Santa Ana Road Underground Stream	Not Available	Not available	×	×	Discounted as a potential new water source for Casitas.	×
GW 08	Well Improvements in Ojai Groundwater Basin	Unit Capital Cost = \$3,000/AFY Capital Cost = \$ 1.5M ⁵	500 AFY ⁵	~	~	Casitas is currently underway for well improvements in the Ojai Basin	~

¹2019 dollars based on RSMeans Historical Cost Index (RSMeans, n.d.)

² Original 2016 Estimate (WREA & KG, 2016)

⁵2019 estimate (Pueblo, 2018)



# 4.4 Recycled Water Project (RW) Options

### 4.4.1 Introduction

Incorporating recycled water to Casitas' portfolio has proven more challenging than other supply options, largely because OVSD does not own the rights to its effluent or any treated wastewater and therefore cannot enter into agreements with Casitas or other agencies. However, an option to bypass this water right issue has been considered, where a packaged wastewater treatment plant in east Ojai Valley would draw from sewage currently disposed in septic systems.

The alternatives listed below in **Table 4-26** describe six recycled projects explored historically, the current status of each, and recommendations moving forward.

#### **Table 4-26 Recycled Water Project Options**

Alternative No.	Project
RW 01	Recycled Water from Ojai Valley Sanitary District (OVSD)
RW 02	Scalping Plant on OVSD Collector Main for Re-Use at Ojai Valley Inn
RW 03	Secondary Reclaimed Water to the Ojai Valley
RW 04	Tertiary Reclaimed Water to Rincon Orchards
RW 05	Spray Fields in Canada Larga
RW 06	Ojai East Septic Collection, Package Treatment, Recharge

### 4.4.2 Option Project Descriptions

### RW 01 - Recycled Water from Ojai Valley Sanitary District (OVSD)

### **Project Description**

This project would utilize OVSD Treatment Plant effluent to either increase the supply of the Ventura River (which in turn supplies Lake Casitas), or it would use recycled water to irrigate crops, parks, and golf courses in the Casitas service area. It could also provide water for industrial processes, power plants, fire-fighting, and other similar non-potable uses. (UWMP, 2016)

There are several obstacles for implementing a recycled water project using OVSD effluent. Most importantly, OVSD does not own the rights to its effluent or any treated wastewater and thus cannot enter into agreements with Casitas or other agencies to provide recycled water. The wastewater treatment plant is on City of Ventura land with a lease that gives Ventura the first right of use. (Ojai Valley Sanitation District, 2018) Treated wastewater must currently be discharged to the Ventura River



for environmental purposes. Repurposing this water for municipal or agricultural use would require permitting from multiple regulatory agencies and compliance with CEQA.

Treating wastewater for non-potable municipal and agricultural uses would involve a cost for providing additional treatment beyond what the wastewater treatment plant is already required to provide. Even with additional treatment there may be public concerns over use of treated wastewater for municipal or agricultural use.

 Table 4-27 lists the advantages and disadvantages of this project.

Table 4-27 Advantages and	<b>Disadvantages of Rec</b>	vcled Water from Oia	ai Valley Sanitary	District Project
	J	,		

Advantages	Disadvantages
<ul> <li>Offsets the demand of Lake Casitas water and reduce use of local groundwater supplies.</li> <li>Reuses existing supplies.</li> <li>Consistent with current integrated water planning and "One Water" concepts being adopted by progressive water utilities.</li> </ul>	<ul> <li>Water rights issues (OVSD does not own the rights to its effluent).</li> <li>May not be permittable due to downstream environmental flow requirements.</li> <li>Wastewater treatment process would have to be upgraded to meet non-potable water use standards.</li> <li>Public may oppose use of treated wastewater for some non-potable municipal and agricultural uses.</li> </ul>

### **Current Status**

The project is not in active status. OVSD prepared a board memorandum detailing their concerns and potential constraints for them to begin providing recycled water.

### **Recommendations Summary**

This project is not considered a viable alternative per the *2016 UWMP* due to the issues discussed above. OVSD prepared a board memorandum stating their concerns regarding providing recycled water. Thus, despite the obvious benefits of using locally available recycled water for non-potable uses, this project must be eliminated from consideration in the CWRP options analysis.

### RW 02 - Scalping Plant on OVSD Collector Main for Re-Use at Ojai Valley Inn

### **Project Description**

This project involves constructing a Scalping Plant on an OVSD collector main to allow for wastewater reuse at Ojai Valley Inn Golf Course. The project is comprised of a new package wastewater treatment plant ("scalping plant") along with appurtenances such as manholes, cleanouts, siphons and lift stations to deliver treated wastewater to the Ojai Valley Inn Golf Course irrigation system. The "scalped" wastewater from the OVSD collector main would be directed to the package treatment plant, ideally located at a low point in the selected area. (WREA & KG)



The treatment plant would need to be sited in an area of easy access near the Ojai Valley Inn water service on a parcel that Casitas may need to acquire. The "scalped" influent would be treated by means of a centralized redundant extended aeration system including anoxic chambers and clarification followed by membrane filtration and disinfection to meet tertiary standards. A sludge processing system would be included to decant the brine/sludge, reducing volume and decreasing water loss. (Alternatively, the brine could be returned to the collector main.) The treated effluent would then be piped to the Ojai Valley Inn irrigation system. OVSD staff have stated as much as 100,000 gallons per day could be "scalped" from the nearby collection main. Since treated wastewater storage is not contemplated, the "production" would be limited to what can be used daily. If the rainfall evapotranspiration (ETO) deficit is positive 8 months of the year, the project would reduce demand from the discharge during the other four months of the year (37 AFY) can be recharged to the groundwater basin.

The quality of treated wastewater must meet or exceed the standards adopted in the Ojai Groundwater Basin Plan. Lowering levels of nitrate and chloride to the required concentrations could be a challenge for a package plant wastewater treatment system. This project would also trigger the CEQA process, and an EIR would likely be required.

Anticipated capital cost of the project is \$2.0 million, and operation costs are estimated to be approximately \$150,000 per year. Project duration for implementation is estimated at 4 years. (WREA & KG, 2016)

Table 4-28 lists the advantages and disadvantages of this project.

Table 4-28 Advantages and Disadvantages of Scalping Plant on OVSD Collector Main for Re-Use at Ojai Valley Inr	n
Project	

Advantages	Disadvantages
<ul> <li>Reliable, no apparent water rights issues.</li> <li>Additional supply can be generated very near the point of use.</li> <li>Efficiently reuses existing supplies.</li> <li>Consistent with current integrated water planning and "One Water" concepts being adopted by progressive water utilities.</li> </ul>	• High cost for small benefit.

### **Current Status**

Not currently being pursued by Casitas.

### **Recommendations Summary**

This was a lower tier project per the 2016 Preliminary Water Security Project Analysis and should be included in the CWRP.



### RW 03 – Secondary Reclaimed Water to Ojai Valley Irrigators

### **Project Description**

Secondary treated reclaimed water from the OVSD wastewater treatment plant would be distributed to the Ojai Valley to irrigate citrus groves and two golf courses. To use the secondary effluent, farmers would need to convert their orchards to furrow irrigation. Although almost all orchards in the Ojai Valley now use drip irrigation to minimize water use, many of those orchards formerly used furrow irrigation and could be converted back. (Boyle, 1992) If reclaimed water rates are reasonable, farmers may be willing to convert their orchards back to furrow irrigation.

The water allocation program implemented by Casitas and the Ojai Basin Groundwater Management Agency may provide incentives for the use of reclaimed water. All of the reclaimed water from the OVSD treatment plant would be used if about a fourth of the orchards in East Ojai were connected to the reclaimed water system.

This project has the same legal constraints related to use of OVSD wastewater effluent as described for the Recycled Water Project (RW 01). To compensate for downstream environmental flow obligations associated with the current wastewater effluent discharge, it may be feasible for Casitas to release some Lake Casitas water into the Ventura River near the wastewater treatment plant to meet environmental demands of the river. The amount released would be lower than the reductions in water demand because it would only represent the non-consumptive portion of M&I water use; this would result in a net increase in water supplies available to Casitas' customers. However, this does not address the City of Ventura's claim on OVSD wastewater effluent. (Boyle, 1992)

Table 4-29 lists the advantages and disadvantages of this project.

Advantages	Disadvantages
<ul> <li>Uses water to irrigate citrus groves and two golf courses, offsetting the demand on Casitas supply.</li> <li>Efficiently reuses existing supplies.</li> <li>Consistent with current integrated water planning and "One Water" concepts being adopted by progressive water utilities.</li> </ul>	<ul> <li>Requires farmers using drip irrigation to convert back to furrow irrigation.</li> <li>Water rights issues (OVSD does not own the rights to its effluent).</li> <li>May not be permittable due to downstream environmental flow requirements.</li> </ul>

Table 4-29 Advantages and Disadvantages of Secondary Reclaimed Water to the Ojai Valley Project

### **Current Status**

The project is not in active status. OVSD prepared a board memorandum detailing their concerns and potential constraints for them to begin providing recycled water.

### **Recommendations Summary**

This project is not considered a viable option due to the issues discussed above. OVSD prepared a board memorandum stating their concerns regarding providing recycled water. Thus, despite the obvious



benefits of using locally available recycled water for non-potable uses, this project must be eliminated from consideration in the CWRP options analysis.

#### RW 04 - Tertiary Reclaimed Water to Rincon Orchards

#### **Project Description**

This project is similar to the previously discussed Recycled Water Project and Secondary Reclaimed Water Project in that OVSD wastewater effluent would be provided for non-potable water uses. In this project tertiary treated reclaimed water for OVSD would be distributed to orchards on the Rincon west of Lake Casitas, which are supplied by Casitas, in an aim to offset demands on Lake Casitas. (Boyle, 1992)

This project has the same regulatory and environmental constraints as the previously discussed reclaimed water projects.

Table 4-30 lists the advantages and disadvantages of this project.

#### Table 4-30 Advantages and Disadvantages of Tertiary Reclaimed Water to Rincon Orchards Project

Advantages	Disadvantages
<ul> <li>Reduces the use of Lake Casitas' water.</li> <li>Efficiently reuses existing supplies.</li> <li>Consistent with current integrated water planning and "One Water" concepts being adopted by progressive water utilities.</li> </ul>	<ul> <li>In summer months, potable water from Casitas would be required.</li> <li>Water rights issues (OVSD does not own the rights to its effluent).</li> <li>May not be permittable due to downstream environmental flow requirements.</li> </ul>

### **Current Status**

The project is not in active status. OVSD prepared a board memorandum detailing their concerns and potential constraints for them to begin providing recycled water.

### **Recommendations Summary**

This project is not considered a viable option. OVSD prepared a board memorandum detailing their concerns regarding providing recycled water. Thus, despite the obvious benefits of using locally available recycled water for non-potable uses, this project must be eliminated from consideration in the CWRP options analysis.

### RW 05 – Spray Fields in Canada Larga

### **Project Description**

Fodder crops in the Canada Larga area are planned to be irrigated with secondary treated wastewater effluent from the OVSD. To date, this project has not been implemented.



There is not enough irrigable acreage of fodder crops in Canada Larga to use all the available effluent, so this project would establish "spray fields" to utilize the excess water. A "spray field" is an irrigation practice in which more water is applied to a field than would be consumed by the crops, ultimately aiming to recharge the groundwater basin. With the hilly topography of the area, it is likely some of the percolated water would emerge from the ground and flow into the Canada Larga Creek, which flows into the Ventura River. This water could then be picked up at the Robles Diversion and stored in Lake Casitas for use by Casitas (Boyle, 1992)

To verify the feasibility of spray fields concept in this area, pilot studies are needed to determine percolation rates, whether percolated groundwater would emerge into Canada Larga Creek, and the quality of the emergent water. Studies are needed to verify the project would meet State health regulations governing recharge of reclaimed water, including blending with other sources, depth to groundwater, retention time, and distance to potable water wells. The Regional Water Quality Control Board would have to permit the project. (Boyle, 1992)

Table 4-31 lists the advantages and disadvantages of this project.

Advantages	Disadvantages
• The Ventura River would gain an additional source without any reclaimed water directly discharged to a surface water body.	<ul> <li>Feasibility is unknown without further studies of hydrogeology and water quality.</li> <li>Benefits to Casitas would be minor.</li> <li>High capital cost \$10,721,000 in 1992. (Boyle, 1992)</li> <li>Water rights issues (OVSD does not own the rights to its effluent).</li> <li>May not be permittable due to downstream environmental flow requirements.</li> </ul>

Table 4-31 Advantages and Disadvantages of Spray Fields in Canada Larga

### **Current Status**

Not currently being pursued by Casitas.

### **Recommendations Summary**

This project is not considered a viable alternative. OVSD prepared a board memorandum stating their concerns regarding providing recycled water. Thus, despite the obvious benefits of using locally available recycled water for non-potable uses, this project must be eliminated from consideration in the CWRP alternatives analysis.

### RW 06 – Ojai East Septic Recharge

### **Project Description**

The Ojai East Septic Recharge project includes the installation of a package wastewater treatment plant in east Ojai Valley and a network of sewer collection mains and laterals to collect sewage that is



currently being disposed in septic systems. The influent is treated by means of a centralized redundant extended aeration system including anoxic chambers and clarification followed by membrane filtration and disinfection to meet tertiary standards. The treated effluent is then piped to the lower pond in the San Antonio Creek Spreading Grounds (SACSGRP) to help recharge the Ojai Groundwater Basin. Production is estimated to be approximately 70 AFY. Current conditions may allow upwards of 35 AFY to recharge with 35 AFY taken up cumulatively by local trees and plants at individual sites. The project would provide the ancillary benefit of replacing septic systems with a centralized treatment system, which could improve local groundwater quality.

Anticipated capital cost of the project is \$11 million, and operation costs would be approximately \$100,000 per year. This is very expensive for 35-70 AFY of new supply. East Ojai is very rocky, and, as a result, cost for the sewer pipeline installation is anticipated to be very high. Project duration is estimated at 8 years from initiation of design to completion of construction.

Table 4-32 lists the advantages and disadvantages of this project.

### Table 4-32 Advantages and Disadvantages of Ojai East Septic Recharge Project

Advantages	Disadvantages
<ul> <li>Increases recharge to Ojai Basin.</li> <li>Uses existing recharge facilities.</li> <li>Replaces septic systems with a centralized treatment system, which improves groundwater quality.</li> </ul>	<ul> <li>Expensive capital and variable costs</li> <li>Minimal supply created (35 AFY).</li> <li>Estimated 8-year timeline from initial design to completed construction.</li> <li>Triggers the CEQA process and multiple regulatory permits.</li> </ul>

### **Current Status**

This project was on the 2016 Water Security Project list but has not been studied further and is not currently being pursued by Casitas.

### **Recommendations Summary**

This project was a part of the 2016 Water Security Project list. It is recommended that this project be included in the CWRP list of alternatives for evaluation.

### 4.4.3 Summary

**Table 4-33** below summarizes all recycled water project options reviewed in this document and significant criteria associated with each.



Option No.	Project	Cost	Estimated Annual Yield	Current Water Security Project	Early Action Plan Project	Current Status	Viable for CWRP Option
RW 01	Recycled Water from Ojai Valley Sanitary District (OVSD)	Not Available ³	Not Available	×	×	The project is not in active status. OVSD prepared a board memorandum detailing their concerns and potential constraints for them to begin providing recycled water.	×
RW 02	Scalping Plant on OVSD Collector Main for Re-Use at Ojai Valley Inn	Unit Capital Cost = $$63,514/AFY^1$ Capital Cost = $$4.7M^1$ (Unit Capital Cost = $$27,027/AFY$ ) ⁶ (Capital Cost = \$2,000,000 O&M = \$150,000/year) ⁶	74 AFY ¹	×	×	Not currently being pursued by Casitas.	×
RW 03	Secondary Reclaimed Water to the Ojai Valley	Unit Capital Cost = \$21,563/AFY ¹ Capital Cost = \$48.3M ¹ (Unit Capital Cost = \$9,286/AFY) (Capital Cost = \$20.8M) ⁶	2,240 AFY ⁶	×	×	The project is not in active status. OVSD prepared a board memorandum detailing their concerns and potential constraints for them to begin providing recycled water.	×
RW 04	Tertiary Reclaimed Water to Rincon Orchards	Unit Capital Cost = \$10,508/AFY ¹ Capital Cost = \$20.7M ¹	1,970 AFY ⁶	×	×	The project is not in active status. OVSD prepared a board memorandum detailing their concerns and potential constraints	×

### Table 4-33 Summary of Recycled Water Project Options



		(Unit Capital Cost = \$4,517/AF) (Capital Cost = \$8.9M) ⁶				for them to begin providing recycled water.	
RW 05		Unit Capital Cost = \$11,160/AFY ¹ Capital Cost =				Not currently being pursued by Casitas.	
	Spray Fields in Canada Larga	\$25.0M ¹ (Unit Capital Cost = \$4,777/AFY)	2,240 AFY ⁶	×	×		×
		(Capital Cost = \$10.7M) ⁶					
RW 06		Unit Capital Cost = \$345,714/AFY ¹				Not currently being pursued by Casitas.	
Si C P T	Septic Collection, Package Treatment,	Capital Cost = \$12.1M ¹	35 AFY ²	×			
		((Unit Capital Cost = \$314,286/AFY) ²			X		$\checkmark$
		(Capital Cost = \$11M					
		Annual O&M = \$100,000) ²					

¹2019 dollars based on RSMeans Historical Cost Index (RSMeans, n.d.) ² Original 2016 Estimate (WREA & KG, 2016)

³ To comply with the Nutrient TMDL, OVSD estimates that it will have to spend \$10-15 million over the next 7 years

⁶ Original 1992 estimate (Boyle, 1992)



# 4.5 Local Agreement (LA) Options

### 4.5.1 Introduction

Agreements with local cities, purveyors, and agencies that were outdated and/or didn't optimize Casitas' water usage capabilities were considered for revision or development. The options listed below describe three local agreements explored historically, the current status of each, and recommendations moving forward.

### 4.5.2 Option Project Descriptions

### LA 01 – OBGMA Co-operation Agreement (Inter-basin) with Upper Ventura River Groundwater Basin Sustainability Agency

### **Project Description**

This project is part of the OBGMA overall Groundwater Management Plan whereby the OBGMA works with other stakeholders in the Ventura River Watershed to effectively understand and manage the drainage area that includes Ojai. Such a project is also included in the suite of tasks applied for by the Watersheds Coalition of Ventura County, under the Ventura River Watershed Management Plan (VRWMP). The UVRGA will develop its GSP and the OBGMA would review and provide comment as well as collaborate on linking projects. Of special concern is the shared boundary on the western side of the Ojai Basin and the discharge to San Antonio Creek from the Ojai Basin. Both agencies are implementing detailed studies to measure outflow and inflow via this waterway. (Ojai Basin Groundwater Management Agency, 2018)

 Table 4-34 lists the advantages and disadvantages of this project.

Advantages	Disadvantages
• Promotes interagency cooperation to improve efficiency of overall water resources management in the Casitas region.	<ul> <li>Casitas is not a party to the agreement and does not control how it is carried out.</li> <li>Water supply benefits to Casitas are highly uncertain.</li> </ul>

### **Current Status**

The agreement is outside of Casitas' control and is between OBGMA and UVRGA.

### **Recommendations Summary**

It is recommended that Casitas continues to track this agreements progress and understand any potential benefits but this project is not recommended to be a part of the CWRP for long term water supply.



### LA 02 - Conjunctive Use Agreement with OBGMA

### **Project Description**

OBGMA has proposed developing a conjunctive use agreement with Casitas by which the agencies would work together to create an agreement for optimizing the water storage capacities in both Lake Casitas and the Ojai groundwater basin. Criteria are proposed for tying pumping rates of OBMGA groundwater to Lake Casitas' storage during dry periods when lake levels are low. Benefits to Casitas' water supply have not been estimated. These criteria do not necessarily increase the long-term yield of Casitas' supplies but would manage them better during droughts when both surface water and local groundwater are decreased.

Currently, a significant amount of surface water from Lake Casitas evaporates every year, reducing the supply available for Casitas customers. If Casitas and OBGMA could develop a plan for storage of more surface water in the Ojai Basin groundwater aquifer as part of the Conjunctive Use Agreement, it would improve overall yield for the combined surface water and groundwater resources by reducing losses.

 Table 4-35 lists the advantages and disadvantages of this project.

Advantages	Disadvantages
<ul> <li>Improved efficiency of conjunctive groundwater</li></ul>	<ul> <li>Casitas must rely on OBGMA for managing the</li></ul>
and surface water management. <li>Possibility to increase overall yield by reducing</li>	groundwater portion of a conjunctive use
evaporation losses from Lake Casitas.	program.

### **Current Status**

The OBGMA is the lead agency to develop the conjunctive use agreement. At this time a draft has been prepared and is in the review process with stakeholders. Additional investigation may be warranted into options for increasing surface water recharge in lieu of storage in Lake Casitas to reduce evaporation losses.

### **Recommendations Summary**

Casitas supports the conjunctive use plan and prefers that OBGMA lead and fund the effort. It is not recommended this project be included in the CWRP list of options for evaluation as it is not a Casitas project.

### 4.5.3 Summary

**Table 4-36** below summarizes all local agreement options reviewed in this document and significant criteria associated with each.



### Table 4-36 Summary of Local Agreement Options

Option No.	Project	Cost	Estimated Annual Yield	Current Water Security Project	Vater Action curity Plan	Current Status	Viable for CWRP Option	
LA 01	OBGMA Co- operation Agreement (Inter-basin) with Upper Ventura River Groundwater Basin Sustainability Agency	Not Available	Not Available	×	X	In Progress	Option	
LA 02	Conjunctive Use Agreement with OBGMA	Not Available	Not Available	×	×	OBGMA is developing a draft agreement	×	

## 4.6 Maintenance and Operation Project (MO) Options

### 4.6.1 Introduction

Though maintenance and operation projects do not provide new sources of supply, they can prevent unnecessary losses and/or capture water otherwise lost due to inefficient systems. Several maintenance and operation projects have been considered by Casitas throughout the years. The options listed below describe eight projects explored historically, the current status of each, and recommendations moving forward.

### 4.6.2 Option Project Descriptions

### MO 01 - Environmental/Habitat Modifications

### **Project Description**

The Environmental/Habitat Modification project consists of activities to reduce the amount of a major water consuming plant in the Casitas service area and contributing watershed, *Arundo donax* (*Arundo*). Turfgrass is also considered a major water consuming plant, but to a considerably lesser extent and is part of regular conservation measures. Therefore, this project focuses only on removal of *Arundo*.

*Arundo* is an invasive species with very high water consumption; the rate of water loss is estimated at approximately six times more than that of the native riparian vegetation. Estimates of *Arundo* water use vary between 1 and 48 AFY/acre, with a reasonable estimate of 24 AFY/acre water use (California



Invasive Plant Council, 2011). *Arundo* removal and replacement with native riparian plants would reduce evapotranspiration losses and result in net savings of approximately 20 AFY per acre of *Arundo* removed. This would improve recharge to the groundwater basin as well as help keep the river alluvium more saturated.

*Arundo* removal and replacement with native species can vary in cost based on method of removal. Methods meeting all County requirements has a cost of approximately \$20,000 per acre, and other methods could cost as much as \$579,000 per acre (Ventura County Watershed Protection District, 2010; WREA & KG, 2016). However, *Arundo* removal is not permanent and ongoing management programs are required to control this invasive species.

The Ventura River Watershed Council has included an Arundo-Free Watershed Campaign as one of their top six priority projects per the 2015 Ventura River Watershed Management Plan (Ventura River Watershed Coordinator, 2015). In 2015, it was estimated that over 180 acres of land in the Ventura River watershed were covered with *Arundo*, after 270 acres of *Arundo* were already removed.

 Table 4-37 lists the advantages and disadvantages of this project.

### Table 4-37 Advantages and Disadvantages of Environmental/Habitat Modifications

Advantages	Disadvantages
<ul> <li>No water rights or legal issues</li> <li>Does not trigger environmental permitting requirements.</li> </ul>	<ul> <li>Arundo control requires continuous effort and expense.</li> <li>Benefits of controlling Arundo and other non-native, high water consuming vegetation are difficult to document.</li> </ul>

### **Current Status**

Casitas has previously offered grant-funded rebates to direct customers for turfgrass removal.

### **Recommendations Summary**

The Environmental/Habitat Modifications Project was a lower tier project in the 2016 Preliminary Water Security Project Analysis. It is recommended to include this project in the CWRP to further investigate its potential benefits.

### MO 02 - Ventura River Watershed Infrastructure Improvements

### **Project Description**

This project is a collection of general infrastructure improvements to mitigate water losses or to optimize operational efficiency of current water systems. Individual projects included in this category include the Existing Water Supply Infrastructure Reliability Improvements, the Contingency Water Storage Project, and the Ventura Water – Casitas Conduit Intertie. These projects are briefly described below.



- Existing Water Supply Infrastructure Reliability Improvements: Replace or retrofit aging or threatened water supply tanks, wells, pipes, and other conveyance and storage equipment to reduce water losses, ensure supply reliability, and bring infrastructure up to earthquake standards. (Ventura River Watershed Coordinator, 2015)
- Contingency Water Storage Project: Install decentralized contingency water storage. (Ventura River Watershed Coordinator, 2015)
- Ventura Water Casitas Conduit Intertie: Install a new 5.5-mile pipeline from Lake Casitas to the City of Ventura, and a pump station, to provide Casitas with a backup for potential water service delivery interruption to the Rincon area and to improve the City of Ventura's water supply reliability and system operational abilities. (Ventura River Watershed Coordinator, 2015)

 Table 4-38 lists the advantages and disadvantages of this project.

### Table 4-38 Advantages and Disadvantages of Ventura River Watershed Infrastructure Improvements Project

Advantages	Disadvantages
<ul> <li>Ensures supply reliability and overall system operational abilities.</li> <li>Maximizes efficiency of existing system components.</li> <li>Delays the need for additional new water supply projects.</li> </ul>	<ul> <li>Actual benefits in terms of reduced losses or more efficient water management may be difficult to quantify.</li> <li>Benefits may be realized infrequently when emergency systems or alternate supplies are needed.</li> </ul>

### **Current Status**

These projects are projects and or programs proposed by Ventura River Watershed Management Plan. Casitas participates as necessary for projects directly involving Casitas.

### **Recommendations Summary**

These projects are not recommended to be a part of the CWRP plan.

### MO 03 – Fire Hydrant and Dead-End Flush Re-Use

### **Project Description**

The Fire Hydrant and Dead-End Flush Water Re-Use project is based on the concept of capturing the flush water generated from maintenance of fire hydrants and dead-end water distribution lines and using it for irrigation. Casitas completes fire hydrant and dead-end flushing on an as-needed basis, whenever the chlorine residual drops below a pre-determined level or when other water quality issues are present. A large diameter hose and 5,000-gallon truck could be utilized to capture and temporarily store the water and then deliver it to a prearranged user. Casitas records show that approximately 0.3 AFY of water is lost to flushing. Although it is a good practice not to "waste" water, the re-use of flush water does not represent a major source of "new" water for Casitas. No project cost information available at this time. (WREA & KG, 2016)



### Table 4-39 lists the advantages and disadvantages of this project.

#### Table 4-39 Advantages and Disadvantages of Fire Hydrant and Dead-End Flush Re-Use Option

Advantages	Disadvantages
<ul> <li>Captured flush water could be used for irrigation, reducing demand for new supplies.</li> <li>Demonstrates Casitas' commitment to using best practices to reduce lost water to the greatest extent practical.</li> </ul>	<ul> <li>The re-use of flush water would recover only about 0.3 AFY and does not represent a major source of "new" water for Casitas.</li> </ul>

### **Current Status**

This is an active annual maintenance project.

### **Recommendations Summary**

Re-use of fire hydrant and dead-end flushing water is a lower tier project in the 2016 Preliminary Water Security Project Analysis. It is recommended that Casitas employ this practice to the extent practical, but the benefits are too small for this project to be considered in the CWRP comparison of new supply options.

### MO 04 – Resale Water Company System Retrofit/Rehabilitation

### **Project Description**

In this project, Casitas would assist resale agencies to retrofit or rehabilitate their systems to rely less on Casitas supplies. For example, Casitas has assisted Senior Canyon Mutual Water Company to improve the reliability of its groundwater resources. (UWMP, 2016) As shown in **Table 3-5**, resale customers are expected to have a demand of 6,500 AFY in 2040, or about 37 percent of Casitas' total demand. If retrofit and rehabilitation projects could generate a reduction in losses or improvement in reliability of 10 percent, the benefit to Casitas would be 650 AFY in supply that could be used for other customers.

 Table 4-40 lists the advantages and disadvantages of this project.

Table 4-40 Advantages and Disadvantages of Resale Water Company System Retrofit/Rehabilitation

Advantages		Disadvantages		
•	Improves efficiency of existing infrastructure. Requires minimal permitting.	•	Casitas would have to rely on other water entities to make the desired system improvements.	

### **Current Status**

Casitas is not actively assisting another agency at this time.

### **Recommendations Summary**

This project is not recommended to be a part of the CWRP.



#### MO 05 – Leak Detection and Repair Program

#### **Project Description**

Per the 2010 UWMP, a much more aggressive leak detection and repair program was implemented by Casitas as a recommendation from the 2005 UWMP. This program was effective in reducing losses in the Casitas water distribution system and extending the benefits of existing water supplies. This project would continue that practice and expand it if practical. No estimate of water savings was provided in previous documents.

**Table 3-5** shows the 2040 Casitas retail and agricultural demand is estimated to be 11,000 AFY. If minimal gains of 2 percent can be achieved by a more aggressive leak detection and repair program, the savings would be 220 AFY.

Table 4-41 lists the advantages and disadvantages of this project.

#### Table 4-41 Advantages and Disadvantages of Leak Detection and Repair Program

Advantages	Disadvantages
<ul> <li>A leak detection and repair program has already been implemented by Casitas.</li> <li>Lower water losses each year would stretch the benefits of existing water supplies.</li> <li>Maximizes efficiency of existing infrastructure.</li> </ul>	<ul> <li>Because Casitas already has a strong leak detection and repair program, the additional savings may be minimal.</li> <li>Marginal cost of saved water may be high if straightforward leak detection and repair projects have already been completed.</li> </ul>

#### **Current Status**

A leak detection and repair program is currently in progress. This project would expand the current program.

#### **Recommendations Summary**

This should be considered an on-going maintenance and operations project; it is not recommended for inclusion in the CWRP option evaluation.

#### MO 06 – Sediment Removal at North End of Lake Casitas

#### **Project Description**

This project was identified in the 2005, 2010, and 2016 UWMP and would involve excavating the north end of Lake Casitas during low water level periods to increase the reservoir storage volume. Excavating a portion of the reservoir pool area would recover some of the storage volume lost due to sediment accumulation since the dam was constructed in 1959.

This option involves extensive permits and approvals from Reclamation and environmental regulatory agencies. Further study is required to estimate the additional storage created, cost estimates, and other planning level details.



 Table 4-42 lists the advantages and disadvantages of this project.

Table 4-42 Advantages and Disadvantages of Sediment Removal at North End of Lake Casitas Project

Advantages	Disadvantages
<ul> <li>Improves benefits of existing reservoir by recovering some of the original storage volume lost to sedimentation.</li> <li>Contributes new storage without constructing a new reservoir.</li> </ul>	<ul> <li>Extensive permitting requirements.</li> <li>Created storage will eventually be lost again due to future sedimentation.</li> </ul>

#### **Current Status**

Although suggested as a potential project, this project has not been implemented due to environmental and financial feasibility concerns.

#### **Recommendations Summary**

Due to the difficulty of creating additional storage volume by constructing new reservoirs in the current permitting and political environment, it is recommended this option be included in the CWRP option evaluation process.

#### MO 07 – Pipeline from Matilija Chlorinator to Hot Springs

#### **Project Description**

This project involves replacing a portion (approximately 9,800 feet) of the existing 27-inch Matilija Conduit with smaller pipes. Currently, this pipe is oversized for the demands served by the pipeline which is causing water quality issues. The relative low velocity in the pipe during normal operations requires frequent flushing. Casitas' staff has stated the pipe is occasionally flushed once per week due to low chlorine residual levels.

Replacement options may include a new 12-inch and 8-inch pipe. It is assumed the replacement pipeline would be installed generally along the same alignment as the existing pipe with the possibility of using the existing pipe for slip-lining, especially for the Ventura River crossing. According to Casitas' records, flushing the Matilija conduit in the area requires approximately 12 AFY which is discharged into the groundwater basin.

By changing to smaller pipe and assuming the same flushing frequency and time, based solely on pipe diameters, the total flush volume "saved" would be approximately 9.6 AFY. This water would remain in Lake Casitas. The volume would probably be greater since the number of flushes would likely be lower due to the smaller pipe having fewer water quality issues. Anticipated capital cost of the project is \$1.13 million. (WREA & KG, 2016)

 Table 4-43 lists the advantages and disadvantages of this project.



Advantages	Disadvantages
<ul> <li>Saves approximately 9.6 AFY by requiring less flushing.</li> <li>Maximizes benefits of existing infrastructure.</li> </ul>	<ul> <li>Expensive on a unit cost basis (\$116,802/AFY (WREA &amp; KG, 2016))</li> <li>Current flushing water percolates to the Upper Ventura River Basin, so some of it already returns as usable supply.</li> </ul>

#### Table 4-43 Advantages and Disadvantages of Pipeline from Matilija Chlorinator to Hot Springs

#### **Current Status**

This project is currently scheduled for implementation by Casitas in 2020-2022.

#### **Recommendations Summary**

This is primarily a maintenance project rather than a water supply project. Because of its low yield and high unit cost, it is not recommended for inclusion in the CWRP option evaluation study.

#### MO 08 – Robles Diversion Fish Passage Improvements

#### **Project Description**

In order to augment the natural inflow to Lake Casitas, Casitas operates the Robles Diversion Dam along the Ventura River. The **Robles Diversion Dam diverts** water to the Robles Diversion Canal, which in turn feeds Lake Casitas. Due to the Biological **Opinion from the National** Marine Fisheries Service (2003) regarding the endangered steelhead trout, Casitas was required to install and operate a fish screen at the Robles Diversion Dam. After the installation of the fish screen in 2004, the Robles Diversion no longer could divert the maximum



Figure 4-5. Robles Diversion Fish Screen (MKN Associates, 2019)

design flows into Lake Casitas due to frequent clogging and blockage of the fish screens by debris in the river, especially during high flows. The existing cleaning equipment cannot keep up with the debris loading, which limits the amount of water diverted into the Robles Diversion Canal. This is especially problematic after wildfires in the tributary watershed such as the most recent Thomas Fire when the sediment and debris load significantly increased. The existing operations reduce the flow through the screens or shut the diversion down in order to perform manual cleaning, both of which significantly reduce the amount of flow diverted to the lake during storm runoff.



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To optimize the operation of the Robles Diversion Dam and maximize the intake of the diversion structure into the Robles Diversion Canal, the following alternatives were proposed per the Robles Diversion Fish Screen Alternatives Feasibility Study (MKN Associates, 2019):

- 1. Improve the existing brush system.
- 2. Install a fixed manifold back-spray system to work in tandem with an improved brush system.
- 3. Replace the existing fixed screen system with a traveling screen.
- 4. Reduce the load on the existing screen system by suppling the fish ladder auxiliary flow separately from the screened v-channel flow. This is intended to be used in combination with Alternative 1.

The costs range from \$30,000 to \$12M depending on the alternative and selected components. The Study did not include an evaluation of the additional yield that would be captured after implementing these project alternatives.

Table 4-44 lists the advantages and disadvantages of this project.

#### Table 4-44 Advantages and Disadvantages of Robles Diversion Fish Passage Improvements

Advantages	Disadvantages
<ul> <li>Most alternatives would improve the performance of the diversion and have little potential to create negative biological or other impacts.</li> <li>Alternative 1 can be implemented immediately.</li> <li>Maximizes benefits of the existing diversion system.</li> </ul>	• Significant infrastructure costs and time to implement associated with Alternatives 2-4.

#### **Current Status**

Casitas has completed the feasibility study and will be implementing Alternative 1 by summer 2019. Casitas is moving forward with a pilot program in winter 2019 to determine which of the other three alternatives should be constructed in 2020.

#### **Recommendations Summary**

The existing fish passage screen is susceptible to clogging with debris. Improving operation of the cleaning system will increase the flows diverted from the Ventura River to Lake Casitas. Given the significance of this project, it is recommended this project be included in the CWRP list of options for evaluation.

### 4.6.3 Summary

**Table 4-45** below summarizes all maintenance and operation project alternatives reviewed in thisdocument and significant criteria associated with each.



Option No.	Project	Cost	Estimated Annual Yield	Current Water Security Project	Early Action Plan Project	Current Status	Viable for CWRP Option
MO 01	Environmental /Habitat Modifications	(Capital Cost = Arundo removal ~\$20,000/acre) ²	20 AFY/acre ^{2,8}	×	×	Casitas offers rebates for direct customers for certain environmental/ha bitat modifications.	~
MO 02	Ventura River Watershed Infrastructure Improvements	Various per annual fiscal year budget	Not Available	×	×	These projects are projects and or programs proposed by Ventura River Watershed Management Plan. Casitas participates as necessary for projects directly involving Casitas.	×
MO 03	Fire Hydrant and Dead-End Flush Re-Use	Not Available	0.3 AFY ²	×	×	Not enough to represent new water for Casitas.	×
MO 04	Resale Water Company System Retrofit/Rehab ilitation	Various per annual fiscal year budget	650 AFY ⁹	×	×	Casitas has assisted Senior Canyon Mutual Water Company to improve reliability of groundwater resources.	×
MO 05	Casitas Leak Detection and Repair Program	Variable costs	Not Available	×	×	Program in progress.	×

### Table 4-45 Summary of Maintenance and Operation Project Options



MO 06	Sediment Removal at North End of Lake Casitas	Not Available	Not Available	×	×	Not implemented, environmental and financial feasibility and justification assessment is needed.	~
MO 07	Pipeline from Matilija Chlorinator to Hot Springs	Unit Capital Cost = $$125,000/AFY^1$ Capital Cost = $$1.2M^1$ (Unit Capital Cost = $$116,667/AFY)^2$ (Capital Cost = $$1,120,000)^2$	9.6 AFY ²	×	×	This project is currently scheduled for implementation by Casitas in 2020-2022.	×
MO 08	Robles Diversion Fish Passage Improvements	Various alternatives ranging from \$4M to \$12M of capital costs	Annual yield values have not been determined	~	~	Initial stages is being implemented this summer. Pilot study beginning winter 2019	~

^{1.}2019 dollars based on RSMeans Historical Cost Index (RSMeans, n.d.)

² Original 2016 Estimate (WREA & KG, 2016)

⁸20 AFY/acre of arundo removal estimated to recharge groundwater

⁹ Assuming a 10 percent reduction in estaimted annual supply to resale customers. (UWMP, 2016)

## 4.7 Conservation Project Options (C)

### 4.7.1 Introduction

The conservation project options listed below is described in terms of what conservation measures have been explored historically, the current status of the project options, and recommendations moving forward. Both conservation options are the same program but would vary with how much reduction is planned.

### 4.7.2 Option Project Descriptions

#### C 01/02 – Conservation/Enhanced Demand Management Programs (5%/10%)

#### **Project Description**

Casitas has a long history of implementing conservation policies and demand management measures (DMMs). These policies and DMMs have been remarkably effective in reducing water demand during



drought periods. During the most recent drought, Casitas customers maintained steady conservation numbers. While Casitas rates remained the same, overuse penalties were implemented as part of the allocation program under the more severe stages of drought. As of April 2019, the State of California declared the drought over, but Casitas customers are reminded daily of the water shortage when looking at the low Lake Casitas levels.

Casitas has a comprehensive water conservation program directed toward its different classes of customers. The following sections discuss the three main customer types retail, agricultural, and resale. Casitas water is provided to three main sectors:



### **Retail Customers**



One of the key measures of the comprehensive water conservation program is establishment of a water allocation for each customer under the WEAP. Other conservation programs and measures include:

Public education and outreach (newsletters, billing statement messages, website, social media) - Example per Figure 4-6

- Customer water survey
- Free water conservation devices
- Rebate for direct customer turf replacement program (other rebates could include high efficiency washing machines, high efficiency toilets, smart irrigation controllers)
- Staff assistance (Public Affairs Resource Manager, Water Conservation Specialist, Water Conservation Analyst, Water Conservation Technician)

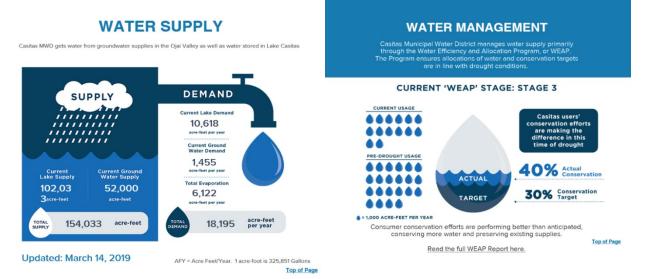
Casitas' municipal customers responded to mandatory and voluntary demand management measures implemented during the recent drought by reducing overall consumption by 40 percent (per Casitas' Water Security website). This remarkable reduction in water use was driven by a combination of structural change (e.g., plumbing fixture replacement and turf replacement) and behavioral change (e.g., watering before 10:00 AM and after 6:00 PM, taking shorter showers). While much of the per capita water savings achieved during this period are expected to be permanent, customers may return to previous behaviors as the pressure to conserve in direct response to an ongoing drought is relaxed. However, Casitas' allocation program may promote continued conservation efforts and limit the water bounce back effect.

Casitas' water conservation staff should explore strategies for retaining as much of the recent per capita water use reduction as possible such that they become permanent savings. As extensive policies and



conservation measures have already been implemented, maintaining gains in water conservation beyond the set allocation limits will likely be achieved through voluntary public programs. In general, Casitas should continue to promote its existing public programs to encourage participation for those who have not been engaged already. Casitas has a robust conservation program and it is recommended they continue with the following practices:

- Aggressive public education and outreach programs, with emphasis on thanking customers for their actions in the past and "maintaining the gains" already achieved.
- Rebate programs if they still appear to be effective.
- Promotion of the water survey program. This program is offered to single-family and multifamily residential customers, for direct retail customers, and for wholesale agency customers. Casitas' direct survey program includes an evaluation of all indoor and outdoor water use. The survey program includes an inspection of water appliances, leak checks for toilets and faucets, and a landscape inspection for irrigation efficiency and plant type. After completion of the survey, a customer is provided with a summary report on the improvements that can be completed both inside and outside of the home to assist water use efficiency. The report also indicates water and dollar savings that could be achieved, along with a summary of rebate opportunities provided by Casitas. Completion of the water survey program for all customers receiving supply from Casitas, who have not already done so, would help in reducing any extraneous water usage.



