

Board Meeting Agenda

Russ Baggerly, Director
Mary Bergen, Director
Bill Hicks, Director

Pete Kaiser, Director
James Word, Director

CASITAS MUNICIPAL WATER DISTRICT
November 12, 2014
3:00 P.M. – DISTRICT OFFICE
1055 Ventura Ave.
Oak View, CA 93022

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 and except that members of a legislative body or its staff may briefly respond to statements made or questions posed by persons exercising their public testimony rights under section 54954.3 of the Government Code.

1. Public Comments (items not on the agenda – three minute limit).
2. General Manager comments.
3. Board of Director comments.
4. Board of Director Verbal Reports on Meetings Attended.
5. Consent Agenda
 - a. Minutes of October 22, 2014 Meeting.

RECOMMENDED ACTION: Adopt Consent Agenda

6. Bills
7. Recommend approval of entering into an agreement with RNT Consulting Inc. in an amount not to exceed \$49,575 to provide the District with a Vulnerability Assessment and a Control and Management Plan for Invasive Species (Dreissenid Mussels).

RECOMMENDED ACTION: Motion approving recommendation

8. Recommend approval of a purchase order to Goulds Pump, Inc. in the amount of \$71,726.15 plus shipping for additional pump stages for the Ventura Avenue No. 1 Pump Plant.

RECOMMENDED ACTION: Motion approving recommendation

9. Recommend approval of the purchase of Incode's Remit Plus hardware and software in the amount of \$10,565.00 plus an annual maintenance fee of \$1,994.00.

RECOMMENDED ACTION: Motion approving recommendation

10. Information Items:

- a. Water Resources Committee Minutes.
- b. Recreation Committee Minutes.
- c. Executive Committee Minutes.
- d. Lake Casitas Recreation Area Report for September 2014.
- e. Water Consumption Report.
- f. CFD No. 2013-1 (Ojai) Monthly Cost Analysis.
- g. Investment Report.

11. Adjournment

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

Minutes of the Casitas Municipal Water District
Board Meeting Held
October 22, 2014

A meeting of the Board of Directors was held October 22, 2014 at Casitas' Office, Oak View, California. The meeting was called to order at 3:00 p.m. Directors Hicks, Bergen, Kaiser, Baggerly and Word were present. Also present were Steve Wickstrum, General Manager, Rebekah Vieira, Clerk of the Board, and Attorney, Robert Krimmer. There were ten staff members and 18 members of the public in attendance. President Hicks led the group in the flag salute.

1. Public Comments (items not on the agenda – three minute limit).

None

2. General Manager comments.

Mr. Wickstrum explained that he received a call from Rick Cole, Assistant to Mayor Garcetti in Los Angeles wondering if the Lake Casitas Recreation Area would have an interest in hosting the 2024 Olympics. Mr. Wickstrum will provide a letter suggesting Casitas' desire to support the Olympics and be considered for as a possible venue.

Mr. Wickstrum reminded the Board of the AWA Water Tour on Nov 13th. If you are interested in riding the tour let Rebekah know so you can be registered. The final stop is at the dam. This Saturday is the Water Summit at the City of Ventura from 10:00 – 2:00. Directors Hicks, Word and Baggerly are planning to attend. Ojai day was successful with a lot of people coming to the booth to talk about what they are doing to conserve water.

3. Board of Director comments.

Director Word suggested that Director Baggerly would be a good candidate to serve on the State Advisory Committee on Invasive Species. Director Baggerly would be interested.

Director Baggerly stated it had been a year and a half since the board took action to fix the problem of noise on Reeves Road and it is not done yet. It does not look good for the district. He asked that this be fixed within ten days or place it on the next agenda to have a consultant do it. Mr. Wickstrum informed him that staff will have it done at the end of next week.

Director Baggerly reported that the quagga mussel comments were substantive and the responses were weak showing they will do almost nothing as usual.

Director Baggerly then informed the Board that Supervisor Steve Bennett is going to propose a moratorium on well permits during the time necessary to form the Groundwater Sustainability Agencies. The covered area would include all of the Ventura River watershed, the Santa Clara River watershed and most of the Calleguas watershed. The Simi Valley high groundwater areas would be exempt. The area of the moratorium would later be reduced to specific groundwater basins that the State mandates as medium and high priority. This action is being announced today at the Fox Canyon GMA and will be on the agenda of the Board of Supervisors for Tuesday, October 28, 2014. The number of well permits have risen 20% this year, probably due to the drought and cost of water. Steve feels that in order to hold off a run on permits that could be implemented at any time in the future, the moratorium, adopted as an "Urgency Ordinance", is needed in order for the new Groundwater Sustainability Agencies to be formed and functioning.

Director Baggerly added that OBGMA will develop a resolution to be adopted as a Groundwater Sustainability Agency prior to December 30, 2014 and as noted in the Ventura Star, Gladstone Ag states Ag land is better than gold and they are buying land in Ventura County.

Director Bergen congratulated staff on Ojai day, there is a lot of value and it is very worthwhile.

Director Kaiser thanked Bob and his staff adding that the water treatment plant staff are not appreciated enough for what they are trying to do right now to have the best quality water they can considering on the circumstances.

President Hicks mentioned an article in the Montecito paper yesterday about their water situation and they have hired a consultant to do desal.

4. Board of Director Verbal Reports on Meetings Attended.

Director Word discussed his meeting with the Ventura Chamber and participation for Saturday's event.

President Hicks attended a water issues meeting where Tony Stafford, Manager of Camrosa spoke. They get 63% of their water from state water and 37% from local sources. In 1997 they got 90% of their water from state water. He thinks the next step is desal. It was an interesting presentation.

5. Consent Agenda

ADOPTED

a. Minutes of October 8, 2014 Meeting.

The consent agenda was offered by Director Kaiser, seconded by Director Baggerly and passed by the following roll call vote:

AYES:	Directors:	Word, Baggerly, Kaiser, Bergen, Hicks
NOES:	Directors:	None
ABSENT:	Directors:	None

6. Bills

APPROVED

Director Bergen questioned #019185 with Mr. Wickstrum explaining that is the remaining units being placed on the meters which we hope to have finished by March.

On the motion of Director Word, seconded by Director Kaiser the bills were approved by the following roll call vote:

AYES:	Directors:	Word, Baggerly, Kaiser, Bergen, Hicks
NOES:	Directors:	None
ABSENT:	Directors:	None

7. Resolution honoring Robert Monnier upon his retirement from the Casitas Municipal Water District.

ADOPTED

President Hicks read the resolution which was then offered by Director Word, seconded by Director Baggerly and approved by the following roll call vote:

AYES:	Directors:	Word, Baggerly, Kaiser, Bergen, Hicks
NOES:	Directors:	None
ABSENT:	Directors:	None

Resolution is numbered 14-25

8. Resolution awarding a contract to Union Engineering in the amount of \$614,701.00 for Lake Casitas Recreation Front Entrance Upgrade, Specification 14-373, bid items 1 through 11 and 14 through 19 only.

ADOPTED

Mr. Wickstrum explained this topic was tabled at the last Board meeting. Staff would like to go over the project to fully inform the Board of Directors of the project and to come to resolution to accept the bid or reject the bid.

Park Services Manager Carol Belser explained that the Front Gate improvement project has been in the ten year capital since March of 2007. The Bureau included this in their Resource Management Plan and EIR and their record of decision was finalized April 11, 2011. There is a problem with low clearance and lane 2 is the only lane the large RV's can enter. Often RV's will enter lane one and misjudge the height. The current traffic flow pattern was reviewed and the backing up of traffic on 150 and Santa Ana Road are also concerns. Additionally, the kiosks need to be improved for today's technology. The project was discussed at recreation committees from October 2011 through 2012, 2013 and 2014.

Director Kaiser questioned the traffic flow asking if a study had been done and if there was interface with the county. Todd Evans explained that a traffic study was not completed however with the additional functional lanes it is anticipated that the backup would be alleviated. Director Kaiser added it is

important we are doing everything possible for it to live 20-30 years. Director Kaiser also questioned the sun protection and the lateral influence of rain being blown under the roof. Mr. Evans added that one of the advantages of the roof being high is that it provides a better profile to throw shade. Director Kaiser questioned the need to maintain a roof rather than just modernizing the kiosks.

Public comments against the project were made by Gary Girod, William Weirick and George Galgas. Gary Girod suggested removing the current roof, conducting a traffic study and is concerned about how the project will be paid for. William Weirick suggested a benefit cost ratio for the roof portion of the project and thinks the bid should have been put out with the option of not having the roof. He added concerns with the funding for the project and also suggested the District consider budgeted for a public address system. George Galgas suggested cutting the roof off, or removing a portion of the roof and eliminating the lights. His opinion is that there is no reason for the expenditure and it is uncalled for.

Gary Wolfe, concessionaire at the lake, spoke in favor of the project and commended the staff and stated this makes an excellent first impression. He added that Friday afternoons and early mornings in the spring the traffic is out to Santa Ana and it is a safety issue. Additionally, the additional width of the lanes is also as important as the height and it will be a lot easier for the large RVs to maneuver.

Director Bergen asked if it is possible from an engineering standpoint to do the project in a staged process, putting the roof off into a second stage. Neil Cole responded that you cannot eliminate it from this project without going back out to bid. It is feasible to go back out to bid without the roof and set the project out to add it in the future. Typically you will have additional costs if that happens, price of roof could go up or down. Director Bergen added she was in favor of providing shade for our employees.

Director Word explained that the Bureau of Reclamation has been very good in providing grant funds for a number of projects. There is still money left in the grant earmarked for this which reduces the total cost. What would be the chance of future grants continuing that might be applied to this? Cheryl Carter with the Bureau of Reclamation responded you could do a scope modification, changing what was envisioned and use the remaining funds for something else. It is time sensitive and would need to be done quickly. We have been working on another grant with another \$120,000 under a new grant to assist with this project as well. Our fiscal year starts Oct 1 and these things take time to be awarded.

Director Baggerly questioned the location of the quagga inspection area. Director Word questioned if the fence line can be moved. And Director Baggerly asked about the shape of the island being a benefit or disturbance to traffic flow. Mr. Cole stated it is more of a disturbance and we have looked at moving it but there are two oak trees in there with one of them not doing very well. It is also easy to do later to adjust the island.

Director Baggerly questioned the environmental review for the project and questioned what mitigations have been provided and expressed concerns about ground disturbance. Cheryl Carter explained that it is categorically excluded. This area has been pre-disturbed. There is standard language in the agreement about the finding of artifacts.

Director Baggerly questioned the aesthetics and his first impression of the structure in steel is of something industrial and is concerned about it fitting with the rustic nature of the part. Mr. Cole agreed and explained that is why the project calls for adding rock work around the base but for costs we are looking to delete that at this time.

Director Kaiser stated there is a lot of discussion about the roof and I don't believe it is a mandatory feature. The original roof structure was the problem in the first place and we are replacing it on the pretenses it will offer some shade. This is creating a monument out there. There are issues about traffic that are unexplained. It seems that the quagga inspection area was an afterthought. They need shade. Is this a mandatory project? No. Is it beyond budget? Yes. Originally there was \$378,000 in budget. A significant portion is the roof. I have had some concerns about this and those concerns remain. There should be a traffic study and interface with the county.

President Hicks added it is a 50 year project and is the first thing people see, the entrance. Staff did an excellent job of designing this and spent over a year and half on this.

Director Bergen added there is a traffic hazard here and we have to deal with it. If we have to go out to bid again this won't happen this year.

Director Baggerly expressed concerns to Bob Krimmer that there was no mention of environmental review in the agenda item. Mr. Krimmer responded that the agenda sufficiently describes the item.

Director Word added there is a need and it must be looked at not just for this year but for the next 40 – 50 years.

The resolution was offered by Director Word, seconded by Director Bergen and passed by the following roll call vote:

AYES:	Directors:	Word, Bergen, Hicks
NOES:	Directors:	Baggerly, Kaiser
ABSENT:	Directors:	None

Resolution is numbered 14-26

9. Recommend approval of a Purchase Order to Big T's Freightliner, Oxnard in the amount of \$137,737.78 for the purchase of a Freightliner Service Body Truck. APPROVED

On the motion of Director Kaiser, seconded by Director Baggerly the above recommendation was approved with President Hicks looking at getting a higher price for trade in. This was passed by the following roll call vote:

AYES: Directors: Word, Baggerly, Kaiser, Bergen, Hicks
NOES: Directors: None
ABSENT: Directors: None

10. Recommend entering into an agreement with Water Quality Solutions in an amount not to exceed \$20,000 for the preparation of a site plan and technical specifications for a hypolimnetic aeration system. APPROVED

Mr. Cole informed the board that was one slight change to the agreement just removing a couple of words.

On the motion of Director Baggerly, seconded by Director Kaiser and passed, the above recommendation was approved as modified by the following roll call vote:

AYES: Directors: Word, Baggerly, Kaiser, Bergen, Hicks
NOES: Directors: None
ABSENT: Directors: None

11. Recommend approval of a purchase order to Goulds Pump, Inc. in the amount of \$44,673.78 plus shipping for additional pump stages for Ventura Avenue No. 1 Pump Plant. APPROVED

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

AYES: Directors: Word, Baggerly, Kaiser, Bergen, Hicks
NOES: Directors: None
ABSENT: Directors: None

12. Resolution supporting Water Bond Proposition 1 on the November Ballot. ADOPTED

George Galgas implored the board and the voters not to support this item. He also made a statement that he is still paying for the dam on his tax statement.

The resolution was offered by Director Word, seconded by Director Bergen and passed by the following roll call vote:

AYES: Directors: Word, Bergen, Hicks
NOES: Directors: Baggerly, Kaiser
ABSENT: Directors: None

Resolution is numbered 14-27

13. Discussion on the formation of the Upper Ventura River Groundwater Sustainability Agency.

Mr. Wickstrum thanked individuals from the Ventura River Water District for attending and explained that there is a desire for the Ventura River groundwater agency stakeholders to be a part of forming the Upper Ventura River Groundwater Sustainability Agency. A meeting is scheduled on Wednesday at Meiners Oaks where the General Managers and some board members of the agencies will attend. It was suggested that Mary Bergen and Pete Kaiser attend.

William Weirick asked if the whole valley would be moving to one agency. Director Baggerly explained that there is a good delineation between the two groundwater basins and it is not suggested to combine the two.

14. General Manager's report on State Water.

Mr. Wickstrum reported that the multi-year pool has been negotiated at \$375 an acre foot. The money we receive is turned back in so the tax payers do not pay as much. The dam has been paid off and now all that is on the tax roll is the portion to pay for state water. There is a desire to continue the multi-year pool by the majority of the state water contractors. Discussions are continuing on the Bay Delta Conservation Plan.

15. Information Items:

- a. Recreation Committee Minutes.
- b. Executive Committee Minutes
- c. Personnel Committee Minutes.
- d. Finance Committee Minutes.
- e. Letter from County Clerk regarding November 4 election.
- f. Investment Report.

On the motion of Director Word, seconded by Director Bergen, the information items were approved for filing by the following roll call vote:

AYES:	Directors:	Word, Baggerly, Kaiser, Bergen, Hicks
NOES:	Directors:	None
ABSENT:	Directors:	None

16. Recommend approval of a letter to the Ventura County Board of Supervisors regarding Impending Quagga Threat to Ventura County.

APPROVED

Director Baggerly suggested that it is time that Ventura County step up to the plate and get into the game and this letter would encourage them to do that. The Board discussed various responses and lack of responses that have been received to date. Director Word wondered where is the outcry from the Ventura River folks, Mark Capelli, NOAA, etc. We have not heard from them on this issue. Either they don't believe it or Casitas carries the ball on the issue. We are the

only ones that seem to be concerned about this. The ones that should be the most upset are silent on the issue.

Ralph Steele read from his prepared statement encouraging approval of the letter and passing the lead role to the county. The mussels need to be halted before they get into the Santa Clara River.

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

AYES:	Directors:	Word, Baggerly, Kaiser, Bergen, Hicks
NOES:	Directors:	None
ABSENT:	Directors:	None

President Hicks noted there were two additional speaker cards for items that were not on the agenda and he opened the meeting back up to public comments with Ron McCrea and Cynthia discussing the Matilija Dam Project. Ron McCrea explained that he would be interested in the silt from Matilija Dam. He would mix it with waste from horse ranches and sell it to orchards. It was suggested that he contact the Ventura County Watershed Protection District. Cynthia suggested the creation of terraces using the concrete from the dam to percolate some of the sediment and add in some facilities such as restrooms. Director Baggerly suggested she look at the Matilijadam.org webpage and let the Watershed Protection District know what you prefer.

17. Adjournment

President Hicks adjourned the meeting at 5:14 p.m.

Pete Kaiser, Secretary

CASITAS MUNICIPAL WATER DISTRICT
 Payable Fund Check Authorization
 Checks Dated 10/8/14-10/15/14
 Presented to the Board of Directors For Approval October 22, 2014

Check	Payee			Description	Amount
000526	Payables Fund Account	#	9759651478	Accounts Payable Batch 102314	\$14,375.81
000527	Payables Fund Account	#	9759651478	Accounts Payable Batch 103014	\$311,481.25
000528	Payables Fund Account	#	9759651478	Accounts Payable Batch 110414	\$283,895.32
					\$609,752.38
000529	Payroll Fund Account	#	9469730919	Estimated Payroll 11/26/14	\$140,000.00
					\$140,000.00
				Total	\$749,752.38

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

The above numbered checks, 000526-000529 have been duly audited is hereby certified as correct.

Denise Collin

11/4/14

Denise Collin, Accounting Manager

Signature

Signature

Signature

A/P Fund

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

000526 A/P Checks: 019178-019290
A/P Draft to P.E.R.S.
A/P Draft to State of CA
A/P Draft to I.R.S.
Voids:

000527 A/P Checks: 019291-019382
A/P Draft to P.E.R.S. 102943, 103043
A/P Draft to State of CA 102942, 103042
A/P Draft to I.R.S. 102941, 103041
Void: 019344

000528 A/P Checks: 019383-019392
A/P Draft to P.E.R.S.
A/P Draft to State of CA
A/P Draft to I.R.S.
Void:

The above numbered checks,
have been duly audited are hereby
certified as correct.


Denise Collin, Accounting Manager

Signature

Signature

Signature

CERTIFICATION

Payroll disbursements for the pay period ending 10/25/14
Pay Date of 10/30/14
have been duly audited and are
hereby certified as correct.

