



# EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

## Board of Directors Meeting

### AGENDA

Thursday, October 17, 2019

10:00 a.m. – 1:00 p.m.

Delta Water Supply Treatment Plant  
11373 North Lower Sacramento Road, Lodi, California

- I. Call to Order/Pledge of Allegiance & Safety Announcement/Roll Call
- II. **SCHEDULED ITEMS – *Presentation materials to be posted on ESJGroundwater.org and emailed prior to the meeting. Copies of presentation materials will be available at the meeting.***
  - A. **Discussion/Action Items:**
    1. Approval of Minutes of September 11, 2019 (See Attached)
    2. Adopt Resolution Reinstating WID to the ESJGWA (Board Action)
    3. Comment Review – Ad-Hoc Committee Findings & Recommendations
      - i. Comment Review and Response Approach
      - ii. Overview of Comments
      - iii. Comment Categories
      - iv. Ad-Hoc Recommendations: Changes to Draft GSP (Board Action)
    4. Implementation – Ad-Hoc Committee Findings & Input
      - i. Grant: Prop 68 Resolution, Grant Package, Letters of Support (Board Action)
      - ii. Introduce Implementation Items: Annual GSP Activities, Approach for Cost Sharing, Proposed Methodology
    5. GSA GSP Adoption Process
    6. DWR Update
    7. November Agenda Items
- III. **Public Comment (non-agendized items)**
- IV. **Directors' Comments**
- V. **Future Agenda Items**
- VI. **Adjournment**

**EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY**  
**Board of Directors Meeting**  
**AGENDA**  
*(Continued)*

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**Next Regular Meeting**

**November 13, 2019 at 11:00 a.m.**

San Joaquin County - Robert J. Cabral Agricultural Center  
2101 E. Earhart Ave., Assembly Rm. #1, Stockton, California

**Action may be taken on any item**

*Agendas and Minutes may also be found at <http://www.ESJGroundwater.org>*

*Note: If you need disability-related modification or accommodation in order to participate in this meeting, please contact San Joaquin County Public Works Water Resources Staff at (209) 468-3089 at least 48 hours prior to the start of the meeting.*

**EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY**  
**Board Meeting Minutes**  
**September 11, 2019**

**I. Call to Order/Pledge of Allegiance & Safety Announcement/Roll Call**

The Eastern San Joaquin Groundwater Authority (GWA) Board meeting was convened by Chair Chuck Winn at 11:05 A.M., on September 11, 2019, at the Robert J. Cabral Agricultural Center, 2101 E. Earhart Ave. Stockton, CA. Following the Pledge of Allegiance, a representative of the San Joaquin County Office of Emergency Services provided the required safety information.

In attendance were Vice-Chair Mel Panizza; Directors David Fletcher, Mike Henry, Tom Flinn, Eric Thorburn, John Herrick, Robert Holmes; and Alternate Directors Dante Nomellini, Reid Roberts, Charlie Swimley, Dan Wright, Walt Ward, and Andrew Watkins.

**II. SCHEDULED ITEMS**

**A. Discussion/Action Items:**

**1. Approval of Minutes of July 10, 2019**

**Motion:**

The July 10 meeting minutes were approved, and the motion passed unanimously.

**2. Outreach & Groundwater Sustainability Workgroup Update**

Alyson Watson gave a brief update on Workgroup activities and noted last meeting is today at 4pm at the County Public Works office.

**3. Ad-Hoc Committee Recommendation and Input**

Alyson Watson provided an overview of the Ad Hoc Committee activities and presented the survey findings. Discussion:

Director Henry asked if there was an update on ACWA Committee's work on getting the April Annual Report removed from legislation. There were no updates.

There was group discussion on the Financing Plan that is recommended to be part of the grant application and it was determined that the Financing Plan cover only administrative costs instead of both project and administrative costs. Concern was raised on the estimate preliminary estimate of annual implementation costs by Directors Flynn and Biagi. Director Lytle clarified that estimate is conservative and there is a wide range of cost specified in the 5 year update effort, and that comments are noted. He also clarified the Ad Hoc is looking to refine and hone-in costs and that Mokelumne River Loss Study will move to a GSA-level project. Recommendations on cost share for implementation costs will be presented by the Ad Hoc Committee in the October Board Meeting.

**Public Comment:**

Valerie Kincaid asked if GWA Board has approved the expense of taking on the grant application. Glenn Prasad clarified that the County is funding the Prop 68 Grant Application. The Board will be able to review the application at the October Board meeting. The applicant for the grant will be the GWA and a resolution is needed which will be presented at the October Board Meeting.

