Regular Meeting
February 20th 2018
6:00 p.m.

MEINERS OAKS WATER DISTRICT
VENTURA COUNTY SINCE 1949
(805) 646-2114
"WATER IS PRECIOUS"
202 WEST EL ROBLAR DRIVE

NOTICE OF REGULAR MEETING OF

BOARD OF DIRECTORS

February 20th, 2018

Right to be heard: Members of the public have a right to address the Board directly on any item of interest to the public that is within the subject matter jurisdiction of the Board, provided that no action shall be taken on any item not appearing on the agenda unless the action is otherwise authorized by subdivision (b) of Section 54954.2.

Please Note: If you have comments on a specific agenda item(s), please fill out a comment card and return it to the Board Secretary. The Board President will call on you for your comments at the appropriate time, either before or during the Board's consideration of that item.

Agenda

Meeting will be called to order at 6:00 p.m.

a) **Roll Call**

b) **Approval of Minutes**

Approval of the minutes of the January 16th, regular meeting and the January 24th Special Meeting

c) **Public Comments**

The Board will receive comments from the public at this time on any item of interest to the public that is not on the agenda that is within the subject matter jurisdiction of the legislative body, provided that no action shall be taken on any item not appearing on the agenda unless the action is otherwise authorized by subdivision (b) of Section 54954.2. Matters raised by public comment requiring Board action will be referred to staff or placed on a subsequent agenda where appropriate.

When addressing the Board, please state your name and address and limit your comments to three (3) minutes.

Please Note: If you have comments on specific agenda items, please fill out a comment card and return it to the Board Secretary. The Board President will call on you for your comments at the appropriate time, either before or during the Board's consideration of that item.

In addition to the initial public comment period, another comment period will be provided for each agenda item prior to the Board vote. Once public comments are closed further dialog on that topic from the public will not be heard.

4. **General Managers Report**

- **System Status**
- **Update of Eagle Ariel Spreadsheet and next steps**
- **River conditions/well levels and 3.74" of rain**

5. **Board Committee Reports**

   - **No committees met last month**

6. **Old Business**

   - **Financial: CA Special District Training Expense - Tabled to March 2018.**

7. **Board of Directors Reports**

8. **Financial Matters**

   1. **Approval of Payroll and Payables from January 16th, 2017 to February 15th, 2018 in the amount of;**

Payables -	**$ 75,835.33**
Payroll -	**$ 35,807.99**
Total -	**$ 111,643.32**

9. **Board Discussion and/or Action**

   a) **Professional services proposal from Kear Groundwater in the amount of $10,740.00**

   b) **Allocation and Rate Program – Discussion of draft dated February 20, 2018**

   c) **Approval of MOU establishing a collaborative non-binding agreement between CMWD, VRWD, MOWD, City of Ojai, County of Ventura, OBGMA and UVRGSA.**

   d) **OVLC letter of interest for District 50 acres**

   e) **Adoption of Meiners Oaks Water District email policy**

   f) **Report by Richard Hajas discussing a possible solution to water supply reliability.**

10. Closed Sessions: The Board of Directors will hold a closed session to discuss personnel matters or litigation, pursuant to the attorney/client privilege, as authorized by Government Code Section 54957 & 54956.8, 54956.9 and 54957

No closed session items to discuss

11. Meeting Adjournment.

Regular Meeting
January 16, 2018
6:00 p.m.

Meiners Oaks Water District
202 West El Roblar Drive
Ojai, CA 93023-2211
Phone 646-2114

MINUTES

The meeting was called to order at 6:00 p.m.

1. Roll Call

The meeting was called to order by the Board President James Kentosh at 6:00 pm at the District Office.

Present were: Board President James Kentosh, Board Directors Mike Krumpschmidt, Diana Engle, Larry Harrold and Mike Etchart. Staff Present: General Manager Mike Hollebrands and Board Secretary Summer Ward. Attorney Lindsay Nielson was also present.

Absent: None.

2. Approval of the minutes

Approval of the December 19, 2017, Regular Meeting minutes:

Mr. Etchart made the motion to approve the December 19, 2017, Regular Meeting minutes with a minor wording correction on page 2, item 4 date and page 3 abbreviation correction to "QAPP," page 5 remove "in" congruent from statement from Mr. Krumpschmidt. Mr. Harrold seconded the motion.

Etchart/Harrold
All Ayes
M/S/C

3. Public Comments

Mr. Kentosh presented "Guidelines" for public comment session. Mr. Kentosh reviewed relevant portions of the Brown Act and created the guideline accordingly:

- 3 minutes per public speaker
- Comment period will be provided for each agenda item;
- Speakers are to stand at the lectern and introduce themselves for the record.

Ms. Von Gunten stated that the public meetings are a time for the Board to receive comments from the public.
Ms. Moll asked if there is a request that a statement be included in the minutes, will it be included?

Mr. Nielson clarified for the Board that they can briefly respond to a public comment but it is not the intent to engage in discussion on the public comment.

Mr. Krumpschmidt made the motion to approve the Public Comment Guidelines. Mr. Etchart seconded the motion.

Krumpschmidt/Etchart
All Ayes
M/S/C

Public Comments:
Susan Moll was present. Ms. Moll stated that the Board President stamped "draft" on her June 22, 2017 response letter and that this is her 3rd request to have her response included in the August 2017 minutes. Ms. Moll also mentioned that Mr. Nielson's email was hacked and Ms. Moll read the hacked email that she received and expressed concern regarding security of her information that may have been obtained by the hacker. Ms. Moll also expressed concern because of her receiving one other strange email previously from Stacey Gilbert. Ms. Moll provided a copy of the letter and email from Stacey Gilbert.

Elizabeth Anne Von Gunten was present. Ms. Von Gunten made four comments. Public Comments section is for receiving comments not for discussion. Public Records Act requires that her written statement be included in the meeting minutes, which they previously have not been. FEMA has Emergency Management training for elected officials coming up and she will email that information to Mr. Hollebrands for distribution. Ms. Von Gunten has requested a copy of the completed CalFire After Action Report for MOWD for the Thomas Fire.

4. Financial Matters

- **Approval of Payroll and Payables from December 16th to January 15th, 2018 in the amount of:**

Payables -	**$44,510.25**
Payroll -	**$36,498.12**
Total -	**$81,008.37**

Public Comments: Ms. Moll referenced line item "Benner & Carpenter" what is the history of payment, what expenses are included in that item?

Mr. Harrold made the motion to approve the Payroll and Payables from December 16th to January 15th, 2018. Mr. Etchart seconded the motion.

Harrold/Etchart
All Ayes
M/S/C

5. Board Discussion/Actions (public comments after each item)

A. Benner & Carpenter (Larry Frager)

Mr. Frager presented the 1976 parcel map and identified markers during onsite survey that matched parcel map and county records, most were within 2-3 inches of the mapped location. The few markers not found were extrapolated using the angles and distances between the found markers and all indicate matches with county record. Temporary flags were placed in those extrapolated sites. An official county recording is only required if the surveyor places a 1" pipe with marker tag, which Benner & Carpenter did not do at that time of the survey. Mr. Nielson clarified that it is illegal to move or deface county recorded markers. Mr. Krumpschmidt asked of Mr. Frager if in his professional opinion there was any doubt in the accuracy of the parcel map, of which Mr. Frager confirmed he is confident in the accuracy of the parcel map. Mr. Frager stated his professional licensing for the record as a Licensed Land Surveyor and professional engineer. Mr. Kentosh made the request that Mr. Hollebrands contacted Benner & Carpenter to set and record each corner of the tank farm property with the county, if the expense is within the GM's approval limit, if it is not it will come to the board for approval. The board was unanimously in support of Mr. Hollebrands completing this task.

Public Comments:
Ms. Von Gunten requested that it be indicated on the map where a marker should have been found and where actual markers were found. Ms. Von Gunten also requested electronic copies of the 2 maps Mr. Frager presented.

Ms. Moll stated that there were two records of survey for the property in 1941 and 1956. She went to the county GIS to make corrections and made requests to the county surveyor for other related changes. Ms. Moll had in hand and presented a marker pipe that she states she found lying by her water valve #RE224 and that Steve found a marker #3069 on the property. Ms. Moll added that parcel and track maps are validated by county record of survey and cannot divide the land.

Ms. Foley stated for the record that the history of 0.22 acres came from the deed for that triangle of land.

B. Tank Farm Fence Location

Mr. Kentosh restated that this is to complete the perimeter and corner of the tank farm property carried forward from last meeting. Mr. Kentosh gave a brief summary of the December regular meeting agenda item asked if there was any new information that should be considered regarding fence location. Ms. Engle clarified with Mr. Hollebrands that at the time Ms. Moll purchased the property there was a chain connected to two poles across that access road, the prior owner did not use that as a primary access.

Public Comment:

Ms. Moll stated that the fencing would not allow her to turn around and that she would lose an acre of her land. This is a form of taking and to follow the legal land acquisition guideline. She stated to not move forward until county recording is done. She will do anything to make it safe.

Ms. Foley asked if the fencing will include the triangle of land. Mr. Kentosh affirmed yes. Ms. Foley noted that she was on Ms. Moll's property during the fire and that she had told the fire crews they had access to turn around at the top driveway and that this would cut off the access road.

Ms. Von Gunten felt she was cutoff during her response and that it was disrespectful and that she wanted to recommend a recorded survey, seek the highest legislative authority. Ms. Von Gunten noted that if Ms. Moll is left with less than 10 acres of useable agricultural land she will lose her agriculture designation and that has its own set of ramifications.

Ms. Maroney stated that she is a good friend of Ms. Moll and was present with Ms. Moll at the November 28, 2017 meeting and would like to know what happened with the liability insurance and electrifying the gate for access.

The Board discussed continuing forward with fencing while the district pursues recording the markers with the county. The board agreed that fencing would be inside the temporary wood markers, to be prudent and place fence further inside markers, if county survey requires adjustment then the fence would be moved accordingly.

C. Damage to Tank Farm Property

The damages to the Tank Farm are viewed as a civil matter according to local authorities. Damages include removal of flow berm, excavation of the main line and removal the removal survey markers. Mr. Hollebrands is currently obtaining cost estimates from WREA for the repairs, if the total is less than $10,000 it will go to small claims court. Mr. Hollebrands

will proceed with making the necessary repairs while the civil matter is being processed.

Public Comment: Ms. Moll stated that the flow berm is just a speed bump and that she installed ballards, she felt compelled to make it safer. In regards to compaction, the surveyor was digging deeper than she dug and stated that she has photographs.

D. Moll Allocation Request
Mr. Kentosh reviewed the allocation waiver request submitted by Ms. Moll. The information provided on the request form was incomplete and did not include the amount of units being requested. Mr. Etchart and Mr. Kentosh both offered assistance to Ms. Moll in how to estimate units for an agricultural land. The request was not approved pending more information from Ms. Moll.

Public Comment: None.

E. Replacement of Well 4
Mr. Hollebrands presented the bid summary sheet based on the job specifications created by the hydrogeologist. The board discussed the bid variances and work history and reputation of each bidding company. Mr. Hollebrands clarified for the Board that these bids do not include the motors, control panels, or VFD's, etc...these additional items are not in the current budget and will need to come from reserves. The Board will discuss further during the upcoming budget meetings. Mr. Hollebrands recommended Layne Christensen for the job as they have the most experience with this type of drilling and a long history of high quality work for the District. The Board requested that Mr. Hollebrands request a bid from the hydrogeologist for his presence during onsite drilling.

Public Comments: None

Mr. Etchart made the motion to approve the Layne Christensen bid for the Well 4 Replacement job. Ms. Engle seconded the motion.

Etchart/Engle
All Ayes
M/S/C

F. Board Email Policy
The Executive Committee met and discussed the template provided last meeting by Ms. Engle, as well as the information provided by Mr. Nielson. The Board is in agreement that the District should move forward with creating the Board email accounts and develop and adopt a clear email and retention policy.

Public Comment:
Ms. Von Gunten referenced back to around 2010 when there was a large project to file scan and purge, there was a retention policy at that time. Ms. Von Gunten added that the Clinton email investigation is still ongoing.

G. **MOWD Officer Elections for 2018**
Mr. Kentosh stated that it is healthy to have rotation of positions and that he has acted as President for 18 months. The Board agrees that annual rotation of positions would be beneficial.
MOWD Board President – Mr. Kentosh made a motion to nominate Mike Etchart. Ms. Engle seconded the motion.

Kentosh/Engle
All Ayes
M/S/C

MOWD Vice President – Mr. Krumpschmidt made a motion to nominate Jim Kentosh. Mr. Etchart seconded the motion.

Krumpschmidt/Etchart
All Ayes
M/S/C

Public Comments: None

H. **Presentation on Thomas Fire – presentation at end of meeting.**

6. General Manager's Report

- **Highway Bids - pending**
- **District O & M Report – Mr. Hollebrands met with the State onsite and the District anticipates receiving its Discharge Permit in February 2018.**
- **Thomas Fire Recovery Updates – The staff have trenched approximately 1,000 feet at wells 1, 2 & Treatment Plant. The generators will be removed by next week and Edison will be picking up the full cost approximately $24,000/month. The insurance claim is up to $100,000 and the equipment to date has reached $86,000. There is a FEMA meeting scheduled for January 22, 2018 to review the application process and required documentation.**
- **District Generators – Tabled to February 2018**
- **AWA meeting – Eric Bolt, NASA will be presenting at the January breakfast with a 2018 weather outlook.**

Public Comment: Ms. Von Gunten requested an after action report on the CalFire template for the Thomas Fire events.

7. Board Committee Reports

- **Executive Committee – January 5, 2018**
  Mr. Kentosh reported that the Executive Committee and Mr. Hollebrands met on January 5th to review the email policy template that Ms. Engle had provided last month. Recommendations and further editing of the policy will be made as discussed in item F.
- **GSA – postponed to January 18, 2018**

8. Old Business

- **Financial: CA Special District Training Expense – Tabled to March 2018**

9. Board of Directors' Reports

- **Mr. Etchart – requested that a link for the landslide website be added to the MOWD website. Ms. Ward will make the website revision.**
- **Mr. Harrold – stated that the Thomas Fire was a good example of our emergency response and would like the board to consider not purchasing a generator.**
- **Ms. Engle stated that the ground water/surface water flow standard public comment period has been extended. Ms. Engle drafted the comment letter on behalf of the MOWD as discussed at the December 2017 regular meeting. Mr. Kentosh will sign and Ms. Engle will submit the completed comment letter.**
- **Mr. Krumpschmidt shared that the new assisted living started construction on El Roblar, they are to meet a net zero consumption. The water saving efforts will begin at Meiners Oaks Elementary School and then to other schools within the district until net zero is reached. The site will have a MOWD allocation, with additional units already purchased from Casitas.**
- **Mr. Kentosh noted that when he was out jogging he noticed and removed a garage sale sign that was posted over our drought sign. Mr. Kentosh also reported that the AWA has appointed him to the Nomination Committee.**

10. Closed Session: The Board of Directors will hold a closed session to discuss personnel matters or litigation, pursuant to the attorney/client privilege, as authorized by Government Code Sections 54957 & 54956.8, 54956.9 and 54957.

- **No closed session items.**

11. Thomas Fire Presentation

Mr. Hollebrands prepared and narrated a 58 slideshow of the timeline and impact of the Thomas Fire in the Meiners Oaks District.

12. Meeting Adjournment

There being no further business to conduct at this time, Board President James Kentosh adjourned the meeting at 9:35 PM.

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President

_____

Secretary

Special Meeting
January 24, 2018
6:00 p.m.

Meiners Oaks Water District
202 West El Roblar Drive
Ojai, CA 93023-2211
Phone 646-2114

MINUTES

The meeting was called to order at 6:00 p.m.

1. Roll Call

The meeting was called to order by the Board President James Kentosh at 6:00 pm at the District Office.

Present were: Board President James Kentosh, Board Directors Mike Krumpschmidt, Diana Engle, Larry Harrold and Mike Etchart (by phone). Staff Present: General Manager Mike Hollebrands. Attorney Lindsay Nielson was also present.

Absent: Summer Ward

2. Approval of the minutes

None

3. Public Comments

None

4. Board Discussion/Actions

A. Benner & Carpenter $9,000 expense to map and record the tank farm property with the County of Ventura – *tabled until after closed session.*

Discussion pertained to scope of work to record the corners of the tank farm property line.

Public Comments: None

B. Options regarding proposed litigation against Ms. Moll – the Board discussed need for legal opinion of options for the District to be held in closed session.

Public Comments: None

At this time the Board of Directors went into Closed Session at 6:06 pm.

5. Closed Session: **The Board of Directors will hold a closed session to discuss personnel matters or litigation, pursuant to the attorney/client privilege, as authorized by Government Code Sections 54957 & 54956.8, 54956.9 and 54957.**

- **The Board will go into closed session under Lawyer-client privilege Government Code sections (§54956.8), (§54956.9 (b)(3)(c) and (§54957.7) to discussion options regarding options of potential litigation against Ms. Moll.**

Closed session ended at 7:28 pm.

Open session re-opened at 7:29 pm.

Item 4A was discussed further; as a result, the Board approved the amount of $9,000 for Benner & Carpenter to record markers at each corner of the tank farm property. Mr. Krumpschmidt made the motion and Mr. Harrold second. All Ayes M/S/C

6. Meeting Adjournment

There being no further business to conduct at this time, Mr. Kentosh adjourned the meeting at 7:31 PM.

_____

President

_____

Secretary

Report of Income as of 1/31/2018

Income	Month of January	Year To Date	Budget Approp	Approp Bal 07/31/15
Interest	562.37	5,540.15	7,000.00	1,459.85
Taxes	1,515.76	87,569.29	130,000.00	42,430.71
Pumping Charges	260.07	2,430.38	3,000.00	569.62
Fire Protection	118.51	1,081.32	1,000.00	(81.32)
Meter & Inst. Fees	--	--	--	--
Water Sales	60,806.05	475,658.56	451,584.00	(24,074.56)
Casitas Standby Fees	338.57	2,364.43	6,196.54	3,832.11
MWAC Charges	51,566.25	357,624.99	760,881.60	403,256.61
MCC Chg.	6,387.64	45,514.00	80,000.00	34,486.00
Misc. Income	1,272.41	3,333.08	8,000.00	4,666.92
Late & Delinquent Chgs.	1,904.20	15,002.78	30,000.00	14,997.22
Conservation Penalty	--	200.00	500.00	300.00
Capital Improvement	--	--	--	--
Drought Surcharge	6,609.58	63,840.32	40,000.00	(23,840.32)
	--	--	--	--
		--	--	--
		--	--	--
TOTAL INCOME	**131,341.41**	**1,060,159.30**	**1,518,162.14**	**458,002.84**

Meiners Oaks Water District

Report of Expenses and Budget Appropriations, Current Bills and Appropriations To Date

Expenditures	Month of January	Year To Date	Budget Approp	Approp Bal 01/31/17	Current February	Approp Bal To Date
Salary	33,711.92	224,195.46	382,000.00	157,804.54	-	157,804.54
Payroll Taxes	4,582.70	19,540.76	30,000.00	10,459.24	-	10,459.24
Retirement Contributions	2,147.17	20,345.99	30,000.00	9,654.01	-	9,654.01
Group Insurance	3,903.94	30,050.87	70,000.00	39,949.13	-	39,949.13
Company Uniforms	219.13	879.64	1,500.00	620.36	200.00	420.36
Phone Office	465.12	5,494.99	7,600.00	2,105.01	70.00	2,035.01
Janitorial Service	341.36	2,449.52	5,500.00	3,050.48	101.36	2,949.12
Refuse Disposal	231.18	1,419.43	2,700.00	1,280.57	-	1,280.57
Liability Insurance	-	24,649.65	25,000.00	350.35	-	350.35
Workers Compensation	-	10,200.26	17,500.00	7,299.74	-	7,299.74
Wells	1,001.12	9,539.96	25,000.00	15,460.04	-	15,460.04
Truck Maintenance	727.28	1,834.60	4,000.00	2,165.40	20.00	2,145.40
Office Equip. Maintenance	96.53	2,049.83	7,500.00	5,450.17	463.89	4,986.28
Cell Phones	388.16	1,829.17	4,500.00	2,670.83	-	2,670.83
System Maintenance	5,245.14	32,470.84	55,000.00	22,529.16	-	22,529.16
Safety Equipment	-	598.21	3,500.00	2,901.79	-	2,901.79
Laboratory Services	534.00	4,851.00	8,000.00	3,149.00	-	3,149.00
Membership and Dues	-	6,420.00	7,500.00	1,080.00	750.00	330.00
Printing and Binding	19.31	1,305.13	1,000.00	(305.13)	-	(305.13)
Office Supplies	239.50	2,217.88	6,000.00	3,782.12	-	3,782.12
Postage and Express	2,221.90	8,029.80	13,500.00	5,470.20	-	5,470.20
B.O.D. Fees	1,750.00	7,450.00	13,000.00	5,550.00	-	5,550.00
Engineering & Technical Services	1,100.00	23,826.85	35,000.00	11,173.15	282.40	10,890.75
Computer Services	489.21	5,330.00	15,000.00	9,670.00	136.96	9,533.04
Other Prof. & Regulatory Fees	4,258.83	18,961.24	15,000.00	(3,961.24)	19.90	(3,981.14)
Public and Legal Notices	-	-	1,000.00	1,000.00	-	1,000.00
Attorney Fees	1,580.00	14,077.00	15,000.00	923.00	-	923.00
GSA Fees	-	7,697.06	40,000.00	32,302.94	-	32,302.94
VR/SBC/City of VTA Law Suit	-	207.50	15,000.00	14,792.50	-	14,792.50
State Water	-	-	25,000.00	25,000.00	-	25,000.00
Audit Fees	3,250.00	9,750.00	18,000.00	8,250.00	-	8,250.00
Small Tools	-	389.74	3,000.00	2,610.26	-	2,610.26
Election Supplies	-	-	-	-	-	-
Water Purchase	-	8.93	75,000.00	74,991.07	-	74,991.07
CMWD Standby Charges	1,034.40	7,029.73	10,000.00	2,970.27	-	2,970.27
Treatment Plant	2,318.28	12,331.44	10,000.00	(2,331.44)	-	(2,331.44)
Fuel	696.27	5,619.07	12,000.00	6,380.93	-	6,380.93
Travel Exp./Seminars	155.00	565.32	2,000.00	1,434.68	102.30	1,332.38
Utilities	172.93	1,508.71	3,500.00	1,991.29	-	1,991.29
Power and Pumping	3,326.55	3,326.55	110,000.00	106,673.45	1,972.47	104,700.98
Meters	-	-	10,000.00	10,000.00	-	10,000.00
Total Expenditures	**76,206.93**	**528,452.13**	**1,134,800.00**	**606,347.87**	**4,119.28**	**602,228.59**
Water Distribution System	-	-	-	-	-	-
Cold Water Well	-	-	100,000.00	100,000.00	-	100,000.00
Well 4 Rehab	-	57,769.32	50,000.00	(7,769.32)	903.00	(8,672.32)
18 Valve Replacements	862.29	6,140.12	103,900.00	97,759.88	-	97,759.88
Fencing at Tank Farm	8,530.00	38,381.00	40,000.00	1,619.00	-	1,619.00
Structures and Improvements	-	-	-	-	-	-
Generator Z-2	-	-	75,000.00	75,000.00	-	75,000.00
Treatment Plant EDR/CEQA	-	-	80,000.00	80,000.00	-	80,000.00
Zone 1 Booster/MCC Upgrade	-	-	30,000.00	30,000.00	-	30,000.00
Well 4 MCC/VFD Upgrade	-	-	-	-	-	-
Furniture and Fixtures	-	-		-	-	-
General Managers Desk	-	-	1,500.00	1,500.00	-	1,500.00
Office Machines	-	-		-	-	-
Copy Machine	-	-	4,500.00	4,500.00	3,587.51	912.49
Field Equipment	-	-	-	-	-	-
Weed Sprayer Trailer	-	553.57	1,500.00	946.43	-	946.43
Appropriations for Contingencies	24,616.55	49,710.01	100,000.00	50,289.99	-	50,289.99
Total Assets	**34,008.84**	**152,554.02**	**586,400.00**	**433,845.98**	**4,490.51**	**429,355.47**
GRAND TOTAL	**110,215.77**	**681,006.15**	**1,721,200.00**	**1,040,193.85**	**8,609.79**	**1,031,584.06**