Signed: Rebekah Vieira
Rebekah Vieira

Signed: _____
Signature

Signed: _____
Signature

Signed: _____
Signature

11/04/2014 2:28 PM
 VENDOR SET: 01 Casitas Municipal Water D
 BANK: * ALL BANKS
 DATE RANGE: 10/22/2014 THRU 11/04/2014

A/P HISTORY CHECK REPORT

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
C-CHECK	VOID CHECK	V	10/30/2014			019344		

* * T O T A L S * *

	NO	INVOICE AMOUNT	DISCOUNTS	CHECK AMOUNT
REGULAR CHECKS:	0	0.00	0.00	0.00
HAND CHECKS:	0	0.00	0.00	0.00
DRAFTS:	0	0.00	0.00	0.00
EFT:	0	0.00	0.00	0.00
NON CHECKS:	0	0.00	0.00	0.00
VOID CHECKS:				
1 VOID DEBITS		0.00		
VOID CREDITS		0.00	0.00	

TOTAL ERRORS: 0

VENDOR SET: 01	BANK:	TOTALS:	NO	INVOICE AMOUNT	DISCOUNTS	CHECK AMOUNT
			1	0.00	0.00	0.00
BANK:	TOTALS:		1	0.00	0.00	0.00

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
02704	ADR Services, Inc. I-146187LSB01 CMWD Matter Case No. 146187LSB	R	10/22/2014	3,140.00		019278		3,140.00
01325	Aflac Worldwide Headquarters I-020301 Supplemental Insurance 10/14	R	10/23/2014	4,358.73		019279		4,358.73
01616	FRED BRENEMAN I-102314 10/12/14-10/25/14	R	10/23/2014	391.00		019280		391.00
00055	CASITAS BOAT RENTALS I-Sep 14 Gas Gas for Boats at LCRA	R	10/23/2014	847.20		019281		847.20
01483	CORVEL CORPORATION I-683825561 Bill Review	R	10/23/2014	81.51		019282		81.51
02658	Liebert Cassidy Whitmore I-1393405 Matter#CA182-00003 9/14	R	10/23/2014	217.50		019283		217.50
02225	Musick, Peeler & Garrett LLP I-272989 File#13477002 9/14	R	10/23/2014	592.50		019284		592.50
09764	OJAI VALLEY EMERGENCY PHYS MED I-022714 DOS 2/27/14 Claim#14-15631	R	10/23/2014	165.44		019285		165.44
02597	Shell I-93033611410 Gas for Rogue Boats	R	10/23/2014	853.80		019286		853.80
02643	Take Care by WageWorks I-2329070 Reimburse Medical 2014 I-2341857 Reimburse Medical 2014	R R	10/23/2014 10/23/2014	35.00 182.60		019287 019287		217.60
00247	County of Ventura I-101514 Encroachment Permits	R	10/23/2014	735.00		019288		735.00
02583	WageWorks I-125AI0352761 Monthly FSA Admin Fee	R	10/23/2014	86.40		019289		86.40
00270	WELLS FARGO BANK I-100814 CA Aquatic Management School I-100814A Monthly Credit Card Charges	R R	10/23/2014 10/23/2014	1,290.00 1,399.13		019290 019290		2,689.13
00021	AWA OF VENTURA COUNTY I-102114 CCWUC Luncheon 10/29/14	R	10/28/2014	250.00		019291		250.00

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
02491	Marshall's Bodacious BBQ							
I-141030	Food for Retirement Lunch	R	10/29/2014	686.17		019292		686.17
02587	A&M LAWNMOWER SHOP							
I-39535	Grinding Wheel for Dist Maint	R	10/30/2014	30.90		019293		30.90
01707	AIRGAS SPECIALTY PRODUCTS							
I-131356091	Ammonium Hydroxide for TP	R	10/30/2014	2,785.60		019294		2,785.60
00010	AIRGAS USA LLC							
C-9600218492	Welding Supplies Returned	R	10/30/2014	17.19CR		019295		
I-9032089802	Pipelines Welding Supplies	R	10/30/2014	52.22		019295		
I-9032406951	Repair Gas Cutting Gauges	R	10/30/2014	129.91		019295		
I-9032406952	Safety Glasses for Pipelines	R	10/30/2014	5.55		019295		
I-9032782573	Electrode Stick for LCRA Maint	R	10/30/2014	38.17		019295		
I-9921838824	Cylinder Rental for Pipelines	R	10/30/2014	32.15		019295		240.81
09569	ALLCABLE							
I-216982400	Cable, Tools for IT Dept	R	10/30/2014	99.70		019296		99.70
02708	Ofelia Amezcua							
I-092014	Camping Fee Refund	R	10/30/2014	28.00		019297		28.00
00417	APPLIED INDUSTRIAL TECHNOLOGY							
I-7003476418	Pump Coupling Post Chlor CL2	R	10/30/2014	224.87		019298		224.87
00014	AQUA-FLO SUPPLY							
C-688634	PVC Parts Returned	R	10/30/2014	24.97CR		019299		
I-677105	Tape, Hand Pump for Pipelines	R	10/30/2014	53.90		019299		
I-680319	Parts for New Toilets, LCRA	R	10/30/2014	309.74		019299		
I-682286	PVC Parts for Service Lines	R	10/30/2014	211.85		019299		
I-682918	Clamps for Pipelines	R	10/30/2014	67.18		019299		
I-684611	PVC Parts for Pipelines	R	10/30/2014	13.08		019299		
I-688302	PVC Parts for Pipelines	R	10/30/2014	37.83		019299		
I-688754	PVC for Waterpark	R	10/30/2014	61.88		019299		
I-688905	PVC Parts for Waterpark	R	10/30/2014	36.57		019299		767.06
01703	ARNOLD LAROCHELLE MATTHEWS							
I-42248	Matter #5088001, 9/14	R	10/30/2014	12,536.00		019300		
I-42249	Matter #5088012, 9/14	R	10/30/2014	825.00		019300		
I-42250	Matter #5088014, 9/14	R	10/30/2014	840.00		019300		14,201.00
01666	AT & T							
I-000005829590	Local, Regional, Long Distance	R	10/30/2014	1,069.47		019301		
Acct#C604513638777								
I-000005859259	Acct#C602222128777 T-1 Lines	R	10/30/2014	902.19		019301		1,971.66

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
00018	AT & T MOBILITY I-829434088X10142014 PT Wildlife Biol Monthly Cell	R	10/30/2014	11.46		019302		11.46
02271	Robert Auric I-072414 Reimburse for Mat. Cond Repair	R	10/30/2014	900.00		019303		900.00
00020	AVENUE HARDWARE, INC I-56557 Keys and Key Rings for TP I-56560 Keys for Pump Plants I-56673 Ridgid Cast for UOPP	R R R	10/30/2014 10/30/2014 10/30/2014	10.64 4.15 38.51		019304 019304 019304		53.30
00030	B&R TOOL AND SUPPLY CO I-1286253000101 Service Line Repair Tools I-1287147000101 Hammer Drill for Telemetry	R R	10/30/2014 10/30/2014	123.16 326.21		019305 019305		449.37
00679	BAKERSFIELD PIPE & SUPPLY INC I-S2099030001 Bushings, Couplings for WH	R	10/30/2014	173.03		019306		173.03
00463	Cal-Coast Machinery I-209823 Points for LCRA Maintenance	R	10/30/2014	17.98		019307		17.98
09907	CARUS PHOSPHATES, INC. I-SLS10037125 Orthopolyphoshate for TP	R	10/30/2014	20,935.63		019308		20,935.63
00057	CLEAN SOURCE I-286708900 Janitorial Supplies for LCRA I-286708900a Correct Inv#286708900 I-286790100 Janitorial Supplies, DO	R R R	10/30/2014 10/30/2014 10/30/2014	1,668.59 0.28 747.32		019309 019309 019309		2,416.19
01934	Coast Truck Parts I-4242880009 Parts to Repair Eq# 68 & 89	R	10/30/2014	351.29		019310		351.29
01843	COASTAL COPY I-568319 Copier Usage for LCRA	R	10/30/2014	91.69		019311		91.69
00059	COASTAL PIPCO I-S1834964002 PVC Fittings for TP I-S1836786001 Pipe for Post Chlor Injectors	R R	10/30/2014 10/30/2014	119.16 32.88		019312 019312		152.04
00071	COMMANDER PRINTED PRODUCTS I-98016 Envelopes for Dist Ofc, LCRA	R	10/30/2014	412.52		019313		412.52
00061	COMPUWAVE I-SB02078272 5 Port Desktop Switch for IT I-SB02078316 Printer Ink for Stock	R R	10/30/2014 10/30/2014	53.70 162.92		019314 019314		216.62

VENDOR SET: 01 Casitas Municipal Water D
 BANK: AP ACCOUNTS PAYABLE
 DATE RANGE: 10/22/2014 THRU 11/04/2014

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
00062	CONSOLIDATED ELECTRICAL I-9009704003 Gel Cap Wire Splices for O&M	R	10/30/2014	120.08		019315		120.08
01647	JOEL COX I-102714 Safety Boot Purchase	R	10/30/2014	170.00		019316		170.00
01525	CPS HR CONSULTING I-INV346840 Project #E3523 Water Ops Mgr	R	10/30/2014	5,978.64		019317		5,978.64
02034	D.K. Mechanical I-2986 Repair Raditor, EQ#112	R	10/30/2014	60.60		019318		
	I-2990 Repairs to Eq#112	R	10/30/2014	187.50		019318		
	I-2993 Bit Inspection, #88	R	10/30/2014	150.00		019318		
	I-2994 BIT Inspection #68	R	10/30/2014	375.00		019318		
	I-2995 BIT Inspection Eq#212	R	10/30/2014	75.00		019318		
	I-2996 Bit Inspection Eq#89	R	10/30/2014	375.00		019318		
	I-2997 Bit Inspection EQ#87	R	10/30/2014	112.50		019318		1,335.60
01856	DATA FLOW C-15596a Accrue Use Tax	R	10/30/2014	13.26CR		019319		
	D-15596a Accrue Use Tax	R	10/30/2014	13.26		019319		
	I-15596 W-9 and 1099 Forms	R	10/30/2014	192.86		019319		192.86
00076	DEKREEK TECHNICAL SERVICES I-64102 Services for Telemetry, TP	R	10/30/2014	4,920.00		019320		4,920.00
00520	DESTIN THOMAS COMM., INC. I-483255 Reprogram LCRA Radio Frequency	R	10/30/2014	179.00		019321		179.00
00182	DEWITT PETROLEUM I-0047554 Diesel for LCRA	R	10/30/2014	1,931.66		019322		
	I-0047555 Diesel for Main Yard	R	10/30/2014	1,044.95		019322		2,976.61
00086	E.J. Harrison & Sons Inc I-1150 Acct#500546088	R	10/30/2014	280.00		019323		
	I-28546 Acct#1C00053370	R	10/30/2014	114.55		019323		
	I-28570 Acct#1C00054230	R	10/30/2014	705.00		019323		1,099.55
00641	Environmental Laboratory Accre I-01151696 ELAP Annual Fee Cert#1696	R	10/30/2014	1,455.00		019324		1,455.00
00095	FAMCON PIPE & SUPPLY I-163059 Saddle for Warehouse Stock	R	10/30/2014	180.60		019325		
	I-163169 2" Air Valve Parts for PPs	R	10/30/2014	279.50		019325		460.10

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
10120	CHARLES Z. FEDAK & COMPANY I-083114 Target Audit	R	10/30/2014	7,360.00		019326		7,360.00
00575	FENCE FACTORY - SATICOY I-484026 Posts for LCRA Maintenance	R	10/30/2014	70.18		019327		70.18
00013	FERGUSON ENTERPRISES INC #1083 I-0491391 Parts for Warehouse Stock	R	10/30/2014	697.02		019328		697.02
00099	FGL ENVIRONMENTAL I-409998A Nutrient Profile 8/27/14 I-410355A Nutrient Profile 9/9/14 I-410537A Wet Chemistry-NO3 I-410598A Distribution System Analysis I-410654A Metals-Total, Mn I-410942A Manganese, Nitrate Testing	R	10/30/2014	1,328.00		019329		3,561.28
00101	FISHER SCIENTIFIC I-9631663 Ethyl Alcohol for Lab	R	10/30/2014	8.47		019330		8.47
00106	FRONTIER PAINT I-F0199107 Paint Supplies for Camp M RR	R	10/30/2014	24.35		019331		24.35
00485	FRUIT GROWERS SUPPLY COMPANY I-91604103 Gloves/Safety Glasses LCRA	R	10/30/2014	86.88		019332		86.88
01280	FRY'S ELECTRONICS, INC. I-5647462 Computer Hard Drive for IT	R	10/30/2014	151.17		019333		151.17
00216	THE GAS COMPANY I-102414 Acct#18231433006 I-102814 Acct#00801443003	R	10/30/2014	44.88		019334		117.82
00115	GRAINGER, INC I-9559994265 Boot Scraper, Treatment Plant I-9561209322 Disposable Respirators, LCRA I-9565867539 Fuses for Grand Avenue PP I-9567176806 Fuses for Grand Avenue PP I-9568555818 Respirator, Wheel Chocks I-9569756340 D Batteries for Stock	R	10/30/2014	41.41		019335		364.81
01052	HARBOR FREIGHT TOOLS USA, INC I-02179264 Stamp Set for Labeling Keys TP	R	10/30/2014	10.74		019336		10.74

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
00596	HOME DEPOT							
I-102014	Blind for Dist Maint Office	R	10/30/2014	16.17		019337		16.17
00131	JCI JONES CHEMICALS, INC							
I-635359	Chlorine for TP, CM#635373	R	10/30/2014	1,770.00		019338		
I-635974	Chlorine for TP, CM#636000	R	10/30/2014	899.94		019338		
I-635975	Chlorine for TP, CM#635999	R	10/30/2014	1,770.00		019338		4,439.94
00345	KAZARIANS & ASSOCIATES, INC.							
I-53110701	Update Risk Management Plan TP	R	10/30/2014	4,344.75		019339		4,344.75
01272	LISA KOLAR							
I-102314	Advanced Pesticide Class/Exams	R	10/30/2014	386.30		019340		386.30
01829	MAC'S AUTO UPHOLSTERY							
I-22816	Upholstery Repair for Eq#46	R	10/30/2014	453.75		019341		453.75
00329	MCMASTER-CARR SUPPLY CO.							
I-14956820	Push Connect Tube Fittings TP	R	10/30/2014	116.26		019342		
I-15342233	Polyethylene Sheet for PP	R	10/30/2014	56.49		019342		172.75
00151	MEINERS OAKS ACE HARDWARE							
I-630326	Supplies for Waterpark	R	10/30/2014	188.44		019343		
I-632442	Pipe for Wash Rack, LCRA	R	10/30/2014	114.55		019343		
I-633087	Supplies for Dist Maint	R	10/30/2014	9.56		019343		
I-633562	Concrete for Casitas Dam	R	10/30/2014	43.67		019343		
I-633651	Coupling for LCRA Maint	R	10/30/2014	10.56		019343		
I-633784	Parts for Water Leak in "O"	R	10/30/2014	6.63		019343		
I-633980	Parts for LCRA Fountain, Misc	R	10/30/2014	79.50		019343		
I-634017	Tubing for Dist Maint	R	10/30/2014	0.48		019343		
I-634108	Teflon Tape for Pipelines	R	10/30/2014	8.76		019343		
I-634174	Dish Soap, Distribution Shop	R	10/30/2014	3.71		019343		
I-634555	2" Couplings for Pipelines	R	10/30/2014	1.94		019343		
I-634607	Toggle Bolts for Blind in DM	R	10/30/2014	4.61		019343		
I-634625	Keys Made for PP Locks	R	10/30/2014	26.45		019343		
I-634643	Caution Tape, Pipeline Safety	R	10/30/2014	7.43		019343		
I-634683	Paint Supplies for Waterpark	R	10/30/2014	10.43		019343		
I-634723	Ready Mix for 3MPP, Canal	R	10/30/2014	172.77		019343		
I-634742	Parts for LCRA Fountain, Misc	R	10/30/2014	240.91		019343		
I-634746	Sawzal Blades for Waterpark	R	10/30/2014	43.02		019343		
I-634935	Silicon Spray, Handle for WP	R	10/30/2014	25.90		019343		
I-635003	Bolts & Screws for Pipelines	R	10/30/2014	26.53		019343		
I-635461	Drill Bits, Screws for IT Dept	R	10/30/2014	10.67		019343		
I-635737	Electrical Tape, Gloves for IT	R	10/30/2014	7.29		019343		1,043.81

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
00481	NORTHERN SAFETY COMPANY, INC.							
C-901129226A	Accrue Use Tax	R	10/30/2014	10.43CR		019345		
D-901129226A	Accrue Use Tax	R	10/30/2014	10.43		019345		
I-901129226	PPE for TP Staff	R	10/30/2014	139.13		019345		139.13
02185	Oasis Technology Inc.							
I-1001144	Anti-Hacking Device 3 Months	R	10/30/2014	237.00		019346		
I-1006144	Install Server Updates	R	10/30/2014	125.00		019346		362.00
00163	OFFICE DEPOT							
I-735808140001	Office Supplies	R	10/30/2014	580.21		019347		
I-735808431001	Office Supplies	R	10/30/2014	111.71		019347		691.92
00160	OILFIELD ELECTRIC CO, INC							
I-2016086	Repair Fairview PP Motor	R	10/30/2014	4,825.94		019348		4,825.94
01570	Ojai Auto Supply LLC							
I-321557	Fittings, Hose to Repair #114	R	10/30/2014	128.23		019349		
I-321832	Antifreeze for #114	R	10/30/2014	26.10		019349		154.33
00165	OJAI LUMBER CO, INC							
I-1409690412	Box of Screws for Waterpark	R	10/30/2014	17.89		019350		
I-1410692768	New Side Board for Dump Truck	R	10/30/2014	18.88		019350		
I-1410693969	Screws & Nails, 4M Motor Mutes	R	10/30/2014	8.49		019350		
I-1410694017	Concrete for 4M Motor Mutes	R	10/30/2014	66.26		019350		
I-1410694400	Lumber for 4MPP Motor Mutes	R	10/30/2014	13.02		019350		
I-1410694455	Concrete, Wood for 4MPP	R	10/30/2014	38.92		019350		
I-1410694505	Concrete for 4MPP Motor Mutes	R	10/30/2014	45.04		019350		
I-1410694600	Spade Drill Bit 4MPP	R	10/30/2014	3.38		019350		211.88
01627	OSCAR'S TREE SERVICE							
I-11388	Remove 4 Pines at LCRA Storage	R	10/30/2014	2,200.00		019351		2,200.00
10072	PERMACOLOR, INC							
I-276166	Powder Coat Pipe, Pipelines	R	10/30/2014	398.42		019352		
I-276193	Coat Motor Mute Stand UOPP	R	10/30/2014	300.00		019352		698.42
01439	PRECISION POWER EQUIPMENT							
I-2859	Bar for Saw in Dist Maint	R	10/30/2014	45.14		019353		
I-2864	Cut Off Saw Blades, Pipelines	R	10/30/2014	85.99		019353		131.13
00313	ROCK LONG'S AUTOMOTIVE							
I-13161	Replace Fuel Pump, #3, Fish	R	10/30/2014	837.68		019354		837.68