#### Figure 4-6 Examples of Water Supply and Water Management Public Outreach from Casitas' Website

Casitas should identify and target any structural changes that have not yet been implemented with respect to residential, direct retail, or wholesale agency customers, as these changes will not be susceptible to the "bounce back" that can typically occur in post-drought conditions. Promotion of



voluntary programs and public messaging to not fall back into pre-drought habits can be used to maintain behavioral changes that have been achieved.

### Agricultural Customers



Water savings were achieved through improving efficiency and use in agricultural water consumption. Per the 2015 UWMP, local agricultural water demand is historically the highest water demand among Casitas customer categories. This agricultural water demand also fluctuates dramatically from year to year. Agricultural customers tend to have a higher water demand from Casitas during years of low annual rainfall, as primary groundwater sources are quickly depleted, and surface water supplies are used. Although Casitas does not meet the requirements of an agricultural water supplier, it voluntarily provided elements of an Agricultural Water Management Plan (AWMP) in its 2015 UWMP.

The AWMP Act requires agricultural water supplies to address Efficient Water Management Practices (EWMP) with two separate classifications, one for critical activities and another for conditional activities. Casitas has implemented the critical EWMPs as required, which include accurate measurement of water deliveries to individual farming operations and adopting a pricing structure for agricultural water customers based at least partially on the quantity of water delivered. However, a focus on adoption of more conditional activities could assist in helping achieve additional water savings. Per the 2015 UWMP, conditional activities must be implemented by agricultural water suppliers if they are locally cost-effective and technically feasible. Examples of conditional activities offered by Casitas include:

- Real-Time Crop Irrigation Information Casitas provides a link to the Soule Park Golf Course weather station, and additional irrigation information is made available to local farmers upon request.
- Provide Water Delivery Information to Water Users Casitas provides water usage reports to water users upon request
- On-Farm Evaluations Casitas contracts with the Ventura County Resource Conservation District's mobile laboratory for irrigation evaluation. Farmers are provided with free irrigation system audits/evaluations which include recommendations for BMPs. Per the 2015 UWMP, a potential future element of this program could provide financial incentives to farmers who choose to implement recommendations made as part of the irrigation system audit/evaluation.

#### Resale Customers



Per the 2015 UWMP, roughly one-third of Casitas' water is sold to entities (such as the City of Ventura) who resell water to their customers. Casitas' conservation programs account for water use among these resale customers as well as their retail customers.

Casitas' WEAP policies address resale customers by:



- establishing an annual water allocation each year;
- setting an objective of parity between the resale agency customers and Casitas customers in applying similar overall water use restrictions and financial penalties in each WEAP stage; and
- establishing a requirement to implement water conservation measures in accordance with the State's or California Urban Water Conservation Council's best management practices, responsibly maintain water system metering and pipeline systems to reduce water losses, and when necessary or when asked to do so, implement water demand reduction measures similar to or more restrictive than those imposed by Casitas.

Customers of resale entities may be less inclined to maintain water conserving practices if their water providers are not as aggressive as Casitas in promoting the importance of water conservation to long-term water security. Part of Casitas' post-drought water conservation strategy should include a component for ensuring its resale partners continue to implement best practices in water conservation as a condition of their water service contracts.

Table 4-46 lists the advantages and disadvantages of this project.

Advantages	Disadvantages
<ul> <li>Conservation efforts would reduce the demand on Lake Casitas.</li> <li>Casitas has a strong conservation program to build on.</li> <li>Conservation has been effective in the past and would be part of any future water supply plan.</li> </ul>	<ul> <li>Casitas' customers may experience "conservation fatigue".</li> <li>Benefits of additional conservation measures are difficult to predict.</li> <li>Agricultural conservation measures are dependent on farmers; new measures in orchards could only be done when orchards are being replaced.</li> </ul>

Table 4-46 Advantages and Disadvantages of Conservation/Enhanced Demand Management Programs

#### **Current Status**

Ongoing - several programs already in use but could be evaluated and updated as necessary.

#### **Recommendations Summary**

Casitas should continue to promote the existing conservation programs available to all municipal, agricultural, and resale customers and should develop a strategic plan for customer outreach and conservation program modifications after the current drought. Casitas currently provides, and should continue to provide, incentives to help promote on-farm evaluations and ensure its resale entities continue to aggressively promote post-drought conservation among their customers. It is recommended this project be included in the CWRP list of options for evaluation.



### 4.7.3 Summary

**Table 4-47** below summarizes all conservation project options reviewed in this document and significantcriteria associated with each.

#### **Table 4-47 Summary of Conservation Project Options**

Option No.	Project	Cost	Estimated Annual Yield	Current Water Security Project	Early Action Plan Project	Current Status	Viable for CWRP Option
C 01	Conservation/ Enhanced Demand Management Programs (5%)	Not Available	No additional yield	~	~	Ongoing	~
C 02	Conservation/ Enhanced Demand Management Programs (10%)	Not Available	No additional yield	~	~	Ongoing	~

## 4.8 Desalinated Water Project (DW) Options

### 4.8.1 Introduction

Casitas' proximity to the Pacific Ocean has offered potential to add desalinated water to its portfolio, either by utilizing current desalinated water plants, or by constructing a new one. The options listed below describe three desalinated water projects explored historically, the current status of each, and recommendations moving forward.

### 4.8.2 Option Project Descriptions

#### DW 01 – Desalinated Water from City of Santa Barbara

#### **Project Description**

The City of Santa Barbara reactivated their desalination plant in late 2017. The Desalination Plant as a full build-out capacity of 10,000 AFY but is currently operating around 3,125 AFY. The City of Santa Barbara is out to bid for the construction of a 24-inch water main to allow the distribution of desalinated water throughout the entire City water system including the South Coast Conduit that supplies Montecito Water District and CVWD. Desalinated water could be potentially be provided to the Casitas service area and reduce the demand on Lake Casitas. If Casitas proceeds with infrastructure for the SWP to connect into the CVWD system, these new facilities could be utilized to also receive desalinated water to help offset the reliance on Lake Casitas.



 Table 4-48 lists the advantages and disadvantages of this project.

#### Table 4-48 Advantages and Disadvantages of Desalinated Water from Santa Barbara

Advantages	Disadvantages
<ul> <li>Reduces demand on Lake Casitas water.</li> <li>Santa Barbara desalination plant is an existing facility so infrastructure investment and permitting are complete.</li> </ul>	<ul> <li>For Casitas use, significant pumping would be required to deliver desalinated water to a large number of M&amp;I customers.</li> <li>The desalination plant is operated by the City of Santa Barbara; Casitas would not have control over operation and maintenance.</li> </ul>

#### **Current Status**

None of the desalination options are currently being pursued by Casitas.

#### **Recommendations Summary**

It is recommended this project be included in the CWRP list of options for evaluation.

#### DW 02 – Casitas Desalinated Water Plant

#### **Project Description**

Proximity to the Pacific Ocean provides an opportunity for the Casitas to consider development of desalinated water supplies to supplement surface water supplies and to provide potential increased system reliability, most notably for coastal communities within the Casitas service area. For Casitas to move forward with a desalination project, a public consensus is needed, followed by a feasibility study to determine whether the project will have a positive cost-benefit result. (UWMP, 2005) Capital and operating costs of desalination plants are high, and most communities with desalination plants treat water as an emergency supply.

 Table 4-49 lists the advantages and disadvantages of this project.

#### Table 4-49 Advantages and Disadvantages of Casitas Desalinated Water Plant

Advantages	Disadvantages
<ul> <li>Reduces demand on Lake Casitas water.</li> <li>Provides an additional water supply with minimal reliability concerns.</li> </ul>	<ul> <li>Desalination plant is required within a reasonable proximity of Casitas customers.</li> <li>Significant pumping is required to deliver desalinated water to a large number of M&amp;I customers.</li> <li>Desalination plants are expensive to operate.</li> <li>Permitting and CEQA compliance may take years to complete.</li> </ul>



#### **Current Status**

None of the desalination options are currently being pursued by Casitas.

#### **Recommendations Summary**

It is recommended this project be included in the CWRP list of options for evaluation.

#### DW 03 - Ventura County Regional Desalinated Water Plant

#### **Project Description**

Ventura County formed a Desalination Task Force which started meeting in 1991. The task force was to assess the possibility of developing a desalination facility in the County and stay up to date on other desalination projects within California including the neighboring Santa Barbara County. At the time, the task force determined a desalination project should remain a future possibility; this decision was made after a year with significant rainfall which replenished the local supplies and reduced the urgency for developing countywide facilities, so this project was put on hold. (Ventura County Resource Management Agency & Ventura County Public Works Agency, 1994) Capital and operating costs of desalination plants are high, and most communities that have desalination plants treat water from them as an emergency supply.

 Table 4-50 lists the advantages and disadvantages of this project.

#### Table 4-50 Advantages and Disadvantages of Ventura County Regional Desalinated Water Plant

Advantages	Disadvantages
<ul> <li>Reduces demand on Lake Casitas water.</li> <li>Provides an additional water supply with minimal reliability concerns.</li> <li>Adds a new water supply for the coastal communities.</li> </ul>	<ul> <li>Impactful to the environment.</li> <li>Outside of Casitas' control.</li> <li>Desalination plants are expensive to operate.</li> <li>Permitting and CEQA compliance may take years to complete.</li> </ul>

#### **Current Status**

None of the desalination options are currently being pursued by Casitas.

#### 4.8.3 Summary

It is recommended this project be included in the CWRP list of options for evaluation.

**Table 4-51** below summarizes all desalinated water project options reviewed in this document andsignificant criteria associated with each.



Option No.	Project	Cost	Estimated Annual Yield	Current Water Security Project	Early Action Plan Project	Current Status	Viable for CWRP Option
DW 01	Desalinated Water from City of Santa Barbara	Not Available	Not Available	×	×	None of the desalination options are currently being pursued by Casitas.	~
DW 02	Casitas Desalinated Water Plant	Not Available	1,121 AFY ¹⁰	×	×	None of the desalination options are currently being pursued by Casitas.	~
DW 03	Ventura County Regional Desalinated Water Plant	Not Available	Not Available	×	×	None of the desalination options are currently being pursued by Casitas.	~

### Table 4-51 Summary of Desalinated Water Project Options

¹⁰Estimate per 2005 UWMP. However, the 2016 Final UWMP states no feasibility study has been done, so production rate is unknown





# CONCLUSIONS

# Section 5 Conclusions

Casitas has considered a wide range of water supply enhancement projects in the past 50 years. These have included large capital projects such as improvements to the Robles Diversion Canal and a connection to the State Water Project; small capital projects including improvements to wellfields and recycled water options; and non-structural projects such as water conservation and agreements with resale customers and regional agencies.

Because Lake Casitas and groundwater wells were a reliable source of supply under historical hydrologic conditions and demand management measures were effective, Casitas was not required to implement any of the major, expensive and complex water supply projects considered to date. However, risks to water supply reliability posed by future climate variability, environmental threats such as wildfires, and future demand require a more robust water supply portfolio.

The supply projects identified in this TM for consideration in the CWRP option analysis offer a broad array of options for evaluation and comparison. These are listed in **Table 5-1**.

Option. No.	Option Description	
SWP	State Water Project	
SWP 01	Deliveries via City of Ventura SWP Interconnect and Casitas-Ventura SWP Interconnection	
SWP 02	Calleguas Emergency Interconnection with Casitas	
SWP 03	Ventura-Santa Barbara Counties Interconnection	
<b>SWP 04</b>	Casitas-Calleguas Interconnection	
SWP 05	City of Ventura Supplemental Water or In-Lieu Water	
SW	Surface Water	
SW 03	Matilija Dam Groundwater/Surface Water	
SW 04	Expansion of Robles Canal	
SW 05	Construction of a New Dam Upstream of Lake Casitas	

#### Table 5-1 Recommended CWRP Long List of Water Supply Options List



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Option. No.	Option Description
GW	Groundwater
GW 01	Matilija Formation Deep Wells
GW 06	Ojai Basin Desalter Project
GW 08	Well Improvements in Ojai Groundwater Basin
RW	Recycled Water
RW 06	Ojai East Septic Collection, Package Treatment, Recharge
мо	Maintenance and Operations
MO 01	Environmental/Habitat Modifications
MO 06	Sediment Removal at North End of Lake Casitas
MO 08	Robles Diversion Fish Passage Improvements
с	Conservation
C 01	Conservation/Enhanced Demand Management Programs (5%)
C 02	Conservation/Enhanced Demand Management Programs (10%)
DW	Desalinated Water
DW 01	Desalinated Water from City of Santa Barbara
DW 02	Casitas Desalinated Water Plant
DW 03	Ventura County Regional Desalinated Water Plant





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#### Appendix B Draft Stakeholder Engagement Documentation Technical Memorandum

Casitas Comprehensive Water Resources Plan

June 8, 2020

Prepared for:

Casitas Municipal Water District

Prepared by:

Stantec Consulting Services Inc.

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## Section 1 Introduction

Casitas Municipal Water District (Casitas) prepared a Comprehensive Water Resources Plan (CWRP) to define a practical and defensible strategy for addressing current and future water supply needs. One of the important objectives of the CWRP planning process was to incorporate input from Casitas' stakeholders. For purposes of this project, stakeholders include community groups, public agencies, elected officials, and Casitas customers that could be affected by or that could influence the CWRP recommendations.

This Technical Memorandum summarizes the methods used for stakeholder engagement and the findings that were incorporated into the CWRP.

## Section 2 Stakeholder Engagement

### 2.1 Stakeholder Engagement Plan

Stantec and subconsultant Consensus prepared a Stakeholder Engagement Plan to outline the objectives and methods to be used in gathering input from key Casitas stakeholders. The philosophy of the stakeholder engagement process for this project was to inform and gather input from key stakeholders; decision making during the study and selecting the recommended plan were the responsibility of Casitas staff and Board members.

The Stakeholder Engagement Plan laid out the following objectives.

- Facilitate stakeholder meetings to gather input on community priorities for water supply projects.
- Build trust in the engagement process among key stakeholders and the communities served by the District by providing regular and ongoing progress updates.
- Organize and document the feedback received throughout the process.

In order to achieve the objectives, the following activities took place:

- Prepared a key stakeholder database
- Created a micro-website for communication
- Conducted local elected official briefings
- Hosted two key stakeholder workshops
- Presented project progress at monthly Casitas Water Resources Committee meetings

At the present time (April 2020) two public meetings are planned at which the general public will have an opportunity to comment on the CWRP recommendations.



## Your Participation is Key to Developing a Reliable Water Source for the Future

With the community's help, a plan will be developed and circulated for public comment. Our team will then review community feedback, address key points raised and refine recommendations before preparing the final Comprehensive Water Resources Plan.

But first, we want to hear from you! Get involved by providing your input and suggestions on the water supply options available to the Casitas community.

Email us your comments and input, and attend our upcoming public meetings.

Figure 2-1 Casitas Micro-Website

## 2.2 Casitas Stakeholder Database

A comprehensive stakeholder database was created in collaboration with Casitas staff and local elected officials that represents the various interests in and around the Casitas service area. The stakeholder database includes local, state and federal government agencies; water districts and other special districts; regulatory agencies; environmental groups; and special interest groups representing Casitas customers. Table 2-1 is the comprehensive stakeholder list developed through the CWRP process.

Stakeholder	Website
U.S. Army Corps of Engineers	https://www.spk.usace.army.mil/
Association of Water Agencies of Ventura County	https://www.awavc.org/
California Association of Mutual Water Companies	https://calmutuals.org/about-mutuals/
California Department of Fish & Wildlife	https://www.wildlife.ca.gov/
California Division of Drinking Water	https://www.waterboards.ca.gov/drinking_water/programs/
Calleguas Municipal Water District	http://www.calleguas.com/
Carpinteria Valley Water District	http://www.cvwd.net/
Center for Regenerative Agriculture	https://www.ojaicra.org/
City of Ojai City Council	http://ojaicity.org/city-council/



Stakeholder	Website
City of Ventura City Council	https://www.cityofventura.ca.gov/712/City-Council
Climate First: Replacing Oil and Gas	https://www.cfrog.org/
Environmental Coalition of Ventura County	https://www.facebook.com/pages/Environmental-Coalition- of-Ventura-County/154369081266266
Farm Bureau of Ventura County	http://www.farmbureauvc.com/
Friends of Ventura River	http://friendsofventurariver.org/
Major Water Users in Casitas service area	Various
Meiners Oaks District	http://meinersoakswater.com/
National Marine Fisheries Service	https://www.fisheries.noaa.gov/
Ojai Basin Groundwater Management Angency	http://obgma.com/
Ojai FLOW	http://ojaiflow.com/
Ojai Valley Chamber of Commerce	https://www.ojaichamber.org/
Ojai Valley Green Coalition	https://ojaivalleygreencoalition.com/
Ojai Valley Inn	https://www.ojaivalleyinn.com/
Ojai Valley Land Conservancy	https://ovlc.org/
Ojai Valley Sanitary District	http://www.ojaisan.org/
Ojai Valley Unified School District	https://www.ojaiusd.org/
Ojai Valley Water Advisory Group	http://www.ovwag.org/
Ojai Water Conservation District	https://owcd.org/
Santa Barbara Channelkeeper	https://www.sbck.org/
State Water Resources Control Board	https://www.waterboards.ca.gov/
Surfrider	https://www.surfrider.org/
United Water Conservation District	https://www.unitedwater.org/
US Bureau of Reclamation	https://www.usbr.gov/
US Forest Service	https://www.fs.fed.us/
Ventura Chamber of Commerce	http://venturachamber.com/
Ventura County Parks Department	https://www.ventura.org/parks-department/
Ventura County Resource Conservation District	http://www.vcrcd.org/
Ventura County Watershed Protection District	https://www.vcpublicworks.org/wpd/
Ventura Land Trust	https://www.venturalandtrust.org/
Ventura River Water District	http://venturariverwd.com/

### 2.3 Local Elected Offical Briefings

Casitas conducted a series of elected official briefings at the outset of the outreach process to notify elected officials of the project, allow for questions, augment the key stakeholder list, and collect feedback. These meetings include briefings with the following elected officials:

- Councilmember Ryan Blatz, City of Ojai
- Mayor Johnny Johnston, City of Ojai
- Councilmember Erik Nasarenko, City of Ventura
- Councilmember Cheryl Heitmann, City of Ventura
- Mayor Matt LaVere, City of Ventura
- Assemblymember Monique Limón, District 37
- Congresswoman Julia Brownley, District 26

### 2.4 Key Stakeholder Workshops

Casitas coordinated two key stakeholder workshops to provide stakeholders with the opportunity to learn about the CWRP and solicit feedback on several key topics including identification of potential water sources, approaches to strengthening existing water infrastructure, and strategies for conserving existing resources. The key stakeholder workshops were hosted in a charrette format in which attendees were divided into two to three groups consisting of participants with diverse backgrounds. Both of the key stakeholder workshops were held in July 2019. A total of 80 stakeholders from 58 organizations were engaged during these workshops.

Workshop participants brainstormed a wide range of issues, challenges and potential solutions associated with current conditions and future water planning strategies in the Casitas service area. These topics were organized into the following recurring themes.

- Navigating a complex web of multiple water agencies
- Risk of reliance on a local water source
- Identifying cost-effective solutions that work
- Environmental concerns
- Impacts on residents and businesses
- Water price and sustainability
- The importance of communication with elected officials

Specific input received from workshop participants in each of these key theme areas is summarized in Table 2-2.

	Navigating a Complex Web of Multiple Water Agencies			
	Challenges	Potential Solutions		
•	The challenge of navigating multiple (and in some cases overlapping) water agencies that are reliant on a single source of water.	<ul> <li>Any successful solution must involve some work at the regional level in order to deal with the complicated existing web of water agencies</li> </ul>		
•	Identifying a mutual framework that allows various water agencies to work collaboratively	Explore a State Water Project connection		
•	Effectively using a singular source of water controlled by multiple interests	• A holistic approach: One Valley, One Water Supply		
•	Navigating a solution that will work for federal, local, and state officials and stakeholders	Support for an integrated regional plan		
		<ul> <li>Include drop-dead dates into the plan – when we need water resources from outside of our region</li> <li>Moratorium on building to avoid increasing water reliance</li> </ul>		
	Risk of Reliance on a	a Single Water Source		
	Challenges	Potential Solutions		
•	Too much reliance on local water sources and a clear need for a water source outside of the Casitas area	<ul> <li>Any successful solution must be an amalgamation of multiple potential solutions including obtaining water from additional sources.</li> </ul>		
•	Threat of increased rationing and inconsistent water supply for residents and businesses	Seek a more diversified water supply		
		<ul> <li>Pursue more water from Ventura River via lawsuit or otherwise</li> </ul>		
		<ul> <li>Fully explore State Water Project connection possibility</li> </ul>		
		ive Solutions That Work		
	Challenges	Potential Solutions		
•	The challenge of introducing cost-effective solutions that work	<ul> <li>An effective solution will both diversify and optimize existing and new water supplies</li> </ul>		
•	Desalination as an example of good idea that is considered too expensive	<ul> <li>Lake is wasted sitting empty; we can rent space in Lake Casitas to other entities</li> </ul>		
•	Identifying new solutions while optimizing existing ones	• Article 21: surplus water made available by the State		
		Ensure correct hydrology at/around Lake Casitas		
		<ul> <li>Seasonal pumping</li> <li>The potential for Arundo removal using a rebate</li> </ul>		
		<ul><li>program</li><li>Local desalination plants</li></ul>		
		<ul> <li>30-year revenue bonds as potential funding opportunity.</li> </ul>		
		Trained beavers		

Environmer	ntal Concerns
Challenges	Potential Solutions
The difficulty in quantifying the "safe yield" of the entire Ojai Valley	<ul> <li>Continued rationing: Casitas should evaluate how Stage 3 was weathered and consider continued/increased rationing as needed</li> </ul>
Growing environmental uncertainty due to climate change and other factors	<ul> <li>Determine Ojai Valley's "safe yield" for future consideration</li> </ul>
Impact of rationing on fire protection	<ul> <li>Look into the flood control hard channel bottoms and what we could gain with recharge if those were removed</li> </ul>
	<ul> <li>Irrigated orchards are the best line of fire defense, yet we are making it a challenge for them to survive by not supplying sufficient water. We need to adap accordingly</li> </ul>
	<ul><li>Harden water demand but allow for some growth</li><li>Re-allocate water to in-stream uses</li></ul>
Impacts on Individ	uals and Businesses
Challenges	Potential Solutions
The economics of rationing, with the current boom- and-bust approach, is hurting local businesses and agricultural users in particular	<ul> <li>Perform rate review: water rates don't push conservation; rates are backwards and penalize the smallest user vs. the largest user</li> </ul>
Climate of uncertainty: Orchards (and some other agricultural user sources of income) are reliant on a consistent water supply, and we are making it a challenge for them to survive economically and physically by not supplying consistently sufficient water	Look into alternatives other than rationing
Water Price an	nd Sustainability
Challenges	Potential Solutions
Water is sold too cheaply, and the supply is unsustainable because Casitas Municipal Water District is the defacto backup	<ul> <li>We need to have a regional base to reduce costs or large infrastructure expenditures</li> </ul>
Optics: The Lake looks dry, even when it is not	Increase the price of local water
Difficulty in identifying the real problem: is it inefficient storage or a natural water deficit?	•
	Improve quality of local water infrastructure
	Revisit fees to account for large vs. small users
Communicating w	ith Elected Officials
Challenges	Potential Solutions
The challenge of communicating these issues to elected officials who lack proper context in an effective manner	Bring in leadership/champion to represent Casitas     Municipal Water District to elected officials
Concern over failed communication with past agency directors	<ul> <li>Convince officials to better understand boom-and- bust cycles and forward legislation that addresses the actual issue proactively rather than constantly playing catch-up</li> </ul>

## 2.5 Project Updates to Casitas Board

Monthly CWRP updates were provided to the Casitas Water Resources Committee (WRC), which consists of two Casitas Board members. These meetings were open to the public and were attended by Casitas staff and the Stantec consulting team. CWRP updates were provided at 12 WRC meetings over the course of the project. At these meetings the WRC provided project direction in a number of important areas, including alternatives to be studied, approaches to incorporating climate variability, alternative evaluation criteria, supply and demand estimates, and the recommended plan.

During preparation of the draft CWRP report a Board workshop was held to brief the entire Board on the study process and the draft recommendations. This meeting was open to the public.

# Section 3 Stakeholder Input in CWRP

The CWRP incorporated input from the stakeholder process regarding key issues to be addressed and water supply solutions to be considered. Stakeholder feedback was integrated with technical study results and Casitas staff knowledge to inform project decisions.

For example, each water supply option was evaluated using the decision support tool created as part of the CWRP study. The decision support tool includes a social impact criterion that was scored based on stakeholder and community values.

Casitas plans to conduct two public meetings to present the draft CWRP report and receive feedback on the proposed recommendations. That feedback will be incorporated into the final CWRP report.



Comprehensive Water Resources Plan

June 8, 2020

Prepared for:

Casitas Municipal Water District

Prepared by:

Stantec Consulting Services Inc.



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## Introduction

This technical memorandum (TM) describes the estimation of future water demands for use in the Comprehensive Water Resources Plan (CWRP) for Casitas Municipal Water District (Casitas). The TM documents the methods used to estimate water demands for customers served by Casitas, and presents the results for future water demands adopted for water supply planning purposes. The analysis is based on data provided by Casitas and information gathered from previous reports.

The Background Information TM prepared previously for the CWRP provides background on Casitas' municipal and agricultural retail customers and resale (contract) customers. That information is not repeated here. The emphasis of this TM is on developing appropriate projections of future water use for the entire Casitas system.

The following terms are used in this TM.

- Water consumption Water consumed by end-user customers; also water required at the water meter to satisfy customer demands; often estimated based on billed water use.
- Water production Water that must be produced by Casitas from its raw water sources and water treatment facilities to satisfy customers demands, accounting for distribution system losses and other unaccounted for water.

# Section 1 Historical Water Demands

Over 98% of water used by Casitas to serve its retail, agricultural, and resale customers was drawn from Lake Casitas. The remainder was provided by Mira Monte Well with a capacity of 300 acre-feet/year (AFY). Figure 2-1 shows the total annual water deliveries from Lake Casitas from 1983 to 2018. The historical trend of Casitas water demand was steadily increasing from the1960s to the 1990s. The demands were growing primarily due to new agricultural lands being put into production. By 1990, the total demand on Lake Casitas began to exceed the estimated safe yield of the lake at that time. As a result of the growing demands which were exceeding the safe yield and the drought during this time, Casitas declared a water shortage emergency which led to implementation of conservation measures and helped to bring demands within safe yield limits. By 2005, the projected demands were significantly lower than demands in the 1990s. Several factors may be responsible for the change in demand pattern, including a wet period in the 1990s that caused Lake Casitas to spill in 1998; a water conservation ethic that became more prominent in the Western United States beginning in the 2000s; and customer response to drought conservation measures including adoption of a water use allocation program during an extended dry period in the 2010s. In addition, water quality issues that occurred during the 1990's reduced the amount of water the City of Ventura used significantly below their maximum 6,000 acrefeet (AF) contracted value in the mid-1990s. In 2017, Casitas acquired the Ojai Water System from Golden State Water Company. The Ojai Water System receives approximately 20 percent of it's annual demand from Casitas while the remainder of the demand is supplied by the Ojai Groundwater Basin wells.



Introduction 2

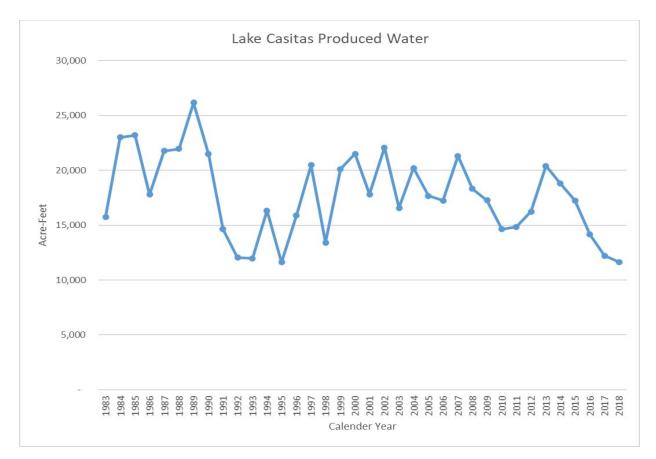


Figure 2-1. Annual Produced Water from Lake Casitas, 1975-2018 (Casitas Municipal Water District)

**Table 2-1** shows potable water use sales (i.e., water consumption) for Casitas between 2000 and 2015 as reported in the 2016 Urban Water Management Plan (UWMP), and is evidence of the declining water use in the Casitas service area in recent years. These values exclude the Ojai Water System, and represent water provided from Lake Casitas and the Casitas Mira Monte Well. Figure 2-2 shows the average percentage of deliveries to the three main customer categories over this period. **Table 2-2** shows the most recent potable water use between 2016 and 2018.

#### Table 2-1. Past Potable Water Uses 2000-2015 (UWMP, 2016)

Category (1)	2000	2005	2010	2015	
Sales to other agencies (includes sales to Ojai Water System)	7,186	7,118	6,482	6,192	
Agricultural sales (2)	9,115	8,939	6,398	8,048	
Retail sales (2)	3,088	2,821	2,427	2,507	
TOTAL	19,389	18,877	15,307	16,747	
Notes:					
(1) Source, CMWD, 2016. All values in AF, rounded. Data does not include water losses.					
(2) Direct sales to CMWD customers.					

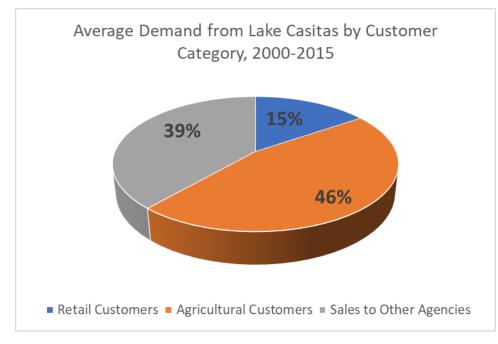


Figure 2-2 Average Demand from Lake Casitas by Customer Category, 2000-2015

#### Table 2-2. 2016-2018 Water Consumption

Category	2016 (1)	2017 (1)	2018 (1)	
Sales to other agencies (includes resale to Ojai Water System)	3,926	2,742	3,284	
Agricultural	6,973	6,404	4,552	
Retail	1,836	2,974	3,136	
Total	12,735	12,120	10,980	
CMWD Water Consumption Subtotal	12,735	12,120	9,600	
OJAI Water Consumption Subtotal	(2)	(2)	1,380	
TOTAL	12,735	12,120	12,764	
<ul> <li>(1) Casitas Municipal Water District Consumption Report Water Sales FY 2015-2016, 2016-2017,2017-2018 and 2018-2019</li> <li>(2) Not CMWD responsibility prior to 2017</li> </ul>				

The 2010 UWMP prepared for Ojai Water System by Golden State Water Company (GSWC, 2011) reported historical water use from 1994-2010 by residential and commercial category. This water consumption data is listed in **Table 2-3**.

Table 2-3. Total Historical Water Use by All Ojai Water System Customers

Year	Total Historical Water Use by All Customers (AF)
1994	1,638
1995	1,844
1996	2,064
1997	2,210
1998	1,737
1999	2,120
2000	2,193
2001	2,153
2002	2,398
2003	2,070
2004	2,182
2005	1,954
2006	2,077
2007	2,283
2008	2,218
2009	1,973
2010	1,779



Data for recent annual water production and consumption from Lake Casitas, the Mira Monte Well, and Ojai Wells was provided by Casitas by calendar year and is shown in **Table 2-4**. The water production data represents the total water produced to meet the needs of customers currently in the Casitas service area and Casitas' contracts with resale agencies.

For water supply planning, water production data is needed to plan raw water requirements. Based on the data in **Table 2-4**, the average ratio between production water and consumption water is 1.09 (i.e., the need for total water production is and average of 9% greater than total measured customer water use at the meter). The difference between water production and water consumption represents unaccounted for water, which includes distribution system losses and non-revenue water. Variability in the difference between annual water production and water consumption is shown in **Figure 2-3**.



Produced Water			Consumed				
Calendar Year	Lake Casitas	Mira Monte	Ojai Wells	Produced Total	Casitas	Ojai	Consumed Total
2011	14,841	150	1,934	16,925	13,441	N/A	13,441
2012	16,245	180	1,760	18,185	15,269	N/A	15,269
2013	20,402	180	1,421	22,003	18,294	2,099	20,393
2014	18,810	180	1,337	20,327	18,325	1,994	20,319
2015	17,247	180	1,220	18,647	14,989	1,483	16,472
2016	14,152	180	944	15,276	12,796	1,373	14,169
2017	12,213	164	450	12,827	12,120	N/A	12,120
2018	11,632	151	1,381	13,164	9,600	1,380	10,980
Average past 3 years	12,666	165	925	13,756	11,505	1,376	12,882
Average past 5 years	14,811	171	1,066	16,048	13,566	1,557	15,123
Average past 8 years	15,693	171	1,306	17,169	14,354	1,666	16,020

#### Table 2-4. Water Production and Water Consumption in Casitas and Ojai, 2011-2018

Notes:

Data reported by calendar year.

Mira Monte Well production set equal to effective capacity for 2012-2016 considering water quality blending requirements.

N/A – not available

Averages computed excluding years with missing data.



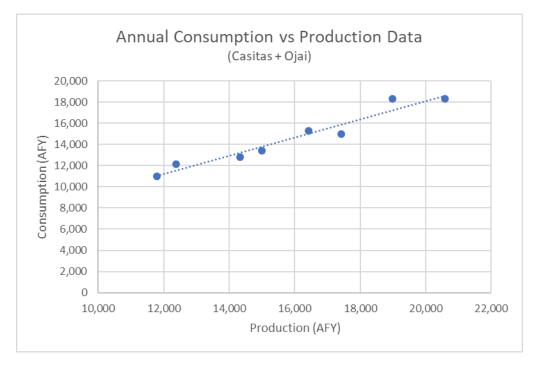


Figure 2-3. Consumption vs Production Data for Casitas + Ojai Water System, 2011-2018

## Section 2 Water Demand Forecasts

### 2.1 Current Casitas Service Area and Contract Customers

Because Casitas took over GSWC customers and assets in 2017, a comprehensive demand forecast for the current Casitas service area has not been prepared yet. The demand forecast should include Casitas municipal and agricultural retail customers, including those in Ojai Valley, and resale customers with which Casitas has contracts to supply supplemental water. However, separate demands should also be reported for the Casitas customers and the Ojai Water System customers because water produced from the Ojai Basin wells can only be used in the Ojai Water System. Ojai demands would be met first from the Ojai Basin wells, with supplemental water provided by the Casitas system as in the past prior to the GSWC acquisition. **Figure 3-1** schematically shows the relationship between Casitas sources of supply, retail customers and resale customer agencies.



Appendix C Draft Water Demand Estimate for Casitas Municipal Water District Technical Memorandum

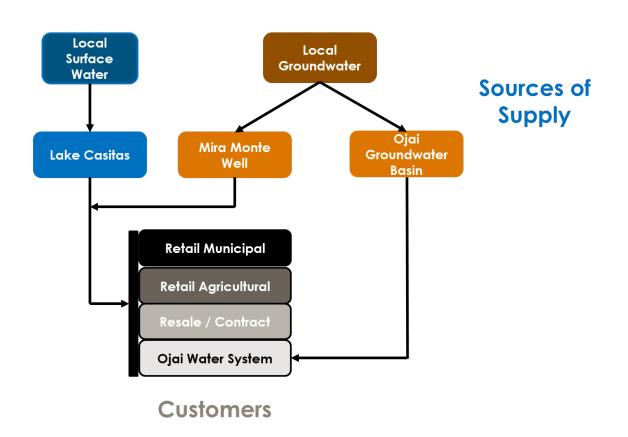


Figure 3-1. Current Casitas Customers and Water Sources

### 2.2 Previous Water Demand Forecasts

**Table 3-1** shows the projected demands for the Casitas system from 2020 to 2040 from the 2016 UWMP. The total demands on the Ojai Water System were not included in the projections in the 2016 UWMP, though they are expected to be included in the next update. Historically, the Casitas system provides approximately 20 percent of the Ojai Water System supplies as part of the resale or sales to other agencies. The values in **Table 3-1** were used by Casitas for water supply planning prior to the GSWC acquisition. This projection assumes population in the Casitas retail service area remains relatively constant based on the Ventura County population forecast. It also assumes agricultural water demand is unchanged and there is a small increase in current deliveries to resale customers. The data in **Table 3-1** is water consumption data because it is measured as water delivered to customers. Produced water requirements would be an average of 9% greater, as described in Section 2.



Appendix C Draft Water Demand Estimate for Casitas Municipal Water District Technical Memorandum

Category (1)	2020	2025	2030	2035	2040		
Sales to other agencies	6,200	6,200	6,500	6,500	6,500		
Agricultural sales (2)	8,000	8,000	8,000	8,000	8,000		
Retail sales (2)	3,000	3,000	3,000	3,000	3,000		
TOTAL	17,200	17,200	17,500	17,500	17,500		
Notes:							
(1) Source, CMWD, 2016. All values in AF, rounded. Data does not include water losses.							
(2) Direct sales to CMWD customers.							

#### Table 3-1. Projected Casitas Water Demands for Pre-2017 Service Area (UWMP, 2016)

The 2010 GSWC UMWP (2011) forecasted water use for the Ojai Water System. This was based on past water use history, forecasted population growth, and assumed reduction in per capita use due to implementation of water conservation measures. The Ojai Water System demand forecast from the UWMP is shown in **Table 3-2**.



Appendix C Draft Water Demand Estimate for Casitas Municipal Water District Technical Memorandum

Year	Projected Water Sales (AFY)	System Losses (AFY)	Total Water Demand Baseline (AFY)	Conservation to Meet SBX7-7 (AFY)	Total Water Demand with SBX7-7 compliance (AFY)
2005	1,955	284	2,239	0	2,239
2010	1,780	227	2,007	0	2,007
2015	2,266	339	2,605	111	2,494
2020	2,384	356	2,740	409	2,331
2025	2,483	371	2,854	426	2,428
2030	2,569	384	2,953	440	2,513
2035	2,625	392	3,017	450	2,567
Notes: (1) Source, GS	WC UMWP, 2011. Ta	ble based on DWR G	uidebook Table 11.		

Table 3-2. Projected Water Sales, Unaccounted-for System Losses, and Total Water Demand for Ojai Water System (AFY)

(2) Based on calendar year.

(3) SBX7-7: The Water Conservation Act of 2009 (Senate Bill X7-7).

## 2.3 Water Demand Estimates for CWRP

There is no single previous water demand estimate suitable for use for the CWRP. Changing water use behavior by Casitas' customers and addition of the Ojai Water System to the Casitas service area require an updated future water demand estimate. The future water use estimates in the Casitas UWMP and GSWC UWMP do not necessarily reflect future conditions based on recent water use history. Therefore, a new water demand estimate was prepared for the CWRP comprised of separate estimates for the Casitas and Ojai Water System portions of the combined service area. This estimate was based on comparison of the results of applying two approaches: (1) modification of published UWMP data, and (2) extrapolation of historical water use data.

Table 3-3 documents the calculation of the future water production requirement for the Casitas service area based on published UWMP data. The Casitas UWMP in 2016 provided estimates of 2040 water requirements for Casitas' retail and contract customers. The UWMP estimate of 17,500 AFY for future use is much higher than recent historical use shown in Table 2-2 and Table 2-4, although population in the Casitas service area is not expected to increase substantially compared to current population. These estimates also assume Casitas must be prepared to deliver the full contracted amount of water to its resale customers, although they have not used their full allotment in recent years (see Table 2-2).

The GSWC UWMP in 2010 provided an estimate of 2035 water requirements for Ojai Water System customers (see **Table 3-2**). This estimate accounted for distribution system losses so it represented water production requirements. It also assumed water conservation goals would be met and would result in a 15% water use reduction. However, unlike in the original Casitas service area, the forecast Appendix C Draft Water Demand Estimate for Casitas Municipal Water District Technical Memorandum

shows a small increase in water use through 2035 due to population growth, and it is assumed this increase will continue into the future.

The UWMP estimates did not account for changes in customer behavior and permanent changes to landscaping (e.g., conversion to xeriscape) and water-using fixtures implemented by Casitas' customers in response to the recent severe California drought. To account for this, the Water Resources Committee of the Casitas Board recommended reducing future requirements to reflect the need to preserve recent conservation savings. The project team reduced the previous forecasts by 10% to account for permanent water use changes.

Making the adjustments to previous UWMP forecasts described above resulted in a future water requirement estimate of 15,750 AFY for the Casitas system including the portion of Ojai Water System demands met from Lake Casitas, 2,042 AFY for the portion of the Ojai Water System demand not met from Lake Casitas, and a total of 17,792 AFY in the combined CMWD system.

The extrapolation of future water demand from historical water use was performed as follows.

- As shown in **Table 2-4**, the average water produced by Casitas and GSWC over the past 8 years to meet the demands of all current Casitas customers is 17,226 AFY (15,864 AFY for original Casitas customers including resale water to Ojai, and 1,362 AFY for Ojai Water System customers from local groundwater).
- The Casitas UWMP showed a 300 AFY increase in water demand from 2020 to 2040. This was added to the average produced water requirement of the past 8 years for Casitas original customers.
- The GSWC UWMP showed a 220 AFY increase in water demand from 2020 to 2035. This was rounded up to 250 AFY to account for growth in the Ojai Valley after 2035.
- Adjusting the recent historical water production for future growth gives a value of 17,776 AFY for future water requirement in the total Casitas service area – 16,163 AFY in the original Casitas area (include resale water for Ojai) and 1,612 AFY in Ojai Valley from Ojai Basin wells.

**Table 3-4** compares the two methods for estimating future water demands. Both gave a total future demand of approximately 17,800 AFY, but the distribution between the original Casitas service area and Ojai Water System service area are different. For CWRP planning purposes, the average of the two estimates was adopted. This yields a future total water production requirement of 17,825 AF, with 16,000 AFY in the original Casitas portion of the service area and 1,825 AFY by Ojai Valley wells for the Ojai Water System.