Meiner's Oaks County Water District, CA

Check Report

By Vendor Name

Date Range: 01/16/2018 - 02/15/2018

Vendor Number / Payable #	Vendor Name / Payable Type	Post Date	Payment Date / Payable Description	Payment Type	Discount Amount / Discount Amount	Payment Amount / Payable Amount	Number
Bank Code: AP Bank-AP Bank							
AQUA-F	Aqua-Flo Supply		02/13/2018	Regular	0.00	224.99	7961
SI1148600	Invoice	01/11/2018	FIRE - 6" PVC Pipe,Cement,Primer,etc.		0.00	148.23	
SI1149738	Invoice	01/15/2018	FIRE - Couplings		0.00	76.76	
AWAVC	Association of Water Agencies		01/29/2018	Regular	0.00	50.00	7933
06-10529	Invoice	01/18/2018	Water Wise Breakfast Meeting		0.00	50.00	
AWAVC	Association of Water Agencies		02/13/2018	Regular	0.00	855.00	7962
06-10548	Invoice	01/24/2018	CCWUC Luncheon		0.00	105.00	
06-10561	Invoice	02/01/2018	2018 Membership Fees		0.00	750.00	
U-VERSE	AT&T U-verse		01/29/2018	Regular	0.00	70.00	7935
294600118	Invoice	01/04/2018	Internet		0.00	70.00	
U-VERSE	AT&T U-verse		02/13/2018	Regular	0.00	70.00	7963
294600218	Invoice	02/13/2018	Internet		0.00	70.00	
AT&T	AT&T		01/29/2018	Regular	0.00	395.12	7934
01840118	Invoice	01/13/2018	Office Phones		0.00	108.58	
21140118	Invoice	01/05/2018	Office Phones		0.00	286.54	
BOB'S	Bob's Fence		01/29/2018	Regular	0.00	8,530.00	7936
12618	Invoice	01/23/2018	New Fencing		0.00	8,530.00	
CALPERS	California Public Employees' Retirement		01/26/2018	Bank Draft	0.00	353.14	DFT0000358
12618	Invoice	01/16/2018	Retired Premium		0.00	353.14	
CALPERS	California Public Employees' Retirement		01/29/2018	Bank Draft	0.00	2,207.86	DFT0000366
INV0000843	Invoice	01/31/2018	Health		0.00	2,207.86	
CALPERS	California Public Employees' Retirement		02/13/2018	Bank Draft	0.00	2,207.86	DFT0000376
INV0000853	Invoice	02/15/2018	Health		0.00	2,207.86	
CAL-STATE	Cal-State		02/13/2018	Regular	0.00	101.36	7964
97482	Invoice	02/03/2018	Portable Toilet		0.00	101.36	
CANON	Canon Financial Services, Inc.		01/29/2018	Regular	0.00	96.53	7937
18180273	Invoice	01/13/2018	Copier Contract		0.00	96.53	
CMWD	Casitas Municipal Water District		02/13/2018	Regular	0.00	1,034.40	7965
261150218	Invoice	01/31/2018	Fairview Standby		0.00	530.70	
262000218	Invoice	01/31/2018	Hartmann Allocation		0.00	134.78	
911320218	Invoice	01/31/2018	Tico/La Luna Standby		0.00	368.92	
CLEANCO	Cleanco Services		01/29/2018	Regular	0.00	240.00	7938
3150	Invoice	01/26/2018	January 2018 Janitorial		0.00	240.00	
COASTGRADING	Coast Grading Company		01/29/2018	Regular	0.00	350.00	7939
MOW17-1	Invoice	01/23/2018	Heavy Wall 6 Inch Pipe		0.00	350.00	
CVTDEP	County of Ventura Transport. Dept.		02/13/2018	Regular	0.00	2,880.00	7966
253844	Invoice	01/05/2018	114 & 388 S Pueblo		0.00	645.00	
254062	Invoice	01/10/2018	Annual Excavation Permit		0.00	1,335.00	
254069	Invoice	01/10/2018	525 N Arnaz		0.00	300.00	
254929	Invoice	01/31/2018	313 S Padre Juan		0.00	600.00	

Vendor Number / Payable #	Vendor Name / Payable Type	Post Date	Payment Date / Payable Description	Payment Type	Discount Amount / Discount Amount	Payment Amount / Payable Amount	Number
VCRMA	County of Ventura, RMA		01/29/2018	Regular	0.00	3,975.49	7940
039476	Invoice	01/22/2018	CUP for Public Utility Service Yard		0.00	3,975.49	
VCRMA	County of Ventura, RMA		02/13/2018	Regular	0.00	263.44	7967
IN0172174	Invoice	01/26/2018	Cross Connection Contract		0.00	263.44	
DATAP	Dataprose LLC		02/13/2018	Regular	0.00	775.40	7968
DP1800291	Invoice	01/31/2018	Postage/Billing		0.00	775.40	
DOCUPRO	DocuProducts Corporation		02/13/2018	Regular	0.00	3,961.55	7969
154739	Invoice	02/02/2018	Copier Maintenance		0.00	374.04	
155090	Invoice	02/08/2018	New Copier		0.00	3,587.51	
DRAGANCHUK	Draganchuk		02/13/2018	Regular	0.00	89.85	7970
148575	Invoice	02/01/2018	Alarm System		0.00	89.85	
EJHAR	E. J. Harrison Rolloffs, Inc.		01/29/2018	Regular	0.00	170.02	7941
281300118	Invoice	01/14/2018	Office Trash		0.00	42.24	
994260118	Invoice	01/14/2018	3 Yard Dumpster		0.00	127.78	
EJHAR	E. J. Harrison Rolloffs, Inc.		02/13/2018	Regular	0.00	61.16	7971
2283140218	Invoice	01/11/2018	40 Yard Dumpster		0.00	61.16	
FAMCON	Famcon Pipe and Supply, Inc		02/13/2018	Regular	0.00	3,943.26	7972
201030	Invoice	01/02/2018	Valves,Tee Flanges,Bends,etc.		0.00	862.29	
201050	Invoice	01/02/2018	Repair Clamps		0.00	504.08	
201051	Invoice	01/02/2018	Saddle,Ball Corps.,Pipes,etc.		0.00	386.10	
201052	Invoice	01/02/2018	3/4" Female Threads, 1" Female Threads		0.00	514.80	
201053	Invoice	01/02/2018	1" Ford,Pipes,Rings, etc.		0.00	235.95	
201363	Invoice	01/10/2018	FIRE - Conduit,Glue,Extension,etc.		0.00	1,140.71	
201918	Invoice	01/25/2018	Pipes,Slips,Couplings,etc.		0.00	299.33	
FGLENV	FGL Environmental		01/29/2018	Regular	0.00	449.00	7942
800025A	Invoice	01/11/2018	Samples		0.00	85.00	
800026A	Invoice	01/11/2018	Samples		0.00	62.00	
800027A	Invoice	01/11/2018	Samples		0.00	99.00	
800286A	Invoice	01/22/2018	Samples		0.00	85.00	
800616A	Invoice	01/22/2018	Samples		0.00	62.00	
800617A	Invoice	01/22/2018	Samples		0.00	56.00	
FRED'S	Fred's Tire Man		02/13/2018	Regular	0.00	20.00	7973
106084	Invoice	02/05/2018	Flat Repair		0.00	20.00	
GRAINGER	Grainger		02/13/2018	Regular	0.00	519.93	7974
9677372774	Invoice	01/23/2018	Solenoid,Brass,Air,etc.		0.00	519.93	
GUARDIAN	Guardian		01/29/2018	Regular	0.00	408.34	7932
INV0000834	Invoice	01/15/2018	Dental		0.00	204.17	
INV0000844	Invoice	01/31/2018	Dental		0.00	204.17	
GUARDIAN	Guardian		01/29/2018	Regular	0.00	10.00	7943
7690460118	Invoice	01/16/2018	Administration Fee		0.00	10.00	
HACHCO	Hach Company		01/29/2018	Regular	0.00	129.73	7944
10783340	Invoice	01/08/2018	Chlorine Reagent		0.00	129.73	
HLTHNE	Health Net Life Insurance Company		01/29/2018	Regular	0.00	25.80	7945
61790118	Invoice	01/05/2018	Life Insurance		0.00	25.80	
HSBS	HealthSmart Benefit Solutions, Inc.		02/01/2018	Regular	0.00	99.06	7960
INV0000836	Invoice	01/15/2018	HSBS		0.00	49.54	
INV0000846	Invoice	01/31/2018	HSBS		0.00	49.52	

Vendor Number / Payable #	Vendor Name / Payable Type	Post Date	Payment Date / Payable Description	Payment Type	Discount Amount / Discount Amount	Payment Amount / Payable Amount	Number
INTERSTATE	Interstate Batteries		01/29/2018	Regular	0.00	53.52	7946
55541242	Invoice	01/19/2018	Battery		0.00	53.52	
INTERSTATE	Interstate Batteries		02/13/2018	Regular	0.00	102.83	7975
55638570	Invoice	01/12/2018	Battery		0.00	102.83	
JUSTIN	Justin Martinez		02/13/2018	Regular	0.00	200.00	7976
41	Invoice	02/09/2018	Work Clothes Reimbursement		0.00	200.00	
KG	Kear Groundwater		01/29/2018	Regular	0.00	1,100.00	7947
1784	Invoice	01/17/2018	Well 4 Bids		0.00	1,100.00	
KEATING	Keating Communications		01/29/2018	Regular	0.00	272.50	7948
16576	Invoice	01/11/2018	AT&T/running cable and testing internet		0.00	272.50	
NEILSON	Law Offices of Lindsay F. Nielson		01/29/2018	Regular	0.00	1,580.00	7949
34880118	Invoice	01/08/2018	Attorney Fees		0.00	1,580.00	
LIGHTNING	Lightning Ridge Screen Printing, Inc.		02/13/2018	Regular	0.00	219.13	7977
01171807K	Invoice	01/17/2018	Hoodies		0.00	219.13	
MATT-CHLOR	Matt-Chlor. Inc.		02/13/2018	Regular	0.00	2,188.55	7978
19744	Invoice	01/29/2018	Vacuum Regulator,Tubing, Bug Screen,etc.		0.00	2,188.55	
MOHARD	Meiners Oaks Hardware		02/13/2018	Regular	0.00	1,006.73	7979
807549	Invoice	01/04/2018	Battery		0.00	3.31	
807571	Invoice	01/04/2018	Foam Roller, Bolts, Shackles, etc.		0.00	75.16	
807717	Invoice	01/05/2018	Acetone, Wheel Grind, Concrete Mix, etc.		0.00	135.29	
807852	Invoice	01/06/2018	Ear Plug, Primer Spray, etc.		0.00	36.72	
808172	Invoice	01/08/2018	FIRE - Plywood, Power Bit, etc.		0.00	240.25	
808608	Invoice	01/11/2018	Shovel, Tape Rule		0.00	24.38	
808737	Invoice	01/11/2018	Union, Couplings, Adapters, etc.		0.00	169.89	
808745	Invoice	01/11/2018	Cement, Coupling, Primer		0.00	11.97	
809752	Invoice	01/18/2018	Wire for Gate		0.00	135.14	
810383	Invoice	01/23/2018	FIRE - Couplings, Elbow		0.00	6.11	
810499	Invoice	01/24/2018	Nipples, Locks		0.00	155.38	
810620	Invoice	01/24/2018	FIRE - Elbow 1"		0.00	2.04	
810780	Invoice	01/25/2018	FIRE - Couplings,Bushings,Nipples,etc.		0.00	11.09	
MITEC	MiTec Solutions LLC		01/29/2018	Regular	0.00	1,545.49	7950
1047006	Invoice	01/23/2018	New Work Station		0.00	1,355.49	
1047027	Invoice	01/24/2018	Monthly Maintenance		0.00	180.00	
47488	Invoice	01/15/2018	Splashtop User		0.00	10.00	
MITEC	MiTec Solutions LLC		02/13/2018	Regular	0.00	230.71	7981
1047075	Invoice	01/29/2018	Labor Remote Repair		0.00	93.75	
47651	Invoice	02/01/2018	Monthly Web Hosting/Exchange		0.00	87.96	
47674	Invoice	02/01/2018	Monthly Business Subscription		0.00	49.00	
OFFDEP	Office Depot		01/29/2018	Regular	0.00	163.69	7951
993716180001	Invoice	01/03/2018	Calendar,Binders,Sheet Protectors,etc.		0.00	82.33	
998005070001	Invoice	01/16/2018	Dividers,Binders,Paper Clips,etc.		0.00	81.36	
OILELE	Oilfield Electric Company, Inc.		01/29/2018	Regular	0.00	7,562.23	7952
2024657	Invoice	01/16/2018	FIRE - Installing New Starters		0.00	7,562.23	
OVO	Ojai Valley Organics		01/29/2018	Regular	0.00	46.00	7953
32489	Invoice	01/01/2018	Green Waste		0.00	46.00	
PERS	Public Employees' Retirement System		01/31/2018	Bank Draft	0.00	2,049.84	DFT0000350
INV0000835	Invoice	01/15/2018	PERS		0.00	2,049.84	
PERS	Public Employees' Retirement System		01/31/2018	Bank Draft	0.00	2,175.88	DFT0000359
INV0000845	Invoice	01/31/2018	PERS		0.00	2,175.88	

Vendor Number / Payable #	Vendor Name / Payable Type	Post Date	Payment Date / Payable Description	Payment Type	Discount Amount / Discount Amount	Payment Amount / Payable Amount	Number
PERS	Public Employees' Retirement System		02/13/2018	Bank Draft	0.00	20.90	DFT0000367
10000001518508	Invoice	02/01/2018	Unfunded Accrued Liability		0.00	20.90	
PERS	Public Employees' Retirement System		02/13/2018	Bank Draft	0.00	922.01	DFT0000368
10000001518507	Invoice	02/01/2018	Unfunded Accrued Liability		0.00	922.01	
QUINNRNTL	Quinn Rental Services		01/29/2018	Regular	0.00	7,874.57	7954
04066402	Invoice	01/22/2018	FIRE - Backhoe		0.00	3,022.47	
04484401	Invoice	01/22/2018	FIRE - Excavator		0.00	4,852.10	
REBAR	Rebar Supply, Inc.		01/29/2018	Regular	0.00	288.00	7955
8081	Invoice	01/05/2018	3 Cages		0.00	288.00	
SSB&P	Soares,Sandall,Bernacchi & Petrovich,LLP		01/29/2018	Regular	0.00	3,250.00	7956
46844	Invoice	01/01/2018	Audit		0.00	3,250.00	
SCE	Southern California Edison Co.		02/13/2018	Regular	0.00	2,074.77	7982
OFFELE0218	Invoice	02/12/2018	Office Electricity		0.00	102.30	
PMP4&70218	Invoice	02/12/2018	Pumps 4&7		0.00	1,373.25	
TNKFRM0218	Invoice	02/12/2018	Tank Farm		0.00	28.56	
WELL80218	Invoice	02/12/2018	Well 8		0.00	136.10	
Z-20218	Invoice	02/12/2018	Zone 2		0.00	58.94	
Z-2FIR0218	Invoice	02/12/2018	Zone 2 Fire		0.00	81.31	
Z-2PWR0218	Invoice	02/12/2018	Zone 2 Power		0.00	268.49	
Z-3FIR0218	Invoice	02/12/2018	Zone 3 Fire		0.00	25.82	
SCGAS	Southern California Gas Co.		02/13/2018	Regular	0.00	63.67	7983
6602	Invoice	01/29/2018	Office Heat		0.00	63.67	
TALLEY	TALLEY		02/13/2018	Regular	0.00	1,834.47	7984
10295392	Invoice	01/31/2018	FIRE - Towers,Joint Bolts,Base Plates		0.00	1,107.64	
10295393	Invoice	01/31/2018	FIRE - Tower Base,Joint Bolt Kit,Base Plate		0.00	726.83	
UAOFSC	Underground Service Alert of So.Ca.		02/13/2018	Regular	0.00	19.90	7985
120180438	Invoice	02/01/2018	Digalert		0.00	19.90	
USBANK	US Bank Corporate Pmt. System		02/13/2018	Regular	0.00	1,541.62	7986
AMAZON0122	Invoice	01/22/2018	Prime Membership		0.00	11.79	
OBC0101	Invoice	01/01/2018	Copies of Maricopa Job		0.00	19.31	
RITEAID0122	Invoice	01/22/2018	SD Card		0.00	23.58	
USPS0109	Invoice	01/09/2018	Pre-Stamped Envelopes		0.00	1,397.50	
USPS1228	Invoice	01/01/2018	Stamps		0.00	49.00	
VONS0110	Invoice	01/10/2018	Water,Toilet Paper		0.00	40.44	
VTASTEEL	Ventura Steel		01/29/2018	Regular	0.00	610.20	7957
203888	Invoice	01/08/2018	Plates,Pipes,Angles		0.00	610.20	
VERIZON	Verizon Wireless		02/13/2018	Regular	0.00	388.16	7987
9800665614	Invoice	01/26/2018	Cell Phones		0.00	388.16	
WREA	Water Resource Engineering Associates		02/13/2018	Regular	0.00	1,185.40	7988
3131-5	Invoice	02/01/2018	WDR for Well Drilling		0.00	282.40	
3144-3	Invoice	02/01/2018	Well Site Electrical/Plumbing		0.00	903.00	

Vendor Number	Vendor Name		Payment Date	Payment Type	Discount Amount	Payment Amount	Number
Payable #	Payable Type	Post Date	Payable Description		Discount Amount	Payable Amount	
WRIGHT EXP	WEX Bank		01/29/2018	Regular	0.00	696.27	7958
52829407	Invoice	01/15/2018	Fuel		0.00	696.27	

Bank Code AP Bank Summary

Payment Type	Payable Count	Payment Count	Discount	Payment
Regular Checks	110	55	0.00	65,897.84
Manual Checks	0	0	0.00	0.00
Voided Checks	0	0	0.00	0.00
Bank Drafts	7	7	0.00	9,937.49
EFT's	0	0	0.00	0.00
	117	**62**	**0.00**	**75,835.33**

PR $35,807.99

February 14, 2018

Mr. Mike Hollebrands
General Manager
Meiners Oaks Water District
202 W. El Roblar
Meiners Oaks, California 93023

Re: Professional Hydrogeologic Scope for construction supervision and reporting, MOWD Well No. 4 Replacement

Greetings Mr. Hollebrands:

Per our discussions, Kear Groundwater (KG) is pleased to present this proposal for the construction supervision and reporting for Meiners Oaks Water District (MOWD) Well No. 4, Replacement. We understand that the new Well No. 4 is intended to replace an older Well No. 4 that had reached the end of its life expectancy.

Our efforts in the design and construction support efforts are outlined below and presented in detail in the underlying sections:

- Task A: Drilling operations and well construction, development and testing oversight
- Task B: Summary of operations reporting

As we discussed, KG would work as a consultant to MOWD on this project and share communication with others as directed. Our work would be independent and serve as professional service to MOWD.

KG truly appreciates the opportunity to continue to work with you. Our goals include provision of valued services to help clients make well-informed decisions with respect to the stewardship of groundwater resources.

PROJECT BACKGROUND AND SCOPE

We understand that MOWD is planning to replace Well No. 4 with a new well of the same nomenclature, targeting to produce over on the order of 1000 gpm. Recent efforts to determine the optimal location and collect information that will be used in the design of the well were collected in 2017 and included a provision of KG's well construction guidelines and a bidding process for which Layne Christensen was the successful bidder. The new MOWD Well No. 4 is anticipated to be drilled to target the full thickness of alluvial aquifer material and located north of the well to be replaced.

Task A – Drilling Operations Oversight

KG proposes to support MOWD with respect to professional hydrogeologic supervision during all aspects of well drilling, construction, development, testing, and evaluation. KG will support MOWD during implementation of construction guided by the set of specifications and ensuing contract between

MOWD and Layne Christensen. A summary of efforts under this task is listed with additional details described below.

- Cost estimate revisions
- Construction inspection/management
- Geologic logging
- Field memoranda
- Final design memoranda
- Schedules
- Progress reports
- Change order oversight
- Post-construction meeting coordination.

KG will work closely with MOWD's general manager in making various field and administrative decisions, and understands that MOWD will be the final authority in these matters.

KG proposes to assist MOWD in a complete hydrogeologic field service capacity. During field construction monitoring, our field geologists will be reviewing the plans and technical specifications for contractor compliance. Moreover, our trained field personnel will be available for communication at all times while in the field with both MOWD and other KG personnel.

Pre-construction meeting

KG will attend the pre-construction meeting for the proposed well site and review information provided by the drilling contractor who is awarded the construction contract. KG will discuss key issues in the technical specifications, and help arrange for mobilization and scheduling of personnel and equipment.

The pre-construction meeting will acquaint KG field personnel and MOWD with the Layne personnel chosen for the project. In addition, this meeting will better acquaint Layne with the well construction site and help the contractor evaluate logistical considerations, such as nearest available water and electrical supply, placement of equipment with respect to buried utilities, and disposal of drilling fluids. The most important function of this meeting is the driller's responsibility to inform MOWD and KG what they will need to prepare the site for the required work, when work will actually commence, and the detailed schedule for completing the work at the site.

Contractor Mobilization Activities

KG will provide initial field coordination during mobilization of the drilling contractor and perform periodic site checks during mobilization at the well site. With this effort, we will be able to apprise MOWD on the progress of drilling contractor activities during initial mobilization and provide the necessary logistical support to assist the driller complete mobilization.

Pilot Hole Logging

KG will provide experienced geologic logging personnel to log drill cuttings from the pilot hole at the well site. It is assumed that drilling will be performed to an estimated depth of 260 feet. We will implement detailed geologic logging on a part-time basis, spending an average of approximately six to eight hours per day on site during pilot borehole drilling, which is anticipated to require two days. Should additional time be needed, KG staff is capable of round-the-clock (24-hour) oversight during critical portions of the project.

During pilot hole drilling, KG will check contractor conformance with the specifications. In addition to geologic logging, drilling penetration rates will be measured and plotted on the geologic log, providing additional aquifer information for hydrogeologic interpretation. Samples of key formation materials will be obtained during drilling to provide grain-size distribution curves of these materials for selecting the final screen slot size and gravel pack gradation. Grain-size analyses will be performed on representative cuttings, likely by the contractor or casing manufacturer, to confirm the correlation with the results of KG's work on the pilot hole and monitoring well.