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
02475 I-702625	Rutan & Tucker, LLP Acct#0295180001 9/14	R	10/30/2014	1,394.00		019355		1,394.00
01107 I-S97093	SAWYER PETROLEUM Hydraulic Oil for Pump Truck	R	10/30/2014	156.70		019356		156.70
01944 I-102814	Luke Soholt D4 Exam	R	10/30/2014	130.00		019357		130.00
00215 I-102314 I-102314a I-102314b I-102914	SOUTHERN CALIFORNIA EDISON Acct#2157697889 Acct#2266156405 Acct#2312811532 Acct#2210507034	R R R R	10/30/2014 10/30/2014 10/30/2014 10/30/2014	926.39 116.34 18.54 17,752.70		019358 019358 019358 019358		18,813.97
02202 I-652331	Stanley Pest Control Pest Control at Waterpark	R	10/30/2014	170.00		019359		170.00
02703 I-48586353001	Sunbelt Rentals Excavator Rental for Pipelines	R	10/30/2014	295.63		019360		295.63
01173 C-0139049a D-0139049a I-0139049IN	TOICO INDUSTRIES, INC. Accrue Use Tax Accrue Use Tax Enzyme Tabs for CTs	R R R	10/30/2014 10/30/2014 10/30/2014	7.05CR 7.05 108.58		019361 019361 019361		108.58
02497 I-26242 I-26243	Total Barricade Service, Inc. Traffic Control, Grand & Daly Traffic Control, Grand & Daly	R R	10/30/2014 10/30/2014	621.00 981.00		019362 019362		1,602.00
02527 I-15981	Traffic Technologies LLC Safety Signs, Warehouse Area	R	10/30/2014	264.28		019363		264.28
09465 I-100914	TRAVIS AGRICULTURAL CONSTRUCTI Chlorination Bypass Line	R	10/30/2014	18,437.04		019364		18,437.04
09465 I-100914a	TRAVIS AGRICULTURAL CONSTRUCTI By-Pass Line, Rincon PP-Final	R	10/30/2014	10,390.50		019365		10,390.50
00239 I-29181896	VENTURA CHAMBER OF COMMERCE Water Summit Sponsorship	R	10/30/2014	500.00		019366		500.00
00254 I-12910 I-12913 I-12914	VENTURA LOCKSMITHS Clone Key Unit EQ#31 2 Key Fobs, 2 Key Units EQ#41 1 Keys Fob, 2 Key Units EQ#47	R R R	10/30/2014 10/30/2014 10/30/2014	85.00 430.00 306.38		019367 019367 019367		821.38

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
00258	VENTURA STEEL, INC							
I-159961	Steel for Motor Mute, UOPP	R	10/30/2014	69.55		019368		
I-160151	Steel for LCRA Maint	R	10/30/2014	32.36		019368		
I-160327	Steel for 4M Motor Mutes	R	10/30/2014	24.49		019368		126.40
09955	VENTURA WHOLESALE ELECTRIC							
I-146472	Electrical Supplies for LCRA	R	10/30/2014	102.77		019369		102.77
01283	Verizon Wireless							
I-9733148934	DO, TP Monthly Cell Charges	R	10/30/2014	720.03		019370		
	Acct#77062830400001							
I-9733149578	LCRA Monthly Phone Charges	R	10/30/2014	196.92		019370		916.95
	Acct#77232361800001							
00630	WESCO							
I-994422	Relay for Mira Monte Well	R	10/30/2014	326.33		019371		
I-995039	Probe for Mira Monte Well	R	10/30/2014	58.16		019371		
I-995041	Wire for Mira Monte Well	R	10/30/2014	548.25		019371		932.74
00271	WEST COAST AIR CONDITIONING							
I-S60580	Repair A/C Units at LCRA	R	10/30/2014	1,570.00		019372		1,570.00
00124	ICMA RETIREMENT TRUST - 457							
I-CUI201410270903	457 CATCH UP	R	10/30/2014	634.61		019373		
I-DCI201410270903	DEFERRED COMP FLAT	R	10/30/2014	2,894.24		019373		
I-DI%201410270903	DEFERRED COMP PERCENT	R	10/30/2014	171.06		019373		3,699.91
01960	Moringa Community							
I-MOR201410270903	PAYROLL CONTRIBUTIONS	R	10/30/2014	16.75		019374		16.75
00985	NATIONWIDE RETIREMENT SOLUTION							
I-CUN201410270903	457 CATCH UP	R	10/30/2014	864.53		019375		
I-DCN201410270903	DEFERRED COMP FLAT	R	10/30/2014	4,332.85		019375		
I-DCN201410270904	DEFERRED COMP FLAT	R	10/30/2014	100.00		019375		
I-DN%201410270903	DEFERRED COMP PERCENT	R	10/30/2014	304.10		019375		5,601.48
00180	S.E.I.U. - LOCAL 721							
I-COP201410270903	SEIU 721 COPE	R	10/30/2014	12.00		019376		
I-UND201410270903	UNION DUES	R	10/30/2014	677.50		019376		
I-UND201410270904	UNION DUES	R	10/30/2014	16.75		019376		706.25
02643	Take Care by WageWorks							
I-2381214	Reimburse Medical 2014	R	10/30/2014	177.30		019377		177.30

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
00230	UNITED WAY I-UWY201410270903 PAYROLL CONTRIBUTIONS	R	10/30/2014	60.00		019378		60.00
00124	ICMA RETIREMENT TRUST - 457 I-CUI201410290908 457 CATCH UP 1 I-DCI201410290908 DEFERRED COMP FLAT	R	10/30/2014	846.12		019379		
		R	10/30/2014	2,730.72		019379		3,576.84
1	Jimmy J James I-000201410170902 TS Refund	R	10/30/2014	1.90		019380		1.90
1	Dana G Thomas I-000201410280905 TS Refund	R	10/30/2014	42.50		019381		42.50
00144	BOB MONNIER I-Oct 14 Reimburse Mileage 10/14 I-Sep 14 Reimburse Mileage 9/14	R	10/30/2014	39.65		019382		
		R	10/30/2014	97.10		019382		136.75
02704	ADR Services, Inc. I-146187LSB02 CMWD Matter Case No. 146187LSB	R	11/04/2014	2,750.00		019383		2,750.00
01616	FRED BRENEMAN I-110114 10/26/14-11/8/14	R	11/04/2014	391.00		019384		391.00
02709	Brush Research Manufacturing C I-110414 Deposit for Brushes for Robles	R	11/04/2014	400.00		019385		400.00
00126	CAROLE ILES I-Oct 14 Reimburse Mileage 10/14	R	11/04/2014	45.08		019386		45.08
02671	Tim Lawson I-Oct 14 Reimburse Expenses 10/14	R	11/04/2014	1,303.16		019387		1,303.16
00215	SOUTHERN CALIFORNIA EDISON I-103114 Acct#2210503702 I-110114 Acct#2210502480 I-110114a Acct#2210505426 I-110114B Acct#2237789169 I-110414 Acct#2269631768	R	11/04/2014	9,405.60		019388		
		R	11/04/2014	152,293.71		019388		
		R	11/04/2014	1,987.63		019388		
		R	11/04/2014	31.18		019388		
		R	11/04/2014	24.38		019388		163,742.50
00048	STATE OF CALIFORNIA I-110114 State Water Plan Payment	R	11/04/2014	114,796.00		019389		114,796.00

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
01101	REBEKAH VIEIRA							
I-Oct 14	Reimburse Expenses 10/14	R	11/04/2014	112.60		019390		112.60
00489	STEVE WICKSTRUM							
I-Oct 14	Reimburse Mileage 10/14	R	11/04/2014	104.16		019391		104.16
01203	DENISE COLLIN							
I-Oct 14	Reimburse Expenses 10/14	R	11/04/2014	250.82		019392		250.82
00128	INTERNAL REVENUE SERVICE							
I-T1 201410270903	Federal Withholding	D	10/29/2014	24,077.62		102941		
I-T1 201410270904	Federal Withholding	D	10/29/2014	620.41		102941		
I-T3 201410270903	FICA Withholding	D	10/29/2014	20,699.46		102941		
I-T3 201410270904	FICA Withholding	D	10/29/2014	428.02		102941		
I-T4 201410270903	Medicare Withholding	D	10/29/2014	5,606.30		102941		
I-T4 201410270904	Medicare Withholding	D	10/29/2014	100.10		102941		51,531.91
00049	STATE OF CALIFORNIA							
I-T2 201410270903	State Withholding	D	10/29/2014	7,997.26		102942		
I-T2 201410270904	State Withholding	D	10/29/2014	209.45		102942		8,206.71
00187	CALPERS							
I-PBB201410270903	PERS BUY BACK	D	10/29/2014	66.87		102943		
I-PEB201410270903	PEBRA EMPLOYEES PORTION	D	10/29/2014	1,045.79		102943		
I-PEB201410270904	PEBRA EMPLOYEES PORTION	D	10/29/2014	146.14		102943		
I-PER201410270903	PERS EMPLOYEE PORTION	D	10/29/2014	10,093.20		102943		
I-PRB201410270903	PEBRA EMPLOYER PORTION	D	10/29/2014	1,045.79		102943		
I-PRB201410270904	PEBRA EMPLOYER PORTION	D	10/29/2014	146.14		102943		
I-PRR201410270903	PERS EMPLOYER PORTION	D	10/29/2014	12,378.42		102943		24,922.35
00128	INTERNAL REVENUE SERVICE							
I-T1 201410290907	Federal Withholding	D	10/30/2014	12,825.63		103041		
I-T1 201410290908	Federal Withholding	D	10/30/2014	26,067.09		103041		
I-T4 201410290907	Medicare Withholding	D	10/30/2014	1,102.48		103041		
I-T4 201410290908	Medicare Withholding	D	10/30/2014	2,569.89		103041		42,565.09
00049	STATE OF CALIFORNIA							
I-T2 201410290907	State Withholding	D	10/30/2014	4,086.39		103042		
I-T2 201410290908	State Withholding	D	10/30/2014	8,954.77		103042		13,041.16
00187	CALPERS							
I-PER201410290907	PERS EMPLOYEE PORTION	D	10/30/2014	244.59		103043		
I-PRR201410290907	PERS EMPLOYER PORTION	D	10/30/2014	299.87		103043		544.46

VENDOR I.D.	NAME	STATUS	CHECK DATE	INVOICE AMOUNT	DISCOUNT	CHECK NO	CHECK STATUS	CHECK AMOUNT
-------------	------	--------	------------	----------------	----------	----------	--------------	--------------

* * T O T A L S * *

	NO	INVOICE AMOUNT	DISCOUNTS	CHECK AMOUNT
REGULAR CHECKS:	114	468,940.70	0.00	468,940.70
HAND CHECKS:	0	0.00	0.00	0.00
DRAFTS:	6	140,811.68	0.00	140,811.68
EFT:	0	0.00	0.00	0.00
NON CHECKS:	0	0.00	0.00	0.00
VOID CHECKS:	0	VOID DEBITS	0.00	
		VOID CREDITS	0.00	
			0.00	0.00

TOTAL ERRORS: 0

	NO	INVOICE AMOUNT	DISCOUNTS	CHECK AMOUNT
VENDOR SET: 01 BANK: AP TOTALS:	120	609,752.38	0.00	609,752.38
BANK: AP TOTALS:	120	609,752.38	0.00	609,752.38
REPORT TOTALS:	121	609,752.38	0.00	609,752.38

**CASITAS MUNICIPAL WATER DISTRICT
INTEROFFICE MEMORANDUM**

TO: Steve Wickstrum, General Manager
FROM: Carol Belser, Park Services Manager
SUBJECT: **Accept Proposal And Enter Into An Agreement With RNT Consulting Services Inc. For Consulting Services For A Lake Casitas Vulnerability Assessment And A Control And Management Plan For Aquatic Invasive Species**
DATE: November 4, 2014

RECOMMENDATION:

It is recommended that the Board of Directors accept the proposal and enter into an agreement with RNT Consulting Inc. in an amount not to exceed \$49,575 to provide the District with a Vulnerability Assessment and a Control and Management Plan for Invasive Species (Dreissenid Mussels).

BACKGROUND AND DISCUSSION:

Quagga and Zebra mussels arrived in North America from Europe in the 1980s first appearing in Lake Mead in January 2007. They were subsequently were found in Lakes Mohave and Havasu on the Colorado River and in the Colorado River Aqueduct System which serves Southern California. Zebra Mussels heavily colonize hard substrates while Quaggas colonize both hard and soft substrates and both clog water intake structures, such as pipelines and screens, reducing pumping capabilities for water treatment facilities. Recreation-based industries and activities are affected by the mussels which take up residence on docks, buoys, boats and beaches. Casitas has had an aggressive vessel tamper proof tag prevention program in place since 2008 in response to the threat of Quagga/Zebra Mussel migration from other lakes in California and Nevada through recreational boating.

In December 2013, Lake Piru identified mollusks attached to a Lake Patrol vessel and several substrate monitoring devices. The mollusks were identified as Quagga Mussels, or *Dreissena bugensis*, through DNA testing. The Quagga found in Lake Piru are the first to be found in Ventura County and the first in a California lake body that is not connected to the Colorado River system. United Water Conversation District, the agency that manages Lake Piru, has released statements that maintenance costs to deal with the infestation are in the hundreds of thousands and eradication at this point in time in the tens of millions of dollars. Maintenance costs are exponential since unless the mussel is eradicated, constant maintenance and management practices must be done to keep the infrastructure operational. Mussel transport from an infected water source to Lake Piru via recreational boating appears to be the source of the infestation.

Casitas desires to have a vulnerability assessment to identify any and all exposures and or weaknesses in the Casitas system, Casitas' methods and Casitas' preventative measures that are currently in place to defend Lake Casitas from destructive aquatic Dreissenid Mussels and be provided with recommendations for any and all improvements to the current preventative

system, methods and measures. Additionally, Casitas desires to have a Control and Management Plan also referred to as a Rapid Response Plan that includes eradication measures in the event Casitas becomes infected with the mussels. This plan must be in compliance with the California Department of Fish and Wildlife Codes 2301 and 2302.

Casitas sent out Requests for Proposals to five firms and posted it on the Casitas web site on September 4, 2014. Two proposals were received by the deadline of September 25, 2014. The results are as follows:

Firm	Vulnerability Assessment	Control and Management Plan	Total
Cardo Entrix 201 N. Calle Cesar Chavez Suite 203 Santa Barbara, CA 93103	\$27,830	\$26,685	\$54,515
RNT Consulting Inc. 823 County Road 35 Picton, Ontario, Canada K0K 2T0	Included in total	Included in total	\$49,575

The scope of work that RNT Consulting Services will perform include:

- Kick Off Meeting/Field Inspection/Data Collection - **\$7,800.00.**
- Preliminary Environmental Suitability Determination - **\$2,600.00.**
- Data Gathering and Analysis Report Findings and Recommendation – **\$36,175.00.**
 - ✓ Examine History of the reservoir, watershed details and reservoir uses for possible vulnerabilities for aquatic alien species introduction
 - ✓ Provide Background of Quagga and Zebra Mussels
 - ✓ Estimate the Potential for Quagga/Zebra colonization in Lake Casitas
 - ✓ Review any Existing Monitoring Program for Water Quality / Chemistry and Presence of Dreissenids
 - ✓ Evaluate and Document Possible Vectors of Introduction and Dispersal
 - ✓ Estimate and Document Impact of Dreissenid Mussels to District area.
 - ✓ Assess Potential for Eradication with Options for Consideration
 - ✓ Develop Containment Measures for Quagga Mussels in Lake Casitas
 - ✓ Develop Required Public Outreach Materials on Aquatic Invasive Species
- Travel costs to Lake Casitas - **\$3,000.00.**

Total Proposal - **\$49,575.00.**

If approved, the project will commence in early December 2014 and take approximately sixteen (16) weeks concluding at the end of March 2015.

The 2014-15 budget includes \$40,000.00 for the project and the lowest responsible bidder RNT Consulting Inc. proposed \$49,595.00 or 25% higher than the budgeted amount. Casitas has applied for a \$40,000.00 Quagga and Zebra Mussel Infestation Prevention Fee Grant from the Department of Parks and Recreation, Division of Boating and Waterways which, if awarded, will offset the cost of the project.

RNT Consulting Inc.
823 County Road 35
Picton, Ontario, Canada
K0K 2T0

Phone: 613 476 7994
URL: www.rntconsulting.net



PROPOSAL FOR LAKE CASITAS VULNERABILITY ASSESSMENT AND A CONTROL AND MANAGEMENT PLAN FOR AQUATIC INVASIVE SPECIES

Prepared for Casitas Municipal Water District



Prepared by: Renata Claudi MSc. and Tom Prescott MAsc, PEng.

Date: September 17, 2014

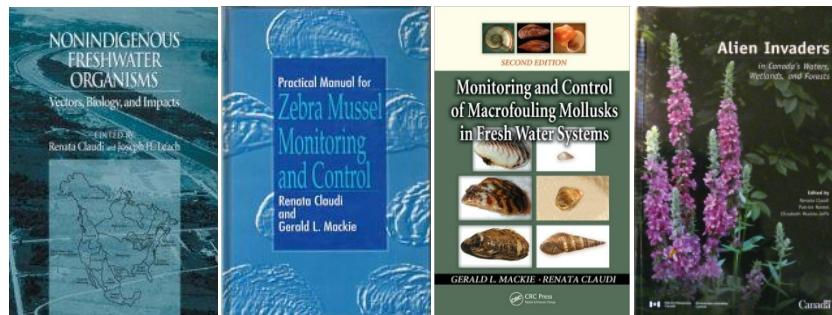
Table of Contents

1.:	Introduction	3
2.:	References and Selected Project List.....	4
3.:	Proposal	6
4.:	Quality Assurance / Quality Control	12
5.:	Schedule	12
6.:	Budget.....	14
7.:	Company Background, Projects and Experience.....	15
8.:	Resumes	18
9.:	Resource Material	33

1.:Introduction

In late 2013, Quagga mussels were found to be present in Lake Piru in Ventura County, Southern California. This is the first time Quagga mussels have been found in California in a lake or reservoir which does not receive Colorado River Water. Although Casitas Municipal Water District has implemented a strict water vessel tagging and quarantine program at Lake Casitas since 1980, and while there appears to be no indication of an infestation of Quagga/Zebra mussels in Lake Casitas, the infestation of Lake Piru has caused Casitas Municipal Water District to re-evaluate the current dreissenid prevention program, assess vulnerabilities and develop an action plan which is both preventative and proactive and which can be implemented should the mussels arrive.

