

## **UPPER VENTURA RIVER GROUNDWATER AGENCY**

### **NOTICE OF REGULAR MEETING**

**NOTICE IS HEREBY GIVEN** that the Upper Ventura River Groundwater Agency (“Agency”) Board of Directors (“Board”) will hold a **Regular Board Meeting at 1 P.M. on Thursday, September 13, 2018 at the Casitas Municipal Water District Meeting Room, 1055 Ventura Ave., Oak View California 93022.**

### **UPPER VENTURA RIVER GROUNDWATER AGENCY BOARD OF DIRECTORS** **REGULAR MEETING AGENDA**

**September 13, 2018**

#### **1. MEETING CALL TO ORDER AND ROLL CALL**

#### **2. PLEDGE OF ALLEGIANCE**

#### **3. PUBLIC COMMENT FOR ITEMS NOT APPEARING ON THE AGENDA**

The Board will receive public comments on items not appearing on the agenda and within the subject matter jurisdiction of the Agency. The Board will not enter into a detailed discussion or take any action on any items presented during public comments. Such items may only be referred to the Executive Director or other staff for administrative action or scheduled on a subsequent agenda for discussion. Persons wishing to speak on specific agenda items should do so at the time specified for those items. The presiding Chair shall limit public comments to three minutes.

#### **4. CONSENT ITEMS**

- a. Approve Minutes from July 12, 2018**
- b. Approve Financial Report for July 2018**
- c. Approve Financial Report for August 2018**
- d. Approve Outstanding Invoices**

#### **5. DIRECTOR ANNOUNCEMENTS**

#### **6. GSP PROJECT MANAGER REPORT**

#### **7. GSP ACTION ITEMS**

##### **a. GSP Task 1 – Monitoring and Data Collection Protocols Revision**

The Board will consider approving a revision to the procedures for conducting high frequency readings for visual surface water flow observations recommended based on findings from initial monitoring activities.

##### **b. GSP Task 1 – Data Quality Control Review Procedures**

The Board will consider approving this document prepared by the GSP Project Manager, which establishes procedures Agency staff and consultants working for

the Agency will follow when performing data quality control review of groundwater and surface water data.

**c. GSP Task 2.1 – Groundwater Monitoring Network**

The Board will receive an update on groundwater levels and consider receiving and filing the first annual data logger report. The Board will also consider approving professional services to explore expanding the groundwater monitoring network.

**d. GSP Task 3.1 - Technical Advisory Committee Discussion**

The Board will discuss whether to pursue formation of a technical advisory committee and provide direction to staff.

**8. OTHER ACTION ITEMS**

**a. Fiscal Year 2017/2018 Budget**

The Board will receive a year-end budget report from the Ad Hoc Budget Committee and will consider approving budget adjustments.

**b. Multi-Year Budget**

The Board will discuss a draft multi-year budget and operating reserves recommendation prepared by the Ad Hoc Budget Committee and provide feedback to the committee.

**c. Comment Letter for Geologic Analysis of Ventura River Watershed - State Water Resources Control Board Study Plan for the Development of an Integrated Groundwater-Surface Water Model of the Ventura River Watershed**

The Board will consider authorizing the GSP PM to prepare written comments on the geologic analysis for signature by the Board Chair.

**d. Staffing Discussion**

The Board will discuss the executive director duties and different possible approaches for servicing the duties.

**9. COMMITTEE REPORT**

**a. Ad Hoc Funding Options Committee**

The committee will provide an update on its progress toward developing funding options recommendations.

**b. Ad Hoc Stakeholder Engagement Committee**

The committee will provide an update on implementation of the Stakeholder Engagement Plan.

**10. EXECUTIVE DIRECTOR'S REPORT**

**11. ADJOURNMENT**

The next scheduled Board meeting will be on October 11, 2018 at 1pm at the Casitas Municipal Water District Meeting Room, 1055 Ventura Ave, Oak View, CA 93022

**UPPER VENTURA RIVER GROUNDWATER AGENCY  
MINUTES OF REGULAR MEETING JULY 12, 2018**

The Board meeting was held at Casitas Municipal Water Districts meeting room at 1055 Ventura Avenue, Oak View, CA 93022. Directors present were: Bruce Kuebler, Glenn Shephard, Diana Engle, Kevin Brown, Emily Ayala and Larry Rose. Director Mary Bergen was absent. Also present were: Executive Director Cece Vandermeer, Attorney Jena Acos, and GSP Project Manager Bryan Bondy. Public present were; Mike Hollebrands, Bert Rapp, Jennifer Tribo and Jordan Kear.

**1) CALL TO ORDER-** Chairperson Bruce Kuebler called the meeting to order at 1:00 P.M.

**2) PLEDGE OF ALLEGIANCE** – Led by Chairperson Bruce Kuebler.

**3) PUBLIC COMMENTS ON ITEMS NOT APPEARING ON THE AGENDA** – None

**4) CONSENT ITEMS**

**a. Approve Minutes from June 14, 2018**

Director Engle moved to receive and file the June 14, 2018 minutes with the correction on Item 5 from “CMWD was criticized for its delay” to “CMWD was criticized by some audience members for a perceived delay “. Seconded by Director Brown.

Ayes: Bruce Kuebler, Diana Engle, Kevin Brown, Larry Rose and Emily Ayala. Shephard abstained because he was not in attendance at the June 14,, 2018 Board Meeting. Absent: Mary Bergen.

**b. Approve Financial Report for June 2018**

Vandermeer presented the Financial Report June 2018. Chair Kuebler motioned to approve the Financial Report for June 2018. Seconded by Director Shephard.

Ayes: Bruce Kuebler, Glenn Shephard, Diana Engle, Kevin Brown, Larry Rose and Emily Ayala.  
Absent: Mary Bergen

**c. Approve Outstanding Invoices for June 2018**

Vandermeer presented the report on the June 2018 outstanding invoices for approval. Chair Kuebler stated that he thought that the outstanding invoices would be in the agenda packet for review. After brief discussion, Attorney Acos suggested that further discussion on the process for approval of checks and approval of warrants should be in Item 8(a) of the agenda. Chair Kuebler reported that he and Director Bergen reviewed the invoices prior to the board meeting and recommended approval. Director Shephard motioned to approve the outstanding invoices for June 2018. Seconded by Ayala.

Ayes: Bruce Kuebler, Glenn Shephard, Diana Engle, Kevin Brown, Larry Rose and Emily Ayala.  
Absent: Mary Bergen

**5) DIRECTOR ANNOUNCEMENTS**

Director Brown reported that he briefed the Ventura City Council on potable water reuse and State Water Project interconnection and that Ventura is opposing DWR's proposed priority change for Lower Ventura River Basin from very low to medium.

Director Ayala reported that it is trying times for farmers and the last heat wave was hard on avocado trees and imposing additional fees at this time was not a good idea.

Director Shephard reported that the Watershed Protection District approved Casitas' 2018 SWP allocation to San Geronimo Pass Water Agency.

Director Kuebler mentioned the SWRCB is seeking to consolidate one of Santa Barbara Channelkeeper's against it with two similar cases dealing with the Clean Water Act. Neither Ventura or Channelkeeper have amended their complaints.

## **6) GSP PROJECT MANAGER COMMENTS**

Bryan Bondy reported that he met with Director Engle and Jordan Kear regarding GSP Task 2.2. Bondy contacted Lorraine Walter regarding helping to write the GSP and she declined. Regarding the Grant status, Bondy noted that he is working on schedules and budget updates and is basically waiting for DWR to begin negotiations on the agreement. It will probably take four to seven months before the grant agreement is finalized. Kuebler asked Bondy and Acos to review DWR's grant agreement in preparation for negotiations

## **7) GSP ACTION ITEMS**

### **a. GSP Task 1- Data Quality Control Review (Time: 1:22 to 2:11 pm)**

Bondy went over his staff report and stated that SGMA does not have QA & QC for data quality control and he would work with this document regarding how and where data quality control review fits into the GSP development process. The Board discussed the Draft UVRGA Data Quality Control Review Procedure. Director Engle noted that flow measurements can have significant variables so it is important to have good documentation and raw data should be an attachment to any flow report. A section should be included to describe how outside data will be evaluated, such as from labs, volunteers, and resource agencies. There was a question about whether data review prior to being entered in Data Management System would be public and Acos that it should occur at staff level. Selection of the data reviewed will be handled as part of GSP flow.

No public comments.

The Board directed staff to bring this item back to next board meeting for approval.

### **b. GSP Task 2.2- Update on Surface Water-Groundwater Study (a.k.a. Wet-Dry Interface Monitoring) (Time: 2:11 to 2:28 pm)**

The Board received an update on the surface water – groundwater interface monitoring task.

On June 22, Director Engle, Bondy and Kear did a field visit to evaluate whether 24-hour or daytime high frequency surveys of the edge of surface flow would be done. Directors supported Kear's approach to do a dawn to dusk survey to help identify diurnal variations in movement of the wet/dry interface. Kear plans to do the survey in the next two weeks. Kear reported he looked at the City of Ventura's proposed five additional monitoring wells and did a quick prioritization. Additional evaluations will be done.

No Public Comments

**c. GSP Task 3.1 – Technical Advisory Committee Discussion (2:28 to 3:09 pm)**

Bondy went through his staff report covering several options for an advisory committee. After discussion, there was no consensus on the timing and structure of such a committee. Directors will discuss the issues with their member agencies/stakeholders and the Board will have further discussions at the September meeting.

No public comment.

**d. GSP Task 3.1 – Fee Consultant (3:09 to 3:15 pm)**

Kuebler summarized the Ad Hoc Funding Options Committee work to select a consultant. Three proposals were evaluated and the Committee unanimously recommended hiring Hildebrand. Acos supported that. The contract would be between Brownstein and Hildebrand because of potential attorney client privilege issues. In response to a question from Director Engle, there will be no Brownstein markup for administering the contract.

No public comment.

Director Shephard motioned to authorize legal counsel to enter into a contract with Mark Hildebrand on behalf of the Agency for \$19,000.00 plus the additional costs to undertake a GSA fee survey and hold a stakeholder workshop within the basin. Seconded by Brown.

Ayes: Bruce Kuebler, Glenn Shephard, Diana Engle, Kevin Brown, Larry Rose and Emily Ayala.  
Absent: Mary Bergen.

**8) OTHER ACTION ITEMS**

**a. Policy Re: Signature of Checks and Approval of Warrants**

The Board discussed considered adopting Resolution 2018-4 Designating Check Signing Authority and Establishing Invoice Review Procedures.

Chair Kuebler asked if the board wanted to have the invoices included in the agenda packet. The consensus among directors was to not have the invoices included. Directors who have signing authority will review the invoices and the invoices would be available for review by any director if there are any questions.

No public comment.

Director Rose motioned to approve Resolution 2018-4 Designating Check Signing Authority and Establishing Invoice Review Procedures. Seconded by Engle.

Ayes: Bruce Kuebler, Glenn Shephard, Diana Engle, Kevin Brown, Larry Rose and Emily Ayala.  
Absent: Mary Bergen.

**b. Support Letter for Bureau of Reclamation Assistance**

The Board considered a request from the City of Ventura for a letter from the Agency supporting the City's application for assistance to plan, design and construct an innovative water recycling project under the Title XVI Program.

Director Ayala requested businesses be added to the letter as benefitting. Director Rose expressed concern about treated water being exported from the Ventura River watershed. Kuebler offered to make those changes.

No public comment.

Director Rose motioned to approve the letter with the suggested changes to be made by Kuebler. Seconded by Shephard.

Ayes: Bruce Kuebler, Glenn Shephard, Diana Engle, Larry Rose and Emily Ayala. Brown  
Abstained Absent: Mary Bergen.

Director Ayala excused herself and left the meeting at 3:35.

## **9) COMMITTEE REPORT**

### **a. Ad Hoc Stakeholder Engagement Committee**

Director Rose stated that the Ad Hoc Stakeholder Engagement Committee will be meeting July 16. He presented a matrix showing opportunities for stakeholder engagement throughout the GSP process.

## **10) EXECUTIVE DIRECTOR'S REPORT**

- 11) ADJOURNMENT** – The meeting was adjourned at 3:36 pm. The next regular Board meeting will be August 9, 2018 at 1:00 pm at the Casitas Municipal Water District Meeting Room, 1055 Ventura Ave., Oak View, CA 93022.

Action: \_\_\_\_\_

Motion: \_\_\_\_\_ 2<sup>nd</sup>: \_\_\_\_\_

B. Kuebler\_\_ M. Bergen\_\_ G. Shephard\_\_ D. Engle\_\_ K. Brown\_\_ L. Rose\_\_ E. Ayala\_\_

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30

**BOARD OF DIRECTORS**

**UPPER VENTURA RIVER GROUNDWATER AGENCY**

**RESOLUTION NO. 2018-4**

**A RESOLUTION OF THE UPPER VENTURA RIVER GROUNDWATER AGENCY  
(AGENCY) DESIGNATING CHECK SIGNING AUTHORITY AND ESTABLISHING  
INVOICE REVIEW PROCEDURES**

**WHEREAS**, Article 7.2 of the Bylaws of the Agency requires the Board of Directors (Board) to approve all warrants and authorize issuance of checks in payment thereof; and,

**WHEREAS**, Article 4.4 authorizes the Board of the Agency to direct the actions of the Executive Director; and,

**WHEREAS**, Article 4.10 authorizes the Board of the Agency to hire and engage a consultant to serve as the GSP Project Manager for the purpose of assisting in the preparation and implementation of a Groundwater Sustainability Plan (GSP); and,

**WHEREAS**, the Agency executed a professional services agreement with Bondy Groundwater Consulting, Inc. on August 25, 2017 to perform the GSP Project Manager duties; and,

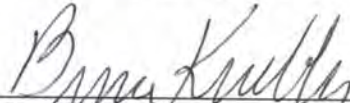
**WHEREAS**, the Board did thoroughly discuss and determine need for GSP Project Manager review of warrants for consultant and other GSP-related expenses at its July 12, 2018.

**NOW, THEREFORE**, the Board of Directors of the Upper Ventura River Groundwater Agency does hereby resolve, find, determine and order as follows:

Article 7.2 of the Bylaws is hereby repealed in its entirety and replaced as follows:

7.2 Signature of Checks and Approval of Warrants. The Chair, Vice-Chair, and Secretary shall have authority to sign checks on behalf of the Agency. Following GSP Project Manager review of all warrants for consultant and other GSP-related expenses, other than those warrants submitted by the GSP Project Manager, the Board shall approve all warrants and authorize issuance of checks in payment thereof. Two of the three board members with check signing authority shall review all of the GSP Project Manager's warrants prior to submitting them for Board approval. Checks for payment of utility bills, postage, payroll, payroll taxes, credit union collections, petty cash, emergency repairs, invoices subject to discount and interfund transfers, and similar payments may be disbursed prior to Board approval; such items shall be presented to the Board at its next meeting.

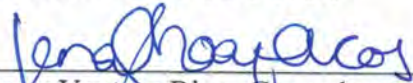
1 PASSED, APPROVED, AND ADOPTED this 12th day of July, 2018.