Well Completion Recommendations

Based on our hydrogeologic analysis of water quality, geologic, and geophysical data, KG will prepare the final well construction design for the new well. KG proposes to present the final recommendations for casing lengths and diameters, well screen placement, perforation sizes (slot sizes), gravel pack type and gradation, and depth of cement around the blank casing to both MOWD and the driller.

Monitoring of Borehole Ream

KG will provide limited part-time monitoring of contractor operations during the pilot hole ream. If the budget allows, a KG geologist will witness and review the downhole caliper survey.

Casing, Gravel Pack, and Cement Seal Installation

Experienced KG geologists will be present to monitor the installation of the recommended well screen, blank casing, gravel pack, and cement seal for the new well. Monitoring will be conducted to ensure conformance with the appropriate methods and materials in the specifications and/or recommendations based on accurately defined downhole conditions. Volumes of gravel pack and cement emplaced will be monitored and compared with the required volumes calculated from caliper log and casing data in order to assess a properly filled annulus in the well.

This subtask may be the most critical to ensure that the constructed well provides MOWD with groundwater produced from intended zones.

Well Development and Testing

KG will provide a qualified geologist at appropriate times to monitor well development by both mechanical and pumping methods. Monitoring contractor development, operations, and checking for conformance with construction specifications is included in this subtask. This oversight is vital because

proper mechanical development of the new well is one of the most crucial activities during well construction.

During all phases of extraction of groundwater from the well, KG proposes to install a network of automatic water level loggers in Well No. 7 and other nearby production wells as feasible. Influence of pumping on the aquifers and other nearby wells will be observed and data used to evaluate long-term operations.

Step Drawdown Testing

KG will provide a geologist to monitor step drawdown testing of the completed well at the site. Three pumping rates are likely to be tested, and pumping rates and pumping levels will be monitored on a part-time basis. A field memorandum will be issued to document results of the step drawdown test.

Final Aquifer Test (Pumping Test)

KG will provide a geologist, on a part-time basis, to monitor water level drawdown and recovery after the final constant-rate pumping test of the completed well. Water levels in any available observation wells will also be monitored. Critical times will be during the first few hours of drawdown and recovery measurements. In addition, we will use our automatic data logging and pressure transducer equipment to monitor water levels during our absence. The contractor's pump crew will also be used to conduct manual water level measurements to maintain the monitoring schedule recommended by our office.

Field values of temperature, and electrical conductivity of the well discharge will be obtained by the geologist during the test. We understand that MOWD will collect and analyze water samples of the final well blend from the new well for quality testing to comply with any NPDES requirements and drinking water quality parameters. Field memoranda will be issued to document well development and testing operations for the new wells.

Task B - Summary Report of Well Construction Operations

For many of our clients, a report summarizing operations and as-built conditions, original capacity, and testing data are invaluable. Although not specifically requested, KG provides an optional task of preparing a summary report. The Summary of Operations reports will document the existing geologic conditions at the well site such as the subsurface lithology, aquifer zones where well perforations have been set, and inter-well correlation of aquifers based on geophysical logs and testing. In addition, water level drawdown data collected during aquifer testing will be used to determine aquifer transmissivity at the well site, comparing the data to other previous aquifer testing in the area.

KG will provide MOWD with requested numbers of hard copies (plus digital copies) of the reports to summarize and document well construction activities and to provide an "as-built" of the completed well, along with a lithologic log, geophysical logs, water quality laboratory test data, and aquifer test data. Data acquired during the logging and testing of the new well will be included in the report.

Recommendations for operational yield and final pump placement for each new well will also be provided.

The summary of operations report will serve to document the drilling, construction, testing and equipping activities of the new well. The report will include the recommendations for production well features, including drilling depths, anticipated production rates, anticipated water quality, casing and gravel pack/seal details, pump depth setting, and possible water treatment for the new well. All technical information, including operations manuals and settings of permanent infrastructure, will be provided to MOWD via the Summary of Operations Report.

COST OF SERVICES

KG proposes to conduct the scope of work at the cost summary presented below.

Task A – Drilling operations oversight $6,840

Task B – Summary of operations report $3,900

Hence, for the anticipated scope of work, Tasks A and B, KG estimates that the project costs will total $10,740. Any subsequent efforts such as additional testing or any contracted services such as laboratory analysis would be conducted under separate authorization. Actual costs will be charged to the client and invoiced monthly.

KEY ASSUMPTIONS AND LIMITATIONS

Permitting, intrusive investigation, soil or water testing, well construction, development and testing are to be conducted by the client and/or their chosen contractor(s), whose costs client or owner will pay directly. If directed by the client, Kear Groundwater can provide such subcontracted outside services at cost plus 15 percent.

The services proposed herein will be performed in a manner consistent with our agreement with the client and in accordance with generally accepted professional consulting principles and practices. Opinions and recommendations contained in proposed reporting apply to conditions existing at certain locations when services were performed and are intended only for the specific purposes, locations, time frames, and project parameters indicated. We cannot be responsible for the impact of any changes in standards, practices, or regulations after performance of services.

Hydrogeologic analyses for the proposed preliminary design work will rely solely on available background data obtained from the MOWD, Ventura County, the State of California, and published geologic reports, our in-house files, etc. No independent subsurface exploration, laboratory testing, geophysical surveying or well testing will be conducted by our firm for the study unless expressly contracted to do so. No guarantee of water quantity or quality from any well can be offered. Because the efforts to implement recommendations contained in the proposed reporting rely on the skill of outside contractors, our liability is limited to the dollar value of our professional efforts. Outside

contractors engaged separately by MOWD shall be liable for any and all issues associated with their work as it may affect private property in the vicinity of the project site.

Any use of proposed reports by a third party is expressly prohibited without a written, specific authorization from the client. Such authorization will require a signed waiver and release agreement.

We look forward to receiving authorization to proceed and assisting in implementation of the project.

Sincerely,

Jordan L. Kear, PG, CHG
Principal Hydrogeologist

MEINERS OAKS WATER DISTRICT
VENTURA COUNTY SINCE 1948
(805) 646-2114
202 WEST EL ROBLAR DRIVE

MEINERS OAKS WATER DISTRICT

Allocation and Rate Program (ARP)

BOARD REVIEW DRAFT

February 20, 2018

Adopted by the MOWD Board on _____

Background and Introduction

In 2016, MOWD implemented an allocation/rate program based partly on historical water use. Historical water use for customers was based on their average water use during the pre-drought period of 2010-2012. Based on that historical use, each customer was assigned a reduced monthly allocation depending on the stage of drought – for example, a 30% reduction in Stage 3. Those who exceed their allocation each month are charged a $1/unit over-allocation charge for the amount of water used exceeding their allocations. No seasonal variation in water allocation was incorporated into the program.

Since implementing the 2016 MOWD allocation/rate program, we have determined that the program should be modified to better achieve our water conservation goals and to become more consistent with measures implemented by other local agencies. Several reasons for modifying our allocation/rate program are briefly summarized below:

1) Our reliance on historical water use "grandfathered" in some customers who were using much
more water than necessary. Those who used too much water from 2010-2012 should not be rewarded with higher allocations than they actually need.

2) Some people who have been conserving water conscientiously have been paying over-allocation charges in one or two summer months. Applying more water to plants in the hot summer months does not constitute "waste." We would rather encourage water misers than penalize them.

3) Casitas MWD has increased its conservation penalty (over-allocation charge) from $1 to $5 per unit, and it may go higher in future stages of drought. We must pass this on to our customers when necessary. However, when it was only $1, we considered it to be an "incentive," whereas at $5 it is truly a "penalty." As a penalty, we must be certain that everyone who pays it is really using too much water.

4) We are negotiating a Memorandum of Understanding with Casitas MWD for purchasing water from them. The current draft MOU requires us to adopt measures equivalent to the Casitas MWD WEAP (discussed below). Such measures have been incorporated into this revised allocation/rate program.

5) When we developed our historical approach, Lake Casitas was over 50% of capacity and Casitas MWD was in Stage 1. Now that we are in Stage 3, we need a program that will be more effective if the drought worsens, and as we approach Stage 5.

6) As irrigation practices change and properties change ownership, the 2010-2012 historical water-use averages become less significant. It is preferable to develop a program that will remain valid for many years, during both dry and wet periods.

Casitas MWD's Water Efficiency and Allocation Program (WEAP)
In June of 2015, Casitas MWD adopted its WEAP, which is posted on their website. Many of those measures have been incorporated into the Allocation and Rate Program (ARP) presented herein.

It is not MOWD's intention to adopt Casitas MWD's WEAP verbatim. Instead, we will adopt those measures that are applicable to and appropriate for our customers. For example, Casitas MWD has individual agreements with their agricultural customers, which specify annual allocations. MOWD has no such agreements. Thus we must depart from the WEAP for agricultural allocations.

As State regulations change and as Casitas MWD modifies its WEAP in the future, MOWD will decide on a case-by-case basis which of those new regulations and modifications to adopt into its ARP.

The Casitas WEAP relies on definitions of "essential" and "non-essential" water uses. Because the definition of essential water use is somewhat arbitrary and subject to regulation, we have substituted the terms "indoor" water use and "outdoor" water use.

Comparing WEAP and Historical Allocations

Before developing this ARP, we did a comparison of historically-based allocations and the Casitas WEAP allocations for a random sampling of customers. The results of our comparison are briefly summarized below:

1) Those who are conserving the most water within MOWD would receive a higher allocation from the WEAP than from MOWD's 2016 allocations. Would the WEAP encourage them to waste water? Probably not, since both the historical and WEAP allocations exceed the amount of water they are actually using.

2) Most of those customers who are using large amounts of water would receive less allocation from the WEAP. This result was a big surprise. We expected that most of the higher water users have large lots, orchards, and intense landscaping. Instead, we found that most of the higher water users lack justification for the water they were using. Some people with 1/5 acre lots were using 30 units per month, pre-drought. Those are the customers we want our ARP to focus on: those who are using more water than they need; and that is where the WEAP allocations work best.

We studied the water conservation achieved in 2016 by the customers in our random sample. Again, we found some unexpected results:

1) The lowest 1/3 of our residential customers with a ¾" meter averaged 81 units per year before the drought. We did not expect much conservation from people who were using such low amounts of water. Yet a high fraction of them reduced their annual demand to 35 units. This shows the amounts of conservation that is achievable, and will give us hope if the drought worsens.

2) In every category of water use, most people have conserved water, but those reductions were offset by a few customers who used even more water than before the drought. In fact, a few higher water users significantly negated the efforts of the vast majority who are conserving. Those higher water users are the ones targeted in this ARP.

Summary of Potential MOWD Allocation/Rate Program

MOWD will not adopt Casitas MWD's WEAP per se; instead we are adopting our own Allocation/Rate Program based partly on the WEAP, as follows:

1) Assign new customer "baseline allocations" using features of the Casitas WEAP:
   An "indoor portion" of 10 units/mo per residence (7 units/mo for 2nd homes etc.)
   An "outdoor portion" based on irrigable area of the property.
      There is a 2 acre limit on irrigation allocation for residences.
   Most commercial and agricultural baseline allocations would not change.
      Allocations would be based on historical use during 2010-2012.
      Some Ag allocations would be reduced if they used more than 2.5 AF/acre/yr.
      Ag use would be considered to be "outdoor use."
      Commercial meters would be assigned 10 units/month as their "indoor portion."

2) Reduced allocations during drought stages:
   The indoor portion of the baseline allocation (10 units/month) would not be reduced.
   The outdoor portion would be reduced 30% in Stage 3, 40% in Stage 4, etc.
   We will follow Casitas MWD's lead on drought measures, as applicable.

3) Seasonal variations of water use would be allowed:
   Residences would be allowed higher water use in the summer using a given formula.
   Commercial/agriculture would manage their own seasonal use.
   Water use exceeding monthly or annual limits would be subject to a Conservation Penalty.

4) New rate classes: (Examples only – actual rates will depend on the adopted budget)

Indoor water use	$2.00/unit	
Outdoor water use	$3.00/unit	
Conservation penalty		
When MOWD wells operational	$2.50/unit	(additional charge)
When taking Casitas water	$5.00/unit	(additional charge)
Meters with annual allocations	pro-rata	(additional charge)

   These rate classes are based on the cost of delivering water – see a later page.

5) We will continue our waiver program – see a later page.
   Few, if any, changes would be needed to the waivers we've already heard.

MOWD reserves the right to assign baseline allocations to individual customers based on actual audits of their water needs, on a case by case basis.

MOWD Annual Baseline Allocations

MOWD's Baseline Allocations represent a reasonable amount of water use in the absence of drought conditions. Baseline Allocations are derived from elements of Casitas MWD's WEAP.

Residential meters:
Each meter will be assigned a baseline allocation that includes an "indoor portion" and an "outdoor portion."
Indoor portion: Each customer will receive a monthly allocation for indoor water use:

Single family homes	10 units/month
Multiple-family dwelling units	7 units/month per dwelling unit
Mobile home parks	7 units/month per mobile home
Granny flats and second homes under 2,000 SF	7 units/month
Second/additional homes over 2,000 SF	10 units/month

Outdoor portion: Each customer will receive an annual baseline allocation based on square footage (SF) of irrigable area up to 2 acres, calculated as follows:

First 5,000 SF	15 gallons per SF
Next 10,000 SF	10 gallons per SF
Next 71,684 SF	3 gallons per SF
Over 86,684 SF total	No additional allocation

Irrigable Area: Each residential customer's annual irrigation water allocation shall be based on an irrigable area calculated as follows: From the total area of the customer's parcel(s) served by a meter, subtract out the areas of permanent facilities such as houses, garages, carports, patios, brickwork, sheds, driveways, sidewalks, horse corrals, pools, fountains, gravel parking areas, etc.

Irrigable area shall be limited to the contiguous lots of a single owner.

Commercial and Agricultural Meters:
Annual baseline allocations for these meters shall be based on the average annual historical demand from 2010 through 2012. Agricultural meters will not be assigned an indoor portion. Commercial meters will be assigned an indoor portion of 10 units/month. Their annual outdoor baseline allocation will be their historical usage less 120 units/yr.

Regardless of historical use, agricultural baseline allocations shall not exceed 2.5 AF per acre of arable land per year (not including roads, structures, parking areas, etc.)

Future second dwellings: An additional allocation of 7 or 10 units/month would be offset by reducing the irrigable area, taken from the first 5,000 SF of irrigated area. No additional allocation will be provided for outdoor use for future second dwellings.

Reduced Allocations During Droughts

During declared droughts, each customer will be assigned a reduced allocation based on his/her baseline allocation, as follows:

Reductions During Drought Stages

Stage	1	2	3	4	5
Reduction	None*	20%	30%	40%	50%

* Voluntary 20% reductions in effect.

These reductions are subject to any drought-related adjustments made by Casitas MWD.

Residential
The indoor portion of baseline allocations will normally not be reduced during a drought. The outdoor portion will be reduced during various drought stages as provided in the table.

Commercial Customers
The indoor portion of their baseline allocations (10 units/month) will normally not be reduced during a drought. The remainder of their allocation – based on historical use – is considered to be outdoor use and will be reduced during various drought stages as provided in the table.

Agricultural Customers
All agricultural water use is considered to be outdoor use for the purpose of this allocation/rate program. To calculate reduced allocations during drought stages, total baseline allocations will be reduced in accordance with the table.

Allowance for Seasonal Variations in Customers' Demands

Residential Water Use

The indoor portion of residential allocations shall be taken at a uniform rate each month, as assigned. Since this water is intended to be used inside the home, no increased use in the summertime is necessary. No carryover amount will be allowed from month to month.

The outdoor portion of residential reduced allocations will be distributed among months to allow varying seasonal water use, as follows:

Monthly Irrigation Allowance – Percentage of Irrigation Portion of Reduced Allocation

Month	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
% of Annual Irrigation Allocation*	17	17	13	5	5	5	2	2	2	10	10	12

*From the Casitas MWD WEAP. These percentages correspond fairly well with actual residential usage within MOWD.

Monthly water use exceeding the sum of the indoor portion and the seasonal monthly outdoor allowance will be subject to the conservation penalty.

Commercial and Agricultural Customers

Commercial and agricultural customers will be responsible for managing their own seasonal variations in water use, and for staying within their annual limits. They will be provided with a reduced allocation each year based on the drought stage then in effect. For this purpose a year will begin on July 1 and end on June 30 of the following year. Once a customer's cumulative usage exceeds his/her reduced allocation for that year, all subsequent water use during that year shall be subject to the Conservation Penalty. This cycle will be restarted each July 1.

Commercial and Agricultural customers will be billed for their Conservation Penalty in the July or August following the July 1 – June 30 allocation period. These customers will be advised of their cumulative usage during the year to assist them with managing their use.

Financial Justification for Higher Rates for Non-Essential Water Use

Our proposed allocation/rate structure will assign higher rates for outdoor uses of water, than for indoor uses of water. This is easy to justify for financial reasons:

Indoor uses of water primarily occur within the home or business, and include drinking, food preparation, dish washing, bathing, flushing toilets, laundry and similar activities. These water uses do not vary substantially throughout the year. It is more efficient, and less costly, for MOWD to deliver water at a constant rate throughout the year.

Irrigation, on the other hand, is the primary outdoor water use within MOWD, both for residences and agriculture. Irrigation requires more water in a few summer months than during the rest of the year. On a unit basis, it is more costly to construct and operate facilities that are used at capacity only a few months of the year.

For example, the indoor water use for the 1250 homes (10 units per month each) and 512 secondary dwellings (7 units per month each) within MOWD can be supplied by a mean flow of 275 gpm throughout the year. Supplying that same annual amount of water to agriculture or to landscaping would require a mean flow of 560 gpm during the peak month of August. More flow means more well capacity, larger pipelines, and even more daily-regulation tank storage. Overall, it is more costly to supply irrigation/agricultural water on peak than to supply indoor water uses that vary little throughout the year.

This is why are justified in charging a rate for outdoor water uses that is up to 2.04 times the rate for indoor water uses, based on the seasonal variations in demands experienced in our area.

Our historical trends show that even commercial customers have demands that vary throughout the year. Many of those customers are irrigating landscaping like residential customers.

Economic Justice Issues

A guiding principle in our *Drought Contingency Plan* is that

> "Water is a necessity of life and we should ensure that those who can most afford it do not take essential water away from those less able to afford it."

The question is, can we utilize elements of the Casitas WEAP and implement a rate structure that better satisfies this principle?

Perhaps the most important element of the WEAP is that is creates a privileged class of water use: "indoor uses". Each primary residence would receive the same 10 units of water per month for that type of use. A small house on a 1/6 acre parcel would receive the same indoor allocation as a 6,000 square-foot mansion on 5 acres.

Under our prior allocation method, small water users, whose water use is already dedicated for indoor uses, are squeezed down further in a drought – down to 7.5 units/month in Stage 5. While larger water users can reduce their irrigation to sustain indoor uses, smaller water users don't have that option. Under the WEAP, indoor uses of water are not reduced during drought stages. This provision helps everyone, but primarily the smaller customers, compared to our current method.

Unlike indoor uses of water, outdoor uses would be reduced during drought stages. Those with large lots and orchards will have their allocations reduced at a greater proportion than smaller water users. As the lake approaches empty, it may be that only indoor uses of water will be allowed. That would be a great equalizer: large homes would receive the same allocation as small homes.

Most important, implementing two classes of water (indoor and outdoor) allows us to charge rates more closely related to the cost delivering water. Smaller customers have demands that vary less during the year. In a sense, they have been subsidizing the delivery capacity required by larger customers only a few months of the year. Having two rate classes is fairer to our smaller water users.

Finally, the 2 acre limit on irrigation allocation is progressive. No single family needs more than 2 acres of irrigated landscaping during a severe drought.

Overall, our new proposed allocation/rate program appears to be better for our smaller customers. Having a more equitable allocation program also justifies more stringent penalties for those who exceed their allocations.

How We Estimated Irrigable Areas

An important part of this Allocation and Rate Program is to estimate irrigable areas for each of our customers' properties. The best way to do that would be to make a site visit to each customer's residence and measure the dimensions of houses, pools, driveways, structures, sheds, sidewalks, etc. Unfortunately we do not have enough staff to do that. Instead we hired an aerial survey company, Eagle Aerial Solutions, who used advanced aerial surveillance techniques and computer algorithms to measure and calculate the irrigable areas for all of our customers. A description of their methods is attached in the Appendix.

To check their methods, we selected a random sampling of about 40 of our customers, calculated their irrigable areas from aerial photographs, and compared those results to the automated surveillance approach. While the two approaches were fairly close for most customers, there were a few customers whose areas did not match well using the two approaches.

The basic problem is that it is difficult to estimate irrigable areas using only aerial surveys and an automated process. Nevertheless, we had to start somewhere, and that is how we assigned everyone a baseline allocation for outdoor use. In case we have missed the mark for some customers, we provide a waiver process to allow for revisions to our customers' outdoor allocations.

Waiver Program

Although MOWD has attempted to be as fair as possible in setting up its allocation program, there may be legitimate uses of water not properly accounted for. Therefore, MOWD has adopted a waiver system whereby a customer may request a higher allocation for metered service. There are three categories of waivers:

1) Adjustments to "Irrigable Areas"

If the actual irrigable area of a customer's property substantially exceeds the MOWD assigned irrigable area (by 20% or more), the customer may request an additional allocation to accommodate that adjusted irrigable area. Irrigable area is that amount of land that can reasonable be assumed to support irrigated landscaping in its present condition. An owner's properties must be served by a meter, and shall be contiguous with the property served by that meter. Any separate lot included in the calculation shall have been historically irrigated by that meter.

To request a waiver under this category, a customer should prepare a hand sketch of his property and all relevant improvements on it. He should measure the dimensions of each of those improvements and provide those on the sketch. The sketch should indicate the total square footage of the lot and how that was determined. The customer should provide a calculation of the irrigable area by

subtracting from the total lot area any impervious or non-irrigable areas, including but not limited to

Houses, garages, carports, dwellings, structures, sheds
Driveways, roads, parking areas, concrete, ashpalt, gravel
Pools, fountains, ponds

Areas should include overhanging roofs, eaves, etc. Non-irrigable areas need not be impervious to water, and shall include any rocky or graveled areas. Call us if you have any questions on what to include.

To request a waiver, the customer should submit a written letter to MOWD explaining the reason for additional allocation, along with the sketch and calculations. If the request appears to be reasonable, and is in an acceptable form, the District will arrange with the customer for a site inspection to confirm the presence and dimensions of irrigable/non-irrigable areas.

If approved, changes in baseline outdoor allocation will be calculated based on the new irrigable area and the criteria on Page 5. No changes to the applied water amounts on Page 5 for a given irrigable area will be considered by MOWD.

2) Adjustments allowed by the Casitas MWD WEAP
Adjustments to the baseline allocation may be allowed for the following:

A correction in the number of dwelling units for a multiple family dwelling or mobile home park.

An exemption granted for a licensed in-home childcare or elderly care facility.

3) Adjustments for humanitarian reasons or public benefits
Adjustments to indoor allocations may be considered for the following:

Schools
Public health facilities
A change in occupancy that results in more than 5 full-time residents
Medical needs supported by a letter from a medical provider
Water use that benefits the community as a whole

Per the Casitas MWD WEAP, additional allocations will not be allowed for the following:

Pools, ponds, spas, or hot tubs.

In-home businesses or hobbies that use an increased amount of water.

Gardens or orchards.

Homeowner association requirements for outside irrigation.

Furthermore, the following factors will be given less weight when considering a waiver:

Adverse impacts on the viability of marginally profitable or unprofitable agriculture. Such fields should be removed from use during extreme droughts.

