Fillmore and Piru Basins
Groundwater Sustainability Agency

Board of Directors Meeting
Friday
January 18, 2019 – 5:00 p.m.

City of Fillmore City Hall, City Council Chambers
250 Central Avenue, Fillmore, CA 93015

AGENDA

1. Call to Order

2. Pledge of Allegiance

3. Directors Roll Call

4. Public Comments

   Fillmore and Piru Basins Groundwater Sustainability Agency (Agency) will accept public comment concerning agenda items at the time the item is considered and on any non-agenda item within the jurisdiction of the Board during the agendized Public Comment period. No action will be taken by the Board on any non-agenda item. In accordance with Government Code § 54954.3(b)(1), public comment will be limited to three (3) minutes per speaker per issue.

5. Approval of Agenda

   Motion

6. City of Fillmore Representative to FPB GSA Board of Directors

   Information Item

   Board will welcome a new member of the Board of Directors, representing the City of Fillmore, as a result of a change on the Fillmore City Council from the November 6, 2018 election.

7. Director Announcements/Board Communications

8. Executive Director Update

   Information Item

   The Executive Director will provide an informational update on Agency activities since the previous Board meeting of December 20, 2018.

9. CONSENT CALENDAR

9A Approval of Minutes

The Board will consider approving the Minutes from the Board Meeting of December 20, 2018.

9B Approval of Warrants

There are no invoices for approval at this time.

9C Monthly Financial Report

The Board will receive a monthly profit and loss statement and balance sheet for the FPBGSA from UWCD's accounting staff.

10. ACTION ITEMS

10A Adoption of Consultant Agreement with Daniel B. Stephens & Associates for Groundwater Sustainability Planning

Motion

Board will consider approving and adopting an agreement with Daniel B. Stephens & Associates for groundwater sustainability planning services in the amount of $795,000.

11. INFORMATION ITEMS

11A Update on Status of Fillmore and Piru Basins GSA Boundary Modification

Information Item

Board will receive an update from UWCD's Supervising Hydrogeologist Dan Detmer on the status of the Fillmore and Piru Basins GSA Boundary Modifications with the CA Department of Water Resources.

FUTURE TOPICS FOR BOARD DISCUSSION

Update on Basin Boundary Modification; Update on Past Due Account Receivables

ADJOURNMENT

The Board will adjourn to the next **Regular Board Meeting** on Thursday**, February 21, 2019** or call of the Chair.

Materials, which are non-exempt public records and are provided to the Board of Directors to be used in consideration of the above agenda items, including any documents provided subsequent to the publishing of this agenda, are available for inspection at UWCD's offices at 106 North 8th Street in Santa Paula during normal business hours.

The Americans with Disabilities Act provides that no qualified individual with a disability shall be excluded from participation in, or denied the benefits of, the District's services, programs or activities because of any disability. If you need special assistance to participate in this meeting, or

if you require agenda materials in an alternative format, please contact the UWCD Office at (805) 525-4431 or the City of Fillmore at (805) 524-1500. Notification of at least 48 hours prior to the meeting will enable the District to make appropriate arrangements.

Approved: Kelly Long
Board Chair Kelly Long

Posted: (date) Monday, January 14, 2019 (time) 10:00a.m. (attest) *Kris Sofley*
At: Fillmore City Hall, 250 Central Avenue, Fillmore, CA

Posted: (date) Monday, January 14, 2019 (time) 10:00a.m. (attest) *Kris Sofley*
At: https://www.FPBGSA.org

Posted: (date) Monday, January 14, 2019 (time) 10:00a.m. (attest) *Kris Sofley*
At: https://www.facebook.com/FPBGSA/

Posted: (date) Monday, January 14, 2019 (time) 10:00a.m. (attest) *Kris Sofley*
At: United Water Conservation District Headquarters, 106 No. 8th St., Santa Paula, CA

Fillmore and Piru Basins
Groundwater Sustainability Agency

Board of Directors Meeting
Thursday, December 20, 2018
City Council Chambers, Fillmore City Hall
250 Central Avenue, Fillmore, CA 93015

MINUTES

Directors Present
Director Kelly Long, Chair
Director Ed McFadden, Vice Chair/Secretary/Treasurer
Director Gordon Kimball
Director Candice Meneghin
Director Glen Pace

Staff Present
Anthony Emmert, Executive Director
Lemieux, Legal Counsel
John Lindquist, UWCD (substitute Clerk of the Board)

Public Present
Dan Detmer, United Water Conservation District
Tony Morgan, Daniel B. Stephens & Associates, Inc.
Tim Moore, Daniel B. Stephens & Associates, Inc.
Kenneth Rogers, Amen Ranches LLC
George Reid

1. **Call to Order 6:07 p.m.**
   Chair Long called the meeting to order at 6:07p.m.

2. **Pledge of Allegiance**
   The Board, Staff, and audience participated in the Pledge of Allegiance.

3. **Directors Roll Call**
   Directors Pace, Kimball, Long, McFadden and Meneghin all answered the roll call.

4. **Public Comments**
   Chair Long asked if there were any public comments for the Board. None were offered.

5. Approval of Agenda

Motion

Chair Long asked if any Board member would like to revise the agenda, or make a motion to approve it as written. Motion to approve the agenda: Director McFadden; Second, Director Pace. Voice vote: five ayes (Pace, Kimball, Long, McFadden, Meneghin); none opposed. Motion carries unanimously 5/0/0.

6. Director Announcements/Board Communications

Director Pace noted that he had to leave tonight's Board meeting by 7:15p.m. due to a personal matter.

Director Meneghin informed the group that after this meeting, she would take maternity leave and anticipated returning to the Board in late April 2019. She asked if the Board thought another member of the Friends of the Santa Clara River should take her place on the Board during her absence. Chair Long stated that the Board would need to consider that proposal further. Director Meneghin stated that she had discussed her departure with E.J. Remson (of The Nature Conservancy), who felt that a Friends of the Santa Clara River representative would be a suitable replacement.

Director McFadden reported that United Water Conservation District (United) is considering a variety of interesting and exciting new projects to improve water supply throughout their service area.

Chair Long noted that the State of California is providing a number of grant opportunities that would be worth looking into.

7. Executive Director Update

Information Item

Mr. Emmert provided a brief update to the Board regarding his activities since the previous Board meeting of November 15, 2018. He reported that the Proposition 1 grant agreement to support preparation of the Fillmore and Piru basins Groundwater Sustainability Plans (GSPs) was close to being executed. He also reported that contract negotiations with the GSP consultant selected by the Board were proceeding and should be completed by the next Board meeting. Mr. Emmert said that staff is in the process of updating the cash-flow forecasts in light of the new budget and schedule, and the only concern noted so far (based on preliminary review) is that the forecasted FPBGSA account balance could potentially become negative during parts of fiscal years 2020 or 2021, depending on the cost and timing for construction of new monitoring wells included in the scope of work submitted with the Proposition 1 grant. Mr. Emmert said the cash-flow forecasting effort is still underway, and will continue early in the next year.

Mr. Emmert also reported that he attended the State Water Resources Control Board (SWRCB) and Department of Water Resources (DWR) meeting about surface water and

groundwater interactions. His take-away from the meeting was that GSAs must consider multiple issues, including groundwater dependent ecosystems (GDEs) and surface water diversions, but had little actual authority to affect them. The SWRCB would need to be asked for help in influencing surface water diverters. Director Meneghin noted that groundwater withdrawals can affect surface water flows, and that while a GSA has authority over groundwater withdrawals, they have little control over surface water diversions.

8. CONSENT CALENDAR

Chair Long asked if the Board members had any questions or comments on the consent calendar. Regarding the Minutes from the November 15, 2018, Board meeting, Director Kimball noted that attendee Ann Ohlankum was listed as being affiliated with "CFRDG" rather than "CFROG" (Citizens for Responsible Oil and Gas). Chair Long proposed revising the minutes to reflect the change from "CFRDG" to "CFROG." Voice vote to approve the consent calendar, with the one revision to the Minutes proposed by Chair Long: five ayes (Kimball, Long, McFadden, Meneghin, Pace); none opposed; one absent. Motion carries unanimously 5/0/0.

8A Approval of Minutes

The Board will consider approving the Minutes from the Board Meeting of November 15, 2018.

8B Approval of Warrants

The Board will consider approving invoices for the following payments:

OMLO October 2018 Legal Services $625.00
OMLO November 2018 Legal Services $960.00
insureCAL 2019 General Liability insurance $2,077.67

8C Monthly Financial Report

The Board will receive a monthly profit and loss statement and balance sheet for the FPBGSA from UWCD's accounting staff.

9. ACTION ITEMS

9A Update on Agency's Past Due Receivables and Collection Strategy.

Motion

Mr. Emmert summarized the status of past due receivables, as described in the Staff Report for this item. He also noted that there are a handful of pumpers with no additional contact information other than an address, and notices sent to them were returned to United as "undeliverable." Potential options that might be pursued by United staff include outreach or "friendly reminders" that payment was required. Director Long noted that 28 of the past-due amounts are for bills of less than $10. Mr. Emmert clarified that those past-due amounts of $1 or $0.01 represented

unreported pumping volumes. Therefore, the actual amount owed was unknown, but likely higher than $1.

Director Meneghin questioned why, if groundwater pumpers had to report their pumpage to the State, couldn't the GSA obtain the information from DWR? Dan Detmer/United clarified that pumpers have an option to report pumping to the State for a fee of $100, but that is not a requirement, and many pumpers choose not to do so. Mr. Emmert confirmed that self-reporting to the State is optional.

Director Kimball asked whether Ventura County or United have the authority to inspect wells. Mr. Emmert replied that United is developing procedures to do so, but has not finalized those procedures or exercised that new authority yet.

Director Long asked Director Kimball if any of the non-reporters were members of the Fillmore and Piru Basins Pumpers Association. Director Kimball was not sure, but was willing to check.

Director Long asked Mr. Emmert what authority United had to pursue non-reporters, and what the GSA's options were. Mr. Emmert stated that United is continuing to develop its authority to pursue non-pumpers and non-reporters. United staff could also continue its efforts to find contacts for notices to pumpers that were returned as "undeliverable." However, he said that he did not feel it would be appropriate for him to direct United staff to press pumpers further without consulting the Board first, which is why he brought the issue before the Board tonight.

Chair Long suggested that United provide the list of non-paying or non-reporting pumpers to Director Kimball, with any financial information required, so that he could work with the Pumpers Association to identify and contact the well owners. Counsel stated that there should be no legal issues with United providing such a list to Director Kimball and the Pumpers Association. Chair Long also suggested that United should follow up on its efforts to identify non-payers and non-reporters on behalf of the GSA.

A representative from the California Department of Fish and Wildlife (DFW) at the Fillmore Fish Hatchery spoke up and stated that they planned on paying their past-due and future extraction fees to the GSA. The reason they had not paid yet was that they needed to make budget changes. Chair Long thanked the DFW for their cooperation and attendance at this meeting.

Chair Long suggested that United staff should be allowed to proceed, using "reasonable judgment" in determining how much effort they should expend in pursuit of non-payer or non-reporter contact information. Director Pace felt that

United could spend as much time as necessary to track down non-payers if fees exceeded a certain dollar amount, but did not specify an amount.

Chair Long asked if there was a motion to:

1. Request that United provide a list of non-paying or non-reporting pumpers to Director Kimball, without any financial information, so that he could work with the Pumpers Association to try and identify and contact the well owners;
2. Request that United also provide that list to Supervisor Long to pursue through Ventura County staff;
3. Authorize United to follow up on its efforts to identify non-payers and non-reporters on behalf of the GSA, using reasonable judgment regarding time spent on this effort.

Motion to proceed with the three efforts to identify non-payers and non-pumpers, Director McFadden; Second, Director Kimball. Voice vote: five ayes (Kimball, Long, McFadden, Meneghin, Pace); none opposed. Motion carries unanimously 5/0/0.

9B Stakeholder Engagement Strategy

Motion

Mr. Emmert summarized the existing plan for stakeholder engagement during GSP development, together with the options and potential effects of a more robust stakeholder engagement effort, as described in the Staff Report for this item. Mr. Emmert suggested that an ad hoc committee could strategize on an approach for stakeholder engagement, noting that the State wants a "sincere" effort to engage all stakeholders, not just pumpers.

Chair Long stated that as a County Supervisor, she had a list of all organizations and potential stakeholders in the Santa Clara River Valley. She asked how much time the ad hoc committee should invest on this effort. Director Kimball asked if it was necessary that potential stakeholders actually attend meetings, or was it enough to inform potential stakeholders of the process that is occurring. Mr. Emmert said that a sincere effort to inform people of the process and their opportunities to engage was what the State expected. At this point, Mr. Emmert asked Tony Morgan/DBS&A to provide his thoughts. Mr. Morgan showed a slide (Attachment A) and described the process that the State expected.

Director Pace asked why it was necessary to talk about this today—couldn't the Board just accept the GSA's GSP consultant's proposal, which included a stakeholder engagement component? Mr. Morgan replied that there was enough funding to implement a robust stakeholder engagement plan, and what he really hoped was for the engagement team to be adequately prepared for the upcoming effort as early as possible in the new year. He suggested a couple of meetings to brainstorm on the process and contacts. Director Meneghin asked if meetings were

really needed, or could Board members just share stakeholder information? Counsel suggested that to avoid Brown Act violations, it would be best to have an ad hoc committee discuss the issues and bring their thoughts back to the full Board.

Director Kimball suggested that Chair Long and Director McFadden comprise the ad hoc committee. Counsel stated that Chair Long could simply appoint an ad hoc committee, rather than the Board deciding as an action item.

Chair Long appointed herself and Director McFadden to an ad hoc committee to consider the methods and contacts that the Board should consider as part of its stakeholder engagement effort for the GSPs.

9C Soliciting Proposals for Auditors

Motion

Mr. Emmert summarized the need for the GSA to hire an auditor, as described in the Staff Report for this item. Director Pace noted that in the Request for Proposals, in the last paragraph of the first page (Section I, Subsection A), the second sentence referred to a "District Board." Director Pace felt that should instead refer to "Agency Board." Mr. Emmert agreed.

Motion to proceed with soliciting proposals from auditors, with the one revision of language noted above, Director McFadden; Second, Director Pace. Voice vote: five ayes (Kimball, Long, McFadden, Meneghin, Pace); none opposed. Motion carries unanimously 5/0/0.

9D Board Meeting Dates for 2019

Motion

Chair Long stated that she felt the dates were acceptable, but asked how the other Directors and Staff felt about starting the meetings at 5:00p.m., rather than the 6:00p.m. starting time of the past year's meetings. The other Directors and Staff felt 5:00p.m. would be acceptable to them.

Motion to accept the proposed Board meeting dates and specifying a planned starting time of 5:00p.m., Director Pace; Second, Director Meneghin. Voice vote: five ayes (Kimball, Long, McFadden, Meneghin, Pace); none opposed. Motion carries unanimously 5/0/0.

10. INFORMATION ITEMS

10A Basin Boundary Modification Update

Information Item

UWCD's Supervising Hydrogeologist Dan Detmer provided a presentation (Attachment B) updating the Board on status of the proposed Basin Boundary Modifications for Fillmore and Piru basins submitted to DWR by United Staff in 2018. Chair Long asked if Staff were given any real choice by DWR other to accept DWR's recommended changes to the boundary modification request. Mr. Detmer replied that he did not get the impression that DWR was willing to entertain any other options. Chair Long also asked if owners of wells that were within the proposed new Fillmore and Piru basin boundaries had been notified. Mr. Detmer said he would like to discuss that later in the presentation. He noted that United did not have information about whether some wells outside of United's service area were active or not, and would ask Ventura County staff if they knew. Director McFadden stated that the County often had better information about well status than one might expect.

After the presentation, Mr. Detmer asked how the Board would like to proceed on notifying owners of wells that would be within the new Fillmore and Piru basin boundaries under the proposed modifications. Chair Long asked how would these owners know that the GSA exists, since they were not included in the initial GSA notification process? Director Kimball noted that public outreach to date has basically failed, due to DWR's input (their requirement to make further basin boundary modifications beyond those requested by the GSA). Chair Long agreed that the DWR is really responsible for the latest changes, therefore it was DWR's outreach that failed.

Chair Long then asked how can the GSA reach out to those owners, considering that the DWR's public comment period for this round of basin boundary modifications is closing in early January. Mr. Detmer replied that United could relatively easily send a mailer to those affected well owners. He estimated that the number of impacted wells is "a little more than a couple dozen." Chair Long suggested sending a letter to those well owners to the effect that due to DWR requirements, their wells were included within the proposed new boundaries of the Fillmore and Piru basins, and would therefore be within the planning area for the FPBGSA. Furthermore, the owners could comment on the proposed boundary modifications at the DWR web site by January 4, 2019.

10B City of Fillmore Representative to FPBGA Board of Directors

Information Item

Chair Long noted that a new representative from Fillmore's City Council has not been appointed yet, and that the City would select their representative at its January 8, 2019, Council meeting.

FUTURE TOPICS FOR BOARD DISCUSSION

No additional topics proposed.

ADJOURNMENT 7:35 p.m.

The Board will adjourn to the next **Regular Board Meeting** on Friday**, January 18, 2019, at 5:00 p.m.** or call of the Chair.

I certify that the above is a true and correct copy of the minutes of the Fillmore and Piru Basins Groundwater Sustainability Agency's Board of Directors meeting of December 20, 2018.

ATTEST:_____
Kelly Long, Chair, FPB GSA Board of Directors

ATTEST: _____
John Lingquist (UWCD), Substitute Clerk of the Board

Fillmore and Piru Basins
Groundwater Sustainability Agency

BOARD MEETING

December 20, 2018 @ 6:00pm

City Council Chambers, Fillmore City Hall

250 Central Avenue, Fillmore, CA 93015

Name: Dan Detmer
Organization: UWCD
Phone:
E-mail:

Name: Tony Morgan
Organization: DBS&A
Phone:
E-mail: TMORGAN@GEO-LOGIC.COM

Name: KENNETH ROGERS
Organization: AMEN RANCHES LLC
Phone: 805-340-2363
E-mail: kb.rogers@hotmail.com

Name:
Organization:
Phone:
E-mail:

Name: TIM MOORE
Organization: DBS&A
Phone:
E-mail:

Name:
Organization:
Phone:
E-mail:

Name: George Reid
Organization: —
Phone: 794-9737
E-mail: greid23@gmail.com

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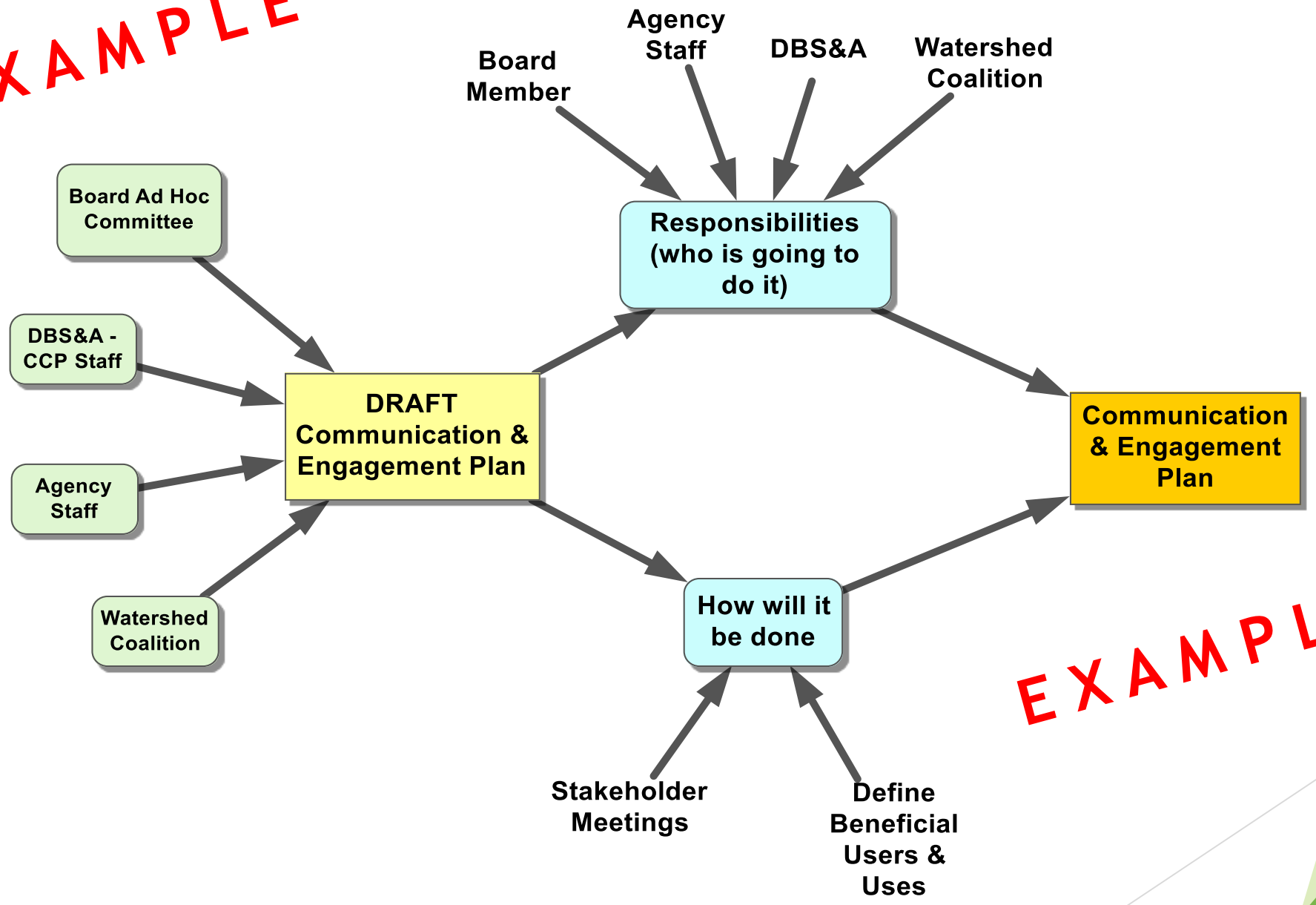
EXAMPLE



EXAMPLE

Update on Proposed DWR Basin Boundary Modifications

December 20, 2018

DWR Basin Boundary Modifications Process to Date:

- United worked with DWR staff in early 2018 to redraw Piru and Fillmore boundaries, following original DWR criteria (but with improved accuracy)
- Most edits were technical in nature (following geologic contacts)
- Jurisdictional boundary for western Fillmore (snap to stipulated boundary for Santa Paula basin)