Customer Class	Future Annual Demand (AFY) (Production)	Year	Sources/Comments
Original CMWD Municipal Customers	3,000	2040	2015 Casitas UWMP, Table ES-3. Table footnote says "data does not include water losses" but it must include Casitas losses if they were using this for planning.
Original CMWD Ag Customers	8,000	2040	2015 Casitas UWMP, Table ES-3. Table footnote says "data does not include water losses" but it must include Casitas losses if they were using this for planning.
Original CMWD Resale Customers	6,500	2040	2015 Casitas UWMP (Meiners Oaks WD, Sisar MWC, Tico MWC, Ventura River WD, City of Ventura, Senior Canyon MWC, Siete Robles MWC)
Deduct Conservation Savings	1,750		Effect of current conservation practices - 10% reduction per WRC direction
Subtotal Casitas Demand	15,750		
Ojai Valley - All Customer Classes	2,567	2035	2010 GSWC UWMP; includes portion of demand previously met through temporary agreements with Casitas. This includes system losses.
Deduct Purchase from Casitas	525		Included in "Resale Customers" category above
Subtotal Ojai Valley Demand from Local Wells	2,042		Excludes resale water supplied from Lake Casitas
Total	17,792		

#### Table 3-3. Casitas Future Annual Water Production Requirement Based on Published UWMP Water Use Data

#### Table 3-4. Water Production Demand Forecasts for Casitas Service Area

Portion of Service Area	UWMP Forecast (AFY)	Historical Projection (AFY)	Average, Rounded (AFY)
Production for Original Casitas Customers (includes resale deliveries to Ojai)	15,750	16,163	16,000
Production from Ojai Valley Wells	2,042	1,612	1,825
Total	17,792	17,776	17,825

**Table 3-5** presents a summary of the water demand forecast adopted for the CWRP. In this table, the total Ojai Water System demand is shown, including the portion of demand met from Lake Casitas. Demand estimates apply to the 2040 time period, but current population projections show very little growth after that period so these water demands should be usable for planning beyond 2040.



Appendix C Draft Water Demand Estimate for Casitas Municipal Water District Technical Memorandum

Demand Parameter	Casitas System	Ojai Water System	Total
UWMP 2040 Forecast (AFY)	15,750	2,570	-
Historical Extrapolation (AFY)	16,200	2,140	-
Adopted for CWRP (AFY)	16,000	2,350	18,350
Ojai Demand Included in Casitas Demand (AFY)	-	-	525
Net Casitas Municipal Water District Demand (AFY)	-	-	17,825

#### Table 3-5. Water Demand Forecast Adopted for CWRP

## Section 3 References

CMWD, 2016. Final Urban Water Management Plan and Agricultural Water Management Plan, 2016 Update, prepared by Milner-Villa Consulting for Casitas Municipal Water District, June 2016.

Golden State Water Company, 2011. 2010 Urban Water Management Plan, Ojai. Prepared by Kennedy Jenks Consultant for Golden State Water Company, August 2011.

CMWD, 1983-2018, Lake Casitas Reservoir Levels





### Appendix D Draft Lake Casitas Water Supply Analysis Technical Memorandum

Comprehensive Water Resources Plan

June 8, 2020

Prepared for:

Casitas Municipal Water District

Prepared by:

Stantec Consulting Services Inc.



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## Section 1 Introduction

This Technical Memorandum (TM) describes the water supply analysis performed for Lake Casitas as part of the Comprehensive Water Resources Plan (CWRP). It documents the updates made to a previous yield model for Lake Casitas, and presents results of applying the model to analyses of estimated water supply available from Lake Casitas under different future hydrology and operating conditions. This TM satisfies the requirements of Task 6.3 in the CWRP Scope of Work.

## Section 2 Lake Casitas Yield Model

Lake Casitas is the primary source of water available to Casitas Municipal Water District (Casitas). Hence an estimate of the yield available from this source is critical to water resources decision-making by the Casitas staff and Board. A previously developed simulation model to estimate the safe yield of Lake Casitas was provided to Stantec as part of CWRP project, with the understanding it would be updated and improved to reflect current and potential future conditions and incorporate hydrologic uncertainty. This section describes the Lake Casitas Yield Model and the improvements made to it under the CWRP project.

## 2.1 Original Lake Casitas Yield Model

Casitas provided the Stantec consulting team with an Excel-based simulation model of Lake Casitas developed by staff in the early 2000s. The model consisted of several related files containing data and calculations. It is documented in the 2004 Water Supply and Use Status Report (CMWD 2004). The details of this previous documentation, which are also contained in an appendix to the current Casitas Municipal Water District Urban Water Management Plan (CWMD 2016), are not repeated here.

The original Lake Casitas Yield Model is a mass-balance model that tracks Lake inflows, outflows (including evaporation) and change in storage to simulate operations over historical hydrology conditions. Highlights of the model configuration and capabilities include:

Period of record in model provided by Casitas: 1945-1965; Period of record for most data supporting the model: 1945-1999.

- Surface inflows include streams that are directly tributary to the Lake and diversions from the Ventura River at the Robles Diversion Structure.
- Outflows include net evaporation (evaporation minus precipitation) and withdrawals to meet Casitas demands.
- Monthly simulation of reservoir operations using a maximum Lake capacity of 254,000 acre-feet (AF). Lake water surface area or elevation were not calculated in the model.
- Daily tracking of Ventura River extraction and accretion, and Robles Diversion Structure inflows.
- Monthly tracking of tributary inflows and Lake evaporation based on historical data.



- Identification of critical historical drought period (WY1945-WY1965).
- Robles Diversion simulated based on 1959 Operating Criteria and the Robles Biological Opinion (BO) in effect at the time.
- Comparison of Lake inflows while operating under the 1959 Operating Criteria, Biological Opinion, and Keinlen D20 Study Criteria (CMWD, 2004).

## 2.2 Lake Casitas Yield Model Improvements

In the course of updating the Lake Casitas Yield Model for use in the CWRP, several significant improvements were made to the model. These are described in this section.

### 2.2.1 Extension of Period of Record

The model period of record was extended to include all available years of historical hydrologic data at the time the CWRP was started. The full updated model period extends from 1944 to 2018 and includes the 1945 – 1965 data provided in the original model. The extension process consisted of updating model input data for historical direct tributary inflows to the Lake, Robles Diversion inflows, evaporation and precipitation, and Lake storage volumes for the period 1966-2018.

- Historical direct tributary inflows from 1966 2018 were provided by Casitas. These inflows were given as back-calculated values from historical water inventory data for Lake Casitas.
- Robles Diversion inflows were extended using historical hydrological information from USGS stream gages along tributaries to the Ventura River.
- Extraction and Accretion values within the Ventura River between streamgage locations and the Robles Diversion Structure were extended using a multiplier that varied by calendar month. This method was provided in the original model and outlined in the 2004 Water Supply and Use Status Report (CMWD 2004).
- Net evaporation values were extended using historical water inventory data provided by Casitas.

The original model used historical net evaporation volumes for each month of the reservoir simulation calculations. In the updated model this was changed so reservoir evaporation in each month is calculated dynamically based on the known (historical) net evaporation rate in feet in that month and the computed reservoir surface area as determined during the simulation for that month.

### 2.2.2 New Bathymetric Survey

A new bathymetric survey of Lake Casitas was performed in 2017. The updated data for lake volume, water surface elevation and water surface area were incorporated into the elevation-area-capacity table in the Lake Casitas Yield Model. The new survey resulted in a reduction in maximum Lake capacity from 254,000 acre-feet (AF) to 237,761 AF, which in turn resulted in a decrease in estimated yield from the Lake for the same hydrology and operating conditions.

### 2.2.3 Spillway Calculation

The original model only included the drought period of 1945 – 1965 in which lake volumes never reached the maximum capacity of 254,000 AF and lake levels were not above the elevation of the spillway crest. Throughout the extended period of record there were multiple periods of recovery when the lake levels would exceed the elevation of the spillway.

In order to refine the simulation of Lake operations during periods of high inflow when the Lake is full, a computation of spillway overflow based on historical records and the configuration of the spillway structure was added to the model. The new bathymetric survey of 2017 did not include elevation, area and capacity data above the spillway crest. In order to model high inflow when the lake is full and apply the derived spillway equation, the elevation-area-capacity (EAC) table from the new bathymetric survey was extended. Fitting a curve to the EAC table allowed Lake surface area and capacity values to be extrapolated beyond the elevation of the spillway crest.

Historical spillway flows were plotted against the height of flow over the spillway crest (H). A good-fit equation for the data was developed using an exponent of 1.5 on the height parameter H to be consistent with the form of the ogee crest spillway flow equation -  $Q=CLH^{3/2}$ . The resulting equation derived for flow over the Lake Casitas spillway is  $Q=281^*H^{3/2}$ .

A monthly spill volume in AF was needed for the monthly Lake simulation performed by the Yield Model. Using the spillway outflow rate calculated based on the beginning-of-month height of the reservoir level over the spillway crest would overestimate the spillway outflow because absent new inflows the Lake level will fall and the spillway outflow will decline during the month. An adjustment was needed as a substitute for doing a daily diminishing head analysis since the Yield Model operates on only a monthly time step. Empirically it was found that multiplying the instantaneous flow rate corresponding to the Lake level at the beginning of the month by 10 provided good agreement with running a daily diminishing head simulation throughout the month. This compares to a conversion factor of 55 to convert cfs to a monthly flow volume. The resulting equation used in the updated model for monthly flow over the Lake Casitas spillway in months when the lake water surface elevation exceeds the spillway elevation is Volume =  $10 * 281 * H^{3/2}$ .

### 2.2.4 Robles Diversion Operation

The Robles Diversion Structure diverts water from the Ventura River into the Robles Diversion Canal, which conveys the diverted water to Lake Casitas. The diversion system has a nominal capacity of 500 cfs. Environmental considerations and physical operating conditions govern operation of the diversion structure under different hydrologic situations. The Biological Opinion (BO) adopted in 2004 modified previous requirements for passage of flows for fish habitat. This was further modified during the recent drought to allow increased diversions to the Lake when storage levels in the Lake are low.

As part of the model upgrade, the functions used to simulate operation of the Robles Diversion Structure were modified to reflect the current operating rules. The operation of the diversion structure in the model followed the 2004 BO as follows.

- The Extraction and Accretion values are applied to historical hydrology based off the method outlined within the 2004 Water Supply and Use Status Report. This resulting flow rate is categorized as 'Available to Divert' at the Robles Diversion Structure.
- Within the Migration Period (Jan. 1st to June 30th) outlined in the BO, available flows above 30 cfs up to 500 cfs are diverted down the Robles Canal. Flows equal to and below 30 cfs bypass the diversion structure and are sent downstream.
- Outside of the migration period (July 1st to Dec. 31st), available flows over 20 cfs up to 500 cfs are diverted down the Robles Canal.
- Storm events within the Migration Period are categorized within the BO as available flows above 149 cfs, Following the peak storm event, flows above the thresholds as outlined in the applicable primary 12-day and secondary 10-day fish passage tables in the BO, up to 500 cfs, are diverted down the Robles Canal.

In addition to simulating the regulatory factors affecting operation of the diversion structure, the diversion efficiency based on physical and operational factors was added as model input. The original model did not account for the fact that actual historical diversions were generally less than the theoretical or legal diversion amounts allowed under the adopted operating rules. The relationship between theoretical and actual historical diversions was investigated by plotting the actual daily diversions against the theoretical diversion calculated based on the adopted operating rules. This data was plotted for two periods of record: 2004-2018 when the current BO governed operation of the structure, and 2017-2018 when Lake Casitas storage was low. Results are shown in **Figure 2-1** and **Figure 2-2**.

The figures show that on most days the actual recorded diversion is less than what the model would have predicted based on the legal operating rules. The difference could be attributed to clogging of the diversion structure with debris, poor water quality making it inadvisable to divert to the Lake, or other physical or administrative factors affecting operation of the structure. For the 2004-2018 period, the ratio of total historical to total modeled flows is 0.66. For the 2017-2018 period that ratio is 0.73. To accommodate the uncertainty in this important factor, the updated Lake Casitas Yield model allows the user to set this parameter for each simulation. Based on discussion with Casitas staff, a value of 0.70 (70%) was adopted for the Robles diversion efficiency factor when simulating typical operating conditions with the current diversion structure facility.

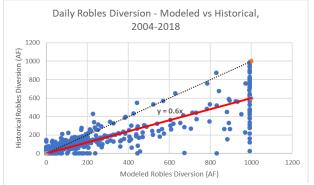


Figure 2-2 Daily Robles Diversion - Modeled vs Historical, 2004-2018

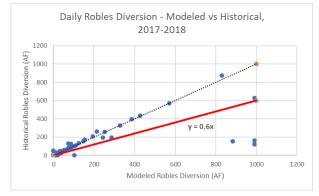


Figure 2-1 Daily Robles Diversion - Modeled vs Historical, 2017-2018

### 2.2.5 Minimum Allowable Storage

In previous applications of the Lake Casitas Yield Model, the safe yield was determined by finding the largest demand that could be met from the Lake based on drawing the lake level down to the dead pool elevation. The storage at this elevation is 950 AF, and represents the amount of water that cannot be released from the Lake using the normal outlet works. This would leave no buffer for emergencies or for droughts more severe than the drought in the historical record. In practice the Casitas managers would not want to draw the Lake down to the dead pool level, but would want to reserve water in storage for conditions outside the range used for prudent planning (e.g., more severe droughts, equipment failures). In addition, water quality is poor at very low lake levels and Casitas may not be able to treat water with its current water treatment facilities when water is pulled from the Lake when storage is very low. The amount of emergency storage appropriate for Casitas is a policy decision, as discussed below.

To accommodate this planning strategy, the updated Lake Casitas Yield Model allows the user to set a minimum allowable storage level to be used in safe yield simulations. Making this value a variable allows Casitas to test different minimum allowable storage levels and their impact on reservoir performance.

### 2.2.6 Effect of Model Upgrades

**Figure 2-3** shows the effects on Lake Casitas safe yield estimates of the Yield Model improvements described above. Updating the elevation-area-capacity data, adding minimum allowable storage, incorporating the Robles Diversion Structure BO rules, and adjusting modeled Robles diversions for historical experience progressively reduced the Lake Casitas safe yield estimates. Overall these model changes resulted in a 17% reduction in the safe yield estimate for the historical hydrologic period. [Note: the version of the model used for the preliminary analyses described above was updated later in the study, giving slightly different results.]



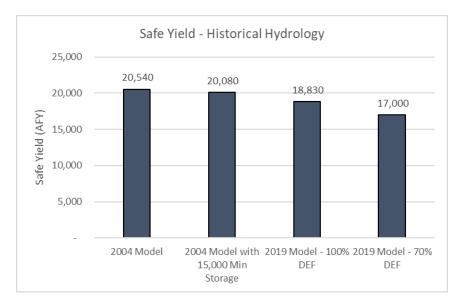


Figure 2-3 Effects of Model Improvements on Safe Yield Estimates

### 2.2.7 Water Efficiency and Allocation Program and the "Safe Demand" Concept

The original Lake Casitas Yield Model determined the safe yield for the Lake by allowing the user to iterate on the estimated annual demand on the Lake until the largest demand without drawing the Lake below the dead pool level was determined. This annual demand was distributed monthly based on percentages of total annual demands determined from historical water use data. The monthly percentages were applied in every year of the simulation. This approach does not account for the inherent variability in annual demand as a function of weather, economics, and other factors, but more importantly does not account for the impact of water conservation measures implemented by Casitas during years of drought. The updated Lake Casitas Yield Model incorporated changes to address the second factor but not the first. Future updates could link water demand to weather conditions (hot/dry, normal, cool/wet) as a further model refinement.

For the CWRP, the Lake Casitas Yield Model was updated to incorporate the effects of Casitas' policies for implementing demand management practices during periods of low Lake levels. The Casitas Water Efficiency and Allocation Program (WEAP) policy provides information to the Casitas Board in setting water use reduction goals during droughts and other water shortage periods. The policy is summarized in Table 6 in the WEAP report. It sets water allocations for Casitas customers based on usage records from 1989, and provides guidance for reducing water allocations based on Lake Casitas storage volumes. The policy was designed to use demand management as a strategy for managing through critical shortage periods, and assures that supplies are available to meet reduced demands throughout the critical period in the historical period of record (1945-2018).

Key values of Lake Casitas storage levels and demand thresholds incorporated in the current WEAP policy are summarized in **Table 2-1**, as defined in Table 6 in the WEAP report. In simplified form, the WEAP sets water reduction goals based on a starting water demand that is reduced by 20 percent from the 1989 system-wide water demand. Different water use categories were treated differently, but the



overall effect was a reduction of about 20 percent. With this assumed system-wide demand (19,127 AFY), the demand reductions at different lake levels as described in WEAP Table 6 are capable of managing supply and demand through the historical critical period.

#### Table 2-1 WEAP Demand Reduction Targets

	Reserve	oir % Full	Reservoir S	Storage (AF)	Water Use Reduction Response Goal as a Percent of Current Water Allocation (Table 6) (1)	Water Demand Target Value Based on Percent Reduction from "80% of 1989" Water Allocation (AFY)
Stage Title	Minimum	Maximum	Minimum	Maximum		
Stage 1 - Water Conservation	50	100	118,881	237,761	100% (80% voluntary reduction) (2)	19,127
Stage 2 - Water Shortage Warning	40	50	95,104	118,881	80%	15,302
Stage 3 - Water Shortage Imminent	30	40	71,328	95,104	70%	13,389
Stage 4 - Severe Water Shortage	25	30	59,440	71,328	60%	11,476
Stage 5 - Critical Water Shortage	0	25	-	59,440	50%	9,564

(1) Values based on information from Table 6 in CMWD, 2018.

(2) 100% water use reduction goal was used in the model.

The WEAP policy provides guidance to the Board; it does not establish fixed operating rules. When simulating the impact of the WEAP policy, it was assumed that water customers would actually reduce their demands consistent with the targets in the policy. That is, if Lake Casitas storage was in the Stage 2 range at the beginning of a year in the simulation, a demand of 15,302 AFY was simulated for that year. In the recent drought in Southern California, Casitas' customers demonstrated the ability to meet or exceed the WEAP demand reduction targets. Some of the landscape changes and customer behavior changes made in response to the drought will be permanent and have lasting effects on reducing customer demand. In turn, achieving similar levels of demand reduction during future droughts may be more difficult because the "easy" savings have already been built into the system. Despite this difficulty, Casitas' staff felt comfortable in assuming for water supply planning purposes that the levels of demand reduction outlined in the current WEAP policy will be achievable in the future.

The Lake Casitas Yield Model used for the CWRP includes a toggle that allows the user to simulate safe yield in the traditional sense (constant demand for all periods of simulation) or what for this study is termed "safe demand", which includes demand reductions in accordance with the WEAP policy as described above. For Casitas' future water supply planning, the safe demand concept is more applicable because it is consistent with the WEAP policy adopted by the Board and with the behavior of Casitas' customers during the recent drought.

## Section 3 Simulation of Net Evaporation

Evaporation loss is an important part of the water budget for Lake Casitas. The Casitas Water Resources Committee has asked several questions regarding how evaporation is accounted for in the Lake Casitas Yield Model. This section describes that process. More detail on evaporation data and modeling is provided in CWMD (2004).

As noted previously, the Yield Model simulates monthly operations of Lake Casitas. Evaporation losses are accounted for in a net evaporation term (evaporation – precipitation) that is estimated for each month of the 1945-2018 simulation period. When possible, historical evaporation and precipitation data for the years in the simulation period was used. Evaporation was based on the average of pan evaporation measurements for two evaporation pans at Lake Casitas, adjusted by a pan evaporation coefficient for each calendar month provided by the U.S. Bureau of Reclamation. Precipitation was based on the average of recorded rainfall at two rain gauges at Lake Casitas. When historical data was not available for evaporation precipitation, monthly averages for the period of record were used. The average annual evaporation rate for Lake Casitas is about 42 inches per year. It can vary substantially from year to year; for example, in 2018 the evaporation rate was 45.7 inches. The typical monthly distribution of annual evaporation is shown in **Table 3-1**.

Month	Fraction of Annual Evaporation
October	0.0712
November	0.0607
December	0.0609
January	0.0669
February	0.0450
March	0.0641
April	0.0759
Мау	0.0955
June	0.1099
July	0.1320
August	0.1204
September	0.0975
Total	1.0

#### Table 3-1 Distribution of Annual Evaporation by Month

The net evaporation rate in inches for each month in the 1945-2018 simulation period was calculated as evaporation minus precipitation for that month. This resulted in a unique net evaporation rate for each month in the simulation period. In some months rainfall exceeded the evaporation loss; in those cases the value of the net evaporation parameter in the Yield Model was negative.



The net evaporation loss in acre-feet from reservoir storage was calculated in the model for each month of the simulation by multiplying the net evaporation rate in feet by the reservoir surface area in acres. The surface area is a function of reservoir storage and lake level. As the reservoir level increases or decreases over time, the evaporation loss in volume reflects this change. For the same monthly net evaporation rate, reservoir losses are higher at higher storage levels and lower at lower storage levels because of the difference in reservoir surface area. This effect is shown conceptually in **Figure 3-1**.

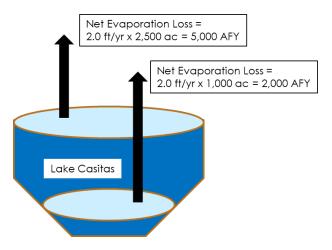


Figure 3-1 Effect of Reservoir Surface Area on Calculated Monthly Net Evaporation Loss

This effect is shown in the chart in **Figure 3-2**, which shows the primary reservoir inflows (tributary inflow and Robles Diversion inflow) and reservoir outflows (net evaporation and withdrawals to meet demands) for the 10 year simulation period from 1945-1954. It is evident that as the reservoir storage volume declines (and the reservoir surface area shrinks), the evaporation loss in acre-feet also tends to decline.



#### Appendix D Draft Lake Casitas Water Supply Analysis Technical Memorandum

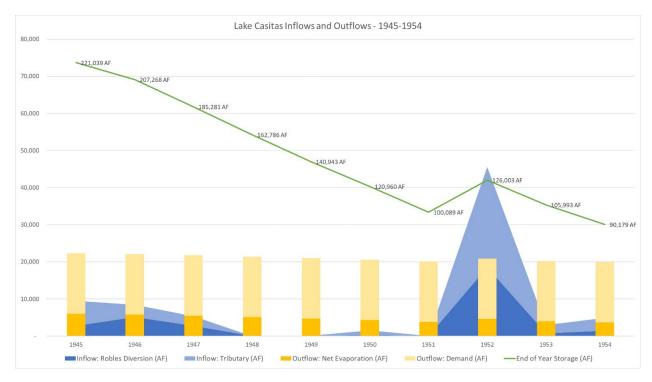


Figure 3-2 Sample Modeled Lake Casitas Inflows and Outflows, 1945-1954 Historical Hydrology



## Section 4 Minimum Allowable Storage and Robles Diversion Sensitivity Analysis

Key modeling assumptions affecting safe yield and safe demand analyses include the minimum allowable storage in Lake Casitas and the effectiveness of the Robles Diversion Structure. The sensitivity of model results to those input parameters are described in this section.

As described previously, the minimum allowable storage is a policy decision based on the amount of emergency storage desired in Lake Casitas. As such the selection of the minimum allowable storage is affected by the Casitas Board's risk tolerance. A higher minimum allowable storage reduces the risk of impacts from unforeseen events, but reduces the amount of working storage to meet demands under normal conditions and thus results in a lower safe yield. Similarly, a lower minimum allowable storage increases the risk of impacts from unforeseen events but results in higher safe yield for normal operations. To test the sensitivity of Lake Casitas simulated yield to the minimum storage level, yield analyses were performed for minimum allowable storage values varying from 15,000 AF to 100,000 AF.

The Robles Diversion Structure is a critical facility in determining the Lake Casitas yield, since it controls the amount of water diverted into the Lake from the Ventura River. As described previously the amount of water diverted on a daily basis is governed by both physical and regulatory constraints. To account for the uncertainty in actual vs theoretical operations, the yield model has a parameter that allows the user to set the Robles diversion efficiency factor. An efficiency factor of 0.70 was adopted for all simulations of base conditions with the existing facility. To test the sensitivity of the Lake Casitas simulated yield to the Robles diversion efficiency factors, yield analyses were performed for efficiency factors varying from 0.6 to 1.0. All simulations were performed using historical hydrology and the full model period from 1945-2018.

The sensitivity analyses of minimum allowable storage and Robles diversion efficiency were combined into sets of yield model runs in which both parameters were varied over the stated ranges. The sensitivity analysis was performed for safe yield and safe demand assumptions. Results are shown in **Figures 4.1 – 4.3** and **Table 4-1** and **Table 4-2**.

The minimum allowable storage level has a substantial effect on safe yield and safe demand over the range of 15,000 AF to 100,000 AF. This is a large range, representing 6% to 42% of total available capacity. The safe yield varies by an average of 5,370 AFY over this range, and the safe demand varies by an average of 13,260 AFY over this range. The results are less sensitive to the Robles diversion efficiency factor. Over the range of 0.6 to 1.0 the safe yield varies by an average of 1,920 AFY and the safe demand varies by an average of 2,340 AFY.

Based on these results the Casitas staff felt comfortable with setting the Robles diversion efficiency factor at 0.70. The minimum allowable storage level was presented to the Board as a policy decision.

[Note: the model results described in this section are based on a previous version of the Yield Model which was changed slightly later in the study. The conclusions of this section are still valid.]



Lake Casitas Safe Yield (AFY)								
Minimum	Robes Diversion Efficiency Factor							
Allowable Storage (AF)	100% 90% 80% 70% 60%							
15,000	18,830	18,230	17,625	17,000	16,400			
30,000	17,875	17,260	16,660	16,050	15,450			
50,000	16,620	16,010	15,400	14,800	14,175			
75,000	15,075	14,460	13,850	13,250	12,650			
100,000	13,050	12,700	12,350	11,750	11,140			

### Table 4-1 Safe Yield Sensitivity Analysis of Minimum Allowable Storage and Robles Diversion Efficiency Factor

Lake Casitas Safe Demand (AFY) – WEAP Policy Operation							
Minimum	Robles Diversion Efficiency Factor						
Allowable Storage (AF)	100% 90% 80% 70% 60%						
15,000	27,150	26,325	25,500	24,775	24,025		
30,000	24,650	23,910	23,160	22,450	21,700		
50,000	21,015	20,600	20,225	19,650	18,425		
75,000	16,300	15,900	15,325	14,550	13,810		
100,000	13,250	12,875	12,530	12,050	11,400		

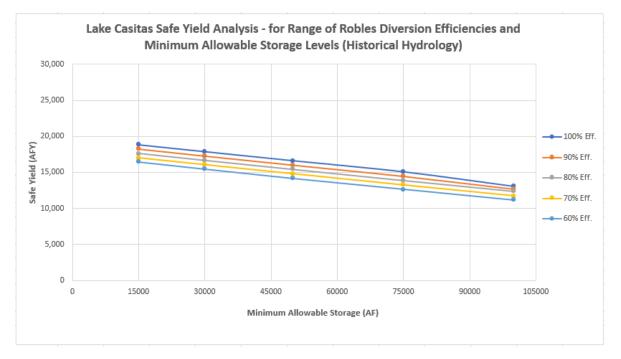


Figure 4-1 Lake Casitas Safe Yield for Range of Minimum Allowable Storage and Robles Diversion Efficiency

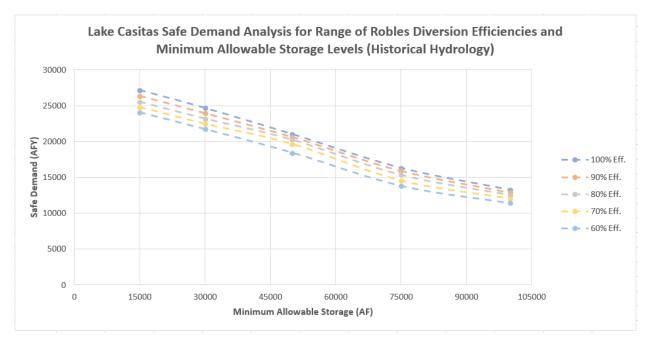


Figure 4-2 Lake Casitas Safe Demand for Range of Minimum Allowable Storage and Robles Diversion Efficiency

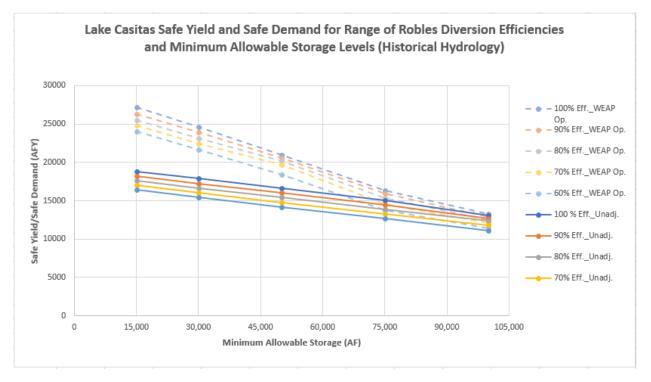


Figure 4-3 Lake Casitas Safe Yield and Safe Demand for Range of Minimum Allowable Storage and Robles Diversion Efficiency

# Section 5 Analysis of Hydrologic Uncertainty

The previous Lake Casitas yield analyses – both those conducted with the original model and those performed with the new model as described in the foregoing sections – all used historical hydrology in the simulations. That includes historical data for direct inflows to Lake Casitas, flows in the Ventura River on which diversions at the Robles Diversion Structure were based, and net evaporation from the Lake. This type of analysis assumes historical hydrology will recur in the future in exactly the same sequence and magnitude. In fact, the one thing known about future hydrology is that it will <u>not</u> occur in the same sequence and magnitude as the historical record. Natural variability in climate, shifts in climate drivers such as ocean temperatures, and other factors all are responsible for affecting future hydrologic conditions.

Hydrologic variability is being addressed in long-range water supply plans being conducted by water utilities throughout the nation. For this study, hydrologic variability was incorporated into the Lake Casitas water supply analysis in two ways:

 Natural variability was incorporated by generating 100 sequences of hydrologic model inputs with the same basic statistics as the historical record. Simulations based on selected sequences from this dataset were used to develop a probabilistic approach to estimating Lake Casitas yield.



2. Potential effects of climate change on temperature and precipitation were incorporated by reviewing published climate change studies and adjusting yield estimates to reflect likely future climate conditions.

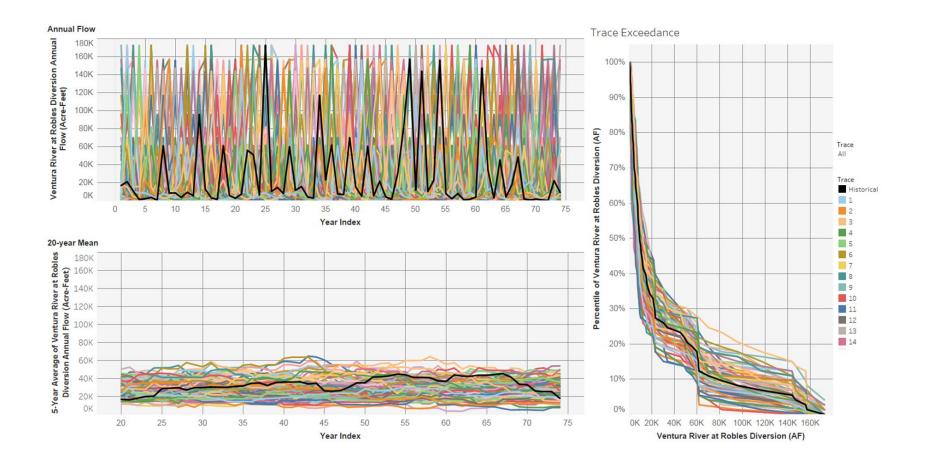
Each of these modifications to Lake Casitas Yield Model inputs are described below.

## 5.1 Resequencing of Historical Hydrology

Natural hydrologic variability was incorporated into the Lake Casitas yield analysis by generating 100 hydrologic datasets (traces) derived from the historical dataset and having the same basic statistics (e.g., standard deviation and serial correlation of annual streamflows) as the historical record. This was accomplished in the following steps.

- Resequencing was based on Ventura River streamflows upstream of the Robles Diversion Structure from the yield model. This was considered a more reliable dataset than the direct tributary inflows to the Lake, as aggregated model input data for the tributary inflow node was estimated by Casitas from 1983 to present. Annual streamflow volumes for the Ventura River upstream of the Robles Diversion Structure for the model period of record (1944-2018) were extracted from the Yield Model for use in the resequencing analysis.
- 2. Ventura River annual streamflows were input to a k-nearest neighbor (KNN) software routine to generate 100 similar sequences of annual Ventura River streamflows. In a KNN routine, a historical year is randomly selected as the first year in the new sequence. Using that first year's associated annual flow, remaining annual flows are ranked and weighted based on how close they are to the selected first year's annual flow. To determine the second year of the new KNN sequence, one of these weighted historical annual flows and its corresponding historical year is selected. This is akin to selecting one ping pong ball from a jar of ping pong balls, in which the number of balls representing a given year is based on the nearness of the annual flow in that year to the annual flow in the first year. The second year in the KNN sequence is then chosen to be the year <u>after</u> the selected historical year. This generates new streamflow sequences that reflect the persistence in the historical record (i.e., probability of a wet year following a wet year or a dry year following a dry year). The synthetic streamflow sequences generated by the KNN approach contain substantial variability, as shown in Figure 5-1.
- 3. The KNN methodology produced many hydrologic sequences with longer and deeper droughts than the critical drought in the historical period. Because the historical critical drought was 21 years long (1945-1965), the synthetic streamflow records were analyzed for 5-year, 10-year and 20-year moving average annual streamflow to assess their severity relative to the historical record. Figure 5-2 shows a range of statistics for the synthetic hydrologic traces, and demonstrates the large number of traces with longer, deeper droughts than the historical critical period.

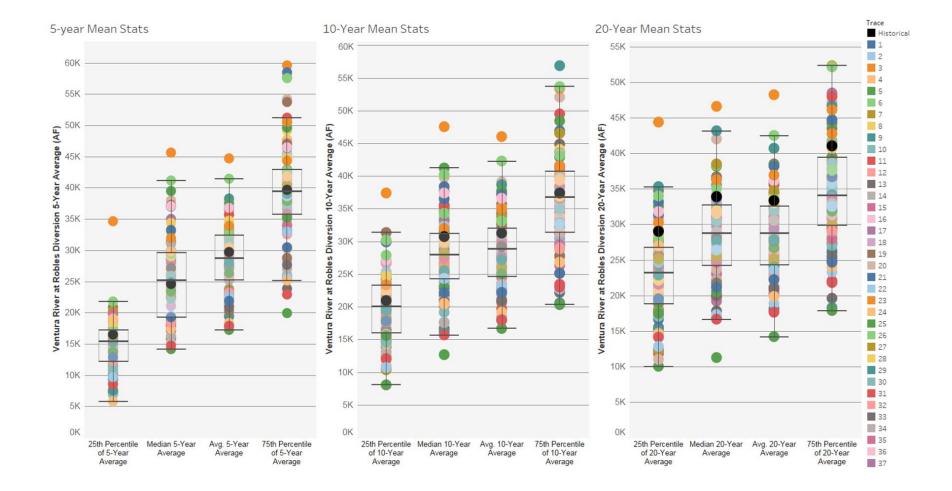




#### Figure 5-1 100 Hydrologic Traces for Ventura River Upstream of Robles Diversion

Note: Each color is a different hydrologic trace. The black trace is historical hydrology.





#### Figure 5-2 5-year, 10-year, and 20-year Moving Average Statistics for Ventura River Synthetic Streamflows

Note: Each colored dot represents one of the 100 synthetic streamflow records. The black dot is the historical record.

- 4. For each of the 100 resequenced Ventura River historical annual streamflows, the corresponding historical year was used as an index to resequence the other two Lake Casitas Yield Model inputs dependent on climate the direct Lake inflows and Lake net evaporation. For example, in trace 1 the annual Ventura River streamflow selected for the first year in the sequence was the 1982 annual flow. To generate the other model inputs, the annual direct Lake inflow was taken from 1982 and annual net evaporation was taken from 1982. In this way the historical correlation between all the hydrologic inputs was preserved.
- 5. The Lake Casitas Yield Model simulates Lake operations on a monthly basis. To generate the monthly input for each synthetic sequence, the monthly data for the corresponding year in the resequencing process was taken from the historical database. For the example used in the previous step, the yield model input for the first year in the simulation of trace 1 was populated with the historical monthly streamflows from 1982 for the direct Lake inflow and net evaporation. Similarly, the historical daily Ventura River flows from 1982 were used to calculate the Robles diversion volumes for the first year in trace 1.
- 6. Because the safe yield and safe demand analyses involved iteration, selected traces from the set of 100 were used to test the process of performing the reliability analysis. The selected traces represented the full range of long-term average streamflow statistics shown in Figure 4-2. Twelve traces were selected, plus the historical record, for use in the yield reliability analysis. The moving average statistics for the 13 traces are shown in Figure 5-3.

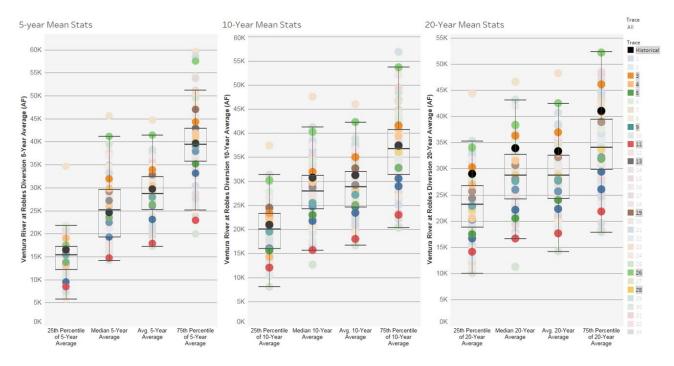


Figure 5-3 Moving Average Statistics for Traces Selected for Yield Reliability Analysis

## 5.2 Yield Reliability Analysis

The 100 resequenced hydrologic traces plus the historical hydrologic record were simulated in the Lake Casitas Yield Model to determine the corresponding safe yield and safe demand for each trace. Simulations used a minimum allowable storage of 20,000 AF and a Robles diversion efficiency factor of 0.70. The exceedance probability of each safe yield and safe demand result were computed and the results were plotted as shown in **Figure 5-4**. Polynomial equations were fitted to the probability distribution to estimate safe yields and safe demands for a range of exceedance probabilities.

Because the extreme tails of the distributions differed significantly from the bulk of the data, a sensitivity analysis was performed by excluding the upper and lower 10% of traces from the analysis and the results were replotted. The truncated safe yield and safe demand exceedance probability curves are shown in **Figure 5-5** and **Figure 5-6**. **Table 5-1** summarizes the safe yield and safe demand reliability results for the two datasets. Using the middle 80% of the traces provides a better polynomial fit to the data. However, because the primary interest of the CWRP is in the reliability of Lake Casitas yield during extreme dry periods (i.e., 90%-99% exceedance probability range), the analysis based on the full 100 traces was adopted for this study.

Exceedance Probability	Safe Yield – 100 Sequences (AFY)	Safe Yield – 80 Sequences (AFY)	Safe Demand – 100 Sequences (AFY	Safe Demand – 80 Sequences (AFY
0.10	19,265	18,409	26,115	24,714
0.25	18,015	17,232	24,512	23,535
0.50	15,498	15,270	20,851	20,878
0.75	12,440	13,308	15,952	17,359
0.90	10,346	12,130	12,419	14,833
0.95	9,605	11,738	11,142	13,922
0.99	8,996	11,424	10,085	13,168

Note: Simulations are based on 20,000 AF minimum allowable storage, 0.70 Robles diversion efficiency factor, and no climate change adjustment

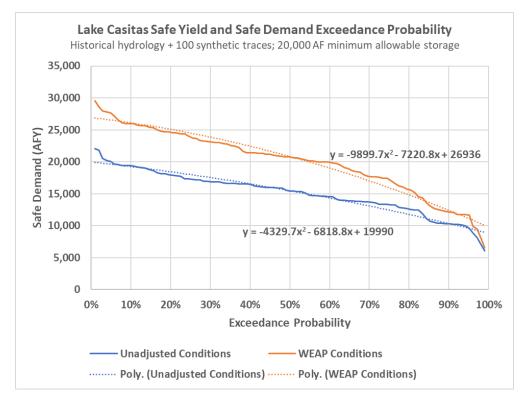


Figure 5-4 Safe Yield and Safe Demand Probability Based on 100 Synthetic Hydrologic Sequences

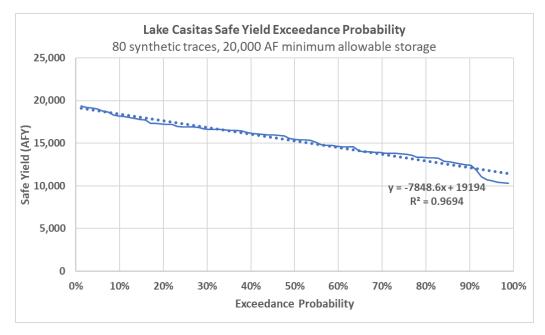


Figure 5-5 Safe Yield Probability Based on 80 Synthetic Hydrologic Sequences

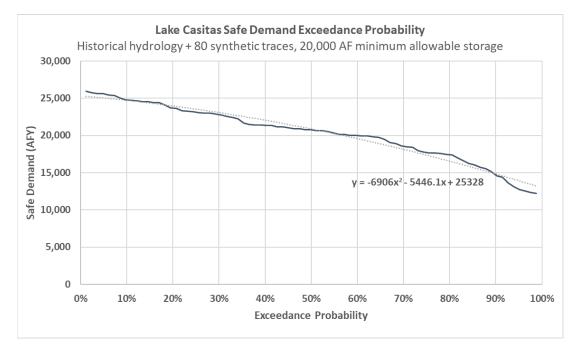


Figure 5-6 Safe Demand Probability Based on 80 Synthetic Hydrologic Sequences

## 5.3 Climate Change Analysis

The analysis of the effects of climate change on Lake Casitas hydrology was based on the findings of *Projected Changes in Ventura County Climate: 2021-2040, Western Regional Climate Center/Desert Research Institute and Watersheds Coalition of Ventura County, 2019.* This is considered to be the most reliable estimate of near-term climate change effects for the Casitas region. The study was supported by Casitas and other Ventura County agencies.