RNT Consulting Inc. is an independent consulting company established in 1998. Our primary area of activity is the control and mitigation of biofouling, as well as addressing issues arising from aquatic invasive species. We apply both proven and innovative technologies appropriate to a given situation. We are considered experts in this field in North America. With more than 50 years of combined experience, four text books authored, and focused studies across the continent and overseas over the past 10 years, RNT represents the industry authority on dreissenid mussel research, monitoring, assessment and control. Two of the members of the proposed team are biologists. The third member of the team is a mechanical engineer with background in forensic engineering and military service.



The company has been engaged in contract work for various clients including Environment Canada, Transport Canada, Agriculture Canada, Ontario Power Generation, Ontario Federation of Anglers and Hunters, U.S Army Corps of Engineers, U.S. Bureau of Reclamation, Central Arizona Project, Salt River Project, Southern Nevada Water, California Department of Water, and Brazilian and Spanish Power Utilities.

For carrying out vulnerability assessments, we have developed a concise methodology to assess various structures, facilities and water bodies for their vulnerability to mussel infestation. Vulnerability assessments have been done for a number of clients as documented by the report titles which follow. The assessment is done using a team comprised of the RNT engineer and biologists together with client personnel intimately

familiar with the structures in question and their operation. Vulnerability assessments allow clients to focus on the protection of assets most likely to be severely affected by mussel infestation. The assessments also aid in selecting the most appropriate and economical mitigation strategy. Reclamation has adopted this vulnerability assessment template for internal use by Reclamation staff when assessing all Reclamation assets.

2.: References and Selected Project List

CAP Central Arizona Project (CAP)

Scott Bryan - Senior Biologist

Phone: (623) 869-2474 • Cell: (602) 376-5763 • email: sbryan@cap-az.com

Assessment of the potential impact of Quagga mussels on Central Arizona project western facilities and structures; recommendations for monitoring and control (2008)

Assessment of the Potential Impact of Quagga Mussels on CAP Southern Canal facilities and structures; recommendations for monitoring and control (2009)

Salt River Project

Lesly Swanson - Senior Environmental Scientist, SRP Environmental Services

Phone: (602) 236-2893 • Fax: (602) 236-3407 • email: Lesly.Swanson@srpnet.com

Assessment of the Cragin Water Project potential for infestation by Quagga and Zebra mussels, assessment of impact on civil and mechanical structures and recommendations for monitoring and control (2008)

Phase II Assessment of the Potential Impact of Quagga Mussels on Salt River Project Facilities and Structures; Recommendations for Monitoring and Control (2009)

U.S. Bureau of Reclamation

Leonard Willett - Hoover Dam - Lower Colorado Dams Office, P.O. Box 60400
Boulder City, NV 89006

Phone: (702) 494-2216 • Fax: (702) 494-2841 • email: lwillett@usbr.gov

Assessment of the Potential Impact of Quagga Mussels on Hoover Dam and Recommendations for Monitoring and Control (2007)

Assessment of the Potential Impact of Quagga Mussels on Hoover Dam and Recommendations for Monitoring and Control (2007)

Assessment of the Potential Impact of Invasive Mussels to Water and Power System Facilities and Structures for the following Facilities: East Portal Reservoir, Marys Lake, Pole Hill, Pinewood Reservoir, Flatiron Reservoir and Green Mountain Reservoir of the Colorado-Big Thompson Project (2009)

California Department of Water Resources

Tanya Veldhuizen - California Department of Water Resources, O&M Environmental Assessment Branch, Aquatic Nuisance Species Program

Phone: (916) 657-3609 • Cell: (916) 539-6741 • email: tanyav@water.ca.gov

Assessment of the Potential Impact of Quagga/Zebra Mussels on Selected Facilities and Structures of the California State Water Project; Recommendations for Monitoring and Control – Part 1 (2008)

Assessment of the Potential Impact of Dreissenid Mussels on the Citrus Pumping Plant and Recommendations for Mitigation/Control (2010)

Vulnerability Assessment and management of Dreissenid Mussels in the State Water Project – Part 2 (2013)

Ontario Ministry of Natural Resources

Francine McDonald - Senior Invasive Species Biologist, Biodiversity Branch, Biodiversity Policy Section, Ontario Ministry of Natural Resources

Phone: (705) 755-5136 • email: Francine.MacDonald@Ontario.ca

Public Outreach and Education On Aquatic Invasive Species - This effort was initiated by the Ontario Ministry of Natural Resources in 2006 and involved the production of two videos, a brochure and a waterproof sticker. The printed material was later adapted by each province of Canada and re-printed in 2007. In Manitoba the video has become part of the school curriculum (2007/2008).



3.: Proposal

RNT Consulting Inc. has prepared the following proposal for carrying out a vulnerability assessment of existing preventative measures which are in place to prevent infestation by dreissenid mussels and for the development of a Control and Management Plan should said mussels become established in Lake Casitas. The objective of the Control and Management Plan is to provide a road map forward on managing the mussel infestation in the reservoir, minimizing impact on manmade structures such as pipeline distribution systems and preventing the mussels from spreading from the reservoir to other areas. Contained within the plan will be detailed information on a number of topics as outlined in the scope of work and the plan will meet the requirements of the California Department of Fish and Wildlife Codes 2301 and 2302.

Key staff for this project are the two principles of RNT, Renata Claudi and Tom Prescott along with Dr. Gerry Mackie.

We propose to carry out the work in the following steps;

1. After the contract is awarded we propose to hold an initial kick-off meeting where we will introduce our team to the staff and stakeholders of Casitas Municipal Water District, determine what data sources are available, collect all available material on existing controls which are in place and physically examine the area of Lake Casitas. If necessary we will collect water samples to determine the calcium level in the water and measure alkalinity, total hardness, pH and dissolved oxygen. If desired by the client, we offer an overview presentation on the biology and ecology of dreissenid mussels and an overview of existing control strategies.
2. Examine all available water quality data to determine if dreissenid population would be able to survive or thrive in Lake Casitas. In the event that we deem the lake is not suitable for mussel population, we will report these findings to the client, so that the rest of the scope may be adjusted.
3. If the lake is deemed capable of supporting dreissenid population we will proceed with the following steps;

3.1 Examine the History of the reservoir, watershed details and reservoir uses for possible vulnerabilities to aquatic alien species introduction

Lake Casitas is an artificial lake formed by the construction of the Casitas Dam in 1958 on the Ventura River. Due to various meteorological events the lake was not fully filled and functional until 1978. The Casitas Municipal Water District supplies water from Lake Casitas to 60-70,000 people in Western Ventura County and to hundreds of farms through an extensive network of concrete and steel pipes.

The Lake Casitas Recreation Area encompasses the northern end of Lake Casitas and is a very popular destination site with over 650,000 visitors each year. While camping draws the most attendance, boating and fishing activities have always been popular. Lake Casitas has a robust boat inspection and tagging protocol in place. As Lake Casitas is a drinking water reservoir, no body contact such as swimming, wading, or skiing is allowed.

Within this task we will review;

- History of the reservoir and Recreational Uses
- All water inputs and water releases to and from the reservoir
- Composition of the substrate and underlying rock formation

3.2 Provide Background on Zebra and Quagga mussels

RNT has studied Zebra and Quagga mussels since they arrived in the Great Lakes (1986 Zebra Mussel; 1991 Quagga Mussel) and two of the three investigators assigned to this project have written numerous articles as well as two books on dreissenids.

In this task we will summarize the following information on Quagga mussels;

- Systematics and taxonomy
- Anatomy and Morphology
- General Life Stages
- Growth and Feeding
- Predation
- Habitat
- Distribution

3.3 Estimate the Potential for Quagga/Zebra colonization in Lake Casitas

This step assumes that the brief initial water quality review described in Step 2 has determined that dreissenids would be able to survive and thrive in Lake Casitas.

The success of an invasion by dreissenids depends on the quality of water, and the health of the receiving ecosystem. The quality of water in a lake depends in part on the chemistry of the water that supplies the lake. Every lake has its own watershed, and the chemistry of the soil and bedrock in the watershed will largely (but not entirely) dictate the chemistry of the water flowing through it and over it. The chemistry may change over time. The rate and amount of change depends on factors such as type and amount of bedrock, climate and the weathering processes which naturally and continually take

place. We propose to review the key parameters of Lake Casitas water chemistry by reviewing all of the data available, preferably examining multi year data sets on such parameters as;

- Calcium
- pH
- Water temperature
- Dissolved oxygen
- Chlorophyll
- Nitrogen
- Phosphorus
- Turbidity

The success of an invasion by an aquatic nuisance species depends on the physiological and ecological requirements and tolerances of the species. Thus, a species' potential for invasion into a body of water not only depends on its dispersal potential but on the ability of the body of water to support a viable population. By reviewing the above parameters we may be better able to determine the ultimate size of the Quagga mussel population and therefore the impact such a population may have on the lake and associated infrastructure.

3.4 Review any Existing Monitoring Program for Water Quality / Chemistry and Presence of Dreissenids

Water Quality/Chemistry - Depending on the quantity and quality of water data available for review we may recommend, at a minimum, a seasonal (i.e. spring, summer, fall, winter) sampling regime. If possible, it is preferable to collect monthly samples. Sampling locations should include any effluent from Lake Casitas and several stations in the impoundment. EPA methods should be used to measure the environmental variables.

The pre-invasion monitoring program for dreissenids is usually limited to detecting the presence or absence of various stages of the dreissenid mussels. Monitoring for the planktonic stages as well as settlement plates to detect adults is recommended.

Should an invasion occur, the monitoring program will need to be changed to a primarily temporal one which is used to determine the level of infestation at different times of the year, the periods of reproduction and of settlement, and the periods of most and least intense infestation levels. Growth rates and longevities would also be part of the analyses. Post-invasion monitoring is especially important to industries, utilities and irrigation systems in order to determine when larvae are arriving in the cooling systems, follow the changes in numbers of veligers and attached adults within different parts of a facility, determine the effectiveness of a control program and minimize the costs of a control program. Monitoring methods vary and the final monitoring program should be a

combination of best available techniques and staff preference and availability. The following items will be part of the monitoring program;

- Periods of settlement
- Densities of larvae and adults
- Maximum sizes and biomasses of adults
- Development rates of larvae
- Growth rates of adults

The monitoring program would meet the California Fish and Game requirement for delineation of infestation, including both adult mussels and veligers.

3.5 Evaluate and Document Possible Vectors of Introduction and Dispersal

It is prudent to review the potential vectors of introduction as well as the potential vectors of dispersal. The review would include but not be limited to such activities as;

- Fish stocking
- Fire Fighting
- Water Transfers
- Recreational Boating
- Perimeter security
- Sabotage

This review would allow management to focus on the vectors of greatest concern.

3.6 Estimate and Document Impact of Dreissenid Mussels to district/area

The impacts to be considered are broadly divided into four categories which do have some overlap.

- Ecological Impacts such as potential changes to fisheries and water quality
- Physical Impacts on manmade structures including the dam, water distribution system and any recreational facilities or structures
- Economic impacts of the infestation and the efforts of minimizing spread and/or eradication
- Recreational Impacts

3.7 Document Available Control Measures for Adult Mussels and Options for Decontamination of Water Containing Larval Mussels.

Mackie and Claudi (2010) describe a number of controls strategies for use both proactively and reactively. The choice depends on the circumstances, regulatory stance and management preference. Control strategies fall into the following categories;

- Cultural Controls such as public education
- Physical Controls
- Biological controls
- Chemical controls

All appropriate control strategies will be documented and reviewed with staff and any identified stakeholders in order to prioritize applicability.

3.8 Assess Potential for Eradication

There exists some potential for eradication of Quagga mussels should they be introduced. The economic requirement of eradication would have to be assessed and evaluated against the on-going management effort of minimizing impact and spread. This assessment would be done in concert with the client.

3.9 Develop Containment Measures for Quagga Mussels in Lake Casitas

Based on Vector Analysis carried out under step 3.5, address all vectors which may result in the spread of Quagga mussels such as, but not limited to,:

- Recreational Boats
- Effluent leaving Casitas
- Water Quality sampling

We would then develop a containment plan for each vector, incorporate existing strategies such as current boat inspections. Part of this plan would consider potential impact to other water bodies in the local area should Casitas become infested. Therefore this task would also include:

- Identifying adjoining water bodies
- Implementation of HACCP methodology for “clean” sampling practices.

3.10 Develop Required Public Outreach Material on Aquatic Invasive Species

In concert with the client we are able to prepare any required public outreach material aimed at;

- Recreational Boaters
- Fisherman
- General Public

3.11 Report of Findings and Recommendation

We will review the draft document with representatives from Casitas Municipal Water District and any stakeholders identified by the District prior to issue to verify that all the objectives of the scope have been met.

4.: Quality Assurance / Quality Control

RNT is an independent company focused only on providing our clients with the best expert information possible to make decisions related to mussel issues that may affect the client. We test mussel related products for various vendors but we do not represent or promote specific vendors. Any assignments with vendors are done through non-disclosure agreements (NDA) solely to protect the vendors proprietary information. This approach makes us knowledgeable about the efficacy, costs and applicability of a variety of solutions for our clients.

RNT takes a multidisciplinary approach to our investigations involving biology, engineering, chemistry, operations and statistics to assess the broadest possible risk areas for our clients. For example RNT pioneered the use of evaluating historical environmental parameters as part of our assessment. This has saved clients in New York, California and Arizona millions of dollars in avoiding needless capital outlay.

RNT participates in conferences, interest groups and a network of personal contact to keep up to date and share the most recent information about mussel related issues.

All our reports are peer reviewed internally and vetted by our clients before issue. We encourage review and feedback from our clients before issuing reports as the variety and complexity of each setting can clearly benefit from the depth of operational experience at a particular site.

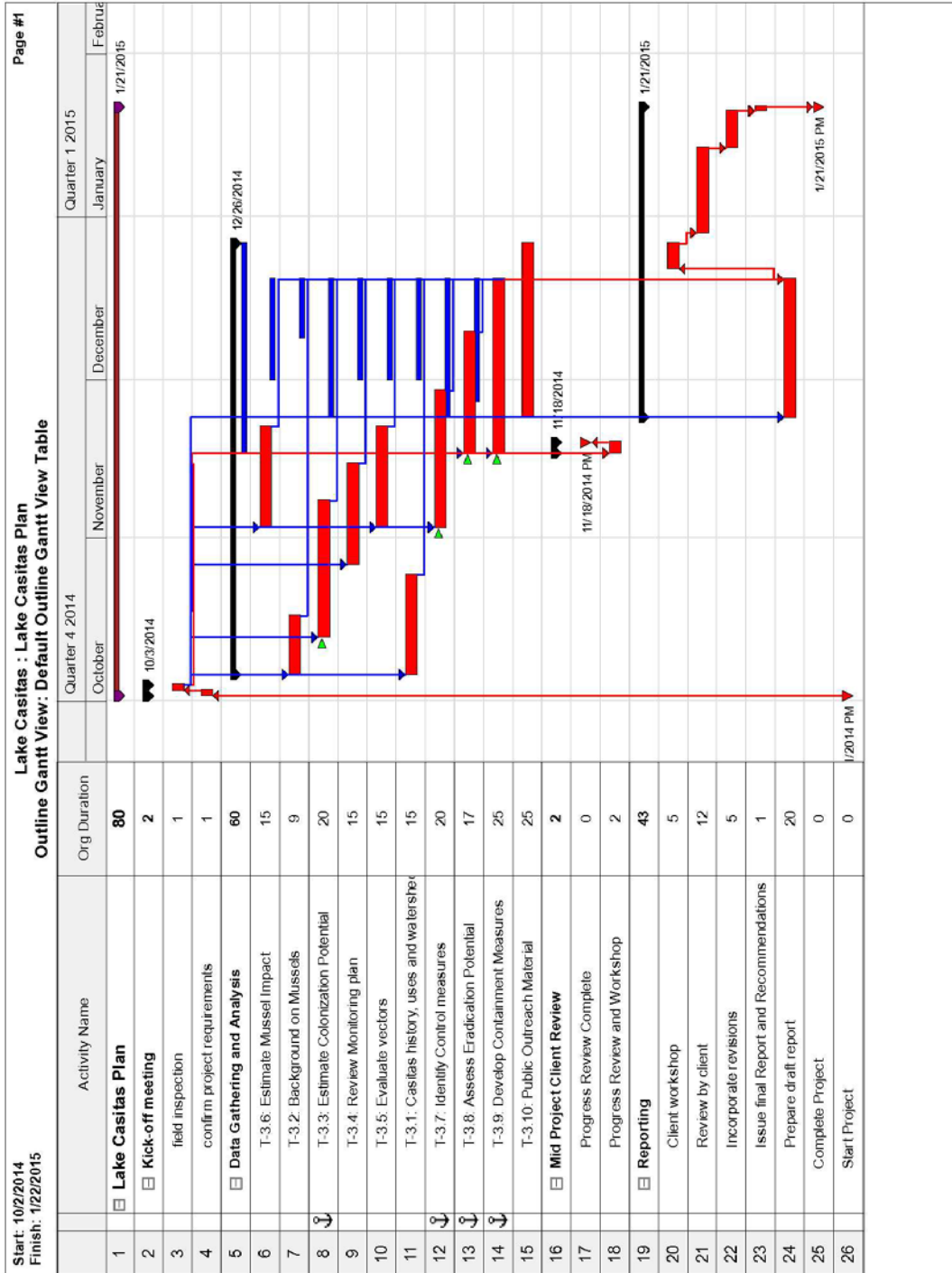
We offer to our clients the option to name a technical contact for ongoing telephone consultations following completion of our assignments. This person or persons becomes part of RNT's ongoing network for information exchange.

5.: Schedule

The schedule is based on a start date of October 1, 2014 with completion following 16 weeks later. This start date can be adjusted at the pleasure of the client without altering the activity durations. A kick-off meeting follows shortly after confirmation of project approval. Within two weeks of the first meeting we propose to have verification as to whether or not dreissenid mussels are likely to survive and thrive in Lake Casitas. We shall inform the client and adjust the scope if appropriate. Six weeks later, a mid-course progress meeting will be held in person or by teleconference to update the client on progress and to make any adjustments required by the client.

Following the mid-course review, a draft report will be prepared for review and feedback by the client and any stakeholders identified by the client. Client comments will then be addressed and incorporated and a final report issued by May 30, 2015. A level 1 project GANTT chart is provided below for more detailed information.