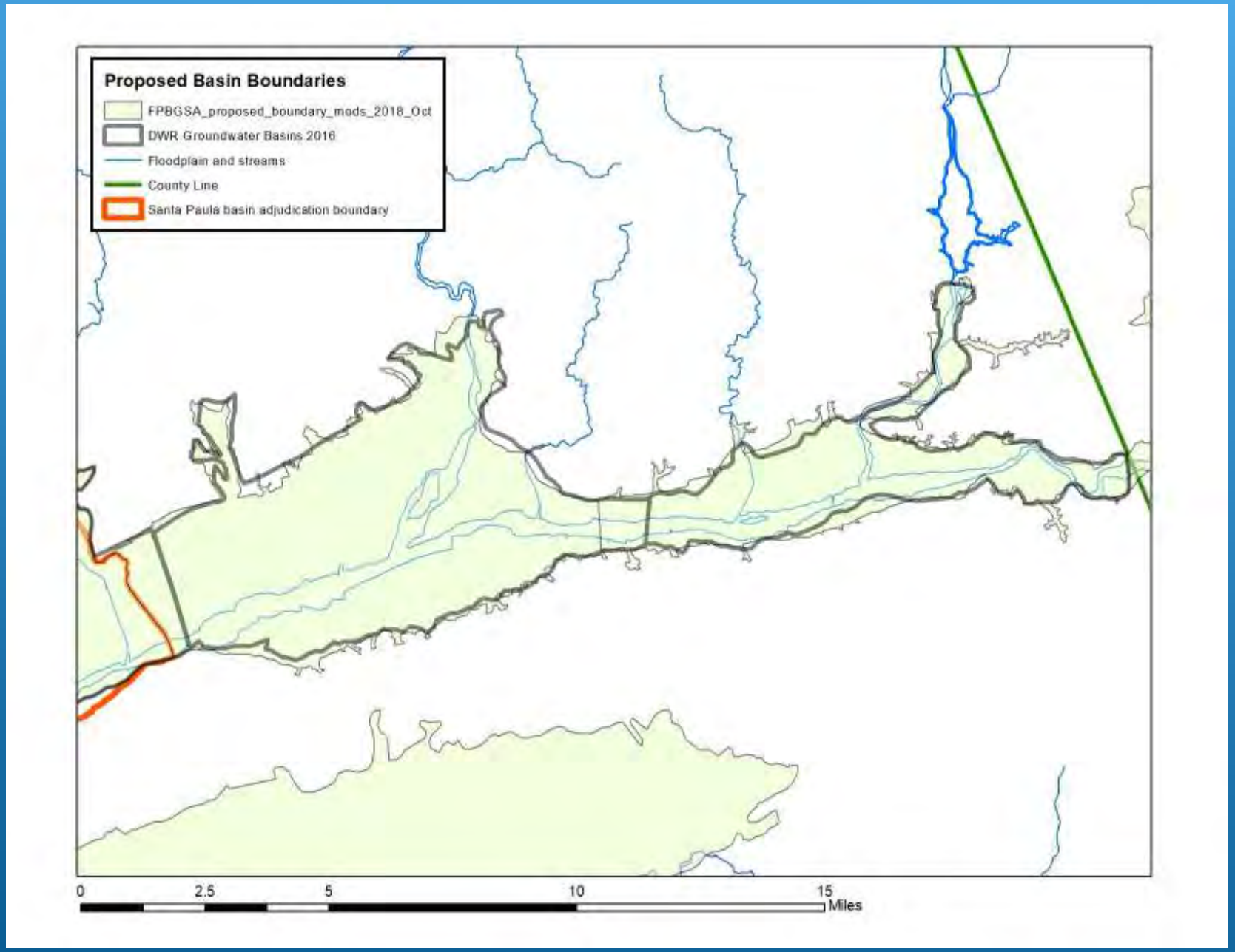
DWR Basin Boundary Modifications:

- On October 29 the DWR review panel expressed a strong preference for including alluvium around margins of the basin
- Mapped alluvium could be excluded if thought to be < 25 feet thick, unsaturated, non-water-bearing or structurally isolated from the basin
- UWCD edited the proposed basin boundaries and resubmitted to DWR on October 30
- DWR review panel recommended acceptance of proposed boundaries, DWR Director concurred: (draft decision to approve)

DWR Basin Boundary Modification Timeline:

- Public comment period opened November 29
- Public hearing in Sacramento on December 11, webcast was also available
- Public comment period closes January 4, 2019
- California Water Commission meeting
- Boundary modifications expected to be finalized in late February 2019

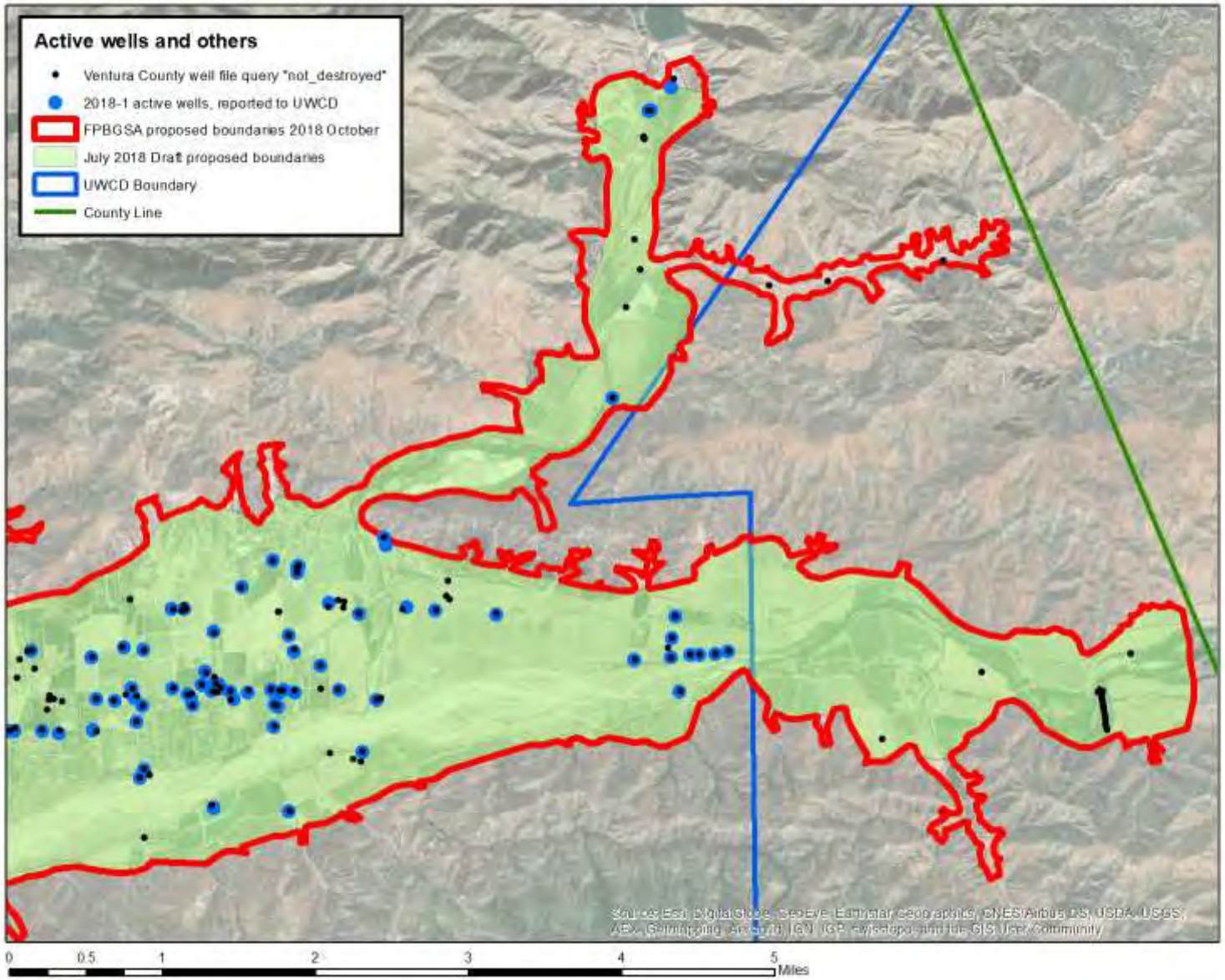
Proposed Basin Boundary Changes and Current DWR



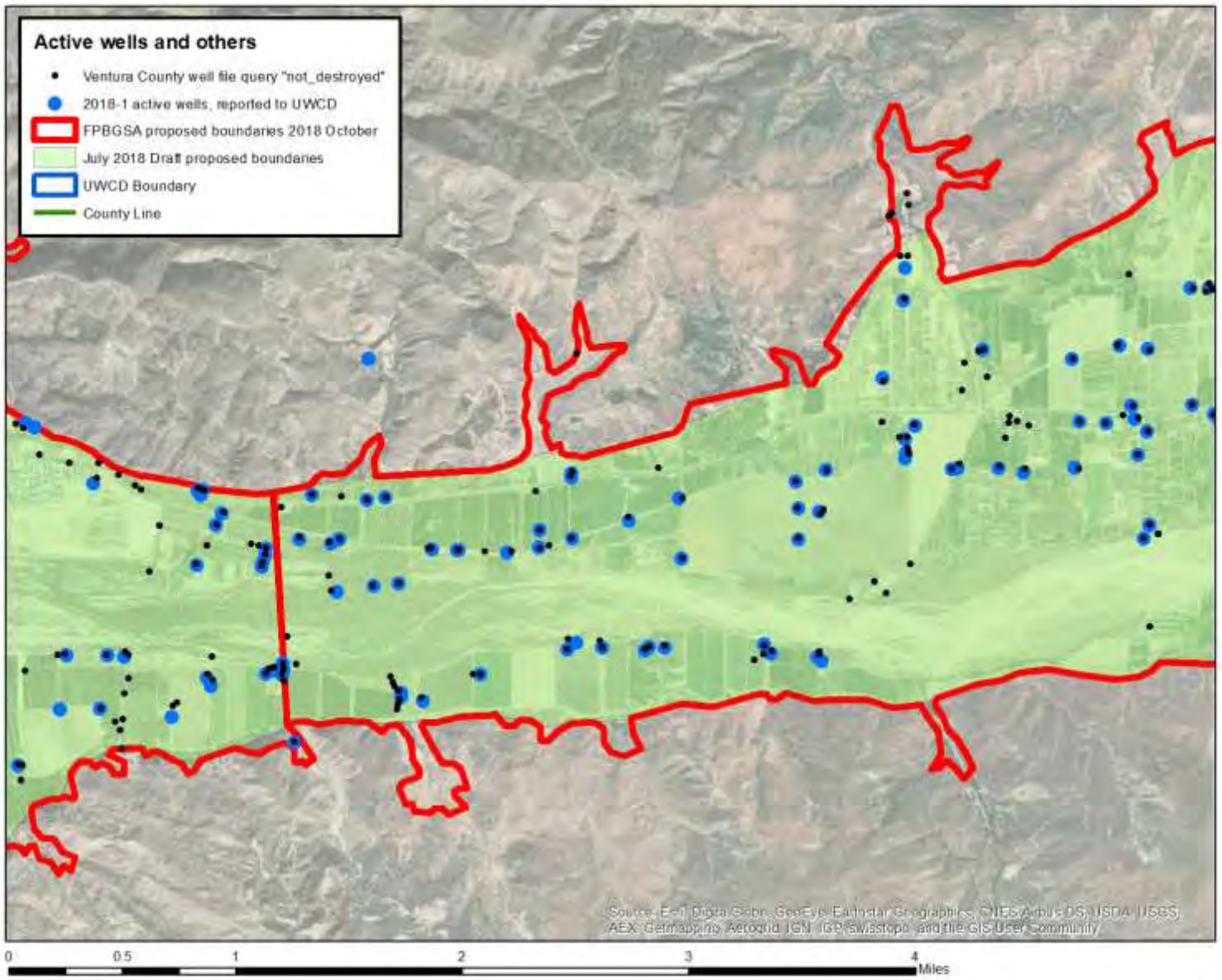
Local Public Process:

- FPBGSA basin boundary workshop considered the July version of proposed changes
- Subsequent changes to the proposed boundaries following DWR review and feedback in October
- Preliminary mapping done to evaluate how many wells were captured by the revision

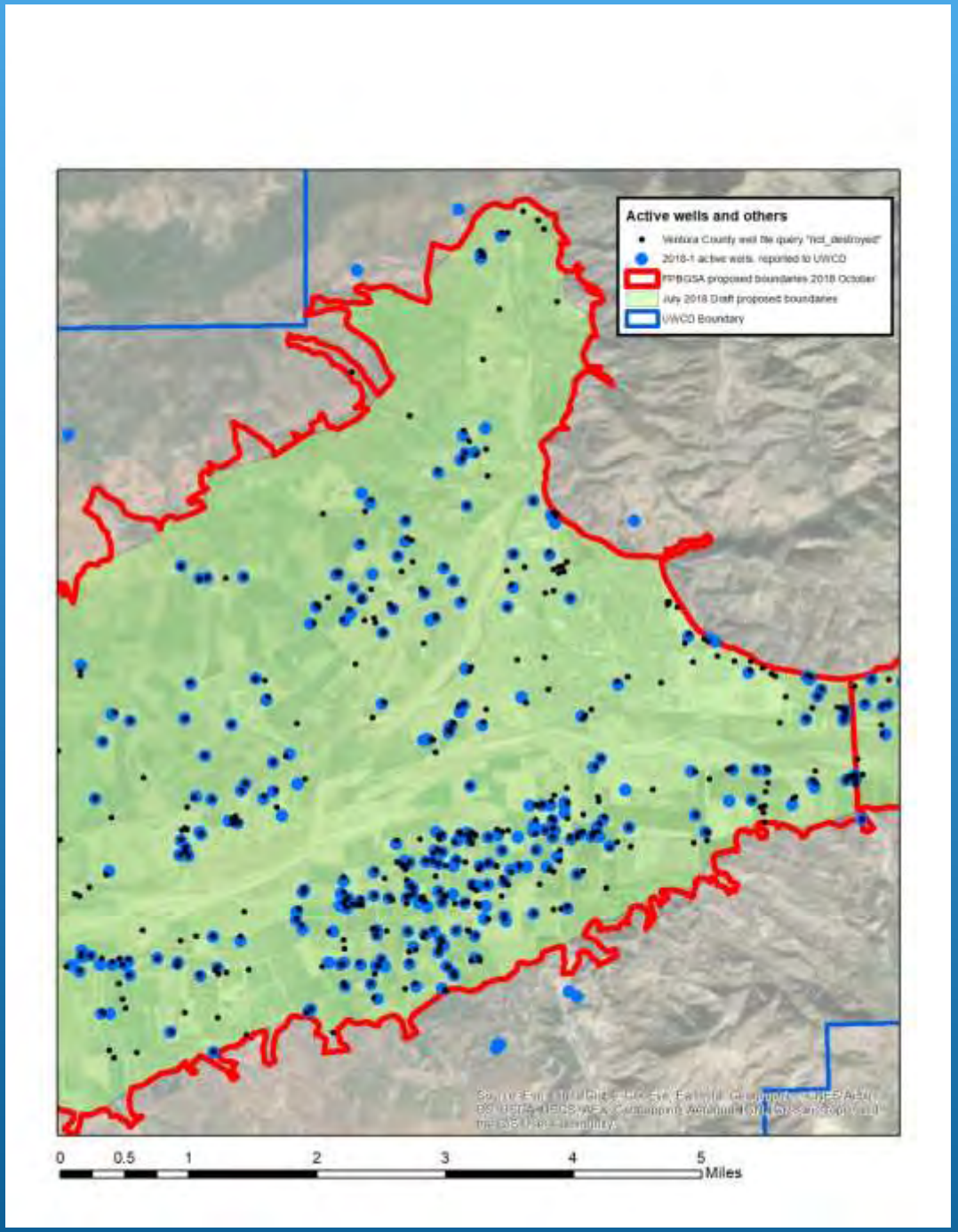
Basin Boundary Modification: Eastern Piru



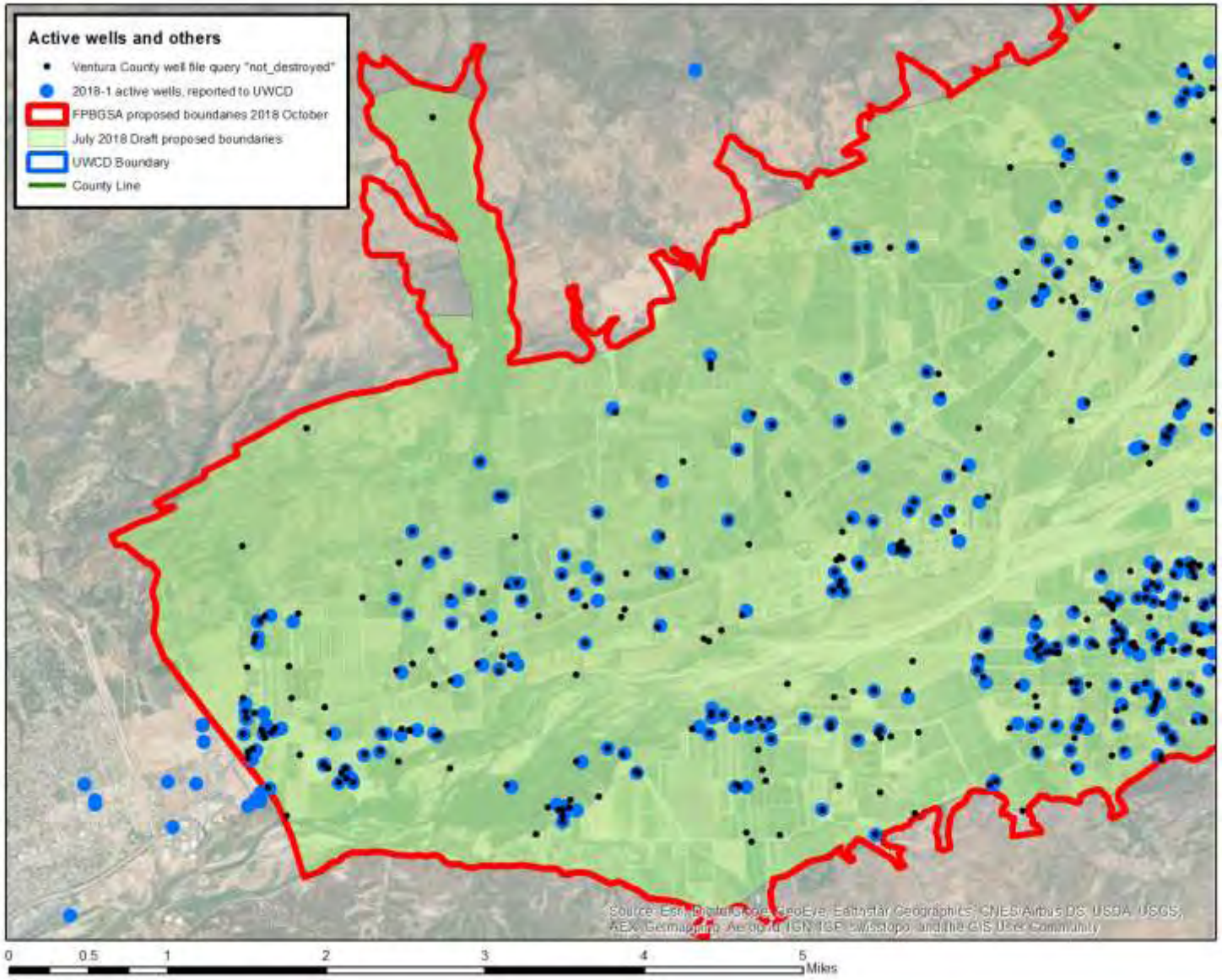
Basin Boundary Modification: Western Piru



Basin Boundary Modification: Eastern Fillmore



Basin Boundary Modification: Western Fillmore



Next Steps:

- Additional work required to determine status of certain wells
- Contact owners of active wells within FPBGSA boundaries

Item No. **9C Informational Item**

DATE: **January 11, 2019 (Meeting of January 18, 2019)**

TO: **Board of Directors**

SUBJECT: Monthly Financial Report

SUMMARY

The Board will receive the monthly financial reports for the Fillmore and Piru Basins GSA.

BACKGROUND

UWCD accounting staff has prepared various financial reports based on the Fillmore Piru Basins GSA revenue and expenses for the month of December, 2018.