Primary findings as they relate to this study for the time period through 2040 are:

- Average temperatures will increase.
- Maximum temperatures will increase by 3-5 degrees.
- Average annual precipitation could increase or decrease; for this study it was assumed there would be no substantial change in annual precipitation.
- There will be more 3-4 more dry days per year, primarily in spring and fall.
- Precipitation intensity will increase. The wettest 5% of rainfall days will contribute 10% more of the total annual precipitation.
- Evapotranspiration will increase by 2.5 to 6.5 inches per year, with higher increases occurring in inland areas.



• Runoff production (conversion of rainfall to runoff) will decrease due to reduction in soil moisture associated with higher temperatures and greater evapotranspiration.

The Lake Casitas Yield Model simply simulates inflows, outflows and change in storage in Lake Casitas based on an assumed demand. Changes in temperature and precipitation could affect lake hydrology and demands on the Casitas system. Demands are varied in the safe yield and safe demand analysis to find the largest demand that can be met throughout the simulation period. For the safe demand and safe yield modeling analysis, climate effects on lake hydrology could captured in two ways: adjusted lake inflows and adjusted lake evaporation.

Potential climate effects could alter Lake inflows in three primary ways:

- Increase in Precipitation Intensity: Increase runoff from the top 5% of rainfall days without increasing mean annual rainfall
- Increase in Number of Dry Days: Increase the number of days when no runoff would occur
- Decrease in Soil Moisture: Reduce runoff from smaller storm events

The Lake Casitas Yield Model represents lake inflows in two time series: flow in the Ventura River at the Robles Diversion and direct inflow into the lake. Both time series would be affected by these changes. Increase in precipitation intensity would increase runoff, whereas the increase in number of dry days and reduction in soil moisture would decrease runoff. To properly investigate the impact of these climatological changes on watershed runoff, a rainfall-runoff model would be needed to simulate watershed response to changed meteorological inputs on a daily basis. Such a model was not available for the Casitas watershed and developing a model was beyond the scope of the CWRP. For purposes of this analysis, it was assumed the three climate factors affecting Lake inflows would compensate for each other with no appreciable impact on Lake yield.

The Lake Casitas Yield Model has monthly rates of evaporation that are applied to the computed lake surface area to calculate the volume of evaporation loss on a daily basis. The regional climate change assessment indicates that evapotranspiration will increase by 2.5 to 6.5 inches per year, with higher increases occurring in inland areas.

**Table 5-2** summarizes the approach to the lake evaporation climate change adjustment. Two levels of climate change impact were considered – low climate change (LCC) impact corresponding to the lower end of the range of anticipated impacts by 2040, and high climate change (HCC) impact corresponding to the upper end of the range of anticipated impacts by 2040.

Climate Change Impact	Modeling Approach	Magnitude of Change to Simulate Lower Climate Impact	Magnitude of Change to Simulate Higher Climate Impact	
Increase in Evapotranspiration	Increase annual Lake Casitas evaporation, distributed monthly on a pro rata basis	3 inches/year	6 inches/year	

#### Table 5-2 Assumed Climate Change Effects on Lake Casitas Evaporation



Based on data from the Ventura County climate change study, annual evaporation at Lake Casitas could increase by about 3-6 inches depending on the climate scenario assumed. This effect was modeled using the following steps.

- 1. For LCC, assume annual evaporation rate increases by 3 inches. For HCC, assume annual evaporation rate increases by 6 inches.
- 2. Distribute the increase in annual evaporation across the 12 calendar months on a pro rata basis. For example, if the January evaporation rate represents 3 percent of the total annual evaporation rate, then for LCC the increase in evaporation rate would be  $3 \times 0.03 = 0.09$  inches and for HCC the increase in evaporation rate would be  $6 \times 0.03 = 0.18$  inches.

The Lake Casitas Yield Model was run in the safe yield mode (no demand reductions for the WEAP policy) for the two reduced evaporation scenarios using historical hydrology, a minimum allowable storage of 15,000 AF, and a Robles diversion efficiency factor of 0.70. The results are summarized in **Figure 5-6**. The Low Climate Change assumption of an increase in annual evaporation rate of 3 inches reduced the safe yield by 2.2%. The High Climate Change assumption of an increase in annual evaporation rate of 6 inches reduced the safe yield by 4.3%. These are relatively modest impacts over the 2040 planning horizon. For the CWRP it was decided to use the High Climate Change condition to be conservative. When appropriate, climate change adjustments to safe yield and safe demand estimates developed from the Lake Casitas Yield Model were made by reducing modeled values by 4.3%.

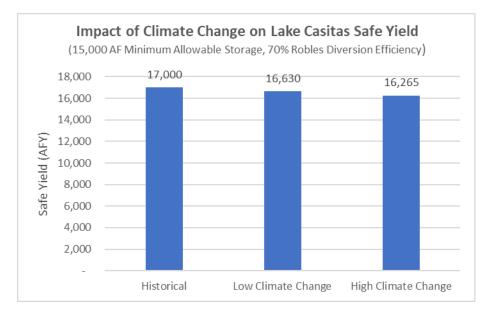


Figure 5-7 Impact of High Climate Change Assumptions on Lake Casitas Safe Yield



# Section 6 Critical Period

Previous safe yield analyses with the original Lake Casitas Safe Yield Model using the historical period in the simulations found that the critical drought period occurred from 1945-1965. After making the adjustments to elevation-area-capacity table, the Robles Diversion Structure simulation, and the minimum allowable storage level, the critical drought period in the historical record was still the 1945-1965 period. This is shown in **Figure 6-1**.

However, when the demands on Lake Casitas were adjusted during the simulation to account for the effect of the WEAP policy, the critical period in the historical record became the 1998-2018 period that contains the recent severe drought. This is shown in **Figure 6-2**. If future hydrologic studies depend on the critical period, it is recommended that both the 1945-1965 and 1998-2018 periods be included in the analysis.



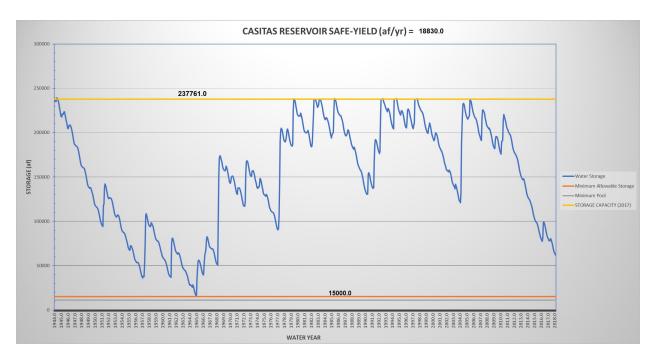


Figure 6-1 Simulated Lake Casitas Storage for Safe Yield with Constant Demand Throughout Simulation

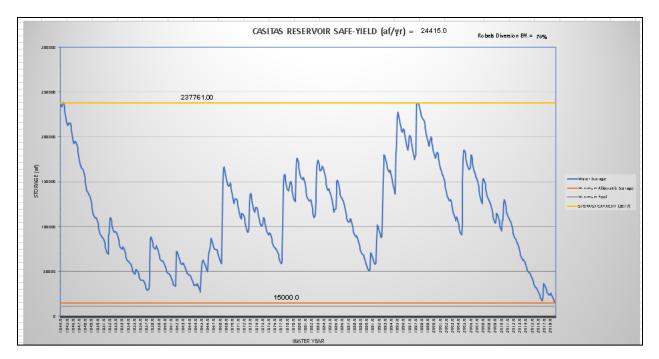


Figure 6-2 Simulated Lake Casitas Storage for Safe Yield with Demand Adjusted Based on WEAP Policy

# Section 7 Minimum Allowable Storage Policy Development

Casitas staff and Water Resources Committee wanted to base the selection of the Lake Casitas minimum allowable storage on the ability to meet critical uses supplied by Lake Casitas. Critical uses are defined as uses that should be met even during emergency periods to meet health and safety obligations, contractual obligations, and regional economic goals. The minimum allowable storage was related to the number of years of critical use volume to be held in storage at all times for the safe yield and safe demand model simulations.

A proposed minimum allowable storage policy was developed by reviewing future water demand estimates for categories of Casitas customers and estimating the percentage of critical water use in each category. Three options were developed – upper bookend, lower bookend, and recommended value. Assumptions for each option were made for future water demand, the percentage of demand considered critical, the amount of water lost from the Lake due to net evaporation, and the number of years of critical use to be retained in storage. Assumptions were validated by Casitas staff.

**Table 7-1** provides details on the calculations and assumptions made for each minimum allowablestorage option. After reviewing this information, Casitas staff agreed that the recommended minimumallowable storage value of 20,000 AF would be presented to the Board as a policy to be considered.

### Table 7-1 Minimum Allowable Storage Calculations

	Upper Bookend		Lower Bookend		Recommended A				
	Percent Critical Use	2040 Forecasted Water Use from Lake (AFY)	2040 Critical Use from Lake (AFY)	Percent Critical Use	2040 Forecasted Water Use from Lake (AFY)	2040 Critical Use from Lake (AFY)	Percent Critical Use	2040 Forecasted Water Use from Lake (AFY)	2040 Critical Use from Lake (AFY)
Retail Use	60%	3,000	1,800	50%	2,700	1,350	50%	2,700	1,350
Agricultural Use	70%	8,000	5,600	50%	7,200	3,600	50%	7,200	3,600
Contract Sales	100%	6,500	6,500	25%	5 <i>,</i> 850	1,463	50%	5 <i>,</i> 850	2,925
Total Use		17,500	13,900		15,750	6,413		15,750	7,875
Years of Critical Use in									
Emergency Storage			3.0			1.0			2.0
Emergency Storage (AF)			41,700			6,413			15,750
Net Evap Make-Up			2,000			0			1,400
Dead Pool (AF)			950			950			950
Minimum Allowable									
Storage (AF)			44,650			7,363			18,100
Recommended Value (AF)			45,000			7,000			20,000

#### Assumptions

Upper Bookend:	Percent Critical Use is very conservative				
	2040 forecasted use is from 2016 UWMP without Ojai Valley demands met from wells				
	3.0 years of critical use gets through 3 additional drought years with no backup supplies				
	Net evaporation make-up volume assumes no natural inflow or Robles diversions				
Lower Bookend:	Percent Critical Use is based on all users cutting back to WEAP levels				
	2040 forecasted use assumes 10% permanent reduction from 2016 forecast values due to demand management				
	50% of ag deliveries keeps trees alive but does not produce a harvest				
	25% of contract deliveries assumes contract allocation is 50% per WEAP and contractors get 50% of that amount				
	1.0 years of critical use in storage gets through one additional drought year with no backup supplies				
	Net evaporation make-up volume assumes natural inflow is minimal but enough to compensate for evaporation losses				
Recommended:	WEAP allocations for all customer classes				
	10% reduced 2040 demand forecast for demand management is consistent with supply gap calculations				
	2.0 years of critical use in storage gets through two additional drought years with no backup supplies				
	Net evaporation make-up volume based on conservative assumption of no significant Lake inflow				

### Section 8 Results for Use in CWRP

As noted in previous sections, the Yield Model was updated during the course of the project to correct minor calculations and the application of the resequenced hydrologic data. This section presents results based on the final version of the model. The reliability analysis using all 100 synthetic hydrologic traces was used.

Based on the recommendation of staff and the Water Resources Committee, a minimum allowable storage level of 20,000 AF will be recommended to the Board for planning. **Figure 8-1** shows the exceedance probabilities for safe yield and safe demand modeling analyses based on that assumption and using the final version of the Yield Model. **Table 8-1** summarizes the results and provides the yield reliability values to be used in the CWRP. As an example of how the results in this table should be interpreted, the 95% safe demand reliability can be stated in words as follows:

There is a 95% chance that in the future Casitas will be able to safely support a demand of up to 10,660 AFY every year from Lake Casitas with existing supplies and infrastructure, 20,000 AF minimum allowable storage, and implementation of our current WEAP policy. There is a 5% chance that hydrology will be drier than expected and we will need to use our emergency storage pool at least once to meet the demand of 10,660 AFY.

Exceedance Probability (Reliability)	Safe Yield (AFY)	Safe Yield with Climate Safe Demand afe Yield (AFY) Adjustment (AFY) (AFY)					
0.90	10,350	9,900	12,420	11,890			
0.95	9,610	9,190	11,140	10,660			
0.99	9,000	8,610	10,090	9,650			

# Table 8-1 Lake Casitas Safe Yield and Safe Demand Reliability with Climate Adjustment for 20,000 AF Minimum Allowable Storage

Note: Results based on 20,000 AF minimum allowable storage and 70% Robles diversion efficiency factor.

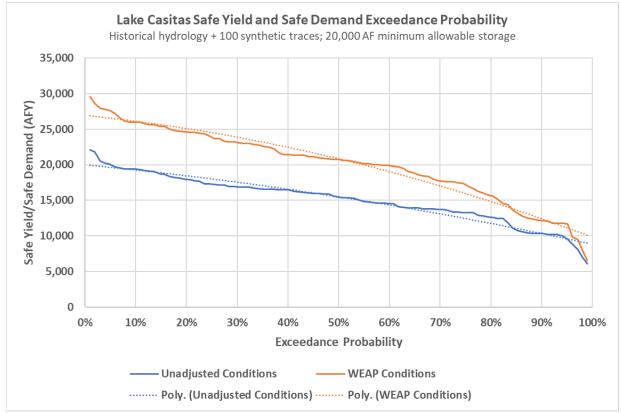


Figure 8-1 Exceedance Probability for Lake Casitas Safe Yield and Safe Demand Simulations With Synthetic Hydrology

The results summarized in **Table 8-1** demonstrate the significant benefits of the WEAP demand reduction policy in terms of managing and stretching existing water supplies. At the 95% reliability level with 20,000 AF minimum allowable storage, a base safe yield of 9,190 AFY can be delivered in every year. However, with implementation of the WEAP demand reduction targets during periods of low Lake levels, the safe demand with 95% reliability is 10,660 AFY. The difference – 1,570 AFY – is a measure of the benefit of Casitas' customers reducing their demands during drought periods. Without a commitment to implement water conservation measures during these periods, Casitas would have to acquire sufficient new water supplies to produce the equivalent of 1,570 AFY in additional yield.

## Section 9 References

CMWD, 2004. Water Supply and Use Status Report, Casitas Municipal Water District, December 7, 2004.

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Comprehensive Water Resources Plan

June 8, 2020

Prepared for:

Casitas Municipal Water District

Prepared by:

Stantec Consulting Services, Inc.



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### Section 1 Introduction

This Technical Memorandum (TM) presents analyses of the risk of Lake Casitas being drawn down to unacceptable levels due to future hydrology and operating conditions. The analyses were conducted to support decision-making for the Casitas Municipal Water District (Casitas) Comprehensive Water Resources Plan (CWRP). As a result of the recent historical minimum storage level that occurred at the end of 2018 and the possibility of a hotter and drier climate in the future, Casitas leadership and the community have expressed concern that there is an increased risk of the lake never fully recovering. This TM presents analyses that attempt to quantify that risk.

## Section 2 Assumptions

### 2.1 Starting Lake Storage

The storage volume in Lake Casitas on September 11, 2019 was 101,829 acre-feet (AF), based on information from the Casitas web site. For purpose of this analysis a starting lake storage volume of 100,000 AF was adopted.

### 2.2 Minimum Reservoir Pools

The Lake Casitas dead pool is 950 AF. It is currently not possible to withdraw water from below that level for distribution to customers. A minimum allowable storage volume of 20,000 AF was selected by the Casitas Water Resources Committee as a provisional level below which the lake would not be drawn down except in extreme emergencies beyond the conditions used for CWRP planning. Although that value may be changed in the future, it was used in this analysis of the risk of lake drawdown.

### 2.3 Water Demand and Production from Lake Casitas

Recent data provided by Casitas for water produced from Lake Casitas to meet customer demands is shown in Table 2-1Error! Reference source not found.. The average water production for the past 3 years was 12,670 acre-feet per year (AFY) and for the past 5 years was 14,810 AFY. Since water demand in the Casitas service area is trending downward based on effective conservation practices, this analysis used a demand on Lake Casitas from all its retail and resale customers of 13,000 AFY. (Note some of Casitas' demands are met from Mira Monte Well and Ojai Valley groundwater wells; demands met by those sources are not included in this analysis.) When simulating performance of Lake Casitas, demands were either held constant in every year at 13,000 AFY or adjusted based on water use reductions prescribed by the Casitas Water Efficiency and Allocation Policy (WEAP). For the CWRP, the unadjusted demand analysis was termed a "safe yield analysis" while the WEAP-adjusted demand analysis was termed a "safe demand analysis." Because 13,000 AFY is the recent historical demand on the lake and includes the effect of WEAP policy reductions in those years of low lake storage, the simulations with unadjusted demand may be better representations of future use. However, Casitas' customers have shown an ability to reduce water consumption to levels exceeding goals in the recent drought, so it is reasonable to expect a certain amount of additional conservation can be achieved during emergency conditions when lake level are close to the minimum allowable storage. Demand data for Casitas is

described in more detail in the Water Demand Estimate for Casitas Municipal Water District TM prepared for the CWRP.

Calendar Year	Water Produced from Lake Casitas
2011	14,841
2012	16,245
2013	20,402
2014	18,810
2015	17,247
2016	14,152
2017	12,213
2018	11,632

Table 2-1 Historical Water Production from Lake Casitas, 2011-2018.

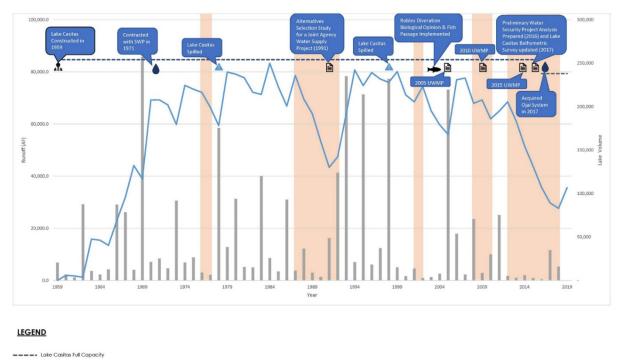
**Modeling.** The Lake Casitas Yield Model developed for use in the CWRP and based on a previous lake operations model was used for this analysis. This model is described in detail in the Lake Casitas Supply Analysis TM prepared for the CWRP.

**Hydrology.** The CWRP developed a suite of 100 hydrologic datasets for lake inflows and evaporation based on the statistics of the historical record. Each dataset has a length of 74 years to match the historical record used in the Yield Model. Each dataset is comprised of resequenced data from historical years, where the resequencing preserves the serial correlation statistics (e.g., the probability that a dry year will be followed by another dry year) of the historical record. This process is described in detail in the Lake Casitas Supply Analysis TM prepared for the CWRP.

## Section 3 Analysis

### 3.1 Historical Lake Levels

Appendix A Background Information Technical Memorandum for the CWRP presented a chart of historical Lake Casitas storage levels over the project history. This is shown in Figure 3-1. It demonstrates that there have been alternating 10- to 20-year cycles of wet and dry periods. The lowest storage volume since the lake began filling in 1959 occurred at the end of the recent prolonged drought when the lake storage was 72,278 AF in January 2019. Since that low level the lake has recovered marginally during the wet winter of 2018-19. The previous low storage level occurred at the end of a dry period in the late 1980s and early 1990s when the lake storage dropped to 127,786 AF in February 1991. Neither of the historical low storage levels approached the 20,000 AF minimum allowable storage level currently proposed for use for CWRP planning.



```
Drought Period
```

Figure 3-1 Historical Lake Casitas Storage Volumes and Inflows

### 3.2 Impacts of Repeat of Historical Hydrology

The Lake Casitas Yield Model was used to simulate performance of the lake based on the starting initial storage volume of 100,000 AF, a constant 13,000 AFY demand, and a recurrence of the 1945-2018 hydrologic record. This resulted in a complete drawdown of the lake. The lake storage volume was below the 20,000 AF minimum allowable storage level for 25 months before becoming completely depleted. Figure 3-2 shows the monthly storage volume over the simulation period using historical hydrology.



Note: Dead pool storage assumption was changed to 950 AFY later in the project

# Figure 3-2 Lake Casitas Drawdown Starting from Current Lake Storage for Historical Hydrology (Safe Yield and Safe Demand)

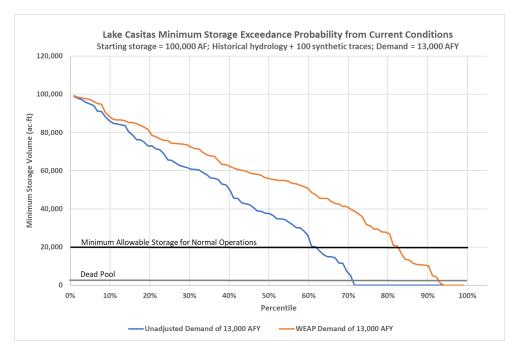
When WEAP policy water use reductions were applied based on the lake storage volume, there was a significant improvement in lake storage for the same initial conditions and historical hydrology. In this case the minimum storage volume for the period of simulation is 36,257 AF. Application of the water conservation targets prescribed in the WEAP policy would be effective in keeping the lake above the 20,000 AF minimum allowable storage level. However, reducing demands on the lake far below the 13,000 AFY assumed base demand for this analysis would require significant water use reduction by Casitas' customers. For example, in years when the lake storage volume is below 59,440 AF, the WEAP policy calls for a 50% reduction in water use.¹ This would reduce customer demands on Lake Casitas to 6,500 AFY, a value much less than any historical annual water demand.

¹ This is based on the study team's initial interpretation of the WEAP water use reduction guidelines. That interpretation was later changed based on input from Casitas, resulting in less drastic demand reductions at low lake levels. The lake storage risk analysis within this technical memorandum was not updated with the revised WEAP interpretation but the CWRP includes the revised results.

### 3.3 Statistical Analysis of Future Hydrologic Conditions

The 100 synthetic hydrologic traces for lake inflow developed for performing risk analyses for the CWRP were simulated with the assumptions of 100,000 AF initial storage and 13,000 AFY demand (with and without the WEAP reductions). Each hydrologic trace consists of 74 years of resequenced historical lake inflows. Because each trace has a different sequence of flows, some start with wet periods and others start with dry periods. Each sequence is equally likely, so the results of all the simulations can be evaluated to estimate the risk of the lake storage falling to different levels in the future.

Results of the statistical analysis of all 100 hydrologic traces are shown in Figure 3-3, which depicts the probability of the minimum storage on the y axis being equaled or exceeded during the 74-year simulation period.



#### Figure 3-3 Exceedance Probability of Minimum Storage Occurring in Lake Casitas for Simulation of 100 Synthetic Hydrologic Sequences

If it is assumed the demand on the lake is constant at 13,000 AFY, there is a 37% chance the lake storage will fall below 20,000 AF in the future and a 28% chance it will fall below the dead pool level. If it is assumed the base demand is 13,000 AFY but it would be reduced as customers respond to measures called for in the WEAP policy during periods of low lake storage levels, there is a 17% chance the lake storage will fall below 20,000 AF in the future and a 6% chance it will fall below the dead pool level. A summary of the risk of Lake Casitas falling below these key levels over the next 74 years is provided in Figure 3-4.

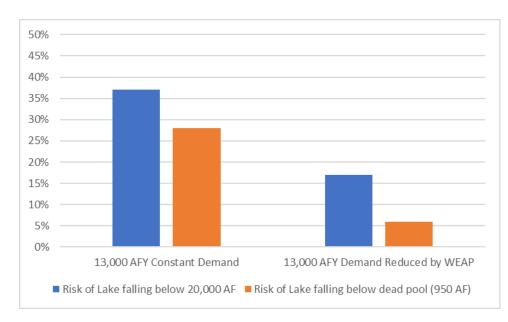


Figure 3-4 Percent Chance of Lake Casitas Being Drawn Down to Low Levels Over the Next 74 Years

### 3.4 Benefits of Supplemental Water

All inflows to Lake Casitas originate from local watersheds (directly tributary streams and the Ventura River). Casitas is actively pursuing multiple options for bringing in supplemental water supplies that are not dependent on runoff from local watersheds. These include options for accessing the District's allocation of State Water Project water, Matilija Formation deep wells, and seawater desalination options. This would add diversity to the Casitas water portfolio and provide alternate sources of supply at times when the local system is in drought conditions.

Benefits of importing supplemental water to Lake Casitas were investigated. For this analysis there was no assumption made about the specific source of water. A simple analysis with a continuous source of supplemental water was conducted (equal deliveries in every month and every year). The volume of supplemental water needed to prevent the lake level from falling below the minimum allowable storage volume of 20,000 AF for a recurrence of historical hydrology was estimated to be 2,350 AFY.

See **Figure 3-5** for a plot of storage volumes showing the benefit of importing 2,350 AFY of supplemental water every year assuming a starting lake storage volume of 100,000 AF, a repeat of historical hydrology, and a constant demand of 13,000 AFY. The synthetic hydrology analysis showed that future hydrology is likely to be drier than the observed historical record. To be conservative, a supplemental supply of 2,500 AFY is recommended to mitigate the risk of Lake Casitas storage dropping below 20,000 AF.

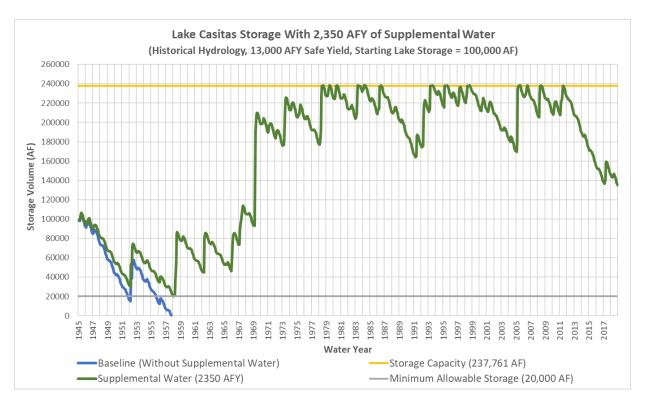


Figure 3-5 Lake Casitas Storage with 2,350 AFY of Supplemental Water, Historical Hydrology, and 13,000 AFY Constant Demand

## Section 4 Summary

The following points summarize the risk of Lake Casitas being drawn down to unacceptable levels based on the current lake storage volume and recent operating history.

- If historical hydrology were to repeat starting in 2020, Lake Casitas would be drawn down to a low storage of about 36,000 AF. This would be the lowest lake storage ever recorded after the lake first filled, but would be above the minimum allowable storage of 20,000 AF set by the Water Resources Committee.
- There is a 17% chance the lake storage will fall below 20,000 AF in the future and a 6% chance it will fall below the dead pool level.
- The volume of supplemental water needed to prevent the lake level from falling below the minimum allowable storage volume of 20,000 AF is approximately 2,350 AFY if historical hydrology were to reoccur. To be conservative a supplemental supply of 2,500 AFY is recommended to mitigate the risk of the lake going dry in the future.



Appendix F Draft Decision Support Tool Documentation Technical Memorandum

Comprehensive Water Resources Plan

June 8, 2020

Prepared for:

Casitas Municipal Water District

Prepared by:

Stantec Consulting Services Inc.

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### Section 1 Summary

This Technical Memorandum (TM) presents the development of the decision support tool for Casitas Municipal Water District (Casitas) to organize water supply options and portfolios identified in the Comprehensive Water Resources Plan (CWRP) and evaluate and rank them based upon common criteria. Evaluation criteria selected for use in this tool included factors representing a triple bottom line approach to decision-making. Stantec prepared this tool to assist Casitas and stakeholders in evaluating the sensitivity of the ranking of water supply options and water supply portfolios (groupings of water supply options) to the various factors that were defined during the study. The decision support tool includes graphical outputs showing how the rating and ranking of each option and portfolio responds to different weightings of the identified criteria.

The Excel-based decision support tool was provided to Casitas separately from this TM. The Excel workbook contains instructions on how to update the tool to revise input data and add new projects.

## Section 2 Decision support Tool Overview

The CWRP decision support tool was developed in Excel for ease of use and transparency of results. The tool implements a basic multi-criteria decision analysis methodology in which:

- 1. Evaluation criteria are identified based on the success factors important to Casitas.
- 2. Options are given a numerical rating (in this case 1-5, with 5 being best) for each of the selected criteria based on objective data or subjective professional opinion.
- 3. Criteria categories are given weights based on preferences and values of the group doing the scoring.
- 4. A composite weighted score is calculated for each option as the sum of the products of the rating and the weight for each criterion.
- 5. A composite weighted score is calculated for each water supply portfolio as the sum of the products of the option composite weighted score and the percentage of annual yield contributed by the option in the overall portfolio.

To select key criteria that can help Casitas identify beneficial options, categories were identified that represented key factors for evaluating each of the options. These categories consist of Technical, Cost, Environmental, and Social factors, and cover the traditional triple bottom line approach to decision-making. For each of the four categories, multiple criteria were defined and scored individually to develop a combined option score. The criteria defined for each category are listed in Table 2-1.

#### Table 2-1 Decision Support Tool Criteria for Evaluating Water Supply Options and Portfolios

Criteria Category	Individual Criteria
	Annual Yield
Technical	Technical Feasibility
	Reliability



	Time to Implement Phased Construction
Cost	Construction Cost O&M Cost Cost Effectiveness
Environmental	Water Quality Permitting and Regulatory Constraints Energy Efficiency
Social	Casitas Control Stakeholder Support Regional and Ancillary Benefits

These criteria were reviewed and approved by Casitas staff and Water Resources Committee.

# Section 3 Ranking Criteria

The following sections summarize the criteria used to evaluate each of the water supply options considered in the CWRP.

### 3.1 Technical Category

### 3.1.1 Annual Yield

The average annual yield contributed by each water supply option was estimated. For the majority of options, an estimate or range of possible annual yield was available from previous planning documents or was developed as part of the CWRP studies. Average annual yield for all alternatives was estimated in acre-feet per year where the option provided a new or expanded supply of water. Some of the options do not provide a direct new supply of water, such as sediment removal from Lake Casitas which would improve the available storage capacity of the lake but not create any new supply for Casitas. These options were ranked in terms of their effectiveness in increasing the yield of Lake Casitas based on existing water sources.

### 3.1.2 Technical Feasibility

This criterion reflects the ability to construct and implement the option. Options that would be implemented using established construction methods are scored higher than those with new or technically challenging elements. Options such as well improvements and conservation measures (i.e., options for which Casitas has a proven track record of delivering successful projects) score highest for this criterion.

### 3.1.3 Reliability

The reliability criterion is used to rank the ability of an option to deliver a consistent and predictable supply of water. Options that can provide consistent supply on an annual basis, even in dry years, are preferred. Examples of projects that scored high for this criterion include the Ojai Basin well improvement project, whereas environmental modification is scored lower as it is unclear how much water will become available on a consistent basis. Similarly, SWP connection projects have a large



Ranking Criteria | 4

average yield but during dry years the availability of water may be severely reduced, and thus they received a lower score for this criterion.

#### 3.1.4 Time to Implement

The approximate time needed to plan, design, and implement an option was considered. In general, options were separated into one of three categories: those that were considered to have a short time frame to implement (0-5 years), a mid-range time to implement (5-10 years), and long-term options (10-20+ years). Options that were already being delivered or had substantial pre-planning, such as conservation and the Ojai Basin well rehabilitation option, scored the highest in this category.

#### 3.1.5 Phasable Construction

This criterion was scored but not included in the final weightings and scoring for each of the options. This criterion was used to assess the ability of each project to be delivered in phases and may or may not be a determining factor for pursuing the project being considered. The findings from Stantec's analysis are included for Casitas' reference, though whether or not an option can be phased was not considered an attribute of the project that should make it more or less desirable than another project independent of the criteria considered in this analysis.

### 3.2 Cost Category

### 3.2.1 Construction Cost

The cost for construction was estimated or identified for each of the options evaluated. In some cases this was based on a qualitative assessment of the order of magnitude of the likely construction cost. This criterion was based on the total capital cost only and considered benefits of regional cost sharing. Options that required low capital investment such as conservation measures and environmental habitat modification scored the highest for this category. The relative cost per AFY of increased yield was not considered as part of this criterion as cost effectiveness was considered separately from the total capital cost needed to implement an alternative.

### 3.2.2 Operation & Maintenance Cost

For this criterion, the typical yearly cost to operate and maintain the option was evaluated. Ongoing costs were either estimated by Stantec staff or adopted from prior studies if they delineated an estimated yearly O&M cost for the alternative. In many cases qualitative estimates of relative O&M costs were used in the analysis. Options that require a large yearly outlay of capital, such as operation and maintenance of a desalination plant or desalter, ranked the lowest for this category.

The cost of water was also considered for this category, but at a conceptual level. The current relative costs of imported water, versus desalinated water, versus local supplies was considered when ranking projects for anticipated O&M costs. In general, projects that developed local groundwater and surface water supplies were the most favorable in terms of anticipated O&M cost, while imported and highly processed water were ranked less favorably. However, future decreases in the cost of treatment technology also make desalination projects more favorable for long term supply planning than new imported water connections.



Ranking Criteria | 5

### 3.2.3 Cost Effectiveness (\$/AFY)

For this category, a cost per AFY of increased yield produced was either identified from past studies or calculated for each option. Cost was based on capital cost of implementing the option. For many of the options, this value had been identified in previous planning documents. For other options, the value identified for the annual yield criterion and the capital cost criterion were used to compute a cost per AFY of increased yield. Stantec used the capital cost per AFY of water for each option to quantify the anticipated cost to develop each new source. Given the stage of planning that most of these projects are currently in (i.e., mostly conceptual), this metric can be used to get a general idea of cost effectiveness to develop the project.

### 3.3 Environmental Category

#### 3.3.1 Water Quality

The water quality criterion was used to capture any negative effects to environmental water quality (e.g., in Lake Casitas or the Ventura River) that the options might pose. Those options that would require more work and study by Casitas to address water quality concerns were ranked lower. The majority of options scored relatively high in this category as no alternatives were identified that posed significant concerns for water quality. Alternatives like Ojai Basin well improvement and conservation scored the highest as they represented gains in existing sources of water where water quality issues were known and previously addressed.

### 3.3.2 Permitting and Regulatory Constraints

This criterion was established to capture any regulatory or permitting issues that may be associated with any of the alternatives. Alternatives that pose significant challenges to permitting or regulatory compliance were identified, and all alternatives were scored based on the expected level of effort to get them approved with all anticipated agencies and partners. Alternatives that scored the lowest in this category include new desalination projects and construction of a new water supply dam, which would both pose significant challenges to permitting and regulatory compliance in order to be implemented.

### 3.3.3 Energy Efficiency

The relative energy efficiency of each option was considered during the option ranking process. This category was difficult to define for many of the options as they have not undergone detailed planning or design. Stantec considered the qualitative energy requirement to construct and operate each of the options and assigned a relative scoring for each of the options based on best engineering judgement and experience from similar. The options that were determined to have the highest concern for energy efficiency are the desalination projects, where the energy needed to process water through membranes is high.

### 3.4 Social Category

The Social category was established to help quantify the social and political factors that could affect implementation of the options.

### 3.4.1 Casitas Control

This criterion was meant to capture the amount of control Casitas would have when implementing an option. Those options that involve ownership by or coordination with outside agencies or partners depend on political decisions and financial commitments outside Casitas' control. Ongoing operations may also be more challenging to coordinate. Options such as development of the Matilija deep formation wells or improvements to wells in the Ojai groundwater basin received the highest scores for this category as Casitas would be able to initiate and complete these options independently and would not need to rely on partners to complete or operate them.

### 3.4.2 Stakeholder Support

The stakeholder support criterion was intended to capture feedback from stakeholders and ratepayers for Casitas and identify options that have been historically supported by these groups or have not been identified as politically volatile. Options such as continued conservation and construction of improved Robles Diversion Structure features are options that have historically been supported by the local community and were scored high for this criterion.

#### 3.4.3 Regional and Ancillary Benefits

The final criterion evaluated for the decision support tool is intended to capture whether an option offers any ancillary or regional benefit besides the creation of a new source of water, or greater confidence in an existing source of water, for Casitas. Examples of options that scored high for this category include the interconnections with the SWP, as all of these options bring in a new source of water for the region, build regional partnerships, and require multi-agency coordination that can help other options move forward by establishing protocols and practices for these agencies working together that can be applied to future endeavors.

### 3.5 Initial Weightings

Once criteria were established for the decision support tool, initial weightings were applied to each of the criteria listed above. Criteria weights capture the relative importance of each of the criteria compared to the others, based on the values and judgements of decision-makers. These weightings were discussed with Casitas staff and the Water Resources Committee of the Casitas Board. Ultimately the Water Resources Committee made the final selection of criteria weights. It is noted that as part of the decision support tool process, several iterations of the criteria rankings were analyzed based on different criteria weights in order to establish the sensitivity of the ranking of options to the criteria weights. Those iterations and the impact on the ranking of options are discussed below.



#### Table 3-1 Base Weightings

Description	Annual Yield	Technical Feasibility	Reliability	Time to Implement	Construction Cost	O&M Cost	Cost Effectiveness (\$/AFY)	Water Quality	Permitting and Regulatory Constraints	Energy Efficiency	Casitas Control	Stakeholder Support	Regional and Ancillary Benefits	Technical Sum	Cost Sum	Environmental Sum	Social Sum	Total
							Per	centag	ge of Tot	al We	ight (%	%)						
Base Weightings: The preferred criteria weighting based on discussion with Casitas staff	15	5	5	5	15	5	10	10	8	7	5	5	5	30	30	25	15	100



## Section 4 Water Supply Options Summary

The options discussed in this technical memorandum (TM) are detailed in the Appendix A Background Information Technical Memorandum included the CWRP. For reference, the options are listed in Table 3-1, followed by a brief description of each.

1	C 01 (Low Conservation/Enhanced Demand Management Programs)
2	C 02 (High Conservation/Enhanced Demand Management)
3	DW 01 (Supplemental Water from City of Santa Barbara)
4	DW 02 (Casitas Desal Plant)
5	DW 03 (Ventura County Regional Desal Plant)
6	GW 01 (Matilija Formation Deep Wells)
7	GW 06 (Ojai Basin Desalter)
8	GW 08 (Well Improv in Ojai GWB)
9	MO 01 (Environmental/Habit Modif)
10	MO 06 (Sediment Removal at North End of Lake Casitas)
11	MO 08 (Robles Diversion Fish Passage Improvements)
12	RW 06 (Ojai East Septic Collect, Treat, Recharge)
13	SW 03 (Matilija Dam GW/SW)
14	SW 04 (Exp of Robles Canal)
15	SW 05 (New Dam Upstream of Lake Casitas)
16	SWP 01 (Deliveries via City of Ventura SWP Interconnect & Casitas-Ventura Interconnect)
17	SWP 02 (Calleguas Emergency Interconnection)
18	SWP 03 (Ventura-SBC Interconnection)
19	SWP 04 (Casitas-Calleguas Interconnection)
20	SWP 05 (In-Lieu Project Water)

 Table 4-1 Water Supply Options Long List Ranked using Decision Support Tool

1. **C 01 (Conservation/Enhanced Demand Management Programs – 5%).** This option involves implementing additional demand management measures to drive water use even lower. In this option demand management measure would reduce average annual demand 5% below the average annual demands of 16,000 AFY for the Casitas System and 2,350 AFY for the Ojai Valley System. It is anticipated this program, in additional to measures targeting municipal uses, would include incentives to help promote on-farm water efficiency and ensure the Casitas resale entities continue to aggressively promote post-drought conservation among their customers.



- 2. C 02 (Conservation/Enhanced Demand Management Programs 10%). This option involves implementing additional demand measures to drive water use even lower than in option C 01. In this option demand would be reduced 10% below the average annual demands of 16,000 AFY for the Casitas System and 2,350 AFY for the Ojai Valley System. It is anticipated this program, in additional to measures targeting municipal uses, would include incentives to help promote onfarm water efficiency and ensure the Casitas resale entities continue to aggressively promote post-drought conservation among their customers.
- 3. **DW 01 (Desal Water from City of Santa Barbara).** The City of Santa Barbara reactivated its desalination plant in late 2017. The City of Santa Barbara has a variety of infrastructure projects that need to take place to allow the distribution of desalinated water throughout the entire city water system, including the South Coast Conduit that supplies Montecito Water District (MWD) and Carpinteria Valley Water District (CVWD). Casitas is in preliminary design for the SWP 03 Ventura-Santa Barbara Counties Interconnection Project, which would construct infrastructure to connect the Casitas system to the CVWD system. This infrastructure could be utilized to also deliver desalinated water to Casitas to help offset the reliance on Lake Casitas supplies.
- 4. DW 02 (Casitas Desal Plant). This option involves development of desalinated water supplies by Casitas to supplement surface water supplies for coastal communities within the Casitas service area.
- 5. DW 03 (Ventura County Regional Desal Plant). Ventura County formed a Desalination Task Force in 1991. The task force was formed to assess the possibility of developing a desalination facility in the County and stay up to date on other desalination projects within California including neighboring Santa Barbara County. From this task force to the most current drought, the County has determined a desalination project should remain a future possibility and is considered as an option in this analysis.
- 6. GW 01 (Matilija Formation Deep Wells). The Matilija Formation Deep Wells project consists of the construction of one or more deep water wells in the Matilija sandstone. This formation contains groundwater that recharged over very long periods and is essentially non-renewable. This option includes the exploration of both horizontal and vertical wells and would allow for drought-period production of groundwater and delivery directly to the Robles Canal.
- 7. GW 06 (Ojai Basin Desalter). This option conceptually would target otherwise unusable high chloride water from the lowest aquifers in the Ojai Basin to allow for its potable use and allow for recharge water to replace the poorest quality water over time. Casitas would own and operate the desalter project infrastructure. Delivering the water acquired from the Ojai Desalter Project will require installation of a membrane treatment system, and connection to the existing Casitas Ojai transmission system, as well as targeting a well (existing or new) to supply the high chloride water. Additionally, the brine from the treatment process would be delivered to the existing Ojai Valley Sanitary District (OVSD) collector lines in the project area. Production for the Ojai Basin Desalter Project is estimated to be in a range from 300 to 400 AFY.
- 8. GW 08 (Well Improvements in Ojai GWB). Casitas acquired GSWC's Ojai water system in June of 2017. Casitas operates these wells on two parcels located on either side of San Antonio Creek, south of Grand Avenue. Recent studies identified several well improvement projects specific to the Ojai wellfield. The projects that can be implemented within a 12-month time period were



included in the Early Action Plan (EAP). The remaining project was a new well replacing Mutual #4 at Grand Avenue Wellfield.