**4. Draft GSP Public Comment Incorporation Process / Public Comment Overview**

Alyson Watson gave an overview on the process of review and response for public comments. A motion was made to appoint an Ad Hoc Committee to review and address public comments. There was discussion around the make-up of the Ad Hoc Committee and it was determined that Supervisor Winn would appoint the committee. GSAs wanting to volunteer themselves or other technical consultants/legal team can volunteer by turning in names to Supervisor Winn within the next day since time is of the essence and the group would begin meetings within the next week.

**Motion:**

Director Herrick Moved, and Director Henry seconded to motion to recommend Supervisor Winn appoint an Ad Hoc Committee to address public comments on the Draft GSP.

A second motion was made to direct the consultants to begin addressing the grammatical and clarifying comments within the Draft GSP immediately.

**Motion:**

Director Henry moved, and Alternate Lytle seconded the approval of staff recommendations to move forward with addressing clarifying questions.

**Public Comments:**

Eric Ringelberg with The Freshwater Trust noted that the TFT comment letter was mischaracterized as a non-governmental organization but should really be characterized as neighboring GSA comments.

**5. Staff Administration for GWA for Implementation**

Alyson Watson provided an update and there were no comments on this item.

**6. Implementation Next Steps**

Alyson Watson provided an update and there were no comments on this item.

**7. Notice of Intent to Adopt**

Alyson Watson provided an update and there were no comments on this item.

**8. GSP Adoption Procedures**

The Eastside GSA asked for clarification on filing a notice of public hearing. Monica Streeter noted there is typically a publishing requirement for a public hearing and she will provide a clarification for GSAs.

Valerie Kincaid noted that each GSA needs to adopt after a public hearing and each should consult with their counsel.

**Motion:**

A motion was made to recommend the GSAs to adopt the Final GSP and the GWA Board to accept the GSP after adopted by the GSAs. Director Henry moved and Director Breitenbucher seconded.

**9. DWR Update**

Paul Wells provided the DWR update and noted if there are questions between now and next meeting they should contact him. Paul provided information on Prop 68 and noted Guidelines cover the implementation round next year which will provide another \$88M in Spring 2020. The combined grant program is \$140M. There is an application assistance webinar 9/18 from 2-4pm for the existing application round.

Regarding DWR's Technical Support Services request for two new monitoring wells, submittals have been reviewed and site visits made by DWR. DWR is now working with the GWA on the agreement and environmental services will do their own site visit. In Spring 2020 two wells will be drilled in for the GWA.

There was a clarifying question about maximum grant funds. Paul noted the Round 4 funding (\$88M) PSP was not out yet and would clarify if allocation would be beyond \$2M.

**10. October Agenda Items**

The Board gave approval to shift the October Board Meeting by a week via a poll and to lengthen the meeting.

Director Breitenbucher asked for October 17<sup>th</sup> date.

**B. Informational Items:**

**III. Public Comment (non-agendized items):**

None.

**IV. Directors' Comments:**

Director Henry noted anyone interested in serving on Ad Hoc Committee to address Draft GSP comments should contact consultants after meeting.

**V. Future Agenda Items:**

Discussed prior.

**VI. Adjournment:**

Director Lytle moved to adjourn, Director Holmes seconded.

The September 11 meeting was closed at 12:18 pm.

**Next Regular Meeting:** There will be a poll for setting a date for the October meetings.


San Joaquin County – Robert J. Cabral Agricultural Center, 2101 E. Earhart Ave., Assembly Rm. #1, Stockton, CA



# Joint Exercise of Powers Board of Directors Meeting

## MEMBER SIGN-IN SHEET

Location: SJ COUNTY ROBERT J. CABRAL AG CENTER    Date: 09/11/19    Time: 11:00 AM

INITIAL	Member's Name	GSA	Phone	Email
	John Freeman	Cal Water Member	209-547-7900	<a href="mailto:jfreeman@calwater.com">jfreeman@calwater.com</a>
	Steve Cavallini	Cal Water Alternate	209-464-8311	<a href="mailto:scavallini@calwater.com">scavallini@calwater.com</a>
	George Biagi, Jr.	Central Delta Water Agency Member	209-481-5201	<a href="mailto:gbiagi@deltabluegrass.com">gbiagi@deltabluegrass.com</a>
	Dante Nomellini	Central Delta Water Agency Alternate	209-465-5883	<a href="mailto:ngmplcs@pacbell.net">ngmplcs@pacbell.net</a>
	Grant Thompson	Central San Joaquin Water Conservation District Member	209-639-1580	<a href="mailto:gtom@velociter.net">gtom@velociter.net</a>
	Reid Roberts	Central San Joaquin Water Conservation District Alternate	209-941-8714	<a href="mailto:reidwroberts@gmail.com">reidwroberts@gmail.com</a>
	Stephen Salavatore	City of Lathrop Member	209-941-7430	<a href="mailto:ssalvatore@ci.lathrop.ca.us">ssalvatore@ci.lathrop.ca.us</a>
		City of Lathrop Alternate		
	Alan Nakanishi	City of Lodi Member	209-333-6702	<a href="mailto:anakanishi@lodi.gov">anakanishi@lodi.gov</a>
	Charlie Swimley	City of Lodi Alternate	209-333-6706	<a href="mailto:cswimley@lodi.gov">cswimley@lodi.gov</a>
	David Breitenbucher	City of Manteca Member 	209-456-8017	<a href="mailto:dbreitenbucher@ci.manteca.ca.us">dbreitenbucher@ci.manteca.ca.us</a>
	Mark Houghton	City of Manteca Alternate	209-456-8416	<a href="mailto:mhoughton@ci.manteca.ca.us">mhoughton@ci.manteca.ca.us</a>
	Jesús Andrade	City of Stockton Member	209-937-8244	<a href="mailto:Jesus.Andrade@stocktonca.gov">Jesus.Andrade@stocktonca.gov</a>
	Dan Wright	City of Stockton Alternate 	209-937-5614	<a href="mailto:Dan.Wright@stocktonca.gov">Dan.Wright@stocktonca.gov</a>