FISCAL IMPACT

None

Attachments: December 31, 2018 P/L Budget Performance
December 31, 2018 Balance Sheet

Fillmore and Piru Basins GSA
Profit and Loss Budget Performance
July through December 2018

	Jul - Dec 18	Annual Budget	% of Budget
Income			
40001 · Groundwater Extraction Charge	958.63	473,850.00	0.2%
41000 · Grant Revenue			
41001 · State Grants	0.00	101,808.00	0.0%
Total 41000 · Grant Revenue	0.00	101,808.00	0.0%
47000 · Other Revenue			
47001 · Late Fees	6,324.45		
47012 · Returned Check Charges	5.00		
Total 47000 · Other Revenue	6,329.45		
Total Income	7,288.08	575,658.00	1.27%
Gross Profit	7,288.08	575,658.00	1.27%
Expense			
52200 · Professional Services			
52230 · Prof Svcs - Grant Solicitation	0.00	0.00	0.0%
52240 · Prof Svcs - IT Consulting	0.00	500.00	0.0%
52250 · Prof Svcs - Groundwtr/GSP Prep		160,609.00	
52251 · Prof Svcs - UWCD GW Services	8,309.18		
Total 52250 · Prof Svcs - Groundwtr/GSP Prep	8,309.18	160,609.00	5.17%
52270 · Prof Svcs - Accounting	3,454.51	34,000.00	10.16%
52275 · Prof Svcs - Admin/Clerk of Bd	1,519.32	30,000.00	5.06%
52280 · Prof Svcs - Executive Director	11,196.25	30,000.00	37.32%
52290 · Prof Svcs - Other	0.00	0.00	0.0%
Total 52200 · Professional Services	24,479.26	255,109.00	9.6%
52500 · Legal Fees			
52501 · Legal Counsel	3,577.00	67,600.00	5.29%
Total 52500 · Legal Fees	3,577.00	67,600.00	5.29%
53000 · Office Expenses			
53010 · Public Information	216.00	17,521.00	1.23%
53020 · Office Supplies	90.15	10,000.00	0.9%
53026 · Postage & Mailing	143.99	4,000.00	3.6%
53040 · Membership Dues	0.00		
53110 · Travel & Training	2,395.51		
Total 53000 · Office Expenses	2,845.65	31,521.00	9.03%
53500 · Insurance			
53510 · Liability Insurance	2,077.67	2,500.00	83.11%
Total 53500 · Insurance	2,077.67	2,500.00	83.11%
70000 · Interest & Debt Service			
70120 · Interest Expense	0.00	0.00	0.0%
Total 70000 · Interest & Debt Service	0.00	0.00	0.0%
70130 · Bank Service Charges	5.00		
80000 · AR Write-Offs - Bad Debt Exp.	5,113.14		
Total Expense	38,097.72	356,730.00	10.68%
Net Income	**-30,809.64**	**218,928.00**	**-23.1%**

Fillmore and Piru Basins GSA
Balance Sheet
As of December 31, 2018

	Dec 31, 2018
ASSETS	
Current Assets	
Checking/Savings	
10000 · Bank of the Sierra	263,255.89
Total Checking/Savings	263,255.89
Accounts Receivable	
11000 · Accounts Receivable	99,038.23
Total Accounts Receivable	99,038.23
Total Current Assets	362,294.12
TOTAL ASSETS	**362,294.12**
LIABILITIES & EQUITY	
Equity	
32000 · Retained Earnings	393,103.76
Net Income	-30,809.64
Total Equity	362,294.12
TOTAL LIABILITIES & EQUITY	**362,294.12**

Item No. **10A Motion**

DATE: **January 15, 2019 (Meeting of January 19, 2019)**

TO: **Board of Directors**

SUBJECT: Adoption of Consultant Agreement with Daniel B. Stephens & Associates for Groundwater Sustainability Planning

SUMMARY

The Board will consider approving an agreement with Daniel B. Stephens & Associates to prepare Sustainable Groundwater Management Act-compliant groundwater sustainability plans for the Fillmore and Piru groundwater basins. A significant portion of the cost of the work will be offset by the recently received grant from the California Department of Water Resources.

RECOMMENDED ACTION

That Board shall consider approving and adopting an agreement with Daniel B. Stephens & Associates for groundwater sustainability planning services in the amount of $795,000.

BACKGROUND

The Sustainable Groundwater Management Act (SGMA) requires that the Fillmore and Piru Basins Groundwater Sustainability Agency (Agency) develop SGMA-compliant Groundwater Sustainability Plans for the Fillmore Basin and the Piru Basin for submittal to the California Department of Water Resources (CDWR) by January 2022. The Agency Board directed staff to procure consultant assistance for the preparation of the GSPs. The CDWR has also recently awarded the Agency with a groundwater sustainability grant to fund a significant portion of the planned work.

On September 26, 2018, the Agency distributed a request for qualifications-request for proposals to 59 potential consulting firms, with an October 24, 2018 submission deadline. At its October 25, 2018 meeting, the Agency Board appointed an Ad Hoc Committee to review the proposals. On November 2, 2018, the Ad Hoc Committee and three Agency staff members met to determine whether the proposers were qualified to perform the required Agency groundwater sustainability planning, and whether they should move forward to interviews by the Agency Board. The Ad Hoc Committee found both proposers to be highly qualified and recommended that the Board interview both proposers. At its November 15, 2018 meeting, the Board interviewed both of the consultant teams, and found the Daniel B. Stephens & Associates team to be the most qualified for the proposed work. The Board directed staff to negotiate and prepare a final agreement with Daniel B. Stephens & Associates for consideration by the Board. Attached as Attachment A is the final agreement.

Staff recommends that the Board approve and adopt the agreement with Daniel B. Stephens & Associates for groundwater sustainability planning services in the amount of $795,000.

FISCAL IMPACT

There are sufficient funds included in the Agency's Fiscal Year 2018-2019 budget to cover the expected expenditures associated with the agreement during the fiscal year. Funds for expected expenditures in ensuing years will be included in subsequent fiscal year budgets. A significant portion of the expected cost for the preparation of the groundwater sustainability plans is eligible for reimbursement from the Agency's Groundwater Sustainability Planning grant with the California Department of Water Resources.

Attachments: A – Agreement No. 1019-01-18-DBSA with Daniel B. Stephens and Associates

Proposed Motion: "Motion to approve the proposed Consultant Agreement with Daniel B. Stephens & Associates for development of the FPB GSA's Groundwater Sustainability Plans."

1st: Director_____ 2nd: Director _____

Voice/Roll call vote: Director Edmonds: Director Kimball: Director Long:

Director McFadden: Director Meneghin: Director Pace:

PROFESSIONAL SERVICES AGREEMENT NO. 2019-01-18-DBSA
between
Fillmore & Piru Basins Groundwater Sustainability Agency
and
Daniel B. Stephens & Associates, Inc.
for
Groundwater Sustainability Planning Services

The Fillmore & Piru Basins Groundwater Sustainability Agency, herein "AGENCY", and Daniel B. Stephens & Associates, Inc., herein "CONSULTANT", agree as follows:

SECTION 1 - PURPOSE

Under this Agreement, the CONSULTANT shall provide groundwater sustainability planning services, in compliance with the requirements of the California Sustainable Groundwater Management Act (SGMA), as described in Exhibit “A”.

SECTION 2 - SCOPE OF SERVICES

The CONSULTANT shall, in good workmanlike and professional manner and at its own expense, furnish all of the technical, administrative, professional and other labor, all supplies and materials, equipment, printing, vehicles, transportation, office space and facilities necessary to perform and complete the work and provide the services as set forth in Exhibit "A" of this Agreement and per the schedule set forth in Exhibit “B”.

SECTION 3 - TERM

The term of this Agreement shall be for a period of five years, commencing on January 18, 2019 and concluding on January 17, 2024.

SECTION 4 - ACCEPTANCE

This Agreement constitutes the AGENCY offer to the CONSULTANT. Unless the CONSULTANT notifies the AGENCY, in writing to the contrary, the commencement of performance required by this offer shall be conclusive evidence of the CONSULTANT’S approval of, and consent to the terms and conditions of this Agreement herein contained.

SECTION 5 - TERMINATION

(a) The AGENCY may terminate or cancel this Agreement, in whole or in part, without liability to the AGENCY, if CONSULTANT fails to perform in accordance with the

requirements of Section 2 – Scope of Services of this Agreement, or in the event of a substantial breach of any of the other terms or conditions hereof.

(b) The AGENCY may also terminate this Agreement, in whole or in part, even though CONSULTANT is not in default hereunder and no breach hereof has occurred, by notice in writing at any time. Such notice shall state the extent and effective date of termination and upon the receipt by CONSULTANT of such notice, CONSULTANT will, as and to the extent prescribed by the AGENCY, stop work under the Agreement and placement of further purchase orders or subcontracts hereunder, terminate work under purchase order and subcontracts outstanding hereunder, and take any necessary action to protect property in the CONSULTANT'S possession in which the AGENCY, has or may acquire an interest.

SECTION 6 – AGREEMENT ADMINISTRATION

The Project Manager is the AGENCY'S designated representative responsible for the administration of this Agreement. The Project Manager for this Agreement is:

Anthony A. Emmert
Executive Director
PO Box 1110
Fillmore, CA 93015
805-525-4431

SECTION 7 - CONSIDERATION

The AGENCY shall compensate the CONSULTANT on a time-and-material basis at the rates and in the amounts shown in Exhibit "C". Total payments shall not exceed $ 795,000.

SECTION 8 -BILLING

(a) CONSULTANT'S invoices shall be submitted on a monthly basis for the previous month's services.

(b) CONSULTANT shall submit an itemized invoice that includes:

(1) Date or period of service.

(2) A complete description of the services performed.

(3) AGENCY'S Agreement number.

(4) The name of the AGENCY'S Project Manager.

(5) CONSULTANT'S remittance address.

(6) Name and phone number of CONSULTANT'S accounts receivable representative.

(c) When applicable, CONSULTANT'S invoice shall be accompanied by support documentation sufficient to validate the charges for each invoice item.

(d) CONSULTANT shall submit invoices to the following address:

Fillmore & Piru Basins Groundwater Sustainability Agency
PO Box 1110
Fillmore, CA 93016

(e) Incomplete invoices will be returned to the CONSULTANT.

(f) AGENCY'S payment terms are Net 30 days after receipt of invoice.

SECTION 9 - NOTICES

Notices required or permitted shall be given by personal delivery or by first class mail, postage prepaid, or facsimile transmission.

To: CONSULTANT
Tony Morgan
Project Manager
Daniel B. Stephens & Associates
3196 State Street Suite 1A
Santa Barbara, CA 93105

To: AGENCY
Executive Director
Fillmore & Piru Basins Groundwater Sustainability Agency
PO Box 1110
Fillmore, CA 93016

SECTION 10 - OWNERSHIP OF DATA, REPORTS, AND DOCUMENTS

The CONSULTANT shall deliver to the General Manager notes of surveys made, all reports of tests made, studies, reports, plans, a copy of electronic and digital files, and other materials and documents which shall be the property of the AGENCY. The CONSULTANT is released from responsibility to third parties for the use by AGENCY of data, reports, and documents on other projects. The CONSULTANT may retain copies

of such documents for its own use. The AGENCY may use or reuse the materials prepared by CONSULTANT without additional compensation to CONSULTANT.

SECTION 11 - CONFIDENTIALITY

Except as required by law, CONSULTANT will not disclose or cause their respective officers, directors, employees, representatives, agents, advisors, or subconsultants to disclose or use any of the content of negotiations or Confidential Information furnished, or otherwise permitted for review, by one party to the other in connection with the proposed transactions. For purposes of this paragraph, "Confidential Information" means information supplied by one party to the other, except information which is part of public record.

SECTION 12 - FORCE MAJEURE

Any prevention, delay, nonperformance or stoppage due to any of the following causes shall excuse nonperformance for a period equal to the duration of the force majeure event. The causes referred to above are strikes, walkouts, labor disputes, failure of power, irresistible superhuman cause, acts of public enemies of the State or United States, riots, insurrections, civil commotion, governmental restrictions or regulations or controls (except those reasonably foreseeable in connection with the uses contemplated by this Agreement), casualties not contemplated by insurance provisions of this agreement, or other causes beyond the reasonable control of the party obligated to perform.

SECTION 13 - INDEMNIFICATION

CONSULTANT shall hold harmless, defend at its own expense, and indemnify AGENCY, its officers, employees, and agents against any and all liability, claims, losses, damages, or expenses, including reasonable attorneys' fees, arising from all negligent or reckless acts or omissions, or acts of willful misconduct of CONSULTANT or its officers, agents, or employees in rendering services under this agreement; excluding, however, such liability, claims, losses, damages, or expenses arising solely from AGENCY'S active negligence or willful acts.

SECTION 14 - INSURANCE REQUIREMENTS

(a) The CONSULTANT shall procure and maintain, for the duration of the contract insurance against claims for injuries to persons or damages to property arising from

or in connection with the performance of the work hereunder by the CONSULTANT, officers, agents, employees, or volunteers.

(b) The CONSULTANT shall provide the following coverages:

(1) Commercial General Liability insurance written on an occurrence basis (Insurance Service Office ("ISO") policy form CG 00 01 or insurer's equivalent) in the amount of $1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. The insurance policy shall be amended to provide that the general aggregate limit shall apply separately to the work under this contract or the general aggregate shall be twice the required per occurrence limit.

(2) Business Automobile Liability insurance insuring all owned, non-owned and hired automobiles - coverage code 1 "any auto" (Insurance Service Office policy form CA 0001 or insurer's equivalent) in the amount of $1,000,000 combined single limit per accident for bodily injury and property damage.

(3) Workers' Compensation and Employer's Liability Insurance - The CONSULTANT and all sub-consultants shall insure (or be a qualified self-insured) under the applicable laws relating to workers' compensation insurance, all of their employees working on or about the work site, in accordance with the "Workers' Compensation and Insurance Act", Division IV of the Labor Code of the State of California and any Acts amendatory thereof. The CONSULTANT shall provide employer's liability insurance with limits of no less than $1,000,000 each accident, $1,000,000 disease policy limit, and $1,000,000 disease each employee.

(4) Professional Liability insurance appropriate to the CONSULTANT'S profession providing coverage for loss, damage or injury arising out of professional acts, errors or omissions in the amount of $1,000,000 per claim. If a general policy aggregate limit is applicable to the coverage, the general policy aggregate limit shall apply separately to this contract (with an appropriate endorsement) or the general policy aggregate limit shall be twice the required per claim limit.

(c) The required limits for the insurance policies required above may be satisfied by a combination of a primary policy and an excess or umbrella policy.

(d) The insurance policies required above shall contain or be endorsed to contain the following specific provisions:

(1) Commercial General Liability - The AGENCY and its Board Members, officers, employees, agents and volunteers are added as additional insureds. Additional insured endorsements shall provide coverage at least as broad as Commercial General Liability ISO form CG 20 10 11 85. If ISO form CG 20 10 11 85 is not provided, then ISO

form CG 20 10 XX XX [latest version] may be provided but must be accompanied by ISO form CG 20 37 XX XX [latest version]).

(2) The CONSULTANT'S insurance shall be primary insurance as respects the AGENCY, its Board Members, officers, employees, agents and volunteers and any insurance or self-insurance maintained by the AGENCY shall be excess of the CONSULTANT'S insurance and shall not contribute to it.

(3) Any failure to comply with the claim reporting provisions of the policies or any breach of a policy warranty shall not affect coverage under the policy provided to the AGENCY, its Board Members, officers, employees, agents and volunteers.

(4) The policies shall contain a waiver of transfer rights of recovery ("waiver of subrogation") against the AGENCY, its Board Members, officers, employees, agents and volunteers for any claims arising out of the work of the CONSULTANT.

(5) The policies may provide coverage which contains deductible or self-insured retentions. Such deductible and/or self-insured retentions shall not be applicable with respect to the coverage provided to the AGENCY under such policies. The CONSULTANT shall be solely responsible for deductible and/or self-insured retention and the AGENCY, at its option, may require the CONSULTANT to secure the payment of such deductible or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit. The insurance policies that contain deductibles or self-insured retentions in excess of $25,000 per occurrence shall not be acceptable without the prior approval of the AGENCY.

(6) Prior to start of work under the contract, the CONSULTANT shall file with the AGENCY evidence of insurance as required above from an insurer or insurers certifying to the required coverage. The coverage shall be evidenced on an ACORD Certificate of Insurance form (latest version) and be signed by an authorized representative of the insurer(s). A copy of ISO form CG 20 10 11 85 (or ISO form CG 20 10 XX XX [latest version] accompanied by ISO form CG 20 37 XX XX [latest version]) required in above shall be attached to the Certificate of Insurance at the time that it is filed with the AGENCY. Should the required coverage be furnished under more than one policy of insurance, the CONSULTANT may submit as many certificates of insurance as needed to provide the required amounts. The AGENCY reserves the right to require certified complete copies of any insurance coverage required by this contract but the receipt of such policy or policies shall not confer responsibility upon the AGENCY as to sufficiency of coverage.

(7) All Coverages:

(i) Each policy required in this Section shall contain a policy cancellation clause that provides that the policy shall not be canceled or otherwise

terminated by the insurer or the CONSULTANT or reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the AGENCY, Attention: Project Manager.

(e) All insurance required by this contract shall be placed with insurers licensed by the State of California to transact insurance business of the types required herein. Each insurer shall have a current AM Best rating of not less than A:VII unless prior approval is secured from the AGENCY as to the use of such insurer.

(f) The CONSULTANT shall include all subconsultants as insureds under its policies or shall furnish separate certificates and endorsements for each sub-consultant and sub-supplier.

(g) All coverages for sub-consultants shall be subject to all of the requirements stated herein. The CONSULTANT shall maintain evidence of compliance with the insurance requirements by the sub-consultants at the job site and make them available for review by the AGENCY.

(h) CONSULTANT shall submit all required insurance documentation identified herein to AGENCY not later than seven (7) calendar days from the initial receipt of this agreement for signature.

SECTION 15 – RIGHT TO AUDIT

Following execution of this Agreement and for a period of three years following the completion of performance, AGENCY shall have the right to audit the CONSULTANT'S invoices and all supporting documentation generated in performance of this agreement.

SECTION 16 - ATTORNEY'S FEES

If any action is instituted to enforce this Agreement, the prevailing party shall be reimbursed all reasonable attorneys' fees, costs of collection, as well as any other costs and expenses incurred in connection with the enforcement effort.

SECTION 17 - ASSIGNMENT

CONSULTANT shall not assign, sell, or otherwise transfer any obligation or interest in this Agreement without the specific written consent of the AGENCY.

SECTION 18 - INDEPENDENT CONSULTANT

The CONSULTANT is an independent CONSULTANT and not an employee of the AGENCY.

SECTION 19 - APPLICABLE LAW

This Agreement shall be construed in accordance with and governed by the laws of the State of California.

SECTION 20 - LABOR COMPLIANCE

(a) Public Works

(1) Portions of this project for which services are provided in performance of this agreement may be considered a "Public Work" for purposes of prevailing wage laws.

(2) AGENCY will file a form PWC-100 with the Department of Industrial Relations ("DIR") for this project, when applicable.

(3) A consultant, contractor, subconsultant or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for Public Work, unless currently registered and qualified to perform public work pursuant to Labor Code Section 1725.5. An unregistered consultant or contractor may submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the consultant or contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

(b) Prevailing Wages

(1) CONSULTANT, subconsultants and subcontractors will not pay less than the prevailing rates of wages. A determination of the general prevailing rates of per diem wages and holiday and overtime work where the work is to be performed is on file at the Agency's offices. CONSULTANT will post one copy of the prevailing rates of wages at the job site.

(2) CONSULTANT shall forfeit as penalty to the Agency a sum of not more than $200.00 for each calendar day, or portion thereof, for each worker paid less than the prevailing rates. This penalty shall be in addition to any shortfall in wages paid.

(c) Travel and Subsistence Payments - Travel and subsistence payments shall be paid to each worker as specified by the Department of Industrial Relations for the particular craft, classification, or type of work.

(d) Hours of Work

(1) Eight (8) hours' labor constitutes a legal day's work. Workers shall be paid at a rate of one and one-half times the basic rate of pay for work in excess of eight (8) hours during a calendar day or 40 hours during a calendar week of the foregoing hours.

(2) As a penalty for failure to pay overtime when required, the CONSULTANT, subconsultant or subcontractor shall forfeit to the Agency $25.00 for each worker for each calendar day during which such worker works more than eight (8) hours and is not paid overtime, and for each week during which such worker works more than 40 hours and is not paid overtime.

(e) Certified Payroll - CONSULTANT shall keep and make available an accurate record showing the name of each worker and hours worked each day and each week by each worker. CONSULTANT, subconsultant and subcontractor shall furnish electronic certified payroll records to the Labor Commissioner in accordance with Labor Code Section 1771.4

(f) Apprentices - CONSULTANT shall comply with the Labor Code concerning the employment of apprentices.

SECTION 21 - SUBSTITUTION OF SUBCONSULTANTS

There may be occasion, during the course of this engagement, to substitute or introduce a new subconsultant in order to satisfy the requirements for a specific task request. Introduction of substitute or new subconsultants will be allowed, but, is subject to the express written approval of the AGENCY. Such approval shall not be unreasonably withheld.

SECTION 22 - INTEGRATION

This Agreement represents the entire understanding of the parties. No prior oral or written understanding shall be of any force or effect with respect to those matters covered by this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date of the latest signature below.

APPROVED:

Fillmore & Piru Basins Groundwater Sustainability Agency

By:_____ Date _____
Kelly Long, Chair

APPROVED AS TO FORM:

By: _____ Date _____
Olivarez Madruga Lemieux O'Neill, LLP
District Counsel

APPROVED:

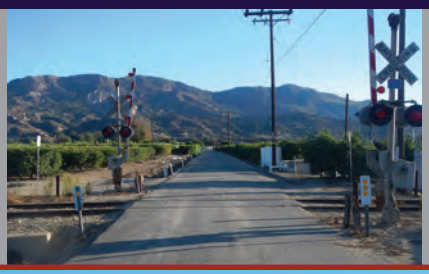
Daniel B. Stephens & Associates, Inc.

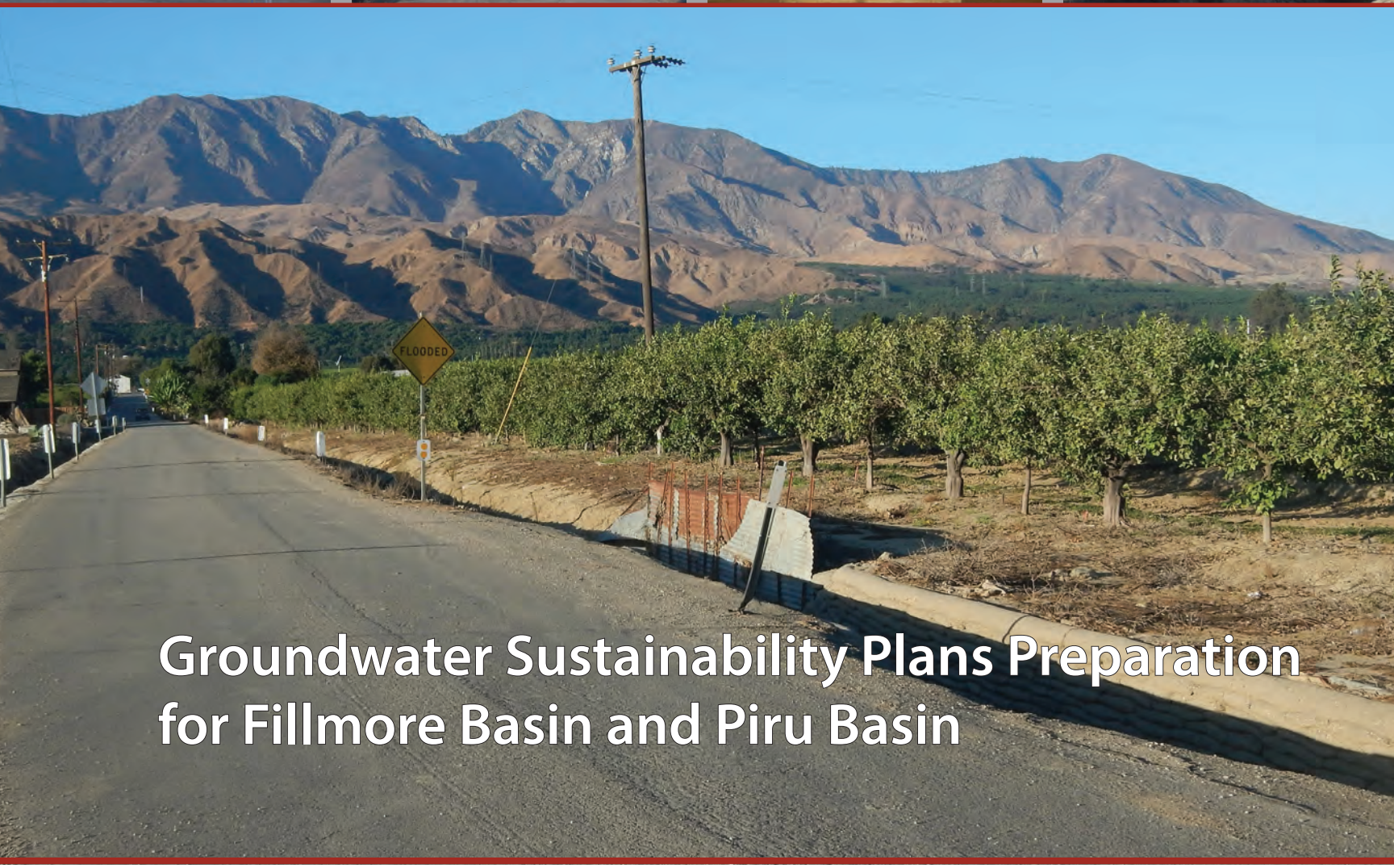
By: Nicole Sweetland Date 1/14/19

Name & Title: Nicole Sweetland CEO
(please print)

XX:xx T:\...\Agr.fy17-18\

PROPOSAL



Groundwater Sustainability Plans Preparation for Fillmore Basin and Piru Basin

October 24, 2018

Prepared for

Fillmore and Piru Basins
Groundwater Sustainability Agency

PO Box 1110
Fillmore, CA 93016

Prepared by

DBS&A
Daniel B. Stephens & Associates, Inc.

