

Casitas Municipal Water District  
WATER RESOURCES COMMITTEE  
Baggerly/Spandrio

**September 15, 2020 – 10:00 A.M.**

This meeting will be held via teleconference  
To attend the meeting please call  
(888) 788-0099 or (877) 853-5247  
Enter Meeting ID 634 789 006#

Agenda

1. Roll Call
2. Public Comments
3. Board Comments.
4. Manager Comments.
5. Review of proposal by Kear Groundwater for field services on the Matilija Deep Wells Project.
6. Update on draft Casitas MWD Comprehensive Water Resources Plan and review public comments.
7. Review and discussion of draft Casitas MWD Comprehensive Water Resources Plan Fall/Winter review schedule.
8. Discussion of Casitas MWD's Water Efficiency Allocation Program (WEAP).
9. Discussion of future scope for Stantec Inc. in relation to the Casitas MWD's Comprehensive Water Resources Plan.

Right to be heard: 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.

If you require special accommodations for attendance at or participation in this meeting, please notify our office in advance (805) 649-2251, ext. 113. (Govt. Code Sections 65954.1 and 54954.2(a). Please be advised that members of the Board of Directors of Casitas who are not members of this standing committee may attend the committee meeting referred to above only in the capacity of observers, and may not otherwise take part in the meeting. (Govt. Code Section 54952.2(c)(6)



September 14, 2020

KG16-0335

Michael Flood  
Casitas Municipal Water District  
1055 Ventura Avenue  
Oak View, California 93022

***Re: Proposed Professional Hydrogeologic Services  
Continued tracking of stream flow in creeks  
North side of eastern Santa Ynez Mountains***

Greetings Mr. Flood:

Per your request and our discussions with the Water Resources Committee on August 18, 2020, as well as our experience in working with Casitas and WREA on the new water source studies since 2016, Kear Groundwater (KG) has prepared this brief proposal to continue quarterly monitoring and annual reporting of creek flows in the key canyon(s) on the north side of the eastern Santa Ynez Mountains.

KG has made occasional (quarterly) reconnaissance visits to various canyons tributary to Matilija Creek and the Ventura River in support of the Horizontal Bore (HoBo) project from 2016 to 2019. This data set is a critical component of tracking and recording natural conditions prior to any vertical or horizontal exploration into or production from the Matilija Formation.

While an FS299 permit to automate monitoring via dataloggers is pending review by the USFS, no permit is required to hike to and map the points of daylighting water in the creeks, estimate flows at key points, and collect samples for water quality analysis. Our efforts will create a database previously unrecorded, with reporting to the board on an annual basis.

Three tasks are proposed:

**Task 1: Fieldwork:** Quarterly field visits to key canyons to map top of flow elevations where groundwater from the Matilija Formation exfiltrates to creek water surface flow. Track GPS locations traversed, photo and video record key components, estimate flow at the contact of the Matilija and Cretaceous shale, and points of presence or absence of creek flow.

Cost estimate for two KG staff for one full field day is \$2500 per quarter; \$10,000 per year.

#### KEAR GROUNDWATER



Task 2: Water quality sample analysis: At each quarterly visit, we would collect two samples of creek water: one at the first point of daylighting water at highest elevation and a second at the basal Matilija contact in Deserpa Canyon.  
Cost estimate \$200/quarter or \$800/year for a general mineral analysis.

Task 3: Graphing and data analysis/reporting/presentation to water resources committee and Casitas Board once per year. We would expand on our existing data sets and provide a flow and elevation hydrograph, as well as map presentation and narrative describing the efforts of the year and findings to date  
Cost estimate \$3000/year.

Total proposed annual fee for all tasks as proposed is \$13,800.

We are pleased to present this proposal, and believe that KG can provide an unparalleled professional hydrogeologic service to CMWD with respect to expertise, time and cost due to our recent experience in the area.

Our unique data sets that we have collected as part of previous efforts will apply well to our proposed efforts for CMWD. More importantly, our insight into the local groundwater conditions will couple well with the CMWD directive to track HoBo and VerBo opportunities, and provide a defensible scientific data set that will help guide future efforts.

We look forward to working with you on this endeavor upon receiving written authorization to proceed.

Best Regards,

A handwritten signature in black ink, appearing to read 'Jordan Kear'.

Jordan Kear  
California Certified Hydrogeologist No. 749  
(805) 512-1516

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**CASITAS MUNICIPAL WATER DISTRICT  
MEMORANDUM**

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**TO:** WATER RESOURCES COMMITTEE

**FROM:** MICHAEL FLOOD, GENERAL MANAGER

**SUBJECT:** UPDATE ON DRAFT COMPREHENSIVE WATER RESOURCES PLAN AND  
REVIEW PUBLIC COMMENTS

**DATE:** 09/15/20

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**RECOMMENDATION:**

It is recommended the Water Resources Committee receive an update on the Comprehensive Water Resources Plan and review public comments submitted.

**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). An overview of the draft plan was presented at a Board Workshop held on February 8, 2020, and the draft report was released for public review from June 26, 2020 through August 24, 2020. The draft CWRP incorporates discussions from 14 public meetings held with the Water Resources Committee prior to its release.

Due to COVID-19 social distancing requirements, public workshops related to the CWRP were not scheduled as originally planned. In order to encourage public participation, postcards were mailed to all properties within District boundaries with information about the opportunity to comment.

Several public comments were received, which are included in Attachment 1. Based on review of comments, staff is recommending a revised draft plan be prepared.

In response to comments, staff are currently working on developing a phased implementation strategy for imported water options, along with costs of each phase. In addition, staff have been meeting regularly with Calleguas Municipal Water District staff to better understand issues and options related to our agency's respective water systems.

**Casitas Municipal Water District  
June 2020 Draft Comprehensive Water Resources Plan  
Public Comment Log**

<b>Name</b>	<b>Organization</b>	<b>Date of Comment</b>	<b>Subject</b>
Anthony Goff	Calleguas Municipal Water District	7/10/20	Regional collaboration; State Water Project options
Therese Cornelius		7/19/20	Additional water supplies; Hard water; Adjudication/litigation
Leila Stephens		7/20/20	Agriculture; conservation
Ed Leicht		8/10/20	Adjudication/litigation
Larry Yee		8/10/20	Evaporation; groundwater; diversion efficiency; demand projections/gap analysis; adjudication/litigation impact; State Water Project options
Eugene Rooke		8/14/20	Time estimates to minimum pool; minimum pool amount; diversion efficiency; lake demands; ranking criteria; adjudication/litigation; State Water Project options
Burt Handy		8/17/20	State Water Project options; United Water ASAPP pipeline from Lake Piru
Adam Kear		8/18/20	Storage of treated State Water Deliveries in Lake Casitas; Available capacity for wheeling; Regional collaboration
Richard Hajas		8/18/20	Safe yield; Detailed analysis of short-term options; Ojai service area demands and groundwater supply
Ed Lee	Ventura River Water District	8/21/20	Local Options; State Water Project options; financing options and water rates; demand projections
Burt Handy		8/23/20	Evaporation
Mauricio Guardado	United Water Conservation District	8/24/20	State Water Project options; regional collaboration
Susan Rungren	Ventura Water	8/24/20	State Water Project options
Paul Jenkin	Surfrider Foundation	8/24/20	Demand projections; water rates; watershed management programs; State Water Project options

THOMAS L. SLOSSON, PRESIDENT  
DIVISION 1

ANDY WATERS, SECRETARY  
DIVISION 3

STEVE BLOIS, DIRECTOR  
DIVISION 5



ANDRES SANTAMARIA, VICE PRESIDENT  
DIVISION 4

SCOTT H. QUADY, TREASURER  
DIVISION 2

ANTHONY GOFF  
GENERAL MANAGER

web site: [www.calleguas.com](http://www.calleguas.com)

2100 OLSEN ROAD • THOUSAND OAKS, CALIFORNIA 91360-6800 805/526-9323 • FAX: 805/522-5730

July 10, 2020

Michael Flood  
General Manager, Casitas Municipal Water District  
1055 Ventura Avenue  
Oak View, CA 93022

**SUBJECT: Regional Collaboration – Draft Casitas MWD Comprehensive Water Resources Plan (CWRP)**

Dear Mr. Flood,

Thank you for the opportunity to review your recently completed draft 2020 Comprehensive Water Resources Plan (CWRP).

The CWRP presents a strategy for addressing long-term water supply challenges in order to meet the needs of Casitas. The draft plan recommends a portfolio of projects for Casitas to consider, including supplemental water options that would involve the participation of Calleguas. Specifically, these include the ability to access State Water Project (SWP) water – and potentially other supplemental sources – into the Casitas water system. We believe further exploration of these options may yield additional benefits for both Casitas and Calleguas.

Calleguas welcomes the opportunity to continue to work together toward a more resilient future. We support exploration of these potential projects and how we might cooperatively manage our diverse water supplies.

Please do not hesitate to contact me at (805) 579-7138 or [tgoff@calleguas.com](mailto:tgoff@calleguas.com).

Sincerely,

A handwritten signature in blue ink that reads "A. Goff".

Anthony Goff  
General Manager  
Calleguas Municipal Water District

From: [REDACTED]  
Date: Sun, Jul 19, 2020 at 6:08 AM  
Subject: Water Plan  
To: [info@casitaswater.com](mailto:info@casitaswater.com) <[info@casitaswater.com](mailto:info@casitaswater.com)>

To whom it may concern,

I was happy to hear things are being talked about regarding additional resources for our water supply here in Ojai Valley.

Having lived here only 2 years, I learned early on the challenges with the water supply. Having a broken sprinkler (while on a weekly vacation) that cost us \$1,400 in our second summer bill, and knowing the drought and seemingly challenges with run off into the lake during the winter, I have been concerned.

Before we moved here, we learned through videos that water run off is inadequately directed to the areas needed most. It seems there are squabbles with why blockages occurred into the lake during a very rainy season, and we know living next to the Ventura River bed, water goes out straight to the sea.

We don't have a well obviously, and it doesn't seem like we can ever get one with the moratorium.

In addition, the damage the hard water deposits cause on my appliances, showers, plumbing, shower doors, etc...it's mind boggling. I personally do not feel comfortable using the water without some sort of filter. I have a Berkey Water container to filter all our drinking water as our new house does not have a water filter/softening system. Being an kidney organ donor to my daughter who now lives with us, we drink alot.

People in the neighborhood don't seem to be happy with any system they have used over the years because it's just not enough. Hard water is terrible for the skin and hair.

Also, what will happen with this lawsuit the Ventura council wants to put on our community? Covid put that on hold, but what will that do for us who are in the lawsuit? More attorney costs to defend our rights to a simple water supply. I still don't understand all that's involved with it, but I anticipate it will show its ugly face once things die down with this pandemic.

Depending on the Lake alone is simply not enough. I don't know what can be done, but we should not be relying on Lake Casitas for our only water supply. I certainly hope the future is bright as we all need fresh water, and enough of it! And we plan on staying here until the good lord calls us home.

Thank you for listening,

Therese Cornelius

[REDACTED]  
Ojai, Ca 93023  
[REDACTED]

From: **Leila Stephens** [REDACTED]  
Date: Mon, Jul 20, 2020 at 11:01 AM  
Subject: Ideas for water conservation  
To: [info@casitaswater.com](mailto:info@casitaswater.com) <[info@casitaswater.com](mailto:info@casitaswater.com)>

To whom it may concern,  
The biggest users of water are raising animals and agriculture.  
Almond trees take an incredible amount of water.  
Lawns should be replaced with drought resistant plants or food gardens.  
Showers should have low flow and pause valves.  
Grey water from washing machines etc should be used to water the plants.  
Rebates for low water usage for new dishwashers and EH WASHING MACHINES.  
LOW FLOW TOILETS ONLY.  
laundromat s should transition to HE MACHINES.  
CLOTHESLINES should be installed , umbrella type in communities or common areas.  
Incentives for customers to save water.

And many more...

When the shortage began  
I changed out toilets for low flow  
Dishwasher for energy efficient  
Washing machine EH  
Removed lawn, put in bark  
Hanged shower heads, put pause valves on.  
Timed my showers  
Switched to non animal diet  
Because my HOA payed my water bill I got \$0 back.

Leila Stephens

[REDACTED]

Vat, 93003



From: Ed Leicht [REDACTED]  
Date: Mon, Aug 10, 2020 at 1:31 PM  
Subject: CWRP  
To: <[info@casitaswater.com](mailto:info@casitaswater.com)>

Hello there, I hope you are having a pleasant day!

Regarding the June 2020 DRAFT CASITAS MUNICIPAL WATER DISTRICT COMPREHENSIVE WATER RESOURCES PLAN (CWRP):

Is there any interaction between this Plan and the Adjudication? I do not see, at first glance, a written explanation as to how an Adjudicated Settlement (or, if it goes that far, Adjudicated Ruling) would affect the CWRP.

I am sure you already have fielded this question from other water users.

Thank you for your reply,

Ed Leicht

Oak View

## CMWD Comprehensive Water Resources Plan – Comments

I appreciate the opportunity to comment on the June 2020 draft of the Comprehensive Water Resources Plan completed by Stantec Consulting for the Casitas Municipal Water District.

I'm pleased that this report was done as it was long overdue, and if the modeling and projections are accurate, there is no time to lose to address critical water issues as discussed in the CWRP. However, I have serious concerns about the CWRP and it being used as a basis for decisions without more work and clarifications.

During the most recent period of drought, it became obvious that the path CMWD was on was unsustainable and that the future of the lake, which was designed for storage, was in serious jeopardy. Many citizens have become rightfully concerned and have demanded changes.

The CWRP is a step in the right direction, but aside from the re-calculation of the lake's safe yield figure, the plan is disappointing, especially in light of what was spent for the study.

### Safe Yield

I agree with the newly re-calculated safe yield figure of 10,600 acre-feet. It is much more realistic considering the lake's current status and the longer-term projections. Comments/questions:

- It's confusing when both the Casitas and Ojai Systems are discussed, how the two relate and how they are integrated. As far as I know, there does not exist a conjunctive use agreement between CMWD and OBGMA. Was OBGMA consulted when the plan was being developed? Do your projections for the water stored in and used from the Ojai basin align with their numbers and projections? OBGMA has yet to do their Sustainability Plan as required by SGMA.
- When the lake level is as low as it is, evaporation becomes a significant factor. It's difficult to see where this was factored in. Did I miss something?
- The structure that diverts water from the Ventura River to the lake has always been a problem. Is it your assumption that the diversion will work optimally into the future?
- For planning purposes, how does the water supply gap of 5200 af/year work going forward? Are you assuming a gap of 5200-acre feet starting now and then staying the same for each year or does it start at a lower figure and gradually increase to 5200 af by 2040?

- I believe more work needs to be done on demand projections. What are your assumptions about growth for both the Ojai Valley and Ventura? How does Covid factor in?
- How does this new safe yield figure relate to and affect in-stream flows for the Ventura River? How will Ventura react and how does the adjudication lawsuit possibly impact this safe yield figure?

## Supply Options

I agree that the best way to increase our supply in future years is to connect with State Water. This was discussed and strongly proposed in the “Three Sisters Plan” (3SP) that was published in February of 2017 by the Ojai Valley Water Advisory Group. Was the 3SP considered in this CWRP? I did not see it referenced.

What happened to State Water Project option #2, SWP 02, the direct connect using a 36” pipe from Calleguas to Casitas, which would allow Casitas access to SWP water and Calleguas use of the lake for emergency storage?

The 3SP put forward the proposition that Calleguas could substantially underwrite the costs associated with a project like SWP-02. Was this considered?

The biggest “elephant in the room” is the Ventura adjudication lawsuit. This is not even mentioned in the CWRP. The possibility of adjudication is a huge wild card, and since it’s been played, it has to be a major factor to consider.

Given the existing poor relationship that Casitas has with Ventura, would not SWP-02 be a preferred alternative if it minimizes Ventura’s involvement that would be necessary in SWP-04?

SWP-02 did not make it into the portfolio analysis? Why? My recommendation would be to put SWP-02 back into serious consideration for diversifying and increasing supply.

The costs of any of the supply options need to be a major consideration when deciding what path to take. Common sense would suggest that raising \$155 million to close a 5200 af gap is completely unrealistic, especially if you consider the number of ratepayers in the district. Further, if the people of Ventura are trying to raise approx \$250 million for their Water Pure project and then you add the \$155 million for Casitas supply options plus the bond measure that the Ojai Unified School District is currently trying to pass, all of this becomes unreasonable and out of the question.

Any State Water to which Casitas has the right to would ultimately need to be received from the Metropolitan Water District. Was any thought given to

developing a direct relationship between MWD and Casitas that would allow Casitas to be an integral part of MWD's overall storage system?

Finally, as we look to the future, what concerns me most is the way water in California is structurally managed. Every tiny little water district acts like a fiefdom all unto its own, looking out for their individual self-interests rather than trying to manage the resource on a larger scale and in a more cooperative fashion. The preponderance of actions is done adversarially using litigation as the main tool. There is little or no discussion in this plan of regional cooperation to help solve our supply problems.

What will be the process going forward? Who is responsible for making revisions to the CWRP? When will the entire Casitas Board approve the CWRP? Then what?

Larry Yee  
Ojai, CA

[REDACTED]

August 14, 2020

by email

Casitas Municipal Water District  
Board of Directors

Following are my comments to Casitas' Draft Water Plan.

Regards,  
Eugene Rooke

[REDACTED]  
Ojai, California 93023  
[REDACTED]  
[REDACTED]

### Comments

The Draft Water Plan raises questions which must be clarified and answered before it can be used. Its credibility is suspect when it:

- (1) fails to propose a direct SWP water pipeline from Calleguas to the Lake,
- (2) ignores the Ventura City lawsuit claiming Casitas' water supplies,
- (3) ignores obvious funding sources that would pay the SWP pipeline connection costs, and
- (4) makes unfounded assumptions and unclear conclusions.

Unbelievably, the Draft Plan fails to address Casitas' most strategic priority - a new non-local water supply adequate to satisfy its water shortage that is free of Ventura's claims and lawsuit. What good is a new water supply if Ventura controls it, can delay or block it, or can claim it? Moreover, the Draft Plan ignores the prime source of funding for this new water supply - Calleguas and other water districts who will pay for pipelines and facilities to store and bank water in the Lake.