- 9. **MO 01 (Environmental/Habitat Modification).** The Environmental/Habitat Modification option consists of activities to reduce the amount of a major water consuming plant in the Casitas service area and contributing watershed, Arundo donax (Arundo). Activities to remove this plant in the Casitas service area are already underway by Ventura County. This option assumes Casitas takes an active role in the Arundo removal program in order to prioritize treatment of areas in the Lake Casitas watershed, and thus increase runoff to the lake.
- 10. **MO 06 (Sediment Removal from North End of Lake Casitas).** This option was identified in the 2005, 2010, and 2016 UWMP and would involve removing sediment from the north end of Lake Casitas to increase the reservoir storage volume. Removing sediment in a portion of the reservoir pool area would recover some of the storage volume lost due to sediment accumulation since the dam was constructed in 1959.
- 11. **MO 08 (Robles Diversion Fish Passage Improvements).** This project is meant to optimize the operation of the Robles Diversion Dam and maximize the efficiency of the intake of the diversion structure into the Robles Diversion Canal. Several alternatives were proposed in the Robles Diversion Fish Screen Alternatives Feasibility Study (MKN Associates, 2019). The most extensive (and expensive) alternative was assessed in the decision support tool.
- 12. RW 06 (Ojai East Septic Collection, Treatment, Recharge). The Ojai East Septic Recharge project would install a package wastewater treatment plant in east Ojai Valley and a network of sewer collection mains and laterals to collect sewage that is currently being disposed in septic systems. The influent would be treated by means of a centralized redundant extended aeration system including anoxic chambers and clarification followed by membrane filtration and disinfection to meet tertiary standards. The treated effluent would then be piped to the lower pond in the San Antonio Creek Spreading Grounds (SACSGRP) to help recharge the Ojai Groundwater Basin.
- 13. **SW 03 (Matilija Dam Groundwater/Surface Water).** Matilija Dam Groundwater/Surface Water project involves collecting and transmitting water to Lake Casitas that currently exists in the shallow sediments in and near Matilija Lake and in the ponding area behind the dam.
- 14. **SW 04 (Exp of Robles Canal)**. The Robles Canal is part of the U.S. Bureau of Reclamation Ventura River water supply project and diverts water from the Ventura River to Lake Casitas. The present capacity of the Robles diversion canal is 500 cfs. Expansion of the Robles Canal was considered by Reclamation in 1968. The proposed project would enlarge the existing canal and headworks capacity up to 2,200 cfs, thereby allowing greater diversions to Lake Casitas during high flow periods.
- **15. SW 05 (New Dam Upstream of Lake Casitas).** The 1991 Alternatives Selection Study for a Joint Agency Water Supply Project prepared by Boyle Engineering Corporation includes five project alternatives for new dam and reservoir construction considered in the 1968 Bureau of Reclamation Report. These five projects were proposed as viable alternatives in anticipation of the Matilija Dam silting over time and losing its role in aiding supply to Lake Casitas.
- **16.** SWP 01 (Calleguas Inter-tie and Casitas-Ventura SWP Interconnection). This option would allow for access to SWP water using a combination of the City of Ventura SWP Interconnection pipeline and a new pump station to deliver water to the Casitas distribution system.



- 17. **SWP 02 (Calleguas Emergency Interconnection).** This option was identified as part of Calleguas Municipal Water District's (Calleguas) Water Supply Alternatives Study and would include a bidirectional pipeline to deliver SWP water to Lake Casitas during normal operations and deliver Lake Casitas water to Calleguas during emergencies. This alternative, referred to as the Calleguas Emergency Interconnection with Casitas, would allow for a direct connection between Calleguas and Casitas.
- 18. SWP 03 (Ventura-Santa Barbara Counties Interconnection). This option, referred to as the Ventura-Santa Barbara Counties Interconnection, involves constructing infrastructure from Carpinteria Valley Water District to the Casitas water system and would allow for Casitas to receive SWP water from the Central Coast Branch through the South Coast Conduit. This project is currently in preliminary design stages.
- 19. **SWP 04 (Casitas-Calleguas Interconnection).** This option, referred to as the Casitas-Calleguas Interconnection, involves a new pipeline from the proposed City of Ventura SWP Interconnection pipeline directly to the proposed Casitas pump station to deliver water to Casitas directly from Calleguas. This project is in the early planning stages.
- 20. **SWP 05 (In-Lieu Project Water).** This option would allow for the in-lieu transfers of SWP allocations between the City of Ventura and Casitas. Ventura would take a portion of the Casitas SWP allocation in return for reducing its demand on Lake Casitas. This project requires the City of Ventura SWP Interconnection pipeline to be constructed for Ventura to access SWP supplies.

## Section 5 Criteria Scoring

For all of the above criteria, each option was given a 1 through 5 score based on the background material available for each option, Stantec's best engineering judgement, and experience from other similar options. This initial scoring was discussed with Casitas during an in-person workshop, where every score was discussed in detail. Based on that workshop, some scores were revised and updated, and some of the scoring was flagged for additional research. The scores shown in Table 5-1 represent the conclusion of this process and the final scores assigned for each of the evaluated options.

#### Table 5-1 Criteria Scores for CWRP Options

		Technical						Cost		E	Invironmenta	1	Social			
Option Number	Option	Annual Yield	Technical Feasibility	Reliability	Time to Implement	Phasable Construction	Construction Cost	O&M Cost	Cost Effectiveness (\$/AFY)	Water Quality	Permitting and Regulatory Constraints	Energy Efficiency	Casitas Control	Stakeholder Support	Regional and Ancillary Benefits	
1	C 01 (Low Conservation/Enhanced Demand Management Programs)	4.0	5.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	3.0	3.0	
2	C 02 (High Conservation/Enhanced Demand Management)	5.0	5.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
3	DW 01 (Supplemental Water from City of Santa Barbara)	5.0	4.0	4.0	3.0	5.0	3.0	2.0	3.0	4.0	4.0	1.0	3.0	4.0	4.0	
4	DW 02 (Casitas Desal Plant)	5.0	2.0	5.0	1.0	4.0	1.0	1.0	2.0	4.0	1.0	1.0	5.0	1.0	3.0	
5	DW 03 (Ventura County Regional Desal Plant)	5.0	2.0	4.0	1.0	4.0	2.0	1.0	3.0	4.0	1.0	1.0	2.0	2.0	5.0	
6	GW 01 (Matilija Formation Deep Wells)	5.0	1.0	2.0	3.0	1.0	1.0	2.0	2.0	3.0	3.0	3.0	5.0	2.0	2.0	
7	GW 06 (Ojai Basin Desalter)	3.0	2.0	5.0	3.0	2.0	3.0	1.0	2.0	4.0	3.0	2.0	5.0	3.0	2.0	
8	GW 08 (Well Improv in Ojai GWB)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	5.0	5.0	3.0	5.0	5.0	2.0	
9	MO 01 (Environmental/Habit Modif)	3.0	4.0	1.0	4.0	5.0	5.0	3.0	2.0	5.0	4.0	5.0	3.0	5.0	5.0	
10	MO 06 (Sediment Removal at North End of Lake Casitas)	4.0	2.0	2.0	2.0	5.0	1.0	4.0	2.0	5.0	2.0	3.0	4.0	3.0	2.0	
11	MO 08 (Robles Diversion Fish Passage Improvements)	3.0	4.0	2.0	4.0	2.0	3.0	4.0	4.0	5.0	4.0	5.0	4.0	5.0	2.0	
12	RW 06 (Ojai East Septic Collect, Treat, Recharge)	2.0	3.0	3.0	2.0	2.0	2.0	4.0	2.0	3.0	3.0	2.0	2.0	3.0	4.0	
13	SW 03 (Matilija Dam GW/SW)	3.0	2.0	3.0	3.0	1.0	3.0	3.0	2.0	3.0	3.0	4.0	4.0	3.0	1.0	
14	SW 04 (Exp of Robles Canal)	4.0	1.0	5.0	2.0	1.0	1.0	4.0	3.0	3.0	1.0	5.0	4.0	2.0	2.0	
15	SW 05 (New Dam Upstream of Lake Casitas)	5.0	1.0	4.0	1.0	2.0	1.0	2.0	3.0	4.0	1.0	4.0	5.0	1.0	2.0	
16	SWP 01 (Deliveries via City of Ventura SWP Interconnect & Casitas-Ventura Interconnect)	5.0	4.0	2.0	2.0	3.0	1.0	2.0	2.0	4.0	3.0	3.0	3.0	4.0	5.0	
17	SWP 02 (Calleguas Emergency Interconnection)	5.0	4.0	3.0	2.0	3.0	1.0	2.0	2.0	4.0	2.0	3.0	1.0	4.0	5.0	
18	SWP 03 (Ventura-SBC Interconnection)	5.0	4.0	2.0	4.0	3.0	3.0	2.0	3.0	4.0	4.0	3.0	4.0	4.0	5.0	
19	SWP 04 (Casitas-Calleguas Interconnection)	5.0	4.0	3.0	2.0	3.0	1.0	2.0	2.0	4.0	3.0	3.0	3.0	4.0	5.0	
20	SWP 05 (In-Lieu Project Water)	5.0	4.0	2.0	2.0	5.0	1.0	2.0	2.0	4.0	4.0	5.0	2.0	4.0	5.0	

## Section 6 Water Supply Option Criteria Rankings and Sensitivity Analysis

In order to prioritize and rank the water supply options, the base weightings for each of the criteria were adjusted to determine whether the relative order of options from best (highest score) to worst (lowest score) was significantly affected by the weights assigned to the criteria. A sensitivity analysis was performed consisting of seven different criteria weighting scenarios to assess whether the ranked order of options changed significantly when applying a different weighting to any of the specified criteria. **Table 6-1** shows how each criterion was weighted for each of the seven scenarios. In all instances, the total weighting for all criteria equals 100%. The top row of **Table 6-1** shows the base weightings that were established through conversation with Casitas staff. The following six scenarios changed the combined weighting of one of the four categories and held the relative weightings of each criterion within those categories at the same ratio to the total for that category. Therefore, the base weighting scenario established the relative importance of the criteria within each of the categories, and the overall percentages were varied based on which category was emphasized in each of the scenarios.

Using the different criteria weightings for each scenario shown in **Table 6-1**, the options were each given a combined score for each of the weighting scenarios. **Table 6-2** shows the ranking for each of the options for each of the seven weighting scenarios. As shown in this table, the top 10 options are comprised of the same 12 options for all seven scenarios.

**Figure 6-1** through **Figure 6-7** show bar graphs that display the options in order of their score for each of the seven weighting options. These charts display the prioritization order of the options evaluated with the decision support tool for each scenario, and display the rankings shown in **Table 6-2**. The bar charts also display the portion of the total option score contributed by the four criteria categories (technical, cost, environmental, and social) to help discern which options offer the most benefits in each of those categories.

Based on the results of the criteria weighting sensitivity analysis, Casitas determined that the base weighting scenario adequately represented the values of the District and those results were carried forward into the water supply portfolio analysis.



Table 6-1 Criteria Weighting Percentages Used in Sensitivity Analysis

Scenario Number	Description	Annual Yield	Technical Feasibility	Reliability	Time to Implement	Construction Cost	O&M Cost	Cost Effectiveness	Water Quality	Permitting and Regulatory Constraints	Energy Efficiency	Casitas Control	Stakeholder Support	Regional and Ancillary Benefits	Technical Sum	Cost Sum	Environmental Sum	Social Sum	Total
		Percentage of Total Weight (%)																	
1	Base Weightings: The preferred criteria weighting based on discussion with Casitas staff	15	5	5	5	15	5	10	10	8	7	5	5	5	30	30	25	15	100
2	Higher Technical Weight: The technical category is elevated to 40% of total from 30%	20	7	6	7	14	5	9	7	6	5	5	5	5	40	27	18	15	100
3	Highest Technical Weight: The technical category elevated to 50% of total	25	9	8	8	9	3	6	7	6	5	5	5	5	50	17	18	15	100
4	High Environmental: The environmental category is elevated to 40% of total	13	4	4	4	13	4	8	16	13	11	3	3	3	25	25	40	10	100
5	High Cost: The cost criteria are weighted as 45% of the total	4	2	2	2	23	8	15	8	6	6	8	8	8	10	45	20	25	100
6	Even Weights: technical, cost, environmental, and social categories weighted at 25%	13	4	4	4	13	4	8	10	8	7	8	8	8	25	25	25	25	100
7	High Social Weight: The social category is elevated to 40% of the total	17	6	5	6	9	3	6	4	3	3	13	13	13	33	17	10	40	100

#### Table 6-2 Options Ranking Comparison for Different Criteria Weighting Scenarios

Base Case Rank	Option	Higher Technical Weight Rank	50% Technical Weight Rank	High Environmental Weight Rank	High Cost Weight Rank	Even Category Weights Rank	High Social Weight Rank
1	C 02 (High Conservation/Enhanced Demand Management)	1	1	1	1	1	1
2	C 01 (Low Conservation/Enhanced Demand Management Programs)	2	2	2	2	2	2
3	GW 08 (Well Improv in Ojai GWB)	3	3	3	3	3	3
4	MO 01 (Environmental/Habit Modif)	5	6	4	4	4	5
5	MO 08 (Robles Diversion Fish Passage Improvements)	6	7	5	5	6	7
6	SWP 03 (Ventura-SBC Interconnection)	4	4	6	6	5	4
7	DW 01 (Supplemental Water from City of Santa Barbara)	7	5	7	7	7	6
8	SWP 05 (In-Lieu Project Water)	8	8	8	9	8	10
9	SWP 04 (Casitas-Calleguas Interconnection)	9	9	9	11	9	8
10	SWP 01 (Deliveries via City of Ventura SWP Interconnect & Casitas-Ventura Interconnect)	10	10	10	12	10	9
11	GW 06 (Ojai Basin Desalter)	12	13	12	8	11	12
12	SWP 02 (Calleguas Emergency Interconnection)	11	11	13	17	12	11
13	SW 03 (Matilija Dam GW/SW)	14	19	11	10	13	19
14	SW 04 (Exp of Robles Canal)	16	17	16	15	15	18
15	MO 06 (Sediment Removal at North End of Lake Casitas)	18	18	14	14	14	16
16	SW 05 (New Dam Upstream of Lake Casitas)	15	14	15	18	16	17
17	DW 03 (Ventura County Regional Desal Plant)	13	12	18	16	17	13
18	GW 01 (Matilija Formation Deep Wells)	17	15	17	19	18	14
19	DW 02 (Casitas Desal Plant)	19	16	20	20	20	15
20	RW 06 (Ojai East Septic Collect, Treat, Recharge)	20	20	19	13	19	20



Figure 6-1 Options Ranking with Base Weighting

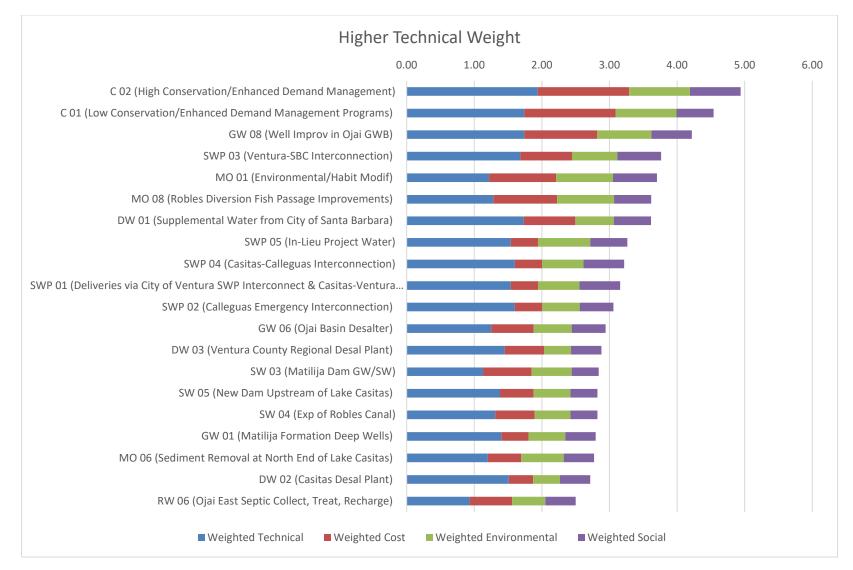


Figure 6-2 Options Ranking with Higher Technical Weighting

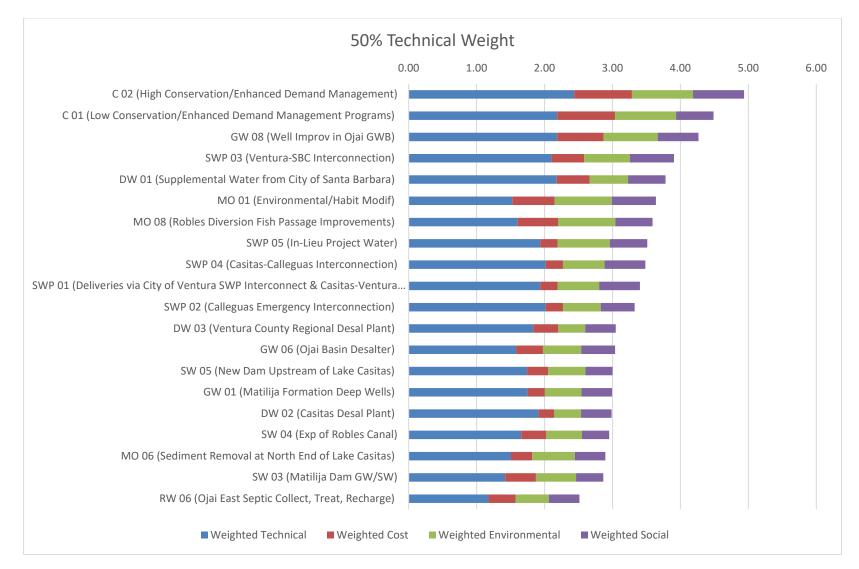


Figure 6-3 Options Ranking with Percent Technical Weighting

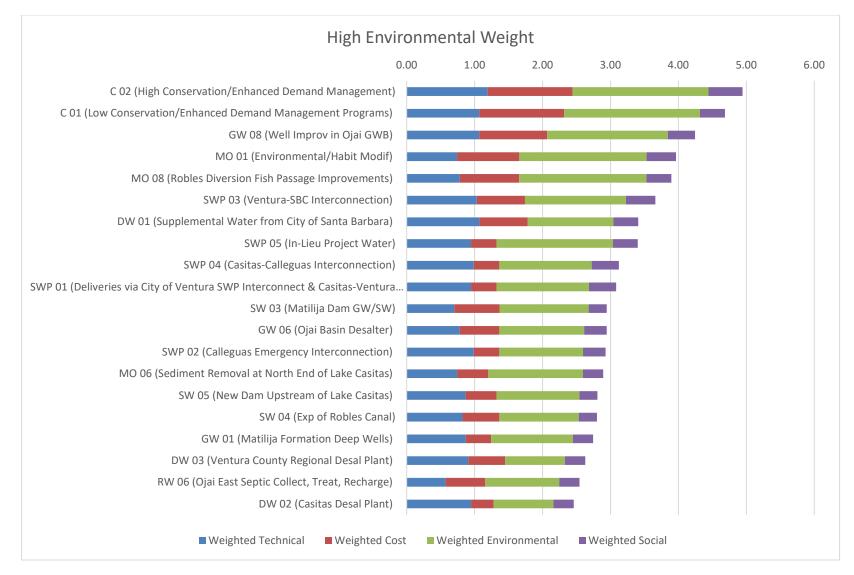


Figure 6-4 Options Ranking with High Environmental Weighting

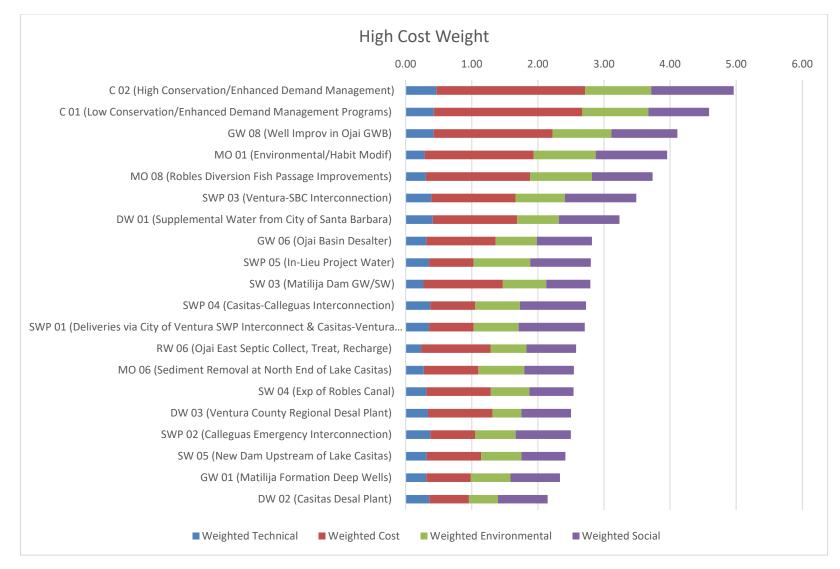


Figure 6-5 Options Ranking with High Cost Weighting

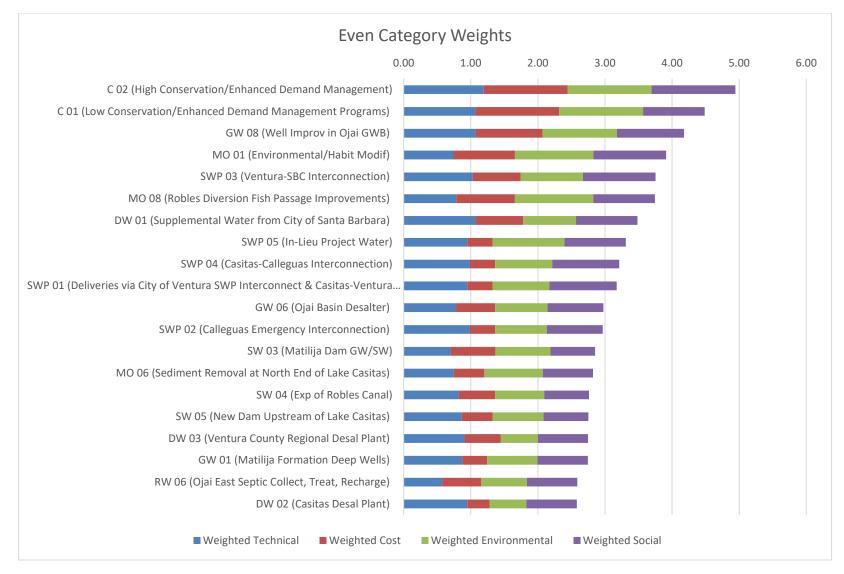


Figure 6-6 Options Ranking with Even Category Weighting

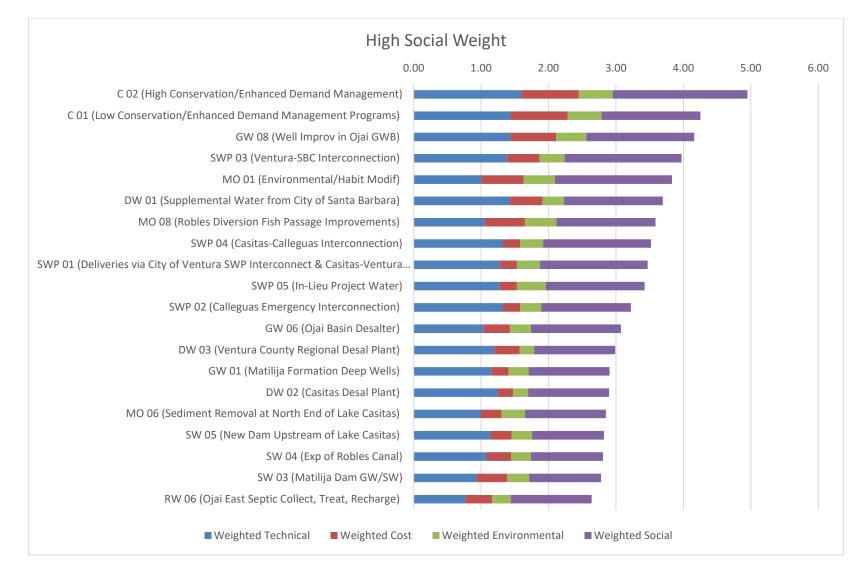


Figure 6-7 Options Ranking with High Social Weighting

## Section 7 Portfolio Development and Ranking

The decision support tool was used to compare relative benefits of water supply portfolios using a similar process to that described above for comparison of water supply options. Portfolios are combinations of options that would meet all the objectives of the CWRP.

### 7.1 Portfolio Development

Casitas selected the top 10 options from the base criteria weighting scenario for use in developing portfolios. Options were categorized as either Local Options (i.e., those that rely on water from the local Lake Casitas watershed or Ojai Groundwater Basin), or Supplemental Water Options (i.e., those that rely on water from outside the Lake Casitas watershed or Ojai Groundwater Basin). Three portfolio development strategies were used to create combinations of options that meet the CWRP objectives:

- Local Focus Portfolios that emphasized use of more Local Options;
- Diversification Portfolios that emphasized use of more Supplemental Water Options; and
- Balanced Portfolios that used a balanced blend of the other two strategies.

The CWRP objectives for meeting long-term water supply needs, short-term water supply needs, and diversification needs allowed for significant flexibility in how options were combined to create portfolios. The portfolio development process is described in more detail in the CWRP report. **Table 7-1** list the options included in each portfolio analyzed with the decision support tool.

#### Table 7-1 Portfolios

		<b>Balanced Portfolios</b>		<b>Diversification Portfolios</b>			Local Focus Portfolios			
	Options	Balanced Portfolio A (Dual Connection Subportfolio)	Balanced Portfolio B (Ventura Subnortfolio)	Balanced Portfolio C (Santa Barbara Subportfolio)	Diversification Portfolio A (Ventura SWP & Wells Subportfolio)	Diversification Portfolio B (Ventura & Santa Barbara SWP Subportfolio)	Diversification Portfolio C (Ventura Only Subportfolio)	Local Focus Portfolio A (Ventura SWP Subportfolio)	Local Focus Portfolio B (Santa Barbara SWP Subportfolio)	Local Focus Portfolio C (Santa Barbara SWP Subportfolio – No Matilija Wells Subportfolio)
C 01	Low Conservation/Enhanced Demand Management Programs	х	х	х						
C 02	High Conservation/Enhanced Demand Management							х	х	Х
DW 01	Supplemental Water from City of Santa Barbara			х						Х
GW 01	Matilija Formation Deep Wells			х	х			х	х	
GW 08	Well Improv in Ojai GWB	х	х	х	х	х	х	х	х	Х
MO 01	Environmental/Habit Modif	х	х	х				х	х	Х
MO 08	Robles Diversion Fish Passage Improvements	х	х	х	х	х	х	х	х	Х
SWP 01	Deliveries via City of Ventura SWP Interconnect & Casitas-Ventura Interconnect	х						х		
SWP 03	Ventura-SBC Interconnection	x	х	х		х			х	Х
SWP 04	Casitas-Calleguas Interconnection				х	х	х			
SWP 05	In-Lieu Project Water		х			х	х			

## 7.2 Portfolio Development Without Delta Conveyance Facility

A fourth set of portfolios was developed to show the impacts to the portfolios without the proposed Delta Conveyance Facility (DCF) see **Table 7-2**. The DCF is the proposed solution to California Delta constraints on deliveries to the State Water Project. Without the DCF, SWP yields would decrease compared to values used in the other water supply portfolios. There is risk of the DCF or similar solution not being completed, which would put SWP yields at risk. In addition, Casitas would have to commit to paying a portion of the DCF cost to receive SWP deliveries at "with DCF" volumes. The impact of this possible future condition was tested by modifying the Balanced Portfolios by reducing the SWP option yields and compensating for the lost yield adding other options to meet the CWRP objectives.

#### Table 7-2 Balanced Portfolios without Delta Conveyance

	Options		Balanced Portfolio A – No Delta Conveyance (Ventura and Santa Barbara Connections)	Balanced Portfolio B – No Delta Conveyance (Ventura Connection)	Balanced Portfolio C – No Delta Conveyance (Santa Barbara Connection)
C 01	Low Conservation/Enhanced Demand Management Programs	х		х	х
C 02	High Conservation/Enhanced Demand Management				
DW 01	Supplemental Water from City of Santa Barbara				х
GW 01	Matilija Formation Deep Wells				
GW 08	Well Improv in Ojai GWB	х		х	Х
MO 01	Environmental/Habit Modif	х		х	х
MO 08	Robles Diversion Fish Passage Improvements	х		х	х
SWP 01	Deliveries via City of Ventura SWP Interconnect & Casitas-Ventura Interconnect	x		x	
SWP 03	Ventura-SBC Interconnection	х			х
SWP 04	Casitas-Calleguas Interconnection				
SWP 05	In-Lieu Project Water	х		х	

## 7.3 Portfolio Rankings

The decision support tool was used to rank the water supply portfolios using the same criteria and base weighting scheme as described previously for the water supply options. However, an additional step was needed to account for the fact that each portfolio was comprised of multiple options. The portfolio score was computed as the weighted average of the scores of the options comprising the portfolio, where the weighting was done based on the percentage of the total annual yield contributed by each option. The equation for this calculation is:

Portfolio Score = Option 1 Score x (Option 1 Yield / Portfolio Yield) + ... + Option n Score x (Option n Yield / Portfolio Yield)

The portfolio scores and relative rankings generated by the decision support tool are shown in **Figure 7-1**. This information was used by Casitas to develop a recommended plan for the CWRP.





Figure 7-1 Portfolio Scores and Rankings



#### Appendix G Draft Water Supply Option Selected for Additional Analysis Draft

Comprehensive Water Resources Plan

June 8, 2020

Prepared for:

Casitas Municipal Water District

Prepared by:

Stantec Consulting Services Inc.



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# **Abbreviations**

AF	acre-foot
AFY	acre-foot per year
AWMP	Agricultural Water Management Plan
Casitas	Casitas Municipal Water District
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CVWD	Carpinteria Valley Water District
CWA	Clean Water Act
CWRP	Comprehensive Water Resources Plan
Desal Plant	Charles E Meyer Desalination Plant
EA	Environmental Assessment
EIR	Environmental Impact Report
FONSI	Finding of No Significant Impact
GSWC	Golden State Water Company
IS	Impact Statement
LARWQCB	Los Angeles Regional Water Quality Control Board
MND	Mitigated Negative Declaration
mg/l	milligrams per liter
MWD	Montecito Water District
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NWP	Nationwide Permit

OBGMA	Ojai Basin Groundwater Management Agency
OVSD	Ojai Valley Sanitary District
RWQCB	Regional Water Quality Control Board
SACSG	San Antonio Creek Spreading Grounds
SCC	South Coast Conduit
SMC	Senior Canyon Mutual Water Company
SWP	State Water Project
SWPCP	Stormwater Pollution Control Plan
SWPPP	Storm Water Pollution Prevention Plan
TDS	Total Dissolved Solids
USACE	U.S. Army Corps of Engineers
USBR	U.S. Bureau of Reclamation
USFWS	U.S. Fish & Wildlife Service
UVRB	Upper Ventura River Basin
UWMP	Urban Water Management Plan
VCFCD	Ventura County Flood Control District
VCWPD	Ventura County Watershed Protection District
VRWC	Ventura River Watershed Council
VRWMP	Ventura River Watershed Management Plan
WEAP	Water Efficiency and Allocation Program



## Introduction

# Section 1 Introduction

This technical memorandum presents information on six water supply project options discussed in previous planning documents prepared for or by Casitas Municipal Water District (Casitas). These projects are not currently in design by Casitas but may be considered as supply options for future water reliability sources in the future. All six projects are listed in the Background Information Technical Memorandum prepared for the Casitas Comprehensive Water Resources Plan (CWRP) and were selected by Casitas for further evaluation because they had not been previously developed to a conceptual level. The additional information described in this TM was needed to properly evaluate them for possible inclusion in the CWRP. The project details prepared for each option include conceptual project descriptions, preliminary costs, regulatory permitting needs, environmental compliance requirements, inter-agency coordination, Casitas water system integration, phasing and implementation timelines.

Each project, along with the estimated costs and yield benefits, are listed in **Table 1-1**. Each project was included in the CWRP project evaluation process.

Option Number	Project	
MO 01	Environmental/Habitat Modifications	
DW 01	Desalinated Water from City of Santa Barbara	
MO 06	Sediment Removal at North End of Lake Casitas	
GW 06	Ojai Basin Desalter Project	
SW 04	Expansion of Robles Canal	
RW 06	Ojai East Septic Collection, Package Treatment, Recharge	

#### **Table 1-1 Water Supply Project Options**



# Project Descriptions and Analyses

# Section 2 Project Descriptions and Analyses

The six water supply project options listed in **Table 1-1** are described in this section. Each project description includes a conceptual level layout and design of required facilities, conceptual opinion of probable costs, regulatory permits required and environmental compliance needs, inter-agency coordination requirements, project system integration issues, project phasing, project timeline, and recommendations for inclusion in the CWRP alternative evaluation process.

## 2.1 MO 01 – Environmental/Habitat Modifications

#### 2.1.1 Project Description

The Environmental/Habitat Modification project consists of activities to reduce the amount of *Arundo donax* (*Arundo*), a major water consuming plant within the watershed. Based on available information and previous studies, this project considers Arundo removal within the Ventura River watershed north of the Robles Diversion (contributing watershed). Other watersheds directly contributing to Lake Casitas may be considered in the future but the information was not available on area of Arundo at the time of report. Reduction of the consumptive use in the contributing watershed would improve the water balance and potentially increase inflows to Lake Casitas. Turfgrass is also considered a major water consuming plant, but to a considerably lesser extent than *Arundo*, and turfgrass removal through incentives to property owners is already part of the Casitas water conservation measures. Therefore, this project focuses only on removal of *Arundo*.

*Arundo* is an invasive species with very high-water consumption. The rate of water loss is estimated at approximately six times more than that of the native riparian vegetation. Estimates of *Arundo* water consumption vary between 1 and 48 AFY/acre, with a reasonable average of 24 AFY/acre consumptive use (California Invasive Plant Council, 2011). *Arundo* removal and replacement with native riparian plants would reduce evapotranspiration losses and result in net savings of approximately 20 AFY per acre of *Arundo* removed. This would improve recharge to the groundwater basin as well as help keep the river alluvium more saturated, which in turn would induce more surface flow into Lake Casitas.

The Ventura River Watershed Council (VRWC) has included an Arundo-Free Watershed Campaign as one of their top six priority projects per the 2015 Ventura River Watershed Management Plan (Ventura River Watershed Coordinator, 2015). In 2015, it was estimated that over 180 acres of land in the Ventura River watershed were covered with *Arundo*, after 270 acres of *Arundo* were already removed. It is understood the Ventura County Watershed Protection District (VCWPD) will be responsible for the implementation of Arundo removal projects. VCWPD will continue this project on an annual basis. For the Casitas project evaluation, it is assumed an *Arundo* removal project would be implemented through

an agreement between Casitas and VCWPD. All work would continue to be managed and run through VCWPD. Therefore, this project would likely be outside of Casitas control and is described in further detail for conceptual level planning only.

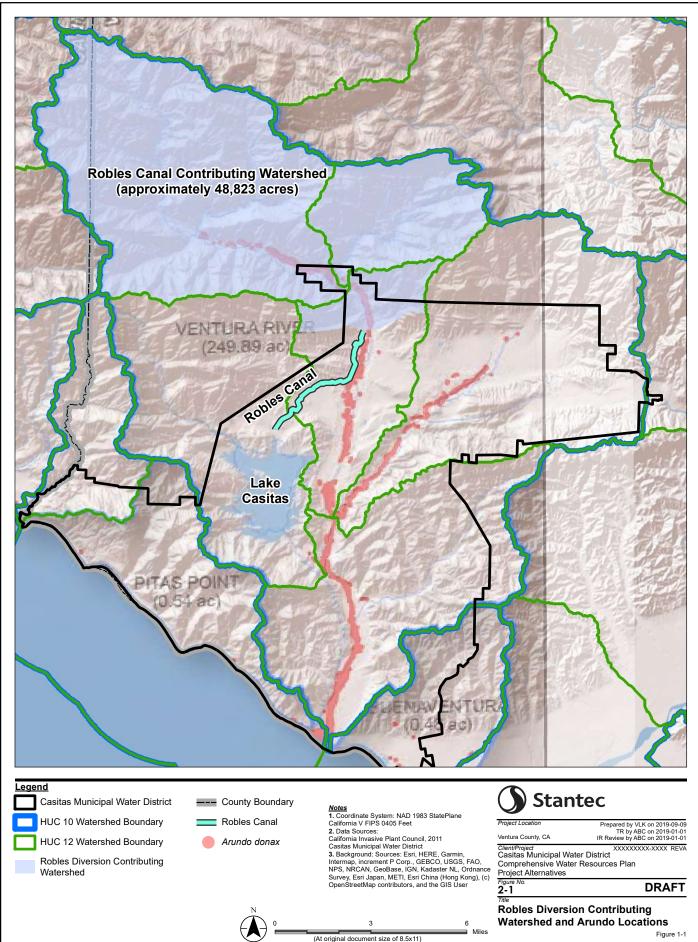
#### **Conceptual Level Layout and Design of Required Facilities**

As stated above, there were 180 acres of land in the Ventura River watershed still infested with *Arundo* in 2015. The California Invasive Plant Council mapped the areas in the Ventura River Watershed in 2011, showing that the areas infested with *Arundo* are clustered around the Ventura River and other streams (California Invasive Plant Council, 2011).

**Figure 2-1** shows the Ventura River contributing watershed upstream of the Robles Diversion (contributing watershed) and the distribution of *Arundo* within the Ventura River Watershed. There are approximately seven miles of stream length infested with *Arundo* in the contributing watershed, and 20 miles of stream length infested with *Arundo* in the Ventura River Watershed but outside the contributing watershed. Assuming that the *Arundo* infested stream length is representative of *Arundo* infested area and using the proportion of *Arundo* infested stream length within and outside of the contributing watershed, it was estimated that approximately 45 acres of land in the contributing watershed with *Arundo* in 2015.

While the VCWPD may continue to work on *Arundo* removal throughout the Ventura River Watershed, this project would include Casitas working with VCWPD to expedite removal of *Arundo* from the 45 acres within the contributing watershed.

#### Appendix G Draft Water Supply Option Selected for Additional Analysis Draft



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## 2.1.2 Conceptual Opinion of Probable Costs

*Arundo* removal and replacement with native species can vary in cost based on the method of removal. Methods can vary in cost of approximately \$20,000 per acre to as much as \$579,000 per acre (Ventura County Watershed Protection District, 2010; WREA & KG, 2016). However, *Arundo* removal is not permanent and ongoing management programs are required to control this invasive species.

Possible *Arundo* removal methods are outlined in the 2015 Ventura River Watershed Management Plan (Ventura River Watershed Coordinator, 2015). These removal methods are summarized in **Table 2-1** along with the unit prices associated with each method.

Method Name	Method Description	Approximate Cost for One Acre with 100 Percent <i>Arundo</i> Density	Advantages	Disadvantages
Cut-Stump Herbicide Application and Biomass Removal	Mechanical removal immediately followed by painting the cut stumps with herbicide. Also known as "cut and paint" or "cut and daub".	\$29,000	Minimal re- sprouting and low post- removal maintenance costs.	High initial costs.
Foliar Application of Herbicide	Foliar spray application of herbicide at lower concentrations; let the biomass remain on site until dead; remove dead materials mechanically in the next spring.	\$20,000	Lower initial costs than cut and paint method.	Dead material may become a fire or flood hazard.
Biomass Removal Only	Removal of above-grade biomass without applying herbicide; later applying regrowth with an herbicide as it emerges.	\$19,000	Lower initial costs.	Immediate and frequent herbicide application necessary to control re- sprouting.
Hand Removal of All Vegetative Matter	Mechanical removal of all biomass including root mass excavation. Includes monitoring and hand removal of regrowth including root mass excavation.	\$579,000	No herbicide application necessary.	Expensive labor costs. May trigger additional permitting requirements and erosion problems.

#### Table 2-1 Conceptual Opinion of Probable Costs for Arundo Removal Methods

The first three methods were roughly similar in terms of costs when normalized to an acre with 100 percent *Arundo* density, while the fourth method is substantially more expensive.

In the long-term management plan for *Arundo* removal in the Matilija Dam ecosystem, the VCWPD planned to use foliar spray and cut and daub as the two treatment methods (Ventura County Watershed Protection District, 2010). Retreatment sweeps of the entire 1,100-acre area treated in the Matilija area

was estimated to cost \$100,000. The plan estimated that retreatment would occur three times a year for the subsequent two years; twice a year for the subsequent five years; and once a year thereafter. Thus, for retreatment for the 15 years following initial removal the total cost over the 15 years would be approximately \$2.4 million, or an average of approximately \$2,200 per acre/year (excluding inflation).

It is assumed for purposes of the CWRP that expediting removal of *Arundo* from the estimated 45 acres within the Ventura River contributing watershed north of the Robles Diversion would use either foliar spray or cut and daub as the treatment method. For a conservative price estimate, the cost of removal of an acre of land with 100 percent *Arundo* density using cut and daub was used. Thus, the estimated cost of initial removal of *Arundo* from 45 acres within the Robles Diversion contributing watershed is approximately \$1.3M. Using the estimate of \$2,200 per acre for retreatment, the estimated annual cost of retreatment would be approximately \$99,000 (excluding inflation).

**Table 2-2** and **Table 2-3** below presents a summary of the conceptual opinion of probable costs and benefits of *Arundo* removal in the Robles Diversion contributing watershed.

Parameter	Value	Unit
Estimated Area Infested with Arundo	45	acres
Estimated Water Savings for Arundo		
Removal	20	AFY/acre
Project Impact Lifetime	15	years
Estimated Annual Water Savings ¹	900	AFY
Unit Cost of Removal	\$29,000	USD/acre
Unit Cost of Retreatment for 15 years	\$2,200	USD/acre/year
Total Estimated Cost of Removal (assumes		
expedited over one year) ²	\$1,305,000	USD
Total Estimated Annual Retreatment Costs		
(15-year period, excluding escalation) ³	\$1,485,000	USD

Table 2-2 Conceptual Opinion of Probable Costs of MO 01 Environmental/Habitat Modifications
---------------------------------------------------------------------------------------------

¹ Note: assumed contributing watershed savings. Casitas benefit may be lower due to restrictions on diversions.

² Costs are project totals without escalation. Cost sharing would need to be coordinated between Casitas and VCWCD.

³Assumed 15 Years of O&M costs for estimation purposes.