3916 State Street, Suite 1A
Santa Barbara, California 93105

October 18, 2018

Mr. Anthony Emmert, Executive Director
Fillmore and Piru Basins Groundwater Management Agency
P.O. Box 1110
Fillmore, California 93016

Re: Request for Qualification and Proposals for Groundwater Sustainability Plans Preparation for Fillmore Basin and Piru Basin

Dear Mr. Emmert:

Daniel B. Stephens & Associates, Inc. (DBS&A) is enthusiastic about the opportunity to partner with the Fillmore and Piru Basins Groundwater Sustainability Agency (FPBGSA) to produce Groundwater Sustainability Plans (GSPs) that will build on existing sustainable practices and guide future groundwater management in the Fillmore and Piru Groundwater Basins in compliance with the Sustainable Groundwater Management Act (SGMA).

We offer a team of experts with exceptional knowledge of Fillmore and Piru Basin hydrogeology, who are experienced working on both sides of the table with regard to SGMA compliance, and are experienced with SGMA-related communication and consensus-building to facilitate development of a stakeholder community that is informed, involved, and supportive. While the Fillmore and Piru Basins are designated as high priority, our team believes that the local water demand and water quality challenges are manageable, and development of the GSPs for these basins should be straightforward. Our goal is to produce a GSP with the appropriate level of technical analyses and stakeholder input to ensure public acceptance and DWR approval with minimal additional study.

Our proposed Project Manager, Tony Morgan, P.G., C.HG., knows the planning area and has unique experience from the public agency point of view that will enable him to anticipate and avoid challenges and pitfalls inherent in the SGMA process. Prior to recently joining DBS&A, he was a Deputy General Manager for Groundwater and Water Resources at United Water Conservation District (UWCD), where he led the District's SGMA compliance activities, including formation of groundwater sustainability agencies (GSAs), creation of GSPs, and conducting groundwater basin studies and groundwater management activities. Mr. Morgan will work closely with Tim Moore, P.G., C.HG., Hydrogeologist, who has direct experience with hydrogeology of the Fillmore and Piru Basins', and is the primary author of the Biennial Report (UWCD, 2016) that summarizes the surface water and groundwater conditions in the Basins. Mr. Morgan and Mr. Moore have worked together on several groundwater projects, including the AB3030 plan updates for the Fillmore and Piru Basins.

Mr. Morgan will also work closely with Dr. Stephen J. Cullen, Ph.D., P.G., a 14-year veteran of DBS&A who has led and provided oversight for dozens of water resources projects in California. Dr. Cullen and Mr. Morgan have worked together on several groundwater modeling projects, including DBS&A's water balance modeling for the Fox Canyon Groundwater Management Agency (FCGMA), where Mr. Morgan was a Technical Advisory Group member.

The remainder of DBS&A's proposed technical staff have an average of nearly 10 years of experience with DBS&A. DBS&A's expertise is augmented by the addition of Stillwater Sciences, Inc. (SWS) and the Consensus and Collaboration Program (CCP) from California State University Sacramento to our team. Our proposed team members have broad expertise in all issues pertinent to groundwater planning,

Daniel B. Stephens & Associates, Inc.

3916 State Street, Suite 1A 805 683-2409

Santa Barbara, CA 93105 FAX 805 683-2419

including surface and groundwater resources assessments, conjunctive use, groundwater and surface water studies, water supply development, feasibility studies, water system engineering, water rights acquisition, agricultural water conservation, watershed management, funding for water resource projects, groundwater dependent ecosystems (GDEs), stakeholder participation, and community planning.

Our team provides several advantages to FPBGSA, including:

- Little to no learning curve about Basin conditions. For example, our proposed Project Manager, Tony Morgan, and Hydrogeologist Tim Moore, have extensive experience studying the geology, hydrogeology, and hydrology of these Basins, and Stillwater Sciences has unparalleled knowledge of the Santa Clara River ecosystem from their 15 years of experience working in these Basins
- Our stakeholder engagement specialist, CCP has, or is currently working with, over 30 groundwater basins or Groundwater Sustainability Agencies (GSAs) in California and is the recognized knowledgebase for GSP outreach campaigns
- Our proposed Project Manager and Hydrogeologist are local to the Basins
- Our proposed Project Manager has:
  - Worked extensively with stakeholders in the Basins while crafting the Joint Power Authority (JPA) that became the foundation of the FPBGSA
  - Led stakeholder information workshops in the Basins to inform the public on SGMA compliance issues
  - Assisted the FPBGSA in its early stages with its agency formational and GSP conceptualization tasks
  - Collaborated with stakeholders to update the AB3030 Groundwater Management Plan for the Basins

In short, **our team can advance the GSP creation process rapidly—**we can hit the ground running.

The primary contact person for this work will be Tony Morgan, P.G., C.HG. He can be reached with the following information:

Address: 3916 State Street, Suite 1A | Santa Barbara, California 93105
Phone Number: (805) 683-2409 x 1403
E-Mail Address: tmorgan@geo-logic.com

Thank you for the opportunity to provide quality assistance to the FPBGSA. Tony Morgan and Stephen Cullen can be reached at (805) 683-2409 x 1403 if you have any questions or need additional information.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

Tony Morgan, P.G., C.HG.
Project Manager
Principal Hydrogeologist
Vice President

Stephen J. Cullen, Ph.D., P.G.
Principal-in-Charge
Principal Hydrogeologist
Senior Vice President, California Operations

PROJECT PROPOSAL

We use Section 6 to present our approach to performing the 11 tasks outlined in RFP Section 2, Description of Scope of Work, and we also provide some recommendations and optional tasks not specifically called out in the RFP.

Technical Approach

Our technical approach is geared towards the identification of an expeditious, yet technically reasonable and implementable path to sustainability for the Fillmore and Piru Basins. We understand that a great deal of information exists for the Basins and these data will be the foundation upon which the GSPs will be built. A GSP is not required to be a large document or overly complicated. Our approach is to prepare GSPs that:

- Are tailored to the critical issues of the Basins;
- Address the items prescribed by DWR in their GSP Preparation Checklist and GSP Annotated Outline guidance documents; and
- Are sensitive to the scope of work and funding available from FPBGSA's Proposition 1 (Prop 1) Grant Award.

SGMA specified many actions that a GSA must accomplish to achieve compliance. Many GSAs throughout California are newly formed public entities created in direct response to SGMA, and have limited experience in groundwater management. To assist these GSAs in meeting their sustainability goals and thereby achieve compliance with SGMA, the DWR created a series of documents to aid the GSAs. These documents were published by DWR as Best Management Practices (BMPs) or Guidance Documents. The BMPs and Guidance Documents are not a replacement for the GSP Regulations or SGMA statutory provisions, but they do provide insights into DWR expectations and how DWR will evaluate the adequacy of a GSP.

BMPs are defined as "the practice, or combination of practices, that are designed to achieve sustainable groundwater management and have been determined to be technologically and economically effective, practicable, and based on best available science." To date, the following BMPs are available to provide clarification and guidance on GSP content:

- BMP 1 - Monitoring Protocols Standards and Sites
- BMP 2 - Monitoring Networks and Identification of Data Gaps
- BMP 3 - Hydrogeologic Conceptual Model
- BMP 4 - Water Budget
- BMP 5 - Modeling
- BMP 6 - Sustainable Management Criteria (draft)
- BMP Framework

Guidance Documents "...address topic areas unique to SGMA, for topics where no established practices in the water management industry exist, and which may not have been specifically identified in the GSP Regulations." To date, the DWR has developed the following guidance documents:

- Guidance for Climate Change Data Use During Sustainability Plan Development
- Stakeholder Communication and Engagement
- Engagement with Tribal Governments
- GSP Annotated Outline
- Preparation Checklist for GSP Submittal

These BMPs and Guidance Documents will assist the DBS&A team in the preparation of the GSPs. Each of the major GSP project elements (i.e., Outreach, Basin Setting, Planning, Projects and Management Action, and Monitoring), when combined, present a systematic path to completing the GSP. The BMPs and Guidance Documents serve to inform the process and provide a framework where the FPBGSA and interested stakeholders can understand the general steps and recognize how the Basins' sustainability planning can be achieved.

The DBS&A team's approach to this project has the following major components:

Leverage existing knowledge

- Make extensive use of the information contained in the many existing technical and management reports;
- Refer to the local expertise and knowledge of our team members;
- Engage with local stakeholders early in the process to identify their concerns and identify knowledge beneficial to the GSP development process; and

- Rely upon the broad experience of our team members gained from working on other GSPs, water resource management projects, groundwater modeling, and regulatory compliance programs.

Proactive Stakeholder Engagement Strategy

- Engage stakeholders early to identify their concerns and issues early in the process;
- Establish multiple venues for stakeholders to participate in the process; and
- Create and implement a stakeholder engagement plan that shows stakeholders how they can participate in the process.

DWR Interaction

- Engage in strategic discussions with DWR personnel to help resolve questions or potential problems in an expedient manner; and
- Communicate frequently and effectively to minimize the potential for delays in GSP preparation or in DWR approval.

Effective Data Management

- Implement a multi-function data management system;
- Use data archival functionality for existing and future data sets; and
- Use data retrieval capabilities for research, analysis, and public information.

Technical Analyses Focused on Essential Issues

- Concentrate technical work on issues critical to determining the sustainable yield of each of the Basins;
- Fill in data gaps later. Significant data unknowns can be addressed over time rather than depleting limited fiscal resources during the early stages of the GSA operations;
- Prepare GSPs substantially compliant with DWR requirements. Our team's approach will develop GSPs based largely on existing data supplemented with a plan describing how the data gaps will be minimized in the future. This approach is being used by several GSAs to focus their GSP development efforts on activities that will result in a substantially compliant GSP, but also provides DWR with a plan that describes how the data gaps will be addressed. GSAs are using this approach in the early stages of their formation when fiscal resources are limited and other financial sources (e.g., grants) have long lead times that can preclude their availability before the January 2022 deadline for GSP submittal to DWR; and
- Identify Other Recommended Actions (some of these are provided in Task 12 in the proposal) that the GSA may want to consider performing so the resultant information can be included in the January 2022 GSP submittal.

Projects and Management Actions are Important

- Sustainable yields can be enhanced through the implementation of project and/or management actions;
- Projects and management actions must be cost-effective; and must be convinces of the cost-benefit relationship for proposed projects.
- Stakeholders must be convinced of the cost-benefit relationship for proposed projects.

TASK 1 - PROJECT MANAGEMENT

A. Project Administration

Project administration activities are expected to fall within the following general categories:

- Work Plan
- Kickoff Meeting
- Monthly Progress Meetings
- Staff Workshops
- Agency Coordination
- Various presentations

B. Work Plan

A key element of the project administration will be preparation of a work plan for review and approval by the FPBGSA. A draft work plan will be prepared within three weeks of receiving the Notice to Proceed from the FPBGSA. Upon receipt of review comments from UWCD and the FPBGSA Board of Directors, the draft work plan will be updated and a final work plan provided to the FPBGSA Board of Directors for their acceptance.

The work plan will include a Gantt chart in MS Project and show actions required, strategies employed,

responsibilities (persons, organizations, and agencies), dependencies, and milestones with dates in weeks and months beginning with Notice of Award.

C. Kickoff Meeting

At the onset of the project, the project management team will review background information provided by UWCD and attend a kickoff meeting with FPBGSA and UWCD staff.

D. Monthly Progress Meetings

Mr. Morgan and other key staff will organize and participate with FPBGSA staff in periodic (e.g., monthly) meetings or teleconferences to keep the project on track and provide staff with information to keep FPBGSA decision makers informed of progress, solicit input at key decision points, and to address problems that may arise. These coordination meetings will help us to work as a partnership with UWCD, with both parties contributing their background knowledge and experience toward refining our path forward to ensure the FPBGSA's compliance with DWR requirements and timelines.

It is anticipated that monthly progress reports will be provided to FPBGSA staff for inclusion in the agenda for regularly scheduled Board of Director meetings. DBS&A personnel will be present at these meetings to address questions from the Board of Directors. DBS&A will work with the FPBGSA to coordinate technical meetings and board meetings in order to minimize travel costs.

E. Staff Workshops

DBS&A team members will work with UWCD staff on workshops, as needed, to keep the FPBGSA Board of Directors and stakeholders informed of our progress in developing the GSPs, as well as to seek input at various times on specific topics (e.g., water budget, sustainability management criteria, projects and management actions). Stakeholder workshops are key elements of our proposed Stakeholder Engagement program.

F. Agency Coordination

The GPSs to be developed for this project will be joint efforts of the DBS&A team and UWCD staff. The DBS&A project management team has extensive experience in working with UWCD staff on groundwater management programs. This experience, when coupled with our existing knowledge of the hydrogeology of the Basins and the breadth of the available data, provides a solid framework for Agency-UWCD-DBS&A coordination. The monthly progress meetings, workshops, and informal consultations will provide ample opportunities for DBS&A project team interaction with the FPBGSA Board of Directors, as well as UWCD staff to ensure that all efforts are progressing in a coordinated, cost-effective manner.

G. Presentations

It is anticipated that DBS&A, in support of the FPBGSA, may be requested to conduct presentations to various interested groups. These groups could include, for example, stakeholder organizations (e.g., Piru or Fillmore Basin Pumpers Associations), industry representatives (e.g., Farm Bureau, Association of Water Agencies of Ventura County), or other governmental organizations (e.g., County Supervisors, Fillmore City Council). DBS&A team members are well prepared to represent the GSP development process, as well as the SGMA compliance requirements. Our proposed Project Manager, Tony Morgan, is a recognized authority on SGMA compliance requisites and has historically advised the FPBGSA on such issues.

Key Assumptions

The following assumptions that are central to our proposal:

- Funding for this project is to come from the Prop 1 Grant Award and is limited to the Prop 1 Grant amount. This does not preclude other future sources of funding (e.g., grants, monies from FPBGSA General Fund) from being developed and used to augment the Prop 1 Grant funds for supplemental studies or analyses. The scope and budget for any supplemental studies or analyses will be negotiated at a future date.
- The vast majority of the existing data in the Basins (e.g., groundwater elevation, water quality, groundwater extractions, well construction, stream flows, vegetation mapping) is available in digital format. This assumption is valid as most of these data are expected to be provided by UWCD and County of Ventura.
- Ecosystem evaluations will largely be restricted to desktop analyses using existing databases (e.g., Natural Communities Commonly Associated with Groundwater) available from DWR, CDFW, The

Nature Conservancy (TNC), and other entities, as well as previous, readily available evaluations and analyses performed on behalf of third parties. This would include the extensive data set developed by our team member, Stillwater Sciences. TNC's guidance document on assessing GDEs will be a centerpiece in the evaluation of surface water - groundwater interactions and potential surface water depletion due to groundwater extractions. The inclusion of extensive field ecosystem mapping is beyond the scope of the budget for these initial GSPs.

- Legal counsel in support of the GSPs development process will be provided by FPBGSA.
- The existing and/or in-development groundwater models will be available and adequate for use in the evaluation of the influence of future project and management actions on basin sustainable yield. The scope and budget needed to merge the models, standardize the base periods, incorporate more recent groundwater data, and recalibrate are not included in this proposal.

DELIVERABLES

1. Draft work plan
2. Final work plan
3. Monthly progress reports
4. Meeting minutes
5. Presentation slides and handouts

TASK 2 - COMPILATION OF EXISTING DATA

DBS&A has assembled a database management task team that has the ideal combination of web development, data management and GIS experience, along with water resources planning and hydrogeology background, to support the design, development, and implementation of a FPBGSA data repository and management system. DBS&A has previously and successfully performed all aspects of the scope of services requested with regard to data management. For example, DBS&A completed an on-line well registration database for the Northern Trinity Groundwater Conservation District in Texas, which was led by proposed team member, Kenny Calhoun. This system is similar in both scope and size to the system under consideration by FPBGSA. This .NET, Microsoft Structured Query Language (MS SQL) Server-based system contains forms for users to submit water well applications, upload documents, track application status, submit e-payment for required fees, and view detailed well information.

DBS&A understands that UWCD manages, collects and archives the majority of the groundwater data available for Fillmore and Piru Basins housed primarily but not limited to the following three databases: groundwater level, water quality (groundwater and surface water) and groundwater extraction (well production records). UWCD also maintains approximately 20 pressure transducer and data loggers distributed throughout Fillmore and Piru Basins set to record on 4-hour reads that will provide high resolution data that will be important in complex areas such as near GDEs that may exist at the boundaries between basins. Ventura County Watershed Protection District (VCWPD) collects groundwater data and maintains databases containing water level and water quality data. VCWPD and UWCD routinely share data resulting in considerable overlap between the two entities' databases. VCWPD houses much of the available Ventura County-wide precipitation and streamflow data on their publically accessible Hydrologic Data Server (Hydrodata). Additional in-stream flow measurements from transient gaging locations may be available from UWCD to supplement VCWPD's fixed gaging site streamflow data. Both UWCD and VCWPD maintain well inventory shape files that contain well construction information.

Communication is critical to successful database design and construction. The DBS&A team will work collaboratively with FPBGSA, UWCD, VCWPD and the other member agencies and stakeholders, as appropriate, to identify the intended uses (e.g., technical analyses, public information) and users (e.g., general public, researchers, regulatory agencies) of the data and select a data management structure that best meets the needs of the expected users and how they will likely interact with the data. At the beginning of the project, DBS&A will meet with UWCD to review the existing and historical data and develop the short- and long-term goals of the system. This kickoff meeting, as well as any other coordination meetings that may be held throughout the project, will form the foundation

for the system design. The kickoff meeting will confirm project objectives, clarify FPBGSA and DBS&A's expectations for the project, and facilitate project planning.

The range of information types to be included in the database will be considered as the data management system is developed. Information to be captured in the database could range from the routine parameters such as depth to groundwater, groundwater elevation, water quality analyses, surface water flow, and precipitation, to more hybrid data sets, such as GIS layers for vegetation type and current and historical land use. We expect the data management scheme to evolve as we collect information on existing sources of data relevant to SGMA and engage in discussions with FPBGSA member agency representatives and appropriate stakeholders.

Our team will inventory documents and gather data from multiple parties which could include: UWCD, VCWPD, City of Fillmore, CDFW (Fillmore Fish Hatchery), USGS, and public and private water systems (e.g., Warring Water Service, Inc.). Our efforts will be focused on meeting the minimum criteria of Reg 352.4 and 352.6. DBS&A will also identify existing data that can be accessed and imported from the state and federal databases. We anticipate that FPBGSA, stakeholder agencies, the USGS, the California Statewide Groundwater Elevation Monitoring (CASGEM), and other appropriate federal and state agencies will identify data sets and provide data upon request.

Stillwater Sciences, part of the DBS&A team, will compile and review available information relevant for identifying and characterizing known or potential groundwater dependent ecosystems (GDEs) and ecohydrological linkages between aquifers and GDEs. Available information includes the California Natural Diversity Database (CNDDB) and DWR's Natural Communities Commonly Associated with Groundwater Database (https://gis.water.ca.gov/app/NCDatasetViewer/). Stillwater Sciences also is currently updating detailed maps of the riparian corridor of the Santa Clara River through the Fillmore and Piru Basins. In addition, recent habitat suitability model results for riparian-dependent endangered bird species (i.e., yellow-billed cuckoo and southwestern willow flycatcher) will be included in this data compilation.

Stillwater will also compile available data on steelhead passage and steelhead usage in streams in the Basins. This information will be used in the identification and characterization of GDEs and other ecological issues.

DBS&A has incorporated many types of hydrogeologic and historical well data into SQL databases for many of our projects, including Texas Water Development Board groundwater database and water use data, Texas Commission on Environmental Quality water supply data, and the Texas Railroad Commission oil and gas well location and completion information. (need some CA projects here) DBS&A has successfully completed the GIS/database portions of groundwater availability models, geologic structure projects, and an assortment of database projects for public and private clients. We routinely integrate hydrogeologic and well data within ArcGIS-based applications and develop custom forms for data users to easily and efficiently import and link newly added data to our information management systems. Two live examples of current DBS&A projects online are located at:

https://www.utlands.org/gmp/waterwellsearch.aspx

http://waterwellmanagementdemo.dbstephens.com

DELIVERABLES:

1. Digital library of collected data, which may include:
    a. Basins wide well inventory
    b. Well production records
    c. Groundwater elevation data
    d. Groundwater and surface water quality data
    e. Precipitation data
    f. Stream gaging data
    g. Groundwater dependent ecosystems

TASK 3 - ASSESSMENT OF EXISTING DATA AND DATA GAP ANALYSIS

The DBS&A team will perform an assessment of the existing data gathered and inventoried under Task 2. In consultation with UWCD, DBS&A will propose the level of effort required to minimize the data gaps and provide recommendations for securing missing information and data through a streamlined process using standardized data collection templates, as applicable. In coordination with UWCD, Stillwater will evaluate the data to identify

areas, gaps and uncertainties in either GDE data or where additional groundwater monitoring may be required to assess the degree to which surface or near-surface water is tied to groundwater. DBS&A will perform a data gap analysis adequate to satisfy the data needs for each sustainable management criteria in accordance with DWR's "Monitoring Networks and Identification of Data Gaps BMP" (Figure 6. Data Gap Analysis Flow Chart from BMP reproduced below).