2   
3 Bruce Kuebler, Board Chair  
4

5 ATTEST:

6   
7  
8 Cece Vandermeer  
9 Executive Director

10 APPROVED AS TO FORM

11   
12 Upper Ventura River Groundwater Agency  
13 General Counsel  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30





P.O. Box 1779, Ojai, CA 93024  
(805) 640-1207

July 16, 2018

The Honorable Brenda Burman  
Commissioner  
U.S. Bureau of Reclamation  
U.S. Department of the Interior  
1849 C Street, N.W.  
Washington, D.C. 20240

Dear Commissioner Burman:

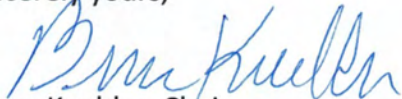
On May 30, 2018, the U.S. Bureau of Reclamation announced that a number of sponsors of water recycling projects successfully completed feasibility studies and met the criteria of the Title XVI Program demonstrating the feasibility of a project to provide sustainable water supplies. I am pleased the City of San Buenaventura (City of Ventura) was included in the list of project sponsors eligible for federal assistance to plan, design and construct an innovative water recycling project under the authorities provided in the WIIN Act. I strongly support the City of Ventura's application for federal assistance and hope that your office will positively review the application for assistance.

The City of Ventura's proposed project is critical to the Ventura River Watershed and the region's environmental protection and economic sustainability given the fact that its water supply is wholly reliant on local sources. It will provide a safe and reliable water supply to the more than 112,000 residents and businesses within their service area and ensure compliance with water quality mandates identified as part of a settlement agreement. Under the feasibility study, the City's objectives focus on expanding recycled water for the purpose of offsetting potable uses, recharging groundwater basins, and creating wetlands that would serve as a public amenity and environmental enhancement to the community.

In 2015-16, the City unveiled a potable reuse demonstration facility to gather site specific data on the performance of purification facilities and to provide a platform for public outreach and education. The facility included a system of multiple barriers (treatment components) and extensive testing to prove the performance of the system in meeting all drinking water goals as well as potable reuse goals for pathogen and pollutant removal. The facility exceeded expectations and more than met all the water quality goals as well as provided an opportunity for the public to come and see the technology. Based on the positive outcomes of the demonstration, the City is now proceeding forward with implementation of this project.

Again, I strongly support the City of Ventura's application for federal assistance. I look forward to learning of USBR's review and decision on the proposed project's request for assistance. If you have any questions, please contact me at (805) 649-3050.

Sincerely yours,



Bruce Kuebler, Chair

Upper Ventura River Groundwater Agency

Cc: City of Ventura



# Upper Ventura River Groundwater Agency Stakeholder Engagement Plan Implementation Tool

7/11/2018 Draft

- SGMA Requirement
- UVRGA Stakeholder Plan
- UVRGA Project Management Plan
- ✕ Member Directors
- ✓ Executive Director
- ☆ Project Manager

[illegible]

**UPPER VENTURA RIVER GROUNDWATER AGENCY Item No. 4(b)**

**DATE:** September 13, 2018  
**TO:** Board of Directors  
**FROM:** Cece Vandermeer, Executive Director  
**SUBJECT:** Approve Financial Report for July 2018

---

June Bank Balance: \$71,739.45

**JULY 2018 ACTIVITY:****Revenues:**

City of Ventura	\$25,000.00
CMWD	25,000.00
MOWD	<u>25,000.00</u>
Total Received	\$75,000.00

**July Expenditures Paid:**

Auto	Wells Fargo	Bank Service Charge	48.99
On line	IRS	Payroll tax 940 YE 2017	87.01
On line	EDD	Payroll tax St 2 <sup>nd</sup> Qtr	198.61
On line	IRS	Payroll tax Fed 941	971.12
On line	IRS	Payroll tax Fed 940	22.15
1100	SDRMA	Liability Insurance	1,748.66
1101	SDRMA	Worker's Comp Ins	1,045.00
1102	OBGMA	Office Share Expense 7/18	735.78
1103	Cece Vandermeer	Medical 7/18	150.00
1104	Amanda Loretto	Office Support 7/18	49.56
1105	Cece Vandermeer	Payroll 7/18	1,499.31
1108	VOID		-0-
1109	CSDA	Membership Dues	<u>1,039.00</u>

Total Expenditures Paid July 2018 \$ 7,595.19

July Warrants Pending Approval 12,136.07

July Ending Bank Balance \$127,008.19

Action: \_\_\_\_\_

Motion: \_\_\_\_\_ Second: \_\_\_\_\_

B. Kuebler\_\_\_\_ M. Bergen\_\_\_\_ G. Shephard\_\_\_\_ D. Engle\_\_\_\_ K. Brown\_\_\_\_ L. Rose\_\_\_\_ E. Ayala\_\_\_\_

**UPPER VENTURA RIVER GROUNDWATER AGENCY Item No. 4(c)**

**DATE:** September 13, 2018  
**TO:** Board of Directors  
**FROM:** Cece Vandermeer, Executive Director  
**SUBJECT:** Approve Financial Report for August 2018

---

July Bank Balance: \$127,008.19

**AUGUST 2018 ACTIVITY:**

Revenues:

County of Ventura	\$25,000.00
VRWD	25,000.00
Employment Development Dept. P/R Tax refund	84.36
<b>Total Received</b>	<b>\$50,084.36</b>

Expenditures Paid:

1111	Hayman Consulting	Quickbooks Set up	510.00
1112	OBGMA	Office Share Expense 8/18	489.96
1113	Cece Vandermeer	Medical 8/18	150.00
1114	Amanda Loretto	Office Support 8/18	42.47
1115	Cece Vandermeer	Payroll 8/18	1,116.24
1118	Ventura River WD	Repay 2017/18 FY	799.85

Total Expenditures Paid August 2018 \$ 3,108.52

August Warrants Pending Approval 11,182.66

August Ending Bank Balance \$162,801.37

Action: \_\_\_\_\_

Motion: \_\_\_\_\_ Second: \_\_\_\_\_

B. Kuebler\_\_\_ M. Bergen\_\_\_ G. Shephard\_\_\_ D. Engle\_\_\_ K. Brown\_\_\_ L. Rose\_\_\_ E. Ayala\_\_\_

**UPPER VENTURA RIVER GROUNDWATER AGENCY Item 4(d)**

**DATE:** September 13, 2018  
**TO:** Board of Directors  
**FROM:** Cece Vandermeer, Executive Director  
**SUBJECT:** Approve Outstanding Invoices For July and August

---

Expenditures for Approval for July 2018:

1106	Brownstein Hyatt Farber & Schreck July 2018 Invoice	5,178.33
1107	Kear Groundwater July 2018 Invoice	1,640.00
1110	Bondy Groundwater July 2018 Invoice	5,317.74

Total Expenditures for Approval for July 2018	\$ 12,136.07
---	--------------

Expenditures for Approval for August 2018:

1116	Bondy Groundwater August 2018 Invoice	4,972.70
1117	Kear Groundwater August 2018 Invoice	2,888.00
1119	Hildebrand Consulting, LLC August 2018 Invoice	3,321.96

Total Expenditures for Approval for August	\$11,182.66
--	-------------

Action: \_\_\_\_\_

Motion: \_\_\_\_\_ Second: \_\_\_\_\_

B. Kuebler\_\_\_\_ M. Bergen\_\_\_\_ G. Shephard\_\_\_\_ D. Engle\_\_\_\_ K. Brown\_\_\_\_ L. Rose\_\_\_\_ E. Ayala\_\_\_\_

## **UPPER VENTURA RIVER GROUNDWATER AGENCY Item No. 7(a)**

**DATE:** September 13, 2018

**TO:** Board of Directors

**FROM:** Agency Staff

**SUBJECT:** GSP Task 1 – Monitoring and Data Collection Protocols Revision

### **SUMMARY**

The Monitoring and Data Collection Protocols require 24-hour high-frequency survey(s) to assess variability in the location of active flow at the north edge of the live reach. The purpose of the high-frequency survey(s) is to determine an appropriate time of day for the weekly surveys. As discussed during the July 12, 2018 Board meeting, an initial dawn-to-dusk high frequency survey was scheduled to evaluate whether a full 24-hour survey(s) is necessary. The dawn-to-dusk survey was recently completed. Movement of the edge of flow was nearly imperceptible during the survey. The lack of movement suggests that 24-hour surveys are not necessary for the purpose of determining an appropriate time of day for the weekly surveys. Staff recommends that any future high-frequency surveys be performed during daylight hours and that the Monitoring and Data Collection Protocols be updated to reflect this procedural change.

### **RECOMMENDED ACTION**

It is recommended that the Board approve the revisions to the Monitoring and Data Collection Protocols attached hereto.

### **BACKGROUND**

The Monitoring and Data Collection Protocols call for augmentation of the weekly surveys of active flow at the north edge of the live reach with at least at least one high-frequency survey for the purpose of determining an appropriate time of day for the weekly surveys.

On June 22, Director Engle and GSP PM Bondy accompanied Kear Groundwater on the weekly field visit to evaluate, among other things, whether 24-hour or daytime high frequency surveys of the edge of surface flow should be performed. Based on the field visit and discussions between Director Engle, GSP PM Bondy, and Jordan Kear, it was recommended that an initial dawn-to-dusk survey be completed instead of a 24-hr survey due to safety concerns and anticipated difficulty in seeing the edge of flow at night. Results of the daytime survey would be evaluated and a final decision would be made whether to forgo the 24-hr surveys and update the Monitoring and Data Collection Protocols. On July 12, 2018 the Board was briefed on these recommendations and concurred.

The dawn-to-dusk high frequency survey was recently completed and movement of the north edge of the live reach was nearly imperceptible, certainly less than the error range of the GPS device used to record the locations.

## **FISCAL SUMMARY**

It is estimated that changing the procedures will save the Agency approximately \$6,000 on GSP Task 2.2. These savings will be realized during fiscal years 18/19 and 19/20.

## **ATTACHMENTS**

A. Proposed Edits to Monitoring and Data Collection Protocols (affected pages only)

Action: \_\_\_\_\_

Motion: \_\_\_\_\_ Second: \_\_\_\_\_

B. Kuebler\_\_\_\_ M. Bergen\_\_\_\_ G. Shephard\_\_\_\_ D. Engle\_\_\_\_ K. Brown\_\_\_\_ L. Rose\_\_\_\_ E. Ayala\_\_\_\_



**UVRGA**

## **MONITORING AND DATA COLLECTION PROTOCOLS**

**UPDATED AND ADOPTED ~~5-10-18~~** \_\_\_\_\_

## Item 7a, Attachment A - September 13, 2018

When locating the northern edge of the gaining reach, daylighting groundwater is typically anticipated to be north of the confluence of the Ventura River with San Antonio Creek. Most traverses will commence from the OVLC Confluence Preserve and work northward. During drier periods the assumed perennial flow would be over an outcrop of bedrock in the river just south of Casitas Vista Bridge. Under such conditions, traverses would commence at Foster Park. During wetter periods, the traverses will commence at Santa Ana Road bridge over the river.

### High Frequency Readings

Owing to the potential for diurnal variability in the location of the Ventura River's north edge of the live reach, the weekly surveys should be augmented with at least one high-frequency survey to assess variability in the location of the active flow starting point throughout a ~~twenty-four hour dawn-to-dusk~~ period that may be resulting from diurnal cycles in evapotranspiration and pumping. The results of the high-frequency survey(s) will be used to identify the optimal time of the day for the weekly monitoring, with the goal of ensuring consistent and representative observations.

The proper time for high-frequency surveys are after the full cross-basin flow has ceased, and the Robles reach has become dry (typically by late spring or early summer). This is to be a combination tape survey, pressure-logger and GPS based survey or the migration of the northern edge of the live reach when it is in a conveniently measureable location (e.g., just south of Santa Ana Road). At a convenient time, personnel will track and map the north edge of surface flow and map (via GPS and tape, as well as a datalogger in the downstream portion that will be saturated throughout this survey time period) to ~~observe-monitor for~~ diurnal fluctuations ~~during up to a 24-hour period~~.

The typical survey shall consist of monitoring during ~~up to a 24-hour period, minimum daylight hours~~, with a full-time observer placed near the northern edge of daylighting groundwater. Equipment may include field note book, GPS unit, 300-ft long fiberglass tape with decimal feet gradations, timepiece, telephone, camera, whistle, headlamps, shade structure, chair, and food/drinking water supplies. Upon arrival to the designated point, the observer shall lay out the 300-ft tape with half (0-150 ft) in the submerged portion of the river and half upstream (150 to 300 ft) in the dry portion at the time of arrival. The datalogger shall be set in a flowing portion of the river downstream of the "0" mark on the tape where flow is anticipated to be continuous throughout the survey. The logger shall be placed on the stream bed, and weighted with cobbles to ensure stationarity throughout the survey. Its GPS position shall be recorded in the field notes.

The observer shall record at 10-minute intervals:

- Time of observation
- Footage reading on fiberglass tape at time
- Latitude of daylighting point
- Longitude of daylighting point
- Temperature of daylighting water

Following the survey, the following data will be compiled:

- Flow at Casitas Vista Bridge  
[https://waterdata.usgs.gov/nwis/uv?site\\_no=11118500](https://waterdata.usgs.gov/nwis/uv?site_no=11118500)
- Flow at Matilija Creek near Matilija Hot Springs  
[https://waterdata.usgs.gov/nwis/uv?site\\_no=11114495](https://waterdata.usgs.gov/nwis/uv?site_no=11114495)

**UPPER VENTURA RIVER GROUNDWATER AGENCY Item No. 7(b)**

**DATE:** September 13, 2018

**TO:** Board of Directors

**FROM:** Agency Staff

**SUBJECT:** GSP Task 1 – Data Quality Control Review Procedures

**SUMMARY**

The Data Quality Control Review Procedures document has been updated based on feedback from the public and Board of Directors received on July 12, 2018.

**RECOMMENDED ACTION**

It is recommended that the Board adopt the Data Quality Control Review Procedures document, attached hereto.

**BACKGROUND**

During its June 14, 2018 discussion of options for a data quality control review process, the Board reached as consensus for implementing data quality control review as part of the GSP workflow under the direction of the GSP PM.

The GSP PM presented a draft Data Quality Control Review Procedures document during the July 12, 2018 Board of Directors meeting and received comments from the public and the Board. A final draft of the document was prepared to address the comments.

**FISCAL SUMMARY**

It is estimated that implementation of the data quality control review process will add approximately \$10,000 to \$20,000 to the GSP development costs, depending on the amount of data that ultimately requires review.

**ATTACHMENTS**

A. Final Draft UVRGA Data Quality Control Review Procedure

Action: \_\_\_\_\_

Motion: \_\_\_\_\_ Second: \_\_\_\_\_

B. Kuebler\_\_\_\_ M. Bergen\_\_\_\_ G. Shephard\_\_\_\_ D. Engle\_\_\_\_ K. Brown\_\_\_\_ L. Rose\_\_\_\_ E. Ayala\_\_\_\_

**FINAL DRAFT VERSION ~~12, 6-30-18~~ 7-30-18**

**UVRGA**

**DATA QUALITY CONTROL REVIEW PROCEDURES**

**ADOPTED \_\_\_\_\_**

**Contents**

Introduction ..... 3

    Relationship to GSP Monitoring Network Requirements..... 3

Applicability ..... 4

Data Reviewer Qualifications ..... 4

Data Quality Control Review ..... 4

    Review Procedures for Data Collected by UVRGA..... 4

    Review Procedures for Data Collected by other Entities..... 6

    Review Documentation ..... 7

## Introduction

This document describes the procedures that Upper Ventura River Groundwater Agency (UVRGA) staff and consultants will follow when performing data quality control review of groundwater and surface water data collected within the Upper Ventura River Basin (UVRB) and surrounding areas within the Ventura River watershed for use in the Groundwater Sustainability Plan (GSP). Implementation of these procedures is intended to ensure data used in the GSP is credible, as required pursuant to GSP Emergency Regulations §351(h). This document may require updates to address additional types of data, as needed (e.g. biological data concerning groundwater dependent ecosystems). The procedures contained in this document are adapted from United States Geological Survey (USGS) data review procedures.