#### Table 2-3 Costs and Benefits of Environmental/Habitat Modifications

Parameter	Value	Unit
Conceptual Opinion of Probable Costs ^{2,3}	\$2,790,000	USD
Estimated Annual Yield (after 15 years) ¹	900	AFY
Conceptual Unit Capital Cost per AFY	\$3,100	USD/AFY

¹ Note: assumed contributing watershed savings. Casitas benefit may be lower due to restrictions on diversions.

² Costs are project totals without escalation. Cost sharing would need to be coordinated between Casitas and VCWCD.

³Assumed 15 Years of O&M costs for estimation purposes.

### 2.1.3 Regulatory Permits & Environmental Compliance

The following permits have been acquired for other *Arundo* removal projects and would likely need to be acquired or renewed for *Arundo* removal by the County of Ventura:

- U.S. Army Corps of Engineers (USACE) Regional General Permit No. 41 Removal of Invasive Exotic Plants;
- Los Angeles Regional Water Quality Control Board (LARWQCB) Section 401 Water Quality Certification; and
- California Department of Fish and Game (CDFG) Streambed Alteration Agreement.

Additionally, a Storm Water Pollution Prevention Plan (SWPPP) or Stormwater Pollution Control Plan (SWPCP) would likely need to be prepared to comply with requirements related to the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities.

The WREA Preliminary Water Security Project Analysis report stated that *Arundo* removals will not likely trigger CEQA (WREA & KG, 2016). However, the Ventura River Arundo Removal Demonstration Project Final Implementation report discussed an Environmental Impact Report (EIR) prepared for the project (Ventura County Watershed Protection District, 2007). In this EIR, project impacts for biological resources, water resources, air quality, and transportation/circulation were mitigated below a level of significance while temporary noise impacts could not be reduced below significant levels despite mitigation.

#### 2.1.4 Inter-Agency Coordination

It is assumed this project would involve Casitas financially supporting the VCWPD to expedite *Arundo* removal in the Robles Diversion contributing watershed. The level of that financial support has not been discussed. Additionally, this effort would likely require or benefit from coordination with the Natural Resources Conservation Service (NRCS), if they would plant native riparian species as they have done for similar projects (Ventura County Watershed Protection District, 2007).

### 2.1.5 System Integration

No system integration issues are anticipated. The project would not change existing operation of any Casitas facilities or systems.

#### 2.1.6 Phasing

The project is naturally divided into a planning and permitting phase, a removal phase, and a monitoring and herbicide reapplication phase, as shown in **Table 2-4**.

#### 2.1.7 Timeline

It is assumed that *Arundo* can be removed at a rate of 10 acres each month and that *Arundo* treatment would be most easily carried out in spring and fall to avoid hot weather and rainfall while working on removal.

Project MO 01	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Following 15 Years ¹
Planning	Planning & Permitting				
Removal		Removal		Removal	
Follow-up					Monitoring & Herbicide Reapplication

#### Table 2-4 Preliminary Timeline for MO 01 Environmental Habitat/Modifications

¹15-year timeframe used for estimation purposes.

#### 2.1.8 CWRP Recommendation

This project was moved forward into the CWRP decision support tool and ranked in the top ten. However, it is extremely difficult quantify water savings from this project and therefore its benefit to Casitas is hard to capture. It is recommended that Casitas continues to support the County in its campaign of *Arundo* removal for the overall health of the Ventura River watershed. This project is included in the draft CWRP as a conditional option.

## 2.2 DW 01 – Desalinated/Supplemental Water from City of Santa Barbara

#### 2.2.1 Project Description

The City of Santa Barbara reactivated the Charles E. Meyer Desalination Plant (Desal Plant) in late 2017. The Desal Plant has a full build-out capacity of 10,000 AFY but is currently operating around 3,125 AFY. The City of Santa Barbara is pursuing a variety of projects to allow for desalinated water to be conveyed to Cater Water Treatment Plant Clearwell. This would allow for desalinated water to be delivered to all of the City customers as well as provide the ability to convey desalinated water to the State Water Project (SWP) South Coast Conduit (SCC). Three of these projects include the construction of a 24-inch water main through the downtown area, upgrades to the Product Water Pump Station, and treatment expansion at the Desal Plant to increase capacity. The existing SCC supplies SWP water to Montecito Water District (MWD) and Carpinteria Valley Water District (CVWD). MWD is in negotiations with the City of Santa Barbara for a supplemental water supply through the existing SCC. The City of Santa Barbara has the ability to sell additional water supplies above and beyond their demands. This supplemental water supply could be a combination of water from all the City's water sources, including desalinated water.

Casitas is in the preliminary design phase of infrastructure to allow for SWP water to be conveyed from CVWD to the Casitas service area as part of the project referred to in the CWRP as Ventura-Santa Barbara Counties Interconnection Project (SWP 03). Once this infrastructure is in place, conveyance of other supplemental water sources can be explored including supplemental water from the City of Santa Barbara.

## 2.2.2 Conceptual Level Layout and Design of Required Facilities

This project would rely on the infrastructure constructed for various other projects as listed in **Table 2-5**, but no additional infrastructure is anticipated for this project. An evaluation of the SCC may be warranted to understand available hydraulic capacity and water age/treatment requirements once the water is conveyed to the Casitas distribution system.

Projects Required	Status	Project Owner
Desal Plant Treatment Expansion from 3,125 AFY to 5,000 AFY or more	In planning	City of Santa Barbara
City of Santa Barbara transmission system update to distribute desalinated water throughout the City and to SCC	In construction	City of Santa Barbara
City of Santa Barbara Product Water Pump Station upgrades	In planning	City of Santa Barbara
SWP 03 Ventura-Santa Barbara Counties Interconnection Project	Preliminary Design In progress	Casitas Municipal Water District
SCC hydraulic capacity analysis	Future	Casitas Municipal Water District
Water age and stability modeling	Future	Casitas Municipal Water District

## 2.2.3 Conceptual Opinion of Probable Capital Costs

The infrastructure costs required to access City of Santa Barbara supplemental water are captured in other proposed projects and therefore there are no additional infrastructure capital costs included in this estimate. Casitas would need to enter into an agreement with the City of Santa Barbara, which could include financial contribution to a share of other potential capital costs and supplemental water supply unit costs. This agreement would likely mimic the agreement Montecito Water District is pursuing with the City of Santa Barbara, which is currently under negotiations. At the same time of this analysis, the draft agreement was proposed to be a 50-year term and allows MWD to receive around 30 percent of the Desal Plant's total production capacity after certain terms are met. In the draft agreement, the City of Santa Barbara retains ownership of the Desal Plant and MWD pays the full annual contract amount whether or not MWD takes the water in a given year. MWD will also pay a prorated portion of potential increases from any capital improvements to the Desal Plant.

The contract water unit price will be allocated in proportion to the percentage of water MWD receives, along with any administrative costs associated with managing the operations of the Desal Plant. For the first 20 years of the agreement, an index-linked Water Supply Development Fee of \$237,500 would be paid by MWD. MWD would also be responsible for contributing to a debt service coverage deposit and debt service reserve account. Montecito Water District will also pay 64.6% of the costs of both a new pipeline (required from the Desal Plant to the Cater Water Treatment plant Clearwell) and what is associated with the reuse of an existing City pipeline.

The terms of an agreement between Casitas and the City of Santa Barbara could be similar to those in the City's agreement with MWD. Project costs specific to a Casitas connection to receive supplemental water would need to be coordinated with the City of Santa Barbara.

Table 2-6 Costs and Benefits of DW 01 Desalinated/Supplemental Water from Santa Barbara

Parameter	Value	Unit
Conceptual Opinion of Probable Costs	TBD ¹	USD
Estimated Annual Yield	Up to 2,000	AFY
Conceptual Unit Capital Cost per AFY	TBD ¹	USD/AFY

¹ Cost is subject to future decisions and negotiations with City of Santa Barbara and other water users.

#### 2.2.4 Regulatory Permits & Environmental Compliance

This project does not require any individual environmental compliance measures as all compliance measures are met within other subsidiary projects listed in **Table 2-5**.

#### 2.2.5 Inter-Agency Coordination

This project requires coordination with multiple agencies including City of Santa Barbara and CVWD. In order to proceed with utilizing City of Santa Barbara desalinated water or other surplus supplies in the Casitas service area, an agreement is needed with the City of Santa Barbara to purchase supplemental water. Coordination will also be necessary with CVWD and other agencies to understand hydraulic capacity availability to utilize the existing infrastructure and also proposed SWP 03 project infrastructure for conveyance of supplemental water.

#### 2.2.6 System Integration

The infrastructure connection will be part of SWP 03. This project would introduce an alternative water source with a different water quality. A blending study is recommended to evaluate the different water quality characteristics from each source and potential impacts to the existing distribution system.

#### 2.2.7 Phasing

There is no infrastructure anticipated to be phased, but the rate at which Casitas can take supplemental water can vary from year to year.

#### 2.2.8 Timeline

The timeline to implement this project includes the time required to design and construction the required infrastructure, as well as the time required to negotiate the agreement with the City of Santa Barbara. The overall project timeline would be determined at a later date.

#### 2.2.9 CWRP Recommendation

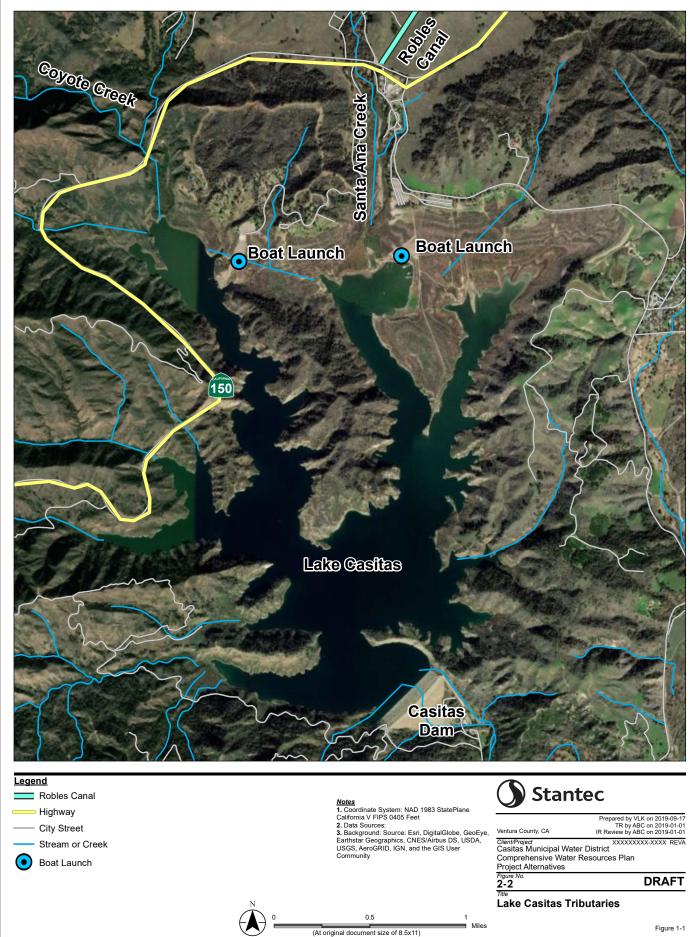
This project was moved forward into the CWRP decision support tool and ranked in the top ten in combination with SWP 03 project. It is recommended to pursue supplemental water options utilizing any constructed infrastructure as part of SWP 03 project between CVWD and Casitas.

## 2.3 MO 06 – Sediment Removal at North End of Lake Casitas

#### 2.3.1 Project Description

Casitas Dam was constructed in 1959 on Coyote Creek to form Lake Casitas with an initial reservoir capacity of 254,000 AF. Since initial construction, sediment accumulation has reduced the capacity to 237,760 AF based on the 2017 bathymetric survey, a difference of 16,240 AF. Based on the difference in storage volume it is estimated that annual sediment loading into the lake is approximately 500 AFY. This value varies from year to year depending on hydrologic conditions and existing watershed conditions such as effects of wildfires.

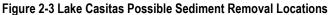
Excavating or dredging a portion of Lake Casitas could recover some of the storage volume lost due to this accumulation. Lake Casitas is fed from two direct tributaries, Coyote Creek and Santa Ana Creek, near its northern shore, as shown in **Figure 2-2.** In addition, Lake Casitas receives diversions from the Ventura River via the Robles Canal. For this report, it is assumed that the focus of the sediment accumulation is at the Coyote Creek and Santa Ana Creek tributaries (including a likely more predominant amount in Santa Ana Creek from the 2017 Thomas Fire). Therefore, any sediment removal project would be focused on the north end of Lake Casitas as shown in **Figure 2-3**. It is noted, these areas are focused on for this report only and further evaluation would be required before determining where and how to perform sediment removal.



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### 2.3.2 Conceptual Level Layout and Design of Required Facilities

While there is potentially approximately 17,000 AF of accumulated sediment in Lake Casitas, removing that large quantity of sediment is impractical. This report assumes Casitas would remove enough sediment to obtain an assumed 25 percent of the lost storage back over a 20-year period, or a total of 4,200 AF. Based on simulations using the current Lake Casitas Yield Model, this would provide approximately 420 AFY in average annual yield.

Before any sediment is removed, a survey of the shoreline and a bathymetric survey of Coyote Creek and Santa Ana Creek inlets would be required to identify the underwater features of the lake and determine where sediment removal is most feasible. In addition, haul road alignments and any stockpiling areas would need to be laid out and surveyed.

A sediment survey would also be required to determine the sediment thickness, depth and quality. The sediment survey would be a geotechnical investigation (including sampling, field and lab testing) to characterize the sediment engineering properties, chemistry, and water quality within the reservoir and tributary drainages in the immediate vicinity of the reservoir. The survey would provide information to be used in the disposal methods which can vary depending on soil and water quality. The field and laboratory testing plan would be prepared in accordance with the Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. – Testing Manual (EPA, 1998) commonly referred to as the "Inland Testing Manual." Locations and extent of sediment deposits to be removed must be identified. Sediment dewatering pads must also be identified.

Once lake and sediment characteristics are identified, a suitable removal technique can be chosen. There are multiple methods for removing sediment from lakes and reservoirs, primarily excavation and dredging.

- Excavation Excavation is conducted above the waterline and can occur during periods of low
  water level, either occurring seasonally or by inducted by temporarily reducing reservoir levels.
  During excavation, earth-moving equipment would remove and load dewatered sediment into
  trucks and haul the sediment to disposal sites. Excavation is preferred for moving large amounts
  of sediment as it may minimize environmental disturbances and may be more cost effective
  than dredging. Many factors need to be considered regarding access for equipment, lake levels,
  and sediment deposit areas.
- Dredging Dredging consists of excavating underwater sediments by either mechanical or hydraulic means and does not require lowering of lake levels. Dredging equipment is typically mounted on a barge and excavation depths can extend up to 100 feet below the water surface. Shallow dredging may also be done from the shore. Mechanical dredging utilizes large cranes, draglines or hydraulic excavators with buckets to excavate sediments from lake floors and transfer them into barges and/or trucks for disposal. Hydraulic dredging utilizes continuous pumping to vacuum sediment and dispose of it offshore. Combination mechanical / hydraulic dredgers may include a cutter head to excavate larger or consolidated material and then use hydraulic suction to remove it. Dredged sediment may be loaded into a barge and transported to shore or may be pumped to shore. For either type of dredging, sediment must be dewatered before disposal by truck which requires dewatering sites.

Based on the available information and evaluation of the terrain, it is assumed dredging would be recommended as the primary sediment removal method as excavation above the water level may be difficult due to the rugged terrain, rocky shoreline, and lack of access to these areas for equipment. In addition, it is likely that sediment has been deposited at the bottom of the lake and not along the shoreline. During dredging operations, equipment will need access to provide the means for moving the sediment to the designated dewatering site and ultimately the disposal site. Existing roads may need to be expanded or new roads constructed for disposal routes outside of the lake boundaries.

The disposal site is dependent on the type of sediment determined by the sediment survey, water quality, and local needs. The extracted sediment can be disposed of in multiple, beneficial ways such as raising subsided lands, habitat restoration projects, levee support and maintenance, or agricultural enhancement.

### 2.3.3 Conceptual Opinion of Probable Capital Costs

Table 2-7 provides approximate unit costs for dredging activities, and **Table 2-8** summarizes the costbenefit of the sediment removal project.

ltem No.	Description	Unit Costs ¹	Quantity	Cost ²			
1	Survey (Bathymetry and Terrestrial)	\$100,000/year	20 years	\$2,000,000			
2	Geotechnical Sediment Survey	\$300,000/year	20 years	\$6,000,000			
3	Environmental & Permitting	\$200,000/year	20 years	\$4,000,000			
4	Dredging, dewatering and disposal offsite	\$35/CY per year (may vary significantly depending on material quality and disposal site)	1,145,000 CY per year for 20 years	\$40,075,000 (estimated annual cost) \$801,500,000 (over 20 years)			
5	Mobilize dredge equipment	\$1,000,000/year	20 years	\$20,000,000			
6	Construction Quality Assurance	\$500,000/year	20 years	\$10,000,000			
7	Engineering, Legal and Administrative	\$1,000,000/year	20 years	\$20,000,000			
8	Contingency		20%	\$172,700,000			
Conceptual Opinion of Probable Capital Costs       \$1,036,200,000 ¹ Unit Costs are provided for order of magnitude only, actual costs may vary significantly due to disposal site locations, water quality results, and other field results.							
² Calculated order of magnitude costs do not include escalation rate							

#### Table 2-7 Conceptual Opinion of Probable Capital Costs for MO 06 Sediment Removal at North End of Lake Casitas

#### Table 2-8 Costs and Benefits of MO 06 Sediment Removal at North End of Lake Casitas

Parameter	Value	Unit
Conceptual Opinion of Probable Capital Costs	\$1,036,200,000	USD
Estimated Annual Yield (after 20 years)	420	AFY
Conceptual Unit Capital Cost per AFY	\$2,467,140	USD/AFY

### 2.3.4 Regulatory Permits & Environmental Compliance

In order to dredge Lake Casitas, Casitas would have to obtain regulatory permits from the United States Army Corps of Engineers (USACE). Under the Federal Clean Water Act of 1976, the USACE is required to regulate the removal of sediments from waterways to protect water equality and ecosystem. Casitas would have to obtain permits from the California Department of Fish and Wildlife (CDFW) for dredging. It should be noted that, currently, a permit is required for suction dredging throughout California. Depending on the method and location of disposal, this permit may be obtained from the Regional Water Quality Control Board under the 401 Water Quality Certification and Wetlands Program for the discharge of dredged material.

Lake Casitas is a Bureau of Reclamation facility. A use permit is required from Reclamation to apply for possession or occupancy of, or for extraction or disturbance of natural resources from land, facilities, or waterbodies under the jurisdiction of Reclamation.

It is also likely the following will be required.

- Conduct site environmental survey(s) and prepare a wetland delineation.
- Submit delineation to USACE and meet with USACE for initial consultation for CWA Section 404 requirements for this project.

Given the size of the project, it is likely that the project will not meet the USACE requirements for a Nationwide Permit (NWP) and an individual permit will be required. The following will likely be required to obtain ab Section 404 Individual Permit:

- Prepare IS/EA and FONSI/MND under NEPA/CEQA
- Prepare Individual 404 Permit Package to include:
  - USACE ENG Form 4345 and required project diagrams
  - Project Description/Project Purpose
  - Draft Public Notice
  - 404(b)(1) Alternatives Analysis
  - Wetland Delineation
  - Biological Assessment
  - Cultural Resource Technical Report
  - Wetland Mitigation Plan
- Obtain 401 Certification from Regional Water Quality Control Board (RWQCB)
- Obtain take exemption under the Endangered Species Act or "not likely to adversely affect" concurrence from USFWS and NMFS

Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW before beginning any activity that will substantially modify a river, stream, or lake. CDFW will review the notification and issue a Lake or Streambed Alteration Agreement when necessary to protect fish and wildlife resources.

## 2.3.5 Inter-Agency Coordination

This project would require coordination and a potential use permit with Reclamation, the Lake Casitas owner. There may be other agency coordination required depending on final selected disposal location and disposal routes required.

#### 2.3.6 System Integration

This project will not produce a significant additional volume and will take many years to perform. To retain the removed storage volume will require periodic maintenance dredging. If maintenance dredging is not completed, the volume could be lost in an estimated 9 years due to incoming sediment. Casitas may want to explore watershed management or stream management alternatives for reducing sediment deposits from reaching Lake Casitas and/or performing annual sediment removal to maintain current volumes through a reservoir maintenance plan.

#### 2.3.7 Phasing

It is assumed that the removal of all sediment accumulation in Lake Casitas would be phased over an estimate of 20 years due to the high volume of removal and funding restrictions. While not all sediment accumulation could be removed in a short amount of time, yearly sediment dredging could help the increase storage volume over the long term. Maintenance dredging would be required after removal is complete to maintain the storage volume.

Assuming 500 AF of sediment accumulates in the lake per year, to remove a total of 4,200 AF in 20 years would require an annual dredge removal volume of 710 AF (1.1 million yards). See **Table 2-9** for potential 20-year dredging program.

Year	Starting Accumulated Sediment Volume (AF)	Dredged Volume (AF)	New Accumulation (AF)	Ending Accumulated Sediment Volume (AF)	Net Gain/loss in Lake Casitas Capacity (AF)
1	17,000	-710	500	16,790	210
2	16,790	-710	500	16,580	420
3	16,580	-710	500	16,370	630
4	16,370	-710	500	16,160	840
5	16,160	-710	500	15,950	1,050
6	15,950	-710	500	15,740	1,260
7	15,740	-710	500	15,530	1,470
8	15,530	-710	500	15,320	1,680
9	15,320	-710	500	15,110	1,890
10	15,110	-710	500	14,900	2,100
11	14,900	-710	500	14,690	2,310
12	14,690	-710	500	14,480	2,520

#### Table 2-9 Twenty-Year Dredging Program

Appendix G Draft Water Supply Option Selected for Additional Analysis Draft

Yearly dredge volume			-1,145,467	CY / year	
Total		-14200			
20	13,010	-710	500	12,800	4,200
19	13,220	-710	500	13,010	3,990
18	13,430	-710	500	13,220	3,780
17	13,640	-710	500	13,430	3,570
16	13,850	-710	500	13,640	3,360
15	14,060	-710	500	13,850	3,150
14	14,270	-710	500	14,060	2,940
13	14,480	-710	500	14,270	2,730

#### 2.3.8 Timeline

For the purposes of this report, it is assumed that dredging and disposal of the 4,200 AF of sediment would occur intermittently throughout 20 years, primarily between the months of May-October each year, or whenever lake levels are low enough. Before any dredging occurs, sediment surveys are key to determine where and how the sediment can be removed and disposed. It is assumed both a bathymetric survey and sediment survey would take several months to perform. Permitting activities could take up to 12-24 months before removal can begin.

Table 2-10 Preliminary Timeline for MO 06 Sediment Removal at North End of Lake Casitas

Project MO 06	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4+
	Annual							
Bathymetry Survey	Survey							
	Annual							
Sediment Survey	Survey							
Permitting		Repeated as required annually (over 20- year period)						
Construction					Annual [	Dredging (c	over 20-yea	r period)

### 2.3.9 CWRP Recommendation

This project was moved forward into the CWRP decision support tool but was not ranked as one of the top 10 projects. This project is not recommended due to the prohibitive costs and little supply yield. Casitas may want to explore other maintenance alternatives for reducing sediment loading into Lake Casitas through a reservoir operations and maintenance plan.

## 2.4 GW 06 – Ojai Basin Desalter Project

## 2.4.1 Project Description

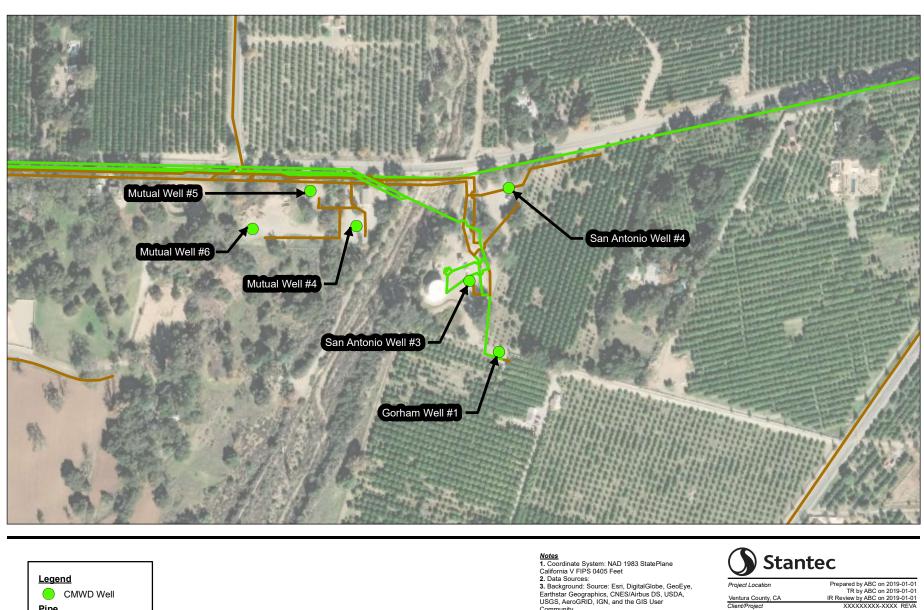
This project targets otherwise unusable high chloride water from the lowest aquifers in the Ojai Basin to allow for its potable use and provides recharge water to replace the poorest quality water over time. Groundwater rights limitations will need to be evaluated as part of this project.

Casitas would own and operate the desalter project infrastructure. Delivering the water acquired from the Ojai Desalter Project would require installation of a membrane treatment system, and connection to the existing Casitas Ojai transmission system, as well as drilling a well to supply the high chloride water. Additionally, the brine from the treatment process was assumed to be delivered to the existing Ojai Valley Sanitary District (OVSD) collector lines in the project area. Further evaluation is required to determine the feasibility of using existing collector lines as there may be concerns with salt build-up and the project may require a completely independent collection system. For the purposes of this report, it is assumed the existing OVSD collector lines are available for brine disposal. Production volume for the Ojai Basin Desalter Project is estimated to range from 300 to 400 AFY. Estimated maximum flow rate to be used in conceptual facility design is approximately 200 gpm.

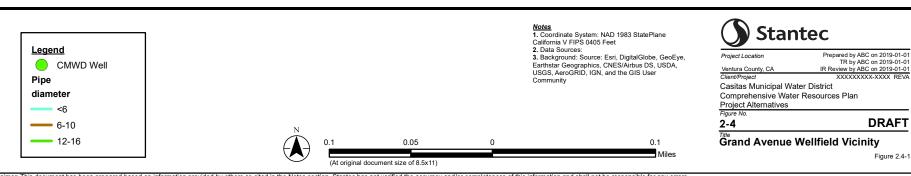
Produced water prior to treatment is expected to be sodium-chloride in character, with total dissolved solids (TDS) in the near brackish state (around 2,000 milligrams per liter, or mg/l, TDS). Desalting would result in water quality of 500 mg/l TDS added to the distribution system.

### 2.4.2 Conceptual Level Layout and Design of Required Facilities

The purpose of this project is to introduce a new water source to the Casitas potable water distribution system. The existing Ojai groundwater wellfield on Grand Avenue is the most feasible and cost-effective location for this project since the site is already owned by Casitas and distribution lines are accessible (Figure 2-4). According to records provided by the Golden State Water Company (GSWC), 12 wells have been constructed in the well field, 6 of which have been decommissioned and six of which are currently operating. The supply wells currently being used are listed in **Table 2-11**. It is assumed neither the active nor the destroyed wells can be repurposed for this project. Therefore, a new well would need to be constructed.







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Well	Year Constructed	Well Depth (ft)	Design Production Capacity (gpm)	Observed Production Capacity (gpm)
San Antonio #3	1956	600	551	197
San Antonio #4	2005	610	500	174
Gorham	1996	650	1000	239
Mutual #4	1947	580	275	131
Mutual #5	1951	610	670	140
Mutual #6	2012	510	471	280
Total			3,467	1,161

#### Table 2-11 Existing Grand Avenue Wellfield Well Supply Summary

According to the Ojai Wellfield Interference Assessment Report (Pueblo Water Resources, 2018), the wells are built with carbon steel casing. Due to encrusting, the carbon steel casing has a useful life of about 30 years. This indicates that the oldest wells in the wellfield, Mutual well #4, Mutual well #5, and San Antonio well #3, are nearing the end of their useful lives. For this reason, the new well location is proposed to be on the east side of San Antonio Creek, in the vicinity of Mutual Wells #4, #5, and #6.

In order to obtain the otherwise unusable high chloride water from the lowest aquifers in the Ojai basin, it is estimated that the borehole will be reamed to 500 ft + below ground surface with an approximate borehole diameter of 36 in. For preliminary estimates, the well casing and screen is proposed to be a diameter of 26 in and constructed to 500 to 1000 ft below ground surface. The borehole will then be backfilled with sand pack, bentonite grout mixture and grout. The approximate lengths and depths of backfill will be determined after logging borehole lithology, again, to ensure proper well construction. Post well construction, well development and groundwater sampling will be required to determine a proper treatment plan. For this purpose, a vertical turbine pump is recommended. In order to determine a stable pumping rate for this new well, as well as the interference on the surrounding wells, a pump test would be required.

According to a Stratified Water Quality Report shown in the 2018 Ojai Basin Groundwater Management Plan (Ojai Basin Groundwater Management Agency, 2018), the concentrations of chloride were determined to be between 36 to 638 ppm (**Table 2-12**). In order to treat the expected levels of TDS in the groundwater, a Package Reverse Osmosis Treatment system is recommended and would be located at the proposed well site. In the reverse osmosis treatment process, a portion of the groundwater would be treated and recombined with the other groundwater from the same well as a split stream process to meet the 500 mg/L to reduce capital and operating costs.

It is assumed the existing 8-inch pipeline connected to the Mutual Wells No. #4, #5, and #6 would be utilized for preliminary estimates. A hydraulic analysis would be required in order to size the discharge pipeline and determine any necessary distribution system upgrades.

	Concentrations in mg/l (ppm)					
Depth (ft)	Calcium	Bicarbonate	Magnesium	Sulfate	Sodium- Potassium	Chlorine
240	120.23	244.07	36.46	192.12	45.98	35.45
320	100.20	244.07	36.46	192.12	45.98	35.45
380	100.20	305.08	36.46	288.18	68.97	35.45
440	120.23	305.08	36.46	288.18	183.92	212.72
505	180.35	305.08	48.61	432.27	344.85	638.15
575	240.47	366.10	48.61	576.36	344.85	567.25
Average	143.61	294.91	40.51	328.21	172.42	254.08

Table 2-12 Solute Concentrations in Ojai Basin Groundwater

### 2.4.3 Conceptual Opinion of Probable Capital Costs

Anticipated cost of the Ojai Desalter Project ranges from \$2.6 million to \$3 million. **Table 2-13** and **Table 2-14** list the conceptual opinion of probable costs and the cost benefit of the Ojai Basin Desalter project.

Table 2-13 Opinion of Probable	e Capital Costs for Oja	i Basin Desalter Project
--------------------------------	-------------------------	--------------------------

ltem	Description	Unit	Quantity		Cost Per Item ¹	Total Cost ^{1,2}
1	Well Construction	ea	1	\$	1,000,000	\$ 1,000,000
2	Well Pump	ea	1	\$	25,000	\$ 25,000
3	Water Treatment System (RO)	ea	1	\$	300,000	\$ 300,000
4	Water Stabilization	ea	1	\$	100,000	\$ 100,000
5	Chloramination	ea		\$	100,000	\$ 100,000
6	Brine Pipeline	linear foot	550	\$	460	\$ 253,000
7	Treated Water Pipeline	linear foot	100	\$	460	\$ 46,000
8	Mobilization, Demobilization, Bonds, & Insurance	%	10			\$ 172,400
9	Potholing Existing Utilities	%	1.50			\$ 30,000
10	Planning and Permitting Allowance	%	5			\$ 100,000
11	Engineering Design Costs	%	15			\$ 290,000
12	Contingency	%	20			\$ 490,000
Conceptual Opinion of Probable Capital Costs					\$ 2,936,400	

² Calculated order of magnitude costs do not include escalation rate

#### Table 2-14 Costs and Benefits of Ojai Basin Desalter Project

Parameter	Value	Unit
Conceptual Opinion of Probable Capital Costs	\$2,936,400	USD
Estimated Annual Yield	350	AFY
Conceptual Capital Unit Cost per AFY	\$8,390	USD/AFY

### 2.4.4 Regulatory Permits & Environmental Compliance

In order to construct the groundwater well and install an attached pump, Casitas must submit multiple permits to the Ventura County Resource Management Agency. This includes a Well Permit Application, specifying the owner, well type and purpose, and construction parameters. The well construction must follow Ordinance No. 4468, to ensure the protection of groundwater quality, supply, and quantity. Next, a Well Pump Test Form must be submitted to demonstrate that the well has an adequate water supply and a sufficient recovery time. Moreover, the Well Pump Test form must contain the proper licenses and certification from the well driller, pump contractor, and the supervising Civil Engineer or Geologist that provides oversight. The Well Pump Test must adhere to the Water Pump Test Criteria set by Ventura County specifying the pump test duration, pumping rate, and recovery time.

This project is not anticipated to have a significant effect on the environment based on the tenants of CEQA. The anticipated environmental document to be required is an Initial Study Mitigated Negative Declaration. Alternatively, a Categorial Exemption could also be implemented.

### 2.4.5 Inter-Agency Coordination

Although Casitas owns and operates the wellfield on Grand Avenue, inter-agency coordination will be required for operation of the project. The involved agencies will include the Ojai Basin Groundwater Management Agency, County of Ventura, and OVSD.

### 2.4.6 System Integration

This water source introduces approximately 300 to 400 AFY of 500 mg/l water into the existing distribution system, as well as brine water into the sewer collector line. The Ojai Water System hydraulic model should be updated to evaluate the impact of the additional flow to the distribution system. OVSD may require additional studies to evaluate the impact on the brine water disposal into the sewer collection system and blending of water sources.

### 2.4.7 Phasing

This project is not anticipated to be broken into phases.

#### 2.4.8 Timeline

The time required from conception to completion if allowed to progress without delay could take up to 24-months if a Categorical Exemption is available for CEQA compliance and a new well or wells are to be constructed.

Project GW 06	Year 1 - Q1-Q3	Year 1 - Q4	Year 2 - Q1-Q3	Year 2 – Q4
Planning	Planning and Permitting			
Design		Design		
Construction			Well Construction and Desalter Station construction	Desalter Installation and connection to distribution System

Table 2-15 Preliminary Timeline for GW 06 Ojai Basin Desalter Project

#### 2.4.9 CWRP Recommendation

This project was moved forward into the CWRP decision support tool but was not ranked as one of the top 10 projects. This project is not recommended as a current water supply project due to the high costbenefit ratio and relatively small amount of supply.

## 2.5 SW 04 – Expansion of Robles Canal

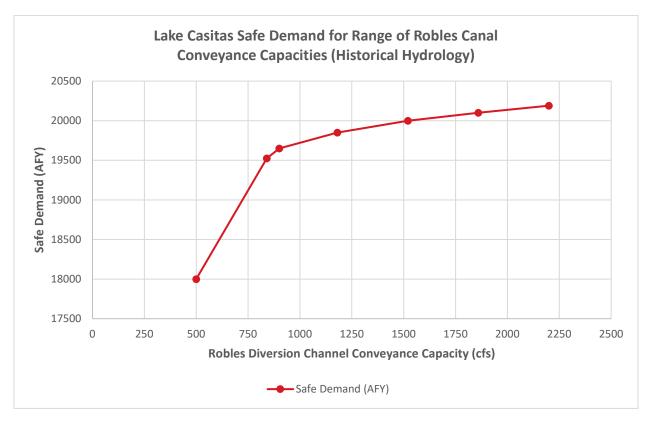
## 2.5.1 Project Description

The Robles Canal is part of the Bureau of Reclamation's Ventura River water supply project and diverts water from the Ventura River to Lake Casitas. The present capacity of the Robles Canal is 500 cubic feet per second (cfs). Expansion of the Robles Canal to a capacity of 2,200 cfs was considered by the Bureau of Reclamation in 1968 but was not implemented at the time for unknown reasons.

Utilizing the Lake Casitas Yield Model, a range of potential Robles Canal conveyance capacities were simulated using historical hydrology to determine the optimal canal capacity. As shown in **Figure 2-5**, there is a lower marginal increase in safe demand¹ for higher capacities. The additional capital cost to increase the size of the canal to accommodate flows higher than 900 cfs would outweigh the benefits of this larger expansion. This proposed project assumes the existing canal and headworks would be enlarged to a capacity of 900 cfs, thereby allowing greater diversions to Lake Casitas during high flow periods.

¹ Safe demand is the maximum demand that can be supplied in every year of simulation when the Casitas Water Efficiency and Allocation Program (WEAP) is implemented. The WEAP includes guidance for implementing conservation measures to reduce demand when Lake Casitas storage is low. See the Water Supply Technical Memorandum for more detail.

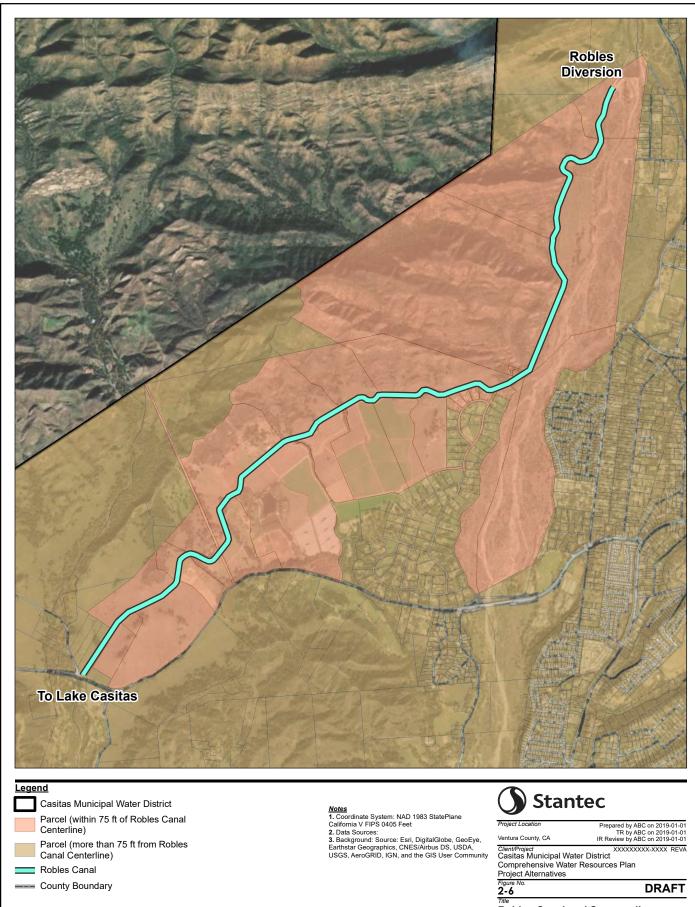




Appendix G Draft Water Supply Option Selected for Additional Analysis Draft

#### Figure 2-5 Lake Casitas Safe Demand as a Function of Robles Canal Capacity

The Robles Canal is approximately five miles long and winds along the border of Los Padres National Forest to connect the Robles Forebay on the Ventura River to Lake Casitas. The alignment includes an inverted siphon approximately 5,400 feet in length. The current canal is approximately 7 feet wide at the bottom, approximately 27.5 feet wide at the top, and has a maximum water depth of 5.56 feet with 15 inches of freeboard (NOAA Fisheries, 2003). See Figure 2-6 for the Robles Canal alignment and location.



**Robles Canal and Surroundings** 

Miles

Figure X-X.X

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## 2.5.2 Conceptual Level Layout and Design of Required Facilities

Two design options were considered for the possible expansion of the Robles Canal to a capacity of 900 cfs:

A) expand the canal while maintaining the same depth to base width ratio as the current canal; and

B) expand the canal while maintaining the current depth of the canal.

Both options were vetted to:

- Understand differences in estimated cost;
- Estimate space constraints between the expanded canal and the existing right of way; and
- Assess constructability and temporary construction access requirements.

Table 2-16 presents the simplified conceptual design criteria for the current canal and the two possible expansion options. The inverted siphon portion is discussed separately following the table.

Expansion Options					
Parameter	Current	A. Maintain D/BW ratio	B. Maintain depth	Units	Notes
Bottom width	7.00	8.71	16.12	ft	This is found using Solver such that the flow rate equals 900 cfs.
Top width	27.50	33.30	36.62	ft	
Water depth	5.56	6.92	5.56	ft	For Option A, depth to base width ratios are equal. For Option B, water depth is maintained as its current value.
Freeboard	1.25	1.25	1.25	ft	Maintained as current value for both options.
Side wall slope	0.66	0.66	0.66	ft/ft	Maintained as current value for both options.
Width at high water level	23.74	29.54	32.85	ft	
Area	85.45	132.30	136.14	sf	
Wetted Perimeter	27.09	33.71	36.21	ft	
Hydraulic radius	3.15	3.92	3.76	ft	Area divided by wetted perimeter.
Slope	0.00066	0.00066	0.00066	ft/ft	Slope over the majority of the canal.
Manning's coefficient	0.014	0.014	0.014		Manning's n for unfinished concrete.
Cross-sectional average velocity	5.88	6.80	6.61	ft/s	Calculated using Manning's equation.
Flow rate	502	900	900	cfs	Cross-sectional velocity multiplied by cross- sectional area.

Based on the Robles Canal as built construction drawings, the shortest distance between the western and eastern right-of-way lines is approximately 100 ft. Assuming a minimum laydown area width of 20 ft on each side, the canal could be no wider than 60 ft without requiring a temporary construction easement for surrounding properties as it would extend beyond the existing right of way. Neither option would require a temporary construction easement along the full alignment to accommodate the laydown area, but several temporary construction easements would need to be acquired in order to enter and exit from the construction area and for staging areas for equipment and materials.

Maintaining the existing channel depth and allowing for expansion while protecting the existing canal bottom and one of the sides, it is assumed that Option B would be preferred, and the opinion of

probable costs in the following section reflects Option B. There is a road on the southeastern side of the canal and thus it is assumed that the canal would expand to the northwest.

An inverted siphon of approximately 5,400 ft length delivers water between the two open channel portions of the canal. The existing inverted siphon is 78-inch diameter pipe. In order to assess whether the existing siphon could deliver 900 cfs, the available static head between the beginning and end of the siphon was compared to the head loss with 900 cfs flow. **Table 2-17** shows these hydraulic calculations; the head loss with 900 cfs flow would far exceed the available static head.