The Draft Plan's failure to address these matters simply and clearly renders its purpose, analyses and recommendations questionable, misleading and suspect.

#### (1) Time

A basic unanswered question is how long can the Lake supply water given its present water supplies and anticipated rainfall. Notably, the Draft Plan omits discussing this but states that significant projects must be completed within the next 5 years to avoid the Lake going dry. Casitas' General Manager also states that the Lake will be dry within 5 years if nothing is done. Interestingly, it's not clear how the Draft Plan and Casitas conclude 5 years because the following estimates from the Draft Plan show that the Lake has 6 to 7 years of water using the Draft Plan's new Safe Demand. So what is the true status of the Lake? These inconsistencies are matters that must be corrected in the Draft Plan.

Lake Water AF	100,000	100,000
Minimum Storage AF (1.5/3 yrs)	20,000	30,000
Net AF	80,000	70,000
Annual rainfall AFY (5 years)	40,000	35,000
Total Water AF	130,000	105,000
Safe Demand AFY	10,660	10,660
Evaporation AFY * Does Safe Demand include Evaporation?	6200	6200
Total Lake Water Demand	16,860	16,860
Years	7.7	6.2
Customer Allocation	10,660	4460

**(2) Minimum Storage**

The Draft Plan increased the Minimum Storage to 20,000 AF - approximately 1.5 years of Casitas water demand. (Section 4.1.3 and Section 7.1). The Casitas Board selected 1.5 years (20,000 AF) to balance water supply planning against prudent financial planning. (Section 4.1.5). Acknowledging that the Lake only has 5 years of water left, Casitas nevertheless determined that developing supplies to produce the new Safe Demand to meet all future hydrologic conditions would be very expensive and unnecessary. Given that Casitas and the Draft Plan also conclude that there is only 5 years of Lake water left, is 1.5 years sufficient before emergency water rationing and restrictions are imposed? Shouldn't the minimum storage be increased to give more time to obtain more water supplies?

**(3) Annual Water in a Drought and Ventura Litigation**

The Draft Plan's assumptions about annual rainfall, river water capture and groundwater replenishment should be reviewed for accuracy and made clear. Assuming annual rainfall in the recent drought was about 7000 AFY, what annual water supply additions should be made to the Lake in the Draft Plan? Also, the Draft Plan assumes that the Robles Diversion Gates will be 70% efficient to capture river water during the rains. Is this a reasonable assumption given that these Gates are blocked by mud and debris during these rain events? Significantly, the Draft Plan also doesn't discuss the Ventura water litigation impacts and address the adverse consequences if Ventura successfully claims some of this water from Casitas and the Lake.

**(4) Safe Demand and Evaporation**

The Draft Plan substitutes a lower Safe Demand from the Lake (10,660 AFY) for Casitas' old Safe Yield model (20,440 AFY). (Section 7.1) However, the Draft Plan does not state by what percentage Casitas must immediately reduce its water deliveries and increase its rates to its customers.

Importantly, the Draft Plan also does not clearly define what the new Safe Demand includes - is it just customer consumption or consumption and evaporation? This is significant because more water taken from the Lake annually means that there are fewer years of Lake water supply left.

The Draft Plan simply doesn't answer these important questions.

As noted, the Draft Plan substitutes a new Safe Demand (10,660 AFY). But what does this mean? Casitas states that the Lake evaporation is an additional 6232 AFY. In other words, does the Total Lake Water Demand equal the new Safe Demand (10,660 AFY) or the new Safe Demand plus evaporation (16,860 AFY)?

If the new Safe Demand is just customer consumption, the actual Total Lake Water Demand (16,860 AFY) is greater than the new Safe Demand (10,660 AFY) and there are fewer years of water supply left in the Lake.

But if the new Safe Demand (10,660 AFY) also includes evaporation (6232 AFY), that means there is significantly less water for customers (4460 AFY) and Casitas Lake water deliveries must immediately be reduced and rates increased.

**(5) Water Supply Gaps**

The Draft Plan concludes that Casitas lacks sufficient Lake Water to satisfy its demands within the next 5 years and beyond. Section 7.2.2 proposes short term actions to provide 2500 AFY within the next 5 years. None of these address Casitas' most important strategic priority - a new non-local water supply free of Ventura's claims and litigation. Why pursue uncertain water supply solutions that Ventura can control, delay, block or claim? Consequently, how reliable are any of these solutions?

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)

Section 7.2.1 proposes longer term actions provide 5200 AFY. Again, these do not address Casitas' most important strategic priority - a new non-local water supply free of Ventura's claims and litigation. Why pursue uncertain water supply solutions that Ventura can control, delay, block or claim?

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)

**(6) Project Ranking Assumptions (Appendix F)**

The Draft Plan identified categories and assumed arbitrary and questionable weightings to determine project priorities. Importantly, the Draft Plan ignored new non-local water supply projects that are Casitas’ most important strategic priority - a new non-local water supply free of Ventura’s claims and litigation. Why pursue uncertain water supply solutions that Ventura can control, delay, block or claim? In fact, the Draft Plan did not mention the Ventura lawsuit at all and stated incorrectly that Casitas and Ventura are cooperating. Why is that? This omission alone undermines the credibility of the Draft Plan. Non-local water supplies which are not subject to the Ventura litigation should have the highest priority.

Among the questionable rankings and weightings were:	
Casitas control of projects	Given that Casitas has not completed any projects to add water diversification in decades, Casitas’ control of projects should not be a material ranking item. They have shown no initiative or capability. Look at our situation.
Permits	The Draft Plan’s timing and permitting rankings and assumptions are also suspect. The Verbo and Hobo drilling projects will be challenged because of the nearby National Forest.
Stakeholder support	Many stakeholders are concerned about our water supplies - that means water source diversification. Some of the weightings appeared to give more weight to local water projects. The times and climate are changing, and water diversification projects should be given high priority.
Why no Ranking for the following important matters?	
Water Diversification	Although the Draft Plan identified and recommended non-local water projects, water source diversification was not a ranking category.
Ventura Litigation	The Draft Plan also did not mention the Ventura litigation, the big elephant in the room. Despite the Draft Plan’s statement that Casitas and Ventura are working together, they are actually engaged in serious litigation which could render this entire Draft Plan and its water supplies assumptions moot.

What is the difference between the following two Calleguas SWP projects? These water diversification projects with Calleguas all involved working with Ventura to bring state project water to Casitas. But Casitas and Ventura are not cooperating. They are suing each other with Ventura claiming Casitas’ water rights. Any project involving Ventura will just strengthen Ventura’s claims against Casitas. Why pursue uncertain water supply solutions that Ventura can control, delay, block or claim? Why isn’t a direct SWP Emergency Interconnection from Calleguas to Casitas being proposed that will bypass Ventura?

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.
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.

**(7) Financing and Costs (Appendix H)**

The Draft Plan estimates that Casitas must pay \$155m for the projects recommended and described several financing options. Accordingly, Casitas was reportedly already considering a \$155m bond issue this fall - even though there is no final Water Plan. However, the Draft Plan ignored the important funding source that costs Casitas nothing. The Lake is a valuable water bank. Consequently, other water districts and agencies will pay for the pipelines to bring state water to the Lake. For example, Calleguas and other districts should pay much of the costs to bring their state water to the Lake. Why was this obvious funding source omitted? Again, this omission is so significant that it renders suspect the intent, assumptions, analyses and recommendations of the Draft Plan. What is the Draft Plan actually trying to achieve?

From: **burt handy** <[REDACTED]>  
Date: Mon, Aug 17, 2020 at 11:12 AM  
Subject: Comment on the Draft Comprehensive Water Plan  
To: <[info@casitaswater.com](mailto:info@casitaswater.com)>

To Whom It may Concern

After reviewing the plan, I see your 150 million dollar pipeline is planned to use the intertie to Camrosa via Ventura Water.

There is no other source for the water listed.

I believe you should add to the plan, using United Water's ASAPP planned pipeline from lake Piru

According to the State Water project information I have received, the limit on the water which can come through Metropolitan water to Camrosa is 26 CFS.

Additionally, this is only one pipeline access and it is vulnerable to many issues, earthquakes, breaks in the line, down for maintenance, and any other reason the pipeline has a problem.

Using the access through United, their proposed pipeline is currently planned to accommodate 50 CFS with the ability to increase the flow to 75 CFS.

Additionally, the water could be sent down the river, and accessed through United Water.

This alternative, in my humble opinion, should be added to the options available for review for the public.

Additionally this would give a second route to access state water and provide another method of receiving water if the pipeline through Metropolitan goes down for any reason

Please include this comment in the plan.

Burt Handy



August 18, 2020

Adam Kear

[REDACTED]  
[REDACTED]

Casitas Municipal Water District  
1055 Ventura Ave.  
Oak View, CA 93022  
*Via email: info@casitaswater.com*

Re: Comments on Casitas Municipal Water District Draft Comprehensive Water Resources Plan

Thank you for the opportunity to comment on the June 2020 draft of the Comprehensive Water Resources Plan for the Casitas Municipal Water District. I am an Ojai property owner and part-time resident; soon to be full-time. As such I have strong interest in seeing the District secure a reliable long-term water supply strategy for the general welfare and needs of current and future Ojai Valley residents, businesses, farms, and the environment. I also have an interest in seeing Lake Casitas operated to maximize water supply and recreational uses. I recently retired from a 30-year career with the Metropolitan Water District of Southern California where my practice focused on legal issues surrounding water supplied through the Sacramento-San Joaquin Bay Delta (Delta) and the State Water Project (SWP). It is with these interests and background that I provide my comments on the Draft Plan.

#### A Direct Connection of SWP to Lake Casitas Should Be Evaluated

I am very surprised that the Draft Plan does not evaluate or even consider a direct connection of SWP supplies to Lake Casitas. The Draft Plan dismisses the idea out of hand “[b]ecause these SWP supplies are treated water, it is assumed they would be delivered to the Casitas distribution system rather than to Lake Casitas.”

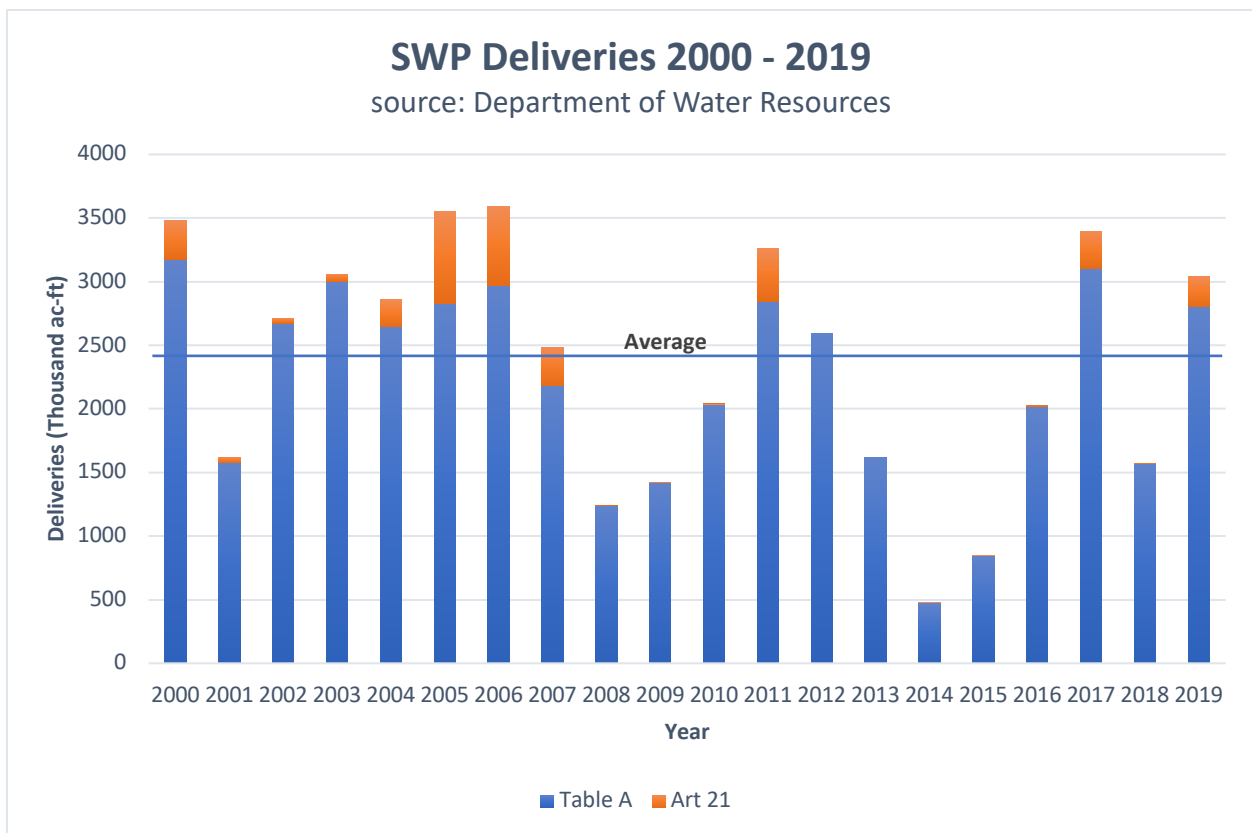
Although not explained, I assume that the concern about supplying treated water to Lake Casitas is a concern about costs. However, a cost analysis was not done to evaluate the overall costs of the connection facilities and re-treatment costs with the benefits of vastly improved water supply reliability and generally higher lake levels.

The evaluation of a direct connection should be factored in to the lake’s safe yield analysis, which was also not done. As described below, the availability of SWP supplies is highly variable. A sequence of dry or critically dry years where SWP deliveries are minimal may be followed by a sequence of relatively wet weather where SWP supplies are ample and often exceed demands. Where SWP Contractor water agencies have available storage to capture those wet-year flows, like the District, they can boost their overall water supply reliability by relying on that storage in dry years. A direct connection should be evaluated as another input to lake storage.

The District is one of a fortunate few California water agencies with ample surface storage to take full advantage of the SWP delivery pattern, yet the Draft Plan completely ignores this potential.

With Storage, the SWP Can Greatly Boost Water Reliability

By way of background, the SWP was never completed as originally intended. It was planned to have major storage facilities north of the Delta to capture sufficient winter flows so that it could deliver consistent supplies to its Contractors' service areas year-after-year. For a variety of reasons, those upstream reservoirs were never built. As a consequence, the SWP operates in a manner inverted from the original intent. In wet years when there is a lot of water in the system, the SWP can deliver ample supplies. But in dry years when demand is high, the SWP is often tapped out and can deliver far less than needed by its Contractor water agencies, at times down to minimum health and safety flows. The figure below shows the historic SWP water deliveries from 2000 to 2019.



With the exception of one or two Central Valley reservoirs that have been proposed (Sites Reservoir, for one, is now in planning), no new upstream reservoirs are expected to ever be built. So, the SWP will continue to operate in this inverted manner – big flows in wet years and not much in dry. That means that to secure reliability from the SWP, the downstream

Contractor agencies need to build their own storage. That's what the Metropolitan Water District has done, by building the 800,000 acre-feet Diamond Valley Lake in the late 90s and developing significant local groundwater storage programs and water banking programs in the Central Valley and on the Colorado River. Kern County Water District also developed big groundwater banking programs. But the rest of the SWP Contractors have not developed the storage needed take advantage of those big "wet year" deliveries that the SWP can make. Finally, by way of background, because in wet years there is usually more SWP water than demand, the SWP makes available surplus water (called "Article 21" water) to those that want it, at a steep discount.

Because the Draft Plan does not consider a direct connection to Lake Casitas, it ignores the water supply reliability that could be gained by storing SWP water in wetter years. And because these SWP deliveries could be discounted Article 21 water, any cost concerns of putting treated water into the lake may be insignificant.

#### The Available Capacity to Wheel SWP Water through Calleguas and Santa Barbara Has Not Been Evaluated

The Draft Plan notes that moving the District's SWP supplies through a connection to Calleguas and/or Santa Barbara will require wheeling agreements with those agencies. However, the Draft Plan does not describe or analyze whether there is sufficient unused capacity in the Calleguas and Santa Barbara conveyance systems to accommodate the District's SWP supplies at the times needed. This analysis of unused capacity must also extend backwards beyond Calleguas and Santa Barbara; for the Calleguas connection, for example, there must also be available capacity in Metropolitan's system.

If this analysis had been done, it might show that in normal and drier years with the interconnection through Calleguas and/or Santa Barbara, those agencies may not have the space available to wheel all of the SWP supplies available to the District.

This brings me to another advantage of a direct connection to Lake Casitas. Both Calleguas and Santa Barbara are short on storage. That should mean that in wetter periods their storage will already be filled and they will not be taking any additional deliveries to storage. So, in these wet periods not only should SWP supplies be available to the District, but there should also be sufficient unused capacity in the Calleguas and Santa Barbara systems to wheel water for storage in Lake Casitas. But this all needs to be analyzed, which the Draft Plan has not done.

#### The Draft Plan Does Not Consider Developing Storage Partnerships with Other Agencies

The Draft Plan does not consider partnering with other agencies such as Calleguas, Santa Barbara, Ventura, and Metropolitan to develop mutually beneficial storage arrangements. Such

August 18, 2020

partnerships could help optimize the reliability of the District's SWP supplies and help offset the costs of constructing the connection infrastructure.

In summary, with Lake Casitas the District holds a significant and extremely valuable water management tool. Very few water agencies in California are blessed with such storage, although many are scrambling to implement new storage facilities and programs in order to improve their water supply reliability. Assuming the cost to develop a new surface reservoir is around \$3,000 per acre foot, it would cost over \$700 million to construct Lake Casitas today, if it even could be constructed today. Lake Casitas is there and available to the District at no cost to build, yet the Draft Plan completely ignores the water supply reliability and enhanced recreational benefits a direct SWP connection could generate for the Ojai Valley.

Thank you for considering these comments.