Data quality control review will be performed prior to data entry into the GSP data management system (DMS) and/or data use for GSP preparation. During its June 14, 2018 discussion of options for a data quality control review process, the Board reached as consensus for implementing data quality control review as part of the GSP workflow under the direction of the GSP PM. Thus, the GSP PM will be responsible for ensuring data is reviewed prior to use in the GSP.

## Relationship to GSP Monitoring Network Requirements

Pursuant to Subarticle 4 of the GSP Emergency Regulations, the GSP must include a monitoring network that includes monitoring objectives, monitoring protocols, and data reporting requirements. Suggested practices for developing the monitoring network are provided in Department of Water Resources (DWR's) Best Management Practice (BMP) titled *Monitoring Networks and Identification of Data Gaps*, dated December 2016.

The required components of the monitoring network are:

1. Monitoring Objectives: The GSP must include a description of the monitoring network objectives for the basin, which will be developed in conjunction with the sustainable management criteria during the planning process. In general, the network will need to be capable of capturing data on a sufficient temporal frequency and spatial distribution to demonstrate short-term, seasonal, and long-term trends in basin conditions for each of the sustainability indicators, and provide enough information to evaluate GSP implementation. DWR's monitoring network and monitoring protocols BMPs suggest using the Data Quality Objective (DQO) process laid out in the U.S. EPA Guidance on Systematic Planning Using the Data Quality Objectives Process to develop the DQOs. One of the last steps in the DQO process is to determine what quality the data must have to achieve the monitoring objectives.
2. Monitoring Protocols: UVRGA adopted the Monitoring and Data Collection Protocols on May 10, 2018.
3. Data Reporting Requirements: Pursuant to GSP Emergency Regulations § 354.40, the Agency must store monitoring data in a data management system (DMS) that is capable of storing and reporting information relevant to the development or implementation of the GSP and monitoring of the basin. Monitoring data must be included in the required annual reports and submitted electronically on forms provided by DWR. The data management system will be created during the GSP development.

Data quality control is not explicitly required by the GSP Emergency Regulations but is mentioned in the BMP summary of the suggested EPA DQO process (see Monitoring Network Component No. 1). One of the last steps in the suggested in the BMP is to “Specify performance or acceptance criteria – Determine what quality the data must have to achieve the objective and provide some assurance that the analysis is accurate and reliable.” DWR suggests that the data performance or acceptance criteria be defined relative to the quantitative measurable objectives and minimum thresholds for each applicable sustainability indicator that will be included in the GSP.

## Applicability

The data review procedures contained in this document shall be applied to all data stored in the UVRGA DMS, regardless of the data source and regardless of whether the data is ultimately utilized to develop the GSP. Data shall be reviewed prior to storage in the DMS and/or use in developing the GSP. Data obtained from the USGS shall be considered to have met already the requirements of this section without further review, provided any USGS data qualifiers are included in the DMS (e.g. provisional status, etc.).

## Data Reviewer Qualifications

An overarching requirement of SGMA is for all personnel to be fully trained and working under the supervision of a California Professional Geologist, Certified Hydrogeologist, or Professional Civil Engineer (herein referred to as the “responsible professional”). Additionally, the USGS requires that data reviewers be experienced in working with the particular type of data being reviewed and possess the expertise and tools to access and assess both the data and associated metadata.

## Data Quality Control Review

The following data quality control review procedures are adapted from the USGS Data Review Checklist [https://www2.usgs.gov/datamanagement/documents/DataReviewChecklist\\_2014.pdf](https://www2.usgs.gov/datamanagement/documents/DataReviewChecklist_2014.pdf). Language taken directly from the USGS checklist is indicated by italic font.

Prior to storing data in the DMS or using data for GSP purposes, data and associated metadata shall be approved by a data reviewer. Review is necessary to ensure that the data are well documented and are complete, consistent, accurate, and precise as needed to achieve the goals for which they were created. Data review may be carried out by one or more qualified reviewers, but reviewers will need to examine both data and metadata in order to understand the data and to ensure that the metadata accurately describe the data. To maintain objectivity, reviewers should not be chosen from the people who collected the data. Following review, the data, metadata, and data quality control review results should be loaded into the DMS.

## **Review Procedures for Data Collected by UVRGA**

The review procedures consist of implementing the USGS Data Review Checklist.

*Data releases require a minimum of one review of the data and one review of the accompanying metadata. The special focus of the data reviewer is the accuracy, completeness, and usability of a data product. The following checklist is provided for the assistance of data reviewers who are experienced in working with the particular type of data being reviewed. It is assumed that data reviewers have the expertise and tools to*

## Item 7b, Attachment A - September 13, 2018

*access and assess both the data and the metadata, and are familiar with standard practices within the relevant discipline.*

*In some cases, it will be unreasonable to actually check every data value, so a spot check or a check of a carefully selected sample may need to suffice. In this case, the data review report should indicate that a spot check or selected sample was examined.*

*A data review should consider the following:*

- *Are the data what the author says they are?*
- *Are data values reasonable? Do they meet specifications for quality, accuracy, and completeness as identified by both the author and the approving official? This might include specific checks such as:*
  - *Are they in a valid range for that measurement?*
  - *Do they display seasonal or daily trends that are expected? Is there consistency between adjacent or otherwise related datasets, within the product?*
  - *Are the geographic locations given for the data reasonable?*
  - *Is the accuracy claimed for the data reasonable?*
  - *Are data anomalies or gaps explained in the metadata? Are “no data” values accurately defined?*
  - *Do analysis values add up? (where applicable)*
- *Consider any other requirements.*
  - Other requirements include but are not limited the following:
    - Adherence to UVRGA’s Monitoring and Data Colleciton Protocols (which satisfies GSP Emergency Regulations § 352.2)
    - GSP Emergency Regulations § 352.4 Reporting Standards, which will be appropriately documented in the metadata:
      - Units:
        - Water volumes shall be reported in acre-feet.
        - Surface water flow shall be reported in cubic feet per second
        - Groundwater flow shall be reported in acre-feet per year.



Item 7b, Attachment A - September 13, 2018

- Units and Accuracy:
  - Field measurements of elevations of groundwater, surface water, and land surface shall be measured and reported in feet to an accuracy of at least 0.1 feet relative to NAVD88, or another national standard that is convertible to NAVD88, and the method of measurement described.
  - Reference point elevations shall be measured and reported in feet to an accuracy of at least 0.5 feet, or the best available information, relative to NAVD88, or another national standard that is convertible to NAVD88, and the method of measurement described.
  - Geographic locations shall be reported in GPS coordinates by latitude and longitude in decimal degree to five decimal places, to a minimum accuracy of 30 feet, relative to NAD83, or another national standard that is convertible to NAD83.
- Monitoring sites shall include the following information:
  - A unique site identification number and narrative description of the site location (for wells – CASGEM well identification number if available);
  - A description of the type of monitoring, type of measurement taken, and monitoring frequency; and
  - Location, elevation of the ground surface, and identification and description of the reference point.

**Review Procedures for Data Collected by other Entities**

In accordance with SGMA requirements, UVRGA will rely on the best available information and science to prepare the GSP, which likely result in the utilization of data collected by other entities. To ensure data collected by other entities is credible (GSP Emergency Regulations § 351(h)), the above-listed procedures for reviewing data collected by UVRGA will be followed to the maximum extent practicable. Because other entities are not obligated to following UVRGA's Monitoring and Data Collection Protocols, the data reviewer will take additional steps to review documentation of the data collection procedures. The reviewer will also consider whether the data was collected under the supervision of a licensed professional geologist or engineer.

## Review Documentation

The data reviewer shall document the data quality control review results using the following DMS database fields:

- Reviewer – Name of the ~~data reviewer~~ responsible licensed professional
- Review\_Date – Date of review
- Review\_Batch – A unique identifier that will be assigned to all records in a particular data review batch (the identifier will be linked to a separate database table that provides batch documentation)
- Review\_Result – The data review result:
  - Approved – data approved without condition
  - Qualified – data approved for use with caution or with data use limitation(s)
  - Rejected – data not approved for GSP use<sup>1</sup>
- Review\_Flag – A code that describes the reason for qualified or rejected status (applies only to qualified or rejected data)
- Review\_Comment – Optional field, used as needed to provide information deemed relevant by reviewer, e.g. elaborate on reason for qualified or rejected status

---

<sup>1</sup> Care should be taken to not reject data that has value if properly qualified.

**UPPER VENTURA RIVER GROUNDWATER AGENCY Item No. 7(c)**

**DATE:** September 13, 2018

**TO:** Board of Directors

**FROM:** Agency Staff

**SUBJECT:** GSP Task 2.1 – Groundwater Monitoring Network

**SUMMARY**

Pursuant to the GSP Task 2.1 requirements, the first annual data logger report has been prepared by Kear Groundwater and reviewed by the GSP PM (Attachment A). The report presents groundwater level data collected in six wells during Spring 2017 through Summer 2018.

The City of Ventura has expressed concerns about the density of groundwater monitoring locations in the basin and has provided suggestions for potential additional monitoring wells (Attachment B). In response to the City's concerns, the GSP PM completed an independent review of the groundwater monitoring network and has identified five areas that could benefit from additional monitoring with data loggers (four areas in alluvium plus bedrock monitoring). Existing wells have been identified in each alluvial area that could potentially be added to the monitoring program. Well owners would need to be contacted for access and the wells would need to be evaluated for data logger accessibility. Staff proposes that the GSP PM work with Chair Kuebler to secure permission from well owners for new monitoring sites and evaluate accessibility for monitoring equipment, in consultation with Kear Groundwater.

Staff proposes that the Board authorize professional services covering the remainder of Task 2.1, including installation of barometric logging devices, which are required by the Agency's Monitoring and Data Collection Protocols. The proposed professional services also include an optional task with unit rates for incorporating any new wells into the monitoring network.

**RECOMMENDED ACTION**

It is recommended that the Board:

- (1) Receive a presentation by Kear Groundwater on Spring 2017 through Summer 2018 groundwater levels;
- (2) Receive and file the first annual data logger report;
- (3) Receive an update from the GSP PM concerning his evaluation of the groundwater level monitoring network and recommendations for potential additional monitoring locations;
- (4) Direct the Board Chair to approve as-needed professional services to pursue access for additional monitoring wells and evaluate wells for monitoring equipment accessibility;

(5) Approve professional services for Task 2.1 as follows:

- a. Summer 2018 through May 2020 groundwater level monitoring: \$3,200;
- b. Two annual data logger reports: \$8,000;
- c. Add barometric logging at up to three locations: \$1,999; and
- d. Add up to eight wells to the groundwater level monitoring and reporting program under Task 2.1 for a fee of \$2,533 per well, with new locations to be approved by the GSP PM.

## **BACKGROUND**

### Task 2.1 Groundwater Level Monitoring

GSP Task 2.1 includes continuous monitoring of groundwater levels and temperature via data loggers installed in six wells located throughout the basin. Continuous monitoring is necessary to better understand historical records, which were only based on bi-monthly or quarterly data. Pursuant to UVRGA's grant application, annual data logger reports are to be prepared and are a required grant deliverable. The first annual report is included in Attachment A.

The Agency's Monitoring and Data Collection Protocols requires groundwater level data be corrected for fluctuations in barometric pressure. Barometric pressure fluctuation effects are relative small and are not a concern for background monitoring, but may be significant when groundwater level data are used in more focused studies (e.g. pump tests or correlating groundwater level changes with local pumping, evapotranspiration, etc.). To ensure consistency with the Agency's Monitoring and Data Collection Protocols and provide the highest quality data possible, barometric loggers should be installed to provide data for the barometric fluctuation corrections.

### Groundwater Level Monitoring Network Evaluation

During the May 10, 2018 Board of Directors meeting, the City of Ventura expressed concerns about the density of groundwater monitoring locations in the basin. The City also provided a list of five wells that were suggested for potential inclusion in the monitoring program (Attachment B).

In response to the City's concerns, the GSP PM completed an independent review of the existing monitoring program. This review identified five areas that could benefit from additional monitoring using data loggers (four areas in alluvium plus bedrock monitoring). Existing wells were identified in each alluvial area that could potentially be added to the monitoring program. Additional evaluation is needed to identify potential bedrock monitoring wells. Details are provided in the tables and figure included in Attachment C.

Well owners would need to be contacted for permission and the wells would need to be evaluated for data logger accessibility. The Board is asked to consider approving professional

services to incorporate up to eight new wells into the groundwater level monitoring network (up to five alluvial wells and up to three bedrock wells).

### **FISCAL SUMMARY**

Evaluating options for expanding the groundwater level monitoring network would add an estimated \$5,000 to \$10,000 to the FY 18/19 budget. Costs could be reduced if one or more Board member(s) takes the lead on contacting well owners to seek permission for monitoring.

Adding new wells to the monitoring network would increase GSP Task 2.1 costs by \$2,533 per well. These costs would be incurred during fiscal years 18/19 and 19/20.

### **ATTACHMENTS**

- A. Task 2.1 Data Logger Annual Report
- B. City of Ventura List of Potential Wells for Additional Monitoring
- C. Groundwater Level Monitoring Network Evaluation Map and Tables
- D. Kear Groundwater Proposal for Ongoing Task 2.1 Services

Action: \_\_\_\_\_

Motion: \_\_\_\_\_ Second: \_\_\_\_\_

B. Kuebler\_\_\_\_ M. Bergen\_\_\_\_ G. Shephard\_\_\_\_ D. Engle\_\_\_\_ K. Brown\_\_\_\_ L. Rose\_\_\_\_ E. Ayala\_\_\_\_



KG16-0313

TO: Bryan Bondy  
UVRGA GSP Manager

FROM: Kear Groundwater  
P.O. Box 2601  
Santa Barbara, CA 93120-2601

DATE: July 29, 2018

SUBJECT: *Report of Groundwater Level and Temperature data, spring 2017 to summer 2018*  
*Upper Ventura River Groundwater Basin*  
*Ventura County, California*

This memorandum provides a summary of Kear Groundwater's (KG) data collection, summarization and review of groundwater level and temperature logging of six wells in the Upper Ventura River Groundwater Basin. This effort is a streamlined reporting to support the Upper Ventura River Groundwater Agency (UVRGA) and its data gap analysis tasks in preparation of a groundwater sustainability plan for the managed basin.

The network of six monitoring points, selected by UVRGA board members and their agencies' staffs in early 2017 contributes to Task 2, with the objective to fill data gaps, including improved characterization of the hydrogeologic conditions to serve groundwater planning and management activities. Specifically, this report addresses Task 2.1 – Establish and analyze data from well monitoring network.

In April and May of 2017, the UVRGA installed data loggers (Solinst Levelloggers) in six wells with long-term records to acquire groundwater hydrographs based on multiple daily readings at key locations extending over a 6-mile reach of the basin (Figure 1). The loggers provide water level and temperature readings at 90-minute intervals. The data from these loggers are part of a long-term monitoring program and will be critical for developing a conceptual groundwater model as well as calibrating the SWRCB's surface water-groundwater model. Frequent daily readings are necessary to better understand historical records, which were only based on bi-monthly or quarterly manually collected data.