1 of 1



6.: Budget

COST ESTIMATE for Lake Casitas: September 15, 2014					RNT Consulting Inc.	
STAFF COSTS	Principal - Project Manager	Principal-Engineer	Lead Scientist	Junior Scientist, Technical specialist	Total	Total
	Claudi R	Prescott T	Mackie G		RNT Hours	RNT Dollars
Rate/Hour	\$130.00	\$130.00	\$130.00	\$75.00		
Kick-off meeting	20	20	20	0	60	\$7,800
Preliminary Environmental suitability	5	0	15	0	20	\$2,600
Tasks 3.1 to 3.11	70	55	110	75	310	\$36,175
Total Labor Hours	95	75	145	75	390	
Total Labor Dollars	\$12,350	\$9,750	\$18,850	\$5,625		\$46,575
DIRECT COSTS						
	Unit Costs/ Rate				Quantity	Total
Travel Costs						
airfare (Toronto / Los Angeles)	\$700.00	per trip			3	\$2,100
accommodation and meals	\$130.00	per day			6	\$780
car rental, fuel	\$60.00	per day			2	\$120
Total Travel Costs						\$3,000
Labor (staff cost)						\$46,575
Travel costs						\$3,000
TOTAL ESTIMATED FEE						\$49,575

7.: Company Background, Projects and Experience

RNT Consulting Inc. is an independent consulting company established in 1998.

Our primary area of activity is the control and mitigation of biofouling, as well as addressing issues arising from aquatic invasive species. We apply both proven and innovative technologies appropriate to a given situation. We are considered experts in this field in North America. The company has been engaged in contract work for various clients including Environment Canada, Transport Canada, Agriculture Canada, Ontario Power Generation, Ontario Federation of Anglers and Hunters, U.S Army Corps of Engineers, U.S. Bureau of Reclamation, Central Arizona Project, Salt River Project, Southern Nevada Water, California Department of Water, and the Brazilian and Spanish Power Utilities.

Renata Claudi M Sc. and Thomas Prescott P Eng. are the principles of RNT Consulting. Dr. Gerry Mackie is a long time associate.

As a team, Ms. Claudi and Mr. Prescott have carried out numerous assessments of risk from dreissenid infestation. These risk assessments usually include the evaluation of the available habitat for mussel colonization and the probability of the dreissenid mussels reaching certain locations. The following is a partial list of completed projects.

Selected Projects in 2013:

1. Vulnerability assessments of the facilities, dam and hydro power for the California Department of Water Resources. This included selection of mitigation strategies appropriate for each facility.
2. Assessment of a full-scale Atlantium medium pressure UV system as a mitigation strategy for prevention of Quagga mussel settlement in cooling water systems of Davis Dam. This study was done for the US Bureau of Reclamation.
3. Assessment of a copper ion generator as means of eliminating settlement of Quagga mussel veligers. This study is still on-going and it is sponsored by the US Bureau of Reclamation.
4. Use of calcite index as a predictor of dreissenid mussel invasion success. This study was sponsored by the California Department of Water Resources.

- Selected Projects in 2012:

5. Assessment of a small-scale Atlantium medium pressure UV system as a mitigation strategy for prevention of Quagga mussel settlement. This study was done for the manufacturer Atlantium Technologies.
 6. Assessment of a full-scale Aquafine medium pressure UV system as a mitigation strategy for prevention of Quagga mussel settlement in cooling water systems of Hoover Dam. This study was done for the US Bureau of Reclamation.
 7. Study to examine the impact of copper based algaecides on adult dreissenid mussels. This study was sponsored by the California Department of Water Resources.
 8. Study to examine the impact of Endothal based algaecides on adult dreissenid mussels. This study was sponsored by the US Bureau of Reclamation.
- Selected Projects in 2011 and earlier:
 9. Vulnerability Assessment for Quagga mussel infestation for San Diego County Water Authority Reservoirs and Facilities, including a prioritized list of viable control strategies and their costs.
 10. Study to examine the impact of chlorine use on dreissenid mussel veligers. The study was done for Rancho California.
 11. Study to examine the effect of high pH on dreissenid settlement and adult mussel survival. Sponsored by US Bureau of Reclamation.
 12. Study to examine the effect of low pH on dreissenid settlement and adult mussel survival. Sponsored by California Department of Water Resource.
 13. In 2010 we completed a study on the vulnerability of the California State Project System to dreissenid infestation, assessment of mussel settlement in the Central Arizona Project System and evaluation of an irrigation system vulnerability for Agriculture Canada. We also consulted for Brazilian Utility on the impacts of the golden mussel, *Limnoperna fortunei*.
 14. In 2009 we completed a study on the effect of low pH on dreissenid mussel settlement and survival, funded by Central Arizona Project. For Rancho California we looked at the use of small pore self cleaning filters as a barrier to dreissenid spread. We also completed numerous vulnerability assessments for a number of different clients.
 15. In 2007/2008, we contributed to and edited the Zebra Mussel Response Plan for Lake Pueblo at the request of Colorado State Parks Agency
 16. Projects in 2008 included evaluation of the risk Quagga mussels pose to the Central Arizona Project, the risk of infestation of a reservoir belonging to the Salt River Project and work on several projects for US Bureau of Reclamation.

17. In 2007 we evaluated the vulnerability of Parker Dam, Davis dam and Hoover Dam on the Colorado River for the US Bureau of Reclamation. In Spain we completed a vulnerability assessment of a nuclear power plant and assisted the client with immediate implementation of a control strategy.
18. In 2006 we carried out a vulnerability assessment of several dams for the Brazilian utility CEMIG. The infestation there is caused by a mussel called *Limnoperna fortunei*, commonly known as the golden mussel. Although this is not a Dreissenid mussel, the method of fouling is very similar and so are the controls.

8.: Resumes

Project Manager

Renata Claudi, M.Sc.

RNT Partner and Chief Scientist

Ms. Claudi is an environmental scientist with over 25 years of diverse business and technical experience. After more than 15 years in the electric power industry, where she established the mussel mitigation program for Ontario's largest electricity utility, Ms. Claudi formed RNT Consulting Inc. to respond to the broader industry need for expert mussel support. As aquatic nuisance species becomes geographically more widespread, Ms. Claudi has provided mussel expertise internationally on the various aspects of alien species invasions, including their economic impact, protection of assets, selection of appropriate control options, and installation of these control options.

Academic Background

Master of Science, Biological Oceanography (McGill University)

Bachelor of Science, Marine Biology (McGill University)

Professional Experience

RNT Consulting Inc., Partner and Chief Scientist

Consult on issues surrounding alien species biology, control, and impact

Perform vulnerability assessments on water distribution systems and facilities

Develop public outreach materials to help minimize the spread of aquatic invasive species

Various clients include Environment Canada, Transport Canada, Ontario Power Generation, U.S. Army Corps of Engineers, U.S. Bureau of Reclamation, California Department of Water Resources, U.S. Patent Office, Brazilian and Spanish Utilities

Ontario Hydro (Head Office), Senior Scientist, Water Section, Safety & Environment

Responsible for assessment of the impact of Zebra mussels on operating stations, development of mitigation plans, interaction with other utilities and industries, organization of major scientific meetings

Developed strategic alliances and communication tools to improve information exchange and maximize effective use of research dollars

Managed specific research projects, delivered numerous presentations with varying technical content

Developed and taught a community college course on Zebra Mussels

Atomic Energy of Canada Ltd. (CANDU Operations), Marketing Team Member

Member of a team charged with the marketing of engineering services

Participated in a site study to place a CANDU nuclear station on the shores of the Mediterranean in Turkey. This assignment involved a site visit, hands-on evaluation of consultant reports submitted to the Turkish Electrical Authority, and input to the design process of plant.

Selected Activities and Achievements

Invited to participate in the Aquatic Nuisance Species (ANS) Task Force Invasive Species Experts Database, 2010

Member of the convening committees for the 2001 - 2007 International Conference on Aquatic Invasive Species

Technical Program Chair and primary organizer of the 1990 - 2000 International Zebra Mussel Conferences

Invited member of a Scientific Panel of the National Sea Grant College Program; asked to evaluate research proposals for Zebra mussel impact and control submitted for funding in 1992

Invited member of the Great Lakes Panel on Exotic Species established in November 1991; the Great Lakes Commission received an official charter from the Secretary of the Interior to create the panel to advance research and coordinate monitoring and control activities targeted at the Zebra mussel and other aquatic nuisances in the Great Lakes Basin

Convener and co-chair of a Symposium on Exotic Bivalves at the Summer Meeting of the American Society of Limnologists and Oceanographers in Williamsburg, Virginia, June 1990

Invited member of a Utility Advisory Group on Zebra Mussels organized by the Electric Power Research Institute (EPRI), January 1990

Acted as an expert witness for technical review of a Patent Application for the U. S. Patent Office

Selected Publications and Presentations

Claudi, R. 1990. *Effect of sodium hypochlorite on adult Zebra mussels at an electrical generating facility; case study*. NABS Conference, May 1990, Blacksburg, Virginia.

Claudi, R. 1990. *Zebra mussels; Impact on Industry*. Presentation to the Ministry of Natural Resources Zebra Mussel Information Session, June 1990, Toronto, Ontario.

Claudi, R. 1990. *Zebra mussel invasion of the Great Lakes*. R. Claudi, Presentation to the Canadian Nuclear Society, Golden Horseshoe Branch, October 1990, Hamilton, Ontario.

Claudi, R. and D. W. Evans. 1990. *Chemical addition strategies for Zebra mussel control in once-through service water systems*. EPRI Service Water Conference, December 1990, Orlando, Florida. Published in *Zebra Mussels: Biology, Impact and Control*, Lewis Publishers, edited by T. Nalepa and D. Schloesser.

Claudi, R. 1991. *Research into Zebra mussel control strategies at Ontario Hydro*. Presentation to the U. S. Army Corps of Engineers, May 1991.

Claudi, R. 1991. *Control of Zebra mussels in once-through cooling systems*. AWWA Conference, June 1991, Philadelphia. Published in the proceedings of the Conference.

Claudi, R. 1991. *Zebra mussel invasion of the Great Lakes and impact on industry*. Northeast Power Coordinating Council Meeting, October 1991, Toronto, Ontario.

Claudi, R. 1992. *Canadian research in Zebra mussel control strategies*. Michigan Seagrant Extension Zebra Mussel Conference, January 1992, East Lansing, Michigan.

Claudi, R. 1992. *Zebra mussels; impact on industry*. Scientists' Institute for Public Information, Binational Great Lakes Environmental Reporting Workshop, April 1992, Toronto, Ontario.

Claudi, R. and J. D. Ackerman. 1992. *Post-settlement movements of juvenile Zebra mussels and their potential impact on plant systems*. National Association of Corrosion Engineers Meeting, May 1992, Nashville, Tenn. Published in the Proceedings of the Conference.

Claudi, R. 1992. *Case study of biofouling species and their control*. Louisiana State University Zebra Mussel Conference, May 1992, Baton Rouge, Louisiana.

Claudi, R. 1992. *Zebra mussels and their impact*. North American Lake Management Society Meeting, November 1992, Cincinnati, Ohio.

Claudi, R. 1992. Description of practical methods for monitoring and control of Zebra mussels in industrial facilities. Water Quality Technology Conference, November 1992, Toronto, Ontario.

Claudi, R. and G. L. Mackie. 1993. *Practical Manual for Zebra Mussel Monitoring and Control*. Lewis Publishers.

Claudi, R. 1997. Potential for Sterilization of NOBOB Ballast Water Remnants with Organic Acid. RNT Report 9609 for DFO Canada.

Claudi, R. and J. H. Leach. 2000. *Nonindigenous Aquatic Organisms*. Lewis Publishers.

Claudi, R. 2002. Environmental and Economic Costs of Alien Invasive Species in Canada. Report prepared for Environment Canada.

Claudi, R. 2002. Quantification of Risks of Alien Species Introductions Associated with Alternative Area for Ballast Water Exchange in the Laurentian Channel of the Gulf of St. Lawrence. RNT Report 108 for Transport Canada 2002.

Claudi, R. 2004. *Potential Impact of Limnoperna fortunei on Brazilian Hydroelectric plants*. Report prepared for Brazilian Utility under contract to World Fisheries Trust.

Claudi, R. 2006. *Investigation of Sparker Technology for Control of Aquatic Alien species in Ballast Water*. Presented at the 14th International Conference on Aquatic Invasive Species in Miami, Florida.

Books Published

Practical Manual for Zebra Mussel Monitoring and Control.
R.Claudi and G.L.Mackie, Lewis Publishers 1993.

Nonindigenous Freshwater Organisms
R. Claudy and J. H. Leach CRC Press 1999

Alien Invades in Canada's Waters, Wetlands and Forests.
Edited by R.Claudi, P.Nantel and E.Muckle-Jeffs Natural Resources Canada 2002

Monitoring and Control of Macrofouling Mollusks in Fresh Water Systems,
G.L.Mackie , R.Claudi, Taylor and Francis Publishers 2010

Lead Scientist

Gerald Mackie, Ph. D.

Associate

Dr. Mackie is a malacologist. He is a member of the Canadian Academia with extensive industrial experience.

Academic Background

Doctor of Philosophy (University of Ottawa)

Master of Science (University of Ottawa)

Bachelor of Science (Laurentian University)

Consulting Positions

Associate, RNT Consulting Inc.

Sole Proprietor, Water Systems Analysts

Partner (with Bruce Kilgour), Water Systems Analysts

President, Mackie and Associates Water Systems Analysts Inc.

Co-Chair of Mollusca Species Specialist Subcommittee (COSEWIC)

Academic Positions

Professor Emeritus, Department of Integrative Biology, University of Guelph

Full Professor, Department of Zoology, University of Guelph

Associate Professor, Department of Zoology, University of Guelph

Assistant Professor, Department of Zoology, University of Guelph

Postdoctoral Fellow, National Museums of Canada, Ottawa

Selected Activities and Achievements

Conducted risk assessments of lakes and reservoirs to Aquatic Invasive Species in Nevada, Arizona and Colorado, 2008 to 2009

Developed a protocol for relocation and monitoring of mussel species at risk in Canada for Department of Fisheries and Oceans, 2005 to 2008

Participated as the Zebra mussel expert in the peer review evaluation of the OCSWEP/QEA water quality model of the Three Rivers System in Central New York State, January 2003

Implemented "Do-it-yourself" programs using a variety of continuous and intermittent chlorination strategies for controlling Zebra mussel infestations at Quebec & Ontario Paper Company on the Welland Canal, Ontario and Labatt Breweries on the St. Lawrence River, Montreal, Quebec, Eastman Kodak, Rochester, and Polysar on the St. Clair River, Sarnia Ontario. In this program we taught biologists and pumphouse operators on staff how to monitor the abundance of veliger larvae and how to evaluate the effectiveness of their chlorination programs, 1989 to 2000

Acted as a subconsultant with numerous engineering firms, including Black & Veatch, Gilbert Commonwealth, Camp Dresser and McKee, Proctor and Redfern, Marshall Macklin Monahan Engineers, and Gore and Storrie, evaluating plant designs for Zebra mussel infestations and making recommendations for control at nuclear power stations (e.g. Niagara Mohawk Nine Mile Point, Syracuse, NY), steel manufacturers (e.g. Stelpipe, Welland, Ontario; Caterpillar Inc., Mapleton, Illinois), breweries (e.g. Labatt, Montreal Quebec), cement manufacturers (e.g. ESSROC, Picton, Ontario), chemical manufacturers (e.g. Polysar, Sarnia, Ontario; Eastman Kodak, Rochester, NY), food and drug manufacturers (e.g. Proctor & Gamble, Scranton, Pennsylvania), petroleum industries (e.g. Shell Oil, Corunna, Ontario), and water treatment plants (e.g. Clarke Water Treatment Plant, Metro Toronto, Ontario). Dr. Mackie has also evaluated the potential for Zebra mussel infestations at several facilities based on intake water chemistry data from lakes and rivers in North Carolina, Pennsylvania, Illinois, New York, Ohio, and Tennessee, 1989 to 2000

Evaluated and published on the efficacies of synthetic chemicals, including sodium hypochlorite, hydrogen peroxide, and Bulab 6002 and 6009 which are nonoxidizing quaternary ammonium compounds (produced by Buckman Laboratories Inc.) at 12°C and 22°C for Ontario Hydro. These studies were instrumental in developing the continuous and intermittent control strategies that industries and utilities now use for controlling Zebra mussels in their raw water supplies, 1990 to 1995

Investigated the toxicity of sodium metabisulfite and the accumulation of sulfur compounds in the tissues of adult mussels for the Tennessee Valley Authority, 1993 to 1994

Examined the efficacy and role of alum in removing veliger larvae from raw water supplies during the coagulation and flocculation stages for the Ontario Ministry of Environment, 1992 to 1993

Acted as technical advisor at a conference for evaluating the effectiveness of Deep Lake Water Cooling (DLWC) for eliminating potential biofouling problems by Zebra mussels in a Lake Water Cooling System for downtown Toronto. The conference was sponsored by the Canadian Urban Institute and resulted in a report (June 1991) available from them: 100 Queen St. W., 2nd Floor, West Tower, Toronto, Ontario, M5H 2N1, 1991 to 1992

Determined the effects of salinity on growth and survival of Zebra mussels for Empire State Electric Energy Research Corporation (ESEERCO), 1991 to 1992

Selected Publications

Books and Monographs

Monitoring and Control of Macrofouling Mollusks in Fresh Water Systems, G.L.Mackie , R.Claudi, Taylor and Francis Publishers 2010

The Cottage Bible. Mackie, G. L. Boston Mills Press, 2007.

Biology of Freshwater Corbiculid and Sphaeriid Clams of North America. Ohio Biological Survey, Columbus, Mackie, G. L. 2007.

Applied Aquatic Ecosystem Concepts, 2nd edition. Kendall/Hunt, Mackie, G. L. 2004.

Flora and fauna of the Speed River watershed, including exotic and endangered species. Water Systems Analysts, Guelph, Ontario. Mackie, G. L. 2001.

Practical manual for Zebra mussel monitoring and control. Lewis, Claudi, R. and G. L. Mackie. 1994.

Chapters in Books

Traits of endangered and invading freshwater molluscs in North America. In: Claudi, R., P. Nantel, E. Muckle-Jeffs (eds.). *Alien Invaders in Canada's waters, Wetlands, and Forests*. Publ., Can. Forest Serv., Nat. Resources Canada, Mackie, G. L. 2002. .

Chapter 9: Mollusc introductions through aquarium trade. In: Claudi, R. and J. Leach (eds.). *Non-indigenous freshwater organisms: vectors, biology and impacts*. Lewis Pub, Mackie, G. L. 2000.

Chapter 15: Ballast water introductions of Mollusca. In: Claudi, R. and J. Leach (eds.). *Non-indigenous freshwater organisms: vectors, biology and impacts*. Lewis Pub, Mackie, G. L. 2000.

Chapter 21: Introduction of molluscs through the import for live food. In: Claudi, R. and J. Leach (eds.). *Non-indigenous freshwater organisms: vectors, biology and impacts*. Lewis Pub, Mackie, G. L. 2000.

Use of low level electric current (AC) to prevent settlement of Zebra/Quagga mussels on concrete and steel panels at Nanticoke T.G.S. In: D'Itri, F. M. (ed.). Zebra Mussels and Aquatic Nuisance Species. Fears, C. and G. L. Mackie. 1996. .