Adam Kear

August 18, 2020

## Comprehensive Water Resource Plan – Comments

The Draft Comprehensive Water Resource Plan (Plan) prepared by Stantec contains some valuable information to aid Casitas' future planning efforts. The "safe yield" analysis is a complex model that accounts for a variety of variables that have been absent in prior "safe yield" assumptions. However, the water supply alternatives presented in the Plan are not well developed and there is no clear rationale for the Plan's conclusions and recommendations. Also, the portion related to the Ojai service area and the Ojai Basin misrepresents both water use in the service area and the availability of additional water from the basin.

### Safe Yield Analysis

The safe yield model provides a robust tool for a series of critical policy decisions facing the Casitas Board. The Plan, however, implies that these policy decisions have already been approved by the Board and that the 'safe yield' is now 10,660 AF/YR. The Plan assumes the Board has established policies on a minimum storage level of 20,000 AF, a risk factor of 95%, and a revised WEAP.

Questions to be considered:

1. Can Casitas' customers afford the luxury of a "safe yield" with a 95% certainty? We have all been living with no certainty for quite some time, any level of reduced risk would be an improvement. Ninety-five percent is certainly a good long-term goal depending upon Casitas' ability to acquire additional water sources and the reliability of those sources.
2. Is a 20,000 AF minimum lake level a reasonable goal today verses in the future? Again, depending on the reliability of new water sources could that level be higher?
3. Can Casitas customers afford a revised WEAP based on a "save yield" of 10,660 AF, one-half of the historical "safe yield"? What will the impacts be to the service area if base allocations are cut in half, plus additional WEAP allocation reductions of 10%-40% as storage declines? How frequently will staged reductions in allocations occur to achieve the 10,660 AF average?

These are difficult questions that should be discussed in detail By Casitas' Board of Directors. The answers may be different for the short-term and may result in goals for the long-term when new supplies are closer to reality.

### Supply Alternatives

Supply alternatives should focus on the immediate need, short-term alternatives that can be implemented within a 3 to 5-year period. An analysis of each short-term alternative should include a specific supply estimate, unit cost of new water, a firm timeline, cost estimate, and a financing plan. Without that information the Board cannot make a rationale decision on how to proceed. At some point in the future Casitas may have the luxury of developing long term alternatives with a planning

horizon of 10-25 years. The reality is Casitas must secure some additional supplies soon or risk a severe water shortage.

#### Ojai Service Area

The portion of the Plan dealing with Ojai and the Ojai Basin is misleading and inaccurate. It is misleading because, when reading this portion of the Plan my first thought was why does Ojai need Casitas? According to the Plan the Ojai area, not only does not have a water supply shortage, it may have a surplus. In addition, the Plan claims the Ojai service area will be the fastest growing area in Casitas' District through 2040. Apparently, the Plan's outreach did not reach anyone in Ojai. Instead the Plan relies on a 2010 Golden State Water Company Urban Water Plan, a plan filled with mis-information and false assumptions that have been debunked by comments and testimony from the City of Ojai and Ojai Flow to the California PUC on numerous occasions. This Urban Water Plan was used by Golden State to support millions of dollars in improved water production facilities that were unnecessary. The City of Ojai's is not growing, its population has declined over the past decade.

The Plan's conclusion that an additional 500 AF/YR can be extracted from the Ojai basin is completely unfounded. Any additional yield from the basin will not be known until the Ojai Basin Groundwater Sustainability Plan is complete. As part of that planning process a conjunctive use arrangement may be developed with Casitas, but until then there is no evidence that an additional 500 AF of water can be pumped by Casitas without exceeding the basin's safe yield.

#### Conclusion

On "safe yield" I recommend the Board take the most valuable elements of the Plan and begin the difficult job of discussing the issues that it presents. Develop a series of choices that can be made for each element, outlining the pros and cons of each choice, and whether, the choices are temporary until new supplies can be secured. Develop a detailed analysis of the short-term alternatives available to Casitas and give the Board of Directors the opportunity to make a rationale and timely decision.

Richard H. Hajas

[REDACTED]

Ojai Ca 93023

[REDACTED]

[REDACTED]

August 19, 2020



**VENTURA  
RIVER  
WATER DISTRICT**

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[www.VenturaRiverWD.com](http://www.VenturaRiverWD.com)

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Board of Directors  
Casitas Municipal Water District  
1055 Ventura Ave  
Oak View, CA 93022

Subject: COMMENTS ON COMPREHENSIVE WATER RESOURCES PLAN

Dear Casitas Directors:

The Ventura River Water District is grateful to the Casitas Municipal Water District for having the Comprehensive Water Resources Plan prepared. The first five years of this current drought have been a wake-up call that the safe capacity of Lake Casitas needed to be reviewed. The Ventura River Water District recognizes the importance of Casitas as the back-up water supply for us and the rest of the valley and how important it is to have redundancy in our emergency water supply options.

Regarding developing other water supplies we believe the goal should be to utilize local projects as much as practical to increase supply because, typically, they can be completed earliest and at the lowest cost. However, it is essential to complete a connection to the State Water Project as soon as possible to begin receiving Casitas' entitlement through in-lieu with Ventura. There should be flexibility to expand capacity of the connection as needs and opportunities arise.

Information is lacking on costs of the recommended plan in terms of its affect on typical customers' water bills. This makes it difficult for the public to assess the need for the more expensive projects and express positions of support or opposition, a key issue if general obligation bonds are favored to finance the plan. The District recommends preparation of an updated plan summary, responsive to comments, such as modifying options, and having a new comment period.

The following are our specific comments on the report:

No Regrets Options. (page 13 & 58): The District supports Ojai Basin Wells (GW 08) and Robles Fish Screens (MO 08). We request that you add to the No Regrets Options two additional projects: 1. the Ventura State Water Project Interconnection (SWP01 without pump station), and 2. Demand Management (C 01). In addition, provide text explaining how extracting an additional 500 af per year from the Ojai Basin fits within the safe yield of the Ojai Basin.

Preferred Supplemental Water Options. (page 13): The District supports the Casitas-Calleguas Interconnection (SWP02) with the Calleguas connection in Somis, the Casitas-Santa Barbara connection (SWP03) with addition of desalted water (DW 01), and the Casitas-Ventura Interconnection which could occur with

either SWP 01 or SWP 02 depending on results of Ventura's improvements to convey water to the western part of the city or progress with Calleguas in using Lake Casitas for emergency storage, respectively.

Conditional Options - Track Only (page 13): The District Supports Watershed Management/Arundo Removal (MO 01) and Matilija Deep Formation Wells (GW 01). SWP 05 is basically in-lieu with Ventura and is a key part of SWP 01. It shouldn't be a separate option, so it disappears from the "Track Only" category.

Financing – Water Revenue Bonds: The District requests that pros and cons be developed so that "Revenue Bonds" can be compared to "General Obligation" bonds. Many water suppliers use revenue bonds, which can be an important option if general obligation bonds do not receive the difficult-to-achieve 67% voter approval. If revenue bonds are used much of the cost can be applied to the upper tiers and paid by large residential users. The Appellate Court ruling on the Capistrano tiered rate case supported placing the cost for new water on higher use tiers. A 75 unit per month residential customer served by water agencies with strong conservation rates is typically charged about three times as much as what Casitas charges thus providing a strong economic motivation to invest in water use efficiency. Such water agencies serve more than 25% of the residents of southern California.

Water Demand:

The Plan acknowledges there will be little, if any, population growth and the intention to maintain current levels of conservation. Yet, demand is shown to be 16,000 af/yr, 33% higher than current use. We recommend adding an alternative with demand of 12,000 af/yr, thereby needing only 1,400 af/yr supplemental water. This would enable a comparison of customer water costs. If there is substantial pressure for more supplemental water, one or more of the options being watched could be implemented. With the current Casitas rate structure about 50% of revenues are collected as fixed costs and there is little economic incentive for large residential customers to invest in water use efficiency. If Casitas were to transition to a stronger conservation rate structure the monthly bill for a very small water user would drop to about 1/3<sup>rd</sup> of today's rates and a large residential water user's water bill would triple while the average Casitas residential customer would see essentially no change in their water bill. With a stronger conservation water rate structure Casitas may never see demand go back up to 16,000 af/yr.

Timing for In-Lieu & Supplemental Purchases: The report discusses future studies to determine when in-lieu or supplemental purchases of water should be made. This analysis should be performed now and be a part of this Comprehensive Water Resources Plan. This information will be critical for future water rate studies and operation plans.

Other Regional Supplies:

We recommend providing text to explain why the SWP03 Ventura-Santa Barbara Interconnection is limited to a 16" pipe. The foothill feeder pipe through Santa Barbara has historically been a limiting factor in conveying water to Carpinteria. Please provide an explanation of how this is or is not a factor in the ability to convey future State Water through Santa Barbara and Carpinteria to Casitas.

The report should emphasize the significant potential of other possible supplemental supplies that could be purchased from other parts of the state because Casitas would be connected to the statewide



plumbing system. For example, in 2014 and 2015 the State Water Project only provided 5% and 20% of contracted water to the Central Coast Water Authority (CCWA) providing State Water to Santa Barbara County. This totaled 11,372 AF. The CCWA was able to purchase an additional 26,000 AF of supplemental water supplies at a cost of \$446/AF because they were connected to the statewide plumbing system. These supplemental purchases provided critical water to Santa Barbara County during the worst drought in California history. The Casitas connection to the statewide plumbing system could prove to be a similar life saver in the future.

#### Expansion of Robles Diversion:

This project would increase the capacity of the Robles Diversion from 500 CFS to 2,200 CFS. Please add to the report the anticipated increased annual AF yield this project would provide and clarify whether the \$556/AF cost is in 1991 dollars or 2020 dollars. The "Disadvantages" for this project lists water rights as an issue. This should be removed because no water right holder in the watershed has the ability to capture between 500 to 2,200 CFS of flood flows racing to the ocean. This project is typically the first idea that comes to mind for the average person and it should be clear why it is not being considered.

The following provides more information on the recommended modification of options:

#### SWP01 Ventura SWP Interconnection

Delete Casitas-Ventura SWP Interconnection (pump station and other facilities) to reduce cost from \$33 million to roughly \$10 million, which would be Casitas' one-third share of Ventura SWP Interconnection. Emphasize in-lieu as critical element instead of it being highlighted as SWP 05, or part thereof. The in-lieu could be expanded by Casitas paying Ventura to use any unused Table A water which would allow Ventura to reduce demand on Casitas by an equal amount.

Casitas-Ventura SWP Interconnection would become a new option, SWP 06, the need for which would depend on Ventura's capacity to transport SWP water to city's westside or whether the Casitas-Calleguas Interconnection becomes feasible.

This becomes the best option. It has lowest capital cost, earliest implementation in two to three years, and enables in-lieu with Ventura, which is the quickest and lowest cost way for Casitas to get SWP access.

#### SWP 02 Calleguas Emergency Interconnection with Casitas

Add to this project Table 5-3 to replace SWP 04 and include a description of how Casitas and Calleguas would each benefit from this project. Change connection to Calleguas system from Springville to Somis for greater flow capacity. This would be monitored concurrently with Casitas-Ventura SWP Interconnection, which could be the new option SWP 06 or renumbered after deleting SWP 04 and SWP 05. This option is only feasible if Calleguas chooses Lake Casitas for emergency storage of 30,000 af and then Calleguas would pay for most, if not all of costs.

#### SWP 03 Casitas-Santa Barbara SWP Interconnection

Add desalted water (DW 01) as a phased element. Desalted water should not be grouped with Ventura in-lieu.

SWP 04 Combination Calleguas-Casitas Connection

Delete this option. It is replaced by SWP 02, as modified, with the Casitas Ventura Connection (SWP 06 or renumbered) being monitored for use with SWP 01 or 02. Currently, Ventura in-lieu is listed as dependent on the \$133 million cost of SWP 04.

SWP 05 In-lieu Project Water:

Delete this option. In-lieu is key part of SWP 01 and any desalted water (DW01) or other supplemental water should be part of SWP 03.

SWP 06 (unless renumbered after changing options)Casitas-Ventura SWP Interconnection

This new option would be for a 10 cfs pump station if Ventura can transport 2,000 to 3,000 af/yr through its improved distribution system to the west side (SWP01) or for a 30 – 40 cfs pump station if Calleguas choses Lake Casitas for its emergency storage (SWP02).

Thank you for the opportunity to comment on this important water resources plan.

Very Truly Yours  
VENTURA RIVER WATER DISTRICT



Ed Lee, President

From: **burt handy** <[REDACTED]>  
Date: Sun, Aug 23, 2020 at 9:35 AM  
Subject: Evaporation from Lake Casitas  
To: <[info@casitaswater.com](mailto:info@casitaswater.com)>

To Whom It May Concern

After reviewing the Comprehensive Water Report regarding evaporation from the lake, it appears there are a lot of assumptions being made to evaluate the evaporation rate.

Some of the factors to affect evaporation are:

1. Size of Lake
2. Humidity
3. Cloud cover
4. Temperature
5. Hours of Sun per day
6. Depth of Lake
7. Loss of water by percolation into the ground

Additional factors which make it hard to evaluate

1. Inflow
2. Outflow

After reading the report, there is a lot of variance, and I have heard board members state the evaporation rate could be as high as 2/3rds. of the consumption of water out of the lake.

The plan evaluates all the options to increase efficiency and decrease use. However, with such an unknown into how much water is lost the true evaluation of water use/loss out of Lake Casitas is a moving target..

I believe that Lake Casitas should incorporate in the plan a way to establish a more reliable way of determining the loss of water due to evaporation from the lake.

I believe there are items in the public domain which could monitor the daily loss of water from the lake, such as an evaporation buoy, which runs in the neighborhood of \$50,000.

This, in my opinion, would enhance the ability of the board, administration, and provide to the public more realistic numbers in this critical area.

Burt Handy

# CACHUMA OPERATION & MAINTENANCE BOARD

## BOARD MEMORANDUM

Date:	February 24, 2020
Prepared by:	Joel Degner
Approved by:	Janet Gingras

**SUBJECT:** Water Quality and Sediment Management Study (WQSMS) – Purchase of Water Quality Monitoring Buoy

### **RECOMMENDATION:**

The Board of Directors review the proposed purchase of the LimnoTech Water Quality Monitoring Buoy as recommended by our consultants, Woodard & Curran, and forward to the Board with a recommendation to approve:

- 1) A budget adjustment in the amount of \$50,000 from the SCC Isolation Valve Installation account (6136) to the WQSMS account 6138.
- 2) The purchase of the LimnoTech Water Quality Monitoring Buoy as described below in an amount not to exceed \$50,000.



### **SUMMARY:**

COMB staff recommends the purchase of a water quality monitoring buoy (CB-450) and YSI EXO2 sonde with Total Algae sensor plus camera for \$50,000 from LimnoTech to support continuous monitoring of surface water conditions and early warning of potential harmful algal blooms occurring at Lake Cachuma for the Spring/Summer 2020. LimnoTech has helped public and private entities procure, deploy, and maintain environmental data buoys across the Great Lakes to monitor algal bloom conditions.

### **BACKGROUND**

COMB staff has previously investigated the installation of an evaporation monitoring buoy at Lake Cachuma. The evaporation discrepancy observed in 2014-2017 at Lake Cachuma has been corrected through the installation of wildlife protection measures. The present need, as recommended by our consultants, is to better understand the algal growth in the lake. A continuous measurement of temperature, turbidity, chlorophyll-a, and phycocyanin at the surface would provide early warning monitoring for harmful algal blooms and an improved understanding of the seasonal and diurnal fluctuations. The equipment would be portable and could be utilized in other locations as well.

This project addresses a critical deficiency for water quality management, specifically, continuous and more extensive granular water quality data is needed from Lake Cachuma to inform critical decision making at member agency treatment facilities, including early warning toxic algal bloom detection and monitoring for proactive treatment and total organic carbon detection for management of trihalomethane formation. COMB staff has evaluated several water monitoring buoy options with two different vendors. COMB staff recommends the LimnoTech Water Quality Buoy based on the the NexSens CB-450 platform. The CB-450 is light enough to be deployed from most small boats, yet it offers adequate power and charging for rigorous instrument sampling and data transmission. The floating platform supports both topside and subsurface environmental monitoring sensors including weather stations, camera, and multi-parameter sonde (YSI EXO 2). Solar panels, batteries, charge controller, navigation light, datalogger, modem, antenna, cabling, and mooring hardware are all included to provide adequate power, data logging, and navigation lighting. The largest part of the costs is the EXO2 Sonde with a Total Algae sensor. COMB staff requested a comparable buoy quotation from another

vendor and the cost was approximately 40 percent higher. A breakdown of the cost items is provided in Table 1.

**Table 1. Water Quality Monitoring Buoy Cost**

Item	Limnotech Water Quality Monitoring Buoy (2020)
Base Buoy	\$11,539
Sensors	\$20,178
Misc. Hardware, Labor	\$14,274
<b>Total Cost</b>	<b>\$49,991</b>

COMB staff recommends the purchase of the LimnoTech Water Quality Monitoring Buoy for an amount not-to-exceed \$50,000. The expenditure would include the buoy with sensors, a camera, a simple web portal to view data, and an allowance for labor support once it has been installed.

The largest cost associated with this purchase is an EXO2 sonde which could be deployed in alternate locations (North Portal Bypass, Lauro Reservoir, etc.) to better understand the water quality in the system. The buoy system could be constructed and shipped in approximately 4 to 6 weeks and be ready for deployment. Initially, data would be transported to a secured web portal that would be shared with treatment plant operators. COMB plans to investigate integrating the data from the sensor into our SCADA system in the future and then share it directly with Corona del Mar and Cater Water treatment plants through our SCADA system.

**FISCAL IMPACTS:**

The South Coast Conduit (SCC) isolation valve installation project was budgeted in the amount of \$150,000 for the current fiscal year. To date, \$25,000 has been expended for design costs. In fall of 2019, staff submitted a Notice of Interest under the Cal OES Hazard Mitigation Assistance Program and received a notice of eligibility for a pre-disaster mitigation activity for this project. Staff proceeded to apply for grant funding with notifications due in mid-2020 and awards following in late 2020. Therefore, remaining funds (approximately \$125,000) for this project will not be expended during this fiscal year.

To purchase the water quality monitoring buoy, staff is proposing a budget adjustment in the amount of \$50,000 to be transferred from the SCC Isolation Valve line item account (6136) to the water quality and sediment management study line item account (6138). The budget adjustment requires no additional assessments for the current fiscal year. If approved, this project would be removed from the projected IIP projects scheduled budget.