All well owners provided written permission allowing the UVRGA and its consultants access to install the loggers and periodically monitor the wells.

#### KEAR GROUNDWATER

P.O. BOX 2601 • SANTA BARBARA, CALIFORNIA • 93120 TELEPHONE: (805) 512-1516 [JORDAN@KEARGROUNDWATER.COM](mailto:JORDAN@KEARGROUNDWATER.COM)  
CALIFORNIA REGISTERED PROFESSIONAL GEOLOGIST N. 6960 CALIFORNIA CERTIFIED HYDROGEOLOGIST N. 749

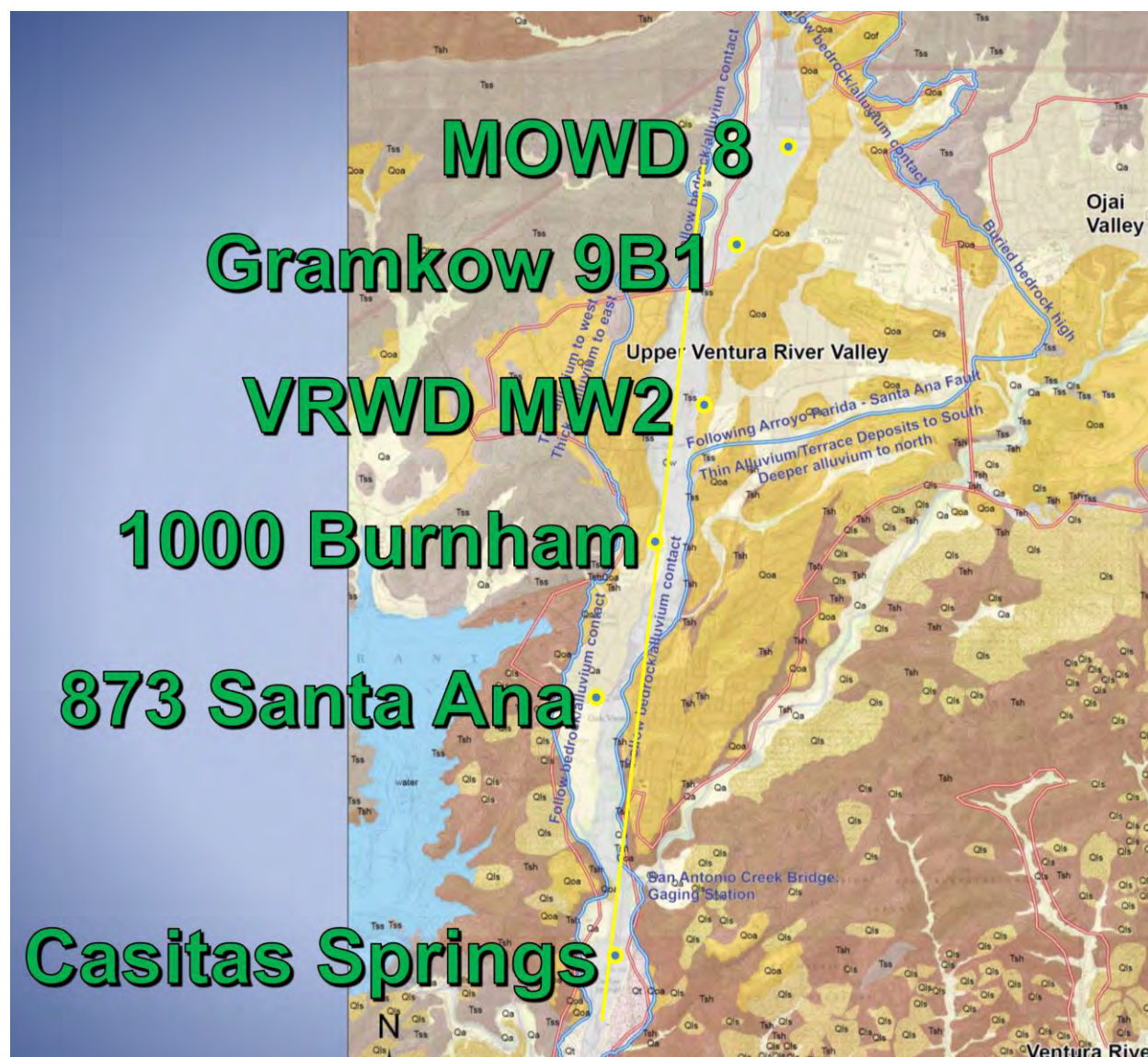


Figure 1. Locations of datalogger-equipped wells monitored by the UVRGA. Base map is the geologic map showing 2016 UVRGA Basin Boundary in blue.

The six monitored wells are described in the following table, and details of the water level and temperature hydrographs over the 15-month monitoring period are presented in the following graphics and discussions.

#### KEAR GROUNDWATER

P.O. BOX 2601 • SANTA BARBARA, CALIFORNIA • 93120 TELEPHONE: (805) 512-1516 [JORDAN@KEARGROUNDWATER.COM](mailto:JORDAN@KEARGROUNDWATER.COM)  
CALIFORNIA REGISTERED PROFESSIONAL GEOLOGIST N. 6960 CALIFORNIA CERTIFIED HYDROGEOLOGIST N. 749

**Table 1 – Monitored Well Information**

<i>Well</i>	<i>Depth</i>	<i>Use</i>	<i>Casing Diameter</i>	<i>Owner</i>	<i>SWN</i>
MOWD Well No. 8	144 (70 to 120 perf)	Municipal Supply	28	MOWD	04N/23W-4J1
Gramkow 9B1	180	Agricultural Supply	16	Gramkow	04N/23W-9B1
VRWD MW2	136 (66-126 perf)	Monitoring	2	VRWD	None (newer monitoring well unassigned state well number)
1000 Burnham Road	101	Agricultural Supply	8	Private	04N/23W-20A1
873 Santa Ana	Unknown	Domestic and irrigation	12	Vega	04N/23W-29F3 (different number assumed in grant application)
Casitas Mobile Home Park	70 (44-65 ft perf)	Inactive	24	CHMP	3N/23W-5B1

***Procedures***

Six wells were selected in early 2017 by UVRGA directors and respective agency staff for monitoring based on geographic distribution and availability. Staff procured agreements with

**KEAR GROUNDWATER**

P.O. BOX 2601 • SANTA BARBARA, CALIFORNIA • 93120 TELEPHONE: (805) 512-1516 [JORDAN@KEARGROUNDWATER.COM](mailto:JORDAN@KEARGROUNDWATER.COM)  
 CALIFORNIA REGISTERED PROFESSIONAL GEOLOGIST N. 6960 CALIFORNIA CERTIFIED HYDROGEOLOGIST N. 749





KG16-0313

well owners to allow for access, and six levelloggers were installed on cables near the bottoms of each well. All loggers were programmed to record data on temperature and water levels on 90-minute intervals. On installation in April and May 2017, water levels were measured to anchor automated water levels going forward. KG staff has downloaded all data from loggers on two occasions, January 2018 and July 2018, measuring depths to water in the wells to confirm and anchor the reported depths to water shown in Figure 3 (field data sheets are attached). The effect of barometric fluctuations on groundwater levels in these vented wells is considered of relatively low significance given the narrow range of air pressures over the monitoring periods; therefore the data were not corrected for barometric pressure fluctuations.

Raw Data graphs are presented on Figures 2A through 2F. Digested depth to water and groundwater elevation graphs are presented as Figure 3 and 4. Appendix A includes an excel file with raw and adjusted data sets.

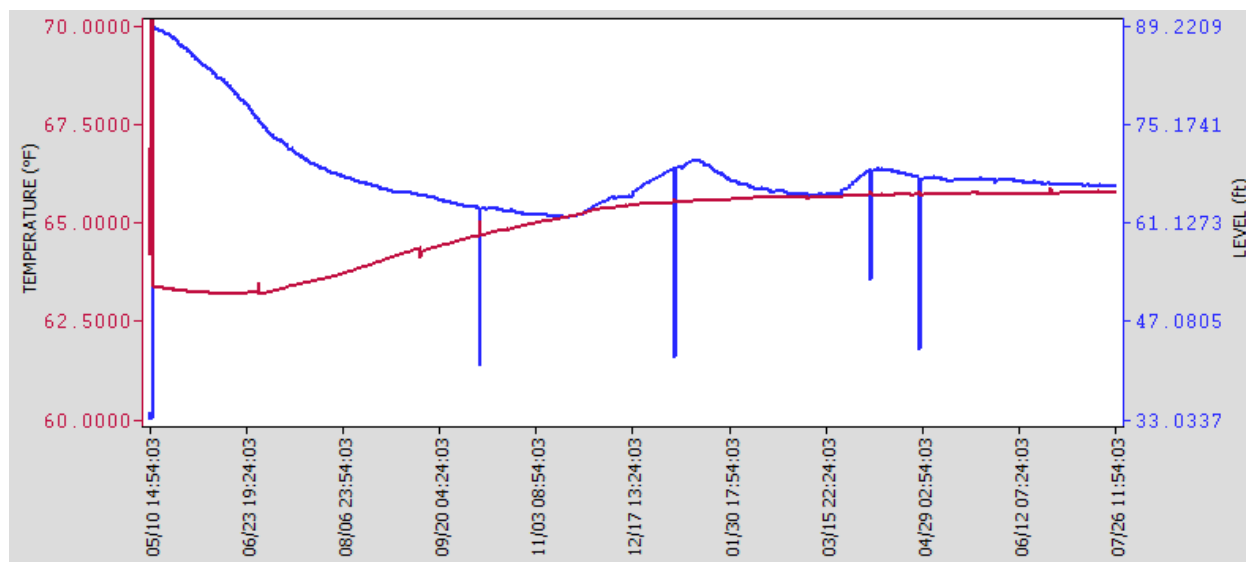


Figure 2A: Raw graph, Meiners' Oaks Water District Well No. 8, May 10, 2017 to July 26, 2018.

In the above graphs of MOWD Well No. 8, the water level is in feet above logger (plus 33 ft for atmospheric pressure) in blue and referenced to right y-axis between 33 and 89 feet. Temperature, in red, references to left y-axis and shows increase of just over 2 degrees F with recession of water levels in summer and fall 2017 then a plateau since winter 2017-18. Well is not typically

#### KEAR GROUNDWATER

P.O. BOX 2601 • SANTA BARBARA, CALIFORNIA • 93120 TELEPHONE: (805) 512-1516 [JORDAN@KEARGROUNDWATER.COM](mailto:JORDAN@KEARGROUNDWATER.COM)  
CALIFORNIA REGISTERED PROFESSIONAL GEOLOGIST N. 6960 CALIFORNIA CERTIFIED HYDROGEOLOGIST N. 749



KG16-0313

pumped due to high nitrate issues.

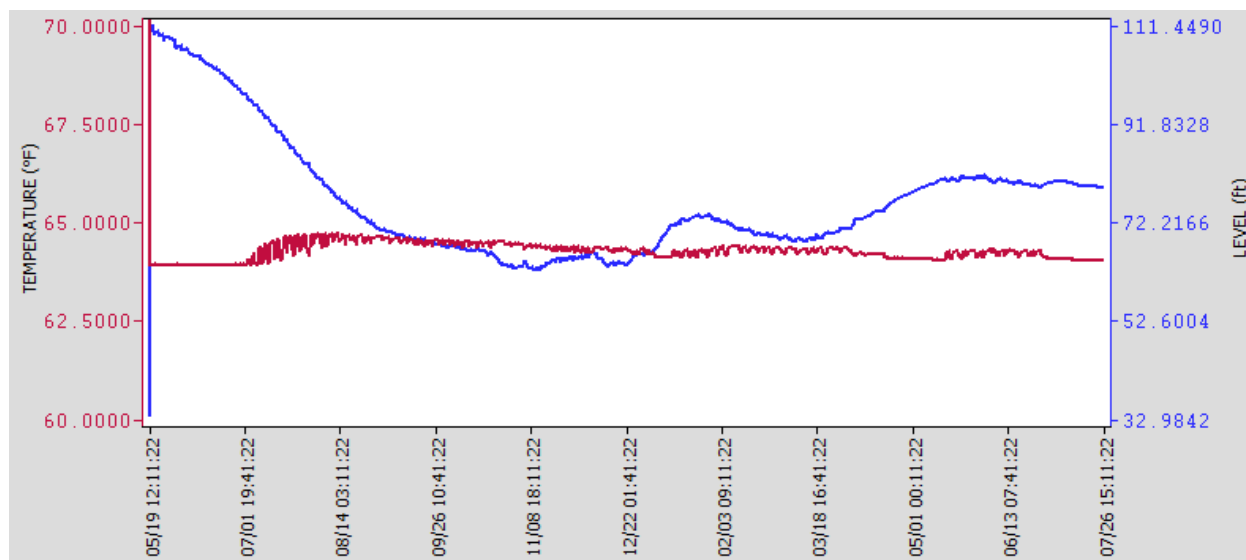


Figure 2B: Raw graph, Gramkow Well 9B1, May 19, 2017 to July 26, 2018.

In the above graphs for Gramkow Well 9B1, the water level is in feet above logger (plus 33 ft for atmospheric pressure) in blue and referenced to right y-axis between 33 and 111 feet. Temperature, in red, references to left y-axis and shows relatively stable water temperatures near 64 degrees. Well is not typically pumped, but water level is affected by proximal municipal supply wells.