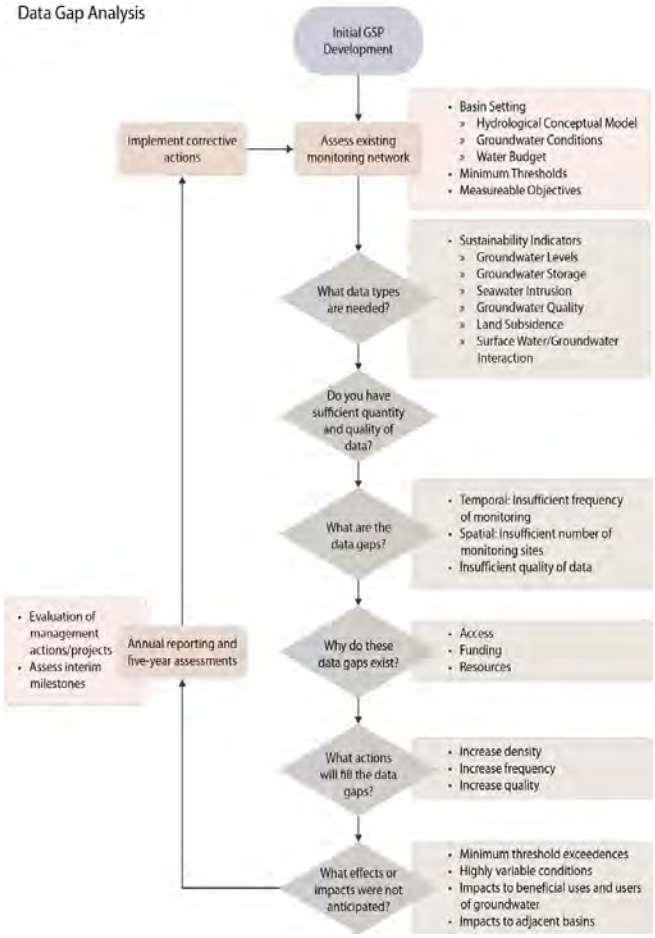


Figure 6. Data Gap Analysis Flow Chart

From a review of the 2014 and 2015 Piru and Fillmore Basins Biennial Groundwater Conditions Report (UWCD, 2016), it is anticipated that the existing data for water level, water quality, groundwater extractions, precipitation, and streamflow is likely nearly adequate for meeting the minimum requirements of 23 California Code of Regulations (23 CCR) § 352.4 and § 352.6. Fortunately, groundwater extractions have been reported to UWCD biannually since 1980 which is an advantage these Basins have over many other basins in the state. Based on the data needs and existing available data, the DBS&A team will identify temporal and spatial data gaps. Recommendations on how to reduce temporal or spatial data gaps might include, but not necessarily limited to, the following examples:

- More frequent water level measurements and/or the installation of additional pressure transducers and data loggers;
- Increased frequency of water quality sampling or water level measurements to capture the transient groundwater and surface water conditions near potential GDEs at the basin boundaries;
- Additional shallow water level monitoring sites to more adequately define GDEs;
- Installation of discrete-depth monitoring wells, such as the nested monitoring wells included in FPBGSA's Prop 1 Grant Award, to assess vertical groundwater gradients;
- Additional subsurface data to refine the hydrostratigraphy in areas lacking well drillers reports or other geologic information; and
- Additional field mapping or verification of potential GDEs.

UWCD recently published a report that documents their development of the Ventura Regional Groundwater Flow Model (VRGWFM) (UWCD, 2018). DBS&A understands that UWCD's current work is focused upon defining the hydrostratigraphy of Santa Paula, Fillmore and Piru Basins, and will be followed by expanding the numerical model to include these Basins by early 2020.

SGMA requires aquifer-specific assessment of the six sustainability indicators. Historically, the Fillmore and Piru Basins have been considered unconfined groundwater basins (UWCD, 2016). If the results of UWCD's updated hydrostratigraphic mapping indicates that the Fillmore and/or Piru Basins' aquifers are more confined than historically conceptualized, there may be data gaps associated with one or more of the hydrostratigraphic units. Many wells in these Basins have long perforated intervals, and as a result, few wells (particularly in the deeper aquifers) are screened in only one aquifer. As necessary, the DBS&A team will

work closely with UWCD to identify potential data gaps identified from UWCD's in-progress hydrostratigraphic mapping for Fillmore and Piru Basins.

DELIVERABLE:

1. Technical Memo: Data Gap Analysis Report

TASK 4 - MONITORING PROGRAM AND DATA MANAGEMENT SYSTEM

The preparation of the GSPs will be a data-intensive effort. Fortunately, the Fillmore and Piru Basins have two long-term groundwater level and water quality monitoring networks operated by UWCD and VCWPD. Additional studies have been performed for various purposes such as water supply evaluation, ecosystem monitoring, and water quality evaluations (Regional Board) that have yielded additional data and analysis. Our team will assimilate the plans and studies (including the resultant data sets) for this project into the GSP project database that will be used throughout the GSP development process.

A focus of this task will be to determine how refinement of the existing monitoring programs might minimize or eliminate data gaps, especially in critical areas. As project Task 2 (Compilation of Existing Data) and Task 3 (Assessment of Existing Data and Data Gap Analysis) proceed, our team will provide guidance on ways to leverage the existing data sets and/or ideas on monitoring program refinements that could benefit the GSP development process and the stakeholders. The process may benefit VCWPD as the CASGEM reporting entity for Ventura County and others.

The ecosystem specialists on our team will review the existing monitoring programs and identify potential refinements to improve monitoring of GDE conditions and surface water-groundwater interactions to track GSP sustainability goals. In most basins, groundwater monitoring and modeling are focused on the deeper aquifers, while shallow water-table aquifers are treated with reduced precision and have greater uncertainty. DBS&A intends to leverage existing wells and data as much as is practicable. Effective monitoring of important GDEs may require monitoring of potential surface water depletions and the establishment of shallow groundwater wells as part of GSP implementation. These shallow monitoring wells could be used to track deviations from baseline conditions and monitor trends over time as part of an adaptive management program.

Stillwater will develop monitoring protocols and data collection methods for GDEs in the Basins based on standard ecosystem monitoring techniques for ecosystems and species identified in Tasks 2 and 3. Any data analysis and reporting protocols for GDEs will be developed by Stillwater Sciences. Stillwater will develop a plan to ensure that the GDE monitoring program is effective and able to track deviations from baseline conditions and identify trends over time as part of an adaptive management program for both management actions (Task 8) and the monitoring network.

DBS&A will draw on our team's specific experience working in the Basins and the outcomes of Task 2 and Task 3 to familiarize ourselves with the active monitoring networks, including overall coverage, objectives, monitoring practices and protocols, and degree of public access to data. The DBS&A team has specific experience working with UWCD's databases and monitoring program. One of DBS&A's hydrogeologists, Tim Moore, worked for UWCD for nearly eight years before recently joining DBS&A's team. His responsibilities included developing and maintaining UWCD's groundwater databases, and developing and overseeing UWCD's monitoring program.

We will describe the physical, jurisdictional, and administrative aspects of current programs, address monitoring gaps identified in Task 3, and assess their applicability to GSP sustainability criteria. In accordance with DWR's "Monitoring Networks and Identification of Data Gaps BMP" and "Monitoring Protocols, Standards, and Sites BMP," we will propose improvements with a focus on leveraging the existing datasets and monitoring programs to minimize or eliminate data gaps. DBS&A routinely performs groundwater monitoring and we understand that proper characterization of changes in a groundwater system requires collection of relevant data, including groundwater levels, water quality, land surface elevation, and surface water discharge conditions. These data are most useful when collected at spatially distributed sites at a consistent frequency.

DBS&A will consult with the FPBGSA and UWCD to determine if UWCD's existing database of groundwater levels and water quality meets the user requirements for storing, viewing, analyzing, and reporting data in the context of the intent of 23 CCR § 352.4. § 352.4 for public accessibility. Based on the FPBGSA's needs, and consideration of project budget limitations, we will propose a database management system (DBMS) that leverages previous data management systems we have developed and make recommendations for an appropriate data management platform. Through leveraging pre-existing DBMSs we have already developed, we can limit the need for custom programing and provide significant cost benefit to the FPBGSA. The team will also recommend an approach for populating the selected DBMS with existing data.

DELIVERABLES:

1. Technical Memorandum: Monitoring Program
2. Data Management System Summary and Location Information

TASK 5 - WATER LEVEL AND WATER QUALITY DATA COLLECTION AND ANALYSIS

The DBS&A team will perform a trend analysis of groundwater level and groundwater quality constituents, as necessary, which expands on the general groundwater level and water quality analysis available in the 2014 and 2015 Piru and Fillmore Basins Biennial Groundwater Conditions Report (UWCD, 2016). The report includes groundwater hydrographs for a number of representative wells within the Fillmore and Piru Basins and time series graphs of water quality constituents including: total dissolved solids (TDS), sulfate, chloride, nitrate, and boron. DBS&A understands that an update that includes 2016 and 2017 data is currently in progress by UWCD and is anticipated to be completed this fall.

A trend analysis performed on a broader suite of analytes than those identified above may be necessary to satisfy the requirements of SGMA, and may lead to identification of additional constituents of concern in the Basins. Identification of constituents of concern will be important in establishing the frequency and suite of analytes for sample analysis, which may not be the same for all locations and/or management areas in the Basins.

DBS&A envisions the development of a SGMA focused Sampling and Analysis Plan (SAP) as a companion document to the Technical Memorandum: Monitoring Program included in Task 4. The Task 4 memo will likely include, but not necessarily limited to, descriptions of the following:

- Available groundwater level and water quality data
- The two long-term groundwater level and water quality monitoring networks operated by UWCD and VCWPD
- Recommendations on how refinement and expansion of the existing monitoring programs might minimize or eliminate data gaps, especially in critical areas

In cooperation with UWCD, DBS&A will develop a SAP in accordance with DWR's "Monitoring Networks and Identification of Data Gaps BMP" and "Monitoring Protocols, Standards, and Sites BMP." DBS&A does not intend to impose specific schedules or monitoring wells and/or sampling locations on UWCD or VCWPD beyond the recommendations that will be included in the Task 4 Memo. The SAP will formalize field techniques and procedures that UWCD may already have in place for the existing monitoring program. Our efforts will be focused on meeting the minimum criteria of 23 CCR § 352.4 and § 352.6. A SAP might include, but will not necessarily limited to, the following sections:

- Introduction, background and analyses of concern
- Equipment
- Sample containers and preservation
- Water level measurement protocol
- Sampling protocol
- Decontamination procedures
- Analytical methods
- Quality assurance/quality control (QA/QC)

DELIVERABLE:

1. Sampling and Analysis Plan (SAP)

TASK 6 - DEVELOP WATER BUDGET, HYDROGEOLOGIC CONCEPTUAL MODEL, AND NUMERICAL FLOW MODEL

UWCD has recently published a report that documents development of the Ventura Regional Groundwater Flow Model (VRGWFM) (UWCD, 2018). DBS&A understands that UWCD's current work is focused upon defining the hydrostratigraphy of Santa Paula, Fillmore and Piru Basins, and will be followed by expanding the numerical model to include these Basins by early 2020. Our prior knowledge of the Fillmore and Piru Basins and initial review of the model report indicates that the VRGWFM, if expanded to include the Santa Clara River basins in time to coincide with the GSPs development milestones, is expected to meet the needs of the GSPs development. DBS&A anticipates that once UWCD's model is calibrated and in a form consistent with DWR's modeling BMP (DWR, 2016), UWCD will set aside a version (2.0) of the model for preparation of the Fillmore and Piru Basins GSPs, which will be used to prepare historic, current and projected water budgets.

We are less optimistic concerning the utility of the groundwater model developed by the USGS.

In 2003, the USGS released documentation of their groundwater flow model for the lower portions of the Calleguas Creek and Santa Clara River watersheds, including the Piru and Fillmore Basins. The USGS model includes two layers, representing the Upper Aquifer System and Lower Aquifer System. UWCD later contracted to update the USGS model by extending the calibration period and including an additional upper model layer. Although the USGS model was an effective starting point for developing an understanding of hydrogeologic conditions in the area, its relatively coarse discretization limited the level of detail at which it could be calibrated, and prevented its use for evaluating complex surface water-groundwater interactions and impacts of future pumping/recharge scenarios on specific aquifers.

DBS&A also understands that a 2018 basin boundary modification for Fillmore and Piru Basins has been submitted and is currently under review by DWR. If DWR approves the basin boundary modification for the Basins, the area included in each of the two GSPs, potential management areas, and water budget calculations may be impacted. A map of the proposed basin boundary modification from Agency's website is reproduced below.

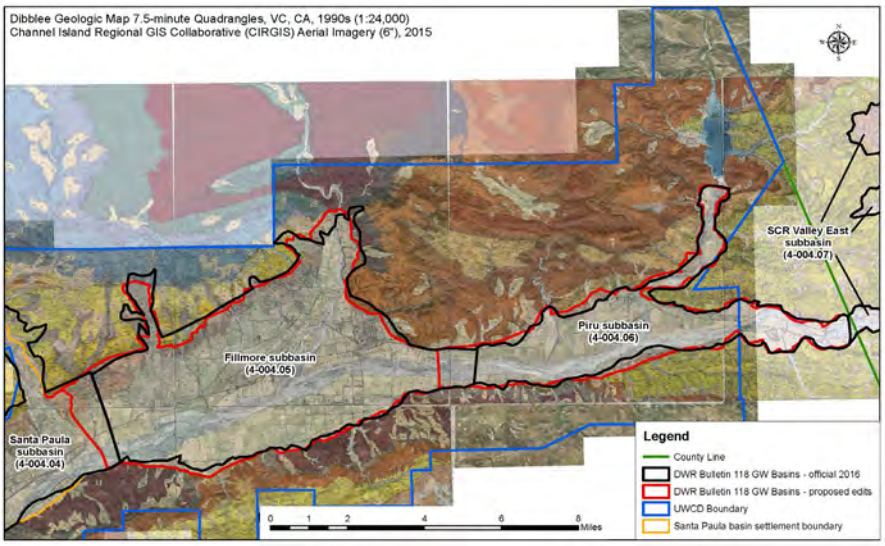


Figure 7. Proposed basin boundary modification

Hydrogeologic Conceptual Model

DBS&A understands that development of a credible hydrogeologic conceptual model (HCM) is the first step to understanding and conveying the GSP basin setting in the GSP process. The HCM also provides the foundation upon which other GSP tasks will be based, such as the development of GSP monitoring networks and development of water budgets for Piru and Fillmore Basins. DBS&A understands that UWCD is responsible for the development of the HCM and it will form the underpinning for the expansion of UWCD's numerical model. DBS&A will coordinate with UWCD to assure that the HCM is complete and consistent with DWR's BMP for development of a HCM (DWR, 2016). The three-dimensional representation of the updated hydrostratigraphic conceptual model from UWCD's model documentation report is reproduced below.

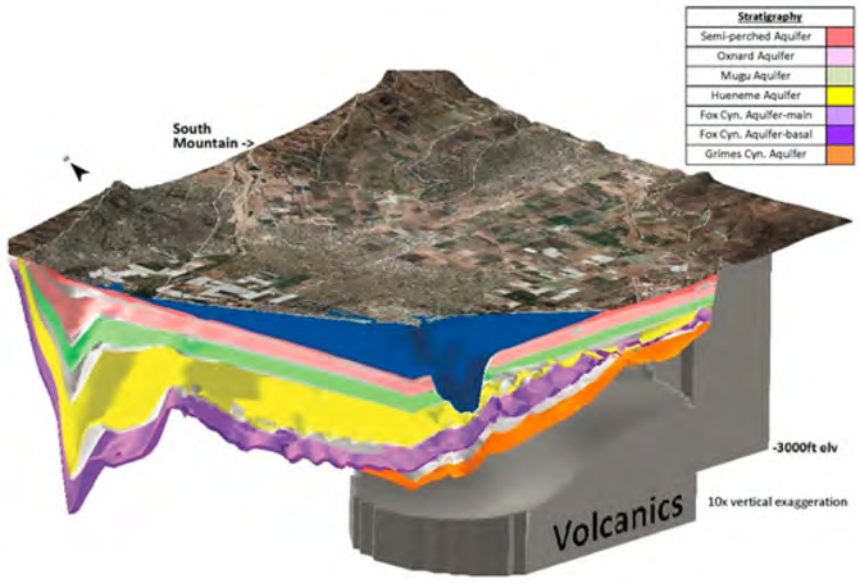


Figure 8. 3-D Representation of Updated Hydrostratigraphic Conceptual Model

The BMP guidance states that a hydrogeologic conceptual model:

- Provides an understanding of the general physical characteristics related to regional hydrology, land use, geology and geologic structure, water quality, principal aquifers, and principal aquitards of the basin setting
- Provides the context to develop water budgets, mathematical (analytical or numerical) models, and monitoring networks
- Provides a tool for stakeholder outreach and communication

Groundwater Dependent Ecosystems

Stillwater Sciences will combine the results of the GDE data collected in Tasks 2 and 3 with the results of the water budget, hydrogeologic conceptual model, and numerical flow model to help forecast the effects of future groundwater and climatic conditions on groundwater dependent ecosystems. This includes likely impacts to changes in the spatial pattern or timing of groundwater flows on riparian and wetland ecosystems.

The project team will review and summarize the general distribution and condition of GDEs in the Fillmore and Piru Basins. The first step in our team's approach to GDEs involves the background data collected and reviewed under Task 2 and the mapping of known and potential GDEs based on the DWR spatial database (i.e., natural communities commonly associated with groundwater) and readily available sources. A literature/data review and GIS-based assessment of the current ecological conditions in the GSP area within watercourses, riparian corridors, and other GDEs (e.g., wetlands) will be performed.

The mapping effort will follow the general approach described by DWR (2018), Rohde et al. (2018), Klausmeyer et al. (2018), and the most relevant scientific literature on integrated groundwater management and identification and assessment of GDEs (e.g., Eamus et al. 2015) to produce a science-based assessment of GDEs that meets the GSP requirements under SGMA. The GDE assessment will also include a review of available information and discussion of species of special concern associated with known or potential GDEs (e.g., Steelhead Trout and Unarmored Threespine Stickleback). In addition, the effects of potential changes in future groundwater-surface water interactions on GDEs will be evaluated to determine the range of potential threats and impacts to GDEs within the GSPs area.

Given the project budget constraints, we propose that this assessment of GDEs be office-based and no field work be conducted. The final GIS dataset will include 1) reasons for including or excluding natural communities mapped in the DWR database, and 2) an indication of the uncertainty in the decision for each polygon (e.g., known GDE, likely GDE, unlikely GDE, non-GDE). Should additional funding become available, we recommend that a follow-up, enhanced effort including field-based study be used to refine the GDE mapping and characterization to reduce uncertainty regarding which natural communities represent GDEs covered by SGMA, and what the most appropriate GDE-related sustainability criteria, monitoring, and management projects and actions would be (see Task 12 for Other Recommended Actions).

Establishment of Management Areas

While not explicitly identified in the RFP, this task, if necessary, will define management areas for use in the

GSPs. The rationale for establishing management areas can be scientific or jurisdictional. Prudent delineation of management areas can be an important tool in achieving sustainability, while providing for flexibility in the beneficial use of groundwater resources. Based on the Fillmore and Piru Basins' conditions and local water budgets, areas with similar hydrogeologic conditions and/or management goals may be grouped into management areas with a unique set of sustainable management criteria.

For this potential task, management areas can be grouped according to the hydrogeologic conditions and water balance determined, and then re-examined for various management criteria. For example, the analysis of undesirable results in Task 7 may identify areas where water levels or other conditions may be significant and unreasonable, while those same conditions might be acceptable elsewhere.

There are several likely groundwater interrelated management areas, which may include, but are not limited to the following:

- Santa Clara River near the Santa Paula/Fillmore Basin boundary
- Bardsdale
- Sespe Uplands
- Pole Creek Fan
- Santa Clara River near the Fillmore/Piru Basin boundary
- Piru Creek
- Piru/SCR East Basin boundary

The GSPs could include a discussion of the rationale for the management areas (e.g., why they are scientifically significant or how they align with the management actions of another agency) and maps delineating the extent of each area.

Water Budget

Water budgets for the Basins constitute an important basis for overdraft susceptibility and sustainable groundwater management assessment. DBS&A understands that UWCD is responsible for preparing preliminary spreadsheet water budgets (based on existing data) due March 29, 2019 that will not rely on numerical model outputs. Once UWCD's model is expanded to include Fillmore and Piru Basins, UWCD will produce modeled draft water budgets and modeling text for inclusion in GSPs due September 30, 2020. It is anticipated that the draft water budgets will be delivered to the FPBGSA for comment. Based on receipt of one set of consolidated written comments from the FPBGSA member agencies and stakeholders, UWCD in coordination with DBS&A, will address the comments and produce final water budget text for inclusion in the GSPs.

The Required Water Budget Components from DWR's BMP is reproduced below.