*Early biological and life history attributes of the Zebra mussel, Dreissena polymorpha (Bivalvia: Dreissenidae) and impacts on native bivalves in Lake St. Clair*In: T. Nalepa and D. W. Schloesser (eds.). Zebra mussels: Biology, impact and control. CRC Pub, Mackie, G. L. 1993.

Colonization of different construction materials by the Zebra mussel, Dreissena polymorpha (Bivalvia: Dreissenidae). In: T. Nalepa and D. W. Schloesser (eds.). Zebra mussels: Biology, impact and control. CRC Pub, Kilgour, B. W. and G. L. Mackie. 1993.

Biology of the exotic Zebra mussel, Dreissena polymorpha, relative to native bivalves and its potential impact in Lake St. Clair. In: Environmental Assessment and Habitat Evaluation of the Connecting Channels. M. Munawar and T. Edsall (eds). Hydrobiologia. Mackie, G. L. 1991.

Reproduction in Bivalvia. In: The Mollusca, Volume VII, Reproduction. Tompa, A. S., Verdonk, N. H. and J. A. M. van de Biggelaar (eds), Academic Press. Mackie, G.L. 1984.

Refereed Publications

Characteristics of a natural refuge for native freshwater mussels (Bivalvia: Unionidae) in Lake St. Clair and evaluation of relocation as a tool for mitigating impacts of the Zebra mussel (Dreissena polymorpha). Journal of the North American Benthological Society. McGoldrick, D. J., Metcalfe-Smith, J. L., Arts, M. T., Schloesser, D. W., Newton, T. J., Mackie, G. L., Monroe, E. M., Biberhofer, J. and K. Johnson. 2009.

Genetic and environmental implications of repatriating laboratory-raised unionid mussels to the wild. Canadian Journal of Fisheries and Aquatic Sciences. Hoftyzer, E., Ackerman, J. D., Morris, T. J. and G. L. Mackie. 2008.

Changes over time in the diversity and distribution of freshwater mussels (Unionidae) in the Grand River, southwestern Ontario. Journal of Great Lakes Research. Metcalfe-Smith, J. L., Di Maio, J., Mackie, G. L. and S. K. Staton. 2000.

Selection of Candidate species of freshwater mussels (Bivalvia: Unionidae) to be considered for national status designation by COSEWIC. Canadian Field-Naturalist. Metcalfe-Smith, J. L., Stanton, S. K., Mackie, G. L. and N. M. Lane. 1998.

Changes in biodiversity of freshwater mussels in the Canadian waters of the lower Great Lakes drainage basin over the past century. Journal of Great Lakes Research. Metcalfe-Smith, J. L., Stanton, S. K., Mackie, G. L. and N. Lane. 1998.

Seasonal and depth variations in gametogenesis and spawning of Dreissena polymorpha and Dreissena bugensis in eastern Lake Erie. Canadian Journal of Zoology. Claxton, W. T. and G. L. Mackie. 1998.

A genetic and morphological comparison of deep and shallow water populations of the introduced Dreissena polymorpha and Dreissena bugensis. Canadian Journal of Zoology. Claxton, W. T., Mackie, G. L. and E. G. Boulding. 1998.

Biodeposition and accumulation of polychlorinated biphenyls and Cd by Zebra mussels in Lake Erie. Canadian Journal of Fisheries and Aquatic Sciences. Dobson, E. and G. L. Mackie. 1998.

Effects of pH, calcium, alkalinity, hardness, and chlorophyll on the survival, growth and reproductive success of Zebra mussels (Dreissena polymorpha) in Ontario lakes. Can J. Fish. Aquat. Sci. Hincks, S. S. and G. L. Mackie. 1997.

Biofilm and substrate preference in dreissenid larvae in Lake Erie. Can. J. Fish. Aquat. Sci. Wainman, B., Hincks, S., Kaushik, N. and G. L. Mackie. 1996.

Comparative biology of Zebra mussels in Europe and North America: An overview. Amer. Zool. Mackie, G. L. and D. W. Schloesser. 1996.

Review of the impacts of the Zebra mussel on Unionidae in North America. Amer. Zool. Schloesser, D. W., Nalepa, T. and G. L. Mackie. 1996.

Efficacy and role of alum in removal of Zebra mussel veliger larvae from raw water supplies. Wat. Res. Mackie, G. L. and B. W. Kilgour. 1995.

Ability of the Zebra mussel, Dreissena polymorpha, to biodeposit and remove phosphorous and BOD from diluted activated sewage sludge. Wat. Res. Mackie, G. L. and C. A. Wright. 1994.

The impact of Dreissena polymorpha on populations of Unionidae in Lake St. Clair. Canadian Journal of Zoology. Gillis, P. L. and G. L. Mackie. 1994.

Effects of salinity on growth and condition of adult Zebra mussels (Dreissena polymorpha). Estuaries Kilgour, B. W., Baker, M. and G. L. Mackie. 1993.

Shell features of Dreissena polymorpha, the Quagga mussels, and Mytilopsis leucophaeta (Bivalvia: Dreissenidae) in North America. Canadian Journal of Zoology. Pathy, D. A. and G. L. Mackie. 1993.

Control of the biofouling bivalve, Dreissena polymorpha, with sodium hypochlorite and with polyquatarnary and benzothiazole compounds. Arch. Environ. Contam. Toxicol. Martin, I. D., Mackie, G. L. and M. Baker. 1993.

Acute toxicity and pulse-dosed delayed mortality at 12°C and 22°C in the Zebra mussel, Dreissena polymorpha. Arch. Environ. Contam. Toxicol. Martin, I. D., Mackie, G. L. and M. Baker. 1993.

Conference Proceedings

Efficacy of low level electric current (A-C) for controlling Quagga mussels on concrete and steel panels after 17 months exposure at Naticoke T.G.S. In: Proc.: 7th Internat. Zebra Mussel and Other Nuisance Organisms Conf., New Orleans. Fears, C. and G. L. Mackie. 1997.

Efficacy of low level electric current (A-C) for controlling Quagga mussels on concrete and steel panels at Naticoke T.G.S. In: Proc.: 6th Internat. Zebra Mussel and Other Nuisance Organisms Conf., Dearborn, Michigan. Fears, C. and G. L. Mackie. 1996.

Adaptations of exotic Mollusca for life in regulated rivers and their potential impacts. Keynote Speaker. Proc.: Fifth Annual Symposium on Natural History of Lower Tennessee and Cumberland River Valleys, Murray State University. Mackie, G. L. 1995.

Use of low level electric current (A-C) for controlling Quagga mussels. In: Proc.: 4th Internat. Zebra Mussel Conf., March 7-10, 1994, Madison, Wisconsin. Fears, C. and G. L. Mackie. 1994.

Thermal treatment to control Zebra mussels at the Dunkirk Steam Station. In: Proc.: 3rd Internat. Zebra Mussel Conf. Toronto. Neuhauser, E. F., Rhode, M. A., Knowlton, J. J., Wahanik, R. J., Borden, M., Lewis, D. P. and G. L. Mackie. 1993.

Monitoring, sampling and identification techniques for adult and veliger Zebra mussels. pp. 163-214. Annual Conference Proceedings, American Water Works Association, "Resources, Engineering and Operations for the New Decade", Philadelphia, PA. Mackie, G.L. 1991.

Commissioned Reports

Protocol for the detection and relocation of freshwater mussel species at risk in Ontario Great Lakes area (OGLA). Can. Manuscr. Rep. Fish. Aquat. Sci. Mackie, G. L., T. J. Morris, and D. Ming. 2008.

Assessment of the Cragin Water Project Potential For Infestation by Quagga and Zebra Mussels, Assessment of Impact on Civil and Mechanical Structures and Recommendations for Monitoring and Control. Claudi, R., Mackie, G. L. and T. Prescott. 2008.

Risk assessments of intakes of Alfred Merritt Smith and River Mountains Water Treatment Facilities and of Big Bend Plant to Zebra/Quagga mussel infestations. Report for Southern Nevada Water Authority. Mackie, G. L. 2008.

Risk assessment of Lake Oswego and the Buoyant Interceptor Sewer System (BISS) to Zebra/Quagga mussel infestations. Report for Brown & Caldwell, Lake Oswego Corporation, City of Oswego. Mackie, G. L. 2008.

Risk assessment of Tualatin River water quality to Zebra/Quagga mussel infestations. Report for Brown & Caldwell, Lake Oswego Corporation, City of Oswego. Mackie, G. L. 2008.

Risk assessment of water quality in Salt River Project watersheds, canal systems and lakes to Zebra/Quagga mussel infestations. Phase I. Report for Salt River Project Participants, Phoenix, Arizona. Mackie, G. L. 2008.

Efficacy and role of alum in removal of Zebra mussel veliger larvae from raw water supplies. A final report to Ontario Ministry of Environment and Energy, Research Advisory Council Project No. 615C. Mackie, G.L. 1993.

Biology and impact of Zebra mussels in Lake St. Clair and Lake Erie. A final report submitted to Ontario Ministry of Environment for Project 443G. Mackie, G.L., Pathy, D., Gillis, P., Dobson, E. 1992.

Biological attributes and ecological impacts of the invading mollusc, Dreissena polymorpha. A final report submitted to Great Lakes University Research Fund. Mackie, G.L., Sprules, W.G., Hebert, P.D.H., Beverley-Burton, M., Haffner, D. 1992.

Effects of salinity on growth and survival of Zebra mussels (Dreissena polymorpha). A report prepared for ESSERCO. Mackie, G.L., Kilgour, B.W. 1992.

Review of chemicals proposed for controlling Zebra mussels in industrial and domestic pipelines in North America. A class project report for Toxicology (92-420). Mackie, G.L., Chiles, C., Gordon, S., MacDonald, M., MacDougall, J., Mitchell, T., Neumann, L., Repaso, T., Surgeoner, K., Wiebe, R. 1991.

Zebra mussels: The Great Lakes under seige, again. Rotunda 23: Mackie, G. L. 1990.

Biology and control of the Zebra mussel, Dreissena polymorpha; A synopsis of the European experiences, a preview for North America. A report for the Ontario Ministry of Environment, Mackie, G. L., Gibbons, W. N., Muncaster, B. and I. Gray. 1989.

Cause and effect relationships between Mollusca and the acid-neutralizing capacity of acidifying lakes. Report to National Research Council of Canada Associate Committee on Scientific Criteria for Environmental Quality. Mackie, G. L., Rooke, J. B. and M. R. Servos. 1983.

Effects of discharge level on oxygen regimes and biota within and downstream of Guelph Lake. Ontario Ministry of Environment, Experience '79 Project Report. Mackie, G. L., Roff, J. C., Gerrath, J. F., Ferguson, M. and W. Morton. 1979.

Effects of impoundment on water quality and biota in Guelph Lake during the first three summers of inundation. Ontario Ministry of the Environment, Experience '78 Project Report. Mackie, G. L., Roff, J. C., Gerrath, J. F. and F. Cichocki. 1978.

Evaluation of effects of impoundment on water quality in the Guelph Reservoir. Ontario Ministry of the Environment, Experience '77 Project Report. Mackie, G. L., Roff, J. C., Gerrath, J. F., Joyner, D. and F. Cichocki. 1977.

Keys to benthic organisms in the Guelph Reservoir and tributaries. Dept. Zool., Univ. Guelph, Guelph, Ontario. McKee, P. M. and G. L. Mackie. 1977.

Engineering Manager

Thomas H. Prescott, M.ASc., P.Eng.

RNT Partner and Chief Engineer

Mr. Prescott has over 30 years of engineering and project management experience on design, installation, and testing of mechanical and process systems in various areas including military, petrochemical, and electric power production industries. Mr. Prescott has particular expertise in vulnerability assessments and pilot testing of control facilities for mussel biofouling control. He has experience with many clients throughout Canada, U.S.A., and overseas and is currently a partner and senior project engineer at RNT Consulting Inc.

Academic Background

Master of Applied Science, Mechanical Engineering (University of Waterloo)

Bachelor of Engineering, Mechanical Engineering (Royal Military College)

Professional Experience

Mr. Prescott has diverse experience in engineering including the following areas:

Design Engineering and Project Engineering

Project Engineer for power plant vulnerability assessments posed by aquatic invasive species at hydraulic dams, power plants and pumping plants in Brazil and USA, and nuclear plants in Spain and USA.

Project Manager for installation and evaluation of Zebra/Quagga mussel control systems in nuclear and fossil plants in Ontario.

Project Engineer for design and installation of aquatic weed control system in a nuclear plant in Ontario.

Specified design and performance requirements for rotating pumping machinery for high reliability applications in nuclear power plant designs. Managed technical aspects of subsequent equipment contracts. The equipment contracts typically ranged from about \$ 0.1M to \$ 7M in value.

Construction Engineering

As Resident Engineering Manager at a nuclear power plant construction site in South America costing approximately \$600M, he set up and managed a program to approve and implement site design changes and to prepare as-built drawings of the power plant

systems. The plant design comprised approximately 21,000 drawings. The drawings and design documents were reviewed, updated, approved and delivered to the plant owner over a two year period. The resident engineering team comprised 12 professionals and was delegated design authority to resolve field engineering problems from the head office.

As Construction Manager for a refractory engineering company that designed and supplied linings for high temperature process lines in existing and newly constructed petrochemical plants and pulp mills, he was responsible for planning, constructing and installing linings. He supervised the construction of the process lines and the installation of the refractory linings at construction sites with crew sizes from 5 to 15 refractory brick masons. Refractory installations included brick, cast-in-place, gunnite and ceramic fibre linings. He also supervised installation of acid resistant linings and fireproof coatings at petrochemical plants. Contracts were of various sizes ranging from \$10K to \$1M. Most contract installations were required to be done during routine plant outages requiring careful planning, innovative pre-assembly and strict attention to detail.

Management

Business Operations Manager and Partner in a Consulting Engineering firm specializing in failure and loss analysis in the transportation industry. The firm has a per annum revenue of \$1.1M and consists of 4 engineers and 2 technologists. Over a period of 3 years, Prescott has introduced new work systems and streamlined the company operations, reducing overhead administration expenses from 10% of revenues to 3% of revenues while meeting revenue targets.

Managed a Computer Aided Design and Drafting (CADD) operation for Atomic Energy of Canada Ltd. (CANDU Division), a large Canadian design and build engineering organization. The CADD operation had an annual operating budget of \$1.3 million. This system expanded from 5 to 34 workstations under his management over a period of 5 years. Also, he moved the design and drafting capability from traditional manual methods to effective 3-D CADD between 1985 and 1989. This included dealing with the many cultural issues that accompany technological change. One design project now underway with a team of 100 technical staff has no drawing boards and uses 3-D CADD for all design and drafting. The 3-D CADD program has input and output links to many other aspects of the design including stress analysis, safety analysis, bills of material, and specifications for procurement.

Supervised a staff of 15 engineering professionals who specify software requirements, evaluate commercial software, modify the commercial software to meet specific design needs and then train the design staff how to use the applications effectively. Where commercial software was not available, these engineering professionals developed in-house applications programming in "C", Fortran and Informix Relational Database languages. About 40 applications programs were introduced about one fifth of which were in-house developed software.

Advised a committee of Senior Staff at the vice-president and general manager level on information technology strategic planning and initiatives. Prepared annual plans for allocation of funding and staffing resources for approval.

As operations manager for the mechanical component design department he was in charge of 4 managers and 80 design staff. The department work included design and analysis of pressure vessels, materials handling systems and remote tooling design for hazardous work areas. The work was characterized by a need for high quality products that were extremely reliable and safe. Delivery of designs on time and within budget were also key success factors. To this end, he designed and introduced a successful PC-based engineering work control system which allowed the work units to identify their engineering deliverables and to control costs.

Professional Memberships

Professional Engineer (P.Eng.), Association of Professional Engineers Ontario

Publications and Presentations

Vulnerability Assessment of Zebra and Quagga Mussels on Facilities from Intake to Discharge. Presented at the Sligo Institute of Technology Water Quality Issues Conference, Athlone, Ireland. Prescott T.H. 2009.

The Proposed Use of Continuous and Intermittent Ozone for Zebra Mussel Control at Ontario Power Generation. Presented at the 10th International Aquatic Nuisance Species Conference, Toronto. Prescott T.H. 2000.

Dealing with Engineering Experts. Presented at the Osgoode Hall Law School Professional Development Program. Prescott T. H. 2008.

Advanced computer methods to design, construct and maintain CANDU reactors. Proceedings of the 30th Annual Conference, Canadian Nuclear Association. Burroughs, J. W. and T. H. Prescott. 1990.

Application of CADD to construction of CANDU power stations. Presented at the Canadian Electrical Association Spring meeting. Prescott, T. H. 1989.

CANDID integrated design system. Proceedings of the 10th Annual Conference, Canadian Nuclear Society. Prescott, T. H., Sayles, C. D. and E. D. Wessmann. 1989.

9.:Resource Material

2012 groundwater section annual report. Ventura County Watershed Protection District Water & Environmental Resources Division, Ventura, California. Dorrington, J. and B. Council. 2012.

Monitoring and control of macrofouling mollusks in freshwater systems. CRC Press. Mackie, G.L. and R. Claudi. 2010.

Practical Manual for Zebra Mussel Monitoring and Control, Lewis Publishers. R.Claudi and G.L.Mackie, 1993.

AGREEMENT
FOR VULNERABILITY ASSESSMENT STUDY AND
CONTROL AND MANAGEMENT PLAN
FOR AQUATIC INVASIVE SPECIES FOR LAKE CASITAS

THIS AGREEMENT is made and entered into this _____ day of November, 2014 by and between **CASITAS MUNICIPAL WATER DISTRICT** (herein “District”) and **RNT CONSULTING INC.** (herein “Consultant”).

WITNESSETH

WHEREAS, District issued a Request for Proposal for a Lake Casitas Vulnerability Assessment and A Control and Management Plan for Aquatic Invasive Species with regard to the potential threat of invasive species entering Lake Casitas; and

WHEREAS, Consultant submitted a Proposal For Lake Casitas Vulnerability Assessment and A Control and Management Plan for Aquatic Invasive Species dated September 17, 2014 (herein “Proposal” to complete the required scope of work; and

WHEREAS, District desires and Consultant is willing to provide the professional services requested; and

WHEREAS, Consultant is well qualified to complete the services required by the scope of work.