#### KEAR GROUNDWATER

P.O. BOX 2601 • SANTA BARBARA, CALIFORNIA • 93120 TELEPHONE: (805) 512-1516 [JORDAN@KEARGROUNDWATER.COM](mailto:JORDAN@KEARGROUNDWATER.COM)  
 CALIFORNIA REGISTERED PROFESSIONAL GEOLOGIST N. 6960 CALIFORNIA CERTIFIED HYDROGEOLOGIST N. 749



KG16-0313

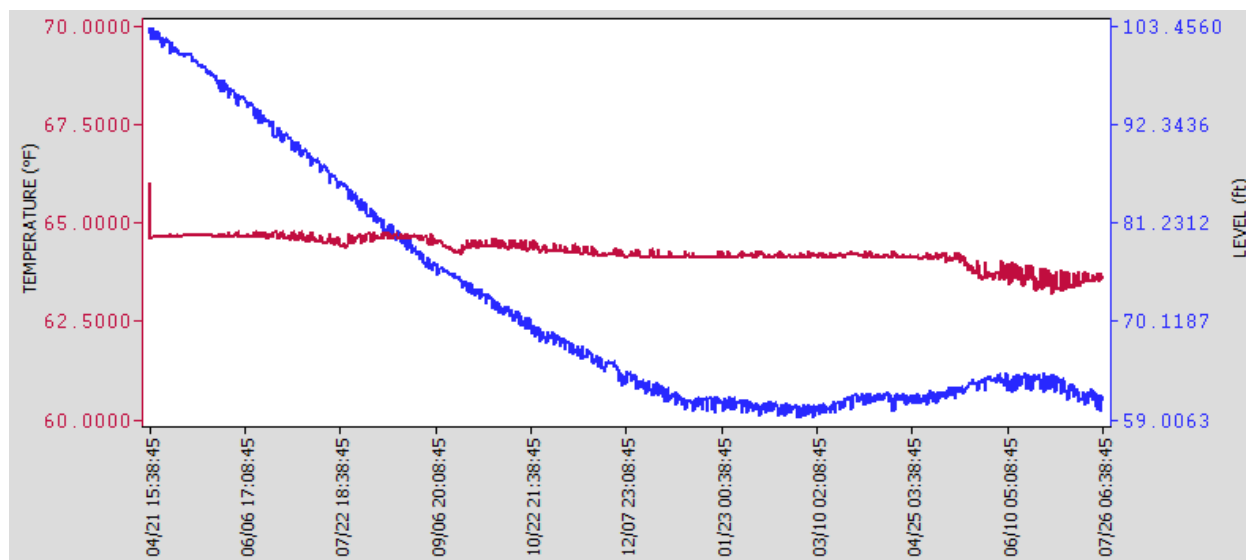
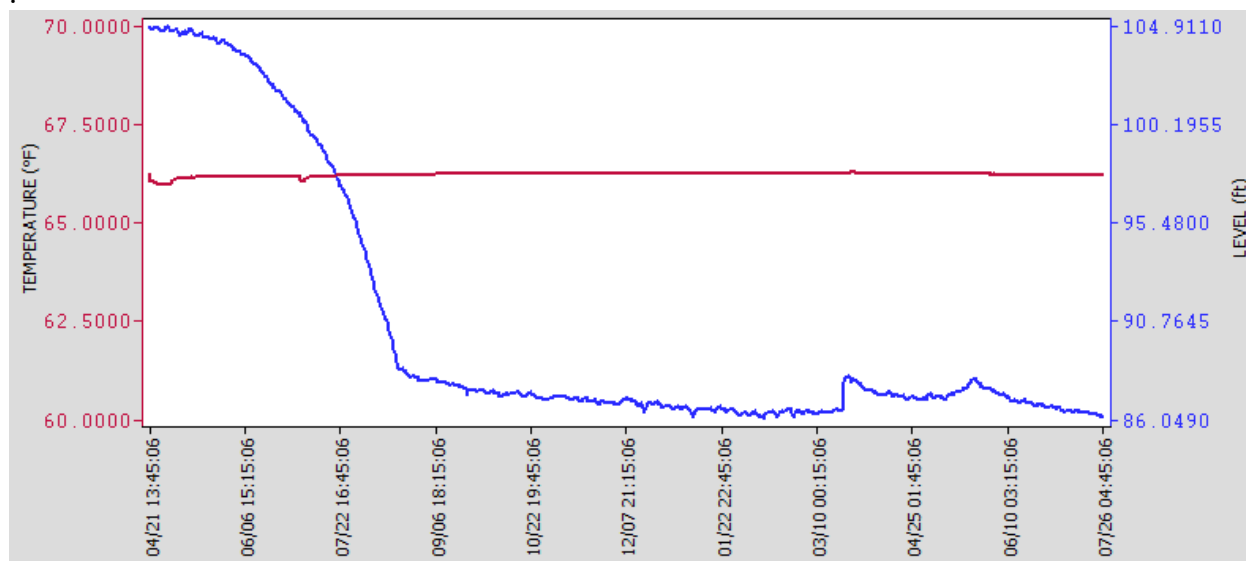


Figure 2C: Raw graph, Ventura River Water District MW2, April 21, 2017 to July 26, 2018.

In the above graphs VRWD MW2, the water level is in feet above logger (plus 33 ft for atmospheric pressure) in blue and referenced to right y-axis between 59 and 103 feet. Temperature, in red, references to left y-axis and shows a slight decrease throughout the monitoring period. Well is not pumped as it is for monitoring only, but water levels therein are affected by proximal municipal supply wells.



### KEAR GROUNDWATER

P.O. BOX 2601 • SANTA BARBARA, CALIFORNIA • 93120 TELEPHONE: (805) 512-1516 [JORDAN@KEARGROUNDWATER.COM](mailto:JORDAN@KEARGROUNDWATER.COM)  
 CALIFORNIA REGISTERED PROFESSIONAL GEOLOGIST N. 6960 CALIFORNIA CERTIFIED HYDROGEOLOGIST N. 749



KG16-0313

Figure 2D: Raw graph, 1000 Burnham Road Well, April 21, 2017 to July 26, 2018.

In the above graphs for the 1000 Burnham Road Well, the water level is in feet above logger (plus 33 ft for atmospheric pressure) in blue and referenced to right y-axis between 86 and 105 feet. Temperature, in red, references to left y-axis and shows very little change from a 66 degree temperature throughout the year.

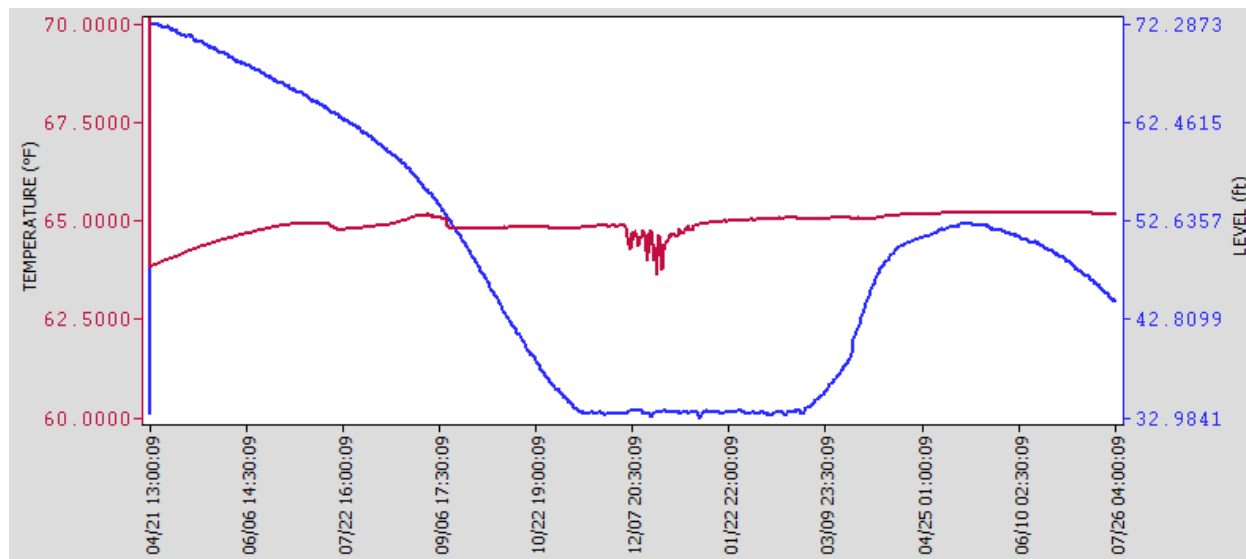


Figure 2E: Raw graph, Vega Well, April 21, 2017 to July 26, 2018.

In the above graphs of the Vega Well, the water level is in feet above logger (plus 33 ft for atmospheric pressure) in blue and referenced to right y-axis between 33 and 73 feet. Temperature, in red, references to left y-axis and shows a slight warming during the 2017 recharge period but relatively stable but for a lowering in early December 2017, with nearly 20 feet of recharge exhibited in 2018.

#### KEAR GROUNDWATER

P.O. BOX 2601 • SANTA BARBARA, CALIFORNIA • 93120 TELEPHONE: (805) 512-1516 [JORDAN@KEARGROUNDWATER.COM](mailto:JORDAN@KEARGROUNDWATER.COM)  
 CALIFORNIA REGISTERED PROFESSIONAL GEOLOGIST N. 6960 CALIFORNIA CERTIFIED HYDROGEOLOGIST N. 749



KG16-0313

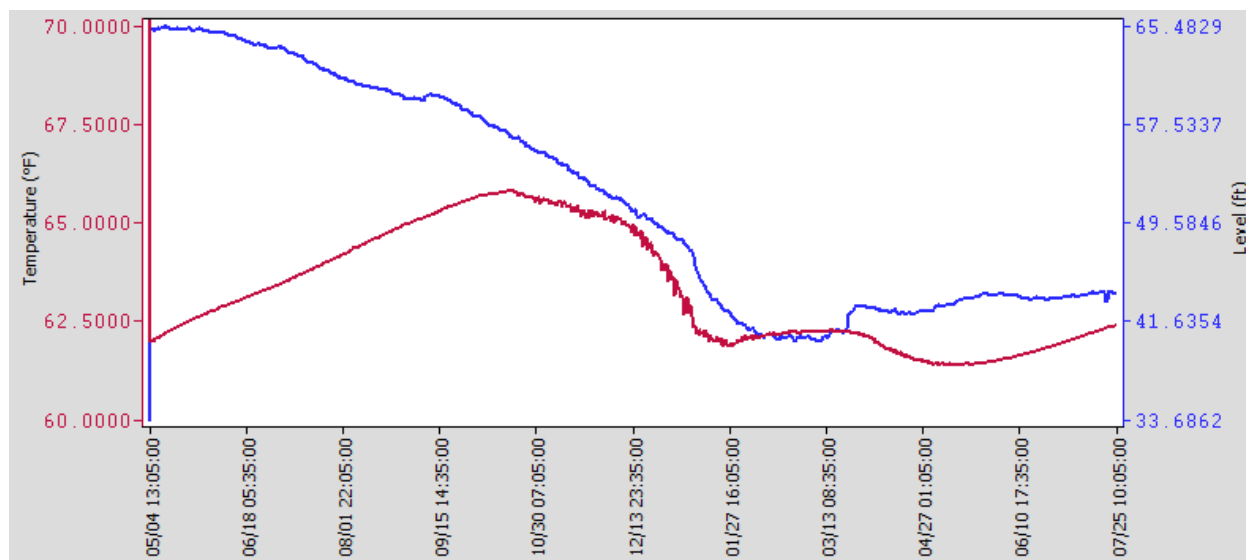


Figure 2F: Raw graph, Casitas Springs Mobile Home Park, May 4, 2017 to July 25, 2018.

In the above graph for the well at the Casitas Mobile Home Park, the water level is in feet above logger (plus 33 ft for atmospheric pressure) in blue and referenced to right y-axis between 33 and 65 feet. Temperature, in red, references to left y-axis and shows the most variability of any of the wells with nearly 3 degrees over recharge and discharge patterns. Well is not pumped as it is for monitoring only, but is in the “live reach” of the River where groundwater daylights and flows as surface water.

#### KEAR GROUNDWATER

P.O. BOX 2601 • SANTA BARBARA, CALIFORNIA • 93120 TELEPHONE: (805) 512-1516 [JORDAN@KEARGROUNDWATER.COM](mailto:JORDAN@KEARGROUNDWATER.COM)  
 CALIFORNIA REGISTERED PROFESSIONAL GEOLOGIST N. 6960 CALIFORNIA CERTIFIED HYDROGEOLOGIST N. 749

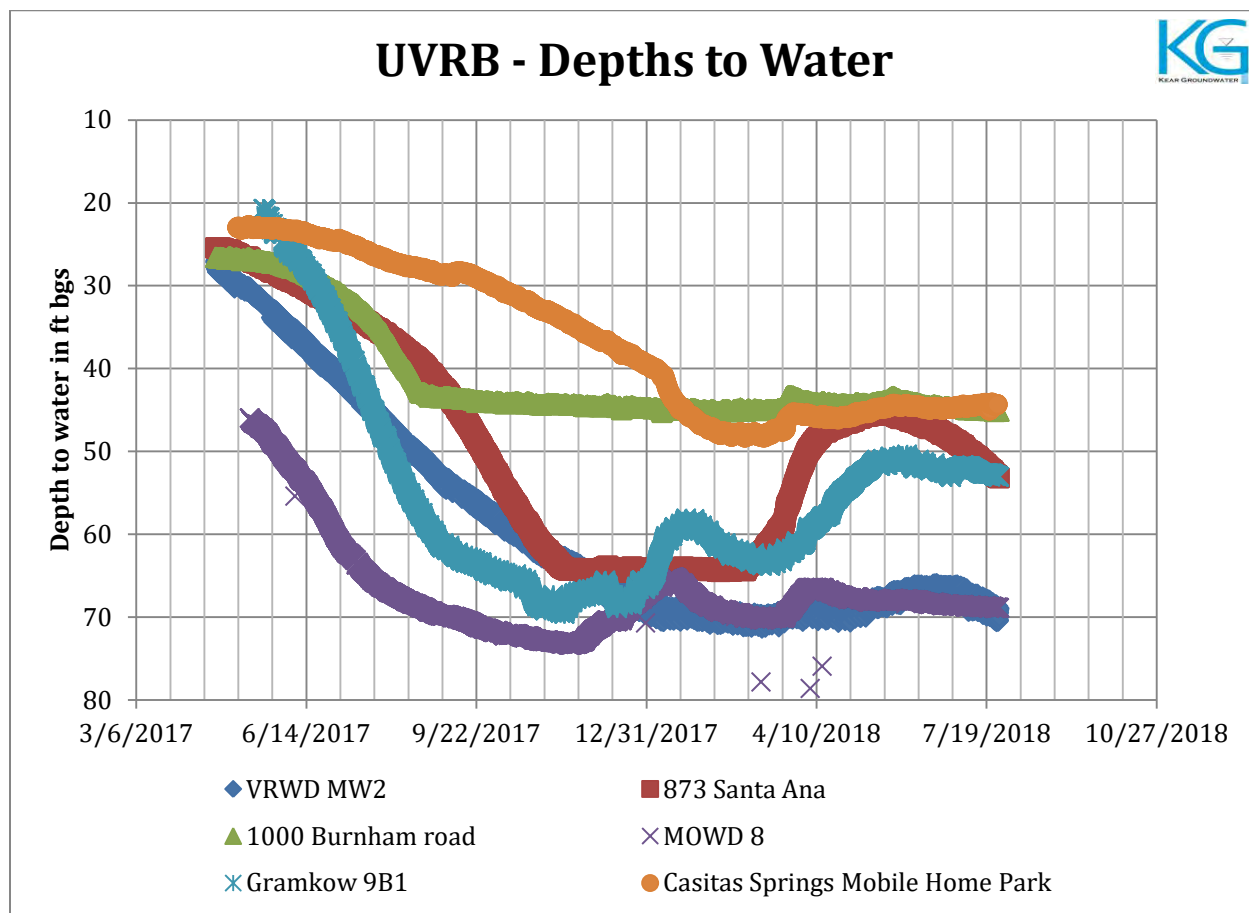


Figure 3. Depths to water in observation points, Spring 2017 to Summer 2018.

Because the logger data are generated in feet above loggers, KG has digested the graphical data to reflect depths to water and groundwater elevations on Figures 3 and 4, respectively.

Depths to water ranged from spring highs in 2017 of between 20 and 47 feet below reference points, which are tops of sounding tubes or well casings where absent sounding tubes. Summer 2017 nadirs were between 45 and 73 feet. Recharge was indicated with an increase in water levels between 2 and 20 feet in the winter and spring 2018, though distribution was variable.