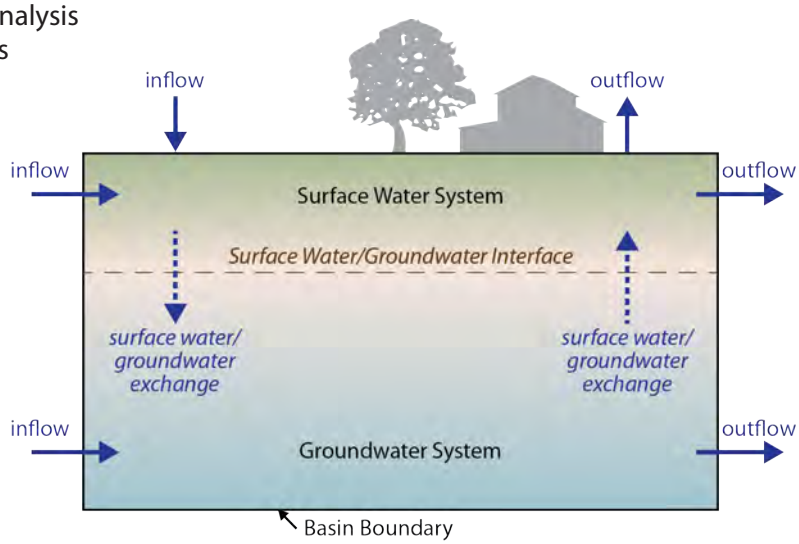


Figure 9. Water Budget Components

Within each Management Area established by FPBGSA, if necessary, DBS&A anticipates that water budgets will be estimated based on the equation (or an equivalent equation) shown below. Groundwater inputs may include deep percolation of precipitation (Pp), deep percolation of irrigation (Pi), lateral groundwater inflow (GWi), deep percolation from wastewater treatment plants (WWTP), deep percolation beneath stream and river channels (Ri), artificial recharge (AR), recharge from septic systems (Se), and recharge from underground water infrastructure (I). Groundwater outputs may include groundwater extraction (E), riparian evapotranspiration (ET), lateral groundwater outflow (GWo), and groundwater discharge to streams and wetlands (D).

Using these water budget components, the groundwater balance is given by the equation:

$$\Delta S = [Pp + Pi + GWi + WWTP + Ri + AR + Se + I] - [E + ET + GWo + D]$$

where ΔS = the change in groundwater storage

When ΔS is equal to zero, groundwater inputs are equivalent to groundwater outputs and the management of groundwater is sustainable. DBS&A recognizes that this theoretical approach must be tempered in light of the time frame considered, measurements on the ground, changes in the basis of water budget component estimation (e.g., changing land use), anticipated future changes in the water budget, the potential for climate change and/or drought cycles, and input from the FPBGSA.

A water budget schematic showing the Interrelationships among potential water budget components and the water systems that comprise the hydrologic cycle from DWR's BMP is reproduced below.

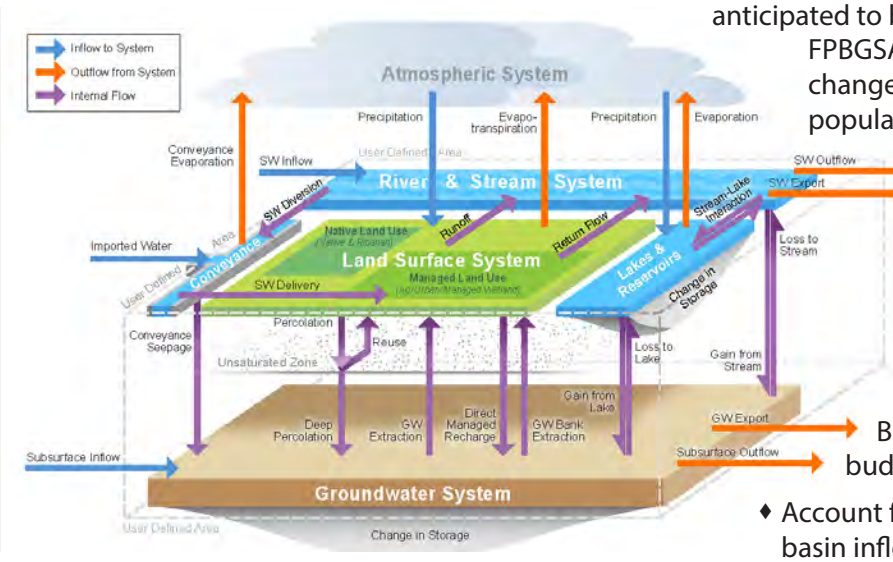


Figure 10. Hydrologic Cycle

DBS&A anticipates that UWCD will estimate groundwater balance component magnitudes based on available data using standard methods for each management area, if necessary. Water budget information from the management areas will be combined to develop basin-specific water budgets. DBS&A will coordinate with UWCD to assure that the water budgets are complete and consistent with DWR's BMP for preparation of water budgets (DWR, 2016).

The DBS&A team is highly qualified to prepare interpretations of UWCD's model outputs having previously developed detailed surface water and groundwater budgets for numerous basins in California, including the Ojai, Santa Paula, Ventura River, Oxnard Plain, Pleasant Valley, East Las Posas, and West Las Posas Basins. The water budgets for the latter four basins were developed in support of developing what will likely be the first GSPs submitted to the DWR under SGMA. For one client, DBS&A has maintained a water budget accounting utilizing a FAO56-based spreadsheet model (Allen et al., 1998) and monitoring for over 15 years as part of an institutional water sustainability program. Through this experience we are familiar with available data sources and studies.

Consistent with DWR's SGMA BMP for a water budget, DBS&A will develop projected future scenarios for UWCD to simulate for the Fillmore and Piru Basins. Also consistent with the BMP, the GSP water budgets are anticipated to be quantified in sufficient detail to build FPBGSA's understanding of how historical changes to supply, demand, hydrology, population, land use, and climatic conditions have affected the six SGMA sustainability indicators in the Basins. The ultimate aim is to use this information to predict how these same variables may affect or guide future management actions intended to achieve and maintain sustainability. As explained in DWR's SGMA Water Budget BMP, examples of uses for the water budgets include:

- Account for spatial and temporal distribution of basin inflows and outflows by water source type and water use sector.
- Assess how the water budget components vary by water year type (e.g., dry, normal, wet).
- Develop an understanding of how historical water budget component conditions have impacted the ability to operate the basin within the sustainable yield.
- Improve communication between and within FPBGSA member agencies and stakeholders.
- Identify data gaps and uncertainty critical to future basin water management actions.

- Identify water budget conditions that often result in overdraft conditions.
- Evaluate the effect of proposed projects and management actions on future water budget projections.
- Inform GSP monitoring requirements.
- Inform development and quantification of sustainable management criteria.
- Help identify and evaluate potential projects and management actions to achieve the sustainability goal for the basin within 20 years of GSP implementation.

DBS&A will work with FPBGSA and UWCD to identify an appropriate base period. If the historical data set is sufficiently robust, a base period will be selected in consultation with the FPBGSA, and a statistical representation of the amount of total recharge water that can be expected in a "dry" year (represented by the 25th percentile of water years), in an "average" year (represented by the 50th percentile of water years), and in a "wet" year (represented by the 75th percentile of water years) will be presented.

It is anticipated that using a similar methodology to that described above and available data, UWCD will prepare historical and current water budgets for the identified groundwater management areas and for the overall Basins. In collaboration with UWCD, DBS&A will report and interpret the results of the water budgets, along with the methodologies utilized, data incorporated into the evaluation, and assumptions that underlie water budget component estimates.

DELIVERABLES (DBS&A):

1. Provide expertise to evaluate GDEs in the Basins
2. Prepare scenarios for UWCD to model
3. Prepare draft text interpretations of the UWCD model outputs for inclusion in GSPs

DELIVERABLES: (UWCD):

1. Water Budget
2. Hydrogeologic Conceptual Model
3. Groundwater Flow Model
4. Draft Text for Inclusion in GSPs

TASK 7 - DEVELOPMENT OF SUSTAINABLE MANAGEMENT CRITERIA

The development of the sustainable management criteria is a cornerstone of the groundwater management process within SGMA. The process begins with the identification of sustainability goals for the Basins, selection of appropriate metrics for each of the criteria, setting measurable objectives and interim milestones for each criterion specific to a management area, identifying the minimum thresholds and linking those thresholds to undesirable results as defined under SGMA. The DWR (Draft BMP Sustainability Management Criteria, Nov 2017) describes the relationship between sustainability indicators, minimum thresholds, and undesirable results in the following graphic.

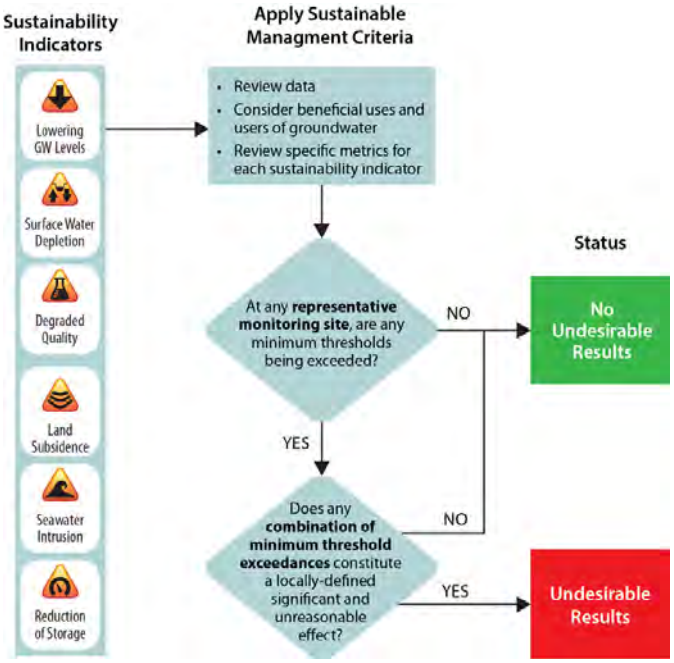


Figure 11. Relationship between sustainability indicators, minimum thresholds, and undesirable results

DWR continues "Sustainability indicators are the six effects caused by groundwater conditions occurring throughout the basin that, when significant and unreasonable, are undesirable results. For example, surface water depletion due to groundwater pumping is a sustainability indicator because it is an effect that must be monitored to determine whether it has become significant and unreasonable."

Sustainability indicators become undesirable results when a GSA-defined combination of minimum thresholds is exceeded. Those combinations of minimum threshold exceedances define when a basin condition becomes "significant and unreasonable."

Stillwater Sciences will identify potential sustainable management criteria related to GDEs, and work with the team to determine which GDE-related criteria should be included in the GSPs. Criteria will be linked to spatial and temporal changes in groundwater elevation, surface water discharge, and water quality (including salinity). Based on these criteria, we will assess the likely response of GDEs to the simulated outcomes of proposed management actions. Our approach will involve a review of UWCD's model results to determine future trends in groundwater elevations and surface water flow to identify areas where future groundwater management is most likely to affect GDEs.

The effects of potential changes in future groundwater-surface water interactions on GDEs and ecological assets (e.g., animal and plant species of concern and their key habitat) will be evaluated to determine the range of potential threats and impacts to GDEs and ecological assets within the GSPs area, and the most appropriate indicators of sustainable management to use as criteria. We will also evaluate the potential impacts of climate change and water quality on GDEs.

Sustainability Goals

Our team will assist the FPBGSA in identifying the sustainability goals for the Basins by providing technical rationale to aid the FPBGSA in their discussions. Functionally, these goals are policy guidelines that meet the needs of the stakeholders and promote sustainable management of the resource. Stakeholders will provide input regarding sustainability goals through their participation in workshops or other outreach events, and the goals will be consistent with guidelines offered by DWR and SWRCB.

The sustainability goals are often keyed to the six sustainability indicators:

- Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply.
- Significant and unreasonable reduction of groundwater storage.
- Significant and unreasonable seawater intrusion.
- Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies.
- Significant and unreasonable land subsidence that substantially interferes with surface land uses.
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

Under SGMA, a groundwater condition is deemed "undesirable" if it is significant and unreasonable. For example, the lowering of the water table to achieve sustainability may be considered undesirable by stakeholders, but it is not considered an undesirable result per SGMA unless it is significant and unreasonable.

Undesirable Results

Our team will identify undesirable results for the sustainability indicators and provide descriptions of the groundwater conditions that could lead to undesirable results. This list of undesirable results will be keyed to the impacts of the groundwater condition on the beneficial users/uses of groundwater. DBS&A will prepare the essential descriptions of the sustainability criteria and the undesirable result(s). These descriptions are important to the establishment of the minimum thresholds.

The DWR provides some flexibility to the FPBGSA with respect to the sustainability criteria. It is assumed that sustainability criteria will be developed for each of the sustainability indicators unless adequate information exists to determine that the indicator does not apply to the basin. An obvious example of a criterion that does not apply to these Basins is sea-water intrusion; the geographic remoteness of the Basins from the Pacific Ocean make this indicator a non-factor, and sustainability criteria will not be developed for this indicator. We will evaluate each of the sustainability criteria to determine those that are applicable to the current and anticipated future conditions in the Basins and provide narratives as appropriate for inclusion in the GSPs.

Minimum Thresholds

The team will establish the minimum thresholds (MT) for each of the applicable sustainability indicators. An MT is quantitative (i.e., a numeric value) and represent a groundwater condition that, if exceeded, would

result in significant and unreasonable impacts to the beneficial users/uses of groundwater in the Basins. The MT must also be set at a value that does not impede other adjacent basins or management areas, such as the down-gradient adjudicated Santa Paula Basin to the west or the Upper Santa Clara River Basin to the east. Monitoring the success of a groundwater sustainability plan is accomplished, in part, by comparing groundwater conditions to the MT. Representative monitoring sites will be identified for each indicator for each management area and the appropriate metric (e.g., water levels, water quality) will be defined for each indicator.

Measurable Objectives

We will develop and describe a measurable objective (MO) for each sustainability indicator with descriptions of a reasonable margin of error or margin of operational flexibility (i.e., the range between the MO and MT). Implementation of the GSPs will position the Basins to achieve the MO for each applicable indicator within a 20-year sustainability timeline. Interim Milestones (IMs) will be identified along the sustainability timeline to aid the FPBGSA and DWR in evaluating the Basins' progress towards achieving the MOs.

Management Areas and Monitoring Sites

Representative monitoring sites will be defined for each sustainability indicator in each of the management areas. Delineation of the management areas is discussed under Task 6. The monitoring sites are the locations where FPBGSA and DWR will evaluate the progress toward achieving the MOs.

This task will require significant interaction and meetings between our team and the FPBGSA, UWCD, stakeholders, and the general public. We are prepared to work with all interested parties to work through issues and concerns around this crucial part of the sustainability plan. To facilitate the stakeholder and FPBGSA discussions, we suggest the following general approach:

- Our team will prepare draft or "strawman" sustainability criteria (sustainability goals, sustainability indicator assessment of undesirable results, minimum thresholds, interim milestones, and measurable objectives) as early as reasonably feasible in the GSP development effort;
- We will coordinate with the FPBGSA to present the draft sustainability criteria to the public and FPBGSA at two or more workshop-style meetings; and
- The team will revise the sustainability criteria based on stakeholder comments, as well as FPBGSA input, prior to completing the draft GSPs.

The sustainability criteria will be a part of the draft GSPs. This will provide stakeholders and the FPBGSA another opportunity to comment while reviewing them within the context of a full GSP.

DELIVERABLES:

1. Technical Memo: Draft Basin Sustainable Management Criteria
2. Summary of Comments from Public Meetings
3. Technical Memo: Final Basins Sustainability Management Criteria, including Summary of Responses to Comments Received During Public Meetings

TASK 8 - PROJECTS AND MANAGEMENT ACTIONS

The GSPs should identify the best approach for achieving groundwater sustainability in the Fillmore and Piru Basins in light of the main issues driving sustainability concerns in the area. The DBS&A team will work with the FPBGSA Board through the stakeholder engagement process outlined in Task 9 to identify the recommended approach for the plans, which will include a suite of projects (e.g., UWCD's proposed Alternative Solution Alliance Pipeline [ASAP]) and management approaches that will meet the sustainability goals for the Basins. The difficulty for any water management agency is to lay out the critical path for achieving the long-term goals, which in this case is sustainability of the aquifer. While it is necessary to identify feasible projects and management approaches that will contribute to achieving sustainability, the greater challenge is to identify which combination of projects and management actions will have the most benefit in the short- and long-term. The DBS&A team proposes to use a quantitative and robust Decision Analysis approach to recommend the alternatives that best meet the goals of the Agency.

The DBS&A team will begin the process by developing a list of strategies, whether specific projects or

management actions or policies, that, if implemented, could beneficially impact the sustainable yield in each Basin. Input from stakeholder groups, FPBGSA, and beneficial users of groundwater is critical to ensure identification of a range of strategies from each stakeholder group. These alternative actions and projects might include, for example, enactment of special management areas where distinct management actions provide basin-wide benefit to the sustainable yield, development of conservation, in lieu deliveries, or supplemental water programs, moving or sequencing groundwater extractions, voluntary shortage sharing agreements, aquifer recharge during the non-irrigation season or participation in water exchange programs. Each of the actions or projects will have a cost-benefit relationship that can be used by the stakeholders and the FPBGSA to settle on a workable, sustainable yield for the Basins.

Based on sustainability criteria developed in Task 7 and the modeling results of Task 6, Stillwater Sciences can develop a series of management actions to maintain GDEs under different management and climate change scenarios. Where GDEs are likely to be impacted, the team can develop management scenarios such as aquifer recharge, vegetation restoration, and fish passage improvements.

Stakeholder and FPBGSA identification and evaluation of the management actions or projects must be based on different types of data to allow for informed decision making. The DBS&A team will work with local project proponents to identify the objectives, technical feasibility, work plans, preliminary budgets, implementation schedules, CEQA and permitting requirements, the status of a species in a GDE, and implementation priority within the GSPs of these projects. Projects or management actions developed by the DBS&A team will also be characterized as to their feasibility, expected budgets, and schedules. The expected benefit of each project or management action will be based on available data and described along with how each benefit will be evaluated and accomplished.

One limitation the Board may encounter is lack of sufficient technical or cost data to fully evaluate the impacts and benefits of proposed alternatives. The scope of this project does not include conducting feasibility studies or preliminary engineering reports. Therefore, the project team must rely on existing studies and published data to determine whether sufficient information is available, what additional studies may be needed, and develop an approach to rank the projects when data is limited. The GSPs will likely include the Board's recommendations for other studies and plans to address data gaps and the need for additional project feasibility analyses.

The proposed evaluation process for selecting the strategies that best meet sustainability goals is a formalized Decision Analysis using multi-attribute utility analysis (MUA). DBS&A proposes to employ Decision Analysis as a tool that can be used to systematically evaluate, compare, and rank water management options. Perhaps no task is more difficult than capturing in a few measurable criterion that will determine which combination of projects and management actions is "best." The MUA process facilitates decision-making by allowing consideration of the issues and values that are most important to implementing projects. DBS&A has developed a practice using the decision analysis modeling software Criterium DecisionPlus for water management decision support. DBS&A proposes to use Criterium DecisionPlus for this project as an effective way to identify sustainability alternatives that incorporate participation by Agency officials and stakeholders and also provides a means for identifying potential consensus on portfolios of preferred alternatives. The goal of the process is to systematically evaluate, compare, and rank alternative sustainability scenarios for a final long-range plan. Decision Analysis also helps to define possible scenarios based on combinations of objectives and sustainability options. The decision analysis process, using principles of MUA, is based on the assumptions that:

- Due to a lack of complete "hard data" at the point when water supply choices must be made, particularly regarding intangibles such as public, institutional and regulatory acceptability, the evaluation and ranking of alternatives must incorporate judgments from those knowledgeable about-or affected by-the alternatives.
- At least three types of judgments are needed: (1) value judgments (such as what objectives should be used in evaluating alternatives and what is really practical and socially desirable), (2) technical judgments (such as well yields, rates of

depletion, costs of development and transmission facilities, environmental impacts), and (3) reliability judgments (such as future sustainability of the aquifer).

- Technical specialists knowledgeable about geohydrology, water supply planning, engineering feasibility, and cost estimating are an important source of technical and reliability judgments, and the key stakeholders impacted by the long-range water supply choices will ultimately be the source of value judgments.

The evaluation process is designed to separate, to the degree possible, technical judgments from value judgments. This aspect allows the collection of two types of information from different sources and more accurate sensitivity analyses to explore whether the evaluation of alternatives changes much depending on (1) technical uncertainties that can be resolved or (2) value judgments about what environmental needs must be protected and how much conservatism is needed in ensuring the reliability of future supplies.

DBS&A has used the decision analysis process to help the City of Albuquerque, City of El Paso and other municipal and state clients with water resources strategy development and planning. Once the stakeholder groups have identified various projects and management actions for consideration, DBS&A uses the decision analysis framework to guide stakeholders through the following steps:

- Identifying the desired outcomes and key performance indicators for potential projects (or combinations of projects)
- Ranking the level of uncertainty and unknowns for potential projects
- Incorporating sensitivity analyses to explore whether the preferred alternatives change with respect to reduced uncertainty
- Screening out the least favorable options

This process provides a "decision audit trail" documenting the inclusion of stakeholder values and resolution of concerns in the decision process, and ultimately, allows the group to reach the most effective and defensible decision with broad acceptance.

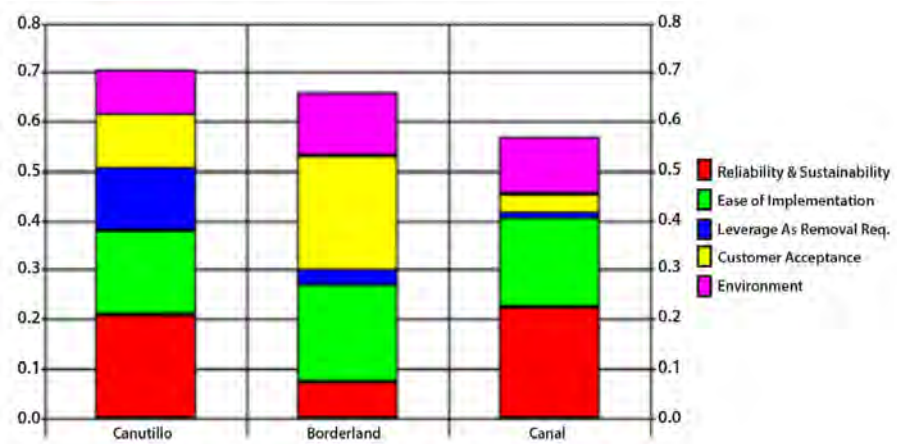


Figure 12. Final results show how much each goal contributes to overall performance of the alternatives

DBS&A completed a project to help the Edwards Aquifer Authority (EAA) determine whether the past studies of the Edwards aquifer modeling and potential recharge enhancement mechanisms provide any insight on the "safe yield" of the aquifer while meeting the many other interests and objectives of EAA stakeholders. This process was used by EAA to reach a decision on the necessity of continued programmed reductions in groundwater withdrawals.