NOW, THEREFORE, in consideration of their mutual promises, obligations and covenants herein contained, the parties hereto agree as follows:

1. Term Of Agreement. The term of this Agreement shall be from the date this Agreement is made and entered into, as first written above, until the completion of all services by Consultant and acceptance of those services and materials by District.
2. Data Furnished By District. For the purpose of aiding Consultant in the performance of its obligations under this Agreement, District shall furnished information requested by Consultant. Consultant shall apply reasonable caution in its use and interpretation of the data and shall promptly advise District of any suspected inaccuracies or omissions in the data that has been furnished, or may be furnished during the project. Consultant shall have no liability for defects in the services attributable to Consultant’s reliance upon, or use of, data furnished by District or third parties retained by District.
3. Scope of Services - Project Goal - The goal of the project is to conduct a vulnerability assessment to identify any and all exposures and/or weaknesses in the Casitas system, methods and preventative measures that are currently in place to defend Lake Casitas from destructive aquatic invasive species Quagga and Zebra Mussels (dreissenid mussels). Upon determining the extent to which dreissenid populations would survive or thrive in Lake Casitas, Consultant shall provide District with a control and monitoring plan in compliance with California Department of Fish and Wildlife Codes 2301 and 2302 that includes eradication options. The scope of work shall be as contained in the attached Proposal attached hereto as Exhibit A.
4. Fee For Services. District shall pay Consultant on a completed task basis for services requested by District as set forth below. The completed task unit costs shall be in accordance with the project cost listed in the Proposal. The task unit costs for services shall be the fully loaded costs and shall include all overhead costs, material costs and miscellaneous costs.

Tasks and Unit Cost

- (a) Completion of Kick Off Meeting as outlined in 3.1 of the Proposal - \$7,800.00.
- (b) Completion of determination of preliminary environmental suitability testing as outlined in 3.2 of the Proposal - \$2,600.00.
- (c) Completion of all tasks outlined in 3.3.1 through 3.3.11 of the Proposal including acceptance by District of the Final Report - \$36,175.00.
- (d) Travel costs for the Principal Project Manager, Principal Engineer and Lead Scientist not to exceed \$3,000.00 as described in 6. Budget of the Proposal. Additional visits may be requested by District and mutually agreed upon to include one or more of the above staff at additional cost to District.
- (e) The total fee for services shall not exceed \$49,575.0 without the prior written consent of District.

5. Deliverables. The completion and delivery of one copy and one electronic file (Adobe format or otherwise mutually agreed format) of the 90% draft and final reports summarizing the results of the work shall be defined as the work required to achieve the designated deliverables. The confidential, not for public distribution, reports will summarize the Vulnerability Assessment and Control and Management Plan as specified in the Scope of Work contained in Exhibit A attached:

6. Payment of Compensation.

- (a) Compensation shall be billed monthly in increments based on the percentage of each task completed. Payment shall be made by District upon receipt and approval of invoices.
- (b) Consultant shall not bill District more often than monthly during the term of this Agreement.

7. Charges for Review of Bills. Consultant shall not charge District for questions of billings under this Agreement. Consultant shall answer all questions about billings to the satisfaction of District.

8. No Interest, No Attorneys' Fees. No interest shall be charged on bills and each party will bear their own attorneys' fees and costs for any lawsuit or arbitration or other dispute resolution methodology arising out of this project.

9. Changes. Consultant shall provide consulting services as required by this Agreement without modification or changes or any other extra compensation, excepting only changes authorized by a written change order signed by District and Consultant. Any change in the total compensation allowed for performance under this Agreement shall be accomplished only by such a change order. Accordingly, no course of conduct or dealings between the parties, nor express or implied acceptance of alterations or additions to the work, and no claim that District has been unjustly enriched by any alteration or addition to work, whether or not there is, in fact, any unjust enrichment to the work, shall be the basis of any claim to any increase in the total compensation provided for in this Agreement. Should District request a change in the services covered by this Agreement, Consultant shall not expend any time or money for the change until a written change order is prepared and signed by District and Consultant. Should Consultant expend time or funds without an executed change order, all costs therefor shall be the sole responsibility of Consultant. Once a change order is prepared and signed by both parties, it shall constitute a final settlement of all matters relating to the change which is the subject of the change order, including, but not limited to, all direct and indirect costs associated with such change and any and all adjustments to the fee due Consultant and the work schedule.

10. Project Schedule. Consultant understands the importance of accurate and timely completion of the required

tasks. It is anticipated that the project will be completed in approximately sixteen (16) weeks from work start date, but may be extended upon the mutual, written consent of the parties hereto.

11. Responsibility of the Consultant.

(a) Consultant shall be responsible for the professional quality, technical accuracy, timely completion and the coordination of all field study, analyses, evaluations, review, development, inspection, scientific reports and other services furnished by Consultant under this Agreement. Consultant shall, without additional compensation, promptly correct any Consultant errors, omissions or other deficiencies in its analysis, inspection, testing, reports, designs and other services, to the extent such corrections are not attributable to change in project description or data modification by District.

(b) Consultant shall perform such professional services as may be necessary to accomplish the work required to be performed under this Agreement, in accordance with this Agreement and the cost proposal. Approval by District of analyses, field study, evaluations, review, development, inspection, scientific reports, and other services incidental scientific work or materials furnished hereunder shall not in any way relieve Consultant of responsibility for the scientific and technical adequacy of its work. Neither District's approval or acceptance of, nor payment for, any of Consultant's services shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement.

(c) Consultant shall be and remain liable in accordance with applicable California law for damages to District caused by Consultant's negligent performance of any of the services furnished under this Agreement.

12. Personnel. District requires the following project team members to work directly with District until completion of the project. Consultant shall inform District immediately if any of the following personnel or staff listed in the proposal becomes unavailable for any reason prior to completion of the project:

<u>Name</u>	<u>Title</u>
Renata Claudi M.Sc.	Principal Project Manager
Tom Prescott M.A.Sc., P.Engr.	Principal Engineer
Dr. G. Mackie	Lead Scientist.

In the event a change in any of the above-named personnel or staff listed in the Proposal becomes necessary with the exception of the inclusion of the Junior Scientist, Technical Specialist, Consultant shall promptly submit to District the name and qualifications of the proposed replacement person(s). Consultant and District will then agree upon the selection of the replacement person(s) whose qualifications and expertise shall be at least equal to the person replaced. The penalty for replacement of personnel without permission of District will be ten percent (10%) of the gross of the contract. Consultant agrees not to request an increase in the per-hour fee or any other compensation for such a change in personnel.

13. Insurance.

(a) During the course of this Agreement, Consultant shall pay for and maintain in full force and effect, and cause each of its Sub Consultants to maintain in full force and effect, all insurance required by District in accordance with Exhibit B attached hereto, and any governmental agency having jurisdiction to require particular insurance of Consultant or its Sub Consultants in connection with or related to the assessment services to be performed under this Agreement.

(b) Prior to the commencement of performance of any work under this Agreement, Consultant and its Sub Consultants shall furnish District with certificates of insurance in form and substance satisfactory to District evidencing all of the insurance coverage required by Exhibit B. All policies and certificates of insurance required shall expressly provide for no less than thirty (30) days prior written notice to District in the event of a cancellation, non-renewal or expiration of the coverage.

14. Indemnification. Consultant shall defend, indemnify and hold harmless the United States of America (Bureau of Reclamation), District and their officers, directors, employees, and agents from all loss, liability and expense from all claims, demands or liability if and to the extent caused by negligence or willful misconduct of Consultant, its Sub Consultants and employees whether such claims, demands or liability are caused by Consultant, Consultant's agents or employees, or Sub Consultants employed by Consultant, their agents or employees, or products installed on the project by Consultant or its Sub Consultant, excepting such loss, liability or expense as may be caused by District's negligence or willful misconduct. Such indemnification shall extend to claims, demands or liability for injury, death or damage to property arising after completion of the project as well as during the work's progress. The foregoing indemnification shall apply, without limitation, to bodily injury and property damage claims as well as to stop notices and monetary claims for labor, materials or equipment furnished in the performance of the assessment services covered by this Agreement. In the event such liability, claims, actions, causes of action or demands are caused by the joint or concurrent negligence of more than one party, such liability shall be borne by each party in proportion to its own fault.
15. Assignment. Neither party may assign this Agreement or any payments due under this Agreement, either voluntarily or involuntarily, without the prior written consent of the other party. If and to the extent any assignment is authorized, it shall not be effective until the assignee signs a written agreement to be bound by all of the provisions of this Agreement, nor shall it relieve the assignor of its obligations under this Agreement unless the written consent to the assignment expressly states that the assignor shall be relieved.
16. Termination. District may, by written notice to Consultant, suspend or discontinue the performance of all work pursuant to this Agreement, and may terminate this Agreement, with or without cause after fifteen (15) calendar day's written notice from the date of mailing. In the event of a termination without cause, Consultant will be entitled to a reasonable portion of the lump sum fee for its services rendered prior to the effective date of the notice, but Consultant shall have no claim against District for loss of anticipated profits or other payment on account of services not yet performed and which are not thereafter performed by Consultant. In the event of a termination without cause, Consultant will submit a final invoice to District for all services rendered prior to termination within a reasonable time, not to exceed forty-five (45) days of the effective date of such notice. Any bills received after the expiration of the 45-day period need not be paid by District.
17. Ownership of Documents. All plans, studies, sketches, reports, test data, and drawings, prepared by or for either party pursuant to this Agreement including copyright ownership shall be the property of District when Consultant has been compensated for all undisputed billings in accordance with this Agreement, whether the work for which they are prepared be executed or not. Upon completion of all work under this Agreement, or in the event this Agreement is terminated prior to completion of all such work, all documents, plans, specifications, drawings pertaining to the facility, and all other material provided to assist Consultant in performing under this Agreement shall be delivered forthwith to District. However, nothing shall prevent Consultant from using intellectual property developed under this contract in other works. All documents, including, but not limited to, drawings, specifications, and computer software prepared by Consultant pursuant to this Agreement are instruments for service specific to this project. They are not intended or represented to be suitable for reuse by District or others on extensions of the project or on any other project. Any reuse without the prior written verification or adaptation by District for the specific purpose intended shall be at District's sole risk.
18. Governing Law; Place of Suit. This Agreement is to be governed by and construed in accordance with the laws of the State of California. Any lawsuit arising out of this Agreement shall be filed and prosecuted exclusively in Ventura County, California Superior Court.
19. Sub Contracts. District has entered into this Agreement in order to receive the services of Consultant. The provisions of the Agreement shall equally apply to any Sub Consultant of Consultant. Consultant shall include in all sub contracts a clause making the terms of this Agreement binding upon the subcontract.
20. Entire Agreement. This Agreement constitutes the whole Agreement between the parties hereto with respect to the subject matter hereof, and neither party nor any of its agents or employees has made any representation except as specifically provided herein. Neither of the parties in executing or performing this Agreement is relying upon any

Agreement – Invasive Species Vulnerability Assessment & Control & Management Plan

statement or information to whomsoever made or given directly or indirectly, verbally or in writing by any individual or corporation except as specifically provided herein. The Agreement may not be modified or altered except in writing signed by both parties.

21. **Opinion Of Cost And Schedule.** Consultant’s opinions on cost and schedule shall be made on the basis of available information and Consultant’s expertise and qualifications as a professional. Consultant does not warrant or guarantee that its opinions on cost or schedule of current and future levels and events will not vary from Consultant’s estimates or forecasts or from actual outcomes.

22. **Notices.** All communication, notices, and demands of any kind which either party hereto may be required or may desire to give to or serve upon the other party may be given or served by manual delivery to such party or an office thereof or by enclosing it in a sealed envelope and depositing it in the United State mail, postage prepaid, registered, and addressed to the respective parties as follows:

To the District:
Carol Belser, Park Services Manager
Casitas Municipal Water District
11311 Santa Ana Road
Ventura, CA 93001
(805) 649-2233 ext. 111/cbelser@casitaswater.com

To the Consultant:
Renata Claudi MSc.
RNT Consulting Inc.
823 County Road 35
Picton, Ontario, Canada K0K 2T0
(613) 476-7994/www.rntconsulting.net

The effective date of all hand-delivered notices shall be the date of delivery. The effective date of all mailed notices shall be the second day following deposit in the mail.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed the day and year first above written.

ATTEST:

CASITAS MUNICIPAL WATER DISTRICT

Pete Kaiser, Secretary

By: _____
Bill Hicks, President

APPROVED AS TO FORM:

John Matthews, Attorney
Arnold, Bleuél, LaRochelle, Matthews & Zirbel LLP

RNT CONSULTING INC.

By: _____
Renata Claudi, Principal Project Manager

**CASITAS MUNICIPAL WATER DISTRICT
INSURANCE REQUIREMENTS**

INSURANCE

(A) Consultant shall provide and maintain the following commercial general liability and automobile liability insurance:

(1) Coverage for commercial general liability and automobile liability insurance shall be at least as broad as the following:

- a. Insurance Services Office Commercial General Liability coverage (Occurrence Form CG 0001).
- b. Insurance Services Office Form Number CA 0001 (ed. 1/87) covering Automobile Liability, Code 1 (any auto).

(2) The Consultant shall maintain limits no less than the following:

- a. General Liability. One million dollars (\$1,000,000) per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to the project/location (with the ISO CG 2501 or insurers equivalent endorsement provided to the district) or the general aggregate limit shall be twice the required occurrence limit.
- b. Automobile Liability. One million dollars (\$1,000,000 per accident for bodily injury and property damage combine single limit.

(3) The general liability and automobile liability policies are to contain, or be endorsed to contain the following provisions:

- a. The United States Bureau of Reclamation, the District, their directors, officers, employees, agents and volunteers are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of the Consultants, products and completed operations of the Consultant; premises owned, occupied or used by the Consultant; or automobiles owned, leased, hired or borrowed by the Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the United States Bureau of Reclamation, the District, its directors, officers, employees, agents and volunteers.
- b. For any claims related to this project, the Consultant's insurance shall be primary insurance as respects the United States Bureau of Reclamation, the District, their directors, officers, employees, agents and volunteers. Any insurance or self-insurance maintained by the United States Bureau of

Reclamation, the District, their directors, officers, employees, agents and volunteers shall be excess of the Consultant's insurance and shall not contribute with it.

- c. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the United States Bureau of Reclamation, the District, their directors, officers, employees, agents and volunteers.
- d. The Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- e. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days prior to written notice by certified mail, return receipt requested, has been given to the District.
- f. Such liability insurance shall indemnify the Consultant and his subconsultants against loss from liability imposed by law upon, or assumed under contract by, the Consultant or his subconsultants for damages on account of such bodily injury (including death), property damage, personal injury and completed operations and products liability. Such insurance shall be provided on a policy written by underwriters through an agency satisfactory to the District (see Section 4-08.05), which includes a cross-liability clause, and covers bodily injury and property damage liability, owned and non-owned vehicles and equipment, blanket contractual liability and completed operations liability. Such liability insurance shall include explosion, collapse, underground excavation and removal of lateral support. The United States Bureau of Reclamation, the District, their directors, officers, employees agents and volunteers shall be named as additional primary insured on any such policies. An additional insured endorsement (ISO CG 2010 or equivalent) (modified to include provisions 2-5 above) and a certificate of insurance (Accord Form 25-S or equivalent), shall be provided to the District.

(4) Any deductible or self-insured retention must be declared to and approved by the District. At the option of the District, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the United States Bureau of Reclamation, the District, their directors, officers, employees, agents and volunteers; or the Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

(5) Insurance is to be placed with insurers having a current A.M. Best's rating of no less than A:VII or equivalent.

(6) The Consultant shall not commence work under this contract, nor allow any subconsultant to commence work on this subcontract, until he has secured all insurance required

under the section and has filed with the District, certificates of insurance in the amounts specified. Such certificates shall contain a provision that they may not be called without at least thirty (30) days' written notice to the District.

(B) Worker's Compensation Insurance.

(1) By his signature hereunder, Consultant certifies that he is aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code, and he will comply with such provisions before commencing the performance of the work of this contract.

(2) The Consultant shall maintain, and shall cause all subconsultants he may employ to maintain adequate workers compensation insurance under the laws of the State of California for all labor employed by them, directly or indirectly, in the execution of the work. The Consultant and all subconsultants shall file with the District certification of such workers compensation insurance prior to beginning construction.

(C) Evidences and Cancellation of Insurance.

(1) Prior to execution of the contract, the Consultant shall file with the District evidence of insurance from an insurer or insurers certifying to the coverage of all insurance required herein. Such evidence shall include the ISO CG 2010 (or insurer's equivalent) signed by the insurer's representative and certificate of insurance (Accord Form 25-S or equivalent). All evidence of insurance shall be certified by a properly authorized officer, agent or qualified representative of the insurer and shall certify the names of the insured, any additional primary insurers, where appropriate, the type and amount of the insurance, the location and operations to which the insurance applies, the expiration date, and that the insurer will give by certified mail, written notice to the District at least thirty (30) days prior to the effective date of any cancellation, lapse or material change in the policy.

(2) The Consultant shall, upon demand of the District, deliver to the District all such policy or policies of insurance and the receipts for payment or premiums thereon; and should the Consultant neglect to obtain and maintain in force any such insurance or deliver such policy or policies and receipts to the District, then it shall be lawful for the District to obtain and maintain such insurance, and the Consultant hereby appoints the District his true and lawful attorney-in-fact to do all things necessary for this purpose. All money paid by the District for insurance premiums under the provisions of this article shall be charged to the Consultant.

**CASITAS MUNICIPAL WATER DISTRICT
INTEROFFICE MEMORANDUM**

TO: GENERAL MANAGER
FROM: E & M SUPERVISOR
SUBJECT: EQUIPMENT FOR AVE 1 PUMP PLANT
DATE: NOVEMBER 3, 2014

Recommendation

Authorize General Manager to sign a purchase order contract with Goulds Pump, Inc. in the amount of \$71,726.15 plus shipping for additional pump stages for the Ventura Avenue No. Pump Plant.

Discussion

Lake Casitas may continue drop in elevation. The elevation drop reduces the inlet pressure at the Ave 1 pump plant. At some level unit 4 will have insufficient inlet pressure to pump. The additional pump stages will allow pump unit 4 to continue pumping as the lake level falls. There is a long lead time to obtain the additional pump stages from the manufacturer. Staff is recommending that the additional pump stages be ordered now so the stages will be available for installation if the lake level continues to fall.

The Board authorized the General Manager to sign a purchase order in the amount of \$44,673.78 at the October 22, 2014 meeting. Staff based that amount on our interpretation of the quotation. \$44,673.78 was the amount for one pump stage and not the two pump stages that are required. The total required to purchase the additional pump stages is \$71,726.15 plus shipping.

The FY 2014-15 Budget included \$75,000 for pump work at Ventura Avenue No. 1 Pump Plant.

CASITAS MUNICIPAL WATER DISTRICT
Inter-Office Memorandum

DATE: November 7, 2014
TO: Board of Directors
FROM: Denise Collin - Accounting Manager
Re: Incode – Remit Plus Scanner Hardware and Software

RECOMMENDATION:

It is recommended that the Board of Directors approve the purchase of Incode's Remit Plus hardware and software in the amount of \$10,565.00 with an annual maintenance fee of \$1,994.00.