#### KEAR GROUNDWATER

P.O. BOX 2601 • SANTA BARBARA, CALIFORNIA • 93120      TELEPHONE: (805) 512-1516      [JORDAN@KEARGROUNDWATER.COM](mailto:JORDAN@KEARGROUNDWATER.COM)  
 CALIFORNIA REGISTERED PROFESSIONAL GEOLOGIST N. 6960      CALIFORNIA CERTIFIED HYDROGEOLOGIST N. 749

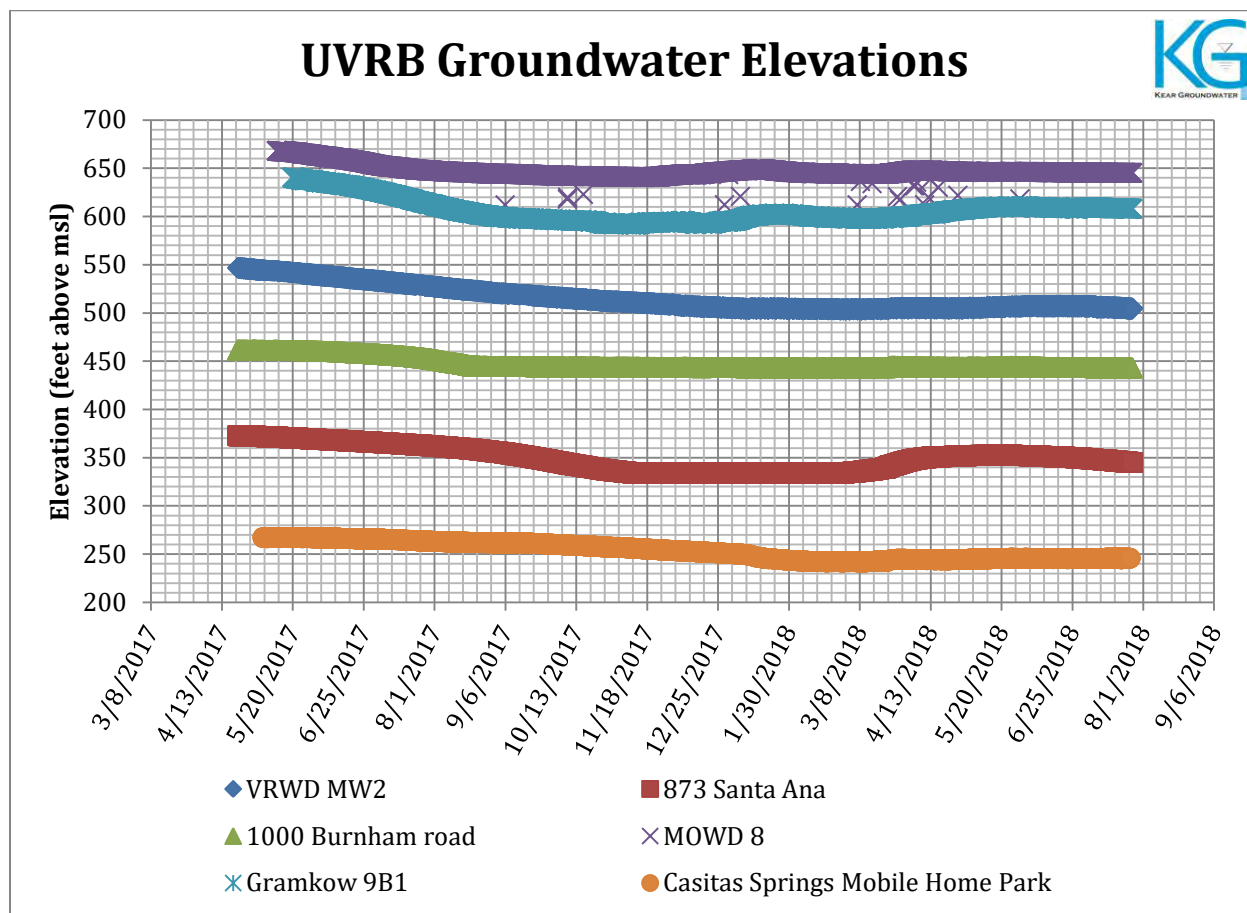


Figure 4. Groundwater elevations at six monitoring points in the UVRB.

When the water levels are presented relative to sea level and placed on an equitable scale, the effects of water level change is muted, and the north-to south flow is clearly predominant and consistent. A gradient of 400 ft per the 30,600 feet of linear length calculates to a southward gradient of 0.013 ft/ft, which mimics topography in the area and is relatively steep compared to many other groundwater basins.

In keeping with the groundwater sustainability planning, the existing network of logging wells should continue and be augmented with additional wells to increase the area with continuous water level coverage. Fire effects on groundwater system may be better understood by comparing 2018 to subsequent water years with the detailed temporal monitoring currently being collected.

#### KEAR GROUNDWATER

P.O. BOX 2601 • SANTA BARBARA, CALIFORNIA • 93120 TELEPHONE: (805) 512-1516 [JORDAN@KEARGROUNDWATER.COM](mailto:JORDAN@KEARGROUNDWATER.COM)  
 CALIFORNIA REGISTERED PROFESSIONAL GEOLOGIST N. 6960 CALIFORNIA CERTIFIED HYDROGEOLOGIST N. 749



KG16-0313

We look forward to our continued involvement with the monitoring program and interpretation of the results to affect an increase in basin understanding and management.

Please do not hesitate to contact us with any questions.

Best Regards,

A handwritten signature in black ink, appearing to read 'Jordan Kear', with a stylized flourish at the end.

Jordan Kear  
Principal Hydrogeologist  
Professional Geologist No. 6960  
California Certified Hydrogeologist No. 749

Attachment: Field Data sheets

Appendix A: Excel file containing raw logger data (.xls)

Appendix B: Raw levellogger files (\*.xle)

**KEAR GROUNDWATER**

P.O. BOX 2601 • SANTA BARBARA, CALIFORNIA • 93120 TELEPHONE: (805) 512-1516 [JORDAN@KEARGROUNDWATER.COM](mailto:JORDAN@KEARGROUNDWATER.COM)  
CALIFORNIA REGISTERED PROFESSIONAL GEOLOGIST N. 6960 CALIFORNIA CERTIFIED HYDROGEOLOGIST N. 749





# GROUNDWATER LEVEL MEASUREMENT FIELD DATA SHEET

[illegible]



# GROUNDWATER LEVEL MEASUREMENT FIELD DATA SHEET

[illegible]



# GROUNDWATER LEVEL MEASUREMENT FIELD DATA SHEET

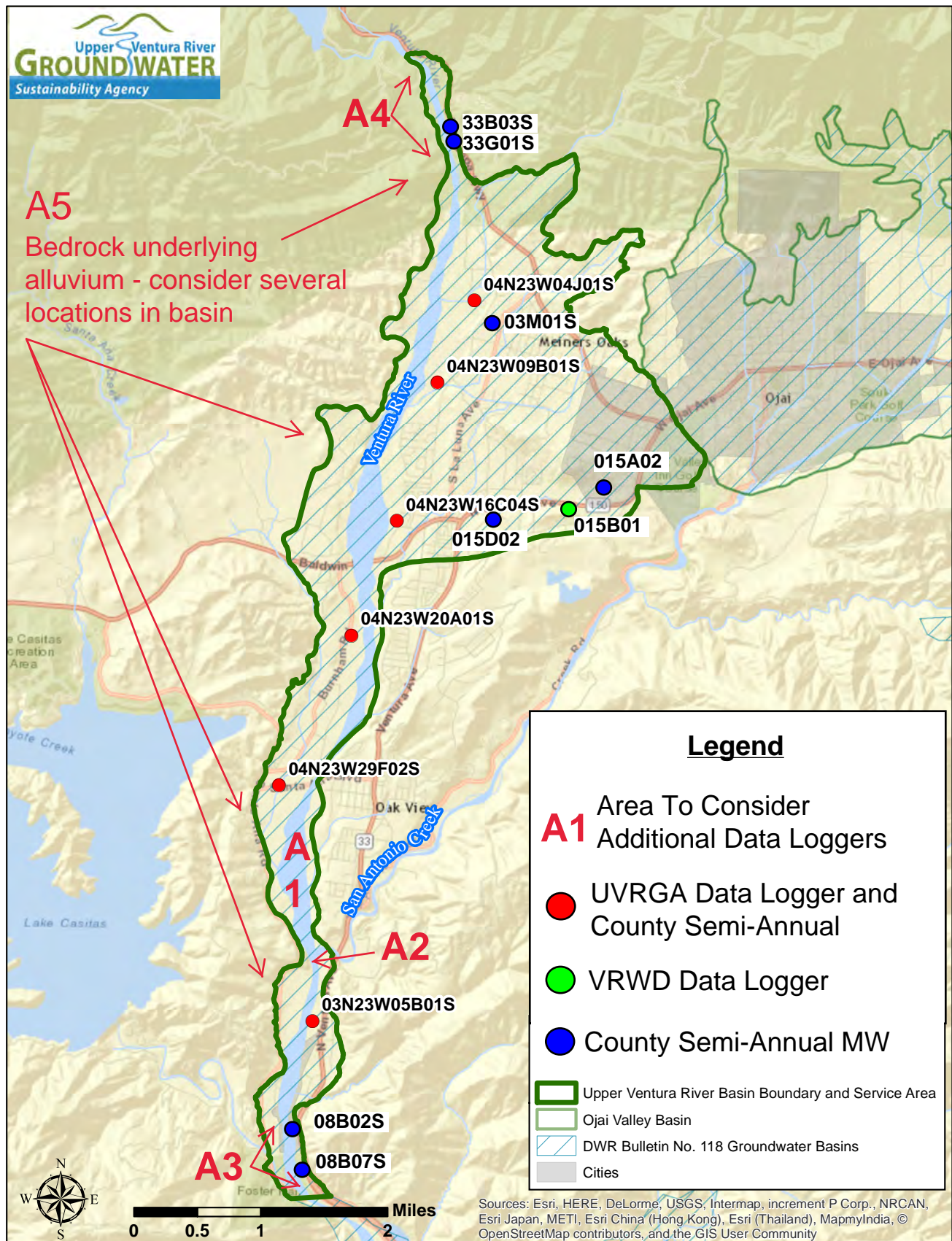
[illegible]

## List of Potential Wells For Additional Monitoring Provided by City of Ventura

State Well Number	Well Name	Discharge Status	Main Use	Owner	Location (X, Y)	Well Log	Depth & Perforation	Static GW Elev. Dates Span	Discharge (Q)
<b>Foster Park</b>									
03N23W08B025	Nye #2	Active	Municipal	City of Ventura	✓		Depth 70' Perf. 34-64'	2009 to 2014	Max 350 gpm Avg 375 AFG; Daily Prod Rpt 2002-2005
<b>Near Foster Park, Upstream of Coyote Creek Confluence &amp; Costas Bridge (Actual UVRGB Boundary)</b>									
03N23W08B075			Observation		✓	No	Depth 60'	1972 to 2016	
<b>Downstream of Robles Diversion</b>									
04N23W03M01S		Active	Domestic		✓	No	Depth 172 ft	1972 to 2016 10/4/1972 to 12/8/2010 2009 to 2014	
<b>Near San Antonio Creek, Upstream of Ventura River Confluence</b>									
04N23W33M08S	Amez Ingekon Well	Active	Agricultural	Tres Condados Girl Scout Council	✓	No	Depth 32 ft	1972 to 2016 10/3/1972 to 12/8/2010 2009 to 2014	
<b>Near Upstream UVRGB Boundary</b>									
05N23W33G01S		Active	Agricultural		✓	No	Depth 108 ft	1997 to 2007 2009 to 2014 1972 to 2016	



Figure 1. Existing Monitoring Network and Areas To Consider Additional Data Loggers



**Table 1. Existing Monitoring Wells in Upper Ventura River Basin**

WELLID	Record Starts	Number of Records	Well or Perf Depth (ft bgs)	UVRGA Data Logger	County Semi-Annual	Comment
03N23W05B01S	08-Apr-42	562	65	X	X	
03N23W08B02S	26-Jan-71	220	64		X	Recommended by City in May - City production well
03N23W08B07S	04-Oct-72	249	60		X	Recommended by City in May - observation well
04N23W03M01S	04-Oct-72	248	160		X	Recommended by City in May
04N23W04J01S	03-Apr-74	240	126	X	X	
04N23W09B01S	26-Jan-49	477	180	X	X	
04N23W15A02S	05-Oct-72	243	405		X	Screen 90-405 - check if bedrock
04N23W15D02S	23-Jul-86	165	207		X	Check if bedrock
04N23W16C04S	08-Jul-49	510	227	X	X	
04N23W20A01S	10-Feb-48	519	101	X	X	
04N23W29F02S	07-Jun-28	614	65	X	X	
05N23W33B03S	05-Oct-72	232	120		X	
05N23W33G01S	13-Oct-72	213	108		X	Recommended by City in May

Note: Well 04N23W33M03S recommended by Ventura is located outside of basin and is not included in table.

**Table 2. Areas of Consideration for Potential Transducer Installations**

Area No.	Area	Purpose	Possible Options
1	Between San Antonio Creek Confluence and Santa Ana Blvd (northern half of 04N23W32 and/or southern half of 04N23W29).	Address data gap near northern extent of SW flow (concern raised by City and shared by GSP PM)	<ul style="list-style-type: none"> <li>Potential candidates for evaluation of installing 1 or 2 data in the area: <ul style="list-style-type: none"> <li>04N23W29L01S – depth 84 ft (Qha)</li> <li>04N23W32C02S – depth 58 ft (Qha)</li> <li>04N23W32C03S – depth 80 ft (Qha)</li> <li>04N23W32F01S – depth 80 ft (Qg)</li> <li>04N23W32F03S – depth 40 ft (Qg)</li> <li>04N23W32G01S – depth unk. (Qg/Qha)</li> <li>04N23W32J01S – depth 16 (Qg)</li> <li>Drill new well in concert with Task 2.5</li> </ul> </li> </ul>
2	San Antonio Creek Confluence	Assess dynamics at confluence	New well to be installed as part of Task 2.5
3	Southern Basin Boundary Area	<ul style="list-style-type: none"> <li>Address data gap near basin boundary</li> <li>Assess surface water groundwater interaction near USGS stream gage</li> </ul>	<ul style="list-style-type: none"> <li>Observation well 03N23W08B07S - convert County Semi-Annual manual monitoring to transducer and/or</li> <li>One of City's Foster Park wells (03N23W08B02S – may already be equipped)</li> </ul>
4	Northern Basin Boundary Area	Address data gap near basin boundary	05N23W33G01S - convert County Semi-Annual manual monitoring to transducer
5	Bedrock wells at several locations throughout the basin: <ul style="list-style-type: none"> <li>Within losing reach</li> <li>Near northern edge of continuous SW flow</li> <li>Within gaining reach</li> <li>Area of very thin alluvium west of La Luna (~northern half of 04N23W10)</li> </ul>	<ul style="list-style-type: none"> <li>Assess bedrock responses (or lack of responses)</li> <li>Assess vertical gradients/flow between alluvium and bedrock</li> </ul>	<ul style="list-style-type: none"> <li>Needs more work to narrow down potential candidate wells</li> <li>3M1, 16P1, and 20A1 in Bruce's report are some potential candidates.</li> </ul>



August 23, 2018

Bruce Kuebler  
Upper Ventura River Basin Groundwater Agency  
PO Box 1779  
Ojai, California 93024

***Re: Proposed Professional Hydrogeologic Services  
Additional Automated Groundwater Level Monitoring  
Upper Ventura River Groundwater Basin – Task 2.1***

Greetings Chair Kuebler:

Per our discussions and the request transmitted by Bryan Bondy via email this month, Kear Groundwater (KG) has prepared this brief proposal to conduct additional automated groundwater and pressure monitoring via the six existing groundwater wells and potential additional data points in the Upper Ventura River Groundwater Basin. This proposal follows the convention of subtasks requested via email, and expands our current efforts under Upper Ventura River Groundwater Agency (UVRGA) Grant Subtask 2.1.