**ENVIRONMENTAL COMPLIANCE:**

Staff is working with Reclamation on environmental compliance requirements.

**COMMITTEE STATUS:**

The Operations Committee reviewed the proposed purchase of a water quality monitoring buoy as recommended by our consultants, Woodard & Curran, and forwards to the Board with a recommendation to approve:

- 3) A budget adjustment in the amount of \$50,000 from the SCC Isolation Installation account (6136) to the WQSMS account (6138).
- 4) The purchase of the LimnoTech Water Quality Monitoring Buoy in an amount not to exceed \$50,000.



Board of Directors  
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General Manager  
Mauricio E. Guardado, Jr.

Legal Counsel  
David D. Boyer

August 24, 2020

Mike Flood, General Manager  
Casitas Municipal Water District  
1055 Ventura Ave.  
Oak View, CA 93022

**Subject:** Draft Casitas Municipal District Comprehensive Water Resources Plan (CWRP)

Dear Mr. Flood:

United Water Conservation District (United) is writing to thank you for the opportunity to review and share our thoughts on Casitas Municipal Water District's June 2020 Draft Comprehensive Water Resources Plan (Draft CWRP), which includes concepts and quantities related to current and future range of water supply options for the Casitas and its customers.

United is supportive of the stated intention of Casitas to utilize its allocation for State Water Project water. Southern Ventura County residents enjoy access to local surface water and groundwater resources but imported water supplies can provide an important additional source of supply, especially in lieu of varying climate conditions throughout the state.

United is also interested in greater utilization of State Water Project allocations held by entities within Ventura County, and other opportunities such as Article 21 supplies. United is interested in developing additional regional water supply programs among neighboring agencies with the goal of optimizing usage of existing allocations and developing in-lieu or other transfer arrangements until such a time that conveyance facilities are constructed to allow Casitas direct access to its State Water Project allocation.

If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "M. Guardado", is written over a light blue rectangular background.

Mauricio E. Guardado, Jr.  
General Manager

Cc: Maryam Bral, Chief Engineer  
Dan Detmer, Supervising Hydrogeologist  
Casitas Municipal Water District Board of Directors

Trusted life source for generations



August 24, 2020

Mr. Michael Flood, General Manager  
Casitas Municipal Water District  
1055 Ventura Avenue  
Oak View, CA 93022

Mailed to above address and emailed to: [info@casitaswater.com](mailto:info@casitaswater.com)

**SUBJECT: COMMENTS ON DRAFT CASITAS MUNICIPAL WATER DISTRICT  
COMPREHENSIVE WATER RESOURCES PLAN**

Dear Mr. Flood,

Thank you for the opportunity to comment on the Draft Casitas Municipal Water District (Casitas) Comprehensive Water Resources Plan (CWRP) dated June 8, 2020.

The City of Ventura (City) has appreciated the collaborative efforts in working with Casitas on State Water Project issues, including the exchanges with San Geronio Pass Water Agency, completion of the State Water Interconnection Alignment Study and Environmental Impact Report, and currently proceeding with design of the State Water Interconnection. I know we both look forward to the day we can access our State Water entitlements and take advantage of this water source that we all have been investing in since 1971.

The City's main comments on the CWRP are related to Option SWP 01 and the City hydraulic limitations of providing water directly to Casitas. Option SWP 01 includes 2 main components: (1) the Ventura State Water Interconnection, which is a pipeline connecting the Calleguas system to the City of Ventura system; and (2) a 10 cfs pump station, which Casitas would construct to pump water from the City's system to Casitas' system. This option also includes the assumption that the City's East to West Interconnection Pipeline Projects (which are currently been designed) have been constructed. The CWRP also infers that the City will be constructing other projects that are not currently funded or in the City's CIP Work Plan.

The City prepared a letter to Casitas dated June 26, 2017 which states the hydraulic limitations of providing water directly to Casitas. That letter is attached. The findings

indicated in that letter, in addition to the following discussion, needs to be incorporated into this CWRP.

The June 26, 2017 letter indicated projects that need to be completed to deliver water from Ventura to Casitas. Two of the projects would be required if flow from the Ventura River was not available when delivering water to Casitas. Currently three of these projects are in design; the remaining projects are either in the planning phase and/or not funded. If all these projects are fully constructed, the City's water distribution system is estimated to be capable of delivering only 5.4 cubic feet per second (cfs) not 10 cfs. Once the City's VenturaWaterPure Project is completed that number is estimated to increase to 7.1 cfs. And these flows would only be achievable during off-peak or average demand conditions.

The primary reason for flow limitations is that the City's water distribution system was not designed to wheel water from the east side of the City to the west side. The City's East to West Interconnection Pipeline Projects will allow water to be delivered from the City's most easterly pressure zone to its most westerly zone, but cannot overcome some of the operational limitations with wheeling flows across the City. Upsizing the proposed 24-inch East to West Interconnection Pipelines, as suggested in the June 26, 2017 letter, was subsequently determined to be infeasible due to the resulting operational and water quality issues.

In addition to 10 cfs not estimated to be achievable, an annual supply of 2,000 acre-feet per year (AFY) may not be achievable/reliable, both due to hydraulic and supply issues. Casitas would still need to supply the water to customers in the Casitas service area in order for the City to meet annual demands. If seasonal limitations are placed on the City on pumping from the Ventura River, the City would depend on Casitas to supply water to at least a portion of customers in the Casitas service area. In addition, all the City's groundwater sources have annual limits (legal, regulatory and/or operational), that cannot be exceeded.

In conclusion, to deliver significant portions of Casitas' State Water allocation **directly** to Casitas' system would require Option SWP 04. Additionally, since the Casitas' State Water allocation is generally less than the demand in the City's Casitas service area, the City anticipates the in-lieu delivery portion of Option SWP 01 would be more economical for Casitas than building infrastructure to deliver water from Ventura to Casitas and then delivering the water back to serve City customers in the Casitas service area.



Other Comments:

**1. Table 5-3, SWP 01, Brief Description**

Change: *"The City of Ventura will make upgrades to their distribution system to allow State Water Project water to reach the west side of Ventura..."* to *"The City of Ventura will make upgrades to their distribution system to enable the City to deliver water from the eastside of the City to the westside...."*

**2. Table 5-3, SWP 05, Brief Description**

As stated above, a 10 cfs (or 30 cfs) pump station without a dedicated Calleguas/Casitas pipeline through the City would be problematic.

**3. Table 5-3, SWP 05, Estimated Capital Cost**

Change SWP 04 to SWP 01 or to SWP 01 and/or SWP 04

**4. Page 49**

In addition to modifying in accordance with the hydraulic limitations discussed above:

- Paragraph 1, Sentence 4  
Change to: *"The City of Ventura would also complete the East to West Interconnection Pipeline Projects to enable the City to deliver water from the eastside of the City to the westside."*
- Paragraph 1, Sentence 6  
Change to: *"...would be dependent on the City of Ventura's East to West Pipeline Projects being completed."*

Again, we thank you for opportunity to comment on the CWRP and look forward to continuing to collaborate with you on regional water supply and reliability projects.

Sincerely,



Susan Rungren

Ventura Water General Manager

cc: Betsy Cooper, Assistant General Manager, Water Resources

Attachment:

Letter titled, *State Water Interconnection Alignment Study, Assessment of Flow Capabilities – City of Ventura to Casitas MWD (June 26, 2017)*

June 26, 2017

Casitas Municipal Water District  
Attn: Mr. Steve Wickstrum  
1055 Ventura Avenue  
Oak View, CA 93002

**Subject: State Water Interconnection Alignment Study  
Assessment of Flow Capabilities – City of Ventura to Casitas MWD**

This letter summarizes the results of the hydraulic analysis conducted by City Staff to estimate the flow capabilities and infrastructure improvements required to wheel State Water through the City of Ventura to Casitas Municipal Water District.

The City is currently preparing a separate study to analyze improvements required to move water from the eastside to the westside of the City, with State Water as a new supply source and assuming no water is available from the west side supplies (Casitas and Ventura River). That study, which does not consider additional flow to Casitas, identified the following improvements required to supply water from the east to the west side of the City:

- A 24-inch pipeline, that will help to transport water between the 430 Zone Corbett Tank and the 430 Zone Long Canyon Tanks,
- A 24-inch pipeline, that will help transport water from the 330 and 210/260 Pressure Zones
- Three pressure reducing stations (330 to 260 zone; 330 to 210 zone; 430 to 330 zone)
- Reconfigure the 24-inch pipeline, that currently delivers water from Casitas Turnout No. 2 to Hall Canyon Reservoirs, to deliver water in the reverse direction (from Hall Canyon Reservoirs to the west side of the City)
- A Booster Pump Station to supply water to the 400' zone from the 210' zone (would not be required if water from Ventura River was available to supply water to the 400' zone).
- 210 to 260 zone boundary adjustment, to eliminate resulting low pressure areas.
- 210 to 400 zone boundary adjustment, to eliminate resulting low pressure areas.

A separate analysis, with the above improvements in place, was then performed to analyze the impacts on the City's system if additional water was supplied to Casitas. This memorandum summarizes the results of that analysis.

## Assumptions

Casitas staff has indicated that they desire to obtain 3 to 7 cfs of water from the City at their point of connection. The assumed point of connection is north of the Casitas No. 2 turnout, along Casitas' 30-inch main near the intersection of Stanley Avenue and Olive Street.

### Demand:

Buildout Demands, as estimated in the 2010 Water Masterplan, were used as a basis for modeling the City's system. Due to the scenario that no supply is available from westside supply sources, demands were reduced by a factor of 10%. Two demand scenarios at buildout were considered: Maximum Day Demand (MDD) and Average Day Demand (ADD). The estimated existing buildout vs. existing demands are as follows:

ADD (existing): 10,900 gpm (17,600 AFY)  
ADD (buildout) w/10% conservation: 14,000 gpm (22,600 AFY)  
MDD (buildout) w/10% conservation: 21,300 gpm

*Note:* ADD (existing) is based on Table 3-5 of the 2016 Comprehensive Water Resources Report and is based on the average of the last 10 years.

### Supply:

Table 1 summarizes the assumed flows from the various supply sources.

The flow from State Water of 7000 gpm is based on 75% of the City and Casitas' combined allocation of 15,000 acre-feet per year, which is the maximum flow anticipated to be available from the State. Over the past 10 years, State Water supply has averaged approximately 50% of the allocated amount. If, hydraulically, the City's system can accommodate the higher percentage, then it would also be able to wheel the reduced flow to Casitas.

The system was modeled with and without direct potable reuse (DPR) as a future supply. There is an existing 18-inch transmission line in Victoria Ave, between Golf Course Well Field and Bailey Reservoir. This line limits the amount of flow that can be pumped from the Golf Course Wells and future Mound Well 3 to Bailey Reservoir to 4500 gpm. For purpose of this analysis, it was assumed that with DPR this bottleneck would be eliminated.

**Table 1**

Source Name	Pressure Zone Supplied	Supply Quantity (gpm)
Ventura River Intake Structure	210	0
Casitas Turnout #1	210	0
Casitas Turnout #2	210	0
Nye Well Field	210	0
Golf Course Well #5	330	2000
Golf Course Well #6	330	2000
Golf Course Well #7	330	2000
Victoria Well #2	330	1200
Mound Well #1	330	1200
Mound Well #2	330	2000
Mound Well #3	330	2000
Direct Potable Reuse	330	0/2500*
Casitas Turnout #1	400	0
Saticoy Well #2	430	500
Saticoy Well #3	430	2000
State Water	430	7000**

\*2500 gpm DPR flow is assumed to include removal of the existing flow limitations from the Golf Course and Mound Well fields. Without DPR, the combined flow from the three Golf Course Wells and future Mound Well 3 is assumed to be limited to 4,500 gpm.

\*\*7000 gpm is based on an assumed 75% allocation of State Water for the City of Ventura and for Casitas (75% of 15,000 AFY – Ventura: 7,500 AFY, 4,700 gpm; Casitas: 3,750 AFY, 2300 gpm)

*Hydraulic criteria:*

- Pipeline velocities – 10 fps maximum
- System pressures – 40 psi minimum
- Hall Canyon Reservoir – 5' minimum water level
- Bailey Reservoir – 5' minimum water level

## Summary of Results

Table 2 summarizes the results of the hydraulic analysis as well as comments on improvements that would be required to increase flows above those indicated.

**Table 2**

Scenario	Maximum Flow to Casitas (gpm)	Maximum Flow to Casitas (cfs)	Minimum HGL at Olive St/ Stanley Ave (feet)	Comments
ADD w/o DPR	2400	5.4	174	The 210-400 rezone area would need to be expanded to increase flows
ADD w/DPR	3200	7.1	174	The 210-400 rezone area would need to be expanded and the 24" interconnect pipeline would need to be increased in size to increase flows
MDD w/o DPR	0	0	N/A	Demand exceeds supply
MDD w/DPR	1500	3.3	174	Off-peak deliveries only. The 210-400 rezone area would need to be expanded and the 24" interconnect pipeline would need to be increased in size to increase flows

In summary, it is estimated that the City could provide 5 cfs to Casitas during Average Day Demands at buildout, without DPR, and up to 7 cfs with DPR. During Maximum Day Demands at buildout, without DPR, demands exceed supply so no flow would be available. With DPR, it is estimated that the City could supply 3 cfs to Casitas during Maximum Day Demands, but only during off-peak hours.

If more flow is desired, increasing the size of the proposed 24-inch interconnection pipelines to 30-inches would allow more water to be transferred through the City to Casitas.

In addition, as flows increase to Casitas, pressures in the 210' zone near the 400' zone boundary continue to decrease below 40 psi, resulting in the need to move customers in the 210' zone to the 400' zone (or reduced 400' zone). If the zone boundary is adjusted, the adequacy of pumping and storage capacity within the 400' zone should be verified.

Other adjustments in the system may also be required if additional flow is desired; however, since the initial results were within the flow range of 3 to 7 cfs identified by Casitas staff, a detailed analysis of all improvements needed to increase flows was not performed.

If you have any questions concerning the findings in this letter, need additional information, or would like to meet and discuss, please contact me at (805) 654-7848. We look forward to continuing to work with you on this project.

Sincerely,



Betsy Cooper, P.E.  
Senior Civil Engineer

cc: Neil Cole – Casitas Municipal Water District  
Loree Pryce, Ron Herbst, Adam Buglieski – Ventura Engineering Division  
Joe McDermott, Susan Rungren, Joe Marcinko, Nikhil Dhir – Ventura Water  
Kristine McCaffrey – Calleguas MWD  
Jim Grisham – United WCD  
Jeff Savard, Bill Yates – Kennedy Jenks Consultants

Comments on **DRAFT CASITAS MUNICIPAL WATER DISTRICT COMPREHENSIVE WATER RESOURCES PLAN (CWRP 2020)**, Submitted by Surfrider Foundation, 8/24/2020

Casitas Municipal Water District is developing a Comprehensive Water Resources Plan (CWRP) to provide information to guide future management of our water supply. The draft document currently recommends almost \$160 million in capital projects, most of which is dedicated to the pursuit of imported water from the State Water Project. The fiscal impact to the ratepayer is left for future work. However, although it is not highlighted in the document, **the CWRP clearly demonstrates the community’s ongoing response to changing conditions, and the very real capacity for sustaining our local water supply without the cost of imported water.**

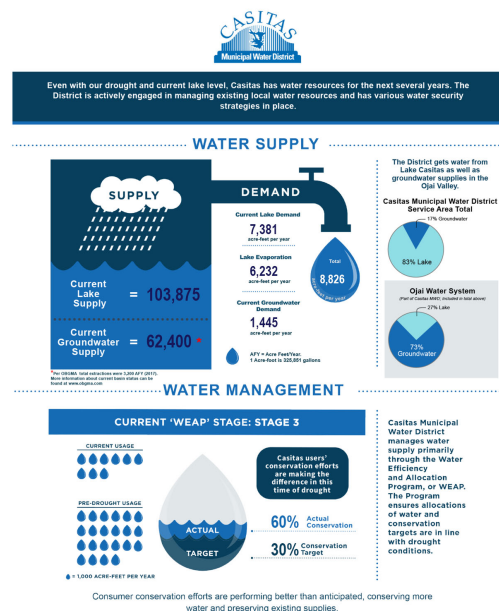
**Updated Models:**

The Draft CWRP document contains valuable information on water demand and supply for the largest water district in the Ojai Valley. The updated Lake Casitas Yield Model estimates that the **safe yield from Lake Casitas has been reduced by 15%** since the 2004 model. This is primarily a result of lake sedimentation, changes to the Robles Diversion, and the impacts of a changing climate. **SAFE YIELD is defined as 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.**

However, the good news is that the **actual demand for water has declined** to match the changing conditions. Reduced demand is to some degree a result of the policies developed in the **Water Efficiency and Allocation Program (WEAP, 2019)**, which reduce customer allocations according to the lake storage. Incorporating this demand reduction into the Lake Casitas Yield Model results in the more realistic concept of “Safe Demand.”

**Safe Demand is 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.** - CWMP

The updated Lake Casitas Yield Model now accounts for the demonstrated reductions in water consumption during drought periods. When accounting for climate change, the projected “Safe Demand” of 10,700 AFY on Lake Casitas is approximately half of the assumed Safe Yield, yet this is well within the range of current water use. In fact, according to the CMWD website, current lake demand is 7,381 AFY, reflecting more than 30% conservation of Safe Demand as recommended by the WEAP during stage 3 drought. Therefore, **according to the updated modeling presented in the draft CWMP, the community is well on the path to sustainable use of Lake Casitas.**



**Risk Assessment:**

Rather than build upon this favorable conservation trend, the CWRP inflates the projected demand on Lake Casitas in a risk assessment designed to demonstrate the need for significant investment in “new” water supplies.

The report acknowledges that;

*Casitas water demand in the past five years has been considerably lower than 17,500 AFY, reflecting the willingness of Casitas customers to modify water use practices in response to the drought.*

But for the purpose of analyzing future scenarios;

*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.*

It is important to **note that current water use is estimated at 7,381 AFY** (CMWD website, Aug 2020.) This is more than 3,000 AFY (30%) below the Safe Demand of 10,700 AFY, or a full 60% reduction from the 2016 UWMP projected demand.