Financial hardship for those on a fixed or limited income, on the basis that the easiest way to reduce water cost is to cut back on landscaping, gardening, etc.

Waiver Application and Approval Process

If a customer satisfies one of the appropriate criteria, he/she may request a higher allocation or other exclusion. The waiver process is as follows:

1) A customer must write a letter to MOWD describing his/her unique situation, provide detailed information, and explain why he/she feels entitled to additional allocation. The letter should be clear and thorough, and request a specific amount. As supplemental information, the customer should fill out and attach the waiver form posted on MOWD's website.

2) MOWD's general manager will review the information provided and advise the customer whether or not the letter is sufficient and complete. If the general manager thinks the request may have merit, he will submit the request to the Board at the next regularly scheduled Board meeting. If the general manager believes the written request in inadequate or without merit, he will advise the applicant to provide additional information or justification. The applicant may then provide the additional information in a new or supplemental letter, or may decide to submit his/her original letter to the Board as-is.

3) At the Board's discretion the request may be sent to the District's Drought Committee for discussion and review.

4) At its next regular Board meeting, the Board will review the submitted information. The applicant may present his/her arguments at the meeting in person, or by representation by a third party. The Board may grant the request as presented or make modifications, or the Board may deny the request at its sole discretion. This topic would be discussed in open sessiont with public attendance unless special conditions apply. The final Board decision will be made by voice vote and will be recorded in the minutes of the meeting.

5) The customer could appeal a Board decision on a waiver request by writing another letter to MOWD presenting any new fact or arguments.

Appendix

Classification Scheme and Interpretation Approach (Band-4), by Eagle Aerial Solutions, Costa Mesa, 2017.

MEMORANDUM OF UNDERSTANDING
BETWEEN
CASITAS MUNICIPAL WATER DISTRICT, and
CITY OF OJAI, and
COUNTY OF VENTURA, and
MEINERS OAKS WATER DISTICT, and
OJAI BASIN GROUNDWATER MANAGEMENT AGENCY, and
UPPER VENTURA RIVER GROUNDWATER AGENCY, AND
VENTURA RIVER WATER DISTRICT

This document constitutes an informal agreement between the Casitas Municipal Water District, the City of Ojai, the County of Ventura, the Meiners Oaks Water District, the Ojai Basin Groundwater Management Agency, and the Upper Ventura River Groundwater Agency, and Ventura River Water District to establish a collaborative relationship and is not intended to be a legally-binding agreement.

General Terms:

The agencies agree to meet on a regular basis, leverage resources, and provide administrative assistance to keep the lines of communication open and share current priorities, efforts, and issues about their respective agencies.

The agencies agree to look for projects and ways to collaborate that are mutually beneficial.

The agencies agree to look for ways to cooperate and offer support of one another's efforts to provide increased water availability and water security to their respective constituencies.

This MOU is not intended to create any legally binding obligations on any of the agencies, but, rather, is intended to facilitate discussions regarding general areas of cooperation.

This MOU shall remain in effect until any of the parties terminate their participation by providing written notice to the other parties.

For the Casitas Municipal Water District

_____ _____
Date

For the City of Ojai

_____ _____
Date

For the County of Ventura

_____ _____
Date

For the Meiners Oaks Water District

_____ _____
Date

For the Ojai Basin Groundwater Management Agency

_____ _____
Date

For the Upper Ventura River Groundwater Agency

_____ _____
Date

For the Ventura River Water District

_____ _____
Date

February 7, 2018

Mike Hollebrands
General Manager
Meiners Oaks Water District
202 W. El Roblar
Ojai, CA 93023

RE: Letter of interest in MOWD property – APN: 010-0-050-230

Mike,

This letter is in follow-up to our recent phone conversation about the Ojai Valley Land Conservancy's potential interest in acquiring land held by the Meiners Oaks Water Company that consists of approximately 55 acres of hillside lands above Highway 33 across from Friends Ranches (APN listed above). The property has significant conservation values based on its scenic properties and the section of the Cozy Dell Trail that comes through the property. The area also functions as a wildlife migration corridor and it supports healthy native chaparral habitats that are expected to return following the recent fire. The OVLC's interest is in procuring the property so it may be permanently protected as open-space land for the benefit of our community.

If there is interest by your Board in selling this property, the OVLC Board will consider a formal approval to undertake an appraisal to determine its fair market value as a basis for a formal offer to purchase the property. At that time we will provide more details on our process and due diligence procedures. We hope your Board will see this as an excellent opportunity to partner on a project that benefits the communities of the Ojai Valley.

Thank you for your consideration,

Brian Stark
Executive Director

ELECTRONIC COMMUNICATIONS POLICY FOR THE MEINERS OAKS WATER DISTRICT

Adopted February ____, 2018 (DRAFT FOR APPROVAL)

BACKGROUND AND PURPOSE:

Meiners Oaks Water District (MOWD) has adopted the following policy regarding the conduct of MOWD business via electronic communications by MOWD directors, officials, and employees. Specifically, this policy was adopted in light of the holding in *City of San Jose v. Superior Court* (2017) 2 Cal.5th608, which held that a city employee's communications related to the conduct of public business do not cease to be public records under the California Public Records Act simply because they were sent or received using a personal account or personal device.

Existing and emerging electronic communications technologies have become an integral part of the ability of MOWD officials and staff members to efficiently and effectively conduct MOWD business. However, with such technology in the work environment, MOWD must ensure it continues to meet its legal obligations with respect to transparency in the conduct of the people's business, including in the area of public records disclosure requirements.

DEFINITIONS:

For purposes of this policy, the following definitions apply:

"District" means Meiners Oaks Water District.

"District official" shall mean any elected or appointed director, official or employee of the District.

"District business" shall be construed broadly to mean information relating to the conduct of the public's business or communications concerning matters within the subject matter of the District's jurisdiction, including, but not limited to, pending or potential District projects, past or prospective District agenda items, or District budgets or expenditures involving District funds. Resolution of the question of whether a topic is District business will involve an examination of several factors, including (a) the content itself; (b) the context in, or purpose for which, it was written; (c) the audience to whom it was directed; (d) the purpose of the communication; and (e) whether the writing was prepared by a District official acting or purporting to act within the scope of his or her official role or employment.

Participation of District officials in communications indirectly related to District business may also be encompassed within the category of District business. Examples include communications with the Association of Water Agencies of Ventura County, the Upper Ventura Groundwater Management Agency, the Integrated Regional Water Management Planning group, the Watershed Council, and so forth.

"Electronic communications" includes any and all electronic transmission, and every other means of recording upon any tangible thing in any form of communication or representation, including letters, words, pictures, sounds, or symbols, or combinations thereof, and any record thereby created, regardless of the manner in which the record has been stored. Without limiting the nature of the preceding, "electronic communications" include e-mails, texts, voicemails, and also includes communications on or within commercial applications (apps) such as Facebook Messenger, Twitter, WhatsApp, etc.

"Electronic messaging account" means any account that creates, sends, receives, or stores electronic communications.

"General Manager" means the acting General Manager of the District.

POLICY:

All District officials shall be assigned a District electronic messaging account. District accounts shall be used to conduct District business. District officials shall not use personal accounts for the creation, transmission or storage of electronic communications regarding District business, except as specifically allowed by this policy.

The District account, along with the attendant access to the District's account server, are solely for the District and District official's use to conduct District business and shall not be used for personal business or political activities unrelated to District business. Incidental use of District electronic messaging accounts for personal use by District officials is permissible, though not encouraged. District officials shall take reasonable precautions to prevent the use of District accounts by any person other than the account holder. If any District official has reason to believe a password has been lost or stolen, or that a District account is being accessed by someone without authorization, he or she shall notify the General Manager immediately.

If a District official receives an electronic message regarding District business on his/her non-District electronic messaging account, or circumstances require such person to conduct District business on a non-District account, the District official shall either: (a) copy ("cc") any communication from the District official's personal electronic messaging account to his/her District electronic messaging account; or (b) forward the associated electronic communication to his/her District account no later than 10 days after the original creation or transmission of the electronic communication.

District officials shall endeavor to ask persons sending electronic communications regarding District business to a personal account; to instead, utilize the official's District account, and likewise shall endeavor to ask a person sending an electronic communication regarding non-District business to use the District official's personal or non-District electronic messaging account.

District officials understand they have no expectation of privacy in the content of any electronic communication sent or received on a District account or communication utilizing District servers. District provided electronic devices, including devices for which the District pays a stipend or reimburses the District official, are subject to District review and disclosure of electronic communications regarding District business.

District officials understand that electronic communications regarding District business that are created, sent, received or stored on an electronic messaging account may be subject to the Public Records Act, even if created, sent, received, or stored on a personal account or personal device. In the event a Public Records Act request is received by the District seeking electronic communications of District officials, the General Manager shall promptly transmit the request to the applicable District official(s) whose electronic communications are sought. The General Manager shall communicate the scope of the information requested to the applicable District official(s), and an estimate of the time within which the General Manager intends to provide any responsive electronic communications to the requesting party.

It shall be the duty of each District official receiving such a request from the General Manager to promptly conduct a good faith and diligent search of his/her personal electronic messaging accounts and devices for responsive electronic communications. The District official shall then promptly transmit any responsive electronic communications to the General Manager. Such transmission shall be provided in sufficient time to

enable the General Manager to adequately review and provide the disclosable electronic communications to the requesting party.

In the event a District official does not possess, or cannot with reasonable diligence recover, responsive electronic communications from the District official's electronic messaging account(s), the District official shall so notify the General Manager, by way of a written declaration in a form approved by the District's legal counsel. In addition, a District official who withholds any electronic communication identified as potentially responsive must submit a declaration, in a form approved by the District's legal counsel, with facts sufficient to show the information is "personal business" and not "public business" under the Public Records Act.

It shall be the duty of the General Manager, in consultation with the District's legal counsel, to determine whether a particular electronic communication or any portion of that electronic communication, is exempt from disclosure. To that end, the responding District official shall provide the General Manager with all responsive electronic communications, and, if in doubt, shall err on the side of caution and should "over produce". If an electronic communication involved both public business and a personal communication, the responding District official may redact the personal communication portion of the electronic communication prior to transmitting the electronic communication to the General Manager. The responding District official shall provide facts sufficient to show that the information is "personal business" and not "public business" by declaration. In the event a question arises as to whether or not a particular communication, or any portion of it, is a public record or purely a personal communication, the District official should consult with the General Manager. The responding District official shall be required to sign a declaration, in a form acceptable to the District's legal counsel, attesting under penalty of perjury, that a good faith and diligent search was conducted and that any electronic communication, or portion thereof, not provided in response to the Public Records Act request is not District business.

Some District communications are privileged and confidential in accordance with attorney-client privilege and are protected from release to the public. District council will make determinations as to which communications are protected from disclosure. This policy does not waive any exemption to disclosure that may apply under the California Public Records Act.

District officials understand that electronic communications regarding District business are subject to the District's records retention policy, even if those electronic communications are or were created, sent, received or stored on an District official's personal electronic messaging account. As such, unless the District official has cc'd/transmitted electronic communications to his or her District electronic messaging account in accordance with this policy, that District official must retain all electronic communications in accordance with this policy.

Emails by District officials to or from their MOWD accounts, or stored on their personal accounts when also copied or forwarded to an MOWD account, are considered to be discoverable via the MOWD servers, and need not be produced by District officials unless so ordered by a court. The GM and District counsel shall have access to District emails for such purposes.

Once a District Official leaves his/her employment or association with the District, he/she will lose access to his/her email account after 30 days.

RETENTION POLICY FOR ELECTRONIC COMMUNICATIONS:

It is the policy of MOWD that emails produced after the initial adoption of this policy on February ___, 2018 shall be retained for at least 7 years. After that time, electronic communications on the MOWD servers may be

deleted at the General Manager's discretion. Voicemail messages left on District phones or District officials' phones may be deleted at any time. Texts sent by cell phone may be deleted at any time.

If a District official uses the MOWD email server to forward his/her emails to a personal electronic device or email account for convenience for reading emails only, such emails will be considered as being stored on the MOWD server. There is no policy for retaining forwarded versions of emails on personal computers or phones when versions of those emails are stored on District servers. They may be deleted at any time.

MOWD has no policy for retention of emails stored on District Officials' personal email accounts before the adoption of this policy. They may be deleted at any time. MOWD has no policy for the retention of posts or communications on Facebook, Twitter, or other social media accounts. They may be deleted at any time.

Meiners Oaks Water District

_____ _____

President Date

A Cooperative Regional Approach to Improving Ventura County's Water Supply Reliability

Published by the Ojai Valley Water Advisory Group

Prepared by

Richard H. Hajas

February 2, 2018

Summary

Five consecutive years of only one-half of average rainfall has reduced local groundwater levels and Lake Casitas storage levels to record lows. Water users in western Ventura County are subject to costly water conservation, allocation, and rationing programs for the second time in the past 25 years. Eastern Ventura County has one source of water, through a single pipeline from the California State Water Project (SWP). An interruption in the imported water supplies by a catastrophic earthquake or other event could leave a large portion of Ventura County without water for as long as 6 months.

The Problem

Calleguas Municipal Water District and the eastern Ventura County have access to the vast water resources of Metropolitan Water District (MET) and the SWP, but have a vulnerable delivery system. The City of Ventura has a variety of groundwater supplies that are capable of producing a small surplus of water during normal years, but no water supply reserves for dry periods. The Casitas Municipal Water District (Casitas) service area has groundwater supplies that satisfy only about 40% of the water needs. In a normal year 60% of the area's water supply is Lake Casitas. During dry years both groundwater supplies and Casitas lake levels are low. Ventura County has little or no reserve water supplies to satisfy the county's needs during drought or emergency conditions.

Responsible Agencies

Three major water authorities manage water supplies in Ventura County: Casitas Municipal Water District (Casitas) and City of Ventura in the western county, and Calleguas Municipal Water District (Calleguas) in the east county. Each of these water authorities is pursuing very costly projects to improve water reliability in their respective service areas. Calleguas needs a local

emergency supply of 30,000 acre feet (AF)[1] to achieve its goal of a 6 month supply stored locally. Ventura and Casitas need additional water supplies and a reserve supply for dry years. None of the three agencies have the financial resources or the water system infrastructure to solve this problem on their own.

State Water Project

More water can be accessed from the SWP. Ventura and Casitas combined could receive an average annual supply of nearly 5635 AF from the SWP, but they have no access to the SWP system. Even with access SWP water is as unreliable as local rainfall. In 2014, during the current local drought, SWP allocations were cut to 5% of annual deliveries.

If Casitas and Ventura each found a means to access SWP their individual situations would only slightly improve. Both would enjoy surplus supplies during normal years, but both would continue to experience deficits during dry periods. Ventura has no means of storing surplus water and Casitas even, with SWP water, would continue to rely on over 50% of Lake Casitas' reserve for routine normal year uses.

Lake Casitas

Lake Casitas is a valuable asset that is being underutilized. Lake Casitas was built to serve as a water storage facility to capture the areas infrequent storm waters. These storm waters were to provide back up for dry periods when groundwater supplies are low. Over time the area began to rely on lake water as a primary source rather than a back up. Today Lake Casitas has become a routine source of water rather than a reserve. When groundwater levels are low, lake levels are also low.

The Solution

If Ventura, Casitas, and Calleguas worked collectively and pooled each of their unique resources, the County could enjoy the benefits of a reliable and abundant water supply well into the future. Ventura and Casitas may have the opportunity to access SWP through Calleguas. With access to SWP water, combined with all of Ventura's and Casitas' current supplies, Ventura and Casitas would enjoy an average annual surplus of 13,500 AF, equal to 32% of their combined annual water needs. This surplus water could be reserved in Lake Casitas and shared by Ventura and Casitas during dry periods.

When a cooperative operational scenario is applied to the Lake Casitas 20 year drought model developed by Casitas the results are lake storage levels never falling below 50% of capacity or 125,000 AF, throughout the worst drought period of record. With minimum lake levels in this range Casitas could easily provide Calleguas with 30,000 AF of needed emergency water. In return western

[1] An acre foot of water is the amount of water that will cover one acre – one foot deep. An acre foot is equal to 326,000 gallons of water

Ventura County would be connected to the state's huge water network and Calleguas could provide an equal amount of emergency water to western Ventura County if ever needed.

Feasibility

A series of pipelines, pumping facilities and water storage tanks would be required to move water from Calleguas across Ventura and into the Casitas service area. The same pipelines could be used to deliver water back to Calleguas from the lake in an emergency. All three agencies have the engineering resources to construct the needed infrastructure.

The environmental impacts are neutral or positive. No foreign water will be placed in Lake Casitas with this proposal. The pressure to over pump local groundwater will be greatly reduced. There will be less competition between the development of sustainable groundwater and surface water plans and community's water demands.

The combined financial resources of all three agencies can be utilized to spread the costs of the project over a very large customer base. These water customers are paying more and more for less and less water every year under the current conditions. And these customers will ultimately pay for whatever projects currently being considered by the individual agencies, projects that may not produce needed long term benefits.

The main obstacles to the success of a cooperative solution to the area's water supply problem will likely be institutional issues. Each community and agency has a culture of "going it alone" and values independence over cooperation. This culture will be hard to overcome, especially in the Ojai Valley. But the Ojai Valley may have the most to gain from a cooperative approach and unfortunately has the most to lose by doing nothing. Without significant rain in 2018 the Ojai Valley and the Casitas service area face the grim reality of an economic disaster, a disaster that will impact agriculture, the tourist industry, real estate values, and the quality of life for everyone.

Conclusion

The following analysis demonstrates that ample water resources are available to Ventura County to avoid chronic water shortages and provide reserve supplies for emergencies. If the local water agencies work collectively and pool each of their unique resources, the County could enjoy the benefits of a reliable and abundant water supply well into the future. A collective and cooperative solution to Ventura County's water supply deficiencies may be the most effective, least costly, and most timely of all of the individual alternatives currently under review.

Introduction

Cyclical drought has repeatedly threatened western Ventura County with water shortages. Ventura County is 12 years into a drought period that may repeat or exceed the 1945-1966 drought, which is considered the longest in Ventura's recorded history. Five consecutive years of only

one-half of average rainfall has reduced local groundwater levels and Lake Casitas storage levels to record lows. Rainfall of 125% of average in 2017 replenished local groundwater to moderate levels, but did little to improve lake storage. Lake Casitas, the largest surface storage reservoir in the County was at 35% of capacity in December 2017. As a result, both Casitas and Ventura have implemented water conservation, allocation and rationing programs for the second time in the past 25 years.

The Calleguas Municipal Water District (Calleguas), which serves imported water to the eastern county, relies on the California State Water Project (SWP) aqueduct and a single pipeline from the San Fernando Valley to supply the SWP water. These delivery systems are vulnerable to earthquake damage that could interrupt Calleguas' 85,000 acre foot (AF) annual water deliveries to Simi Valley, Thousand Oaks, Moorpark, Camarillo and Oxnard.

An interruption in the imported water supply by a catastrophic earthquake or other event; in conjunction with chronic local water supply shortages caused by cyclical drought, threaten the vitality of the County's economy. The County's high tech industry, tourist industry, agricultural industry, real-estate values, and ultimately the health and safely of the entire County's residents are at stake.

This analysis was developed for the Ojai Valley Water Advisory Group, a group formed in April 2017 to analyze the growing water crisis in the Ojai Valley and to facilitate a comprehensive solution that will improve County's overall water supply reliability. Each water authority in the County is pursuing very costly project alternatives to improve water reliability in their respective service areas. If these agencies, Calleguas, City of Ventura, and Casitas Municipal Water District (Casitas) worked collectively and pooled each of their unique resources, the County could enjoy the benefits of a reliable and abundant water supply well into the future. A collective and cooperative solution to Ventura County's water supply deficiencies may be the most effective, least costly, and most timely of all of the individual alternatives currently under review.

City of Ventura

Ventura is the oldest city in the County and has perhaps the largest collection of water sources. The City owns and operates groundwater wells in the Upper Ventura River Basin, the Mound Groundwater Basin, the Oxnard Plain, and the Santa Paula Basin. Ventura also buys lake water from Casitas. All of these sources, however, are dependent on local rainfall. Table A-1 illustrates how much water each source provides the City in a normal rainfall year. The table also compares the average annual water use to annual supplies. In a normal year, the City has an annual surplus of 1,794 AF (City of Ventura, 2017).

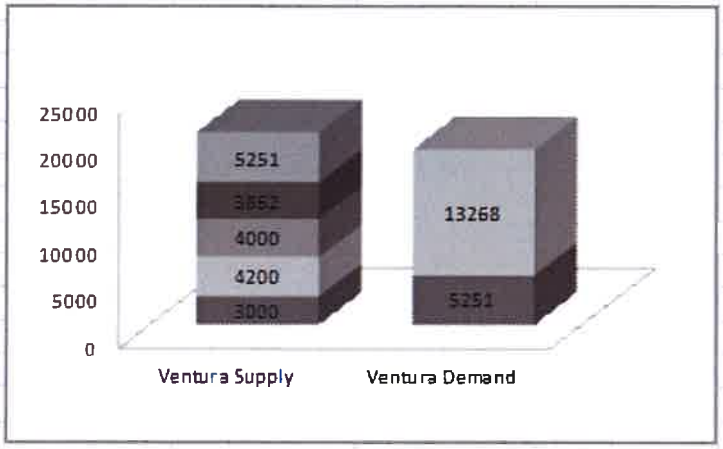
Table A-1

City of Ventura

Water Supply and Demand 2017

Normal Year

City of Ventura	
Demand	**AF/Yr**
East end Ventura	13,268
West end Ventura	5,251
Total	18,519
Supplies	
Lake Casitas	5,251
Oxnard Plain	3,862
Mound Basin	4,000
Ventura River	4,200
Santa Paula Basin	3,000
Total	20,313
Deficit/Surplus	1,794



Data from City of Ventura "2017 Comprehensive Water Resource Report"

In a dry year, Ventura's supplies are reduced. Table A-2 illustrates how supplies fall short of average water use in a dry year. The availability of Ventura River water is reduced significantly. Santa Paula Basin allocation is reduced to prevent overdraft and Casitas may impose staged allocation reductions from the lake, based on lake levels. In 2017 the City's allocation from Lake Casitas was reduced by 30% and may be reduced further to 40% in 2018. In a dry year the City has a deficit of water use over supply of (4,267) AF. Implementation of water conservation and rationing programs are the City's only means of managing these deficits.