Our proposed efforts are associated subtasks of ongoing data logger maintenance and downloads, preparation of annual reports, addition of three barometric loggers and correction of groundwater level data to accommodate atmospheric pressure changes, as well as furnishing and installation of additional loggers in wells to be identified.

**Task 2.1a – Ongoing Data Logger Maintenance and Downloads**

KG proposes to conduct data logger maintenance and downloads for the period August 2018 through May 2020. Assuming the six existing dataloggers are continually accessible and functional, this effort would consist of visiting each well site, measuring a static water level in the respective well, and downloading the data stored therein. We anticipate four download events, in December 2018, May 2019, December 2019, and May 2020. Each reconnaissance comprises about four hours of time, including preparation, download, measurements, and preliminary digest of data. While no hardware replacement or maintenance is anticipated, any required equipment replacement, repair, shipping and handling costs, etc., would be presented as necessary. Snapshots of data collected at each download point will be transmitted via email to UVRGA board members and staff.

**Task 2.1b – Two Annual Reports**

KG proposes to prepare two annual reports - one covering data collection through May 2019 and another through May 2020, each submitted the following June. These would follow a similar format to the Annual Report prepared in August 2018, which will save costs and time in preparation and review. The report will include a narrative of data

**KEAR GROUNDWATER**





collected, figures and charts including a map of logged wells, images of raw logger graphs depicting water temperature and feet of water over loggers plus atmospheric pressure, and graphs depicting 1) depths to groundwater in feet below ground surface and 2) groundwater elevations over the monitoring period. Appendices will include field water level measurements, as well as raw level logger data (\*.xle files) and digested excel files (\*.xls) supporting the reporting effort transmitted via live links to the UVRGA website or KG's file sharing service.

Proposed additions to future annual reports, that were not included in the 2018 effort, will include longer term water level hydrographs based on county-collected data that preceded the spring 2017 logger installations, and barometric logging data and corrections to water level data, if any, based on proposed monitoring conducted under Task 2.1c (below). Any additional wells included in the UVRGA monitoring network will also be included.

One draft report will be submitted, followed by a final after receipt of comments. Any additional comments received after the second submittal may be incorporated but subject to additional fees.

#### Task 2.1c – Addition of Barometric Logging and Barometric Fluctuation Corrections

As required per UVRGA's data collection procedure, KG proposes to furnish and install three Solinst Barologgers and complete barometric correction on future downloads to address compensation for atmospheric pressure fluctuations. Like installed water level loggers, KG understands that the UVRGA will own the Barologgers. Though barometric changes are anticipated to be relatively small and may not result in correction of water level data, a very conservative approach to this effort dictates the installation of three Barologgers in the shallow and vented casings of the northernmost (currently MOWD 8) and southernmost (currently Casitas Springs) wells with transducers and the third in the middle (currently 1000 Burnham). Barometric compensation at the other wells would be performed using the closest Barologger.

The Levelloggers currently installed in UVRGA-monitored wells measure absolute pressure (water pressure + atmospheric pressure) expressed in feet, meters, centimeters, psi, kPa, or bar.

The most accurate method of obtaining changes in water level is to compensate for atmospheric pressure fluctuations using a Barologger Edge, avoiding time lag in the compensation.

The Barologger is set above high-water level in the monitored well. Though industry information indicates that one Barologger can be used to compensate all Levelloggers in a 20-mile (30 km) radius and/or with every 1000 ft (300 m) change in elevation, three are proposed as requested by GSP manager.

The Levellogger Software Data Compensation Wizard automatically produces compensated data files using the synchronized data files from the Barologger and Levelloggers in the wells. The Barologger Edge uses pressure algorithms based on air



rather than water pressure, giving superior accuracy. The recorded barometric information can also be very useful to help determine barometric lag and/or barometric efficiency of the monitored aquifer.

The Barologger Edge records atmospheric pressure in psi, kPa, or mbar. When compensating submerged Levellogger Edge data, Levellogger Software can recognize the type of Levellogger and compensate using the same units found in the submerged data file making the Barologger Edge backwards compatible.

#### Task 2.1d (Optional Task) – Addition of Wells to Monitoring Network

As requested, KG provides costs to add additional wells to the monitoring network on a per-well basis. KG assumes UVRGA will identify the wells and pre-determine logger accessibility, agreements with well owners, if needed, and ensure access. On a per unit basis, each new well to be included in the high-frequency (90-minute) monitoring network will include:

- a. Capital cost for a submerged Levellogger
- b. Capital costs for a Barologger
- c. Labor and incidentals to procure and install Levellogger and Barologger at a single new well site
- d. Incremental efforts to add the new data logger well to the four periodic data download events and two annual reports.

#### ESTIMATED FEE FOR PROFESSIONAL SERVICE

(TASK 2.1 WORK SEPTEMBER 1, 2018 THROUGH JUNE 30, 2020):

Task 2.1a: Ongoing Data Logger Maintenance and Downloads: [16 hours principal time at \$200/hour or 32 hours staff time at \$100/hour]	\$3,200
Task 2.1b: Two Annual Reports: [20 hours principal time at \$200/hour and 40 hours staff time at \$100/hour]	\$8,000
Task 2.1c: Barologger procurement and installation [5 hours principal time at \$200/hour and \$333 per each of three Barologgers]	\$1,999
Task 2.1d: (OPTIONAL) Addition of Wells to Monitoring Network (per well) [a. Levellogger and cable \$1,000 b. Barologger \$333 c. Procure and install instrumentation in well, 2 hours principal time at \$200/hour d. Include new well in monitoring, download and reporting, 6 hours staff time at \$100/hour and 1 hour principal time]	\$2,533
<b>Total, excluding optional task:</b>	<b>\$13,199</b>



We appreciate the opportunity to continue our efforts with the UVRGA and look forward to board authorization to proceed with the tasks described in this proposal. We have new Barologgers in our inventory and can deploy them rapidly.

Best Regards,

A handwritten signature in black ink, appearing to read 'Jordan Kear', with a stylized flourish at the end.

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

**UPPER VENTURA RIVER GROUNDWATER AGENCY Item No. 7(d)**

**DATE:** September 13, 2018

**TO:** Board of Directors

**FROM:** Agency Staff

**SUBJECT:** GSP Task 3.1 - Technical Advisory Committee Discussion

**SUMMARY**

On July 12, 2018, the Board deferred a decision on formation of a technical advisory committee (TAC) to provide the directors time for discussions with the entities they represent. Today, the Board may discuss whether a TAC should be established, discuss the makeup of a TAC if one is desired, and provide direction to staff.

**RECOMMENDED ACTION**

It is recommended that the Board discuss whether to pursue formation of a TAC, discuss TAC structure options, and provide direction to staff.

**BACKGROUND**

Some Board members have expressed an interest in forming a TAC to weigh-in on the data gap tasks and GSP. At the July 12, 2018 Board meeting, the GSP PM briefed the Board on the proposed TAC duties, TAC member qualifications, and various TAC design options for consideration. The July 12, 2018 staff report is attached for reference.

**FISCAL SUMMARY**

Not applicable

**ATTACHMENTS**

A. July 12, 2018 Staff Report (for reference)

Action: \_\_\_\_\_

Motion: \_\_\_\_\_ Second: \_\_\_\_\_

B. Kuebler\_\_\_\_ M. Bergen\_\_\_\_ G. Shephard\_\_\_\_ D. Engle\_\_\_\_ K. Brown\_\_\_\_ L. Rose\_\_\_\_ E. Ayala\_\_\_\_

Item 7d, Attachment A - September 13, 2018

**UPPER VENTURA RIVER GROUNDWATER AGENCY Item No. 7(c)**

**DATE:** July 12, 2018

**TO:** Board of Directors

**FROM:** Agency Staff

**SUBJECT:** GSP Task 3.1 - Technical Advisory Committee Discussion

**SUMMARY**

The GSP PM will describe the purpose of a technical advisory committee and options for establishing one.

**RECOMMENDED ACTION**

It is recommended that the Board discuss whether to pursue formation of a technical advisory committee, discuss technical advisory committee structure options, and provide feedback to staff.

**BACKGROUND**

Some Board members have expressed an interest in forming a technical advisory committee (TAC) to weigh-in on the data gap tasks and GSP.

TAC Purpose and Duties

TACs are typically employed to develop consensus on data interpretation and analysis methods and other complex issues that involve scientific interpretation.

Based on Board member comments to date, the primary goal for the TAC would include:

- Review scopes for data gap tasks prior to Board approval (scopes already approved may be reviewed too);
- Review draft reports for data gap tasks; and
- Although not discussed to date, it is reasonable to assume the TAC would provide input on data analysis methods and review analysis results to be included in the GSP.

The above-listed duties are consistent with the duties assigned to the Fox Canyon Groundwater Management Agency's (FCGMA's) Technical Advisory Group (TAG), which was formed to advise on the development of three GSPs within its jurisdiction. The UVRGA GSP PM is an appointed member of the FCGMA TAG.

### TAC Qualifications

Establishing minimum qualifications for TAC members is highly recommended. Consistent with the FCGMA, the TAC members should be technical professionals with a degree from a state-accredited college or university and possess educational background and experience in hydrogeology or hydrology, applicable to the Upper Ventura River Basin. As required by SGMA and the California Business and Professions Code, practicing professionals must possess a State of California professional license (Professional Geologist, Certified Hydrogeologist, or Professional Engineer [Civil]).

### TAC Design Options

Staff researched the makeup of a number of different technical advisory groups. Several different models were identified and are briefly described below, keeping in mind that there is no requirement to follow any particular model.

- Representative Model: Under this model, TAC members are selected to represent the various interests within the Agency. The FCGMA TAG follows this model, having a one member appointed by each Board member (representing Cities, County, agriculture, small water districts, and United Water Conservation District) and two additional members to represent the public and environmental interests. TAC appointees may be either paid or unpaid depending on the arrangement made with the appointor. Some agencies have TACs that consist of one staff member from each member agency (in which case the TAC members are paid by their agency). This is most common in situations where the member agencies already have qualified professionals on staff.
  - Pros:
    - Provides perceived stakeholder representation. However, the reality is the technical professionals participating in the TAC are supposed to be focused on technical realities, not advocacy.
  - Cons:
    - Would result in a large committee.
      - Large committees are inherently inefficient, which could impact schedules.
      - Larger committees increase administration costs.
    - For UVRGA, the agencies/groups represented by some Board members may not have the resources to sponsor a TAC representative, resulting in vacancies that would defeat the perception of balanced stakeholder representation.
- Subject Matter Model: Under this model, TAC members are selected to provide specialized expertise on different aspects of the project. The National Water Research Institute uses this model for its advisory panels that are developed to review various water issues. This model is useful for projects that include a variety of highly specialized subject matters (for example the West Basin MWD seawater desalination subsurface intake project panel dealt with a wide range of issues including nearshore geology, intake design, underwater construction methods, non-conventional drilling techniques, marine organism entrainment/impingement, etc.) By contrast, GSPs are focused on a

## Item 7d, Attachment A - September 13, 2018

comparatively narrow range of issues. For this reason, the subject matter model is not particularly applicable to GSP development for most GSAs.

- Open Model: Under this model, the TAC is open to any interested person who meets the minimum qualifications. Prior the SGMA, the FCGMA's TAG used an open model.
  - Pros:
    - Creates the opportunity for maximum input
  - Cons:
    - Could result in a large and difficult committee to manage, which would increase the likelihood of delays and increase administration costs
    - Lack of accountability
      - Participation may be inconsistent
      - No guarantee the committee will meet the Board's objectives
- Other Models: Not all TACs necessarily fit into one of the above-listed models.

As mentioned above, there is no requirement to follow any particular model. In fact, SGMA does not require implementation of a TAC. However, implementing a TAC may serve to increase stakeholder buy-in on the GSP.

If the Board desires to move forward with developing a TAC, staff offers the following design suggestions:

1. Keep it small. A smaller committee will minimize administration costs, will minimize TAC member costs (if the agency ends up paying for TAC member time), and will reduce the potential for delays.
2. Focus on needs. The primary need is consensus on hydrogeology issues, including groundwater-surface water interaction. It would be good to have multiple opinions on these issues throughout the GSP development process. Specialized issues, such as biology questions (groundwater dependent ecosystems) do not require a standing committee member<sup>1</sup> and can be addressed with a temporary member or specialty consulting services.

Based on the foregoing, if the Board desires to move forward with developing a TAC, staff would recommend a four-person committee, including the GSP PM, Jordan Kear, and two other members to be approved by the Board. The two unidentified members would be selected from a pool of candidates generated by responses to a request for qualifications issued by the Agency. In order to generate interest and ensure long-term participation, it is recommended that the Agency compensate the TAC members for their time.

---

<sup>1</sup> Some technical issues may fall outside of the licensing scope (e.g. biology questions related to groundwater dependent ecosystems). In these cases, the professional licensing requirement would not apply.

**FISCAL SUMMARY**

Not applicable

Action: \_\_\_\_\_

Motion: \_\_\_\_\_ Second: \_\_\_\_\_

B. Kuebler\_\_\_\_ M. Bergen\_\_\_\_ G. Shephard\_\_\_\_ D. Engle\_\_\_\_ K. Brown\_\_\_\_ L. Rose\_\_\_\_ E. Ayala\_\_\_\_



**UPPER VENTURA GROUNDWATER AGENCY Item No. 8 (a)**

**DATE:** September 13, 2018

**TO:** Board of Directors

**FROM:** Ad Hoc Budget Committee

**SUBJECT:** Fiscal Year 2017/2018 Budget Review

**SUMMARY:** Actual expenditures and income for FY 2017/2018 are compared to the budget. Overall expenditures were less than projected because opening an office and work on the GSP did not proceed as anticipated. Net income was \$69,748.

**RECOMMENDED ACTION:** Review FY 2017/2018 budget

**BACKGROUND:** Member contributions and UVRGA expenditures are compared to the FY 2017/2018 budget in Attachment 1.

Overall expenditures were lower than anticipated, primarily because work on the Groundwater Sustainability Plan and the setup of the office took longer than expected. Many budget categories show zero expenditures, in part because the work was postponed and in part because expenditures are not as yet parsed into grant-related and general expenditures (e.g., special vs. routine legal services). Net income was \$69,748.