The CWRP presents a Risk Analysis based upon a seemingly arbitrary demand of **13,000 AFY, with the assumption that no emergency measures would be taken.** This is approximately **2,500 AF greater than Safe Demand.** Not surprisingly, this analysis resulted in a long-term supply deficit, for which;

*Modeling showed a supplemental supply of 2,500 AFY would adequately mitigate that risk if achieved within one to five years.*

The report goes on to recommend a **suite of projects totaling over \$150M** to secure the “missing” 2,500 AFY. The majority of this money is required for large infrastructure proposals to connect to the State Water Project. (Note that 2,500 AFY is less than half of annual evaporation losses from Lake Casitas.)

The table below provides a summary of the various Supply and Demand estimates:

	Acre-feet/Yr (AFY)			
	160%	28,000	Safe Yield (BuRec 1954)	263%
	118%	20,540	20 yr Safe Yield (2004)	193%
	108%	18,820	projected demand (2004)	177%
% of Safe Yield (UWMP 2016)	100%	17,460	20 yr Safe Yield (2020)	164%
	92%	16,000	2040 projected demand (UWMP, 2016)	150%
	90%	15,750	10% “permanent savings” from current conservation	148%
	74%	13,000	Risk Analysis Demand	122%
	61%	10,660	Safe Demand 95% reliable from Lake Casitas (CRWP 2020)	100%
	42%	7,381	Current Lake Demand (CMWD website, Aug 2020)	69%



## Community Resilience:

Throughout the Ventura River watershed, the community has exceeded recommended reductions in water allocations. This includes customers of the other water districts who all share in the limited local supply. This dramatic reduction in water use is largely in response to the recent catastrophes, including the Thomas Fire and severe drought. The community has clearly demonstrated the ability for adaptation in a time of need. And as the CWRP recognizes, some of these changes have resulted in a permanent demand reduction through lawn replacement and other water saving measures.

CMWD recognizes the importance of working with the community it serves:

*“The main mechanism to respond to water supply conditions is to rely on informed customers working in partnership with Casitas to limit water use to no more than the assigned water allocation and support the water use limitations with appropriate conservation penalties for water use in excess of the assigned, or adjusted, allocation.” - WEAP 2019*

Yet at the same time, CMDW appears hesitant to fully develop this community partnership:

*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.” - CRWP 2020*

**In the meantime, the community has successfully accomplished the sustainable “Safe Demand” as determined by the updated Lake Casitas Yield Model by incorporating WEAP demand reductions in response to lake levels.**

## Demand Management:

Demand management is always more cost effective than infrastructure dependent new supply projects. And the Ventura River community is just getting started. Numerous local projects were identified in the **Ventura River Watershed Plan**, and several initiatives are currently underway to plan and implement decentralized solutions aimed at improving conditions in the watershed. Indeed, the watershed plan (which CMWD participated in) developed the **consensus objective of maintaining independence from imported water** based upon the numerous emerging initiatives identified in the report.

*“Sufficient local water supplies to allow continued independence from imported water and reliably support ecosystem and human (including urban and agricultural) needs in the watershed now and in the future, through wise water management. “ – Ventura River Watershed Management Plan 2015*

However, the CWRP relegates Demand Management to the status of “conditional strategy,” only pursuing such local options if plans for the State Water Project connection do not come to fruition.

*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.**

**Cost Benefit Analysis:**

As recommended in the CRWP, **the potential savings and cost effectiveness of various conservation measures** needs to be carefully examined and compared with the more expensive infrastructure projects. The community deserves a fair and unbiased accounting because it is they who will bear the cost of these decisions.

In 2011, a group from the Bren School of Environmental Science and Management at UCSB developed a watershed model and investigated the cost effectiveness of a suite of infrastructure and consumer-based projects. Aside from the effectiveness of “consumer-based” programs such as re-landscaping and greywater, their report, **Sustainable Water Use in the Ventura River Watershed**, determined that:

*Raising water rates to reflect the true value of water within the Ventura River Watershed will help to avert even higher rate hikes in the future, which will occur if water purveyors are forced to purchase costly State Water to meet consumer demand. – Bren Study 2011*

The Bren report concludes with;

*Our final recommendations to watershed planners in the Ventura River Watershed are:*

- (1) implement programs encouraging the increased installation of ocean friendly gardens and greywater systems in single-family homes,*
- (2) construct decentralized infiltration basins throughout the watershed, and*
- (3) increase CMWD and Meiners Oaks water rates to the state average.*

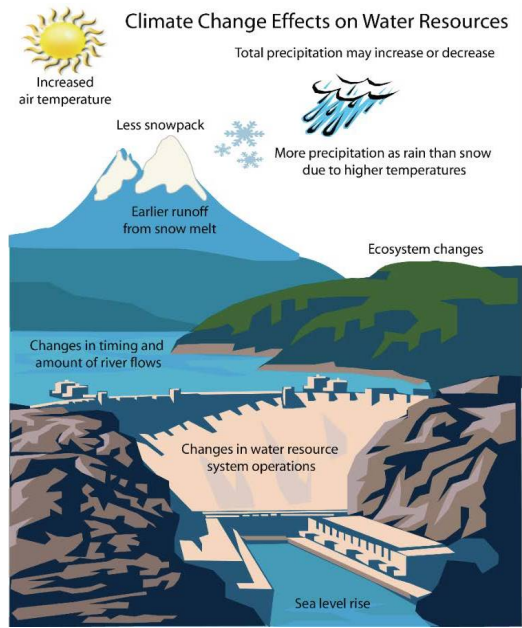
*Implementation of these strategies, coupled with responsible groundwater pumping, has the potential to increase water availability for human needs, improve ecosystem health, and improve water quality even in the face of climate change, land use change, and population growth.*

**Bren school project: Sustainable Water for the Ventura River Watershed**

Alternatives developed:	
<b>Infrastructure Based Water Management Strategies</b>	<b>Infiltration Basins</b>
	<b>Pervious Streets</b>
	<b>Scalping Plant</b>
	<b>San Antonio Spreading Grounds</b>
<b>Consumer Based Water Management Strategies</b>	<b>Ocean Friendly Gardens</b>
	<b>Greywater</b>
	<b>Rate Increases to State Average</b>
	<b>CMWD 33% Rate Increase</b>

## Pitfalls of the State Water Project:

Contrary to the advertised benefits, connecting to State Water potentially threatens to undermine the sustainability of the community that relies upon the Ventura River watershed. Full disclosure of the pitfalls of this strategy is required before the community becomes committed to higher rates for “paper water” that we may never receive.



Research continues to indicate that rising temperatures will result in changes in precipitation patterns, a significant decline in the Sierra snowpack, and early snow melt such that “For the vast majority of potential future climate conditions, the *State Water Project* will have substantially more system shortages than what we’ve seen historically,” according to [Dr. Geeta Persad](#), a senior climate scientist with the Climate and Energy Program at the [Union of Concerned Scientists](#).

The [California Water Impact network \(C-WIN\)](#), a Santa Barbara based organization, published a 2017 report that demonstrates the cost impacts and consequences for State Water Project (SWP) participation to date, utilizing the experience of Santa Barbara County Coastal Aqueduct Project as an example of the statewide problem that will be encountered if the Twin Tunnels comes to fruition. The 'Santa Barbara Report' exposes the underlying problem of

"paper water;" C-WIN spent three years gathering ... information through Public Records Act requests and Freedom of Information Act requests and found that consumptive **water rights claims are at least 5 1/2 times more than available supply**.

In a legal challenge against the City of Ventura’s State Water Interconnect Project, C-WIN states that:

***The Interconnection Project is a major step backward from the growing recognition that local dependence on state water is a problem, not a solution, for water reliability and the environment. ...State water is so oversubscribed that the courts have identified more than half of its allocation as unreliable “paper water”.***

***The cost of state water will cripple Ventura’s ability to explore and develop sustainable regional solutions. ...Once a district is dependent upon the state water system, they’re responsible for the costs of the maintenance and new infrastructure of the entire SWP conveyance system. Ratepayers have no direct input and no ability to opt out of these maintenance and infrastructural decisions. The stated Ventura pipeline project estimate of \$50 million does not include the exorbitant additional costs and risks of state water.***

***The EIR for the Interconnection Project evaded assessing the major impacts of growth encouraged by the false perception of state water availability. When the SWP predictably fails to ensure reliable deliveries, demands on other depleted sources such as groundwater, the Ventura River and Lake Casitas will only increase when it is too late to plan for integrated improvements in local water resilience.***

These and other concerns voiced by the community regarding the long-term cost vs actual benefits indicate that State Water should be relegated to a “Conditional Strategy,” only coming into play if the local watershed-based strategy is not effective.

### **Conclusion and Recommendations:**

The Draft CWRP provides an updated look at water supply and demand within the Casitas Municipal Water District service area. The new Safe Demand Policy provides a realistic assessment of the effectiveness of the WEAP action plan and community response to drought. This new perspective sheds light on the fact that the District is already achieving the newly prescribed Safe Demand which gives a 95% assurance that Lake Casitas will not drop below 20,000 AF of storage.

However, the report does not adequately acknowledge the need for greater coordination amongst the many agencies and individuals within the Ventura River Watershed. Groundwater provides a large proportion of the local water supply with Lake Casitas as backup, so integrated watershed management should be a priority. The community has shown a remarkable resiliency following the recent drought and fires, and the capacity for increased local water use efficiency should not be underestimated.

Based on the information provided in the Draft CWRP, CMWD has an opportunity to plan for local sustainability rather than develop the costly infrastructure for imported water. As recommended in the report, a full cost/benefit (\$/AFY) analysis on a full range of alternatives should be conducted and management options should be prioritized by cost efficiency. The next step should be to develop a comprehensive water use efficiency and conservation policy and program to include:

1. Integrated water budget for the entire Ventura River Watershed
2. Coordination with partner agencies and the community
3. Updated WEAP water allocations to comply with Sustainable Demand
4. Increased water rates to a level that supports Sustainable Demand
5. Support for watershed management programs to implement water efficiency and reuse, conservation, and groundwater infiltration and sustainable management

### **References:**

[Ventura River Watershed Management Plan](#), Walter, Ventura River Watershed Council, March 5, 2015.

[Sustainable Water Use in The Ventura River Watershed](#), Gardner et al, Bren School of Environmental Science and Management, University of California Santa Barbara, 2013

[Climate change and the future of California’s water, Summary of presentation by Dr. Geeta Persad](#) , Mavens Notebook, Nov 7, 2019

[The Unaffordable and Destructive Twin Tunnels: Why the Santa Barbara Experience Matters](#), The California Water Impact Network, November 2017

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**CASITAS MUNICIPAL WATER DISTRICT  
MEMORANDUM**

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**TO:** WATER RESOURCES COMMITTEE

**FROM:** MICHAEL FLOOD, GENERAL MANAGER

**SUBJECT:** REVIEW AND DISCUSSION OF DRAFT COMPREHENSIVE WATER RESOURCES PLAN FALL/WINTER REVIEW SCHEDULE

**DATE:** 09/15/20

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**RECOMMENDATION:**

It is recommended the Water Resources Committee review and discuss a proposed schedule for a revised draft Comprehensive Water Resources Plan.

**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). An overview of the draft plan was presented at a Board Workshop held on February 8, 2020, and the draft report was released for public review from June 26, 2020 through August 24, 2020. In response to comments received, staff is recommending a revised draft plan be prepared.

A proposed meeting schedule is provided on the next page for review and discussion.

A few items to highlight related to the proposed schedule:

- Fall 2020 is proposed to focus on responses to comments related to imported water options, and receive direction from the Board regarding significant changes to the plan.
- In December of 2020, new Casitas Board Members will be joining the Board of Directors. Therefore, the schedule includes a proposed workshop to review and also acquaint the new Board Members with the plan.
- The revised draft plan is proposed to be complete in Spring 2020, and the need for releasing a revised draft plan for an extended public review period can be determined at that time.

<b>Casitas Municipal Water District Comprehensive Water Resources Plan Tentative Meeting Schedule</b>		
<b>Date</b>	<b>Meeting</b>	<b>Goal</b>
Sep 15	Water Resources Committee	Review summary of comments received on the June 2020 Draft CWRP
Sep 23	Board Meeting	Review summary of comments received on the June 2020 Draft CWRP
Oct 20	Water Resources Committee	Discuss Responses to Significant Comments (Imported Water Options)
Nov 17	Water Resources Committee	Discuss Recommendations Regarding Significant Changes to Plan
Dec 9	Board Meeting	Make Recommendation to Board Regarding Significant Changes to Plan; Receive direction to proceed with revisions
Jan (TBD)	Board Meeting	Orientation for New Board Members regarding Contents of CWRP
Feb 16	Water Resources Committee	Review Revised CWRP Document
Mar 10	Board Meeting	Receive direction to release revised document for public review

# MEMORANDUM

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TO: Water Resources Committee  
From: Michael L. Flood, General Manager  
RE: **Discussion of Casitas MWD's Water Efficiency and Allocation Program (WEAP)**  
Date: September 10, 2020

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## RECOMMENDATION:

The Water Resources Committee continue consideration of the WEAP.

## BACKGROUND:

The District's Water Efficiency and Allocation Program was originally developed in response to a combination of historically high water demands and local drought conditions in the late 1980s.

The WEAP has been revised several times including most recently, April of 2019.

Casitas MWD's Comprehensive Water Resources Plan (CWRP) was released to the public in draft form in June 2020.

During the discussion of this item at the August 2020 Water Resources Committee Meeting, the Committee asked that this item be added to future Water Resources Committee agendas for discussion.

## DISCUSSION:

The following questions were presented during the August 2020 Water Resources Committee Meeting:

1. What level of demands should the WEAP attempt to manage to?
2. What changes will be necessary to current allocations, if any?
3. What changes should be made to the current staged demand levels of the WEAP and should they take into account the safe yield or safe demand?
4. Is there a need to make changes to the WEAP prior to the completion of draft CWRP?

5. What changes should be made to the WEAP prior to completion of projects identified in the draft CWRP?
6. What part does the current water supply in Lake Casitas take in the urgency of changes to the WEAP?
7. Can an 'interim WEAP' be developed that takes into account some of the water supply issues identified in the draft WEAP?
8. What role will CEQA play in a new version of the WEAP?
9. What administrative impacts to the Board and staff might occur due to changes to the WEAP?
10. What level of public outreach will be necessary to communicate on a revised WEAP?

A summary of comments on the WEAP during the meeting is as follows:

- *A revised WEAP should be ready at the same time as the final draft of the Comprehensive Water Resources Plan.*
- *An additional drought Stage to the WEAP should be considered. A Stage 6 at 20,000 Acre-Feet.*
- *Stage 1 should not be voluntary. Conservation is key.*
- *Stage 1 should possibly be set at 80%.*
- *Allocations should be considered.*
- *Need to document planning of outreach, communicate and increase conservation.*
- *Lake evaporation calculations need review.*
- *13,000 AF/year could bring Lake Casitas to 20,000 Acre-Feet in six years*
- *There is some urgency in making revisions to the WEAP.*

For this meeting, the Committee should consider the following in light of these comments:

1. Proposed revised lake levels for the Water Shortage Condition (Table 6)
2. Policy recommendation specifics for each Water Shortage Condition. (Table 6)
3. Policy recommendation specifics for a proposed Stage 6 at lake levels below 20,000 Acre-Feet.



# **WATER EFFICIENCY AND ALLOCATION PROGRAM**

## **Casitas Municipal Water District**

**April 24, 2019**

### **SECTION 1: INTRODUCTION**

In 1992 the Casitas Municipal Water District (Casitas) adopted a series of ordinances, resolutions, and a Water Efficiency and Allocation Program (WEAP) in response to the increasing water demands and declining water storage in Lake Casitas experienced during the 1987-1991 drought period. The collective work in 1992 set the starting point for a system of water allocation assignments and demand response criteria that are based on the level of water storage in Lake Casitas. Since 1992, there has been a significant outreach by Casitas to raise the public's awareness on the importance to conserve local water supplies, changes in the water supply and demand, regulatory compliance directives pursuant to the Endangered Species Act (ESA), and system outage events that temporarily activated Casitas' emergency response plan. All of these factors, including the responses and experiences of the current drought, are considered in the update of the Water Efficiency and Allocation Program.

#### **1.1 Purpose and Principles of the Plan.**

The purpose of this update of the WEAP is to provide guidance on water supply and demand strategies that (1) conserve the water supply of the Ventura River Project, Lake Casitas and other water resources that are in the direct control of Casitas, for the greatest public benefit, (2) mitigate the effects of a water shortage on public health and safety and economic activity, (3) allocate water use so that a reliable and sustainable supply of water will be available for the most essential purposes under all water storage conditions of Lake Casitas, and (4) adapt to changing conditions of water supply demand and constraints.

The WEAP describes the water demand reduction strategies and measures to address future water shortage conditions, promote water conservation and the efficient use of water, and the application of a conservation penalty to customers who waste water.

#### **1.2 Relationship between this Document, Water Codes, and Other Plans.**

This WEAP shall be guided by State regulations and planning requirements as provided by the California Water Code that provides Casitas with broad powers to implement and enforce regulations and restrictions for managing a water shortage (§71640-71644), to implement water conservation programs (§375--378), to implement allocation-based conservation water pricing (§370-374), and to declare a water shortage emergency (§350-359).

As required by Water Code Section 10632, this WEAP shall be integrated as a part of the Casitas Urban Water Management Plan (UWMP), as amended or updated every five years. The Casitas 2010 UWMP has been accepted and approved by the State Department of Water Resources. The UWMP provides an in-depth description of the Casitas water system, water resources and demands, and water supply reliability. For the purposes of integration and lessening the conflicts due to the replication of information, the WEAP shall rely on the updates of the Water Code Sections provided in the attached Appendices and UWMP, as amended or updated every five years.