Technical Approach

To provide a cost effective delivery of the Decision Analysis approach, we suggest holding two to three workshops with the FPBGSA to complete the following Steps:

- Step 1--Project Initiation- (after general stakeholder meeting on projects and management actions)
- Step 2--Develop Decision Model
- Step 3--Apply Decision Model
- Step 4--Review, Revise, and Apply Decision Model
- Step 5--Final Recommendations and Report
- Step 6--Project Delivery

The GSP will identify those tasks, activities, or projects that will aid the FPBGSA in guiding the Basins toward sustainability by achieving the Measurable Objectives.

Fundamental to achieving the MOs is the need to develop a GSP implementation schedule and an associated budget. The DBS&A team will prepare a schedule encompassing the time period from submittal of the GSP to DWR through the 20-year compliance period to achieve sustainability. A major element in the schedule will be the anticipated implementation timing of projects that will beneficially impact the Basin sustainable yield in groundwater quality. The schedule will have greater detail for early years of the implementation period during, which there is greater certainty about the scope, timing, permitting and funding of the projects.

DELIVERABLE:

1. The deliverable for this task will consist of a Technical Memo summarizing the output from the multi-attribute utility analysis process and identifying the suite of projects and management actions identified to meet the Agency's sustainability goals. The results will be incorporated into the GSPs.

TASK 9 - STAKEHOLDER ENGAGEMENT

As part of our team, Consensus and Collaboration Program (CCP) will support all requested and related stakeholder engagement services for the FPBGSA. CCP will support the following: A. Develop Presentation Materials, B. Present Information in Public Meetings, C. Receive Feedback/Comments, and D. Respond to Comments. More specifically and as requested, CCP will support seven (7) planned stakeholder meetings to be held at distinct milestones during the GSP process and said services will include: develop draft agendas, prepare presentation materials (as necessary), and prepare written summaries from each meeting. These summaries will be limited in scale and will principally record key discussion topics, majority and minority opinions, action items and meeting attendees. Lastly, CCP will provide written materials in newsletter format to facilitate public understanding of meeting content.

The FPBGSA, with significant support from UWCD, has proven to be very adept at the effective design and management of GSA meetings. As stated in the RFP, the FPBGSA expected the seven public meetings (as well as potential additional meetings that might take place to address Disadvantaged Community [DAC]-related topics and beneficial users) will be facilitated by internal staff. Should the FPBGSA determine a need for third-party neutral facilitation of any meeting, CCP can also provide that support given its extensive, statewide role providing similar services to literally thousands of stakeholders on hundreds of complex, policy topics including SGMA GSA formation and GSP development.

In addition to the necessary services described above, our team (similarly through the services of CCP) is prepared to support the FPBGSA to develop a Public Engagement Plan. The Engagement Plan offers a valuable early benefit to the FPBGSA as a functional tool that will inform early stage GSP outreach activities. It is also a product that should be included in the GSP submission (Task 10) as proof of compliance with required GSP regulations.

CCP has been an advisor to DWR to prepare the standard, statewide DWR recommendations for these plans. Further, CCP has prepared and/or is in the process of preparing, SGMA public engagement plans (and similar) for the following basins and GSAs:

- Borrego Valley GSA
- Colusa Groundwater Authority
- Glenn Groundwater Authority
- Vina Subbasin
- Wyandotte Creek Subbasin
- Madera Subbasin
- Owens Valley Basin
- Chowchilla Subbasin
- Turlock Subbasin
- Santa Margarita Groundwater Agency
- Shasta Valley Basin
- Butte Valley Basin
- Scott Valley Basin

Similarly (and in the context of FPBGSA's expectation that DAC-related discussions may be forthcoming), CCP has done focused DAC work on several of the above cases, particularly in Chowchilla, Madera, Turlock, and the Shasta, Butte, and Scott Valleys efforts (all in Siskiyou County). Additionally, CCP is currently managing a comprehensive DAC program in the Tulare Basin, involving several integrated regional water management planning (IRWMP) groups and associated impacted communities. Such work is part of CCP's specialization as

a third-party neutral organization. Capitalizing on their work preparing engagement plans with the 13 basins and GSAs above, CCP can perform the following:

- Work with the FPBGSA to review and potentially update the list of stakeholders, groups, and organizations to engage though the GSP development process. CCP will work with the FPBGSA to define key and consistent messaging about the SGMA process. As per § 354.10 of the GSA Regulations, the Engagement Plan will include at a minimum, the following information:
  - A description of the beneficial uses and users in the Basins, including the land uses and property interests potentially affected by the use of groundwater in the Basins, the types of parties representing those interests, and the nature of consultation with those parties.
  - A description of the Agency's decision-making process.
  - Opportunities for public engagement and a discussion of how public input and response will be used by the FPBGSA.
  - A description of how the FPBGSA encourages the active involvement of diverse social, cultural, and economic elements of the population within the Basins.

In addition to these essential elements, a section in the Engagement Plan that sets the stage to describe methods the FPBGSA will use to inform the public about GSP implementation progress is also recommended since this item will eventually be required per the regulations anyway. In addition to the essential elements, we find that there is significant "value-added" for the FPBGSA to include the following in the Engagement Plan.

- FPBGSA key messaging about SGMA.
- A summary of Brown Act requirements to inform staff and consultants of such information, ensure that engagement activities are compliant, and ensure that the FPBGSA is least likely to be subject to legal challenges of the GSP based on procedural deficiencies.

"Aside from his professional expertise and experience, Tony brings to the table an inherent ability to analyze, successfully communicate and collaborate on complicated water issues with directors, staff, regulators and the public. He speaks directly and honestly to issues. I have on several occasions personally witnessed Tony address a room full of people who were, to put it politely, not receptive to his remarks, yet by the end of these meetings all present had respect for his integrity, character and unfailing courtesy."

~Anthony H. Trembley, Attorney

- A summary of venues for stakeholder engagement including points of contact, room options and requirements, and similar.
- A schedule of notices to stakeholders (i.e., a web-based messaging calendar).
- Media outlets, publication dates, and points of contact.
- Proposed meeting schedule and workforce projections to implement the Engagement Plan.
- Potential annual budgets for outreach and engagement.
- A summary of the process for reporting communication and engagement highlights to the FPBGSA Board and other associated groups.

The benefit of these additional items is that they require limited additional costs to present and include; yet, with this information, the Engagement Plan becomes a tool that goes beyond meeting state requirements and provides a functional, operational tool that legitimately informs the FPBGSA's work. This task will benefit from meetings with the full FPBGSA and/or an ad hoc or standing committee of the GSA (as has been set up for other key FPBGSA topics such as legal services, bylaws, etc.) to define and agree on items proposed above, identify venues and engagement resources, and confirm the messaging approach and

associated milestones. This task includes time for our team to conduct such meetings and to present the draft and final Engagement Plan to the FPBGSA Board and/or subcommittee.

> **"By all accounts, the SCSC members are happy with the study and have been distributing it to their stakeholders. On behalf of both SCSC and NWRI, I'd like to thank you for all the work you [Dr. LeClaire] and Hannah did. You both navigated the management challenges with grace and we appreciate your professionalism and attention to detail."**
>
> **~Suzanne Sharkey**
> **National Water Research Institute**

Regarding "outreach approach" of the FPBGSA and as an overarching recommendation related to many of the GSP tasks, we believe the following is important. The GSP regulations create a "higher bar" than other environmental compliance laws and regulations, which in concert with §10720.3 and §10723.2 of the statue, creates significant expectations by the SWRCB and DWR for GSAs to achieve regarding stakeholder outreach and engagement. These expectations should lead all GSAs to create abundant opportunities for public input, but this process must be carefully managed to achieve beneficial outcomes and avoid or minimize unintended consequences. FPBGSA has identified an approach very similar to that which CCP regularly advises wherein public meetings should happen when there is a compelling and milestone-based reason to hold one. Meetings for the sake of meetings are inefficient and burdensome to beneficial users, staff, and consultants. They create, rather than reduce, stakeholder fatigue and project costs. Further, public engagement under SGMA should create opportunities for the FPBGSA to investigate and understand the impacts of their future decisions, rather than just deliver technical information. This is the essence of what §354.10 requires and what the FPBGSA Board should be focused on.

DELIVERABLES:

1. Develop Presentation Materials
2. Present Information in Public Meetings
3. Receive Feedback/Comments
4. Respond to Comments

TASK 10 - PREPARE GROUNDWATER SUSTAINABILITY PLAN

The DBS&A team will work with FPBGSA and its staff to prepare a GSP outline for the Fillmore Basin GSP and the Piru Basin GSP, preliminary review draft, public review draft, and final GSPs that the FPBGSA will consider for adoption.

A draft GSP outline will be provided to the FPBGSA appointed project manager for review. We will then work with the FPBGSA's project manager to develop a final outline for each Basin that will be used for the GSP document development.

The preliminary review draft GSPs will provide the FPBGSA an opportunity to comment on early versions of the GSP sections and associated appendices. The comments received from the FPBGSA on the preliminary draft GSPs will be used to revise the plans and create the public review drafts.

This task will also be used to track references used during GSP preparation. GSP regulations require that a copy of every reference used in GSP preparation that is not easily available be included with the GSP submission. This task includes collection of all applicable references used in the report for submittal with the completed GSP.

Our team will prepare public review draft GSPs and all supporting documentation. The public review draft document is to respond to comments made on the preliminary review draft document and revise sections of the plan based on the latest information (e.g., new or updated information from UWCD modeling efforts). The public review draft GSPs will be circulated for agency and public review and comment. The public and agency comments will be taken into account in the creation of the final version of the GSPs. The final GSPs will be provided to the FPBGSA for consideration for adoption and submittal to the DWR.

The GSPs will identify those tasks, activities, or projects that will aid the FPBGSA in guiding the Basins towards sustainability by achieving the MOs. Fundamental to achieving the MOs is the need to develop a GSP implementation schedule and an associated budget. The DBS&A team will prepare a schedule encompassing the time period from submittal of the GSPs to DWR through the 20-year compliance period to achieve sustainability. A major element in the schedule will be the anticipated implementation timing of projects that will beneficially impact the sustainable yield of the Basins. The schedule will have greater detail for early years of the implementation period during which there is greater certainty about the scope, timing, permitting and funding of the projects.

> **"Tony is very, very knowledgeable of the SGMA timelines, issues and requirements."**
>
> **~E. Michael Solomon, General Manager (ret.)**
> **United Water Conservation District**

DELIVERABLES (DBS&A):

1. Preliminary Draft Groundwater Sustainability Plans for FPBGSA review
2. Draft Public Review Groundwater Sustainability Plans
3. Responses to Comments on Draft GSPs
4. Final Groundwater Sustainability Plans

DELIVERABLES (UWCD):

1. Maps detailing area of the Basins and boundaries
2. Maps identifying existing and potential recharge areas that substantially contribute to the recharge of the Basins

TASK 11 - GRANT ASSISTANCE

The DBS&A team is committed to assisting the FPBGSA in their compliance with the reporting and invoicing terms of their Sustainable Groundwater Planning Grant (Prop 1 Grant) and has experience with these processes in California and other western States.

Our team will prepare quarterly progress reports that will detail the work completed (including backup information [as appropriate]) during the reporting period and will be structured to provide the DWR program manager with sufficient information to understand the status of the project. Our progress reports will be submitted to FPBGSA. If needed, our team will respond to items needing clarification once DWR has reviewed the progress reports.

DWR will require a Project Completion Report to document the activities and outcomes associated with work supported by the grant funding. Our team is prepared to provide FPBGSA with a Draft Project Completion Report within 90 days of work completion. Should DWR request revisions or further clarification of information in the Draft Project Completion Report, our team will update the report accordingly.

DELIVERABLES:

1. Quarterly Project Progress Reports
2. Project Completion Report

In addition to the reporting assistance described above, draft invoices will be prepared for submission to DWR. The invoices will be prepared using the DWR the invoice template and provided to FPBGSA for ultimate submittal to DWR. Invoices will be supported with back-up documentation (by task) with a summary Excel document detailing the contents of the backup documentation organized to match the tasks in the grant agreement budget. The back-up documentation will track budget expenditures (i.e., project-to-date), as well. If DWR's project manager has comments or requires clarification on a draft invoice, our team is prepared to respond in a timely manner and will work with FPBGSA and DWR to create a final invoice.

DELIVERABLES:

1. Draft and final invoices
2. Backup documentation and summary document

Standards

Documents and data will be generated by various DBS&A team members, as well as others (e.g., UWCD) during the GSP development process. To help ensure data compatibility amongst the different entities, our team will use the following format conventions:

- Electronic text deliverables will be in the Microsoft Office platform (e.g., Word, Excel, PowerPoint, Project) and/or Adobe PDF format;
- Geographical Information System (GIS) deliverable formats will be:

» Vector spatial data formats are file geodatabase (.gdb), personal geodatabases (.mdb), shapefiles (.dbf, .prj, .sbn, .sbx, .shp, .xml, .shx)

» Raster data formats include file geodatabases, georeferenced TIFFs, ERDAS Image files (.img), Mr. Sid and ECW. Imagery will be orthorectified whenever possible.

All of the format conventions listed above are standards applied to DBS&A's normal operations and do not require special actions for this project. Our quality assurance program includes elements, such as but not limited to, dealing with data compilation and review, data archiving, technical report editing and review.

DELIVERABLES:

1. Electronic Text Document Deliverables
2. Geographical Information System Deliverables
3. Comprehensive Quality Assurance Program

Technical Writing Guidelines

DBS&A has prepared thousands of reports for various clients under established, in-house QA/QC guidelines and requirements. We have an excellent record of meeting client deadlines for deliverables, and maintain a reputation for preparing high quality technical reports. Our team is well versed in the design and preparation of complex and highly technical reports and plans. We know the importance of providing high quality reports that thoroughly address all applicable requirements and recognize the need to ensure the plan and its related documents (e.g., technical memoranda, stakeholder information sheets) are developed with the intended reader in mind.

"Staff went above and beyond to help us meet our deadlines and presented great reports. Most definitely added value to our project and we look forward to working with you again."

~Devin Romero
AMEC Foster Wheeler Environment & Infrastructure, Inc.

DBS&A employs a full-time technical editing and production group to ensure quality, accuracy, format, and completeness of reports prepared by DBS&A. The level of detail of our reports ranges from letter reports providing findings to multi-volume reports adhering to state and federal reporting guidelines. Regardless of the level of detail, DBS&A strictly adheres to a reporting review process described in our QA manual and formalized in our internal document review guidance, in all instances.

"Thank you for the informative, concise report, I have no edits or comments. I think it will serve as a model for moving forward."

~Trent Botkin
New Mexico Department of Transportation

DBS&A follows an established protocol as written in our corporate Quality Assurance Program Manual (QA Manual) on all our projects. This mature corporate QA program, developed from our history of more than 30 years in consulting, includes thorough preparation and planning, establishment of sound procedures, strict adherence to protocol, checks for precision and accuracy, and internal review of documents. The process includes reviews for technical accuracy by a technical manager familiar with the project goals and objectives; a complete editorial review that ensures logical sequence of ideas, and clear, concise writing; checking for consistency and accuracy in data tables and figures; and a final QA check prior to submission to the GSA. In some instances, outside review of documents is used to ensure quality. All DBS&A deliverables are reviewed in accordance with DBS&A's QA Manual to ensure a high-quality end product and one that meets the GSA's needs and SGMA requirements. DBS&A typically allocates 15 to 20 percent of time charged to projects for quality control functions, including data review, internal peer-review, and editorial review. A copy of DBS&A's document review form is shown to the right.

Our ability to produce high quality documents in-house saves time and money, and consistently ensures high quality deliverables. We also typically provide reports

as portable document format (PDF) files with figures and attachments included in a single PDF, incorporating bookmarks to enable readers to easily navigate large documents on screen.

DBS&A's technical editing and production team is responsible for supporting Water Resources plans, including the recent compilation, editing, and production of updates to all 16 regional water plans in New Mexico available here: http://www.ose.state.nm.us/Planning/regional_planning.php

As public documents, these reports present the information in lay terms with clearly understood supporting graphics. Through DBS&A's expert services work, the production team has been responsible for producing documents that withstand the same level of scrutiny in court as our technical experts do during deposition, where the use of scientific vocabulary and detailed supporting data is appropriate. Many clients have commented on our staff's ability to adjust their presentation of technical information to meet their audience's level of understanding. DBS&A staff also includes GIS, information solutions, graphic design, and modeling specialists that help our technical staff to communicate concepts to wide audiences visually.

"Just wanted to say that as a writing person it was a very well written report that I don't see that often. Great and correct citation to sources, easy to understand, and to my limits correct grammar use and formatting."

~Kevin J. Powers
Associate County Attorney
Incorporated County of Los Alamos

Quality Control
Document Review Checklist
Technical Reports

Daniel B. Stephens & Associates, Inc.

Project Name _____ Project No./Phase/Task _____
Document Title _____
Document Author(s) _____
Checklist Initiated By _____ Deliverable Date Click here to enter a date. _____

AUTHOR [1] Initials _____

Has the following occurred: ☐ Calculations checked ☐ Tables/figures correct and consistent with raw data

TECHNICAL REVIEW Reviewer(s) _____ Budget ___ hour(s) Date Reviewed _____ Initials _____

☐ Addresses project objectives Comments _____
☐ Conclusions supported by data Comments _____

EDITORIAL REVIEW Reviewer(s) _____ Budget ___ hour(s) Date Reviewed _____ Initials _____

☐ Text clear and readable Comments _____
☐ Document internally consistent Comments _____
☐ Acronyms defined Comments _____
☐ Tables and figures cited and attached Comments _____
☐ Reference list complete Comments _____
☐ Appendices cited and attached Comments _____

FINAL REVIEW [2] Reviewer _____ Budget ___ hour(s) Date Reviewed _____ Initials _____

☐ All required changes made Comments _____
☐ Document complete Comments _____
☐ Approved for release Comments _____

Principal Review [3] *(if applicable)* *Signature* _____ *Date* _____

Additional Notes

[1] The author is responsible for ensuring that all calculations have been reviewed and tables/figures reconciled prior to providing the document for technical review.
[2] This review should occur after all technical and editorial changes have been completed and should be done by the author who has the most familiarity with the document.
[3] Anything other than the review described here must be approved by the Principal in Charge or designee. Note deviations to the review procedure on this form.

Figure 13. Document Review Form

California Environmental Quality Act (CEQA)

The RFP states that the GSPs are considered to be categorically exempt under California Code of Regulation (CCR), Title 14. However, our project team has personnel that are CEQA knowledgeable if the need should arise.

TASK 12 - RECOMMENDED ACTIONS

Other Recommended Actions

The DBS&A team has carefully reviewed the RFQ/P and prepared a cross tabulation of the tasks identified in the RFQ/P with the GSP checklist and annotated outlines provided by DWR. The cross tabulation has highlighted

some topics, issues, or analyses that could be essential or recommended for inclusion in the GSPs, but that were not a part of the scope of work specified in the RFQ/P and/or part of the budgeting process as noted in the Prop 1 grant proposal. These include, but are not necessarily limited to, the following:

Enhanced Stakeholder Engagement: Consistent with Task 9 Stakeholder Engagement, we believe that the Basin Setting steps of SGMA provide an invaluable, early opportunity for public outreach. Consistent with the experience CCP has had statewide, there is a wide range of understanding and expertise by beneficial users about the accurate conditions of their groundwater resources. This lack of a common knowledge base influences subsequent behavior and beliefs by these beneficial users when working with a GSA. The work to prepare the Basin Setting portion of the GSPs provides an exceptional opportunity to present information, educate the public, dispel "myths" and misunderstandings about the Basins, and align stakeholder awareness such that they are better informed for subsequent key decision milestones under GSP development and presentation. In this context, we recommend that under Task 9, the Engagement Plan include specific text about outreach activities that will coincide with this Task as a means to capitalize on the efforts done under this Task.

Similar to Task 9, CCP has found that development of sustainable management criteria (Task 7) is a step in GSP development subject to significant misunderstandings by beneficial users, and is nonetheless an exceptionally critical milestone to inform subsequent planning steps, define basin conditions and eventual planning actions. The ability to dispense with misunderstandings can be a valuable part of informing public opinion and maintaining productive engagement. Therefore, consistent with Task 9 above, this is a point in the GSP process that we believe benefits from focused public engagement to better educate beneficial users about SGMA criteria and their relationship to future decisions and actions.

Enhanced efforts for GDEs: The Basins have a large extent of known or potential GDEs. The existing DWR GDE mapping and recent projects by our team member, Stillwater Sciences, has improved our knowledge. Our core proposal includes a basic level of effort under a number of tasks that is sufficient to ensure the GSPs show due diligence in addressing GDEs. However, given the number of potential and known GDEs and listed species dependent upon them, our team recommends that the FPBGSA seek additional funding to conduct an enhanced GDE effort (mapping, classification, characterization, potential effect, sustainability criteria, monitoring, and potential projects/actions) that builds on the core approach to reduce uncertainties. Such efforts would provide an efficient path towards ensuring the sustainability of GDEs that is consistent with the groundwater sustainability plan being developed for these Basins.

Stillwater is willing to help the GSA develop proposals for additional funding for GDE investigations in the Fillmore and Piru Basins.

All references cited are shown in Appendix B.

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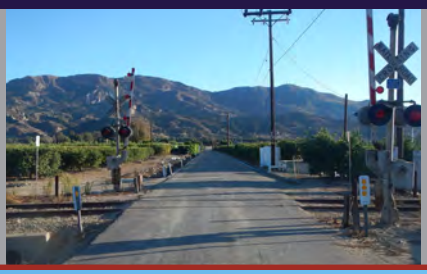
FEE PROPOSAL

Groundwater Sustainability Plans Preparation for Fillmore Basin and Piru Basin

October 24, 2018

Prepared for

Fillmore and Piru Basins
Groundwater Sustainability Agency

PO Box 1110
Fillmore, CA 93016

Prepared by

DBS&A
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Santa Barbara, California 93105

FEE PROPOSAL

The Daniel B. Stephens & Associates, Inc. team is pleased to provide the Fillmore and Piru Basins Groundwater Sustainability Agency (FPBGSA) with our cost proposal to prepare Groundwater Sustainability Plans (GSPs) for Fillmore Basin and Piru Basin. We have used our understanding of the stated desires of the FPBGSA Board of Directors to aid in developing this cost estimate. Those assumptions include, but are not necessarily limited to, the following:

- The Board of Directors preference is to maximize the Prop 1 GSP Development grant award. Per the terms of the grant agreement the DWR will reimburse the FPBGSA $0.74 of each $1.00 spent to prepare its GPSs up to a maximum reimbursable amount of $1,500,000;
- The primary source of funding for the GSPs' development will be the Prop 1 grant funds. Consequently, a desired goal is to keep the costs within the limits of the Prop 1 grant award;
- Separate GSPs will be prepared for each of the Fillmore and Piru groundwater basins;
- United Water Conservation District will assist with the GSPs' development by providing hydrogeologic data, technical memoranda, and groundwater flow model scenario runs. These services are being provided on a cost-reimbursable basis in accordance with a separate time-and-materials agreement between UWCD and FPBGSA. A budget for UWCDs efforts has not been formally established; and
- FPBGSA will self-perform a portion of the stakeholder engagement efforts including outreach to disadvantaged communities; however, the RFP does not detail the scope of these efforts or reconcile the scope with DWR requirements. For the purposes of this proposal, it is assumed thatthe GSP consultant will assist with the Communication and Engagement Plan preparation and provide overall guidance to the Agency on how to comply with DWR's requirements.