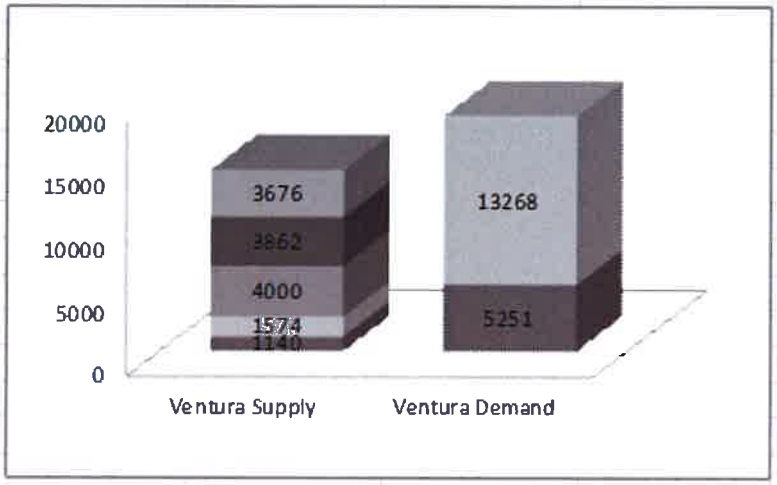
Table A-2

City of Ventura

Water Supply and Demand 2017

Dry Year

City of Ventura	
Demand	**AF/Yr**
East end Ventura	13,268
West end Ventura	5,251
Total	18,519
Supplies	
Lake Casitas *	3,676
Oxnard Plain	3,862
Mound Basin	4,000
Ventura River	1,574
Santa Paula Basin	1,140
Total	14,252
Deficit/Surplus	(4,267)



Data from City of Ventura "2017 Comprehensive Water Resource Report"

* Casitas Stage 3 (30% reduction in allocation)

Casitas and the Ojai Valley

Casitas is both a water retail and wholesale water purveyor. Casitas supplies water to a portion of the City of Ventura, the unincorporated western Ventura County and the City of Ojai. Casitas' district boundaries extend from the Santa Barbara county line at Rincon Del Mar, east to Miles Road in Ventura, north to the Santa Paula –Ojai Summit in Upper Ojai and west along highway 150 towards Carpentaria and the county line. Casitas' water service area is supplied by groundwater from the Ojai Groundwater Basin, Upper Ojai Groundwater Basin, Upper Ventura River Basin and Lake Casitas. Historically, groundwater has been the area's primary source of water.

Ojai Area Groundwater

The Ojai Basin supplies the City of Ojai, residential developments in the unincorporated east end of the Ojai Valley, and about 60% of the groundwater is used for agriculture (VRWC, 2015). The communities of Meiners Oaks and portions of Oak View are supplied by the Upper Ventura River Basin. The Upper Ojai Basin provides water to small residential developments and agriculture. There are also many private water pumpers on all three basins.

Casitas, unlike Ventura, does not own and operate all the groundwater wells in the Casitas service area. Groundwater users are served by separate water agencies, private organizations, or private well owners. Meiners Oaks Water District and Ventura River Water District are public water agencies serving groundwater. There are numerous mutual water companies, the largest of which are Senior Canyon, Siete Robles Mutual, Sisar Canyon Mutual and Hermitage Ranch Mutual. Casitas recently acquired the Golden State Water Company that serves the City of Ojai. Casitas now owns and operates the wells serving the City of Ojai and is expected to continue to use the Ojai Basin as the City's primary water supply.

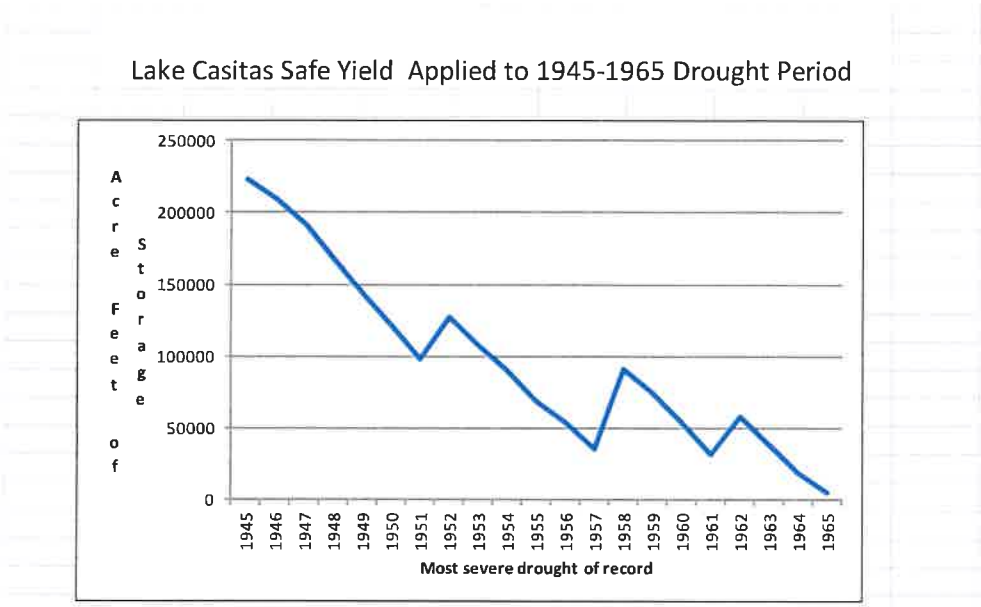
The total water available from each of these basins is generally unknown. Ojai Basin Groundwater Management Agency (OBGMA) has been collecting data and conducting studies to better understand the basins characteristics. The annual yield from the Ojai Basin is currently believed to be 5,026 AF (Stephens, 2011). The Upper Ventura River Groundwater Sustainability Agency was recently formed and has begun to initiate studies and collect groundwater data. Both the Upper Ventura River and the Upper Ojai Basins rely on historical pumping records to estimate average annual yield. Water extractions from all three basins are generally controlled by basin water levels and the ability of existing wells to access water during drought periods.

Lake Casitas

The Casitas Municipal Water District was formed following 1945 record drought. Lake Casitas and Casitas Dam were constructed by the U. S. Bureau of Reclamation and designed to supplement local groundwater supplies during similar drought cycles. Today all groundwater users in the Casitas service area rely on supplemental supplies from Lake Casitas during periods of drought. Many groundwater users are routinely supplemented by Lake Casitas during the high water use summer season.

Lake Casitas has a maximum water storage capacity of 238,000 AF. The available annual supply from Lake Casitas is determined by the lake's "safe yield". "Safe yield" is the amount of water that may be withdrawn from the lake on an average annual basis without depleting the supply. The Casitas "safe yield" was reevaluated in 2004 and determined to be 20,840 AF (Casitas, 2004). Chart B-1 is from Casitas' 2004 "Water Supply and Use Status Report" which analyzed the potential impacts to the lake levels over the historical drought period of 1945-1965 with an average water use of 20,840 AF per year.

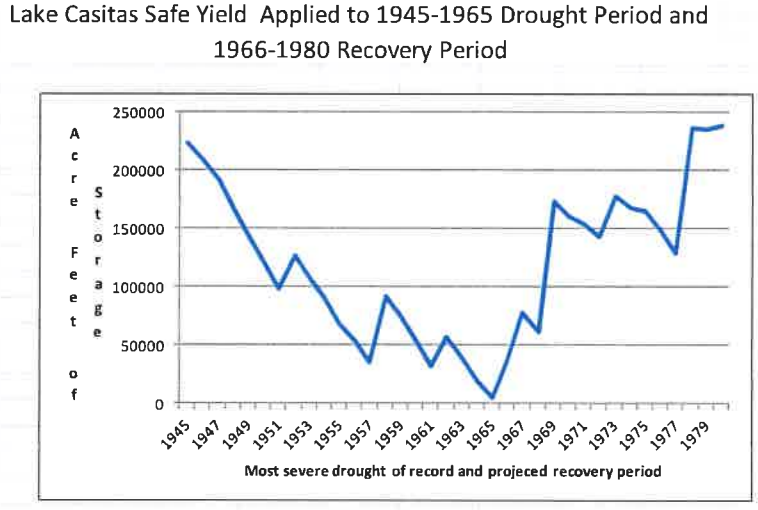
Chart B-1



Data from Casitas "Water Supply and Use Status Report, 2004" Chart data in Appendix A- Table I

Casitas' analysis also projects a recovery period during which the lake would refill following the drought. The recovery period used is 1966-1980. Water use was reduced to 19,775 AF annually to achieve full recovery by the end of the period. Chart B-2 illustrates how lake level would respond to the period of study.

Chart B-2

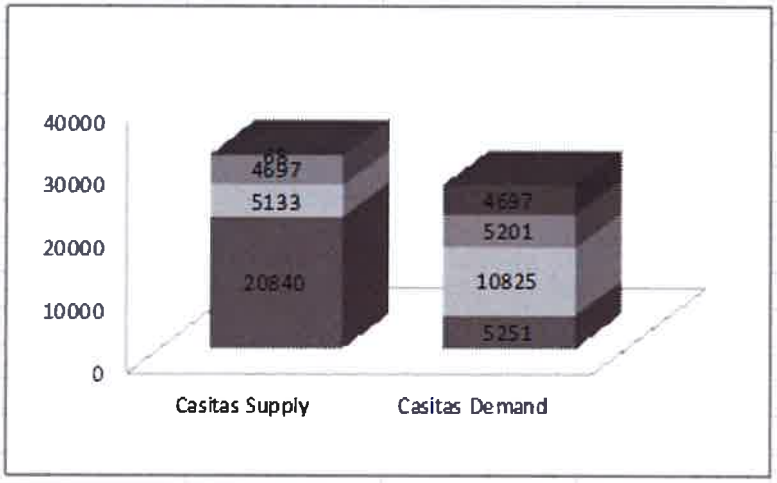


Data from Casitas "Water Supply and Use Status Report, 2004"
Chart data in Appendix A- Table II

Casitas' average annual water use was 16,076 AF from 2006-2017 (Casitas 2017), which is less than "safe yield". Table A-3 compares water supplies in the Casitas service area with water use during a normal year. The Casitas service area has an average annual surplus of 4,858 AF.

Table A-3

Casitas	
Demand	**AF/Yr.**
Casitas Customers	10,825
West end Ventura	5,251
Ojai Valley	5,201
Ventura River Area	4,603
Total	25,880
Supplies	
Lake Casitas	20,840
Ojai Basin	5,133
Ventura River Basin	4,697
Upper Ojai Basin	68
Total	30,738
Deficit/Surplus	4,858



Data from Casitas 2015 "Water Efficiency and Allocation Program", "Ventura River Watershed Management Plan", 2015, and Ojai Basin Groundwater Management Agency 2016 Extraction Data

Casitas is the backup supply for local groundwater in the Ojai Valley and Ventura River basins. In periods of drought the annual demand for Lake Casitas water increases by as much as 7,384 AF (Casitas 2015) and production from groundwater wells declines. Table A-4 compares Casitas' service area supplies to potential water demand during a dry period. Casitas may have a deficit during such periods of (5,824) AF.

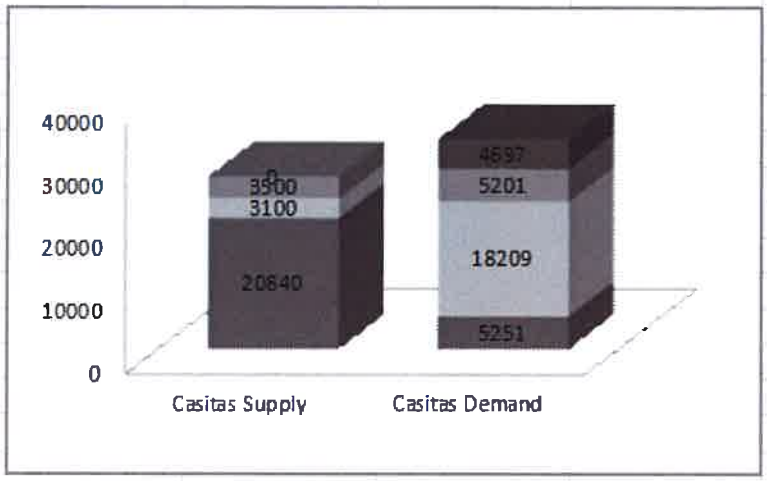
Table A-4

Casitas

Water Supply and Demand

Dry Year

Casitas Demand	AF/Yr.
Casitas Customers	18,209
West end Ventura	5,251
Ojai Valley	5,201
Ventura River Area	4,603
Total	33,264
Supplies	
Lake Casitas	20,840
Ojai Basin	3,100
Ventura River Basin *	3,500
Upper Ojai Basin	-
Total	27,440
Deficit/Surplus	(5,824)



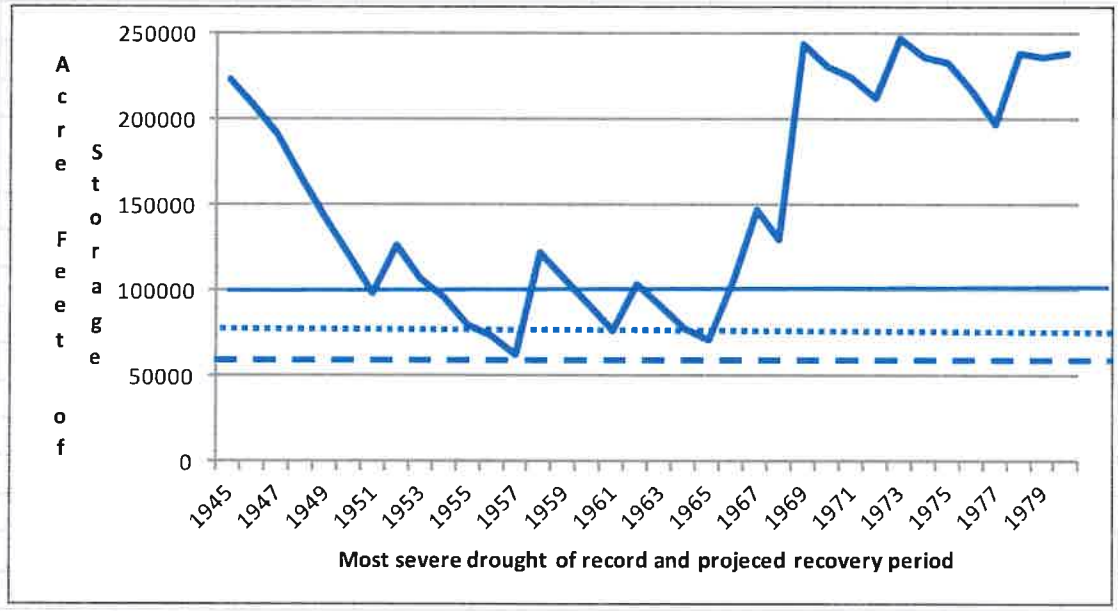
Data from Casitas 2015 "Water Efficiency and Allocation Program", "Ventura River Watershed Management Plan", 2015, and Ojai Basin Groundwater Management Agency 2016 Extraction Data

* Ventura River Basin water supply during drought is an estimate. No exact data available

Casitas, unlike Ventura, has the ability to store surplus water. However, Casitas is operating close to "safe yield", using over 75% of its safe yield annually. In 2015 Casitas adopted the "Water Efficiency and Allocation Program" to reduce water demand on the lake. The 5 Stage program goal is to maintain average annual water use at 18,200 AF, 20% below 1989 record total water sales. The program reduces water use by 30%, 40% and as much as 50% when lake levels fall below what are considered safe levels. This program is based on Casitas "safe yield" analysis.

The analysis applies conditions during the 1945-1965 drought and the probability of lake storage recovering with local rainfall during a 15 year recovery period similar to 1966-1980. Casitas plans to manage the potential water shortages during this 35 year cycle with their 5 Stage Program. Chart B-3 illustrates the impact to lake storage from a drought and recovery period, like that used in the Casitas "safe yield" analysis, with the implementation of the 5 Stage Program. Casitas water users would experience 6 years of Stage 3 (30% reductions in water use) and 3 years of Stage 4 (40% reductions).

Chart B-3



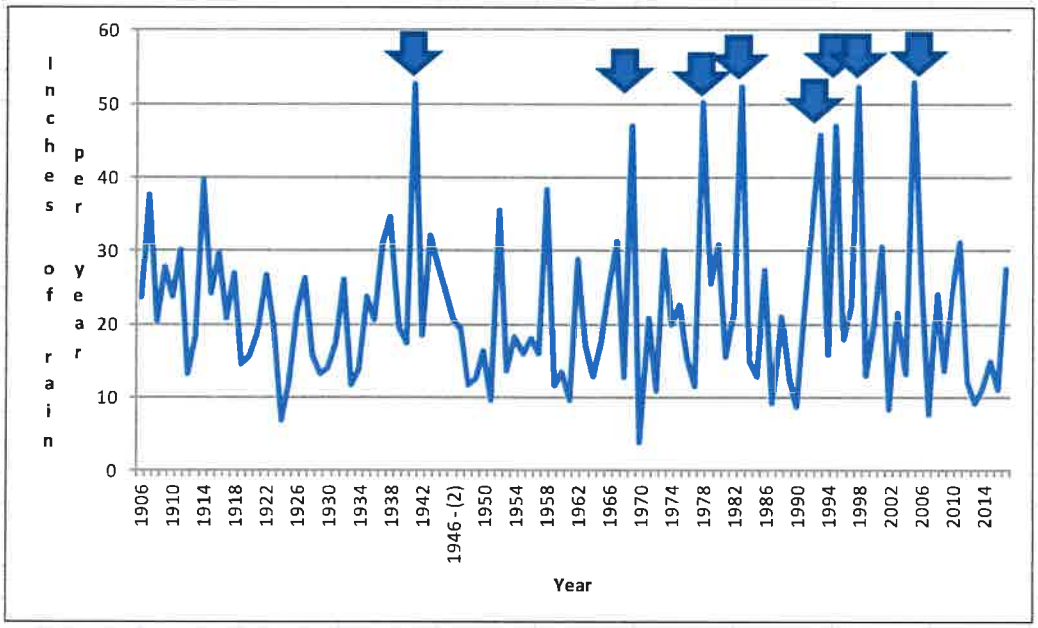
The potential flaw in Casitas' projections is the assumption that the future recovery period will occur as rapidly as the 1966-1980 period. Historical records demonstrate that 1969-1980 may be part of the wettest period of record. Chart B-4 shows how often major rain events occurred in the recovery period compared to the historical record. From 1906-2017 a total of 8 years experienced rainfall in excess of 40 inches at the Ojai weather station (Ventura County Watershed Protection District Rainfall Data Base). In the 62 years between 1906 and 1968 a rainfall year over 40 inches

occurred only once. In the 37 years, 1969-2006, rainfall years of over 40 inches occurred 7 times. During the rather short 15 year recovery period there were 2 years with greater than 40 inches of rain. Using this period (1965-1980) to project recovery may be far too optimistic. Using an extreme wet period that has not been repeated historically, combined with the growing evidence of climate change does not present the most probable outcome.

Chart B-4

Historical Annual Rainfall Recorded at Ojai Station

Thatcher School 1906-2017



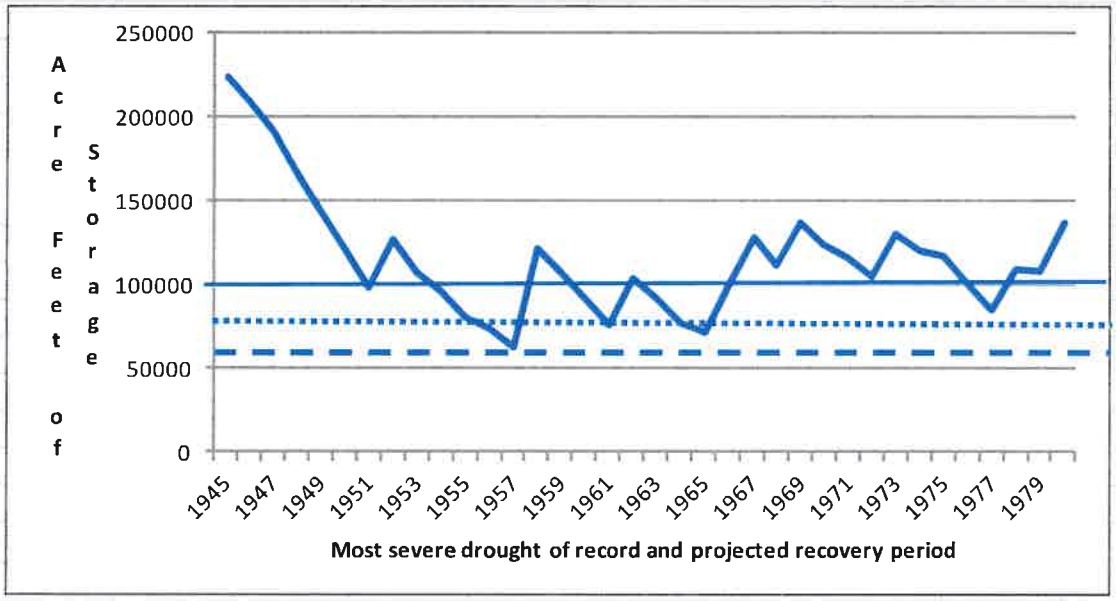
Data from Ventura County Watershed Protection District data base

Rainfall greater than 40 inches

Chart B-5 illustrates a more "conservative" recovery period by reducing all major events during the recovery period to no greater than 1962, a moderate rainfall year. Lake levels would recover to over 58% of total storage, but it will require multiple periods of significant water conservation and rationing. Casitas water users would experience 7 years of Stage 3 (30% reductions) and 3 years of Stage 4 (40% reduction). Hopefully, the area will receive more rainfall than used in the model for Chart B-5, but because weather is notoriously unpredictable there are no guarantees.

Chart B-5

Lake Casitas Safe Yield Analysis Applied to 1945-1965 Drought Period and Conservative 1966-1980 Recovery Period with Implementation of 5 Stage Conservation Program



Stage 3 _____ Stage 4 ..... Stage 5 --------

Data from Casitas "Water Supply and Use Status Report, 2004"

Water use reduced to comply with Casitas' "Water Use and Allocation Program" 2015

Chart data in Appendix A- Table IV

Calleguas and the East County

Calleguas is a member of Metropolitan Water District of Southern California (MET) and receives SWP water through MET's water delivery system. Calleguas is a wholesale water purveyor and delivers an average of 85,000 AF of imported water annually from MET to the cities and unincorporated areas of eastern Ventura County. Many communities in the Calleguas service area rely exclusively on imported water. All rely heavily on imported water to supplement local groundwater supplies. Since the drought of 1989-1992, when SWP supplies were reduced,

Calleguas and fellow members of the MET have invested in water storage projects (MET 1999). Large surface water storage facilities, such as the Eastside Reservoir and groundwater banking agreements with groundwater management agencies along the SWP aqueduct have enabled southern California, including eastern Ventura County, to experience only moderate impacts from the most recent drought in California.

For eastern Ventura County and Calleguas the primary concern today is how to prepare for a catastrophic event, such as an earthquake, that could render the imported water delivery system inoperable for an extended period. An earthquake in the Sacramento Delta area could severely damage the SWP aqueduct and associated facilities. Such an event would obviously be repaired with the utmost urgency, but could take six months to one year to restore service. An earthquake in the northern San Fernando Valley could damage pipelines and water treatment plants on which Calleguas relies. These repairs would likely be achieved much faster, but an outage of several months is possible (Calleguas, 2017).

To plan for such events Calleguas has been pursuing projects that will provide an emergency water supply, for up to one year within Ventura County. Calleguas has invested in large groundwater storage projects, such as the Las Posas Groundwater Storage and Recovery Project, and smaller projects on the Oxnard Plain. Calleguas is actively seeking additional emergency water sources. Calleguas is 30,000 AF short of its 85,000 AF goal, and is now exploring desalination projects with potential costs in the hundreds of millions of dollars and with lengthy completion timelines (Calleguas 2017).

SWP Water

Casitas and Ventura share a 15,000 AF per year SWP allocation, which they have not yet accessed. The SWP has been plagued in recent years by increases in demand for water, by drought, and by operational limitations imposed by regulations regarding environmental impacts to the Sacramento Delta fisheries. As a result, SWP contractors have experienced significant reductions to their original annual water allocations. From 2006 through 2017 annual allocations have been reduced from the original amounts each year. On average SWP contractors have only been allocated about 48% of their full allocations over the past 12 years. At the height of the current drought in 2014 allocations were reduced to 5% (DWR, 1990-2017).