## **SECTION 2: WATER SUPPLY AND DEMAND CONDITIONS**

### **2.1 Water Supply.**

The water supply for Casitas is derived from (1) the watersheds that flow directly and indirectly by diversion from the Ventura River of water during wet years to carryover storage in Lake Casitas for use during dry years, and (2) groundwater to the extent that Casitas has its own groundwater supply. The watersheds of the Ventura River region are subject to an extreme variation in the weather patterns, ranging from multiple years of drought to sometimes significant wet year events that are associated with El Nino conditions that add to the uncertainty of available local water supplies.

#### **2.1.1 Surface Water.**

The primary goal of Casitas is to provide a safe and reliable water supply. Due to the uncertainty of weather conditions that provide water to the local watersheds, a safe yield modeling has been implemented to provide guidance on water supply availability. The safe yield modeling criteria for the Casitas surface water supply provides a theoretical rate of decline in available water supply during a critical drought period, that if given a specific annual extraction rate from storage, that would reduce Lake Casitas to an exhausted minimum pool.

The sizing of Lake Casitas storage volume and the determination of the annual safe yield of water from Lake Casitas was originally determined by the Bureau of Reclamation in 1954, based on the hydrologic modeling for the critical drought period that started in 1919 and continued through 1936. The storage volume of the off stream reservoir, Lake Casitas, was set to be 254,000 acre-feet and the annual safe yield was determined to be 28,000 acre-feet. In 2004, Casitas recalculated the annual safe yield of Lake Casitas for the drought period of 1944 to 1965 based on newer knowledge of the diminished value of Matilija Reservoir and its impending removal, and the change in Robles Diversion operations resulting from the 2003 Biological Opinion established by the National Marine Fisheries Service pursuant to the federal Endangered Species Act. The recalculated annual safe yield of Lake Casitas was determined to be 20,840 acre-feet per year.

The safe yield trend for the 1944-1965 critical drought period is illustrated in Figure 1, with the assumption that the critical drought period begins with a full reservoir. The modeling applies the hydrology, river diversions operations, and lake evaporation for the period (1944-1965) that contribute to the Lake Casitas storage. The safe yield is a constant extraction rate from lake storage that contribute to the decline in Lake Casitas storage during the critical drought period, taking lake storage from full capacity to a minimum pool condition. Based on the safe yield model with a continuous and steady extraction rate, or safe yield, of water at 20,840 acre-feet each year, Lake Casitas would decline from full storage to minimum pool in approximately twenty years.

Also included in Figure 1 is the Recovery Period of Lake Casitas, which illustrates the actual filling rate experienced at Lake Casitas during the 1959 to 1978 period. The recovery of the Lake Casitas volume during the Recovery Period that is illustrated in Figure 1 cannot be assumed as the normal or common sequence given the variability of the rainfall amounts in the Ventura River watershed, constraints, and other influences to Lake Casitas inflow and storage. Casitas may experience elevated water supply risks that could be associated with a delay in the start of the recovery period while at minimum pool in Lake Casitas, or there could be a condition where the critical drought period begins with a partially recovered storage level in Lake Casitas.

The availability of the Lake Casitas supply can be influenced or impacted by long-term droughts, changes to lake water quality, and/or changes to diversion and storage conditions. The safe yield of Lake Casitas and annual water availability may need to be reconsidered in the future as a result of changing conditions or new information that differs from the present conditions.

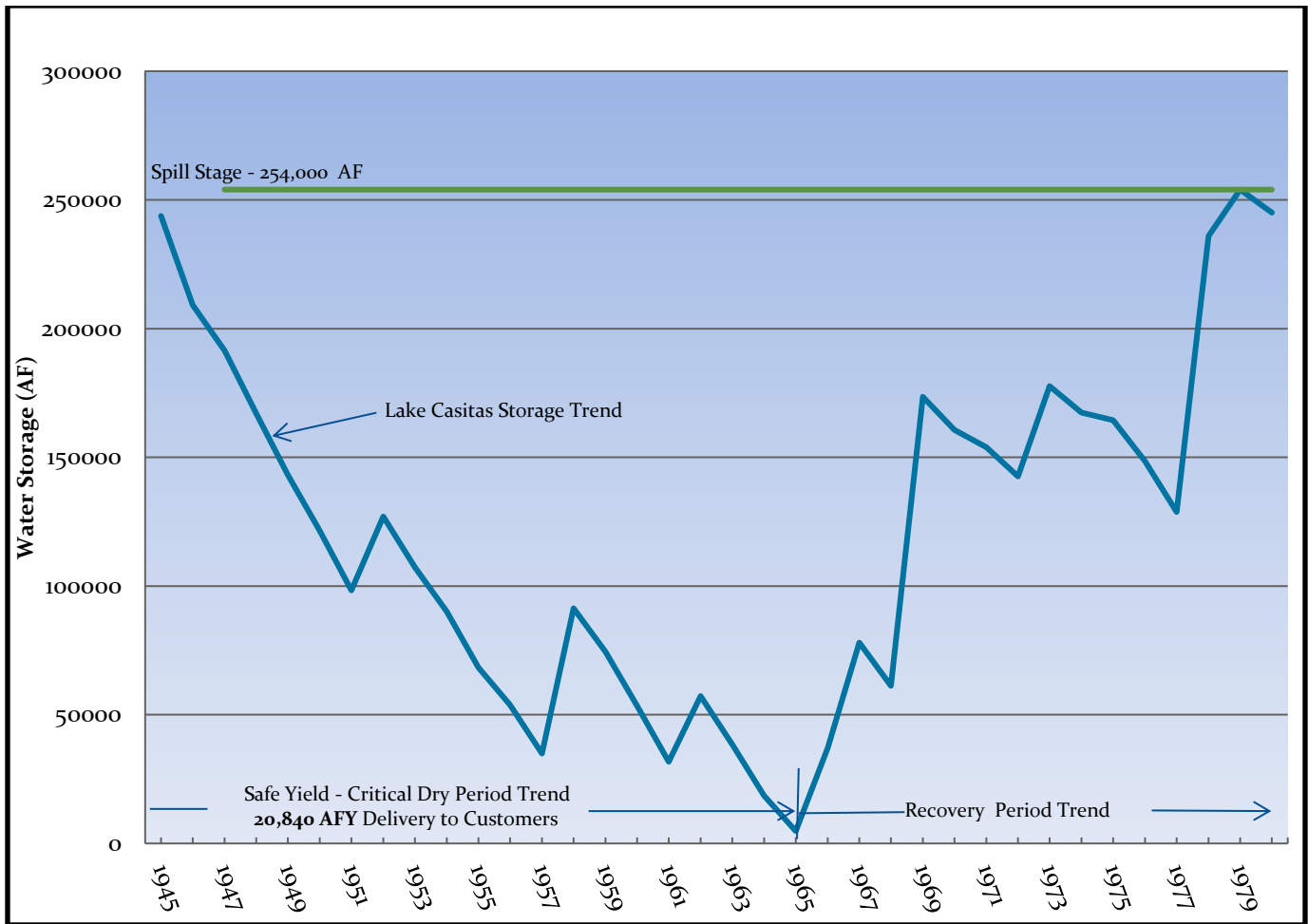


Figure 1 – Lake Casitas Safe Yield Storage and Recovery Period Trends

### 2.1.2 Groundwater.

Within Casitas’ district boundaries, there are several local groundwater basins that are primary and critical sources of water supply for other local water purveyors (public, mutual and private), individual residential use and agriculture. During extended periods of drought with several years of less than average rainfall (20-inches) the local groundwater basins can become depleted due to pumping, natural drainage and evapotranspiration. The Lake Casitas surface water supply serves as a back-up water supply to the groundwater supply during times of extended drought.

Table 1 – Groundwater Basins of the Ventura River Watershed

Groundwater Basin	Acres	Max. Capacity (AF)	Approx. Safe Yield (AF/Yr.)
Upper Ojai	2,840	5,681	Unavailable
Ojai Valley	6,471	85,000	5,026

Upper Ventura River	9,360	35,118	9,482
Lower Ventura River	6,090	8,743	2,130

Source: Ventura River Watershed Council

The groundwater basins have demonstrated an ability to recharge rapidly in any one year with sufficient rainfall events, upon which time groundwater becomes the preferred source for those with well pumping access to the groundwater basins.

## 2.2 Water Demand.

The Casitas Board of Directors has established that the average long-term demand upon Lake Casitas must not exceed the annual safe yield of Lake Casitas supply. As a result of the 1987-1991, multi-year drought that resulted in water demands exceeding the annual safe yield, Casitas implemented specific actions in 1992 to limit water demands. The actions included the declaration of a voluntary twenty percent reduction in water demand, the assignment of water allocations based on 80 percent of FY1989-90 water usage that reflects a reduction in demand that comports more closely to safe yield of the Lake Casitas Supply, the implementation of water conservation measures to assist water users in adapting to less water consumption, and the limiting of new water service connections and expansions of agricultural plantings. Table 2 provides a comparison of classification water use, from prior to the action being taken by Casitas, to the level of water use during the recent drought. The FY 1989-90 water demand is recognized as being a high extreme water demand year at the end of the four year drought period.

Table 2 – Water Use Comparison by Customer Classification

Classification	No. of Service Connections		Water Demand – Lake Casitas (AF)		
	FY 1989-90	FY 2013-14	FY 1989-90	FY 2012-13	FY 2013-14
Residential	2424	2700	1603	1678	1738
Business	93	108	821	663	724
Industrial	12	9	155	23	22
Other	33	41	530	244	255
Resale Gravity	8	8	7724	4642	5614
Resale Pumped	15	15	1027	551	1182
Irrigation	253	251	11706	7978	9385
Interdepartmental	21	21	343	120	119
Temporary			11	13	55
Total	2,859	3,153	23,909	15,899	19,094

The local groundwater resources of the Ojai Valley and Ventura River provide on average 7,385 acre-feet per year (Daniel B. Stephens, 2010) to municipal, residential and agricultural pumpers. During multiple dry years, the groundwater basins become depleted and groundwater demands are met by supplementing groundwater supply from the Lake Casitas supply. In most cases, groundwater pumpers have a water service connection to Casitas as a backup supply of water. During any year or multiple dry year sequence of less than average rainfall, Casitas can anticipate that a portion of the 7,385 acre-feet of groundwater demand may be supplemented by the Lake Casitas supply. When groundwater basins are restored by rainfall events, groundwater pumpers convert back to the less expensive groundwater supply. The demand shifts are illustrated in Table 2 and Figure 2 for various classifications of water consumers. The FY 1989-90 and FY 2013-14 water demands occurred at the end of a three-year drought sequence.

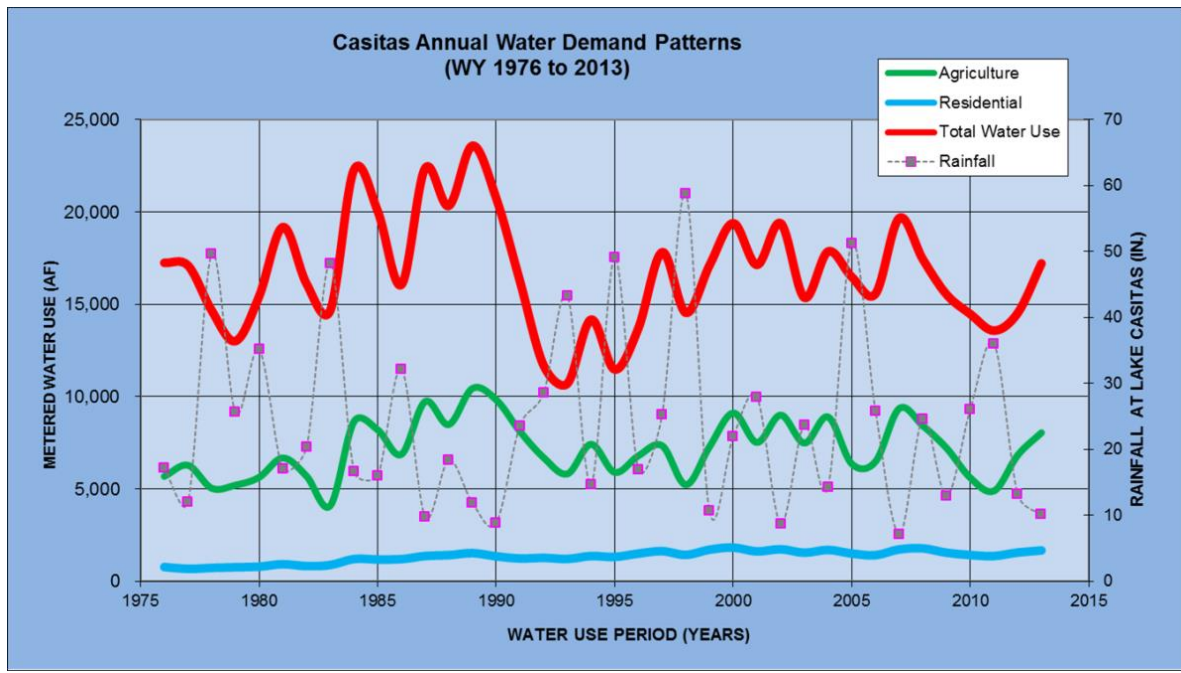


Figure 2 – Casitas Annual Demand Patterns

### 2.3 Priorities of Water Use.

Casitas recognizes the following priorities for potable water:

- 1) Public safety, health and sanitation;
- 2) Economic sustainability; and
- 3) Quality of life for the district’s customers.

Within each of the customer classifications there may be water uses that are considered non-essential to public health and sanitation and may have no significant impact to the economic productivity of the western Ventura County. The non-essential water uses may be asked at any time to be curtailed during times of extreme water shortages.

Casitas recognizes that the agricultural crops in western Ventura County are primarily tree orchards that require a substantial period of time before becoming productive, and if fallowed will experience several years of non-production. To maintain water supplies into the future that will meet the local water demands, Casitas and the public may be faced with additional decisions on water use reductions that may impact the agricultural classification.

## **SECTION 3: WATER SHORTAGE EMERGENCY ACTIONS**

### **3.1 Urban Water Contingency Analysis.**

Water Code 10632 requires that the agency’s Urban Water Management Plan provide an urban water shortage contingency analysis that includes specific elements that are within the authority of the urban water supplier. The required water shortage analysis is performed in the Casitas 2010 Urban Water Management Plan, and is further supported by this WEAP and the Casitas Emergency Response Plan, as amended.

### **3.2 Water Shortage Emergencies.**

Water Code §350-359 provides that the governing body of a distributor of a public water supply may declare a water shortage emergency condition to prevail within the service area whenever it finds and determines that the ordinary demands cannot be satisfied without depleting water supplies to the extent that there would be insufficient water for human consumption. When deemed as a water shortage emergency in accordance with Water Code 350, Casitas shall follow the procedures provided by the Water Code in the implementation of the water shortage declaration and actions.

The State of California, through its authority under the Water Code and Government Code, may declare a water shortage emergency and require curtailment of water use that is above and beyond the requirements of the Casitas WEAP. Customers of Casitas must respond and comply with the orders of the State in a timely manner. A failure to comply may cause the State to impose fines and penalties that will be redistributed to the customers of Casitas in a manner determined by the Casitas Board of Directors.

### **3.3 Water Shortage Contingency Plan.**

The District has prepared a Water Shortage Contingency Plan (Resolution 92-11), and further defined in the Casitas Urban Water Management Plan, that addresses emergencies under short-term, catastrophic events, and long-term water shortages that may occur as a result of a prolonged drought.

A water shortage emergency may be determined to exist in the event of a short-term interruption of water supply or as a result of long-term diminishment of the Lake Casitas water supply. A short-term interruption of water supply can be the result of earthquakes, regional power outages, landslides, or other major and minor events that impact Casitas water facilities or supply. These events are more often a short term interruption of water supplies until the water system can be restored to the customers. A long-term or district-wide condition may be the result of drought conditions or a reduction in local water supplies that will require long-term water supply-demand management.

The Casitas response to a short-term interruption of water supply may cause the implementation of the Casitas Emergency Action Plan that is structured under the State's Standardized Emergency Management System (SEMS), in coordination with federal, state and county emergency response planning that provides the framework for an organized response to catastrophic events.

### **3.4 Water Waste Prohibitions on Certain Uses.**

Water Code § 71640 provides the District the authority to restrict the use of district water during any emergency caused by drought, or other threatened or existing water shortage, and the district may prohibit the wastage of district water or the use of district water during such periods for any purpose other than household uses or such other restricted uses as the district determines to be necessary. The District may also prohibit use of district water during such periods for specific uses which it finds to be nonessential.

## **SECTION 4: STRATEGY FOR MANAGED WATER SUPPLY AND DEMAND**

### **4.1 Strategy Principles.**

The communities and rural agricultural areas of western Ventura County recognize that there is a reliance on limited local groundwater and surface water supply to serve all of the beneficial uses within the District, and there is a local responsibility required to sustain those supplies during

extended drought periods. The continuous implementation of water conservation education and measures (Best Management Practices) has had a significant influence on the beneficial use and sustainability of local water supplies. Ongoing water conservation efforts can ease the impact on normal activities during drought periods, but may not completely eliminate the need for reductions in water use during periods when Lake Casitas water supplies are severely impacted by extended drought. The main mechanism to respond to water supply conditions is to rely on informed customers working in partnership with Casitas to limit water use to no more than the assigned water allocation and support the water use limitations with appropriate conservation penalties for water use in excess of the assigned, or adjusted, allocation.

To address the water shortage risk that may occur during an extended drought, the Casitas Board established in the Casitas Urban Water Management Plan of 1995 a series of five storage levels of Lake Casitas at which the Board could take actions to restrict the annual water extractions from Lake Casitas. The safe yield trend and the five stages of restrictive actions are illustrated in Figure 3.