Information provided at the September 27, 2018 Board of Directors meeting contained a revised budget for the GSP development effort. It is presumed that the changes in the budget resulted from consultation with the DWR grant administrator during the grant contract negotiations. As a result, the following alternations to the grant amounts are:

Table 1. Proposition 1 Grant Summary

Category		Grant Amount	Required Cost Share	Other Cost Share	Total Cost
(a)	Grant Administration	$0	$30,228	$0	$30,228
(b)	Stakeholder Coordination and Engagement	$52,912	$0	$0	$51,912
(c)	Construction/Implementation	$302,970	$497,030	$0	$800,000
(d)	Model and GSP Development	$1,145,118	$0	$0	$1,145,118
	Total Costs	**$1,500,000**	**$527,258**	**$0**	**$2,027,258**

To exercise maximum advantage of the Prop 1 grant award, the DBS&A team analyzed how the grant expenditures were allocated to major activities needed to complete the GSPs. Our analyses are summarized in the below table and following narrative.

Items (1) through (5) and their associated budgets are presented in the Prop 1 Grant Award that totals $2,027,258 ($1,500,000 in reimbursements and $527,258 in matching FPBGSA expenditures or in-kind services). Overall, this means the agency must incur $2,027,258 in expenditures or in-kind services to receive the maximum reimbursement of $1,500,000 via the grant.

To prepare our cost proposal, we reviewed the grant application summaries and available information from the FPBGSA Board of Director meeting minutes and board packets. Some of our key observations include:

A. At the time the grant application was submitted, it was assumed that UWCD would prepare the entire GSPs for both basins on a cost-reimbursable basis. This assumption is no longer valid, and UWCD's role will be to provide FPBGSA with data, technical memoranda, and groundwater flow modeling runs (as summarized in the RFP and various Board of Director meeting minutes) to support the GSP consultant. Consequently, the $799,576 grant amount (#3 in the table above) can be reduced to an amount more reflective of UWCD's lesser anticipated effort. A budget for UWCD's efforts was not a part of the RFP, so we have assumed $200,000 as the approximate amount needed to reimburse UWCD for its groundwater flow modeling efforts. The FPBGSA Board of Directors approved a consulting agreement with UWCD itemizing unit rates for various labor categories (August 23, 2018 Board of Director meeting, Item 8C). If it is assumed that the bulk of the time spent by UWCD staff on the modeling effort will be by Senior-level persons, then approximately 1,809 man-hours are represented by the $200,000 budget allocation ($200,000 / $110.57 per hr =1,808.88 or ~1,809 man-hrs). This level of effort is thought to be sufficient for the scope of work;

Table 2. Proposition 1 Grant Award Assumed Allocations

		DBS&A Proposal		
	Grant	UWCD	GSP Consultant	Others
GSP Project Administration (1)	$30,228	$30,228	$0	$0
Monitoring Wells (2)	$800,000	$0	$0	$800,000
GW Model (3)	$799,576	$200,000	$0	$0
GSP Preparation (4)	$345,542	$0	$745,118	$0
Outreach (5)	$51,912	$0	$51,912	$0
In Kind Services (estimated)		$200,000	$0	$0
Total Grant Award	$2,027,258			
Subtotals by Entity		**$430,228**	**$797,030**	**$800,000**
Total of all Entities			**$2,027,258**	

B. Two nested monitoring wells would be constructed as part of the GSP preparation process. The location and construction details will be determined at a later date. The RFP did not contain a scope of work to construct the monitoring wells as a task to be performed by UWCD and it was not included in the scope of work to be performed by the GSP consultant. Consequently, the amount for this effort ($800,000) has not been modified and it is designated to be performed by "others"; and

C. UWCD (and possibly others) has (have) performed services in support of the GSA and the GSP development process that can likely be claimed as in-kind services and therefore used to assist the FPBGSA in meeting the required cost share associated with the grant. The value of the in-kind services is not presented in the RFP, so it is assumed that those services will total $200,000.

The analyses suggest that as much as $797,030 is potentially available for the preparation of the GSPs, including stakeholder outreach efforts. Using this analysis as our guidance, the DBS&A team has created a scope of work with a proposed budget that is reflective of that level of funding.

Several assumptions were made by the DBS&A team to create our proposed budget. If the FPBGSA prefers different assumptions, then we are certainly willing to revisit our budget in light of those new assumptions. Our summary budget is contained in Table 3 below with more detail provided in the supplemental spreadsheets contained herein.

Table 3. Cost Estimate Summary

Task	Task Description	DBS&A Labor	Other Direct Costs	Task Sub Total
1	Project Management	$94,320	$15,780	$110,100
2	**Compilation of Existing Data**	$8,200	$16,267	$24,467
3	*Assessment of Existing Data and Data Gap Analysis	$20,600	$10,844	$31,444
4	Monitoring Program and Data Management Systems	$25,560	$6,778	$32,338
5	Water Level and Water Quality Data Collection and Analysis	$4,720		$4,720
6	Develop Water Budget, Hydrogeologic Conceptual Model, and Numerical Flow Model	$30,200	$18,978	$49,178
7	Development of Sustainable Management Criteria	$42,208	$21,689	$63,897
8	Projects and Management Actions	$46,160	$22,822	$68,982
9	Stakeholder Engagement	$12,480	$45,133	$57,613
10	Prepare Groundwater Sustainability Plan	$314,320	$33,889	$348,209
11	Grant Assistance	$4,000		$4,000
	Subtotals	**$602,768**	**$192,180**	**$794,948**

Estimated Project Total	**$794,948**

Table 4. Cost Estimate Breakdown

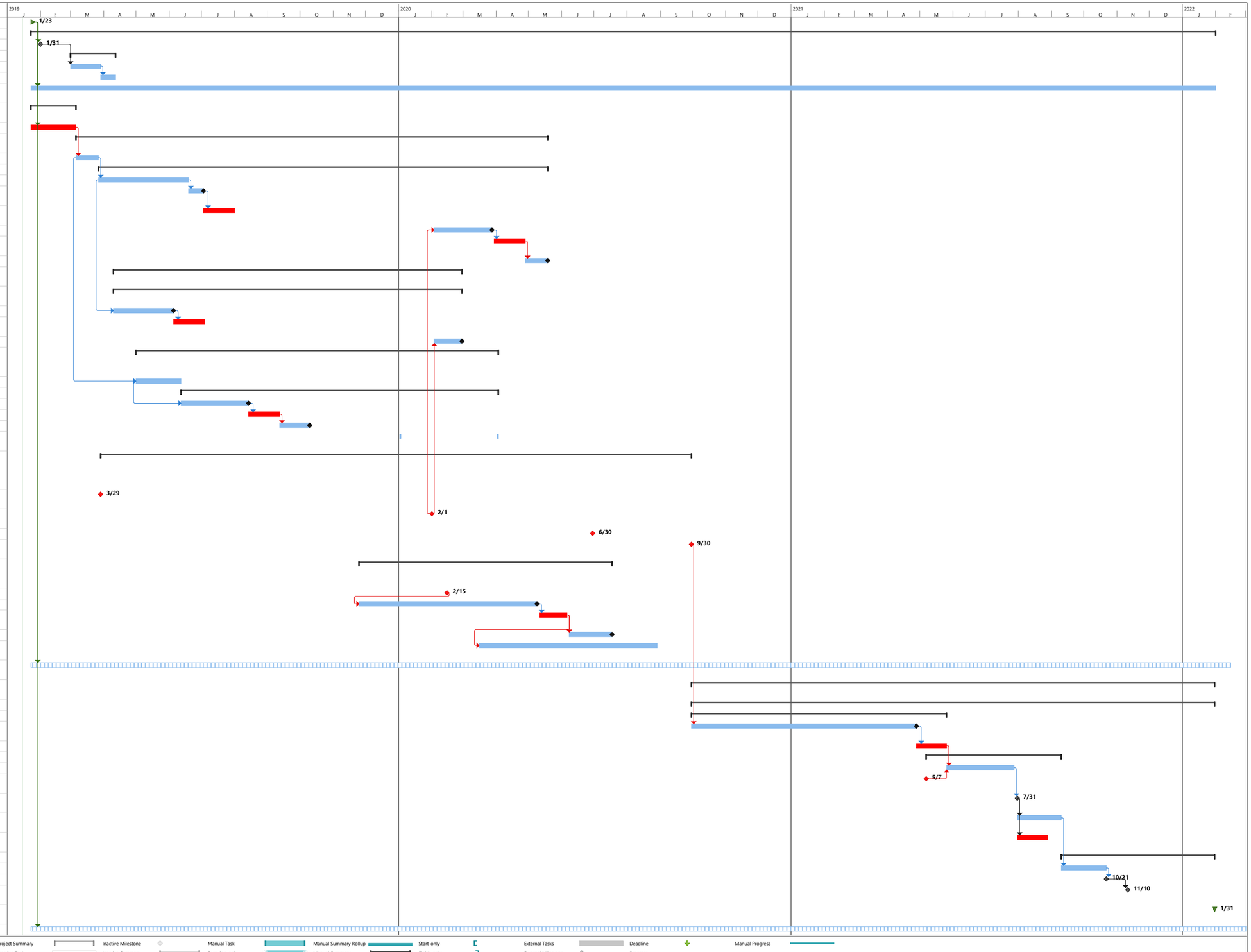
		Man-days							
		Prin II	Prin I	Senior II	Senior I	Project II	Project I	Staff II	Sr Tech Editor
		Cullen Morgan	Blandford	LeClaire	Calhoun	Ewing Cartron, J Moore, S	Moore, T Williams	Erbele Hampton	Fay Torgrimson
Task	Task Description	$250.00	$250.00	$230.00	$204.00	$173.00	$155.00	$130.00	$122.00
1	Project Management	36					18		
	1* man-day/month for 36 months by PM	$72,000					$22,320		
2	Compilation of Existing Data	1					5		
	*Majority of data has been compiled by UWCD; minimal new research needed	$2,000					$6,200		
3	*Assessment of Existing Data and Data Gap Analysis	1					15		
		$2,000					$18,600		
4	Monitoring Program and Data Management Systems	1		5	5		5		
		$2,000		$9,200	$8,160		$6,200		
5	Water Level and Water Quality Data Collection and Analysis	.5					3		
		$1,000					$3,720		
6	Develop Water Budget, Hydrogeologic Conceptual Model, and Numerical Flow Model	2	10				5		
		$4,000	$20,000				$6,200		
7	Development of Sustainable Management Criteria	10		1		2	1	5	
		$20,000		$1,840		$2,768	$12,400	$5,200	
8	Projects and Management Actions	8				20	2		
		$16,000				$27,680	$2,480		
9	Stakeholder Engagement	5					2		
		$10,000					$2,480		
10	Prepare Groundwater Sustainability Plan	50					90	80	20
		$100,000					$111,600	$83,200	$19,520
11	Grant Assistance	2							
		$4,000							
*Assumptions	**Subtotals**	**$233,000**	**$20,000**	**$11,040**	**$8,160**	**$30,448**	**$192,200**	**$88,400**	**$19,520**
	Total	**$602,768**							

Table 5. Cost Estimate ODC's Breakdown

Task	Task Description	ODC's (Includes 10% Subconsultant Markup)			
		Personal or Company Vehicle Mileage $0.545/mi	SWS	CCP	Dominique Cartron
1	Project Management	3,600**			
	1* man-day/month for 36 months by PM		$9,489	$4,111	
2	Compilation of Existing Data				
	*Majority of data has been compiled by UWCD; minimal new research needed		$16,267		
3	*Assessment of Existing Data and Data Gap Analysis				
			$10,844		
4	Monitoring Program and Data Management Systems				
			$6,778		
5	Water Level and Water Quality Data Collection and Analysis				
			$18,978		
6	Develop Water Budget, Hydrogeologic Conceptual Model, and Numerical Flow Model				
			$21,689		
7	Development of Sustainable Management Criteria				
			$9,489		
8	Projects and Management Actions				
			$8,133		$13,333
9	Stakeholder Engagement				
			$33,889	$37,000	
10	Prepare Groundwater Sustainability Plan				
11	Grant Assistance				
	Subtotals	**$2,180**	**$135,556**	**$41,111**	**$13,333**
	Total	**$192,180**			

**Mileage

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
1		Notice to Proceed	0 days	Wed 1/23/19	Wed 1/23/19	
2		**Task 1 - Project Management**	**790 days**	**Wed 1/23/19**	**Mon 1/31/22**	
3		Kickoff Meeting	0 days	Thu 1/31/19	Thu 1/31/19	1FS+7 days
4		**Work Plan Preparation**	**30 days**	**Fri 3/1/19**	**Thu 4/11/19**	
5		Prepare Draft Work Plan	20 days	Fri 3/1/19	Thu 3/28/19	3FS+20 days
6		Prepare Final Work Plan	10 days	Fri 3/29/19	Thu 4/11/19	5
7		Monthly Progress Reports to Board of Directors	790 days	Wed 1/23/19	Mon 1/31/22	1
8		**Task 2 - Compilation of Existing Data**	**30 days**	**Wed 1/23/19**	**Tue 3/5/19**	
9		UWCD Data Transfer to DBS&	30 days	Wed 1/23/19	Tue 3/5/19	1
10		**Task 3 - Assessment of Existing Data and Data Gaps**	**314 days**	**Wed 3/6/19**	**Mon 5/18/20**	
11		Assessment of Existing Data	15 days	Wed 3/6/19	Tue 3/26/19	9
12		**Data Gap Evaluation**	**299 days**	**Wed 3/27/19**	**Mon 5/18/20**	
13		Data Gap Analysis	60 days	Wed 3/27/19	Tue 6/18/19	11
14		Prepare Draft Technical Memo	10 days	Wed 6/19/19	Tue 7/2/19	13
15		Draft Tech Memo Review by UWCD	21 days	Wed 7/3/19	Wed 7/31/19	14
16		Prepare Final Tech Memo	40 days	Mon 2/3/20	Fri 3/27/20	35SS
17		Final Tech Memo Review by UWCD	21 days	Mon 3/30/20	Mon 4/27/20	16
18		Finalize Tech Memo	15 days	Tue 4/28/20	Mon 5/18/20	17
19		**Task 4 - Monitoring Program and Data Management**	**233 days**	**Wed 4/10/19**	**Fri 2/28/20**	
20		**Review Existing Monitoring Program**	**233 days**	**Wed 4/10/19**	**Fri 2/28/20**	
21		Prepare Technical Memo	40 days	Wed 4/10/19	Tue 6/4/19	13SS+10 days
22		Tech Memo Review by UWCD	21 days	Wed 6/5/19	Wed 7/3/19	21
23		Finalize Tech Memo	20 days	Mon 2/3/20	Fri 2/28/20	35
24		**Task 5 - Water Level and Water Quality Data Collection and Analysis**	**242 days**	**Wed 5/1/19**	**Thu 4/2/20**	
25		Assessment of Existing Data	30 days	Wed 5/1/19	Tue 6/11/19	11SS+40 days
26		**Sampling and Analysis Plan**	**212 days**	**Wed 6/12/19**	**Thu 4/2/20**	
27		Prepare Draft SAP	45 days	Wed 6/12/19	Tue 8/13/19	25SS+30 days
28		Draft SAP Review by UWCI	21 days	Wed 8/14/19	Wed 9/11/19	27
29		Finalize SAP	20 days	Thu 9/12/19	Wed 10/9/19	28
30		**Coordination Meetings with UWCD**	**66 days**	**Thu 1/2/20**	**Thu 4/2/20**	
33		**Task 6 - Develop Water Budget, Hydrogeologic Conceptual Model, and Numerical Flow Model**	**393 days**	**Fri 3/29/19**	**Wed 9/30/20**	
34		Preliminary Water Budgets Available	0 days	Fri 3/29/19	Fri 3/29/19	
35		Draft Groundwater Model available	0 days	Sat 2/1/20	Sat 2/1/20	
36		HCM Tech Memo Available	0 days	Tue 6/30/20	Tue 6/30/20	
37		Draft water budget, HCM, modeling text for GSP	0 days	Wed 9/30/20	Wed 9/30/20	
38		**Task 7 - Development of Sustainable Management Criteria**	**170 days**	**Mon 11/25/19**	**Fri 7/17/20**	
39		UWCD input to SMC	0 days	Sat 2/15/20	Sat 2/15/20	
40		Prepare Draft Tech Memo	120 days	Mon 11/25/19	Fri 5/8/20	39FS-60 days
41		Draft Tech Memo review by UWCD & Public	20 days	Mon 5/11/20	Fri 6/5/20	40
42		Update Draft Tech Memo	30 days	Mon 6/8/20	Fri 7/17/20	41
43		**Task 8 - Projects and Management Actions**	**120 days**	**Mon 3/16/20**	**Fri 8/28/20**	**41FS-60 days**
44		**Task 9 - Stakeholder Engagement**	**800 days**	**Wed 1/23/19**	**Mon 2/14/22**	**1**
45		**Task 10 - Prepare Groundwater Sustainability**	**349 days**	**Wed 9/30/20**	**Mon 1/31/22**	
46		**Prepare GSPs**	**349 days**	**Wed 9/30/20**	**Mon 1/31/22**	
47		**Preliminary Draft GSP**	**170 days**	**Wed 9/30/20**	**Tue 5/25/21**	
48		Prepare Preliminary Draft GSP	150 days	Wed 9/30/20	Tue 4/27/21	37
49		FPBGSA & UWCD review	20 days	Wed 4/28/21	Tue 5/25/21	48
50		**Prepare Public Draft GSPs**	**91 days**	**Fri 5/7/21**	**Thu 9/9/21**	
51		Prepare Public Draft GSI	45 days	Wed 5/26/21	Tue 7/27/21	49,52
52		UWCD materials for Public Draft GSPs	0 days	Fri 5/7/21	Fri 5/7/21	
53		Public Draft GSPs completed	0 days	Sat 7/31/21	Sat 7/31/21	51
54		Public Review of Draft GSPs	30 days	Sat 7/31/21	Thu 9/9/21	53
55		UWCD Review of Public Draft GSPs	21 days	Sat 7/31/21	Fri 8/27/21	53
56		**Prepare Final Draft GSPs**	**101 days**	**Fri 9/10/21**	**Mon 1/31/22**	
57		Update Draft GSPs	30 days	Fri 9/10/21	Thu 10/21/21	54
58		Final GSPs adopted by G	0 days	Thu 10/21/21	Thu 10/21/21	57
59		Final GSPs submitted to DWR	0 days	Wed 11/10/21	Wed 11/10/21	58FS+14 days
60		**DWR Deadline for GSP Submittal**	**0 days**	**Mon 1/31/22**	**Mon 1/31/22**	
61		**Task 11 - Grant Assistance**	**815 days**	**Wed 1/23/19**	**Mon 3/7/22**	**1**



Project: Project Schedule 2019_
Date: Tue 1/15/19

Task, Split, Milestone, Summary, Project Summary, Inactive Task, Inactive Milestone, Inactive Summary, Manual Task, Duration-only, Manual Summary Rollup, Manual Summary, Start-only, Finish-only, External Tasks, External Milestone, Deadline, Progress, Manual Progress

Item No. **11A <u>Information</u>**

DATE: **January 11, 2019**

TO: **Board of Directors**

SUBJECT: **Basin Boundary Modifications**

SUMMARY:

Staff proposed basin boundary modifications for the Fillmore and Piru basins in fall 2018 after receiving DWR guidance on the appropriate criteria for modifying these basin boundaries. The final proposed boundaries included a number of alluvial deposits around the edges of the basins that were not included in the prior draft boundaries proposed by staff in summer 2018.

DWR recommended that the proposed boundary modifications be approved. No comments were received for the Fillmore and Piru basins. DWR will now formally adopt the new boundaries.

Staff mailed letters to 14 well owners that are within the fall boundaries but were not within the previously- proposed (summer 2018) boundaries. About half of these wells are believed to be active.

RECOMMENDED ACTION: NONE

FISCAL IMPACT: Modification of the boundaries will result in increased revenue for the GSA, as the new boundaries include more wells than the original boundaries. Many of the new wells are located in the area immediately east of the Santa Paula basin, where the original DWR boundaries stopped short of the stipulated boundary for the Santa Paula basin.

Fillmore and Piru Basins
Groundwater Sustainability Agency

Post Office Box 1110, Fillmore, CA 93016
(805) 525-4431 http://fpbgsa.org

December 28, 2019

SAMPLE LETTER

NAME
ADDRESS
CITY STATE ZIP

Re: SWN# APN #

Dear Sir/Madam:

You are being contacted because our records indicate that you have an active well within the Piru or Fillmore groundwater basin. Revisions to the boundaries for these basins were recently proposed by the Fillmore and Piru Basins Groundwater Sustainability Agency (FPBGSA), and your well is now located within the revised basin boundaries. Additional details, including the public process and technical justifications for the basin boundary modifications, may be accessed through the FPBGSA website at https://fpbgsa.org/public-comments-invited/

The CA Department of Water Resources has recommended approval of the proposed changes to the basin boundaries. The public comment period for these boundary adjustments closes on January 4, 2019. The website detailing the boundary modification process can be found at: https://water.ca.gov/Programs/Groundwater-Management/Basin-Boundary-Modifications

If the well referenced above is active, we would like to invite you to register your well with the Fillmore and Piru Basins Groundwater Sustainability Agency, as required by the Sustainable Groundwater Management Act (SGMA). Additional information about SGMA can be found at: https://sgma.water.ca.gov/portal

Additional information about the Fillmore and Piru Basins Groundwater Sustainability Agency is available online at https://fpbgsa.org/

We look forward to your future involvement in this local process to operate and manage your groundwater basin in a sustainable manner.