Parameter	Value	Units	Notes
Diameter	78	in	Existing siphon diameter.
Flow rate	900	cfs	
Roughness	0.007	ft	Roughness for rough concrete from White's Fluid Mechanics. Conservative value given that the concrete will likely be lined.
Area	4778.36	sq in	
Velocity	27.12	ft/s	
Kinematic viscosity	1.06E-05	ft^2/s	Assumed water temperature at 70 degrees Fahrenheit.
Reynolds number	1.66E+07		Calculated based on velocity, diameter, and kinematic velocity.
Relative roughness	0.0011		Calculated as roughness over hydraulic diameter.
Friction factor	2.00E-02		Based on the Moody friction factor chart, using calculated Reynolds number and relative roughness.
Length	5400	ft	Length of existing siphon.
Head loss	189.79	ft	Calculated using the Darcy equation.
Static head available	47	ft	Based on elevation profile from Google Earth.

Table 2-17 Robles Canal Siphon Hydraulic Calculations

It is assumed that a second, identical inverted siphon would be constructed to handle flows above 500 cfs.

As mentioned, Figure 2-6 above shows the alignment of the Robles Canal along with surrounding parcels. It is assumed that a temporary construction easement will be required for five parcels along the canal (one per mile of canal alignment) and all five parcels along the inverted siphon.

## 2.5.3 Conceptual Opinion of Probable Costs

Assuming Option B would make use of the existing canal bottom and one of the sloped sides, and also assuming the expansion would be built into the existing canal, Table 2-18 presents an opinion of probable costs for the Robles Canal expansion.

ltem	Description	Unit	Quantity	Cost Per Item ¹	Total Cost ^{1,2}
1	Channel Construction (including additional siphon)	ls	1	\$9,400,000	\$9,400,000
2	Demolition	ls	1	\$2,000,000	\$2,000,000
3	Excavation and Grading	ls	1	\$8,100,000	\$8,100,000
4	Miscellaneous	ls	1	\$50,000	\$50,000
5	Mobilization and Demobilization, Bonds, and Insurance	%	10%		\$1,960,000.00
6	Design, Legal, and Administrative	%	15%		\$3,000,000.00
7	Contingency	%	20%		\$4,902,000.00
8	Fish Passage Modifications			TBD	TBD
9	Easement Cost			TBD	TBD
10	Environmental Permitting			TBD	TBD
Conceptual Opinion of Probable Capital Costs					\$29,412,000

#### Table 2-18 Opinion of Probable Capital Costs for Robles Canal Expansion

² Calculated order of magnitude costs do not include escalation rate

Table 2-19 summarizes the cost-benefit of the Robles Canal Expansion project.

#### Table 2-19 Costs and Benefits of SW 04 Expansion of Robles Canal

Parameter	Value	Unit
Conceptual Opinion of Probable Capital Costs	\$29,412,000	USD
Estimated Annual Yield	1,650	AFY
Conceptual Unit Capital Cost per AFY	\$17,830	USD/AFY

## 2.5.4 Regulatory Permits & Environmental Compliance

Expansion of the Robles Canal requires approvals and permits from the Bureau of Reclamation and environmental regulatory agencies. The 2003 Biological Opinion related to operation of the Robles Diversion to accommodate fish habitat objectives affects the estimated project yield and complicates future permitting requirements.

It is anticipated that impacts on biological resources, air quality, transportation/circulation, and noise would be able to be mitigated below a level of significance. Impacts on water resources would need to be evaluated and considerations made to downstream impacts due to reduced flows during high flow periods.

Appendix G Draft Water Supply Option Selected for Additional Analysis Draft

## 2.5.5 Inter-Agency Coordination

Extensive coordination with the Bureau of Reclamation would be necessary to carry out this project.

#### 2.5.6 System Integration

There are no significant issues since the water is coming from the same source (Ventura River) at the same location (Robles Diversion) and will enter into Lake Casitas at the existing discharge of the Robles Canal.

### 2.5.7 Phasing

Canal construction could be accomplished in phases in which sections of the canal would be expanded with construction completed only during the dry season. Construction of a temporary neck-down between the new wider canal and the existing canal before each rainy season would allow for the canal to deliver its current capacity during each rainy season until the expansion is completed. **Table 2-20** shows anticipated activities by phase.

#### Table 2-20 Robles Canal and Siphon Construction Phasing

Phase		Activities		
	•	Expansion of canal northeast of the siphon		
Phase 1	•	Fish passage construction		
	<ul> <li>Neck down into existing siphon</li> </ul>			
Phase 2	•	Construction of new duplicate siphon, except for		
FildSe Z		connection to and from canal		
Phase 3	•	Expansion of canal southwest of the siphon		
Flidse 5	•	Connect new duplicate siphon to expanded canal		

### 2.5.8 Timeline

Expansion of the Robles Canal would ideally begin in early summer when Lake Casitas is relatively full, thus allowing for adequate supply in Lake Casitas despite no flow from the Robles Canal.

A preliminary timeline for the project that reflects phasing broken out into three dry seasons is shown below. This timeline assumes that approximately 75 ft of canal could be constructed in each working day.

	Q1	Q2-Q4	Year 2	Year 3	Year 4
Planning	Planning & Permitting				
Design		Design			
Construction			Construction – Phase 1	Construction – Phase 2	Construction – Phase 3

## 2.5.9 CWRP Recommendation

This project was moved forward into the CWRP decision support tool but was not ranked as one of the top 10 projects. This project is not recommended as a current water supply project due to the high costs and major construction and coordination challenges.

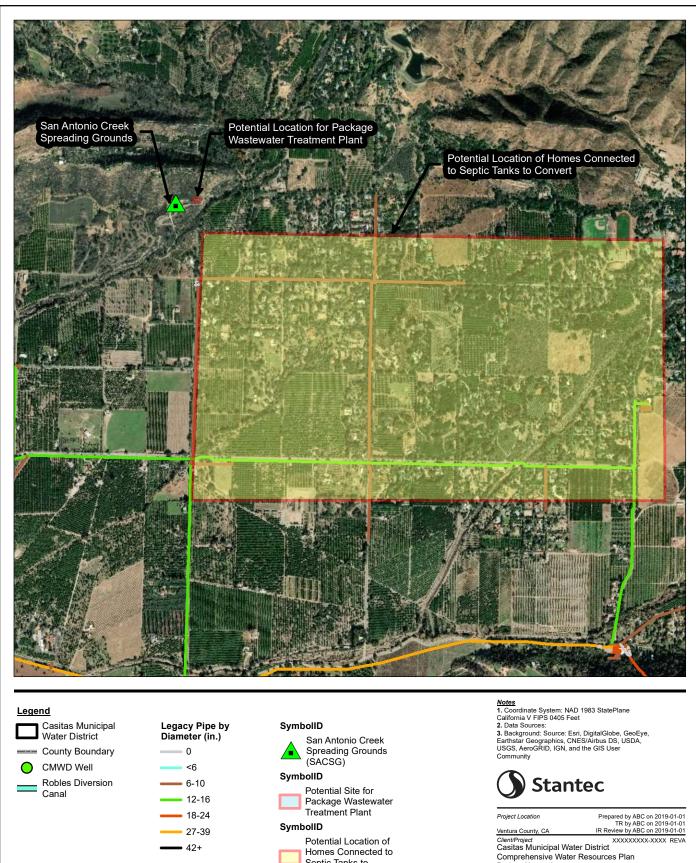
# 2.6 RW 06 – Ojai East Septic Collection, Package Treatment, Recharge

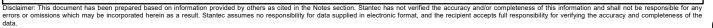
## 2.6.1 Project Description

The Ojai East Septic Collection, Package Treatment, Recharge project includes the installation of a package wastewater treatment plant in east Ojai Valley and a network of sewer collection mains and laterals to collect sewage that is currently being disposed in septic systems. The influent would be treated by means of a centralized redundant extended aeration system including anoxic chambers and clarification followed by membrane filtration and disinfection to meet tertiary standards. The treated effluent would then be piped to the lower pond in the San Antonio Creek Spreading Grounds (SACSG) to help recharge the Ojai Groundwater Basin. Production is estimated to be approximately 74 AFY. Current conditions may allow upwards of 37 AFY to recharge with 37 AFY taken up consumptively by local trees and plants at individual sites. The project would provide the ancillary benefit of replacing septic systems with a centralized treatment system, which could improve local groundwater quality.

## 2.6.2 Conceptual Level Layout and Design of Required Facilities.

The SACSG is located on the San Antonio Creek northeast of the City of Ojai. An area just under 800 acres to the east and south of the SACSG has been identified as a potential opportunity to disconnect private residences from septic systems and connect to a proposed sewer system. Figure 2-7 shows a map of the location of the SACSG, potential location of homes connected to septic tanks to convert, and a potential site for the package wastewater treatment plant.





Homes Connected to Septic Tanks to

Convert

0.5

Project Alternatives

San Antonio Creek Spreading

Grounds and Area of Septic

Figure No. 2-7

Miles

**42**+

DRAFT

Figure 2.6-1

#### **Flow Rate**

There are approximately 300 homes in the area southeast of the SACSG that can be converted from septic to a sewer system. TIGER data from the US Census Bureau shows the area has 2.91 persons per household, providing a population of approximately 860 people. Using the flow per capita without water conservation (Metcalf and Eddy, Wastewater Engineering 2003, Page 161, Table 3-8) of 74 gallons per person per day, the household wastewater flow in the area is approximately 71.3 AFY. Additionally, there are two small schools in the area providing another 5.7 AFY. The total wastewater flow anticipated is 77 AFY. Previous studies have assumed about half of this flow is lost to evapotranspiration in the septic system arrangement; that loss can be counted as an unused water source for this project.

#### **Housing Connection Conversion**

In order to convert the existing homes from septic systems to a sewer collection system, the homes will need to be disconnected from the septic tanks and new piping will need to be installed in the homes as well as a new sewer line on the homeowners' properties to connect to the CVWD sewer system. It is anticipated that two cleanouts per home will be needed to make the piping connections. Once disconnected, the septic systems should be decommissioned by pumping out the sewage in the tank and filling in the tank with suitable grades of sand or cement slurry.

#### Sewer System Design and Layout

In order to collect and convey the wastewater, a low-pressure sewer network is recommended. A gravity-based system is also possible but is not recommended due to the low flow rates causing a risk of stagnant wastewater in the collection pipes. The sewer system layout is anticipated to be a grid of 2-in HDPE pipes in each street in the area. Since the entire system is low-pressure a common header is not needed. The proposed grinder pumps will convey the wastewater to the northwestern-most point of the grid where a 4-in pipe will convey the wastewater to the package treatment plant. The package treatment plant will be located at a higher elevation than the SACSG in order to allow for gravity flow to the injection wells at the spreading grounds. An effluent holding tank will be required after the package treatment plant to maintain a steady head on the effluent and equalize the flow. The grinder pumps will be purchased and installed by Casitas and owned by each homeowner while the package treatment plant will be owned and operated by Casitas.

#### **Packaged Wastewater Treatment Plant**

Typical household wastewater has high concentrations of BOD, TSS, COD, nitrogen, phosphorus, chlorides, sulfate, oil and grease, and coliforms that need to be removed. Title 22 regulations must be met in order to discharge into the SACSG. **Table 2-22** below shows the typical wastewater contaminant concentrations and the limits required to meet for Title 22. Samples will need to be taken before a design of the package plant can be performed. Any contaminants not identified below are subject to federal EPA MCLs as well.

Constituent	Typical Household Wastewater Concentration, medium strength	Title 22 Limits ¹	Los Angeles Regional Water Quality Control Board Groundwater Basin Plan – Ojai Valley ²
Biochemical Oxygen Demand (BOD)	190 mg/L	30 mg/L	n/a
Total Suspended Solids (TSS)	210 mg/L	30 mg/L	n/a
Total Nitrogen (TN)	40 mg/L	< 10 mg/L	< 10 mg/L
Sulfate	30 mg/L	n/a	200 mg/L
Turbidity	n/a	≤ 2 NTU	n/a
Total Coliform	10 ⁷ - 10 ⁹ per 100 mL	< 2.2 total coliform per 100 mL	n/a
Total Dissolved Solids (TDS)	500 mg/L	400 mg/L	700 mg/L
Total Organic Carbon (TOC)	140 mg/L	≤ 0.5 mg/L	n/a
Conductivity	unknown	1170 µmhos	n/a
Chloride	50 mg/L	≥ 99.0% rejection	50 mg/L
Boron	unknown	n/a	0.5 mg/L

Table 2-22 Anticipated Wastewater Constituents and Package	Treatment Plant Requirement Limits
------------------------------------------------------------	------------------------------------

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/lawbook/RWreg ulations_20181001.pdf

²Since the SACSG are along Senior Canyon, the more stringent of the Basin Objectives is presented in this table.

https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/2019/chap3update dMay2019.pdf

### Injecting Treated Effluent into the SACSG

The SACSG have a capacity of 914 AFY while annual groundwater recharge is projected to average approximately 126 AFY through passive injection wells (OBGMA.com). There is plenty of capacity available to increase the flow by less than 75 AFY; however, the spreading grounds are currently not in operation. The SACSG Rehabilitation Project began in 2014 and construction finished, but winter and spring rains in 2017-2018 brought debris from the Thomas Fire into the spreading grounds and caused obstruction of the injection well operation. Maintenance will be required to clear the debris.

# 2.6.3 Conceptual Opinion of Probable Capital Costs

The conceptual opinion of probable costs for converting the area from septic to sewer and treating the wastewater is anticipated to be greater than \$18 million. This is more than \$200,000 per AFY when considering the total treated water generates only 74 AFY in new supply for Casitas. Refer to **Table 2-23** for a breakdown of the conceptual costs, and **Table 2-24** for a summary of the cost benefit.

ltem No.	Description	Unit	Quantity	Cost per Unit	Cost
1	Materials and Installation of E-One Grinder Pumps Duplex Stations at				\$3,600,000
	parcel	ea	300	\$12,000	<i>\</i> <b>\</b> ,,,,
2	Spare E/One Grinder Pumps	ea	10	\$6,000	\$60,000
3	Cleanouts at parcel	ea	390	\$150	\$58,500
4	Decommission septic tanks at parcel	ea	295	\$1,000	\$295,000
5	Housing lateral Lines - 1 1/4" Line	lf	59,000	\$45	\$2,655,000
6	2" diameter force main - Open Cut or HDD - collection system in streets	lf	100,000	\$45	\$4,500,000
7	Connection fee to sewer system	ea	300	\$1,000	\$300,000
8	Packaged Treatment Plant	ea	1	\$1,110,000	\$1,110,000
9	Potholing Existing Utilities	%	1	1.5%	\$230,000
10	Engineering, Legal, Admin Costs	%	1	10% of construction costs	\$1,280,000
11	Environmental Permitting	ea	1	\$50,000	\$50,000
12	Mobilization, Demobilization, Bonds, & Insurance	%	1	10% of construction costs	\$1,280,000
13	Easement on Spreading Grounds (Co of Santa Barbara)	ea	1	TBD	TBD
	Running subtotal				\$15,418,500
14	Contingency	%	1	20%	\$2,962,500
	Estimated Opinion of Probable Capital Costs				\$18,381,000

Table 2-23 Conceptual Opinion of Probable Capital Costs for RW 06 Ojai East Septic Collection, Package Treatment, Recharge

#### Table 2-24 Costs and Benefits of Ojai East Septic Collection, Package Treatment, Recharge

Parameter	Value	Unit
Conceptual Opinion of Probable Capital Costs	\$18,380,000	USD
Estimated Annual Yield	74	AFY
Conceptual Unit Capital Cost per AFY	\$248,400	USD/AFY

## 2.6.4 Regulatory Permits & Environmental Compliance

In order to discharge recycled water into any aquifer in California, extensive permitting is required. The treatment of the wastewater will need to meet Title 22 regulations for indirect potable reuse. The permitting process will be performed through the Department of Drinking Water, the Ventura Regional Water Quality Control Board, and the Ojai Basin Groundwater Management Agency.

Removing the household septic systems from use is anticipated to reduce the loading of nitrogen and chloride in the aquifer by removing point sources of contamination; however, adding wastewater to the

drinking water system requires compliance with Title 22 regulations for recycled water. The wastewater must be treated to 12-log enteric virus reduction, 10-log Giardia cyst reduction, and 10-log Cryptosporidium oocyst reduction with treatment process requirements. Part of the regulation for indirect potable reuse requires a downstream distance from the injection well to the extraction well to provide at least 6 months of retention time. This is already considered in the design and location of the existing SACSG but will be a consideration required for the permitting.

# 2.6.5 Inter-Agency Coordination

Casitas will need to obtain permission from the Ventura County Watershed Protection District and the Ojai Basin Groundwater Management Agency to use the SACSG.

## 2.6.6 System Integration

This water source introduces approximately 37 AFY that would have been taken up by vegetation and relocates another 37 AFY in the watershed via the SACSG. A follow-up study is recommended to evaluate the impact of the flow being diverted from individual parcels to injection at the spreading grounds. At least 6,400 feet downstream of the spreading grounds, groundwater wells pump the water and treat it in the San Antonio Pressure Filter Plant for reduction of iron and manganese as well as chlorination. Treated water fills the San Antonio Forebay and is then pumped into the main zone of the water system.

## 2.6.7 Phasing

It recommended that this project not be phased. It requires a sequence of construction for each part to be brought online, but due to the small size of the project phases are not recommended. In the future, other areas in Ojai on septic systems could be connected to the sewer as a separate project. At that time, sewer pipes may need to be replaced with larger pipes and the packaged treatment plant may need additional treatment capacity.

### 2.6.8 Timeline

Groundwater modeling and water quality sampling can be performed concurrently before the design begins. The design is basic and should take no longer than 6-8 months; however, an extensive public outreach program to get buy-in from community members, easements from property owners for the grinder pump stations and force laterals, as well as user agreements with the property owners will be necessary and could take several months if property owners agree. Without agreement from the property owners, the project could stall. Installation may take from 1-2 years to get all homes connected to the system and for manufacturing and installation of the package treatment plant. Siting and obtaining permission to place the package treatment plant on County land should be done concurrently and as early as possible.



Project RW 06	Year 1 - Quarter 1	Year 2 - Quarter 2-4	Year 2	Year 3
Planning	Groundwater Modeling			
Design		Design		
Public Outreach and Property Owner Agreements		Public Outreach	Property Owner Agreements	
Construction			Installation of Sewer Piping, E/One Grinder Pump Systems, and package treatment plant	
Startup and Commissioning				Connect homes to E/One grinder pump systems and startup sewer network
Decommission septic systems				Decommission septic systems

#### 2.6.9 CWRP Recommendation

This project was moved forward into the CWRP decision support tool but was not ranked as one of the top 10 projects. This project is not recommended as a current water supply project due to the high costs and low supply yield.



# **Summarv**

# Section 3 Summary

Six conceptual project alternatives for increasing Casitas water supply were evaluated at a conceptual level. Project descriptions, layouts, permitting requirements, system integration issues, implementation timing, and conceptual cost estimates were prepared for each project. The costs and benefits of each project are summarized in **Table 3-1**.

The information from this analysis was used in the CWRP alternative evaluation process. In that process the 10 highest ranking alternatives were considered for inclusion in the CWRP recommended plan. Of the six alternatives assessed in this TM, only the Environmental/Habitat Modifications and Desalinated Water from City of Santa Barbara alternatives ranked in the top 10.

CWRP Option Number	Option Name	Average Annual Yield (AFY)	Preliminary Capital Costs	Approximate Cost- Benefit Ratio
MO 01	Environmental/Habitat Modifications	1,080	\$1,405,000	\$1,300/AFY
DW 01	Desalinated Water from City of Santa Barbara	TBD	\$0	TBD
MO 06	Sediment Removal at North End of Lake Casitas	420	\$1,036,200,000	\$2,467,000AFY
GW 06	Ojai Basin Desalter Project	350	\$2,936,400	\$8,400/AFY
SW 04	Expansion of Robles Canal	1,650	\$29,412,000	\$17,830/AFY
RW 06	Ojai East Septic Collection, Package Treatment, Recharge	74	\$18,380,000	\$248,400/AFY

#### Table 3-1 Project Capital Cost and Benefit Summary



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# Section 4 References

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#### Appendix H Draft Funding Options for Water Supply Project

Comprehensive Water Resources Plan

June 8, 2020

Prepared for:

Casitas Municipal Water District

Prepared by:

Stantec Consulting Services Inc.

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# Section 1 Background

This technical memorandum (TM) describes potential funding options for recommended projects in the Comprehensive Water Resources Plan (CWRP), and provides preliminary recommendations on a conceptual funding plan. Casitas Municipal Water District (Casitas) is a special district supplying both wholesale and retail water. The service area is approximately 150 square miles and includes the City of Ojai, Upper Ojai, the Ventura River Valley area, a portion of the City of Ventura, and the coastal Rincon area to the Santa Barbara County line. Casitas serves approximately 70,000 persons through over 6,000 service connections. There are three main water customer sectors: municipal and commercial (retail customers), agricultural, and resale (i.e., other water providers that deliver Casitas water to their own customers).

The CWRP includes the following objectives: meet the long-term water supply gap, mitigate the short-term risk, and diversify the water supply portfolio. The CWRP outlines the Recommended Plan which includes the Recommended Portfolio of Supplies. Additional detail regarding demand, supply and characteristics of the recommended projects is presented in the CWRP.

The Recommend Portfolio of Supplies includes "local, near-term, no-regrets options", "preferred supplemental water options" and "conditional options" to be tracked and considered as need and opportunities present themselves. Combined, the "local, near-term, no-regrets options" and the "preferred supplemental water options" have an estimated capital cost of \$155 million. The projects included in this portfolio meet the objectives set forth in the CWRP to mitigate short-term supply risk, address the long-term supply gap and diversify the water supply portfolio for Casitas.

Table 1-1 below shows the projects included in the Recommended Portfolio of Supplies. Table 1-2 presents the approximate capital costs and long-term average annual yield associated with the project options included in the Recommended Portfolio.

Local, near term,	Preferred supplemental
no-regrets options	water options
<ol> <li>GW 08 - Ojai Basin Well</li></ol>	<ol> <li>SWP 03 – Ventura-Santa</li></ol>
Rehabilitation and	Barbara Interconnection* <li>SWP 04 – Casitas-Calleguas</li>
Replacement (500 AFY) <li>MO 08 - Robles Fish Screen</li>	Interconnection* <li>SWP 05/DW 01 Supplemental</li>
Improvements (350 AFY)	Water (1,250 AFY)

#### Table 1-1 Recommended Portfolio of Supplies

#### Conditional options – track only

- 1. C 01 Demand Management: 5%-10% (800-1,600 AFY)
- 2. MO 01 Watershed Management/Arundo Removal (300 AFY)
- 3. GW 01 Matilija Deep Formation Wells (Unknown)
- 4. SWP 05/DW 01 Supplemental Water Options (up to 4,000 AFY)

*Combined average annual yield of SWP 03 and SWP 04 is 3,100 AFY

Project Options	Approximate Capital Cost (\$)	Long Term Avg. Annual Yield (AFY)
GW08 – Well Improv. In Ojai Groundwater Basin	\$1,500,000	500
MO08 – Robles Diversion Fish Passage	\$3,000,000	350
SWP03 – Ventura-Santa Barbara Counties Interconnection	\$14,500,000	2,000*
SWP04 – Casitas – Calleguas Interconnection	\$136,000,000	3,180*
SWP 05/DW 01 Supplemental Water (via SWP Connections)	Included in SWP project alternatives	1,250+
Total Portfolio	\$155,000,000	4,630 (AFY)

Table 1-2 Recommended Portfolio of Supplies Approximate Capital Costs and Annual Yield

*Combined average yield from 2 connections is limited to a total of 3,100 AFY from the SWP

The Casitas Municipal Water District Water Rate Study (March 2017) anticipated a Capital Improvement Program (CIP) of slightly more than \$24.2 million between fiscal year (FY) 2017 and 2026. To meet operating and CIP costs without taking on any debt, the Rate Study recommended annual rate increases of 12 percent between 2018 and 2022. Based on the recommendations of the CWRP, Casitas requires an additional \$155 million to develop the Recommended Portfolio of Supplies. Cash reserves cannot fund the Recommended Portfolio. Based on financial resources currently available, Casitas would need to secure additional capital to fund water supply project(s) and likely be required to raise rates to meet related financing obligations.

Importantly, all funding decisions will ultimately have an impact on Casitas' customers. New fees, assessments, loan maturities, interest rates, grant management requirements, and repayment conditions - all the direct and indirect costs - are ultimately reflected in the customers' bill.

A conceptual funding plan for the Recommended Portfolio of Supplies is presented in this technical memo. The memo explores potential funding options Casitas may wish to consider funding the "local, near term, no-regrets options" and the "preferred supplemental water options" articulated in the CWRP. This memo provides some preliminary recommendations to advance an integrated approach to project delivery. To access alternative funding, or non-cash funding, Casitas must consider both the price and timing of the projects within the portfolio. With a ten-year delivery timeframe, no single alternative funding source or debt issuance will adequately meet needs.



# Section 2 Funding Options Overview

Developing a strategic funding plan hinges on having a robust understanding of current funding sources, identifying and characterizing new funding sources, and evaluating the applicability and attractiveness of those funding sources. Funding sources can be tapped to support a single water supply project or multiple projects. To secure adequate capital to fund the Recommended Portfolio, Casitas may benefit from pursuing a suite of funding options.

Cash-funding projects through available reserves is often the least expensive source of funding. As funds are available, Casitas should leverage the accrued reserves to, in particular, fund "local, near-term, no-regrets options" and the SWP03-Ventura Santa Barbara Counties Interconnection. For the MO 08 Robles Fish Screen Improvements project, Casitas should consider grant programs administered by the California Department of Fish and Wildlife, the Coastal Conservancy, the California Wildlife Conservation Board, and the Ocean Protection Council. Even smaller grant awards can have a positive impact on project financing and several programs have more funding available related to Proposition 68. Additional detail on these programs is presented in the attached Funding Matrix.

To fund the SWP03 and SWP04 Casitas-Calleguas Interconnection, Casitas should consider positioning for the California Drinking Water State Revolving Fund (DWSRF). While this program is competitive and targets small and disadvantaged communities, the regional and resiliency aspects of SWP03 and SWP04 may recommend the projects to the program. Additionally, Casitas may consider bundling the projects under a single WIFIA loan issuance. The DWSRF and Water Infrastructure Finance and Innovation Act (WIFIA) programs offer low interest rates and other favorable borrowing terms. Opportunistically, and highlighting the sustainability, redundancy, regional aspects, and resiliency of the projects, Casitas should track resiliency funding available through the Federal Emergency Management Act (FEMA) Building Resilient Infrastructure and Communities (BRIC) grant program. Between now and the delivery of these projects, other resiliency programs at the state and federal level may become available. Efforts should be made to track the availability of funding for regional projects supporting resiliency. With an awareness of potential funding sources, to stay aware of emerging funding options, Casitas can sign up for Notices of Funding Opportunity and Notices of Funding Availability email alerts through state and federal agencies.

Revenue bonds are an effective tool for financing funding gaps. Casitas should consider issuing revenues bonds to complement cash, grant and government loan program funding.

The following provides a high-level overview of funding options.

# 2.1 Cash-Funded Capital

The most direct form of capital funding is to pay for projects through available cash balances or revenue cash flows, often referred to as "pay-as-you-go" (PAYGO) funding. This funding source is very often the cheapest form of funding (except grant funding) as there is no interest expense to be paid off over time, nor administrative or issuance costs associated with procuring funding. Projects can be partially or entirely funded as PAYGO capital based on the funds available to meet the project funding needs. Funds may be generated to build a reserve and meet capital needs through a variety of sources. The 2017 Rate Study

recommended a Capital Improvement Program Reserve Target of \$5 million, to stabilize funding for capital projects through accumulated "pay as you go" reserves.¹

The first and most common source of funding is from rate, fee, or assessment revenue collected by the District from rate payers. These are rates or fees paid for potable water services. Generating the revenue needed to meet the project funding needs would likely require an increase and/or change to existing rates, requiring completion of a Proposition 218 compliant rate study to show the cost justification for rates and fees, in addition to notification to affected property owners, voters, or rate payers prior to Board approval.

The second source of cash funding is system development fees (also referred to as impact fees, capacity fees, capital facilities fees, among others), which are fees strictly dedicated to meeting specific capital needs. In particular, these fees are intended to charge new customers for their respective share of the existing system, and for the additional capital investment required to meet their added demands on the system. System development fees are charged as one-time fees upon approval for connection to the system. Development fees are not a good source of funding for the Recommended Portfolio as Casitas is currently projecting no future customer growth.

Lastly, assessments may be charged to fund projects that provide a "special benefit"² to property owners of a clearly defined set of parcels. Assessments are commonly used to meet capital funding needs for a specific project, but they can also be used to meet ongoing debt service and O&M funding needs as long as the basis for the continuation of the fee is clearly defined. Additionally, any basis for annual increases to the assessment to account for inflation or cost escalation must be clearly defined in the original assessment proposal. Assessments must be accompanied by an engineering report that outlines the costs to be recovered, the parcels receiving a special benefit, and the method of apportionment of benefit to individual parcels. Assessments must be approved by a majority of affected property owners, whose votes are weighted based on the benefit apportioned to their respective parcels.

# 2.1.1 Enhanced Infrastructure Financing Districts (EIFD)

Enhanced Infrastructure Financing Districts (EIFDs) were authorized under state law in 2014 to aid in funding a broad range of public capital facilities (including water infrastructure projects) by capturing the increment of property tax revenue generated within the district above the base year established at formation. The statute authorizes cities and counties to create the district, which then becomes a legal entity separate and distinct from the city or the county. Special districts, such as Casitas, can participate in such districts if they receive property tax revenue. The EIFD may finance the purchase, construction, expansion, or improvement of projects with a useful life of 15 years or longer. Property tax increment generated within the EIFD can be used to cash-fund projects and/or pay debt service on bonds issued to fund the projects. There is no required voter approval to create the district; however, to issue bonds, the district must secure 55 percent voter approval. This funding option would require significant collaboration with nearby municipalities and may be well suited for project options that include overlapping water supply projects, such as the Casitas-Calleguas and Ventura-SB County Interconnections.

² Special benefit is defined as a particular and distinct benefit over and above general benefits conferred on real property located in the district or to the public at large.



¹ For reference, to cover all capital needs for the Recommended Portfolio of Supplies in a single issuance, a 3.5% interest rate, 25 year maturity \$155,000,000 loan would require over \$9.4 million in debt service annually. \$9.4 million does not consider the likely debt service coverage loan terms.

Table 2-1 summarizes the strengths, weaknesses, opportunities (SWOT) and threats related to Cash Funded Capital.

#### Table 2-1 Cash Funding SWOT

Strengths	Weaknesses	
Low Cost	Must accrue adequate capital over time	
Control	Requires rate increases	
No external compliance requirements	Could delay delivery	
Opportunities	Threats	
Blend cash with government funding     programs and bonds to reduce overall costs	<ul> <li>Unforeseen costs depleting capital reserves and delaying or preventing projects</li> </ul>	
• Fund "local, near term, no-regrets" options with existing cash reserves	<ul> <li>Failure to implement adequate rate increases</li> </ul>	

# 2.2 Debt Financing

Debt financing is a viable option to meet the planning, design, and construction funding needs to complete the recommended projects. Debt financing can come in various forms, most commonly revenue bonds, general obligation bonds, certificates of participation, or loans. Each of these is described in the following subsections.

## 2.2.1 Revenue Bonds

Revenue bonds are the most common form of debt financing for utility infrastructure investments. Revenue bonds require specific, dedicated, non-tax revenues to be pledged to guarantee payment, and are often issued based on the financial standing and credit rating of the individual utility issuing the bonds (as opposed to the City or other taxing authority). Additional costs are commonly incurred in the issuance of revenue bonds, including legal fees, registration fees, underwriting fees, and others. In addition to these costs and administrative requirements, revenue bonds also carry covenants commonly requiring a utility to generate net revenue after operating costs to meet debt service needs plus a defined margin (e.g. 25%).

# 2.2.2 General Obligation Bonds

General obligation (GO) bonds are similar to revenue bonds, with the distinction that GO bonds are issued based on the issuer's pledge of its full faith, credit, and taxing authority. GO bonds are issued by local governments, sometimes to meet municipal utility capital investment needs. In these cases, the GO bonds are still repaid by utility rate revenues, similar to a revenue bond, although the bond is issued based on the financial standing and credit rating of the taxing authority.

# 2.2.3 Certificates of Participation

Certificates of participation (COPs) provide long-term financing without some of the administrative, regulatory, or legal hurdles often associated with bonds, including voter approval. However, legislative approval is still required prior to issuance of COPs. Under a COP, the lessee makes payments to shareholders using revenues generated from the operation of the facilities, similar to a revenue bond. Interest rates are often higher under a COP based on the increased risk of non-appropriation.

Table 2-2 summarizes the strengths, weaknesses, opportunities and threats related to Municipal Bonds and COPs.

Table 2-2 Municipa	I Bonds and	COPs SWOT
--------------------	-------------	-----------

<ul> <li>Strengths</li> <li>Control</li> <li>Minimal compliance requirements</li> <li>Currently rates are low</li> </ul>	<ul> <li>Weaknesses</li> <li>Typically higher rates than government financing programs</li> <li>Inflexible repayment terms</li> <li>Potentially high issuance costs</li> </ul>	
<ul> <li>Opportunities</li> <li>Blend bonds with government funding programs</li> <li>Leverage current issuance trends to keep costs low</li> <li>Issue numerous bonds over implementation of Recommended Portfolio to reduce capitalized interest prior to substantial completion</li> </ul>	<ul> <li>Threats</li> <li>Interest rate risk exposure</li> <li>Project risk impacting interest rate</li> </ul>	

# 2.3 Government Financing and Funding

The Recommended Portfolio of Supplies may be a strong contender for competitive government funding programs but not all programs are a good fit. Evaluation criteria drives the assessment and comparison of potential funding options. These criteria weigh the qualitative risks and benefits, as well as the quantitative revenue and timing associated with each funding option.

Key evaluation components include:

- Competitiveness Provides a measure of how likely Casitas is to successfully compete for funding from the program
- Maximum Grant Award or Loan Amount Determines the adequacy of the funding available to meet the needs of Casitas



- Funding Terms Evaluates the attractiveness of anticipated loan interest rate and maturity compared to bonding
- Application Costs Considers the level of effort necessary to effectively compete for funding. Outlines the application requirements
- Compliance Costs Assesses the costs of grant or loan management after the funding has been secured
- Timing Overlays the likely timing of funding program disbursements with the project cash flow requirements

The following narrative describes programs to which Casitas may opt to apply. Additional details related to advantages and disadvantages of the various programs and approaches are summarized in the attached Funding Matrix. Securing funding takes time and costs money. Small grants can be competitive and have extensive application requirements even though they have little impact on filling the funding gap. Therefore, this memo is focused on funding and financing options with more substantial funding resources.



Table 2-3 summarizes the strengths, weaknesses, opportunities and threats related to Government Funding and Financing Programs.

<ul> <li>Strengths</li> <li>Low interest rates</li> <li>Grant funding</li> <li>Flexible repayment terms</li> </ul>	<ul> <li>Weaknesses</li> <li>Application costs and requirements</li> <li>Inadequate funding available to meet needs</li> <li>Compliance and reporting costs</li> <li>Government coordination and schedule impacts</li> </ul>
<ul> <li>Opportunities</li> <li>Streamline project management and funding program application, reporting and compliance requirements</li> <li>Reduce impact to rate payers through gradual rate increases that match flexible repayment terms</li> <li>Utilize multiple programs with same compliance &amp; reporting requirements to spread costs across greater capital contribution</li> <li>Use a WIFIA loan in a P3</li> </ul>	<ul> <li>Threats</li> <li>Decreases in funding available</li> <li>Shifting program and political priorities</li> <li>De-obligation of funds related to non-compliance</li> </ul>

Many government financing programs are designed to support the unique funding needs of public water utilities and municipalities. State and federal loan programs offer very low or subsidized interest rates. Recognizing what municipal and water utilities need, state and federal funding program loans may also offer flexible repayment terms, allowing for more gradual rate increases and maturities to more accurately reflect the asset life of water infrastructure. Multiple loan programs exist with the sole purpose of financing infrastructure investments. All the options included in the Recommended Portfolio of Supplies would be eligible for the loan programs described in the following subsections.

#### California Drinking Water State Revolving Fund (DWSRF)

California's DWSRF program offers financings for eligible drinking water infrastructure projects that address drinking water health compliance issues. DWSRF is a competitive program where applicants' projects are scored based on set criteria. Projects aiming to correct or prevent future public health problems (related to potable water) or are needed to comply with the Safe Drinking Water Act, receive higher funding priority. According to the SFY 2019-2020 DWSRF Intended Use Plan, the California State Water Board funding target

for SFY 2019-2020 was \$420 million in new financing. In SFY 2019-2020, the State Water Board received loan requests for almost \$1.4 billion. Based on the United States Environmental Protection Agency (USEPA) Drinking Water Infrastructure Needs Survey, California needs approximately \$51 billion over the next 20 years to adequately fund drinking water infrastructure. The greatest need (\$31 billion) is for drinking water transmission and distribution repair/replacement.

Loan terms under the DWSRF programs typically include an interest rate of approximately 50% of the latest state GO bond rate, and a repayment period of up to 30 years. Applying for these programs often requires extensive studies and administrative costs to show the project yields the intended benefits, meets compliance requirements, is "shovel-ready" (for construction), and can be repaid by the agency in the form of debt payments.

#### EPA Water Infrastructure Finance and Innovation Act (WIFIA)

Another potential loan program is USEPA Water Infrastructure Finance and Innovation Act (WIFIA) loan program. WIFIA is a relatively new funding program to support large water, wastewater, and stormwater infrastructure projects. Since program initiation in 2017, the WIFIA program has closed more than \$2.8 billion in low interest loans.

The WIFIA program is administered by the EPA out of the Washington DC headquarters. Annually, the program is appropriated funds by Congress. The appropriation determines how much the program can lend. In 2020, the Consolidated Appropriations Act provided enough credit subsidy for the WIFIA program to provide approximately \$5.5 billion in credit assistance.

WIFIA loans will only cover up to 49% of total project costs, so applicants must demonstrate a viable financial plan to cover the other 51%. Public and private entities are eligible to apply. WIFIA funds may cover project costs previously incurred and can be used to fund project construction for up to seven years. Borrowers are encouraged to bundle projects and think about portfolios of projects to serve a common purpose (like adequate and resilient water supply). Financing terms for WIFIA loans include an interest rate equal to the US Treasury rate of a similar maturity, up to five years of deferred payments from the date of substantial completion of a project, and the option to structure loan repayment to align with projected revenues generated from the funded project. These deferred and sculpted repayment options enable WIFIA borrowers to more gradually increase rates or fees to cover debt service.

The WIFIA selection criteria are generally divided into three main categories – Project Impact, Project Readiness, and Borrower Creditworthiness – and the program is primarily intended to fund large projects. Administrative funding priorities for WIFIA are announced on an annual basis, and currently include drought prevention, reduction, or mitigation projects. WIFIA encourages applicants to bundle projects into larger programs and has prioritized regional infrastructure projects with multiple partners. Though the projects in the Recommended Portfolio of Supplies represent different strategies to mitigate risk and address supply needs, they are part of a coordinated plan by Casitas. As such, the fish screen improvements, groundwater well rehabilitation/replacement and interconnections could be considered part of Casitas' Water Supply Program and bundled in a single WIFIA credit issuance. Additionally, Casitas might establish partnerships with Santa Barbara County agencies or Calleguas Municipal Water District to apply for WIFIA funding for interconnections.

Debt will likely necessitate an increase in revenues to cover debt service. The magnitude of this increase will be dependent on the amount of debt issued, and the debt terms. WIFIA credit is attractive because, while interest rates are not subsidized as they are with the SRF program, rates are lower than revenue bond interest rates and repayment can be sculpted for borrowers to more gradually implement rate increases.



# 2.4 Grant Funding

While grant programs for the purpose of funding water infrastructure projects in California do exist, they are often targeted at small disadvantaged communities or narrowly defined projects and often award grants of less than \$1 million. Utilizing these programs may require some creative or out of the box type projects, solutions or collaborations. In addition, these programs are highly dependent on funding from federal and state governments, and as such may change over time in their funding capacity and availability, application requirements, and project selection criteria. Because of the limitations and variability, a small number of the largest, most stable and directly applicable programs to the Recommended Portfolio of Supplies are discussed in the following subsections.

# 2.4.1 Drinking Water SRF Program (DWSRF)

The DWSRF program offers grants to small disadvantaged communities up to a maximum of \$8 million over a five-year period for water infrastructure projects. This criteria would generally seem to preclude Casitas from taking advantage of this program, given its demographics, unless there are projects to serve pocket economically disadvantaged communities as indicated by median household income (MHI, must be less than 80% of state MHI).

# 2.4.2 United States Bureau of Reclamation Water Reclamation and Reuse Program (Tile XVI)

The US Bureau of Reclamation (BOR) has several grant programs relevant to Casitas including the BOR WaterSMART Small-Scale Water Efficiency Projects Grants and the WaterSMART Water and Energy Efficiency Grants. Typically these funding programs awards smaller grants though awardees can receive up to \$1.5 million in WaterSMART Water and Energy Efficiency grants.

#### Federal Disaster Resilience and Mitigation Funding

The US Housing and Urban Development (HUD) Community Development Block Grants (CDBG) – Mitigation (MIT) funds represent an opportunity for grantees to carry out activities to mitigate disaster risks and reduce future losses. California Housing and Community Development will submit a State Action Plan in April 2020 outlining targets for the \$88 million of CDBG-MIT funds directed toward Sonoma and Ventura counties recovering from fires. Water supply infrastructure to support community resiliency is a potential application of those funds.

The US Department of Homeland Security FEMA Building Resilient Communities and Infrastructure (BRIC) grant program provides up to \$10 million grants for resiliency projects. FEMA will cover up to 75% of project costs. Critical infrastructure, like water supply systems, is considered eligible for these funds. BRIC is a newer iteration of the Pre-Disaster Mitigation (PDM), Flood Mitigation Assistance (FMA) and Hazard Mitigation Grant Program (HMGP). These programs require applicants to develop a Benefit-Cost-Analysis to demonstrate the value of the resiliency investment. In past years, these programs were criticized for the amount of time between application submittal to grant funding availability. However, FEMA is working to expedite the process and improve the impact of the program. The California Office of Emergency Services (OES) is the FEMA applicant. Cities, districts, and local agencies are the "subapplicants".