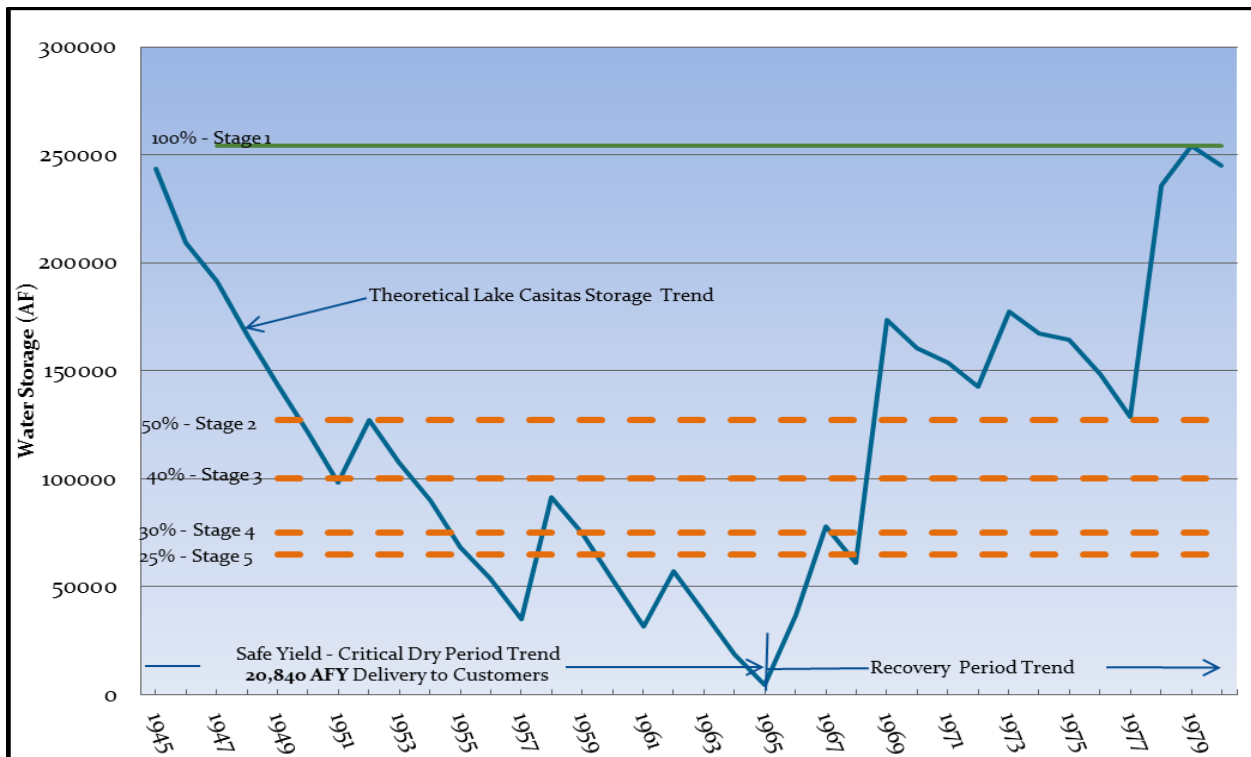


Figure 3 – Lake Casitas Safe Yield Storage Trend and Stages for Demand Reduction

#### 4.2 Water Allocation Principles.

Each and every water service provided by Casitas is metered and a basic water use allocation is established for each customer account that provides a reasonable amount of water for the customer’s needs and property characteristics (WC § 372). The following principles are to be followed for the Casitas water allocations:

- 1) Each Casitas water service shall be assigned either a monthly water allocation in the terms of Units or an annual water allocation in terms of Units and Acre-feet.
- 2) Allocation shall not mean an entitlement or imply water rights in favor of the customer.

- 3) The assignment of allocations shall be based on reasonable and necessary water use, the application of water conservation practices and standards, and other relevant factors associated with water use during Stage 1 conditions at Lake Casitas.
- 4) The Casitas Board of Directors reserve the right to make individual allocation assignments and to change water allocations at any time within each classification based on the changes to the availability of water stored in Lake Casitas, changes in water use that appears to compromise the reliability of the Lake Casitas water supply, and changes in water conservation practices and standards.
- 5) Water allocations provided by Casitas are assigned to property or water purveyors and are not transferrable from one property or water purveyor to another.
- 6) Casitas' water allocations shall not be sold, exported, bartered or traded by or between Casitas' customers.
- 7) Casitas water allocated shall not be transported from the property or by any agency served to any other property or agency without prior written agreement with Casitas.

#### **4.3 Allocation Assignments to Water Service Classifications.**

Casitas has established the definitions of water customer classifications as provided by the Casitas Rates and Regulations for Water Service and has made specific allocation assignments to each and every water account by either (1) written agreement, or (2) the application of historical water use data, or (3) the application of documented water use standards. Where deemed necessary by Casitas, Casitas may perform site specific water use audits and survey to determine the appropriate level of allocation to be assigned to any one service connection or customer. Water allocations may change by action of the Casitas Board of Directors based on the Lake Casitas storage level or trend, water use trends, and the performance by customer classification in meeting water consumption reduction goals.

The following subsections describe the method used to assign the water allocation for each classification of water service at **Stage 1** condition:

##### **Business**

- 1) Water allocation shall be specified as an **annual** allocation based on a fiscal year (July 1<sup>st</sup> to June 30<sup>th</sup>).
- 2) Allocation assigned by recorded agreement; or
- 3) Where not defined by recorded agreement, the lesser of the historical water consumption recorded for either the 80% of the 1989-90 water use or the Fiscal Year 2012-13 water use.

##### **Fire**

There is no water allocation for the Fire classification. This water use is for emergency only, and not a part of a continuing annual water use.

##### **Industrial**

- 1) Water allocation shall be specified as an **annual** allocation based on a fiscal year (July 1<sup>st</sup> to June 30<sup>th</sup>).
- 2) Allocation assigned by recorded agreement; or
- 3) Where not defined by recorded agreement, the lesser of historical water consumption recorded for either the 80% of the 1989-90 water use or the Fiscal Year 2012-13 water use.



### Interdepartmental

- 1) Water allocation shall be specified as an annual allocation based on a fiscal year (July 1<sup>st</sup> to June 30<sup>th</sup>).
- 2) The **annual** allocations for individual Interdepartmental classification services shall be based on the Fiscal Year 2012-13 water use.

### Irrigation (Commercial Agriculture)

- 1) Water allocation shall be specified as an **annual** allocation based on a fiscal year (July 1<sup>st</sup> to June 30<sup>th</sup>).
- 2) Qualifying acreage for each Irrigation account shall be limited to acreage that can be identified as under irrigation prior to March 1, 1992. There will be no allocation for irrigation acreage that has been expanded after March 1, 1992, except as otherwise approved in written and recorded agreement between Casitas and the property owner. Casitas' records and mapping will be the standard for the identification of lands in irrigation prior to March 1, 1992.
- 3) Allocation assignments to lands served by multiple meter services shall consider the proportion of the allocation that each meter is intended to serve. The aggregation of meter readings and allocations from multiple meters shall not be allowed except under the terms and conditions of an approved addendum to the Application for Water Service to provide an aggregation variance. The customer may apply for the aggregation of allocations and water volume for accounts serving contiguous parcels under a single ownership, subject to the conditions of the Casitas addendum to the Application for Water Service. The aggregation variance must be approved and on file for the current year during which the variance is applicable. The issuance of the aggregation variance is subject to the discretion of the General Manager.
- 4) The Stage 1 water allocation assigned to each Irrigation water account is the greater volume of either (1) the water use recorded at each meter service during fiscal year 2012-13 or (2) eighty (80) percent of recorded water volume metered to the account in fiscal year 1989-90, neither of which shall exceed a water volume of 3 acre-feet per acre applied to the qualifying acreage.
- 5) The residential water use for Agricultural/Domestic classification that is directly associated with the Irrigation shall be considered as Irrigation for purpose of allocation assignments and meeting the demand reduction requirements for Irrigation.

### Multi-Family Residential

- 1) Stage 1 water allocations are assigned to each existing Multi-Family Residential account by either a recorded agreement or based on the standards set in 1992 by Casitas.
- 2) The Multi-Family Residential water allocation for each account shall be distributed by either a monthly or bi-monthly scheduling of the allocation.
- 3) A part of the Multi-Family Residential allocation is provided for health and sanitation and shall be set at **84 units per year per dwelling**, distributed evenly each month as 7 units per month for each dwelling.
- 4) The essential water use portion of the allocation is not subject to adjustment by the Staged Demand Reduction Program, unless otherwise deemed by the Board to be a necessity during extreme water supply conditions or during emergencies.
- 5) The part of the Multi-Family Residential allocation that is in excess of the essential allocation shall be specified as a monthly allocation and distributed proportionally to reflect varying seasonal water use, as follows:

Month	July	August	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
% of Total Annual Allocation	.17	.17	.12	.05	.05	.05	.02	.02	.02	.10	.10	.12

The part of the Multi-Family Residential allocation that is in excess of the essential allocation is subject to adjustment by the Staged Demand Reduction Program.

- 6) Where not previously assigned a residential allocation, a residential allocation shall be based on the following:
  - a. The essential health and sanitation portion of the residential allocation shall be set at **84 units per year per year per dwelling**, and be constant for each month of the year;
  - b. Non-essential portion of the annual residential allocation shall be based on a maximum limit of 1.99 acres (86,684 square feet) of irrigated landscape area and set as follows:
    - i. For the first 5,000 square feet of landscape area, 15 gallons per square foot;
    - ii. For the next 10,000 square feet of landscape area, 10 gallons per square foot
    - iii. For the next increment up to 71,684 square feet of landscape area, 3 gallons per square foot;

### Other

- 1) Water allocation shall be specified as an **annual** allocation based on a fiscal year (July 1<sup>st</sup> to June 30<sup>th</sup>).
- 2) Allocation assigned by recorded agreement; or
- 3) Where not defined by recorded agreement, the lesser of historical water consumption of either the 80% of the 1989-90 water use or the Fiscal Year 2012-13 water use.

### Resale

- 1) Water allocation shall be specified as an **annual** allocation based on a fiscal year (July 1<sup>st</sup> to June 30<sup>th</sup>).
- 2) The Stage 1 allocation for each individual Resale customer shall be mutually agreed to by each water agency and Casitas, be incorporated into a memorandum of understanding (MOU), and assigned to provide water to supplement the Resale agency's primary source of water supply. An annual adjustment to the allocation assignment may be a condition of the MOU.
- 3) An objective of a MOU is to achieve parity between the Resale agency customers and Casitas customers in applying similar overall water use restrictions and financial penalties in each Stage.
- 4) The Resale agency shall determine the reliability of its water sources and ensure that the annual water requirements from Casitas do not exceed their annual water allocation from Casitas.
- 5) The allocation assignment from Casitas shall not be used by the Resale agency for growth within the Resale service area, unless additional allocation for growth is authorized by written agreement with Casitas.
- 6) The Resale agency shall 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 to assure the continued availability of water for health and safety purposes.

### Residential

- 1) Stage 1 water allocations are assigned to each existing Residential account by either a recorded agreement or based on the standards set in 1992 by Casitas.

- 2) The Residential water allocation for each account shall be distributed by either a monthly or bi-monthly scheduling of the allocation.
- 3) A part of the Residential Allocation is provided for health and sanitation and shall be set at **120 units per year**, distributed evenly each month as 10 units per month for each dwelling.
- 4) The essential water use portion of the allocation is not subject to adjustment by the Staged Demand Reduction Program, unless otherwise deemed by the Board to be a necessity during extreme water supply conditions or during emergencies.
- 5) The part of the Residential Allocation that is in excess of the essential allocation shall be specified as a monthly allocation and distributed proportionally to reflect varying seasonal water use, as follows:

Month	July	August	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
% of Total Annual Allocation	.17	.17	.13	.05	.05	.05	.02	.02	.02	.10	.10	.12

The part of the Residential Allocation that is in excess of the essential allocation is subject to adjustment by the Staged Demand Reduction Program.

- 6) Where not previously assigned a residential allocation, a residential allocation shall be based on the following:
  - a. The essential health and sanitation portion of the residential allocation shall be set at **120 units per year**, and be constant for each month of the year;
  - b. Non-essential portion of the annual residential allocation shall be based on actual irrigated landscape area of the parcel with a maximum limit to 1.99 acres (86,684 square feet) of irrigated landscape area and set as follows:
    - i. For the first 5,000 square feet of irrigated landscape area, 15 gallons per square foot;
    - ii. For the next 10,000 square feet of irrigated landscape area, 10 gallons per square foot
    - iii. For the next increment up to 71,684 square feet of irrigated landscape area, 3 gallons per square foot;

**Temporary**

- 1) There is no water allocation assigned for the Temporary classification. Temporary water service is not property related on a permanent basis.
- 2) Temporary water use is limited for a short-term of six months or less, for such purposes as construction projects, or short-term water supply emergencies, or temporary backup water to non-metered agricultural parcels.
- 3) Temporary meters that are issued to serve supplemental commercial irrigation shall be temporarily allocated water based on the allocation assignment provided at the time of the application for the Temporary service based on the same water use standards as provided for the Irrigation classification, and reduced by Stage conditions,. The allocation does not extend beyond the period of the temporary water service application of six (6) months, unless the Casitas Board of Directors approves a limited continuance of the temporary service.

**4.4 Allocation Adjustments.**

A Casitas customer may request the reconsideration of their initial assigned Stage 1 water allocation within 60 days of the adoption of the WEAP where the request does not include a consideration for either an expansion in the area of use or new construction. The customer shall submit a water allocation adjustment application in order to have their request considered by the General Manager of

the District. The information contained on the application may be subject to an audit and, if necessary, additional documentation may be required in order to substantiate the requested adjustment.

Adjustments to water allocations that have been assigned through a recorded Water Service Agreement between the property owner, or prior property owner, and Casitas must proceed through an amendatory agreement, will be subject to the capital facility charges for the amount of water provided as the allocation adjustment, and subject to the availability of water allocations.

Adjustments to water allocations will not be granted in amounts that exceed 80 percent of the FY 1989-90 metered usage of water by the meter service account without prior Board approval.

#### **4.5 Standards for a Water Allocation Adjustment.**

Water allocation adjustments may be considered by Casitas during initiation of the WEAP that appropriately assigns a Stage 1 allocation, to ensure that the needs of the water customer are reasonably balanced against the purpose of this Plan.

Water allocations may be considered for adjustment for:

- a. Correction of irrigable area square footage;
- b. Correction of number of dwelling units (Multi-family accounts only);
- c. Exemption granted for a licensed in-home childcare or elderly care facility;

Water allocations will not be adjusted to accommodate:

- a. Pools, ponds, spas, or hot tubs;
- b. In-home businesses or hobbies that use an increased amount of water;
- c. Gardens and orchards;
- d. Homeowner's Association requirements for turf areas in excess of that water allocation specified by Casitas for a Residential classification;
- e. Where an allocation has been assigned through a recorded agreement.

Agricultural Irrigation Allocation Adjustment Standards:

- a. Limited to acreage planted in commercial agricultural production prior to March 1, 1992. Casitas shall also consider the assignment of an appropriate allocation to lands that are verified as being in a crop rotation status, or temporarily in a fallowed state, having been in a planted status prior to March 1, 1992.
- b. Comparative (same crop type and average use of various parcels) crop usage in FY2012-13 for full irrigation, not to exceed 3 AF/AC/YR, which is located within a 1-mile circumference of the parcel seeking the appeal for a change in water allocation.

#### **4.6 Appeals Process.**

Customers that are denied an adjustment of water allocation may request a review of the request by submitting a written appeal to the Casitas Water Resources Manager stating the nature of the appeal. The appeal shall be reviewed by the Casitas Water Resources Manager and a recommendation shall be reported to the General Manager. The decision of the General Manager shall be reported to the customer in written form. If the customer is not satisfied with the General Manager's decision, the customer must request within 10 days that the appeal be placed on the agenda of the Casitas Board of Directors. The determination by the Board of Directors shall be final.

#### **4.7 Availability of Allocations.**

The determination of supplies being available for issuance of new allocations of water shall be made upon staff recommendation at a regular Board of Directors meeting. The determination that water is or is not available shall be within the determination of the Board of Directors. The determination that a supply is available shall be based upon more detailed information about existing supplies, the availability of new supplies, new water supply projects, or contracts or proposed contracts for additional supplies where, in the opinion of the Board of Directors, the supply of water is definite enough to provide the assurance to the County of Ventura that there is a forty year supply.

#### **4.8 Allocation for New or Expanded Water Uses.**

A customer may request a change to a water allocation assignment for the purposes of obtaining new or expanded use of water that is associated with a new building permit, new or existing conditional use permit, or agricultural irrigation acreage expansion. The approval of an addition or change to the water allocation for new and/or expanded water allocation is subject to Casitas' discretion on the limits of available water allocation and subject to the charges for new and/or expanded water allocation.

When the Board of Directors determine that additional new water supplies are available, either from the safe yield of the existing CMWD project supply or additional new supplies, supplies shall be allocated in accordance with the following criteria:

- a) No single property owner or applicant for the given type of service (municipal, industrial or agricultural) shall receive a new water allocation greater than 10 percent of the total new available supply or the minimum standard residential allocation, whichever is greater. If the applicant's allocation requirements are not fully met, the applicant may maintain a position of priority until more water is available.
- b) All applicants seeking an allocation shall provide Casitas with a detailed description of the project, the use of water for which the water is sought, and information on peak flow and annual water requirements. Casitas shall determine meter size and amount of allocation based upon reasonable and necessary needs and Casitas' Rates and Regulations.
- c) The amount of water to be allocated shall be at Casitas' sole discretion. The assignment of an allocation shall be limited to the availability of water from the Lake Casitas safe yield, and be based on current water demand factors as adopted by the District and as amended. The amount of water required for the project may be calculated and submitted for the consideration of Casitas by a civil engineer, registered in the State of California, representing the project proponent.

### **SECTION 5: STAGED DEMAND REDUCTION IMPLEMENTATION**

#### **5.1 Staged Demand Reduction Principles.**

The primary source of water that is available to the Casitas Municipal Water District is the amount of water stored behind Casitas Dam, forming Lake Casitas. The quantity of water stored in Lake Casitas is dependent upon the local hydrology, watershed conditions, diversions from the Ventura River, and the outflow from lake evaporation and water deliveries to beneficial uses. There may be times during which Casitas must consider implementing staged water demand reductions to ensure a sustainable water supply and prevent a complete depletion of water supply in Lake Casitas.

The District has assigned five stages of water storage in Lake Casitas that serve as a guidance to triggering the implementation of water use reduction goals and measures. The overarching goals of the Staged Demand Reduction Program are:

- 1) conserving the water supply for the greatest priority and public benefit; and
- 2) mitigating the effects of a water shortage on public health, safety, and economic activity.