SWP contractors have developed ways, both collectively and independently, to store surplus water in wet years and meet their demands for water through storage and alternative supplies during dry periods. Some, like MET, have been successful in developing a portfolio of storage, alternative supplies, and water exchanges (MET, 1999). If Ventura and Casitas ultimately decide to access SWP water they will have to develop the means to address chronic allocation reductions.

Ventura SWP Allocation

Ventura's share of the SWP allocation is 10,000 AF of water per year. Table A-5 illustrates the amount of water that would be available in a normal year, with the most recent historical average

SWP allocation of 48%, compared to annual water use. The City would have a surplus of over 6,594 AF annually.

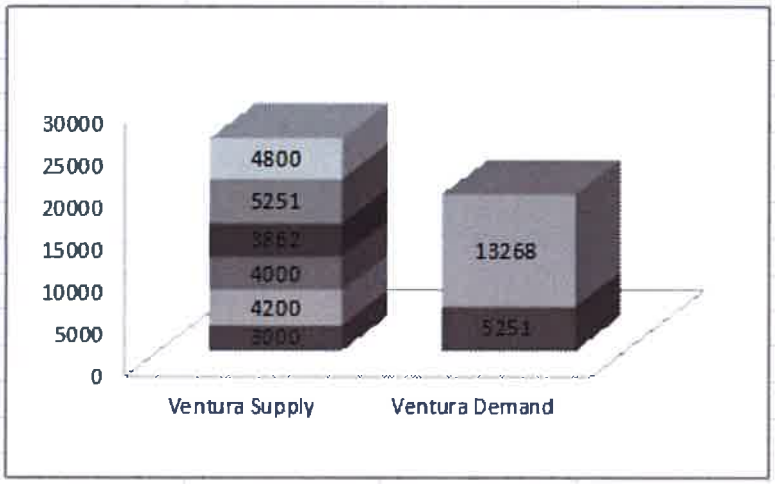
Table A-5

City of Ventura With SWP

Water Supply and Demand 2017

Normal Year

City of Ventura Demand	AF/Yr
East end Ventura	13,268
West end Ventura	5,251
Total	18,519
Supplies	
SWP	4,800
Lake Casitas	5,251
Oxnard Plain	3,862
Mound Basin	4,000
Ventura River	4,200
Santa Paula Basin	3,000
Total	25,113
Deficit/Surplus	6,594

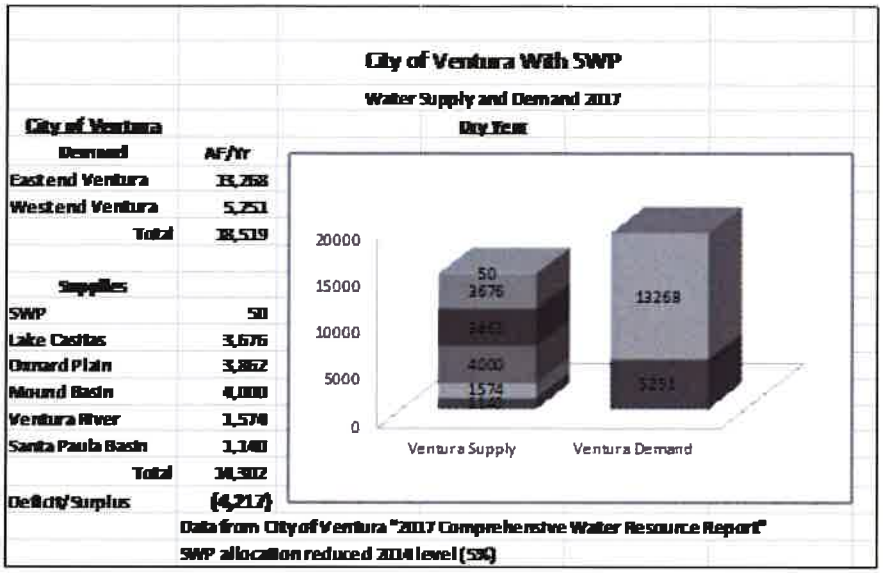


Data from City of Ventura "2017 Comprehensive Water Resource Report"

SWP average allocation over past 12 years (48%)

Ventura does not have access to storage facilities used by other SWP contractors to supplement SWP deliveries when allocations are reduced. Therefore, the City's SWP supply would be subject to even greater reduction during drought periods. Droughts in northern California generally coincide with drought in the southern California. In 2014, a dry period in Ventura, SWP allocations were cut to 5% of total allocation. Table A-6 illustrates what supplies would be available in a severe drought compared to water use. The City would have a deficit of (4,217) AF.

Table A-6



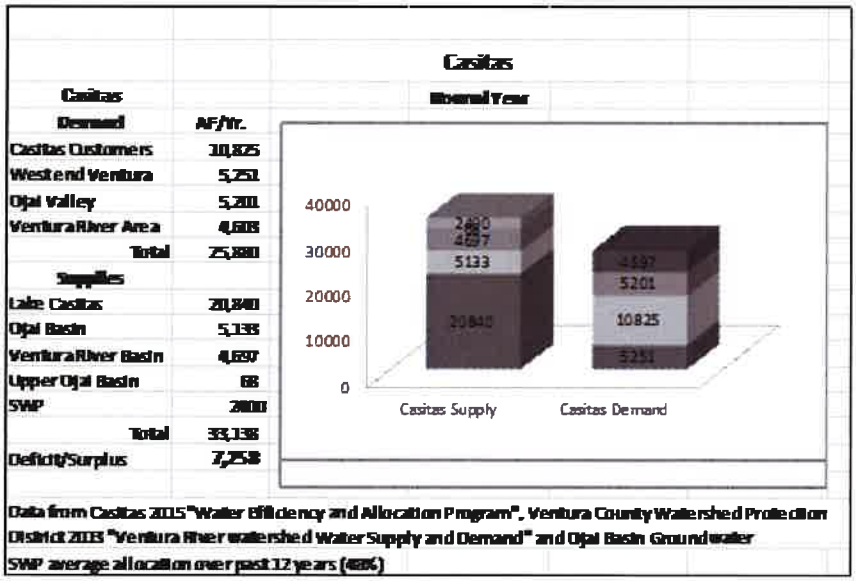
City of Ventura Demand	AF/Yr
East end Ventura	13,268
West end Ventura	5,251
Total	18,519
Supplies	
SWP	50
Lake Casitas	3,676
Oxnard Plain	3,862
Mound Basin	4,000
Ventura River	1,574
Santa Paula Basin	1,140
Total	14,302
Deficit/Surplus	(4,217)

Data from City of Ventura "2017 Comprehensive Water Resource Report"
SWP allocation reduced 2014 level (5%)

Casitas SWP Allocation

Casitas' portion of the SWP allocation is 5,000 AF per year. Table A-7 compares Casitas' supplies and demand under normal conditions and Table A-8 under dry conditions with SWP water. In normal years Casitas would have a surplus of 7,258 AF, but in a dry period could have a deficit of (2,370) AF.

Table A-7

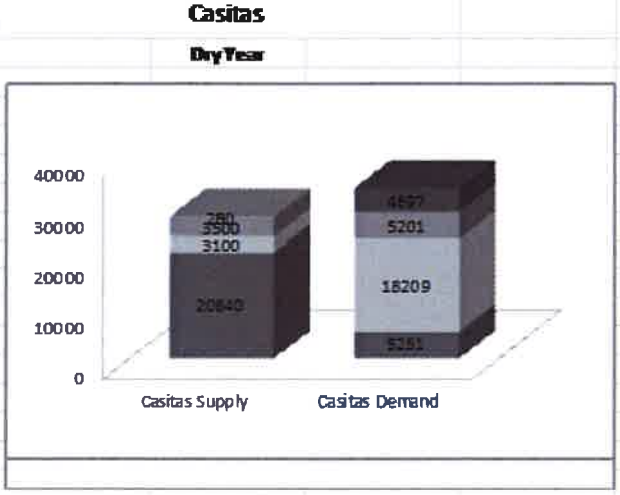


Casitas Demand	AF/Yr.
Casitas Customers	10,825
West end Ventura	5,251
Ojai Valley	5,201
Ventura River Area	4,608
Total	25,880
Supplies	
Lake Casitas	20,840
Ojai Basin	5,133
Ventura River Basin	4,697
Upper Ojai Basin	68
SWP	2800
Total	33,138
Deficit/Surplus	7,258

Data from Casitas 2015 "Water Efficiency and Allocation Program", Ventura County Watershed Protection District 2013 "Ventura River watershed Water Supply and Demand" and Ojai Basin Groundwater
SWP average allocation over past 12 years (48%)

Table A-8

Casitas	
Demand	AF/Yr.
Casitas Customers	18,209
West end Ventura	5,251
Ojai Valley	5,201
Ventura River Area	4,603
Total	33,264
Supplies	
Lake Casitas	20,840
Ojai Basin	3,100
Ventura River Basin	3,500
Upper Ojai Basin	-
SWP	250
Total	27,690
Deficit/Surplus	(5,574)



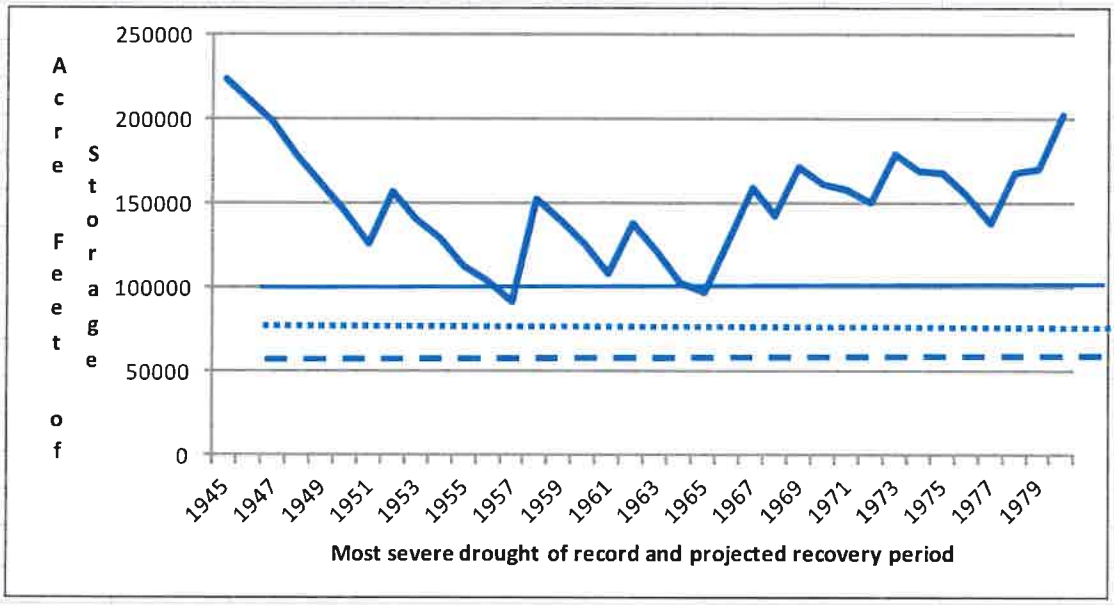
Data from Casitas 2015 "Water Efficiency and Allocation Program", Ventura County Watershed Protection District 2013 "Ventura River watershed Water Supply and Demand" and Ojai Basin Groundwater
SWP allocation reduced 2014 level (5%)

Impacts to Lake Casitas Storage with SWP

Chart B-6 illustrates the impacts of the "conservative version" of Casitas' 35 year drought and recovery period with the benefit of imported water. Most recent SWP water allocation reductions (2006-2017) have been applied repeatedly to the Casitas SWP allocation over the 35 year period. Casitas' water reliability would be greatly improved with the addition of SWP water. Casitas water users would only experience 2 years of Stage 3 reductions and no Stage 4. Lake level would recover to 85% of capacity at the end of the recovery period.

Chart B-6

Lake Casitas Safe Yield Analysis Applied to 1945-1965 Drought Period and Conservative 1966-1980 Recovery Period with SWP and Implementation of 5 Stage Conservation Program



Stage 3 _____ Stage 4 ..... Stage 5 --------

Date from Casitas "Water Supply and Use Status Report, 2004"

Water use reduced to comply with Casitas' "Water Use and Allocation Program" 2015

SWP allocation reduced to 2007-2017 levels

Data contained in Appendix A-Table V

Casitas would benefit from accessing SWP water. If Casitas used SWP water when available as a primary source and reserved as much lake water as possible for dry years Casitas could potentially avoid future water shortages. However, the capital costs for Casitas to independently access SWP may be prohibitive.

Ventura and Casitas Operating Methodology

Ventura

It is unfortunate that Ventura has, on average, a surplus water supply each year of 1,794 AF, with no means to store surplus water from year to year. The only way Ventura can manage dry year shortages is through conservation programs and sometimes severe rationing programs.

Ventura does have access to stored Lake Casitas water, but Casitas' allocation program does not allow unused portions of an allocation to be rolled over to the next year. In fact, the City's use of

Casitas water is very limited. When the Casitas district was originally formed in the 1950's it was not envisioned that the City would expand so far east. The boundary of the Casitas district was set at approximately Mills Road. Today nearly 2/3 of the City is outside the Casitas boundary and therefore prohibited from using Casitas water. This situation has caused much friction between the two organizations over the years. What has resulted is an agreed arrangement that is not ideal for either party. Because the City cannot serve the eastern portion of the City with Casitas water, it supplies the western portion with 100% lake water whenever possible. All other Ventura supplies are reserved for use in the eastern portion of the city, including Ventura River water. Even in an above average rain year Ventura generally moves all Ventura River water east because the quality is much higher than east end ground water, and there is no benefit to Ventura in reserving lake water. Consequently, Casitas is not a supplemental supplier to Ventura, rather a primary supplier, placing a constant demand on the lake.

Casitas

In the Casitas service area groundwater from the Ojai Basin, Upper Ojai Basin and the Upper Ventura River Basin are the primary supplies for much of the Ojai Valley. Groundwater is less expensive to produce and therefore groundwater well operators avoid purchasing Casitas water. Casitas recently acquired the Golden State Water Company service area in the City of Ojai and continues to use Ojai Basin water as the primary source for the City. It is much less costly for Casitas to pump groundwater than to pump lake water up to Ojai.

However, Casitas has become the primary source for many of the water users in its service area. Casitas is the primary source for western Ventura, as discussed above, with an annual water use of about 5,200 AF. Casitas annually delivers water to supplement groundwater users that cannot meet peak summer water demands in normal years, serves agricultural users that have no other supply, and the urban areas of Oak View, Mira Monte, and the Rincon Beach, which rely on Casitas exclusively. These water uses average over 10,825 AF annually. These uses combined with Ventura's water use total 16,076 AF per year, leaving only a small portion of Casitas' annual "safe yield" (20,840 AF) as supplemental supplies to groundwater users in critically dry years (Casitas, 2016)

Integrated Supply Strategy

Ventura and Casitas are responsible for serving their respective constituents with the resources available. Historically, each agency has deliberately tried to remain as independent as possible and preserve its resources for the exclusive use of those they serve. Each agency has a separate SWP allocation subject to chronic reductions. Each agency has valuable resources, but each agency's resources have limitations. With SWP water Ventura would have ample surplus water during normal years, but no ability to store water for dry years. With SWP water Casitas would have the ability to store surplus water in Lake Casitas, but must routinely use water from the lake to meet normal year demands leaving little water in reserve for dry years. If these agencies

worked cooperatively and pooled their resources they may be able to greatly improve their individual service reliability, as well as, collectively gain additional water supplies.

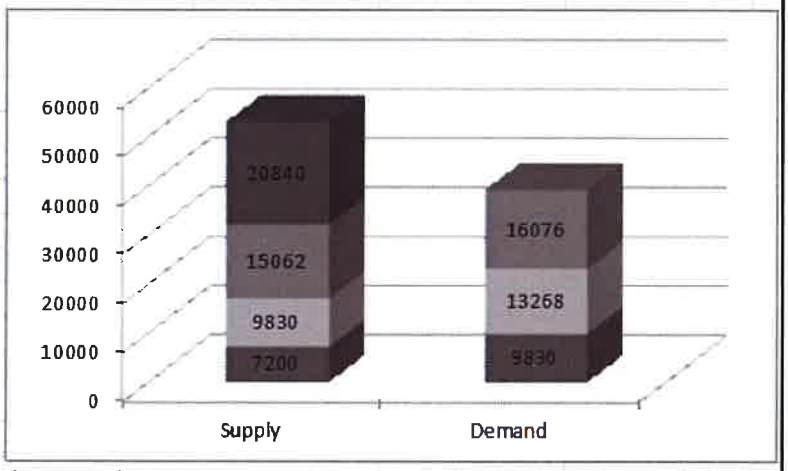
Combined Water Resources

As an example, Table A-7 combines Ventura's and Casitas' water supplies with access to SWP and compares it to their combined water use. In a normal year, the two agencies would have a combined surplus of 13,758 AF, nearly twice the 7,258 AF surplus Casitas would have operating independently with SWP water. If that increased annual surplus was stored in Lake Casitas more water would be available for use in dry years. In a dry year (Table A-8) Ventura and Casitas would have a combined deficit of (7,842) AF, nearly one-half of their combined average annual surplus..

Table A-7

Combined
No Rationing
Normal Year
City of Ventura and Casitas with SWP

Demand	AF/Yr.
Casitas *	16,076
East Ventura	13,268
Ojai Valley **	9,830
Total	39,174
Supplies	AF/Yr.
Lake Casitas	20,840
Ventura Groundwater	15,062
Ojai Groundwater	9,830
SWP	7,200
Total	52,932
Surplus/Deficit	**13,758**

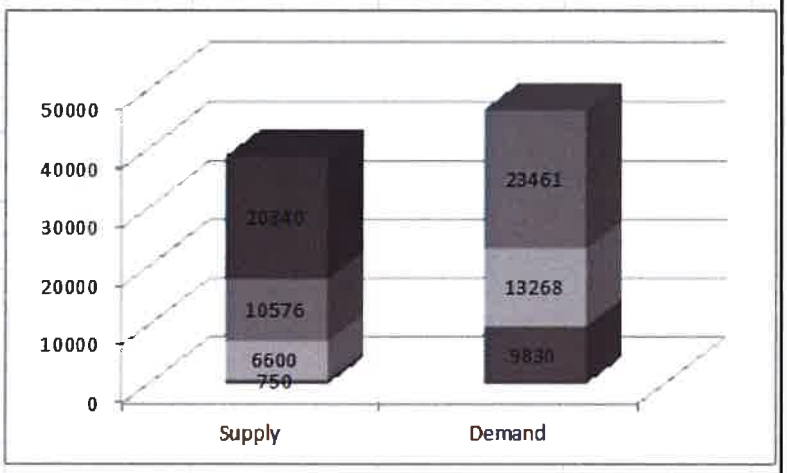


* Casitas customer water use
** Ojai area groundwater use
SWP allocation over past 12 years (48%)

Table – A-8

Combined
No Rationing
Dry Year
City of Ventura and Casitas with SWP

Demand	AF/Yr.
Casitas *	23,510
East Ventura	13,268
Ojai Valley **	9,830
Total	46,608
Supplies	AF/Yr.
Lake Casitas	20,840
Ventura Groundwater	10,576
Ojai Groundwater	6,600
SWP	750
Total	38,766
Surplus/Deficit	**(7,842)**



* Casitas customers water use
** Ojai area groundwater use
SWP allocation reduced 2014 level (5%)

Multi-purpose Pipeline System

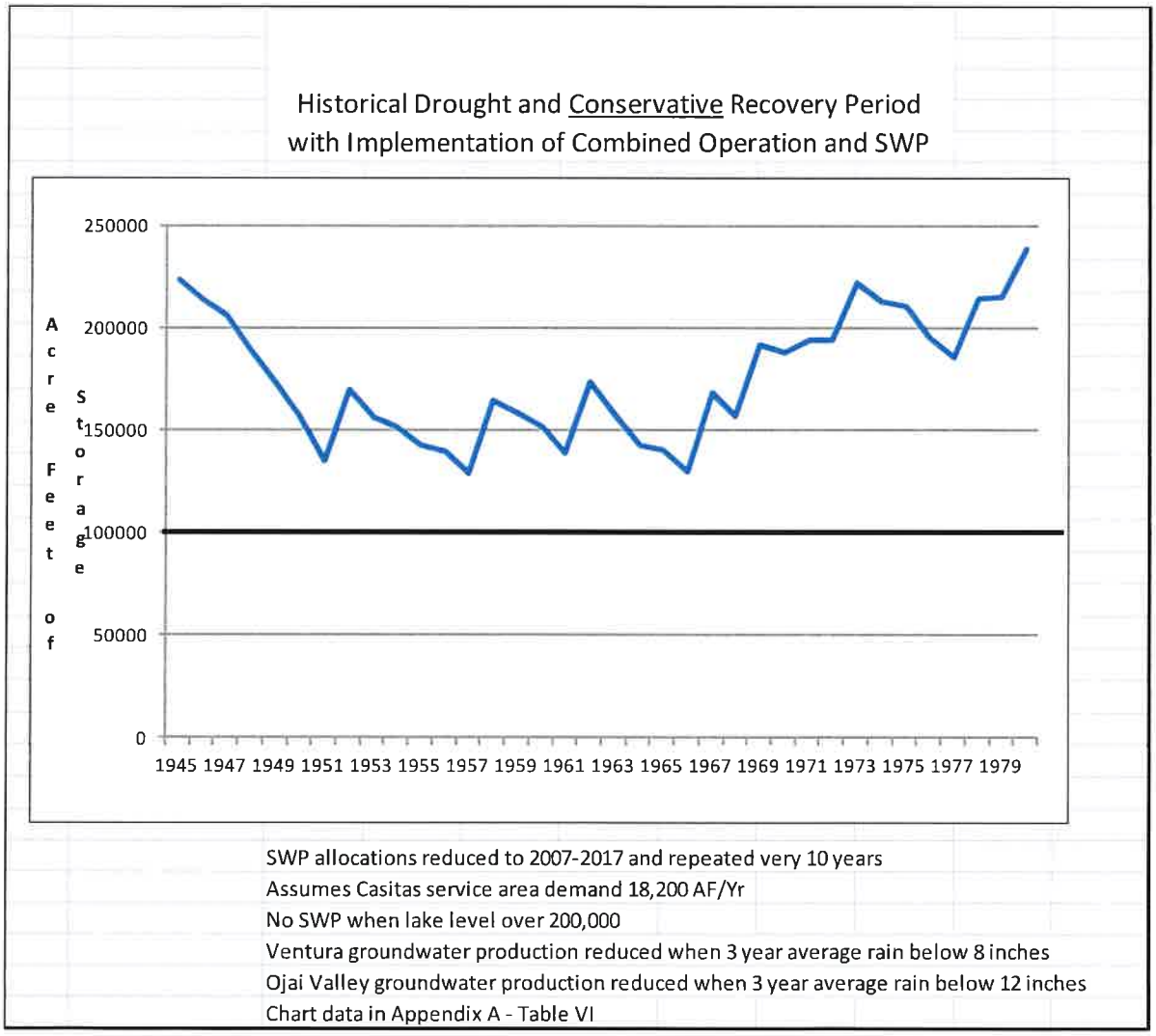
If Ventura and Casitas cooperatively utilized SWP water, east Ventura groundwater, Ventura River water and Ojai Basin water as their primary sources, Lake Casitas water could be reserved for dry periods and emergencies. With the appropriate pipeline network SWP water could be delivered to the east end of Ventura, blended with Ventura's groundwater and Ventura River water. Blended water could be transported through Ventura, satisfying all of the City's water needs. All surplus water could then be pumped into the Casitas pipeline system and used by Casitas customers. Ojai groundwater would continue to be used, as it has historically, to satisfy the water uses of the public and private well operations throughout the Ojai Valley. Casitas could then supplement any routine additional water use needs with lake water. Lake water would be the water source of "last resort ", reserving stored lake water for drought and emergencies.