BACKGROUND AND OVERVIEW:

In preparation of the implementation of the District's customer billing change from Bi-Monthly to Monthly the Operations and Maintenance Department has been upgrading the Districts water meters to Sensus Radio Meters and is expected to be complete in March 2015.

Once this implementation is complete it will result in double the amount of checks/payments received per month to process in the District's accounting software, Incode. Incode's Remit Plus consists of scanner hardware and software. Batches of checks received for payments would be scanned and the payment information will import directly into the customers' accounts avoiding manual data entry, human error and creates efficiency. In addition the software creates a digital file that is submitted to the bank for an ACH deposit.

This item is not in the 2014/2015 budget and would require Board approval.



Proposal - RemitPlus

Presented to:

Denise Collin
Account Manager
Casitas Municipal Water Dist
1055 Ventura Ave
Oak View, CA 93022
(805) 649-2251
dcollin@casitaswater.com

Proposal date:

November 6, 2014

Submitted by:

Robin Reeves
(800) 646-2633
robin.reeves@tylertech.com

Tyler Technologies
Local Government Division
5519 53rd Street
Lubbock, Texas 79414

Investment Summary

Denise Collin
Casitas Municipal Water Dist
November 6, 2014



Cost Breakdown

Proposal Valid for 120 days

Hardware & Third Party Software	Cost	Annual Fees
Profitstars Hardware & Software	10,565	1,994
	10,565	1,994
Project Total	10,565	1,994

Estimated Travel Expenses 1,040

Note: Travel Expenses are billed as incurred based on Federal IRS per diem standards.

Tyler will invoice Client for the License Fees listed above upon delivery of the software.

Maintenance Fees listed above will be invoiced upon ninety (90) days of delivery and annually thereafter on the anniversary of that date

All payment terms are net thirty (30) days

ProfitStars - RemitPlus
 Denise Collin
 Casitas Municipal Water Dist
 November 6, 2014



Description	Product	QTY	Purchase Price	Annual Fee
ProfitStars RemitPlus Software				
RemitPlus Licensed Software	Tier 2 Single User - 50,000 Items per year	1	3,600	864
	CAR/LAR - Character Recognition Module	1	700	480
	Electronic Check Deposit Setup (Optional)	1	500	100
	Services - Installation and Training <i>Services = 1.5 Days</i>		1,500	
Check Scanner	Canon CR-190i Includes Ink Cartridge & 1st Years Maintenance Year 2 Scanner Maintenance	1	3,770	550
	CheckMate Jogger (Single)	1	495	
	ProfitStars RemitPlus Total			
			10,565	1,994

CASITAS MUNICIPAL WATER DISTRICT

MINUTES
Water Resources Committee

DATE: October 20, 2014
TO: Board of Directors
FROM: General Manager, Steve Wickstrum
Re: Water Resources Committee Meeting of October 20, 2014

RECOMMENDATION:

It is recommended that the Board of Directors receive and file this report.

BACKGROUND AND OVERVIEW:

1. **Roll Call.**
Director Pete Kaiser and Director Russ Baggerly
General Manager, Steve Wickstrum
2. **Public comments.** None
3. **Board/Management Comments.**
Director Kaiser inquired about the various pine trees being removed from the Lake Casitas Recreation Area, noting the effort to remove the drought-stricken pine trees and the abatement of the fire hazard.

Director Baggerly asked about the level of siltation in Lake Casitas and suggested investigating the USGS Grace Program use of infra-red photography.

The General Manager informed the Committee of the interaction with the public during the Ojai Day event. Many public comments were directed to their own personal efforts to conserve water. The General Manager also updated the Committee on recent information concerning El Nino conditions and forecasts that indicate a normal or less than normal rainfall year ahead in 2015.
4. **Update on Water Waste Ordinance Response and Conservation efforts.**
The General Manager informed the Committee that staff has responded to reports of water waste, but no responses have been elevated to enforcement stages.
5. **Water Shortage Contingency Plan.**
The Committee discussed the method for introducing the Plan to the Board and public. Director Baggerly suggested there be a review by district counsel prior to moving forward, and the General Manager concurs with this suggestion.
5. **Discussion on District's participation in a local Groundwater Sustainability Agency (GSA) for the Upper Ventura River.**
The General Manager informed the Committee that the Ventura River Water District has expressed an immediate interest in formulating a GSA and has asked if Casitas is interested in being a part of the GSA. A meeting is scheduled in the near future to discuss the initial premise of the GSA. The committee suggested that this topic be brought to the Board to discuss the assignment of staff and directors to attend the initial meeting, and report back to the Board.

CASITAS MUNICIPAL WATER DISTRICT

MINUTES
Recreation Committee

DATE: November 3, 2014
TO: Board of Directors
FROM: General Manager, Steve Wickstrum
Re: Committee Meeting of November 3, 2014

RECOMMENDATION:

It is recommended that the Board of Directors receive and file this report.

BACKGROUND AND OVERVIEW:

1. **Roll Call.**

Director Bill Hicks and Director Jim Word
General Manager, Steve Wickstrum
Park Services Manager, Carol Belser
Park Services Officer IV, Suzi Taylor

Public: Tanya Peralta, Organizer for the Humane Society Event
Dee Bennett, Lake Casitas Rowing Club

2. **Public comments.**

None.

3. **Board/Management comments.**

The General Manager reported that he received information that tamarisk is beginning to grow along the shore at lake Casitas. Staff will determine the extent of the infestation and develop a plan for eradication. The Principal Civil Engineer is presently preparing environmental documents to address the removal of shoreline vegetation and should include this recent finding in the documents.

Director Hicks commented on the Ventura Museum's pictorial exhibit of the Lake Casitas submerged tree. It is a sequential re-emergence of the tree over the course of the declining levels of water in Lake Casitas.

Director Word asked staff about the status of trailer storage occupancy. Staff stated that occupancy is at near full occupancy.

4. **Discussion regarding the Dog Trot event, a 5K fundraiser.**

Carol Belser and PSO Taylor have been working with representative from the Humane Society since March 2014 to organize a 5k fundraiser. It is desired to have the event at Lake Casitas in March 2015. Key issues to resolve are the route of the 5K race and narrowing the point of contact to one person representing the Humane Society. Ms. Tanya Peralta was present during the meeting to assist in organizing the event, but does not work for the Humane Society. Carol Belser requested that the Humane Society meet with staff to resolve the route issue and conclude the arrangements for the event.

5. **Review of Incidents and Comments.**

PSO IV Taylor informed the Committee that last month there were 11 incidents that included a quagga threat and follow up by the State agencies, and a couple of domestic disputes.

CASITAS MUNICIPAL WATER DISTRICT
Minutes

DATE: November 6, 2014
TO: Board of Directors
FROM: General Manager, Steve Wickstrum

Re: Executive Committee Meeting of November 4, 2014

RECOMMENDATION:

It is recommended that the Board of Directors receive and file this report.

MEETING:

1. **Roll Call.** Directors Mary Bergen and Bill Hicks
Steve Wickstrum, General Manager
Rebekah Vieira, Assistant to the General Manager
2. **Public Comments.** None.
3. **Board/Manager comments.**
Rebekah Vieira requested the Committee to consider cancellation of the December 2nd meeting due to attendances by Board and staff at the ACWA conference. It was agreed to cancel the Executive Committee meeting of December 2nd, unless otherwise needed to reschedule.
4. **Discussion regarding District Policies.**
The Committee discussed proceeding with a review of various district policies, aside from the personnel policies, during the next calendar year.
5. **Scheduling a public hearing regarding Board Compensation.**
The Committee discussed the scheduling of the public hearing and deciding on bring the hearing forward early in the 2015 calendar year.

CASITAS MUNICIPAL WATER DISTRICT
LAKE CASITAS RECREATION AREA

DATE: October 31, 2014
 TO: Steve Wickstrum, General Manager
 FROM: Carol Belser, Park Services Manager
 SUBJECT: Recreation Area Monthly Report for September 2014

Visitation Numbers

The following is a comparison of visitations* for September 2014:

	Sept. 2014	Sept. 2013	August 2014
Visitor Days	34,620	49,872	86,996
Camps	4,083	3,737	10,615
Cars	8,655	12,468	21,749
Boats	142	177	199
Kayaks & Canoes	7	4	10

Fiscal Year to Date Visitation	
2013/2014	221,020
2014/2015	217,036
% Change	1.803

*The formulas for calculating the above attendance figures derived from the daily cash reports are as follows:

Visitor Days = Daily vehicles + 30 minute passes X 3 + café passes + attendance at special events + annual vehicle decals + replacement decals + campsites occupied + extra vehicles X 4

Camps = Campsites occupied + extra vehicles

Cars = Daily vehicles + 30 minute passes X 3 + café passes + attendance at special events + annual vehicle decals + replacement decals + campsites occupied + extra vehicles

Boats = Daily boats + overnight boats + annual decals + replacement decals

Kayaks & Canoes = Daily kayaks and canoes + overnight kayaks and canoes + annual kayaks and canoes

Boating

There were six cables sold for new inspections, five vessels were re-inspected and a total of 408 vessels were retagged. Five vessels failed the first inspection in September 2014.

Night fishing from shore was held September 2, 3 and 4. Western Outdoor News organized a night fishing tournament on September 20.

Two PSO staff attended Watercraft Inspection Training Level II in Arizona and obtained certification.

Operations

Astronomy night was held on September 13th and Lake Casitas participated with the County of Ventura for the annual Coastal Clean-up day on September 20th. Ten participants helped clean debris from the shoreline.

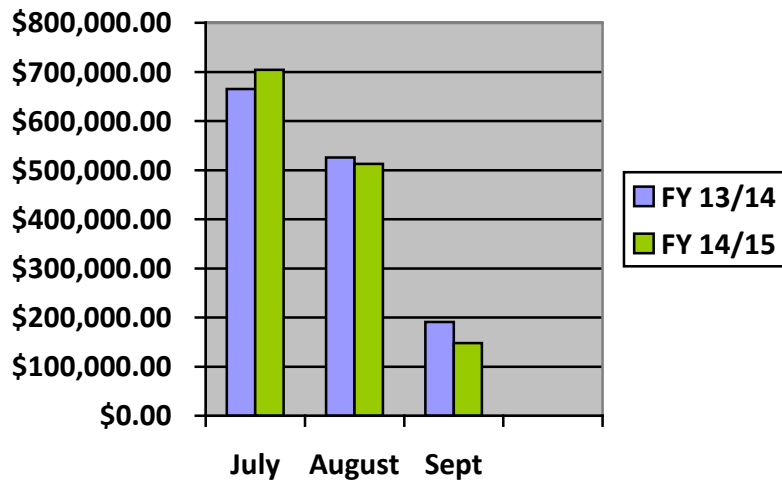
Incidents

Incidents in the Recreation Area for the month of September 2014 that required assistance from outside agencies included: report of difficulty breathing, report of transfer of wildlife, three domestic disputes, medical at the cross country event, diabetic concerns, child head injury and a report of suspicious circumstances of an abandoned kayak leading to search operations by County of Ventura.

Revenue Reporting

The unaudited figures below illustrate all Lake Casitas Recreation Area’s revenue collected in the respective month (operations, concessions, Water Adventure, etc.) per the District’s Financial Summary generated by the Finance Manager.

LCRA TOTAL REVENUE





Consumption Report

Water Sales FY 2014-2015 (Acre-Feet)

Classification	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Month to Date		
													2014 / 2015	2013 / 2014	
													Total	Total	
AD Ag-Domestic	391	706	398	712										2207	2186
AG Ag	341	518	432	550										1841	1747
C Commercial	91	99	93	79										362	397
DI Interdepartmental	18	3	22	4										47	61
F fire	0	0	0	0										0	1
I Industrial	1	6	1	3										11	7
OT Other	27	34	24	24										109	137
R Residential	212	132	224	116										684	750
RS - P Resale Pumped	68	174	157	178										577	678
RS - G Resale Gravity	548	608	615	647										2418	2339
TE Temporary	2	8	6	11										27	44
Total	1699	2288	1972	2,324	0	0	0	0	0	0	0	0	0	8,283	8,347
Total 2013/2014	2014	1910	2301	2122	1951	1437	1145	1713	1022	765	1003	1710		N/A	19093

Casitas Municipal Water District
CFD No. 2013-1 (Ojai) - Monthly Cost Analysis
2014/2015



11/05/2014

	Services & Suplies	Legal Fees	Labor Expense	Other Services	Total Expenses
2011 / 2012	-289.50	42,560.00	11,098.37	0.00	53,368.87
2012 / 2013	831.82	223,462.77	14,836.68	0.00	239,131.27
2013 / 2014	29.89	91,878.06	3,835.65	0.00	95,743.60
July	0.00	0.00	0.00	0.00	0.00
August	0.00	840.00	0.00	0.00	840.00
September	0.00	96.00	0.00	0.00	96.00
October	0.00	2,219.00	0.00	0.00	2,219.00
November	0.00	0.00	0.00	0.00	0.00
December	0.00	0.00	0.00	0.00	0.00
January	0.00	0.00	0.00	0.00	0.00
Feburary	0.00	0.00	0.00	0.00	0.00
March	0.00	0.00	0.00	0.00	0.00
April	0.00	0.00	0.00	0.00	0.00
May	0.00	0.00	0.00	0.00	0.00
June	0.00	0.00	0.00	0.00	0.00
Total Cost YTD	0.00	3,155.00	0.00	0.00	3,155.00
Total Project Cost	572.21	361,055.83	29,770.70	0.00	391,398.74

**CASITAS MUNICIPAL WATER DISTRICT
TREASURER'S MONTHLY REPORT OF INVESTMENTS
11/06/14**

Type of Invest	Institution	CUSIP	Date of Maturity	Adjusted Cost	Current Mkt Value	Rate of Interest	Date of Deposit	% of Portfolio	Days to Maturity
*TB	Federal Home Loan Bank	313379EE5	06/14/2019	\$1,380,198	\$1,342,454	1.625%	10/03/2012	9.10%	1658
*TB	Federal Home Loan Bank	313379RN1	12/27/2024	\$978,364	\$985,617	3.027%	06/18/2014	6.68%	3651
*TB	Federal Home Loan Bank	313380A98	08/14/2024	\$126,966	\$126,826	2.500%	07/03/2014	0.86%	3518
*TB	Federal Home Loan Bank	313380S73	10/11/2022	\$699,720	\$677,215	2.430%	08/11/2014	4.59%	2855
*TB	Federal Home Loan Bank	313381ST3	01/17/2023	\$250,346	\$246,605	1.500%	09/08/2014	1.67%	2951
*TB	Federal Home Loan Bank	313381TA3	01/17/2023	\$277,619	\$273,036	2.240%	09/08/2014	1.85%	2951
*TB	Federal Farm CR Bank	3133EAZM3	07/24/2023	\$1,658,682	\$1,677,021	2.380%	09/16/2014	11.37%	3138
*TB	Federal Home Loan Bank	3133XFKF2	06/11/2021	\$705,533	\$674,587	5.625%	01/16/2013	4.57%	2375
*TB	Federal Home Loan Bank	3133XWNB10	06/12/2015	\$703,726	\$711,179	2.875%	07/01/2010	4.82%	216
*TB	Federal Home Loan Bank	3134A4VG60	11/17/2015	\$720,449	\$732,627	4.750%	07/19/2010	4.97%	371
*TB	Federal Home Loan MTG Corp	3134G43A4	10/30/2024	\$849,441	\$838,095	2.500%	07/03/2014	5.68%	3594
*TB	Federal Home Loan MTG Corp	3135G0ES80	11/15/2016	\$689,015	\$693,682	1.375%	03/12/2012	4.70%	729
*TB	Federal Home Loan MTG Corp	3137EABA60	11/17/2017	\$1,110,954	\$1,119,830	5.125%	01/03/2012	7.59%	1091
*TB	Federal Home Loan MTG Corp	3137EADB2	01/13/2022	\$682,590	\$667,818	2.375%	09/08/2014	4.53%	2587
*TB	US Treasury Inflation Index NTS	912828JE10	07/15/2018	\$1,151,106	\$1,174,911	1.375%	07/06/2010	7.96%	1329
*TB	US Treasury Notes	912828LZ10	11/30/2014	\$700,266	\$700,903	2.125%	07/01/2010	4.75%	24
*TB	US Treasury Inflation Index NTS	912828MF40	01/15/2020	\$1,135,809	\$1,174,095	1.375%	07/01/2010	7.96%	1869
*TB	US Treasury Bond	912828WE6	11/15/2023	\$769,642	\$794,644	2.613%	12/13/2013	5.39%	3249
Accrued Interest						\$140,722			
Total in Gov't Sec. (11-00-1055-00&1065)				\$14,590,424	\$14,751,867			80.32%	
*CD	cit Salt Lake City UT - CD		12/18/2023	\$245,000	\$243,706	3.30%			
*CD	Discover BK Greenwood DE - CD		01/16/2024	\$239,000	\$236,003	3.20%			
*CD	GE Capital - CD Draper, UT		09/27/2023	\$245,000	\$243,714	3.25%			
*CD	GE Capital - CD Salt Lake City, UT		09/27/2023	\$245,000	\$241,842	3.15%			
*CD	Goldman Sachs - CD New York, NY		10/30/2023	\$224,000	\$224,909	3.25%			
*CD	Toyota Financial Services - CD -Henderson NV		12/20/2023	\$245,000	\$243,770	3.30%			
Total Certificates of Deposit: (11.13506)				\$1,443,000	\$1,433,945			7.81%	
**	LAIF as of: (11-00-1050-00)		N/A	\$446	\$446	0.23%	Estimated	0.00%	
***	COVI as of: (11-00-1060-00)		N/A	\$2,179,758	\$2,179,758	0.35%	Estimated	11.87%	
TOTAL FUNDS INVESTED				\$18,213,628	\$18,366,015			100.00%	
Total Funds Invested last report				\$18,219,286	\$18,478,673				
Total Funds Invested 1 Yr. Ago				\$18,140,154	\$18,396,955				
****	CASH IN BANK (11-00-1000-00) EST.			\$5,209,796	\$5,209,796				
	CASH IN Western Asset Money Market			\$8	\$8	0.01%			
TOTAL CASH & INVESTMENTS				\$23,423,432	\$23,575,819				
TOTAL CASH & INVESTMENTS 1 YR AGO				\$20,177,423	\$20,434,224				

- *CD CD - Certificate of Deposit
- *TB TB - Federal Treasury Bonds or Bills
- ** Local Agency Investment Fund
- *** County of Ventura Investment Fund
- Estimated interest rate, actual not due at present time.
- **** Cash in bank

No investments were made pursuant to subdivision (i) of Section 53601, Section 53601.1 and subdivision (i) Section 53635 of the Government Code.
All investments were made in accordance with the Treasurer's annual statement of investment policy.