## 5.2 Water Resource Conditions and Actions.

The General Manager shall report to the Board of Directors each year (*April*) with an assessment of the current water storage in Lake Casitas and local groundwater basins, current water use trends, predicted weather conditions, and an evaluation of current water use reduction goals. The time of the reporting can be each April, as the rainfall season is ending and water resources can be evaluated at the maximum for the year, or as Lake Casitas storage reaches a change in Stage action level. The Board of Directors may, at their sole discretion, declare that a Stage condition of water supply in Lake Casitas exists and implement the appropriate demand reduction goals and measures in response to current and/or predicted water availability conditions. Casitas shall make such determinations public and follow with appropriate and timely notification of all customers. Casitas has established the implementation of various Stages of action based on the amount of water in storage in Lake Casitas, as shown in Table 3. An action to declare and implement a Stage may be by either an action by Casitas Board of Directors based on unanticipated changing lake supply conditions or by the following schedule in Table 4.

Table 3 – Stage Conditions

Stage	Stage Title	Lake Casitas Storage - %	Lake Casitas Storage Action Level (acre-feet)
1	Water Conservation	100% - 50%	237,761 to 118,880
2	Water Shortage Warning	50% - 40%	118,880 to 95,104
3	Water Shortage Eminent	40% - 30%	95,104 to 71,328
4	Severe Water Shortage	30% - 25%	71,328 to 59,440
5	Critical Water Shortage	25% - 0%	59,440 to 3,000

Table 4 - Stage Action Schedule

<b><u>Target Dates</u></b>	<b><u>Action</u></b>
June - April	Monitor water demands, rainfall, reservoir level trend, groundwater trends, and diversion and runoff amounts.
Early April	Staff presents water status report and a recommendation to the Casitas Board of Directors. Publish a notice of a public hearing if changes are recommended.
Late April	Casitas Board of Directors formally declares a Stage, and/or water shortage emergency, adopts recommendations for demand reduction actions.
May	Customer Notification of change in Stage, allocation, and conservation surcharge.
June	Stage demand reduction actions are effective and are implemented.

### 5.3 Demand Reduction Goals and Measures.

The demand reduction goals and measures begin with Stage 1, where reasonable and appropriate water allocation assignments are made to each Casitas service connection and the end water users are

Demand Reduction Stage	1	2	3	4	5
Volume Range of Lake Casitas	254,000 to 127,000	127,000 to 100,000	100,000 to 75,000	75,000 to 65,000	65,000 to 3,000
% Lake Storage	100% - 50%	50% - 40%	40% - 30%	30% - 25%	25% - 0%
Water Use Reduction Response Goal	20%	20%	30%	40%	50%
Residential & Multi-Family Residential Essential Use Non-essential Use	0% 20%	0% 20%	0% 30%	0% 40%	0% 50%
Business	20%	20%	30%	40%	50%
Industrial	20%	20%	30%	40%	50%
Other	20%	20%	30%	40%	50%
Resale	20%	20%	30%	40%	50%
Irrigation	20%	20%	30%	40%	50%
Interdepartmental	20%	20%	30%	40%	50%

implementing the Best Management Practices that conform to State requirements for water conservation and water use efficiency measures. Upon determination of a Stage 2 condition and continuing through Stage 5 conditions, the primary actions to achieve the demand reduction goal is the adjustment of allocations that were made available for each classification during Stage 1 by a reduction of the allocation during the duration of the declared Stage condition.

### 5.4 Stage Adjustments to Allocations.

The five stages of storage in Lake Casitas and the initial guideline for water allocation adjustments for each classification at each Stage are presented in Table 5. Upon recommendation of the General Manager and approval of the Board of Directors at the onset of a specific Stage, the District shall apply appropriate demand reduction factors to the allocations for each customer classification, as deemed necessary. The Board of Directors retain the sole discretion to make allocation changes as a result of declaring a change in Stage, or during any Stage, that are more or less severe than that provided in Table 5. Examples of applying this discretion may include, but not be limited to, the change in any water resource conditions or the demand reduction goals are not being attained by the customer classification.

Table 5 – Staged Water Demand Reductions for Water Classifications

Note: Initial Stage 1 Allocations include a 20% reduction from the 1989-90 demands.

Essential Use Allocations will remain the same and not adjusted, except as otherwise determined by the Board to be a necessity to preserve water supply during extreme conditions. The measures to

achieve the demand reduction goal may be selected from a menu of options as provided in Table 6, or should water supply conditions become worse than anticipated the Casitas Board may adopt more stringent requirements as deemed necessary.

### **5.5 Customer Notification.**

The customers of each and every classification shall be notified in a timely and appropriate manner of any and all actions to declare and implement Demand Reduction Stage. The methods of communication to the customer shall be through direct mailings, public meetings, and billing information that provides the customer the comparison of water use with allocation.

### **5.6 Water Rates and Conservation Penalty.**

- a. The Casitas Board of Directors shall annually consider the setting or adjustment of water rates that reflect the cost of water service, consistent with State law.
  1. Casitas has implemented a tiered inclining rate structure for the Residential and Multi-family Residential classifications that represents the proportional cost of service that is attributable to the parcel that is served water.
- b. The Casitas Board of Directors shall annually set the Conservation Penalty for each classification that will be applied to each individual customer billing for each unit of water that is in excess of the customer's allocation, or the adjusted allocation pursuant to a change in Stage. The Conservation Penalty is imposed to curtail the potential for adverse effects of excessive water consumption.
- c. Upon determination of a change in the Demand Reduction Stage, or at such time the Board deems that the customer response does not appear to attain the desired demand reduction goals, the Board may consider the modification of the Conservation Penalty.
- d. Revenues recovered from the Conservation Penalty will supplement Casitas' water conservation costs, provide revenue for water shortage related projects, and cover costs associated with implementing changes to the WEAP as directed by the Board.

### **5.7 Appeals for Exception to Staged Adjustments of Allocation or Conservation Penalty Assessment.**

- a. A Casitas customer may file an appeal for:
  1. An Exception to Staged Adjustment of Allocation, as provided in Section 5.4 above;  
or
  2. The assessment of a Conservation Penalty, as provided in Section 5.6 aboveby submitting a written appeal, on a form provided by Casitas, directly to the General Manager or his/her designee.
- b. The following paragraphs provide the criteria or reasons for an appeal for an Exception to Staged Adjustments of Allocation and an appeal for an Exception to Staged Adjustments of Allocation may be granted for one or more of the following reasons:



1. The staged adjustment would cause a condition affecting the health, sanitation, fire protection, or safety of the customer or the public;
  2. Strict application of the water allocation adjustment provisions imposes a severe or undue hardship on a particular business, or renders it infeasible for a business or class of business to remain in operation;
  3. The customer is a hospital or health care facility using industry best management practices;
  4. The business has already implemented environmental sustainability measures and water conservation measures reducing water consumption to the maximum extent possible.
- c. The customer must support their reason for an appeal for an Exception to Staged Adjustments of Allocation with supporting documentation or substantial evidence demonstrating the need for an exception. A failure to provide supporting documentation or evidence shall result in a denial of the appeal.
- d. The appeal for an Exception to Staged Adjustments of Allocation will be first reviewed, approved or denied, by the General Manager or his/her designee. The decision of the General Manager or his/her designee shall be reported to the customer/appellant in written form. If the customer is not satisfied with the General Manager or his/her designee's decision, the customer/appellant must request, within 10 days of the date of the General Manager or his/her designee's decision, that the appeal be placed on the agenda of the Casitas Board of Directors for their review and determination based on the criteria set forth in Section 5.7(b)(1)-(4). The determination by the Casitas Board of Directors shall be final.
- e. The following paragraphs provide the criteria and process for an appeal from a Conservation Penalty:
1. An appeal for relief of a Conservation Penalty may only be considered when a natural disaster such as a wildfire, earthquake, flood or landslide or other naturally occurring phenomenon which directly causes a leakage or leakage event.
  2. The customer must file their appeal to the Casitas Municipal Water District Board of Directors' Appeals Panel.<sup>1</sup> A request for review and an evidentiary hearing must be made in writing and submitted to the District within thirty (30) days of date the Casitas bill with the Conservation Penalty was issued by the District. Upon receipt by the District, a review and evidentiary hearing will be placed on the next agenda of the Appeals Panel.
  3. The appeal of a Conservation Penalty must explain why the leakage or leakage event was caused by a naturally occurring event such as wildfire, earthquake, flood or landslide.
  4. The customer/appellant must support their reason for an appeal from a Conservation Penalty with supporting documentation or substantial evidence demonstrating the circumstances for the appeal. A failure to provide supporting documentation or evidence shall result in a denial of the appeal.

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<sup>1</sup> The Appeals Panel is a Board-appointed committee composed of three (3) Board members who are authorized to conduct evidentiary hearings, make findings and render decisions in accordance with this section of the Water Efficiency and Allocation Program. This is in accordance with California Water Code Sections 71300, 71301 and 71305.

5. The General Manager or his/her designee will review the appeal and the documentation or evidence provided by the customer supporting the appeal. The General Manager or his/her designee may request additional information from the customer. Following a review of the appeal, the General Manager shall make a recommendation to the Appeals Panel. A copy of the General Manager's recommendation will be provided to the customer/appellant.
6. If a review and evidentiary appeal hearing is properly requested before the Appeals Panel, the customer/appellant shall have an opportunity to state their case and present evidence supporting their appeal. Following the customer's presentation of the grounds for appeal, the Appeals Panel shall review the General Manager's recommendation on the conservation penalty appeal and determine whether to grant the appeal in full, apportion the penalty, or deny the appeal based on the following:
  - A. The documentation and/or evidence provided by the customer in their initial written appeal;
  - B. The basis of the General Manager's recommendation as provided in the General Manager's written explanation of the grounds for the recommendation; and
  - C. Any additional circumstances the Appeals Panel determines to be relevant during the evidentiary hearing.
7. In order to approve an appeal of a Conservation Penalty, the Appeals Panel must make the following findings:
  - A. The customer provided documentation or substantial evidence that the Conservation Penalty could not be avoided by circumstances within the customer's reasonable control;
  - B. The General Manager's written recommendation is valid or invalid in light of the customer's documentation or evidence provided; and
  - C. The reason for the appeal is not to accommodate for leakage or a leakage event within the control of the customer.
8. If the appeal for a Conservation Penalty is approved by the Appeals Panel, the Appeal Panel shall determine if the Conservation Penalty is denied in whole or in part.
9. Following the review and the evidentiary hearing, the Appeals Panel shall provide a written determination with findings to the customer within thirty (30) days of the hearing either approving, denying or apportioning the appeal. The Appeals Panel's determination is final and binding on the customer.

## **SECTION 6: EXPORT OF CASITAS WATER**

Water Code Section 71611 authorizes Casitas to sell water under its control for use only within the jurisdictional boundaries of the Casitas Municipal Water District. The unauthorized export and use of Casitas water beyond the Casitas district boundaries can have significant negative impacts on the Casitas water supply reliability, and therefore shall be prohibited unless specifically authorized in writing by the Casitas Board of Directors. All customers receiving Casitas water into water

conveyance systems which cross Casitas boundaries shall meet the following requirements as a condition of service:

- 1) Customers shall submit to Casitas a certified report on the last day of each month that demonstrates that no Casitas water was transported or used outside Casitas boundaries during the prior month without written approval by Casitas.
- 2) Customer shall install and maintain approved metering devices and shall be required to account for all Casitas water delivered in the customer's system.
- 3) In the event Casitas water is exported during any month, the customer shall be billed for exported water at five (5) times the Casitas rate for the Temporary Service classification.
- 4) In the event the customer fails to comply with the conditions of service stated in the above (1) and/or (2), all water purchased in excess of the allocation shall be considered exported water and shall be billed in accordance with the foregoing.
- 5) This Section, Export of Casitas Water, is in effect at all times.
- 6) The exceptions to the export are during a declaration by the Board of Directors of surplus water, and limited to the surplus water or exchange agreement between the Board of Directors and other party.

Continuing or reoccurring violations of this section by any Casitas customer may result in the restriction or disconnection of water service to the customer.

Table 6 – Stage Actions and Water Demand Reduction Measures

<b>Water Shortage Condition</b>	<b>Key Casitas Communications and Actions</b>	<b>Customer Demand Reduction Measures</b>	<b>Penalties And Rates</b>
<p><b>Stage 1</b></p> <p>Supply Range 100% - 50%</p> <p>Voluntary Demand Reduction <b>To Stage 1 Allocation</b></p>	<ul style="list-style-type: none"> <li>• Initiate public information and advertising campaign.</li> <li>• Publicize ways to reduce water consumption.</li> <li>• Coordinate conservation actions with other water purveyors and cities.</li> <li>• Perform water audits and promote water efficient use/conversions.</li> <li>• Conduct water workshops.</li> <li>• Temporary staffing for public inquiries, as needed.</li> </ul>	<ul style="list-style-type: none"> <li>• Water conservation practices requested of all customer classifications.</li> <li>• Adhere to Water Waste Prohibition Ordinance and State of California laws and regulations regarding water waste</li> <li>• Adhere to assigned water allocation or less.</li> </ul>	<ul style="list-style-type: none"> <li>• Consider and implement Conservation Penalty for water use in excess of allocation.</li> <li>• Consider rates for revenue stabilization and cost of service.</li> </ul>
<p><b>Stage 2</b></p> <p>Supply Range 50% - 40%</p> <p>Mandatory Demand Reduction <b>to Stage 1 Allocation</b></p>	<ul style="list-style-type: none"> <li>• Declare Stage 2</li> <li>• Implement demand reductions for each customer classification.</li> <li>• Intensify public information campaign.</li> <li>• Optimize existing water resources.</li> <li>• Intensify leak detection.</li> <li>• Develop appeals staffing.</li> <li>• Consult with major customers to develop conservation plans and water use audits.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue all Stage 1 measures.</li> <li>• Landscape watering advised to two (2) watering days per week.</li> <li>• Require water audits for large water users; implement recommendations of the water audits.</li> <li>• Businesses display “save water” signage.</li> <li>• Increase public information.</li> </ul>	<ul style="list-style-type: none"> <li>• Consider and implement Conservation Penalty for water use in excess of allocation – response to reduced allocation.</li> <li>• Consider rates for revenue stabilization and cost of service.</li> </ul>
<p><b>Stage 3</b></p> <p>Supply Range 40% - 30%</p> <p>Demand Reduction From Stage 1 Allocation <b>10%</b></p>	<ul style="list-style-type: none"> <li>• Declare Stage 3</li> <li>• Implement demand reductions for each customer classification.</li> <li>• Expand and intensify public information campaign.</li> <li>• Provide regular briefings, publish monthly consumption report.</li> <li>• Hire additional temporary staff in customer service and conservation. Water waste enforcement.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue with Stage 1 and 2 measures.</li> <li>• Reduced water allocations.</li> <li>• Landscape watering advised to one (1) watering day per week.</li> </ul>	<ul style="list-style-type: none"> <li>• Consider and implement Conservation Penalty for water use in excess of allocation – response to reduced allocation.</li> <li>• Consider rates for revenue stabilization and cost of service.</li> </ul>
<p><b>Stage 4</b></p> <p>Supply Range 30% - 25%</p> <p>Demand Reduction From Stage 1 Allocation <b>20%</b></p>	<ul style="list-style-type: none"> <li>• Declare Stage 4</li> <li>• Implement demand reductions for each customer classification.</li> <li>• Continue to provide regular media briefings.</li> <li>• Open drought information center.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue with Stage 1 through 3 measures.</li> <li>• Reduced water allocations.</li> <li>• Landscape watering advised to one (1) watering day per week.</li> <li>• Consider prohibition of filling swimming pools and fountains.</li> </ul>	<ul style="list-style-type: none"> <li>• Consider and implement Conservation Penalty for water use in excess of allocation – response to reduced allocation.</li> <li>• Consider rates for revenue stabilization and cost of service.</li> </ul>
<p><b>Stage 5</b></p> <p>Supply Range 25% - 0%</p> <p>Demand Reduction From Stage 1 Allocation <b>30%</b></p>	<ul style="list-style-type: none"> <li>• Declare Stage 5</li> <li>• Implement demand reductions for each customer classification.</li> <li>• Minimize outdoor water use and non-essential uses.</li> <li>• Implement aggressive public outreach and education program.</li> <li>• Implement crisis communications plan.</li> <li>• Coordinate with State and local agencies to address enforcement challenges.</li> <li>• Water Shortage Emergency declaration to be considered.</li> <li>• Consider further Staged reductions and other future Board actions</li> </ul>	<ul style="list-style-type: none"> <li>• Continue with Stage 1 through 4 measures.</li> <li>• Reduced water allocations.</li> <li>• Rescind Temporary meters issued.</li> </ul>	<ul style="list-style-type: none"> <li>• Consider and implement Conservation Penalty for water use in excess of allocation – response to reduced allocation.</li> <li>• Consider rates for revenue stabilization and cost of service.</li> </ul>

# MEMORANDUM

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TO: Water Resources Committee  
From: Michael L. Flood, General Manager  
RE: **Discussion of future scope for Stantec Inc. in relation to Casitas MWD's Comprehensive Water Resources Plan**  
Date: September 10, 2020

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## RECOMMENDATION:

The Water Resources Committee provide staff direction.

## BACKGROUND:

During the January 9, 2019 regular meeting of the Board of Directors, Stantec Inc. was awarded a contract to a Comprehensive Water Resources Plan for the District.

On February 8, 2020, Stantec Inc. provided a workshop on the draft plan during a Special Meeting of the Board of Directors.

As a result of the February 8, 2020 Special Board Meeting, the Board of Directors directed the Water Resources Committee to complete the draft plan that would contain the draft plan along with all of the associated appendices for possible issuance for public review.

At the June 24, 2020 regular meeting of the Board of Directors, the Board of Directors authorized the completed draft plan for a 45-day public review period.

During the August 2020 Water Resources Committee Meeting, the Committee asked that this item remain on future agendas.

## DISCUSSION:

The draft plan public review period will ended on August 24, 2020 with public comments expected to be presented to the Water Resources Committee in September 2020.

Stantec should be provided with a scope of work for possible upcoming workshop meetings related to the Comprehensive Water Resources Plan.