**FISCAL SUMMARY:** The budget review shows that in 2017/2018 expenditures were less than member contributions.

**ATTACHMENTS:** 2017/2018 budget review

Action: \_\_\_\_\_

Motion: \_\_\_\_\_ Second: \_\_\_\_\_

B. Kuebler\_\_\_\_ M. Bergen\_\_\_\_ G. Shephard\_\_\_\_ D. Engle\_\_\_\_ K. Brown\_\_\_\_ L. Rose\_\_\_\_ E. Ayala\_\_\_\_

Item 8a, Attachment A - September 13, 2018

**UPPER VENTURA RIVER GROUNDWATER AGENCY  
FISCAL YEAR BUDGET  
FY 2017/18**

**2017/2018 BUDGET Year End**

**REVENUES**

<b>BEGINNING CASH BALANCE:</b>			
--------------------------------	--	--	--

ACCOUNT NUMBER	REVENUES	BUDGET 2017/2018	ACTUAL 2017/2018	Comments
1	Contributions from Member Agencies	\$240,100	\$245,000	
<b>TOTAL INCOME</b>		<b>\$240,100</b>	<b>\$245,000</b>	

**OPERATING EXPENSES**

ACCOUNT NUMBER	OPERATING EXPENSE	BUDGET 2017/2018	Actual	Comments
<b>Labor Costs (Book Keeper/Office Management):</b>				
1	Workers Comp	\$300	\$0	
2	Payroll/Labor	\$27,000	\$14,035	Cece van der Meer & an assistant
3	Medical Reimbursement	\$3,000	\$2,700	
<b>Total Labor Cost:</b>		<b>\$30,300</b>	<b>\$16,735</b>	
<b>Office Costs:</b>				
4	Rent	\$1,650		
5	Telephone/Internet/website	\$750		
6	Utilities	\$75		
7	Supplies	\$4,000		
8	Postage	\$1,125		
	<b>Total to OBGMA</b>	<b>\$7,600</b>	<b>\$5,166</b>	includes rent, utilities
9	Office Equipment	\$20,000	\$758	
10	Bank Charges	\$300	\$220	
<b>Total Office Cost:</b>		<b>\$27,900</b>	<b>\$6,144</b>	
<b>Professional Services:</b>				
11	Audits	\$3,500	\$0	
12	CPA/Treasurer	\$4,000	\$779	
13	Website maintenance	\$1,500	\$1,425	
14	Public Outreach/218 publications	\$3,000	\$0	
15	Liability Insurance	\$2,400	\$0	
16	Professional Services, Engr, Geologist, Drafting, etc.	\$15,000	\$82,542	
17	Routine Legal Counsel	\$40,000	\$62,738	not parsed routine vs special
18	Annual Report	\$1,000	\$0	
19	Hydro Geologist	\$20,000	\$4,104	
21	Training and Membership	\$1,000	\$785	Bruce conference
22	Data Loggers	\$20,000	\$0	
23	DWR filing fees/etc.	\$500	\$0	
24	Special Legal Services	\$25,000	\$0	see line 17
25	Review and Study of Potential Funding Options and Management	\$35,000	\$0	
26	Funding for Reserves	\$10,000		
<b>Total Professional Services Cost:</b>		<b>\$181,900</b>	<b>\$152,373</b>	

<b>TOTAL EXPENSES</b>	<b>\$240,100</b>	<b>\$175,252</b>	
<b>NET INCOME</b>		<b>\$69,748</b>	

**UPPER VENTURA GROUNDWATER AGENCY Item No. 8 (b)**

**DATE:** September 13, 2018  
**TO:** Board of Directors  
**FROM:** Ad Hoc Budget Committee  
**SUBJECT:** Multi-Year Budget

**SUMMARY:** The multi-year budget includes the current fiscal year through FY 23/24. Grant income and expenditures are estimated through FY 22/23. After the grant, expenses for legal and GSP Manager are expected to be reduced by 50%. Monitoring and production of an Annual Report will be necessary starting in FY3/24. Continuing expenses such as labor and office support are multiplied by 3% per year to account for inflation. Anticipated funding needed is included for discussion by the Ad Hoc Funding Options Committee and the Board.

**RECOMMENDED ACTION:** It is recommended that the Board discuss the draft multi-year budget and operating reserves recommendations prepared by the Ad Hoc Budget Committee and provide feedback to the committee.

**BACKGROUND:** See Summary.

**FISCAL SUMMARY:** No fiscal impact.

**ATTACHMENTS**

A. Multi-Year Budget

Action: \_\_\_\_\_

Motion: \_\_\_\_\_ Second: \_\_\_\_\_

B. Kuebler\_\_\_\_ M.rgen\_\_\_\_ G. Shephard\_\_\_\_ D. Engle\_\_\_\_ K. Brown\_\_\_\_ L. Rose\_\_\_\_ E. Ayala\_\_

UVRGA PRELIMINARY DRAFT LONG RANGE BUDGET - AUGUST 30, 2018							
	FY 19	FY 20	FY 21	FY 22	FY23	FY24	Total
EXPENSE							
Labor							
Payroll	\$ 26,000	\$ 26,780	\$ 27,583	\$ 28,411	\$ 29,263	\$ 30,141	\$ 168,179
Insurance	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796	\$ 32,342
Total Labor	\$ 31,000	\$ 31,930	\$ 32,888	\$ 33,875	\$ 34,891	\$ 35,937	\$ 129,692
Office							
Rent	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464	\$ 5,628	\$ 5,796	\$ 32,342
Utilities	\$ 1,000	\$ 1,030	\$ 1,061	\$ 1,093	\$ 1,126	\$ 1,159	\$ 6,468
Postage	\$ 300	\$ 309	\$ 318	\$ 328	\$ 338	\$ 348	\$ 1,941
Supplies	\$ 600	\$ 618	\$ 637	\$ 656	\$ 675	\$ 696	\$ 3,881
Office Equipment	\$ 1,500	\$ 1,545	\$ 1,591	\$ 1,639	\$ 1,688	\$ 1,739	\$ 9,703
Bank Charges	\$ 600	\$ 618	\$ 637	\$ 656	\$ 675	\$ 696	\$ 3,881
Total Office	\$ 9,000	\$ 9,270	\$ 9,548	\$ 9,835	\$ 10,130	\$ 10,433	\$ 37,653
Professional Services (non grant)							
GSP Manager	\$ 44,000	\$ 45,320	\$ 46,680	\$ 48,080	\$ 24,000	\$ 24,720	\$ 232,800
Legal	\$ 72,000	\$ 74,160	\$ 76,385	\$ 78,676	\$ 35,000	\$ 36,050	\$ 372,271
Website	\$ 1,000	\$ 1,030	\$ 1,061	\$ 1,093	\$ 1,126	\$ 1,159	\$ 6,468
Accounting	\$ 10,000	\$ 10,300	\$ 10,609	\$ 10,927	\$ 11,255	\$ 11,593	\$ 64,684
Annual Report	\$ -	\$ -	\$ -	\$ -	\$ 40,000	\$ 41,200	\$ 81,200
Monitoring	\$ -	\$ -	\$ -	\$ -	\$ 30,000	\$ 30,900	\$ 60,900
Total Professional (non grant)	\$ 127,000	\$ 130,810	\$ 134,734	\$ 138,776	\$ 141,381	\$ 145,622	\$ 818,323
Grant Tasks							
2.1 Well Monitoring	\$ 4,875	\$ 4,875	\$ -	\$ -	\$ -	\$ -	\$ 9,750
2.2 Interface Monitoring	\$ 24,000	\$ 13,695	\$ -	\$ -	\$ -	\$ -	\$ 37,695
2.3 Private Well Use	\$ 5,000		\$ -	\$ -	\$ -	\$ -	\$ 5,000
2.4 Water Year Analysis	\$ 10,000		\$ -	\$ -	\$ -	\$ -	\$ 10,000
2.5 Subsurface Inflow	\$ 30,000	\$ 2,520	\$ 2,520	\$ -	\$ -	\$ -	\$ 35,040
2.6 Surface Water Flow Data	\$ 10,000	\$ 8,000	\$ -	\$ -	\$ -	\$ -	\$ 18,000
2.7 Natural Habitat Evapotranspiration Analysis	\$ 5,000	\$ 1,870	\$ 1,870	\$ -	\$ -	\$ -	\$ 8,740
3.1 Organizational Activities	\$ 42,000		\$ -	\$ -	\$ -	\$ -	\$ 42,000
4 Plan Area and Basin Setting	\$ 60,000	\$ 39,200	\$ 39,200	\$ -	\$ -	\$ -	\$ 138,400
5 Sustainable Mgmt Criteria	\$ 16,000	\$ 24,000	\$ 93,917	\$ 46,258	\$ -	\$ -	\$ 180,175
6 GSP Chapter 4: Projects and Management Actions	\$ -	\$ 5,000	\$ 20,469	\$ 10,082	\$ -	\$ -	\$ 35,551
7 GSP Chapter 5: Plan Implementation	\$ -	\$ 2,500	\$ 11,470	\$ 5,650	\$ -	\$ -	\$ 19,620
8 GSP Introduction, Executive Summary, References & Appendices	\$ -	\$ 2,500	\$ 10,486	\$ 5,165	\$ -	\$ -	\$ 18,151
9 GSP Reviews and Approvals and Final Document Preparation	\$ -	\$ -	\$ -	\$ 33,660	\$ -	\$ -	\$ 33,660
10 Project Administration (Grant Management)	\$ 13,000	\$ 19,961	\$ 19,961	\$ 19,961	\$ -	\$ -	\$ 72,883
Total Grant Tasks	\$ 219,875	\$ 124,121	\$ 199,893	\$ 120,776	\$ -	\$ -	\$ 664,665
Funding for Reserve	\$ 41,000	\$ 9,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
Subtotal Expense	\$ 427,875	\$ 305,131	\$ 377,063	\$ 303,261	\$ 186,401	\$ 191,993	\$ 1,791,725
REVENUE							
Total Revenue Needed	\$ 427,875	\$ 305,131	\$ 377,063	\$ 303,261	\$ 186,401	\$ 191,993	\$ 1,791,725
Fund Balance from Prior FY	\$ 69,748						\$ 69,748
Anticipated Grant Payments	\$ -	\$ 149,451	\$ 273,795	\$ 111,925	\$ 94,890	\$ -	\$ 630,061
Anticipated Funding Needed From Members &/or Fees	\$ 358,127	\$ 155,680	\$ 103,268	\$ 191,336	\$ 91,511	\$ 191,993	\$ 1,091,916
RESERVES							
Reserve Balance	\$ 41,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	N/A
YEAR END FUND BALANCE							
Year End Fund Balance	\$ 41,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	N/A

**UPPER VENTURA RIVER GROUNDWATER AGENCY Item No. 8(c)**

**DATE:** September 13, 2018

**TO:** Board of Directors

**FROM:** Agency Staff

**SUBJECT:** Comment Letter on Draft Geologic Analysis of Ventura River Watershed - State Water Resources Control Board Study Plan for the Development of an Integrated Groundwater-Surface Water Model of the Ventura River Watershed

**SUMMARY**

On August 28, 2018, the State Water Resources Control Board (SWRCB) released the Draft Geologic Analysis of Ventura River Watershed in Support of Development of Groundwater-Surface Water and Nutrient Transport Models. This model will be used to develop an instream flow requirement to protect steelhead trout by SWRCB. SWRCB is soliciting comments on the geological analysis. Comments are due on September 28, 2018. The draft geologic analysis is available online at:

[https://www.waterboards.ca.gov/waterrights/water\\_issues/programs/instream\\_flows/cwap\\_enhancing/docs/vrw\\_geologic%20analysis\\_081618.pdf](https://www.waterboards.ca.gov/waterrights/water_issues/programs/instream_flows/cwap_enhancing/docs/vrw_geologic%20analysis_081618.pdf)

The technical advisory committee (TAC) convened by SWRCB meets on September 24, 2018 to discuss the geological analysis. The GSP PM and Chair Kuebler are planning to attend the TAC meeting, which will aide in comment letter development, should the Board decide to submit comments.

The GSP PM believes it is very important for the Agency to send written comments to create an administrative record. It is proposed that the GSP PM and Board Chair develop the comment letter, as was done when the Agency submitted comments on the SWRCB Study Plan and, more recently, the OBGMA groundwater management plan.

**RECOMMENDED ACTION**

It is recommended that the Board:

- (1) Authorize the GSP PM to review the draft geologic analysis and prepare a comment letter for a fee not to exceed \$950; and
- (2) Authorize Chair Kuebler to sign and submit the comment letter on behalf of the Agency.

**BACKGROUND**

The geological analysis is the first step in implementing the SWRCB's Study Plan for development of its Groundwater-Surface Water and Nutrient Transport Model of the Ventura River Watershed. The geological analysis will provide foundational information for SWRCB's

model. In the GSP PM's experience reviewing groundwater models throughout his career, many modeling issues are traced back to problems with the hydrogeological conceptual model, of which the geologic framework is a key component. Therefore, it would be prudent to review and comment on the geological analysis. Written comments are recommended for the purpose of creating an administrative record.

### **FISCAL SUMMARY**

GSP PM review of the draft geological analysis and preparation of a comment letter would add approximately \$950 to the FY 18/19 budget, but only if the GSP PM budget for the year is fully utilized on other work.

Action: \_\_\_\_\_

Motion: \_\_\_\_\_ Second: \_\_\_\_\_

B. Kuebler\_\_\_\_ M. Bergen\_\_\_\_ G. Shephard\_\_\_\_ D. Engle\_\_\_\_ K. Brown\_\_\_\_ L. Rose\_\_\_\_ E. Ayala\_\_\_\_

## **UPPER VENTURA RIVER GROUNDWATER AGENCY Item No. 8(d)**

**DATE:** September 13, 2018

**TO:** Board of Directors

**FROM:** Chair Kuebler

**SUBJECT:** Staffing Discussion

### **SUMMARY**

Vice Chair Bergen and I discussed projected workloads with Executive Director VanDerMeer to anticipate potential conflicts between our Agency and OBGMA.

### **RECOMMENDED ACTION**

Discuss the executive director duties and different possible approaches for servicing the duties. Provide direction to Board Chair on the recommend approach.

### **BACKGROUND**

OBGMA recently hired John Mundy as General Manager. He will continue to work part-time, as he has done for several years as a consultant. He prepared a list of goals and objectives which indicate a higher level of activity related to routine functions. There will also be more work to implement items in the recently approved Groundwater Management Plan. OBGMA may have to prepare a GSP if their alternative demonstration is not approved with a decision expected within four months. VanDerMeer will participate in some of the increased work.

UVRGA workload will increase as we move into drafting the GSP, setting up an extraction fee program with a system to measure pumping, preparing reports as data gap task results come in, and as the stakeholder engagement become more active.

In our talk with VanDerMeer, we stated our intent to continue to have her continue as part of our team and asked which administrative functions she would prefer and which would be done by someone else. We agreed the Board process, including agenda preparation, noticing, and minutes, as well as website maintenance would be done by another person. Thorough meeting minutes, as recommended by Center for Collaborative Policy facilitator Mindy Meyer, are particularly important as we move into potentially controversial issues.

To stimulate discussion, here are a few options.

1. Hire a new part-time Executive Director for the Board process, change VanDerMeer's position to Administrative Assistant (AA), and retain Bondy as GSP PM. The new Executive Director would work with AA to ensure completion on all functions.
2. Designate Bondy as Executive Director, hire a part-time clerk of the Board for the Board process, and change VanDerMeer's position to AA. Bondy would work with clerk of the Board and AA to ensure completion on all functions.

3. For either 1 or 2 above, use a staff member from the County, Ventura, or Casitas for the Executive Director or clerk of the Board, respectively.

**FISCAL SUMMARY**

There will be increased cost to be determined.

**ATTACHMENTS**

None

Action: \_\_\_\_\_

Motion: \_\_\_\_\_ Second: \_\_\_\_\_

B. Kuebler\_\_\_\_ M. Bergen\_\_\_\_ G. Shephard\_\_\_\_ D. Engle\_\_\_\_ K. Brown\_\_\_\_ L. Rose\_\_\_\_ E. Ayala\_\_\_\_