During drought periods when groundwater supplies are reduced and SWP allocations are cut back, Lake Casitas water could be used as a backup for all of the water users in Ojai and Ventura.

Impact to Lake Casitas Storage

Applying the combined operating methodology to the conservative 35 year Drought and Recovery Period model illustrates the benefit to Lake Casitas storage over the period. Chart B-7 demonstrates that there would be no need for implementation of Casitas Stage 3-5 water reduction requirements. Lake levels would never fall below 125,000 AF of storage and the lake would refill by the end of the period.

Chart B-7



Over the 35 year period Ventura and Casitas combined would only use an average 5,635 AF per year from their combined allocation of 15,000. Ventura and Casitas combined would only use an average of 11,650 AF of water from Lake Casitas each year (see Appendix A – Table VI).

Feasibility of Combined Operations

Accessing SWP

Accomplishing a successful combined operation will require access to the SWP. Historically, Casitas and Ventura have contemplated plans to bring SWP to the west County. The closest access point is Lake Castaic , a SWP storage reservoir, in the Newhall area. The water is untreated and a delivery system would require, nearly 50 miles of pipeline as well as a treatment facility. The cost of such a project has only increased over the years. The projected annual water yield from this project has been reduced over the years because of SWP allocation cut backs. Consequently ultimate unit cost of accessing this water has made this alternative for accessing SWP economically infeasible.

Today, the most practical option for access to SWP is through MET and Calleguas. Susan Mulligan, General Manager of Calleguas, confirmed that each agency has surplus system capacity and each could transport treated water through their systems. Calleguas and Ventura are currently evaluating the construction of a pipeline to deliver Ventura's SWP allocation to the eastern end of the City. Exhibit A is the proposed pipeline alignment being considered. Casitas has also expressed some interest in participating in the project. However, a pipeline system from Calleguas to Ventura and beyond to the Casitas service area, combined with fees and charges for utilizing the MET and Calleguas, would be costly. And again, with the continued reductions in SWP allocations the cost/benefits may be marginal.

Partnering with Calleguas

However, if the pipelines and associated facilities needed to transport SWP to Ventura and Casitas were designed to be a regional interconnection between the east county and the west county it could serve multiple purposes and serve to benefit nearly all the residents of Ventura County. Callaguas, as discussed above, is actively seeking 30,000 AF of emergency storage to insure a supply in the event of a catastrophic interruption in their supply from MET. They are currently exploring very costly options, including desalination (Calleguas, 2017). To avoid the costs of projects like desalination, Calleguas may be willing to invest in a regional system capable of transporting water from SWP to Ventura and Casitas as well as transferring water from Lake Casitas to the eastern county in an emergency. In exchange Casitas could provide Callaguas with the 30,000 AF reserve supply they are seeking. All three agencies and the residents of all three service areas would benefit.

As illustrated in Chart B-7 Lake Casitas would maintain a minimum of over 125,000 AF of storage through the conservative 35 year drought and recovery period, with SWP water, and a combined

operation between Ventura and Casitas. Ample reserve storage could be maintained to both serve Ventura and Casitas' needs, as well as, Calleguas' emergency needs.

Emergency Water Reserves

Storing water in Lake Casitas for other water agencies and delivering water from other sources into the lake has been discussed on several occasions throughout Casitas' history. The issues that have always been of concern are the impacts to the lake's water quality and eco-system. Foreign waters are generally of poorer quality than Lake Casitas water. SWP and groundwaters have higher salt and mineral concentrations than lake water. Any foreign water delivered to the lake through a potable water system would contain disinfectants to protect human health; these disinfectants could upset the lake's eco-system.

Other concerns have been with the displacement of the lake's storage capacity. If foreign water is added to the lake there may be less available storage capacity during wet periods when storm waters, otherwise captured in the lake, would be lost. Casitas has in the past taken the position that in the event the lake spills all stored water spills first. Also lake water naturally evaporates. It has always been Casitas' position that stored water would be subject to routine depreciation by evaporation. Consequently, any attempt to invest in storing water by other agencies would be very risky. Their investment in the cost of delivering water into the lake, generally in the thousands of dollars per AF, could either be lost if the lake spills or over time be completely lost to evaporation.

This proposal does not require any water to be placed into the lake. Casitas would simply agree to reserve 30,000 AF of the lake's existing storage to lend Calleguas in an emergency. Charts B-7 above illustrates that lake storage levels never fall below 125,000 AF with the proposed combined operation and SWP water. In a worst-case scenario Casitas would have over 125,000 AF of water to provide Calleguas with an emergency supply and still meet 100% of Ventura's and Casitas' total water needs for several years. In exchange Calleguas could agree to hold a 30,000 AF credit for Casitas and Ventura for their future use. In the event there is an interruption in one or more of Ventura's or Casitas' water supplies they could call on the reserved credits from Calleguas as backup to local water supplies.

This arrangement would be similar to the monetary banking system. When a bank agrees to provide a line of credit, the bank and the borrower settle on pre-arranged terms and conditions. The bank, in this case Lake Casitas, and the borrower, Calleguas, agree to the maximum amount of the credit line (30,000 AF) and the terms of repayment in the event Calleguas withdraws funds (water). No money (water) changes hands until the borrower uses the line of credit. If Calleguas ever needs the money (water), Casitas agrees to deliver it from its reserves (Lake Casitas). The bank, Lake Casitas, is obligated to hold sufficient reserves to deliver the loan to Calleguas and satisfy all of its other obligations (Ventura and Ojai Valley).

Calleguas would not hold title to any of Casitas reserves, only an agreement to borrow. If Calleguas were to request the money (water), Casitas would deliver the money (water), and Calleguas would begin repaying the loan per the original agreement. A re-payment schedule would most likely be in installments that would allow Casitas to replenish its reserves over time. Once the money (water) is delivered to Calleguas, Casitas would now be entitled to repayment.

To compensate Casitas for the obligation of holding a reserve for Calleguas, Calleguas could agree to lend Casitas money (water) if needed. Again Calleguas would provide Casitas a line of credit with agreed terms and conditions. Casitas would not have title to the money (water) only an agreement to borrow the money (water) if necessary. Casitas would by agreement, either repay Calleguas, or simply credit Calleguas with a pre-payment on the loan Casitas has agreed to provide Calleguas sometime in the future. This arrangement could be maintained indefinitely without any money (water) changing hands. Each bank, or in this case each water agency, would have an agreed insurance policy, an insurance policy that would guarantee emergency loans based on pre-arranged terms and conditions.

Details of such an arrangement would require a negotiated agreement, but there may be significant benefits for all. Today's cost to obtain 30,000 AF of storage or a reserve credit of 30,000 AF stored out of the area, would be extraordinary. The most recent construction cost for surface water storage is from MET's Eastside Reservoir in Riverside County completed in 2002. The 800,000 AF capacity reservoir cost $1.9 billion or $2,375 per AF. Using MET's project as an example the value of 30,000 AF of storage, whether in Lake Casitas or held as a credit outside the area is over $70 million. In the alternative approach described above, each agency would realize 30,000 AF of storage, Calleguas in Lake Casitas; and Ventura and Casitas as credits from Calleguas (Water Technology, Inc, 2002).

System Description

The infrastructure needed to achieve this proposal would require the collective engineering resources of all three agencies to assure it meets their mutual needs. Basically, what would be required is a pipeline from Calleguas to the east end of Ventura. This portion of the project is already under review by Calleguas and Ventura. Exhibit A contains the general pipeline and route under consideration.

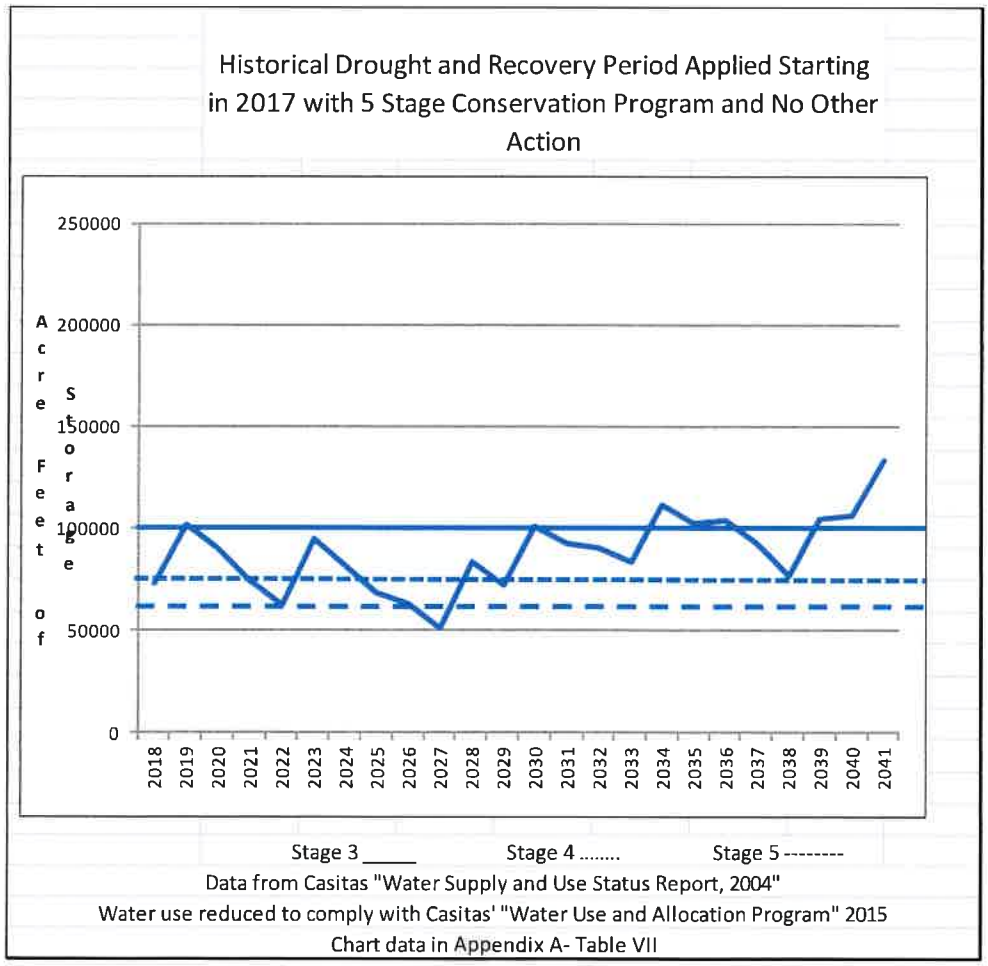
Additional pipelines would be required across Ventura on a route that would intersect with the City's groundwater sources and extend to approximately the Ventura Water Treatment Facility on the Ventura Avenue. The Ventura Water Treatment Plant is near Ventura River water sources and the existing Casitas transmission pipeline from Lake Casitas. At some point along the route a combination pump station and reducing station would be required to both lift water toward the Ojai Valley and return water to Ventura and Calleguas. The pump station would move water to a water storage tank that would be required somewhere around Casitas Dam. The storage tank could then supply the two existing Casitas pump stations that currently pump water from Lake

Casitas to the Rincon Pass area and into the Ojai Valley. Exhibit B is a rough illustration of the piping scheme.

Current Conditions

If this proposed concept could be implemented with a full Lake Casitas, there would be adequate time to explore an infinite number of possible alternatives and the proposed project could start with all of the benefits in place. Unfortunately, as of December 2017 the lake is at 35 % of storage, 83,000 AF. Even with moderate rainfall, Casitas and Ventura customers may be facing decades of water rationing if no action is taken. Today, Lake Casitas is near the year 1957 in the 35-year Drought and Recovery Period model. Chart B-8 illustrates the results of the model beginning today, 2017, with lake storage at 83,000 AF, through what would be the end of the model period 2040. Hopefully the area would receive more rain than the model projects. However, there is a real possibility that the Casitas service area would experience 11 years of Stage 3, 3 years of Stage 4, and 3 years of Stage 5 water reductions.

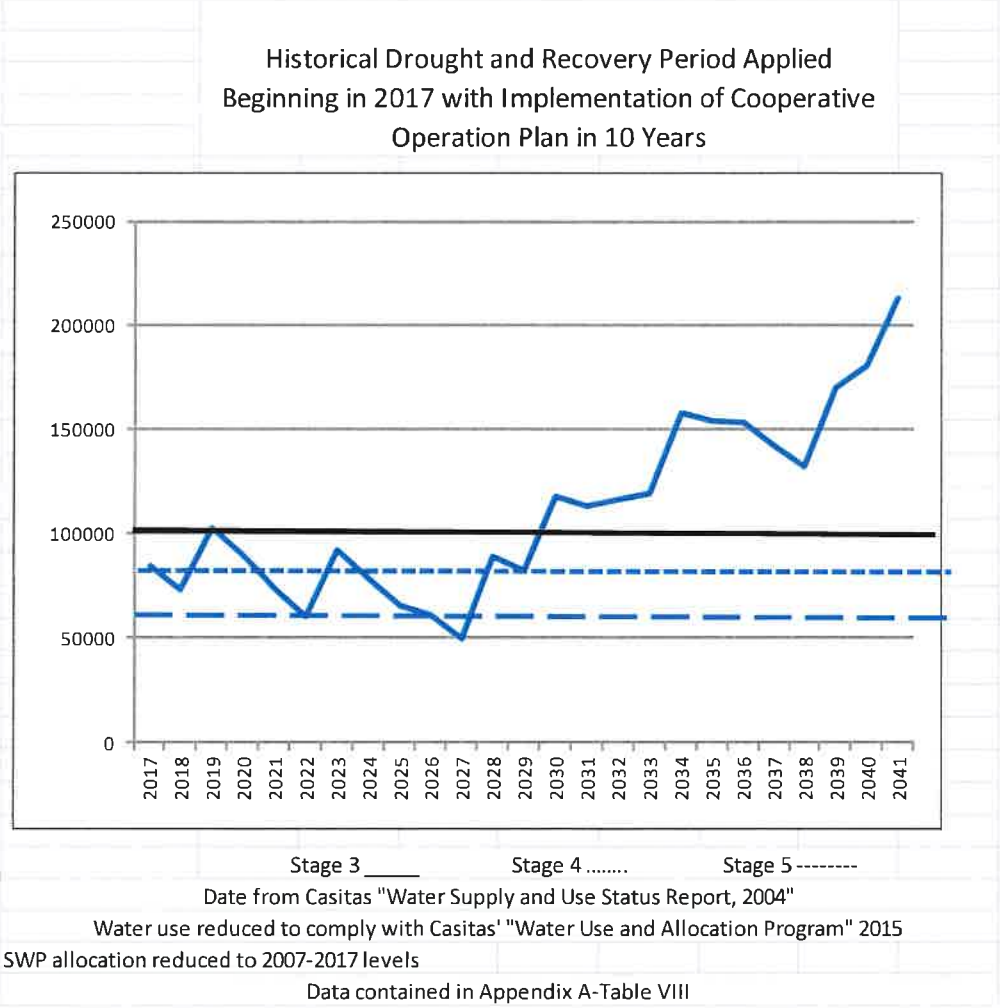
Chart B-8



No action may result in imposing 9 years of Stage 3 rationing (30% reductions), 5 years of Stage 4 rationing (40%) reductions, and 1 year of Stage 5 rationing (50% reductions) over the next 22 years. In the end the lake may only recover to 60% capacity.

If planning begins in 2018 on this proposed cooperative operation concept, there is no reason it could not be implemented in less than 10 years. Enough is at stake economically, environmentally, and for the general well being of the community to expedite the completion of this project. Chart B-9 illustrates how a successful cooperative operation of the County's water resources could solve future water shortage problems. If agreement was reached soon and plans for construction of needed infrastructure finalized, it may be possible to avoid the most drastic periods of water rationing with the knowledge that a better system is soon to be employed.

Chart B-9



Institutional Issues

The institutional issues may be more complex and difficult to overcome than any of the engineering issues related to this proposal. This proposal should not threaten each agency's autonomy, alter its service area, compromise its ownership and control of its facilities, prevent it from setting its own water rates, or interfere with its obligation to act in the best interest of its constituents. Through negotiated agreements this proposal could be designed to work for the best interests all of the residents of Ventura County. Capital cost sharing, equitable distribution of water costs, the conditions for holding and using emergency stored water, and general operating criteria can all be worked out by the three parties acting in good faith to achieve a mutually beneficial outcome.

When the agencies originally envisioned accessing SWP in the 1970's it was understood that some joint operational authority would be required to operate and administer the SWP facilities. This proposal could be operated similarly by forming a Joint Powers Authority (JPA) with representation from each agency to administer agreements, manage operations of the joint facilities, and resolve any future disputes. Such JPA organizations are not uncommon in the water industry.

What should not impair a good faith effort to explore the benefits of this proposal are disputes over agency territory, ownership of facilities or water rights. Each agency, rightfully, is protective of the assets it manages. It is doubtful that water customers of these agencies care about who delivers water, how it is delivered, or the origin of the water. Ventura county residents simply want a reliable water supply.

Timeline

Time required to implement this proposal is depended on the urgency with which each water authority acts. Designing and building the infrastructure is well within the abilities of all three agencies. The design, construction and start-up should easily be accomplished in a 2 to 3 year timeline. How long the community will have to wait for a solution will depend primarily on how long the three parties take to initially sit down and discuss the proposal, how long before they begin "good faith" negotiations, and how long they take to reach agreement. Considering the potential impacts to Ventura County and all three agencies constituents if no action is taken soon, one year to 18 months should be sufficient to reach agreement and begin the implementation phase of the project.

Cost/Benefits

This analysis and proposed cooperative operations concept provides an alternative solution to the County's water supply deficiencies that could save tens of millions of dollars in capital costs, that otherwise might be invested in attempts to operate independently. The annual costs of SWP

water could be spread among a much larger customer base, thereby reducing the burden on any one area. The pressure on local groundwater basins, particularly during times of drought could be dramatically reduced; preserving local water and protecting local resources. By blending groundwater with SWP and Casitas water the City of Ventura would have the opportunity to improve water quality throughout the City. Lake Casitas could enjoy higher average lake levels.

Most importantly, the future is impossible to predict. All of the individual water resources utilized today are at risk of being reduced because of environmental requirements, groundwater management issues, extended drought and climate change. The impacts of the most recent fires on the Lake Casitas watershed threaten the storage capacity of the lake. Heavy rain events may deposit large amounts of silt and reduce the amount of water that can be stored in the future. Pooling today's resources, and any new resources the water agencies are able to secure, is the only way to reduce the impacts of the threats to water supply. The value of having a pipeline that is connected to the entire State's water resources can open possibilities for future opportunities to secure new water supplies. The value of a storage facility like Lake Casitas, that holds a reliable reserve supply, could become one of the County's greatest assets.

The actual capital costs and operating costs to implement this concept are beyond the scope of this analysis and will require the expertise of the all of the agencies' engineers. However, the potential costs of chronic water shortages and decades of severe water rationing could seriously damage Ventura County's economy and dramatically reduce overall quality of life for its residents. It should be noted that the water customers of all three agencies are paying more and more, for less and less water each year.

Other Water Resource Alternatives

Calleguas, Casitas, and Ventura are all pursuing additional water supply alternatives. Calleguas is exploring additional groundwater storage, Casitas is investigating additional groundwater in the mountain region above Ojai, the Hobo project (Kear, 2017)) , and Ventura is planning to expand its production from the Ventura River (Ventura 2017). The Ojai Basin Groundwater Management Agency is reevaluating use of Ojai groundwater and a group has formed to evaluate the sustainability of the Upper Ventura River Basin. The success of any of these projects would only add to the benefits of a cooperative operation among Ventura, Casitas and Calleguas. These alternative projects should continue to be explored. However, none of these alternatives alone will solve the region's water supply problems.

Conclusion

This analysis demonstrates that ample water resources are available to Ventura County to avoid chronic water shortages and provide reserve supplies for emergencies. The residents of the

various areas of the County may live in one water service area, but many work and earn their livelihoods across all areas of the County. The County's economies are interconnected and no one water service area can thrive, if the others are suffering from water shortages. Therefore, the scope of the problem and the scope of potential solutions should be expanded broadly to secure a reliable water future for the entire region.

This analysis and proposal is not intended to be a comprehensive project description. It is a concept developed to provide those with the authority to resolve the water issues facing the County and, particularly the western portion of the County, with a concept that pools the regions collective resources for the benefit of all of the residents of Ventura County. Hopefully further development by the responsible agencies can begin, while there is still adequate time to act.

About the Water Advisory Group

On April 25, 2017, Larry Yee announced the formation of a Water Advisory Group (WAG) at the Ojai City Council Meeting. The purpose of this small 4-person group (Larry Yee, Rosalie Zabilla, Richard Hajas, Peter Thielke) was to analyze the growing water crisis situation in the Ojai Valley brought on by 5 straight years of drought and a seriously low-level Lake Casitas and to explore possible scenarios and solutions.

Acting like a quasi-think tank, WAG has met almost every other week since May and has carefully, deliberately studied and analyzed what is a rather complex and intricate history about the use and management of water in Ventura County with an emphasis on the Ojai Valley.