#### **California Agency Grants**

Several California grant programs support water conveyance, fish passage, and groundwater projects. Several of these programs deserve consideration even though stated agency priorities may not align perfectly with the Recommended Portfolio of Supplies. The Department of Water Resources (DWR), the State Water Resources Control Board, the California Department of Fish and Wildlife, the Coastal Conservancy, the California Wildlife Conservation Board, and the Ocean Protection Council all have relevant grant programs. The "Grants" tab on the attached Funding Matrix includes summaries of nine of these programs, along with the federal programs referenced previously.

# 2.5 Public Private Partnerships

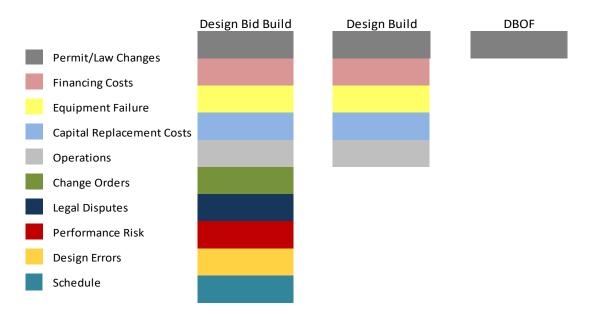
Public Private Partnerships (P3s) are an alternative means to deliver infrastructure services. P3s are rare in the US in the water sector but they do provide a real financing and project development option. This memo focuses on P3s that provide upfront capital for infrastructure projects. Design-Build-Operate (DBO), and Design-Build-Operate-Maintain (DBOM) can be considered P3s but, as those delivery approaches do not include financing, they are not a focus of this memo.

In some cases, private financing of infrastructure assets can be a viable option for local and regional projects which might otherwise face challenges or delays using traditional public financing approaches. Typically, in a P3, a private entity assembles the delivery team and takes responsibility for project design, construction, operations and financing. The private party forms a special purpose entity, or project company to deliver a public-benefit project. Infrastructure P3s often apply capital from institutional investors with long-term investment horizons and lower return expectations than private equity investors. P3s also tend to be heavily leveraged, meaning the equity ownership makes up a smaller percentage of the total capital provided for project development. This effectively brings down the weighted average cost of capital (WACC³) for the project. Commercial debt, private activity bonds, and/or WIFIA funding could all be sources of debt for a P3.

A P3 project delivery approach is sometimes referred to as Design-Build-Operate-Finance, or DBOF.⁴ Private participation creates the opportunity to transfer more project risk and project responsibility from the project sponsor (District) to private partners. Private investors will not accept regulatory, political, or disaster risk. Figure 2-1 depicts risks carried by the project sponsor under different delivery scenarios. A project development agreement, or concession agreement, forms the contractual foundation for the P3 and this risk transfer.

³ The WACC is the blended cost of capital including equity and debt. The cost of each type of capital is weighted by its percentage of total capital and then added. For example, if 20% of a project is funded by Institutional Investors (equity) with 9% return expectations, 49% of a project is funded by WIFIA loans (debt) with a 2.2% interest rate, and 31% is funded by Commercial Debt (debt) with a 4% interest rate, the project WACC would be 4.118% [(0.2*9%)+(0.49*2.2%)+(0.31%*4%)]=4.118% ⁴ In some cases, the public-sector project sponsor may choose to retain operations responsibility.





# Figure 2-1 P3 Risk Transfer for the Project Sponsor. (The colored bars depict the risks retained by the project sponsors under three example delivery approaches.)

The public-sector project sponsor determines the scope of private participation, project performance and quality requirements. These requirements often include a guaranteed maximum price for capital expenditures, guarantees on infrastructure and operations & maintenance (O&M), and secured financing. With those requirements, the project company and the public project sponsor work together to identify the project delivery and financing structure to meet or exceed the requirements. The District can determine its desired level of participation in project development and in the water sector it is not uncommon for public utilities to demand significant oversight and participation during the design and construction phase. P3s do offer the option of significantly less participation on the part of the public project sponsor, potentially freeing up District staff and resources to focus on other projects or priorities.

In recent years, P3 approaches in the water sector were modified to better integrate the P3 team with the public sponsor team, particularly during the feasibility and design phases. In projects with discrete infrastructure assets, a public sponsor may opt to utilize a P3 for certain infrastructure while retaining development responsibility for other system infrastructure. The same may be true for infrastructure operations and maintenance.

Proponents for P3s believe private management of the design, construction, and operations can result in cost efficiencies outweighing the higher costs related to including private financing. These savings are realized over the life cycle of the project and include the value to the public sponsor associated with risk transfer. To increase the competitiveness of a P3 with other financing options, private investors may also offer more flexibility than revenue bonds and some government financing programs in terms of repayment and maturities. Equity return expectations for water infrastructure P3s are trending downward as market interest in infrastructure investing has grown and new and better-informed investors have entered the market. While return expectations were in the high single and low double digits (~8-12%) five years ago, owner-operators and others have emerged with significantly lower equity return expectations (~6%).

Even as equity investor return expectations have lowered, the interest rates are still several percentage points higher than revenue bonds and government financing programs. P3 financing results in higher



financing costs over the life of a project compared to tax-exempt municipal debt or government financing programs. Ultimately equity returns and debt service make up a portion of the rates customers pay for their water. A P3 public sponsor must trust the design, construction, O&M savings and risk transfer, over the life of the project, will outweigh the higher financing costs.

Though newer P3 models allow for more participation from the public project sponsor, the more the District dictates development, the more the project will be built and managed like a public project, effectively minimizing the efficiencies purported to be gained through private DBOF. In order to realize those savings, the District must give up some of control.

Translating requirements and expectations into contractual agreements necessitates a team of strong legal and financial advisors. As there have been few successful water P3s in the US, there are few firms with significant experience. These advisors are expensive and the process of negotiating the P3 agreements and refining the financial models can take a long time. P3s transaction costs can be 2-5% of total project value. Several public entities have spent years exploring the potential benefits of P3s only to decide on a traditional delivery model after spending millions on the analysis.

Garnering public support for P3s can be very difficult. There is a prevalent perception that P3s benefit private investors at the expense of utility customers. With a very large project requiring significant rate increases, private participation can attract negative attention. A lack of stakeholder support can manifest in a lack of political support and this can result in delays and other major project issues.



#### Table 2-4 summarizes the strengths, weaknesses, opportunities and threats associated with P3s.

#### Table 2-4 P3 SWOT

Strengths	Weaknesses
<ul> <li>Design, build, operate &amp; maintain efficiencies resulting in cost savings</li> <li>Project risk transfer</li> <li>Transfer of project development and O&amp;M responsibility</li> <li>City staff directed to other projects or priorities</li> <li>More flexible repayment terms</li> </ul>	<ul> <li>Higher financing costs</li> <li>Less control</li> <li>High transaction costs</li> <li>Longer project development phase</li> </ul>
Opportunities <ul> <li>Leverage WIFIA</li> </ul>	<ul><li>Threats</li><li>Stakeholder support</li></ul>
<ul> <li>Explore ownership configurations, other options and costs during development</li> <li>Identify investor-partner with lower return expectations</li> </ul>	<ul> <li>Political support</li> <li>Regulatory changes</li> <li>Force majeure/Disaster</li> </ul>

# Section 3 Conclusion

This narrative provides information on strategic funding sources for the CWRP Recommended Portfolio of Supplies. A critical next step is integrating the key financial characteristics of the supply option projects included in the portfolio with the most attractive funding scenario currently available to Casitas. Based on projects' characteristics and the funding options available, Casitas may be required to make critical financial decisions in the near term to effectively position for the impact of accruing and securing capital in the future.

Preliminary analysis suggests Casitas cash and grant fund the "local, near-term, no-regrets" options and position SWP03 and SWP04 for loan and grant programs and bond issuances to meet the more significant capital needs associated with those projects, particularly SWP04. There may be opportunities under certain programs, like WIFIA, to bundle all of the Recommended Portfolio of Supplies, even with a longer term delivery timeline. Key considerations included Casitas debt service capacity; program borrowing terms including maturities, rates and repayment; bond issuance costs and timing; and emerging grant and loan opportunities targeting regional water supply resiliency.



Today, Casitas should capitalize on the opportunity to market the Recommended Portfolio of Supplies to government funding programs, regional planning entities, and potential partners. Discussions with state and federal funding agencies may influence project delivery, timing and financing. Raising regional awareness of how Casitas selected the Recommended Portfolio of Supplies can demonstrate to potential partners the analytical rigor behind and legitimacy of Casitas' water supply decisions. It is important to plan and position now. WIFIA and/or SRF loans may require rate increases to cover debt service. In addition, in some cases it takes more than 18 months after submitting an application to receive funding from programs.



# CASITAS MUNICIPAL WATER DISTRICT MEMORANDUM

TO: BOARD OF DIRECTORS

**FROM:** MICHAEL FLOOD, GENERAL MANAGER

**SUBJECT:** REVIEW AND APPROVE MESSAGING PLATFORM FOR THE DRAFT COMPREHENSIVE WATER RESOURCES PLAN

**DATE:** 06/24/20

#### **RECOMMENDATION:**

It is recommended the Board of Directors review and approve the messaging platform for the Draft Comprehensive Water Resources Plan.

#### **BACKGROUND AND DISCUSSION:**

The Board of Directors authorized a public relations services agreement with Fiona Hutton & Associates in February 2020 to provide public outreach services.

Attached for review and approval is the messaging platform prepared by Fiona Hutton & Associates related to the release of the Draft Comprehensive Water Resources Plan Report. The messaging platform serves as agreed-upon language that can be used in various outreach materials including the District website, press releases, bill inserts, postcards, advertisements, presentations, and other materials.

The Water Resources Committee discussed the messaging platform at their June 18th, 2020 meeting and recommended the item for Board discussion.

# CMWD's Draft Comprehensive Water Resources Plan Message Platform

PERSISTENT DROUGHTS ARE A MAJOR VULNERABLITY FOR OUR COMMUNITY'S WATER SUPPLY

### THE TIME TO SECURE OUR WATER FUTURE IS NOW

A ROADMAP TO OVERCOMING OUR WATER CHALLENGES: DIVERSIFYING OUR PORTFOLIO

PLANNING FOR OUR WATER FUTURE WITH OUR COMMUNITY

# PERSISTENT DROUGHTS ARE A MAJOR VULNERABLITY FOR OUR COMMUNITY'S WATER SUPPLY

- **[Mission]** As the public agency responsible for keeping taps flowing in Western Ventura County, our mission is to provide our customers with safe and reliable water and recreational opportunities in an environmentally and economically responsible manner.
- **[About]** The Casitas Municipal Water District (District) serves roughly 70,000 people, as well as hundreds of farms and local businesses.
- [Plan Ahead] Our customers rely on the water we provide to maintain the quality of life that we desire in this beautiful but drought-prone region of the state, and it is incumbent upon us, as our community's water experts and policy professionals, to plan responsibly for the future.
- **[One Source]** Lake Casitas is a primary water source for those that live here and was designed to get us through those periods of drought, which are becoming longer, more frequent and more severe with the increasing impacts of climate change.
- [Drought] According to the <u>US Drought Monitor</u>, California's most recent statewide drought was the longest in the state's history and lasted more than seven years from December 2011 to March 2019.
  - <u>A recent study</u> described the state's last drought as the "second driest 19-year period since 800 CE," and went further to suggest that this appears to be just the beginning of a more extreme trend toward regular megadrought cycles as global warming continues.
- **[Local Impacts]** We are seeing the impacts of this evolving "megadrought" right here in our own backyard.
  - On May 13, 2020, the District's Board of Directors declared a continuance of the Stage 3 drought conditions, which have been in place since April of 2016. There are a total 5 drought stages that require a higher level of conservation from stages 1-5 depending on the water levels at Lake Casitas.
  - In January of 2019, the water in Lake Casitas reached the lowest levels ever recorded at 30% of the lake's total capacity.
  - The District forecasts that, without additional measures, Lake Casitas could be unable to perform its designed function in the next six years if faced with continued drought conditions and higher temperatures.

1

- [Wildfires] Wildfires are an unfortunate and increasing reality of life in California.
  - We rely on water in Lake Casitas to help us fight wildfires throughout the region, such as the recent Thomas Fire.
  - Wildfires can have a negative impact on local water quality, as they increase the amount of sediment and debris that flows down the watershed into our water supply facilities.
  - Diversifying our water portfolio will allow for continued access to high-quality water to augment local supplies, even during periods of wildfire.
- **[Need for a Solution]** The recent prolonged drought highlights the importance of efficient water usage, and the need for a long-term solution to our region's consistent drought conditions.
  - Depending on a primary source of water such as Lake Casitas is risky for any community, let alone one that has a history of consistent drought cycles.
  - We must act now to diversify the sources of our water supply or face increasing water shortages during the next five years if drought conditions continue. This can lead to more stringent water use restrictions, which affect everyone in our community and could have longer lasting impacts to the quality of life here.

# THE TIME TO SECURE OUR WATER FUTURE IS NOW

- **[Comprehensive Approach]** Securing our region's water future requires us to evaluate every tool in the toolbox to ensure we can provide water to the community in those times when we need it most.
- **[Water Plan]** Our District has developed a Comprehensive Water Resources Plan (Water Plan) that provides a long-term roadmap to ensure our community has a reliable water supply:
  - Assesses current water supplies against forecasted demand through the year 2040.
  - Makes recommendations for closing the forecast water supply gap through a portfolio of projects that should be implemented now to prepare for anticipated shortfalls.
- **[Supply Gap]** Without action, our community will have a short-term water supply gap in the next five years and a dramatic water supply gap by 2040 due to recurring and worsening drought conditions not population growth.
  - An additional 5,200 acre-feet per year (AFY) is needed by 2040, which is equivalent to 27% of our average annual customer demand.
  - This additional water supply is needed to serve our existing customers it would supplement existing supply when limited during droughts and filling the supply gap does not support significant future growth in population.
- **[Need to Act Now]** Twenty years may sound like a long time, but new infrastructure projects take years to plan and develop.
  - Creating a secure and diversified water supply will not happen overnight. We need to act now if we are to overcome the water supply challenges that we face together, as a community.

### A ROADMAP TO OVERCOMING OUR WATER CHALLENGES: DIVERSIFYING OUR PORTFOLIO

- **[Thorough Project Analysis]** The District launched a comprehensive analysis and evaluated more than 30 different projects and programs including a range of desalination, recycled water, capital improvement, conservation, groundwater and surface water enhancement projects and programs using technical, economic, environmental, and social criteria.
- **[Portfolio Approach]** The most viable portfolio of solutions is presented in the Water Plan as our recommended path forward, which includes a range of structural projects, nonstructural projects, policies and programs.
  - New **policies** are recommended to ensure the District has a robust risk-based approach to meeting future water supply and demand conditions.
  - New **infrastructure projects** will increase our ability to maximize our current water supplies and allow us to connect to additional water supply sources to address our community's immediate and long-term supply risks, including:
    - A combination of local supply projects including well rehabilitation and replacement and fish screen improvements at our Robles diversion facility – will improve the efficiency of our existing supplies in the Ventura River watershed. These projects can be implemented quickly to meet short-term needs, but that will only take us so far.
    - Diversifying our water supply through supplemental supply projects remains the most important objective that we must achieve to ensure longterm water reliability in our community. The most viable way to diversify our community's water supply is by connecting to the State Water Project.
  - The Water Plan recognizes the need for adaptive management the future doesn't always turn out as planned – and includes **conditional options** that can be pursued if the recommended projects produce less water than expected or cannot be implemented. The conditional options serve as a backup plan if needed.
    - For example, additional conservation and demand management programs can go a long way towards stretching the water supply we have currently, but conservation and demand management alone would not provide water to our community during times of water shortage, and supplemental supplies would be needed for prolonged droughts.
    - By connecting to the state's "water grid" that is the State Water Project, we will always have access to additional water as we need it.
- [About the SWP] Our District has always envisioned connecting to the State Water Project, the backbone of the state's water supply network that brings high-quality water from the Sierra Nevada Mountains to communities throughout California.
- [Benefits of SWP] Our District and our customers have been paying for contracts to this water supply for decades, but selling that water to other Southern California water districts since we still do not have the infrastructure needed to bring this water into our community.

- Faced with climate change and increasing water supply challenges, we must add to our primary source, Lake Casitas, and connect directly to the State Water Project – the most viable project that we can pursue.
- By connecting to the State Water Project through a series of pipelines, we will be able to blend and augment our existing supply from Lake Casitas with high quality drinking water – helping fill the forecasted gap.
- **[Cost]** The capital improvement cost for the Water Plan's recommended projects is \$155 million, which would likely be funded over time through non-rate revenue sources such as bonds or grants.
- **[Necessary, Cost-Effective Investment]** The District has carefully weighed the options that provide a more reliable supply of high-quality drinking water in the most cost-effective manner. It's an investment that we can't afford to delay.

## PLANNING FOR OUR WATER FUTURE WITH OUR COMMUNITY

- **[Community's Vested Interest]** Our customers have a vested interest in how we work together to put this plan into action.
- **[Community-Centered Solution]** Planning for our region's water future is our responsibility, but it is also a conversation with our community.
- **[Transparent Process]** To assist in the development of Casitas' Comprehensive Water Resources Plan, public input was received through two stakeholder workshops and 13 public meetings. Our customers also had the ability to submit written comments.
- [Seeking Public Input] As we work to finalize this plan, we want to hear from you.
  - For more information about the Water Plan or to provide a comment about the plan itself, please visit <u>www.casitaswater.org/your-water/casitas-water-security</u>, email us at <u>info@casitaswater.com</u>, or just give us a call at 805-649-2251.
  - You can also mail your comments or questions to our District headquarters, located at: 1055 Ventura Ave. Oak View, CA 93022.

###



June 24, 2020

The Honorable Hannah-Beth Jackson California State Senate State Capitol, Room 2032 Sacramento, CA 95814

The Honorable Monique Limón California State Assembly Member P.O. Box 942849 Sacramento, CA 94249-0037

# Subject: Support for AB 2182 (Rubio) Emergency Backup Generators: Water and Wastewater Facilities: Exemption

Dear Senator Jackson and Assemblymember Limón,

The Casitas Municipal Water District writes in support of AB 2182, which is sponsored by the Association of California Water Agencies. The bill would allow for critical water service providers to use and maintain emergency power generators for Public Safety Power Shutoff (PSPS) events. Without flexibility in use of power generators for public water supply service during PSPS events, we risk reliable water service to our community.

AB 2182 would support essential water service by (1) confirming backup power generation during PSPS events is considered an emergency use of generators; (2) ensuring generator use for PSPS events is not limited by time constraints; and, (3) providing more rigorous testing and maintenance requirements for backup generators due to the strenuous nature of their use during PSPS events. For these reasons Casitas supports AB 2182. Thank you for your leadership on this issue. If Casitas can provide any assistance to you or your staff in any way, hesitate to contact Michael Flood. General please do not Manager. at mflood@casitaswater.com or (805)649-2251 ext. 111.

Sincerely,

Russ Baggerly Board President Casitas Municipal Water District



June 24, 2020

The Honorable Dianne Feinstein United States Senate 331 Hart Senate Office Building Washington, D.C. 20510 The Honorable Kamala Harris United States Senate 112 Hart Senate Office Building Washington, D.C. 20510

The Honorable Julia Brownley Congresswoman 2262 Rayburn House Office Building Washington, D.C. 20515

### Subject: Support for H.R. 7073, Special Districts Provide Essential Services Act

Dear Senator Feinstein, Senator Harris, and Congresswoman Brownley,

The Casitas Municipal Water District writes in support of H.R. 7073, Special Districts Provide Essential Services Act, which is sponsored by the California Special Districts Association. The bill would allow access to much-needed federal relief resources to help our District with unbudgeted expenses and revenue loss resulting from COVID-19.

Casitas Municipal Water District maintains and operates Lake Casitas, which provides essential water service to over 60,000 people and hundreds of farms in Western Ventura County. Our District also operates the Lake Casitas Recreation Area, a destination typically visited by over 750,000 visitors annually. During COVID-19, our dedicated staff has continued to provide essential water service, but the recreation area has been closed temporarily in order to protect public health and safety.

Our District is experiencing significant revenue losses from the closure of recreation services as well as customer non-payment for water service, coupled with increased expenses for COVID-19 response efforts. H.R. 7073 would provide much-needed financial support by allowing special districts access to the Coronavirus Relief Fund. As Congress continues to negotiate next steps for COVID-19 relief for state and local governments, Casitas asks for your support.

Thank you for your leadership on this issue. If Casitas can provide any assistance to you or your staff in any way, please do not hesitate to contact Michael Flood, General Manager, at mflood@casitaswater.com or (805) 649-2251 ext. 111.

Sincerely,

Russ Baggerly Board President Casitas Municipal Water District

1055 Ventura Ave • Oak View, CA 93022 • (805) 649-2251 • Fax (805) 649-3001 • www.casitaswater.org

## CASITAS MUNICIPAL WATER DISTRICT MEMORANDUM

TO: BOARD OF DIRECTORS

**FROM:** MICHAEL FLOOD, GENERAL MANAGER

SUBJECT: MONTHLY ENGINEERING STATUS REPORT

**DATE:** 06/24/2020

### **RECOMMENDATION:**

The Board receive and file the Monthly Engineering Project Status Report for June 2020.

### **DISCUSSION:**

The status of Water Security and Infrastructure Improvements projects for June 2020 is provided below and in the attachment.

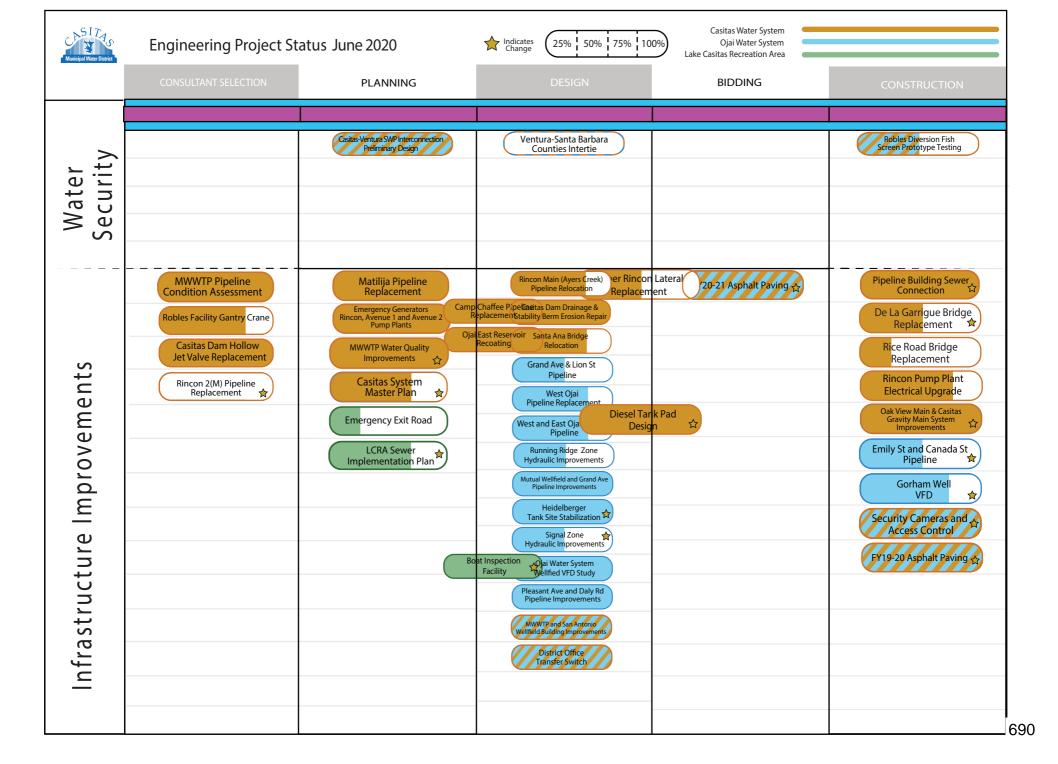
Project	Anticipated Committee / Date	Anticipated Board Date / Action				
WATER SECURITY PROJECTS						
Comprehensive Water Resources Plan		06/24/2020				
Draft CWRP and future public workshops to be discussed at Board meeting						
Casitas-Ventura State Water Project Interconnection						
<ul> <li>Draft geotechnical, environmental, and surge analysis studies received and in review.</li> <li>Preliminary Design expected to be complete by July 2020</li> </ul>						
Ojai Wellfield Rehabilitation/ Replacement	TBD	06/24/2020 Award Contract				
<ul> <li>Emergency repairs needed for Mutual Well #6</li> <li>Mutual Well #7 drilling underway</li> <li>Mutual Well #7 well equipping and site work design underway</li> </ul>						
Ventura-Santa Barbara Counties Intertie						
<ul> <li>Project submitted to the State Water Resources Control Board for consideration of Additional Supplemental Appropriations for Disaster Relief Act (ASADRA) funding and is on the Draft Intended Use Plan (IUP).</li> <li>Discussions with Santa Barbara County agencies regarding agreements to start</li> </ul>						
Robles Diversion Fish Screen Prototype Testing	bles Diversion Fish Screen TBD TBD					
<ul> <li>40 horizontal wedge-wire screens expected to arrive by 6/30/2020</li> <li>Double brush-arm assembly received and scheduled for installation second week in July</li> </ul>						
Robles Forebay Restoration	TBD	TBD				
Funding for FY 20-21 deleted						

Gave presentation to AWA on 6/16/2020 on 2019 project

	Anticipated	Anticipated Board Date /					
Project	Committee / Date	Action					
INFRASTRUCTURE IMPROVEMENTS							
Ojai Water System Improvements	TBD	07/08/2020 Professional Services Amendment					
Grand Avenue and Lion Street Pipeline Replacement design 60% complete							
<ul> <li>Grand Avende and Lion Street Pipeline Replacement design 60% complete</li> <li>West Ojai Pipeline 95% design submitted; on hold</li> <li>West and East Ojai Avenue Pipeline 80% comments provided to consultant; additional services identified related to Caltrans permit submittal include preparation of Traffic Control Plan, Traffic Management Plan, Stormwater Pollution Prevention plan (SWPPP), and NPDES Construction Permit for Groundwater Discharge</li> <li>Running Ridge Zone Improvements 60% design submitted and review comments provided</li> <li>Mutual Wellfield Piping Improvements design complete and on hold</li> <li>Heidelberger Tank Site Slope Stabilization design nearing completion</li> <li>Design for Signal Tank and Pump Station underway; expect 60% in July</li> <li>Pleasant and Daly Pipeline design complete; postponing construction due to lower</li> </ul>							
<ul><li>priority</li><li>Emily and Canada Street Pipeli</li></ul>	ne construction underway:	expect completion and of July					
Rincon Pump Plant Electrical	TBD	TBD					
Upgrade							
<ul> <li>Switchgear on site, installation pending SCE approval of switchgear</li> <li>SCE to inspect changes made by contractor for compliance with SCE standards</li> </ul>							
• SCE to inspect changes made De La Garrigue and Rice Road	TBD	TBD					
Bridges	160	IBD					
<ul> <li>DLG Bridge: temporary road in place, old bridge demolished, working on abutments</li> <li>Rice Bridge to start 6/22/2020; expected completion 8/31/2020</li> </ul>							
Asphalt Paving	TBD	07/08/2020 Award Contract					
<ul> <li>Contractor continuing work on p</li> </ul>	•	or FY 19-20					
Three bids received for FY 20-2							
Rincon Main (Ayers Creek	TBD	TBD					
Crossing) Pipeline Replacement							
Geotechnical work complete							
90% design received and under review     PCCP Pipe Inspection/ Oak View     TBD     TBD     TBD							
Main and Casitas Gravity Main	IBD	IBD					
System Improvements							
<ul> <li>Wet inspection performed with USBR June 2-5, 2020; draft results expected July 2020, final report in December</li> <li>Installation of line stop valve on Oak View Main at STA 226 underway</li> </ul>							

Project	Anticipated Committee / Date	Anticipated Board Date / Action					
Heidelberger Pump Plant and Tank Retaining Walls	TBD	TBD					
Retaining wall design at tank nearing completion							
Casitas Dam Drainage and	TBD	TBD					
Stability Berm Erosion Repair							
Design to be complete by June 2020							
<ul> <li>Project to be shelved until funding available</li> </ul>							
Casitas System Master Plan	TBD	TBD					
<ul> <li>Progress meeting held 6/16/202</li> </ul>	•						
<ul> <li>Progress meeting scheduled for 6/29/2020 to review status</li> </ul>							
Casitas Dam Hollow Jet Valve	TBD	TBD					
Replacement							
<ul> <li>Deposit check sent to USBR; work to commence in near future</li> </ul>							

Attachment: Monthly Status Report



# CASITAS MUNICIPAL WATER DISTRICT MEMORANDUM

- TO: BOARD OF DIRECTORS
- FROM: MICHAEL FLOOD, GENERAL MANAGER
- SUBJECT: HYDROLOGIC STATUS REPORT FOR MAY 2020
- **DATE:** JUNE 24, 2020

### **RECOMMENDATION:**

This item is presented for information only and no action is required. Data are provisional and subject to revision.

### **DISCUSSION:**

Rainfall Data									
	Casitas Dam	Matilija Dam	Thacher School						
This Month	0.08"	0.13"	0.27"						
Water Year (WY: Oct 01 - Sep 30	) 18.62"	20.60"	19.10"						
Average station rainfall to date	22.72"	27.52"	20.86"						
	Ojai Water System Data								
Wellfield production		13	31.26 AF						
Surface water supplement		1	9.07 AF						
Static depth to water surface - Mu	tual #6	97.70 feet							
Change in static level from previou	is month	-27.90 feet							
Robles Fish P	assage and Diversior	Facility Diversion	on Data						
Diversions this month 202 AF									
Diversion days this month		16							
Total Diversions WY to date		6,021 AF							
Diversion days this WY		76							
Casitas Reservoir Data									
Water surface elevation as of end	of month	505 40 fc							
Water storage last month	505.40 feet AMSL 107,237 AF								
Water storage as of end of month		67 AF							
Net change in storage	-	70 AF							
Change in storage from same mor	nth last year	- 1,466 AF							
AF = Acre-feet AMSL	= Above mean sea leve	el WY = V	Vater year						

### CASITAS MUNICIPAL WATER DISTRICT LAKE CASITAS RECREATION AREA

DATE: June 2, 2020

TO: **Recreation Committee** 

FROM: Carol Belser, Park Services Manager

Recreation Area Monthly Report for April 2020 SUBJECT:

### Visitation Numbers

### The following is a comparison of visitations* for April 2020

	April	April	March				
	2020	2019	2020	Visitor Day Totals for Fisca			
Visitor Days	0	78,820	22,924	Year through April 2020			
Camps	0	5,727	1,853	2018/2019	512,18		
Cars	0	19,705	5,731	2019/2020	405,62		
Boats	0	302	169	%Change	-20,80		
Kayaks & Canoes	0	5	1				

*The formulas for calculating the above attendance figures derived from the daily cash reports are as follows:

Visitor Days = Daily vehicles + 30 minute passes X 3 + café passes + attendance at special events + annual vehicle decals + replacement decals + campsites occupied +extra vehicles X 4

Camps = Campsites occupied + extra vehicles

Cars = Daily vehicles + 30 minute passes X 3 + café passes + attendance at special events + annual vehicle decals + replacement decals + campsites occupied + extra vehicles

Boats = Daily boats + overnight boats + annual decals + replacement decals

Kayaks & Canoes = Daily kayaks and canoes + overnight kayaks and canoes + annual kayaks and canoes

### **Operations**, Boating, Incidents

The United States of America and the State of California are under emergency declarations as well as the Lake Casitas Municipal Water District due to a pandemic, COVID-19. The Lake Casitas Recreation Area responded to protocol (shelter in place, social distancing) by cancelling all upcoming events through March and April, and camping, as of March 22, 2020 with the exception of the Snowbird program which ended April 5. On March 23, no vehicles and vessels were allowed to enter the Recreation area, and on March 31, the Recreation Area closed to walk-in/bike-in day use. The complete closure continued



throughout the month of April, 2020.

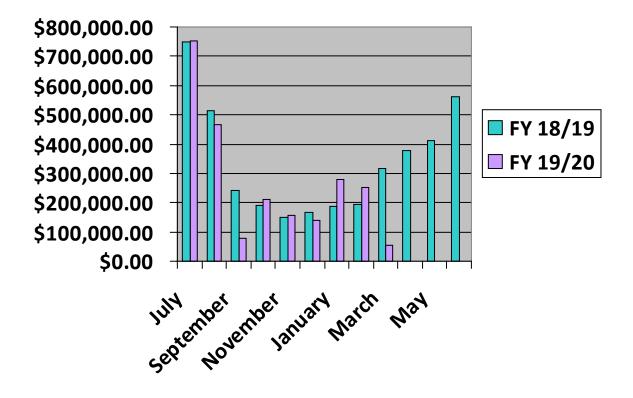
There were 20 patrol observations where park staff made public contact. Park Rangers responded to 3 calls for service and 10 customer service issues. There were no medical responses. There was 1 disturbance requiring support from the Ventura County Sheriff's Office. There were no unattended fires, no traffic violations, no parking violations, restricted area violations, no boating 16 violations, no fishing violations, and 1 leash law violation. There were no body contacts

512,183 405.620 -20,806

with water.

### Revenue Reporting

The 2019/2020 unaudited monthly revenue figures are shown below. Current fiscal year's total figures are reported when made available for the respective months (operations, concessions, Casitas Water Adventure, etc.) per the District's Financial Summary, generated by the Chief Financial Officer. The District is pursing FEMA reimbursement for loss of revenue due to COVID-19.



### CASITAS MUNICIPAL WATER DISTRICT

### MINUTES **Recreation Committee** (this meeting was held telephonically)

June 18, 2020 DATE:

TO: **Board of Directors** 

FROM: General Manager, Michael Flood

Recreation Committee Meeting of June 2, 2020, at 1000 hours. Re:

### **RECOMMENDATION:**

It is recommended that the Board of Directors receive and file this report.

### BACKGROUND AND OVERVIEW:

#### 1. Roll Call.

Director Brian Brennan **Director Pete Kaiser** General Manager, Michael Flood Executive Administrator, Rebekah Vieira Park Services Manager, Carol Belser **Division Officer**, Joe Evans

#### 2. Public Comments. None

#### 3. Board/Management comments.

GM Flood provided and update on the Rincon water system leak.

PSM Belser provided an update on operations at the LCRA including day use, camping, and fishing.

Director Brennan made comments regarding the closure of State and Ventura County beaches parks and camping.

Director Kaiser made comments regarding ongoing issues related to the COVID-19 Outbreak and the careful reintroduction of camping at the LCRA.

### 4. Review proposed updates to Ordinance 18-01 and 81-2 to reflect Open Space Management and Park Ranger Jurisdiction.

PSM Belser made comments regarding the updates to these ordinances.

Director Brennan asked questions regarding coverage at the Robles Fish Passage and Diversion facility.

Director Kaiser made comments regarding coverage at Robles and the Diversion canal, the need for definitions, employee classification, aircraft use, and animals.

The Committee asked for this to be brought back at a future Recreation Committee meeting.

### 5. Review of the April 2020 Recreation Report

PSM Belser reviewed the report with the Committee and mentioned the excellent collaboration going on with the District's Safety Officer, Greg Romey.

Director Brennan asked about the status of the Marina Cafe and the Park Store.

Director Kaiser made comments about FEMA reimbursements, LCRA revenues and FEMA reimbursement in the FY 2021 Budget.

### 6. **Review of Incidents and Comments.**

DO Evans presented the LCRA incident statistics including trailer storage visits, medical situations, and trespass.

Director Kaiser asked for an update on the Santa Ana Road closure/gate project.

GM Flood indicated that there would likely be an update on that project in one month.

### CASITAS MUNICIPAL WATER DISTRICT

### <u>MINUTES</u> <u>Special Water Resources Committee</u> (this meeting was conducted telephonically)

DATE:June 18, 2020TO:Board of DirectorsFROM:General Manager, Michael FloodRe:Special Water Resources Committee Meeting of June 5, 2020, at 1000 hours.

### **RECOMMENDATION:**

It is recommended that the Board of Directors receive and file this report.

### BACKGROUND AND OVERVIEW:

### 1. Roll Call.

Director Russ Baggerly Director Angelo Spandrio General Manager, Michael Flood Assistant General Manager, Kelley Dyer

2. <u>Public Comments</u>.

None

3. Board comments. None

### Manager's Comments. GM Flood informed the Committee of the major leak on the Rincon 2M water system.

### 5. Review of the Draft Comprehensive Water Resources Plan.

Director Baggerly made comments about the Stantec disclaimers found in various parts of the document and reviewed his comments and edits to the document.

Director Spandrio reviewed his comments and edit requests for the current version of the draft plan, asked about active storage, and made comments about the Stantec disclaimers.

Stantec representatives indicated that the disclaimers would be removed for the final draft.

A member of the public made comments about Article 21 water.

Another member of the public made comments about revenue bonds.

AGM Dyer indicated that the draft plan would be released to the public once the Committee's edits and comments were incorporated.

### CASITAS MUNICIPAL WATER DISTRICT

### <u>MINUTES</u> <u>Executive Committee</u> (this meeting was held telephonically)

DATE:June 18, 2020TO:Board of DirectorsFROM:General Manager, Michael FloodRe:Executive Committee Meeting of June 12, 2020, at 1000 hours.

### **RECOMMENDATION:**

It is recommended that the Board of Directors receive and file this report.

### BACKGROUND AND OVERVIEW:

- 1. <u>Roll Call</u>. Director Brian Brennan Director Russ Baggerly General Manager, Michael Flood Assistant General Manager, Kelley Dyer
- 2. <u>Public Comments</u>. None
- 3. Board Comments. None
- General Manager Comments. GM Flood provided an update on the reopening of camping at the LCRA.

Director Brennan indicated that campers need to be forewarned about the closure of shower houses during the COVID-19 Outbreak.

### 5. <u>Letter of Support for AB 2182 (Rubio) Emergency Backup Generators: Water and</u> <u>Wastewater Facilities: Exemption.</u>

AGM Dyer provided an overview of the support letter.

Director Baggerly indicated that these letters need to go to the Board for approval if signed by the Board President.

Director Brennan made comments regarding the Ventura County Air Pollution Control District and the District's process for approving support letters.

6. <u>Letter of Support for H.R. 7073, Special Districts Provide Essential Services Act.</u> AGM Dyer provided an overview of the support letter.

The Directors indicated that this is an important issue for the District.

### CASITAS MUNICIPAL WATER DISTRICT TREASURER'S MONTHLY REPORT OF INVESTMENTS 06/16/20

Type of Invest	Institution	CUSIP	Date of Maturity	Original Cost	Current Mkt Value	Rate of Interest	Date of Deposit	% of Portfolio	Days to Maturity
*TB	Federal Home Loan Bank	3130A0EN6	12/10/2021	\$547,735	\$519,420	2.875%	5/9/2016	3.56%	534
*TB	Federal Home Loan Bank	3130AIXJ2	6/14/2024	\$941,144	\$922,233	2.875%	8/2/2016	6.33%	1438
*TB	Federal Home Loan Bank	3130A3DL5	9/8/2023	\$1,587,180	\$1,600,395	2.375%	10/13/2016	10.98%	1162
*TB	Federal Home Loan Bank	3130A5R35	6/13/2025	\$773,773	\$798,090	2.875%	2/19/2016	5.47%	1797
*TB	Federal Home Loan Bank	3130A5VW6	7/10/2025	\$1,025,110	\$1,100,010	2.700%	5/10/2017	7.54%	1824
*TB	Federal National Assn	31315P2J7	5/1/2024	\$809,970	\$803,706	3.300%	5/25/2016	5.51%	1395
*TB	Farmer MAC	31315PYF0	5/2/2028	\$512,355	\$574,605	2.925%	11/20/2017	3.94%	2836
*TB	Federal Farm CR Bank	31331VWN2	4/13/2026	\$940,311	\$912,097	5.400%	5/9/2016	6.26%	2097
*TB	Federal Home Loan Bank	313383YJ4	9/8/2023	\$476,582	\$456,156	3.375%	7/14/2016	3.13%	1162
*TB	Farmer MAC	3133EEPH7	2/12/2029	\$480,251	\$546,019	2.710%		3.74%	3116
*TB	Federal Home Loan Bank	3133XFKF2	6/11/2021	\$743,109	\$589,742	5.625%	9/8/2014	4.04%	355
*TB	Federal National Assn	3135G0K36	4/24/2026	\$2,532,940	\$2,717,225	2.125%	7/6/2010	18.64%	2108
*TB	Federal National Assn	3135G0ZR7	9/6/2024	\$1,488,050	\$1,523,982	2.625%	5/25/2016	10.45%	1520
*TB	Federal Home Loan MTG Corp	3137EADB2	1/13/2022	\$683,584	\$686,310	2.375%	5/1/2016	4.71%	567
*TB	US Treasury Note	912828WE6	11/15/2023	\$770,037	\$830,056	2.750%	12/13/2013	5.69%	1229
	Total in Gov't Sec. (11-00-1055-00 Total Certificates of Deposit: (11			\$14,312,132 \$0	\$14,580,045 \$0			99.98% 0.00%	
**	LAIF as of: (11-00-1050-00)		N/A	\$473	\$473	2.03%	Estimated	0.00%	
***	COVI as of: (11-00-1060-00)		N/A	\$2,986	\$2,986	2.13%	Estimated	0.02%	
	TOTAL FUNDS INVESTED		-	\$14,315,591	\$14,583,504			100.00%	
	Total Funds Invested last report			\$14,315,591	\$14,581,606				
	Total Funds Invested 1 Yr. Ago			\$21,147,729	\$20,616,677				
****	CASH IN BANK (11-00-1000-00) E CASH IN Custody Money Market	EST.		\$3,854,206 \$45,370	\$3,854,206 \$45,370	0.30%			
	TOTAL CASH & INVESTMENTS		-	\$18,215,167	\$18,483,080				
	TOTAL CASH & INVESTMENTS 1 YR AG	60		\$24,973,229	\$24,442,176				
*00	CD Cortificate of Doppoit								

*CD CD - Certificate of Deposit *TB TB - Federal Treasury Bonds or Bills

** Local Agency Investment Fund

*** County of Ventura Investment Fund

Estimated interest rate, actual not due at present time.

**** Cash in bank

> No investments were made pursuant to subdivision (i) of Section 53601, Section 53601.1 and subdivision (i) Section 53635 of the Government Code. All investments were made in accordance with the Treasurer's annual statement of investment policy.