> ***Larry Yee** is Emeritus University of California Cooperative Extension Advisor having served as the director of the Ventura County office since 1986 retiring in 2008. In 2012 he was appoint by the Governor to the Los Angeles Regional Water Quality Control Board on which he presently serves. He is also the co-founder and past President of the Food Commons.*
>
> ***Rosalie Zabilla** has been a realtor in the Ojai Valley for over 13 years. She served as President of the Board of Realtors in 2016 and recently concluded a four year term as a member of the City of Ojai's Planning Commission.*
>
> ***Peter Thielke** is a retired teacher and currently is the President of the Senior Canyon Mutual Water Company that serves a portion of the Ojai Valley*
>
> ***Richard Hajas** has managed water resources in Ventura County for 40 years. He served as Assistant General Manager of Casitas Municipal Water District in the Ojai Valley and General Manager of Camrosa Water District in eastern Ventura County. He has been involved in planning, funding, designing, and building a variety of water resource projects in the county.*

Exhibits

Exhibit A

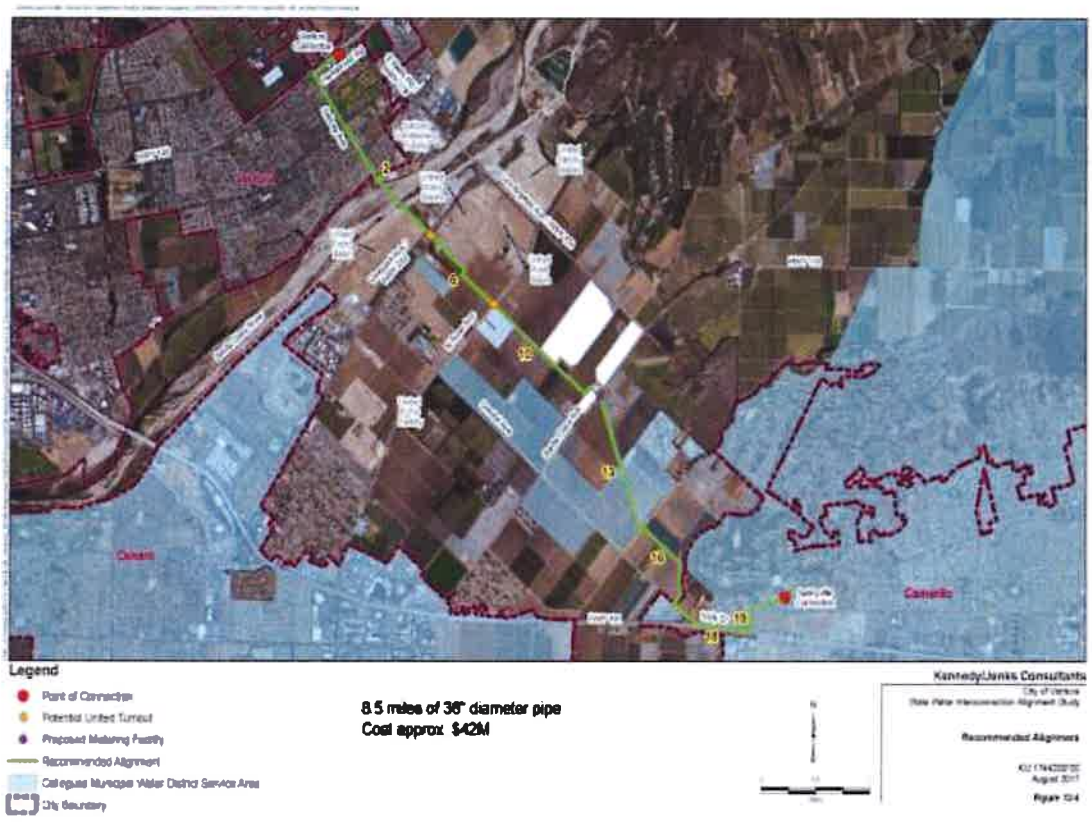


Exhibit B

Existing Casitas pipelines
Proposed pipeline
(Approximately 15 miles)
Pipeline to Calleguas
Pump plant – reducing station
Reservoir

Appendix A

Table I

Lake Casitas Safe Yield Applied to 1945-1965 Drought Period
Chart B-1

Historical Drought Period	Inflows Robles Diversion	Lake Tributaries	Evaporation Net loss	Lake Storage	Safe Yield Available Supply
1945	3852	6812	4711	223307	20840
1946	7560	3377	4529	209175	20840
1947	4376	2654	4255	191410	20840
1948	0	48	3901	167017	20840
1949	128	131	3537	143200	20840
1950	506	1378	3145	121399	20840
1951	0	89	2682	98266	20840
1952	25602	27231	3582	126976	20840
1953	1543	2270	2940	107310	20840
1954	2382	3520	2599	90073	20840
1955	128	703	2078	68286	20840
1956	2049	5792	1773	53814	20840
1957	1881	1008	1260	34902	20840
1958	48058	32125	3204	91341	20840
1959	3178	2909	2374	74515	20840
1960	183	936	1834	53411	20840
1961	61	150	1307	31775	20840
1962	21247	27154	2379	57256	20840
1963	974	2338	1554	38475	20840
1964	743	863	1029	18512	20840
1965	2928	4537	636	4801	20840

Values in acre feet

Data from December 7, 2004 CMWD Water Supply and Use Report - Table A4

Table II

Lake Casitas Safe Yield Applied to 1945-1965 Drought Period and 1966-1980 Recovery Period Chart B-2					
Historical	Inflows				
Drought	Robles	Lake	Evaporation	Lake	Safe Yield
Period	Diversion	Tributaries	Net loss	Storage	Available Supply
1945	3852	6812	4711	223307	20840
1946	7560	3377	4529	209175	20840
1947	4376	2654	4255	191410	20840
1948	0	48	3901	167017	20840
1949	128	131	3537	143200	20840
1950	506	1378	3145	121399	20840
1951	0	89	2682	98266	20840
1952	25602	27231	3582	126976	20840
1953	1543	2270	2940	107310	20840
1954	2382	3520	2599	90073	20840
1955	128	703	2078	68286	20840
1956	2049	5792	1773	53814	20840
1957	1881	1008	1260	34902	20840
1958	**48058**	**32125**	3204	91341	20840
1959	3178	2909	2374	74515	20840
1960	183	936	1834	53411	20840
1961	61	150	1307	31775	20840
1962	21247	27154	2379	57256	20840
1963	974	2338	1554	38475	20840
1964	743	863	1029	18512	20840
1965	2928	4537	636	4801	20840
1966	**31256**	**21289**	1387	37022	19775
1967	**36125**	**27285**	2437	78056	19775
1968	655	2392	1765	61296	19775
1969	**57871**	**78737**	4630	173461	19775
1970	4234	4662	3767	160696	19775
1971	7437	7225	3640	153876	19775
1972	4649	5394	3345	142637	19775
1973	**23855**	**33070**	4342	177592	19775
1974	4205	7417	3936	167422	19775
1975	8079	10670	3940	164412	19775
1976	2433	3239	3584	148531	19775
1977	334	1056	3164	128772	19775
1978	**56542**	**73222**	5366	236013	19775
1979	9971	11740	4872	235179	19775
1980	**13914**	**38299**	4892	238762	19775

1945-1965 data from December 7, 2004 CMWD Water Supply and Use Report - Table A4
1966-1980 data from December 7, 2004 CMWD Water Supply and Use Report - Table A8

Table III

Lake Casitas Safe Yield Analysis Applied to 1945-1965 Drought Period and 1966-1980 Recovery Period with Implementation of 5 Stage Conservation Program Chart B-3					
Historical Drought Period	Inflows Robles Diversion	Lake Tributaries	Evaporation Net loss	Lake Storage	Water Use Based on 5 Stage Program
1945	3852	6812	4711	223307	18200
1946	7560	3377	4529	209175	18200
1947	4376	2654	4255	191410	18200
1948	0	48	3901	167017	18200
1949	128	131	3537	143200	18200
1950	506	1378	3145	121399	18200
1951	0	89	2682	98266	18200
1952	25602	27231	3582	126976	18200
1953	1543	2270	2940	107310	18200
1954	2382	3520	2599	96025	**14588**
1955	128	703	2078	80190	**14588**
1956	2049	5792	1773	73754	**12504**
1957	1881	1008	1260	62879	**12504**
1958	**48058**	**32125**	3204	121658	18200
1959	3178	2909	2374	107171	18200
1960	183	936	1834	91868	**14588**
1961	61	150	1307	76184	**14588**
1962	21247	27154	2379	104006	18200
1963	974	2338	1554	91176	**14588**
1964	743	863	1029	77165	**14588**
1965	2928	4537	636	71490	**12504**
1966	**31256**	**21289**	1387	104448	18200
1967	**36125**	**27285**	2437	147221	18200
1968	655	2392	1765	130303	18200
1969	**57871**	**78737**	4630	244081	18200
1970	4234	4662	3767	231010	18200
1971	7437	7225	3640	223832	18200
1972	4649	5394	3345	212330	18200
1973	**23855**	**33070**	4342	246713	18200
1974	4205	7417	3936	236199	18200
1975	8079	10670	3940	232808	18200
1976	2433	3239	3584	216696	18200
1977	334	1056	3164	196722	18200
1978	**56542**	**73222**	5366	238000	18200
1979	9971	11740	4872	236639	18200
1980	**13914**	**38299**	4892	238000	18200

Stage 3 **Stage 4** **Stage 5**

1945-1965 data from December 7, 2004 CMWD Water Supply and Use Report - Table A4
Inflows in bold are rainfall years greater than 40 inches at Ojai Station
Evaporation losses 2.5% of storage based on average losses in above reports
Water use 2006-2017 actual from CMWD historic records
Projected water use, 2018-2041, based on CMWD 5 Stage Plan
(Water Efficiency and Allocation Program, June 10, 2015

Table IV

Lake Casitas Safe Yield Analysis Applied to 1945-1965 Drought Period and Conservative 1966-1980 Recovery Period with Implementation of 5 Stage Conservation Program Chart B-5

Historical Drought Period	Inflows Robles Diversion	Inflows Lake Tributaries	Evaporation Net loss	Lake Storage	Water Use Based on 5 Stage Program
1945	3852	6812	4711	223307	18200
1946	7560	3377	4529	209175	18200
1947	4376	2654	4255	191410	18200
1948	0	48	3901	167017	18200
1949	128	131	3537	143200	18200
1950	506	1378	3145	121399	18200
1951	0	89	2682	98266	18200
1952	25602	27231	3582	126976	18200
1953	1543	2270	2940	107310	18200
1954	2382	3520	2599	96025	14588
1955	128	703	2078	80190	14588
1956	2049	5792	1773	73754	12504
1957	1881	1008	1260	62879	12504
1958	48058	32125	3204	121658	18200
1959	3178	2909	2374	107171	18200
1960	183	936	1834	91868	14588
1961	61	150	1307	76184	14588
1962	21247	27154	2379	104006	18200
1963	974	2338	1554	91176	14588
1964	743	863	1029	77165	14588
1965	2928	4537	636	71490	12504
1966	**21247**	**27154**	1387	100304	18200
1967	**21247**	**27154**	2437	128068	18200
1968	655	2392	1765	111150	18200
1969	**21247**	**27154**	4630	136721	18200
1970	4234	4662	3767	123650	18200
1971	7437	7225	3640	116472	18200
1972	4649	5394	3345	104970	18200
1973	**21247**	**27154**	4342	130829	18200
1974	4205	7417	3936	120315	18200
1975	8079	10670	3940	116924	18200
1976	2433	3239	3584	100812	18200
1977	334	1056	3164	84450	14588
1978	**21247**	**27154**	5366	109285	18200
1979	9971	11740	4872	107924	18200
1980	**13914**	**38299**	4892	137045	18200

Stage 3	Stage 4 Stage 4	Stage 5 Stage 5

1945-1965 data from December 7, 2004 CMWD Water Supply and Use Report - Table A4
Evaporation losses 2.5% of storage based on average losses in above reports
Inflows in bold reduced to no greater than 1962
Projected water use, 2018-2041, based on CMWD 5 Stage Plan
(Water Efficiency and Allocation Program, June 10, 2015

Table V

Lake Casitas Safe Yield Applied to 1945-1965 Drought Period and a Conservative 1966-1980 Recovery Period with SWP and Implementation of 5 Stage Conservation Program Chart B-6							
Historical	Inflows to Lake				Available		5 Stage Plan
Drought Period	Robles Diversion	Lake Tributaries	Evaporation Net loss	SWP	Annual SWP Allotment	Lake Storage	Annual Water Use
1945	3852	6812	4711		60%	223307	18200
1946	7560	3377	4529	0	35%	211515	18200
1947	4376	2654	4255	2000	40%	198090	18200
1948	0	48	3901	2500	50%	178537	18200
1949	128	131	3537	4000	80%	161059	18200
1950	506	1378	3145	3250	65%	144848	18200
1951	0	89	2682	1750	35%	125805	18200
1952	25602	27231	3582	250	5%	157106	18200
1953	1543	2270	2940	1000	20%	140779	18200
1954	2382	3520	2599	3000	60%	128882	18200
1955	128	703	2078	3000	60%	112435	18200
1956	2049	5792	1773	3000	60%	103303	18200
1957	1881	1008	1260	1750	35%	92094	14588
1958	48058	32125	3204	2000	40%	152873	18200
1959	3178	2909	2374	2500	50%	140886	18200
1960	183	936	1834	4000	80%	125971	18200
1961	61	150	2519.42	3250	65%	108713	18200
1962	21247	27154	2174	1750	35%	138489	18200
1963	974	2338	2770	250	5%	121082	18200
1964	743	863	2422	1000	20%	103066	18200
1965	2928	4537	2061	3000	60%	96882	14588
1966	**21247**	**27154**	1938	3000	60%	128145	18200
1967	**21247**	**27154**	2563	3000	60%	158783	18200
1968	655	2392	3176	1750	35%	142204	18200
1969	**21247**	**27154**	2844	2000	40%	171561	18200
1970	4234	4662	3431	2500	50%	161326	18200
1971	7437	7225	3227	4000	80%	158562	18200
1972	4649	5394	3171	3250	65%	150483	18200
1973	**21247**	**27154**	3010	1750	35%	179425	18200
1974	4205	7417	3588	250	5%	169508	18200
1975	8079	10670	3390	1000	20%	167667	18200
1976	2433	3239	3353	3000	60%	154786	18200
1977	334	1056	3096	3000	60%	137880	18200
1978	**21247**	**27154**	2758	3000	60%	168323	18200
1979	9971	11740	3366	1750	35%	170218	18200
1980	13914	38299	3404	2000	40%	202827	18200

Inflows in bold are rainfall years greater than 5 year events

Stage 3 **Stage 4** **Stage 5**

1945-1965 data from December 7, 2004 CMWD Water Supply and Use Report - Table A4
Evaporation losses 2.5% of storage based on average losses in above reports
Inflows in bold reduced to no greater than 1962
SWP allocations based actual DWR reductions 2006-2017. Ten year period is repeated through 35 year model
Projected water use, 2018-2041, based on CMWD 5 Stage Plan (Water Efficiency and Allocation Program, June 10, 2015

Table VI

Historical Drought and Conservative Recovery Period with Combined Operation and SWP Chart B-7

Historical Drought Period	Inches of Rain Ventura Station	Inches of Rain Ojai Station	Inflows Diversion	Inflows Tributaries	Evaporation Net loss	Ventura Annual Groundwater Supply	Ojai Area Annual Groundwater Supply	Available Annual SWP Allotment	SWP	Water Supplied From Lake Casitas	Lake Storage	Ventura, Ojai Area and Casitas Combined Demand
1945	12.13	20.94	3852	6812	4711	15062	9830	60%	0		223307	41298
1946	8.67	18.69	7560	3377	4466	15062	9830	35%	0	16406	213372	41298
1947	9.02	12.01	4376	2654	4267	15062	9830	40%	6000	10406	205728	41298
1948	5.51	7.99	0	48	4115	10576	9830	50%	7500	13392	188270	41298
1949	5.85	10.8	128	131	3765	10576	6600	80%	12000	12122	172641	41298
1950	10.08	16.08	506	1378	3453	10576	6600	65%	9750	14372	156701	41298
1951	6.95	6.03	0	89	3134	10576	6600	35%	5250	18872	134784	41298
1952	23.78	36.44	25602	27231	2696	15062	9830	5%	750	15656	169265	41298
1953	9.8	13.01	1543	2270	3385	15062	9830	20%	3000	13406	156287	41298
1954	13.17	18.32	2382	3520	3126	15062	9830	60%	9000	7406	151657	41298
1955	12.54	15.94	128	703	3033	15062	9830	60%	9000	7406	142049	41298
1956	14.99	15.87	2049	5792	2841	15062	9830	60%	9000	7406	139643	41298
1957	9.13	14.17	1881	1008	2793	15062	9830	35%	5250	11156	128583	41298
1958	25.65	37.42	21247	27154	2572	15062	9830	40%	6000	10406	164006	41298
1959	6.75	11.65	3178	2909	3280	15062	9830	50%	7500	8906	157907	41298
1960	11.03	12.16	183	936	3158	15062	9830	80%	12000	4406	151462	41298
1961	6.51	9.12	61	150	3029	15062	6600	65%	9750	9886	138758	41298
1962	23.25	29.11	21247	27154	2775	15062	9830	35%	5250	11156	173228	41298
1963	11.52	16.09	974	2338	3465	15062	9830	5%	750	15656	157419	41298
1964	8.7	12.79	743	863	3148	15062	9830	20%	3000	13406	142471	41298
1965	13.65	17.23	2928	4537	2849	15062	9830	60%	9000	7406	139680	41298
1966	12.33	25.14	0	0	2794	15062	9830	60%	9000	7406	129481	41298
1967	14.9	29.87	21247	27154	2590	15062	9830	60%	9000	7406	167886	41298
1968	13.01	13.63	655	2392	3358	15062	9830	35%	5250	11156	156419	41298
1969	22.31	46.06	21247	27154	3128	15062	9830	40%	6000	10406	191286	41298
1970	10.98	14.6	4234	4662	3826	15062	9830	50%	7500	8906	187450	41298
1971	14.52	20.02	7437	7225	3749	15062	9830	80%	12000	4406	193957	41298
1972	7.33	15.14	4649	5394	3879	15062	9830	65%	9750	6656	193465	41298
1973	19.49	42.06	21247	27154	3869	15062	9830	35%	0	16406	221591	41298
1974	15.3	19.87	4205	7417	4432	15062	9830	5%	0	16406	212375	41298
1975	15.42	21.72	8079	10670	4247	15062	9830	20%	0	16406	210470	41298
1976	12.34	18.76	2433	3239	4209	15062	9830	60%	0	16406	195527	41298
1977	9.54	12.04	334	1056	3911	15062	9830	60%	9000	7406	185601	41298
1978	33.56	47.57	21247	27154	3712	15062	9830	60%	0	16406	213884	41298
1979	18.59	25.36	9971	11740	4278	15062	9830	35%	0	16406	214911	41298
1980	24.67	30.77	21247	27154	4298	15062	9830	40%	0	16406	238000	41298
					Average annual SWP water use and Lake water use				5,636	11,652		

1945-1965 data from December 7, 2004 CMWD Water Supply and Use Report - Table A4
Evaporation losses 2.5% of storage based on average losses in above reports
Inflows in bold reduced to no greater than 1962
SWP allocations based actual DWR reductions 2006-2017. Ten year period is repeated through 35 year model
Ventura supply reduced when 3 consecutive rain fall years are below an average of 8 inches- Ventura Station
Ojai groundwater supply reduced when 3 consecutive rain fall years are below an average of 12 inches- Ojai Station
Water use from (Casitas, 2015) and (Ventura, 2017)
No SWP water used when lake storage above 200,000 AF

Table VII

Historical Drought and Recovery Period Applied Starting in 2017 with 5 Stage Conservation Program and No Other Action Chart B-8						
	Historical	Flow into Lake				
Future Years	Drought Period	Diversion AF	Tributaries AF	Net loss from Evaporation	Lake Storage in AF	Casitas Water Use
2017	1956				84490	
2018	1957	1881	1008	2112	72763	12504
2019	1958	21247	27154	1819	101145	18200
2020	1959	3178	2909	2529	90115	14588
2021	1960	183	936	2253	74393	14588
2022	1961	61	150	1860	62324	10420
2023	1962	21247	27154	1558	94579	14588
2024	1963	974	2338	2364	80939	14588
2025	1964	743	863	2023	67933	12588
2026	1965	2928	4537	1698	63160	10540
2027	1966	0	0	1579	51041	10540
2028	1967	21247	27154	1276	83578	14588
2029	1968	655	2392	2089	72031	12504
2030	1969	21247	27154	1801	100432	18200
2031	1970	4234	4662	2511	92229	14588
2032	1971	7437	7225	2306	89997	14588
2033	1972	4649	5394	2250	83202	14588
2034	1973	21247	27154	2080	111323	18200
2035	1974	4205	7417	2783	101962	18200
2036	1975	8079	10670	2549	103574	14588
2037	1976	2433	3239	2589	92069	14588
2038	1977	334	1056	2302	76569	14588
2039	1978	21247	27154	1914	104856	18200
2040	1979	9971	11740	2621	105745	18200
2041	1980	21247	27154	2644	133303	18200

Stage 3 **Stage 4** **Stage 5**

1957-1965 data from December 7, 2004 CMWD Water Supply and Use Report - Table A4

Projected water use, 2018-2041, based on CMWD 5 Stage Plan
(Water Efficiency and Allocation Program, June 10, 2015)
Inflows based rainfall years no greater than 1962
Losses are 2.5% of each years storage equal to the average losses from total storage in Casitas'
2004 Water Supply and Use Report, Tables 4 and 8

Table VIII

Historical Drought and Recovery Period Applied Beginning in 2017 with Implementation of Cooperative Operation Plan in 10 Years Chart B-9

Future Years	Historical Period	Rain Ventura	Rain Ojai	Flow into Lake Diversion AF	Tributaries AF	Net Loss AF	Ventura Water Supply AF	Ojai Groundwater	% of Available SWP	SWP AF	Water Used From Lake	Lake Storage AF	Combinded Water Use Beginning in 10 Years
2017	1956	14.99	15.87	2049	5792	0			60%			84490	14588
2018	1957	9.13	14.17	1881	1008	2112			60%			72763	12504
2019	1958	25.65	37.42	21247	27154	1819			35%			102639	16706
2020	1959	6.75	11.65	3178	2909	2566			40%			89454	16706
2021	1960	11.03	12.16	183	936	2236			50%			73748	14588
2022	1961	6.51	9.12	61	150	1844			80%			59612	12504
2023	1962	23.25	29.11	21247	27154	1490			65%		14588	91934	14588
2024	1963	11.52	16.09	974	2338	2298			35%		14588	78360	14588
2025	1964	8.7	12.79	743	863	1959			5%		12504	65503	12504
2026	1965	13.65	17.23	2928	4537	1638			20%		10400	60930	10400
2027	1966	12.33	25.14	0	0	1523			60%		10400	49007	10400
2028	1967	14.9	29.87	21247	27154	1225	15062	9830	60%	9000	17236	88777	41298
2029	1968	13.01	13.63	655	2392	2219	15062	9830	60%	9000	17236	82199	41298
2030	1969	22.31	46.06	21247	27154	2055	15062	9830	35%	5250	20986	117389	41298
2031	1970	10.98	14.6	4234	4662	2935	15062	9830	40%	6000	20236	112944	41298
2032	1971	14.52	20.02	7437	7225	2824	15062	9830	50%	7500	18736	115876	41298
2033	1972	7.33	15.14	4649	5394	2897	15062	9830	80%	12000	14236	118616	41298
2034	1973	19.49	42.06	21247	27154	2965	15062	9830	65%	9750	16486	157396	41298
2035	1974	15.3	19.87	4205	7417	3935	15062	9830	35%	5250	20986	153927	41298
2036	1975	15.42	21.72	8079	10670	3848	15062	9830	5%	750	25486	153172	41298
2037	1976	12.34	18.76	2433	3239	3829	15062	9830	20%	3000	23236	141609	41298
2038	1977	9.54	12.04	334	1056	3540	15062	9830	60%	9000	17236	132052	41298
2039	1978	33.56	47.57	21247	27154	3301	15062	9830	60%	9000	17236	169746	41298
2040	1979	18.59	25.36	9971	11740	4244	15062	9830	60%	9000	17236	179807	41298
2041	1980	24.67	30.77	21247	27154	4495	15062	9830	35%	5250	20986	212557	41298

Stage 3 Stage 4 Stage 5

Projected water use, 2018-2041, based on CMWD 5 Stage Plan (Water Efficiency and Allocation Program, June 10, 2015)
Inflows based rainfall years no greater than 1962
Losses are 2.5% of each years storage equal to the average losses from total storage in Casitas' 2004 Water Supply and Use Report, Tables 4 and 8
Ventura water supply from Ventura's 2017 Comprehensive Water Supply and Demand Report
SWP allocation percnetages based on actual allocation reductions 2006 through 2017 Redcutions period is repeated through 2040
Projected supplemental water required from lake each year
Combined water use begins in 2028 based on average Casitas water use from 2006-2017 and Ventura project water use from 2017 Supply and Demand Report

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