INITIAL	Member's Name	GSA	Phone	Email
	Russ Thomas	Eastside San Joaquin GSA Member	209-480-8968	<a href="mailto:rthomasccwd@hotmail.com">rthomasccwd@hotmail.com</a>
WW	Walter Ward	Eastside San Joaquin GSA Alternate	209-525-6710	<a href="mailto:wward@envres.org">wward@envres.org</a>
DF	David Fletcher	Linden County Water District Member	209-887-3202	<a href="mailto:dqfpe@comcast.net">dqfpe@comcast.net</a>
	Paul Brennan	Linden County Water District Alternate	209-403-1537	<a href="mailto:ptbrennan@verizon.net">ptbrennan@verizon.net</a>
MH	Mike Henry	Lockeford Community Services District Member	209-712-4014	<a href="mailto:midot@att.net">midot@att.net</a>
	Joseph Salzman	Lockeford Community Services District Alternate	209-727-5035	<a href="mailto:lcsd@softcom.net">lcsd@softcom.net</a>
ES	Eric Schmid	Lockeford Community Services District Alternate	209-727-5035	<a href="mailto:lcsd@softcom.net">lcsd@softcom.net</a>
	Tom Flinn	North San Joaquin Water Conservation District Member	209-663-8760	<a href="mailto:tomflinn2@me.com">tomflinn2@me.com</a>
	Joe Valente	North San Joaquin Water Conservation District Alternate	209-334-4786	<a href="mailto:jcvalente@softcom.net">jcvalente@softcom.net</a>
ET	Eric Thorburn, P.E.	Oakdale Irrigation District Member	209-840-5525	<a href="mailto:ethorburn@oakdaleirrigation.com">ethorburn@oakdaleirrigation.com</a>
		Oakdale Irrigation District Alternate		
	Chuck Winn	San Joaquin County Member	209-953-1160	<a href="mailto:cwinn@sigov.org">cwinn@sigov.org</a>
	Kathy Miller	San Joaquin County Alternate	209-953-1161	<a href="mailto:kmiller@sjgov.org">kmiller@sjgov.org</a>
JH	John Herrick, Esq.	South Delta Water Agency Member	209-224-5854	<a href="mailto:jherrlaw@aol.com">jherrlaw@aol.com</a>
	Jerry Robinson	South Delta Water Agency Alternate	209-471-4025	N/A
RH	Robert Holmes	South San Joaquin GSA Member	209-484-7678	<a href="mailto:rholmes@ssjid.com">rholmes@ssjid.com</a>
	Brandon Nakagawa	South San Joaquin GSA Alternate	209-249-4613	<a href="mailto:bnakagawa@ssjid.com">bnakagawa@ssjid.com</a>
MP	Melvin Panizza	Stockton East Water District Member	209-948-0333	<a href="mailto:melpanizza@aol.com">melpanizza@aol.com</a>
AW	Andrew Watkins	Stockton East Water District Alternate	209-484-8591	<a href="mailto:watkins.andrew@verizon.net">watkins.andrew@verizon.net</a>
	Anders Christensen	Woodbridge Irrigation District Member	209-625-8438	<a href="mailto:widirrigation@gmail.com">widirrigation@gmail.com</a>
	Doug Heberle	Woodbridge Irrigation District Alternate	209-625-8438	<a href="mailto:heberlewid@gmail.com">heberlewid@gmail.com</a>

## Eastern San Joaquin Groundwater Authority Staff & Support

INITIAL	Member's Name	Organization	Phone	Email
	Kris Balaji	San Joaquin County	468-3100	<a href="mailto:kbalani@sigov.org">kbalani@sigov.org</a>
<i>FB</i>	Fritz Buchman	San Joaquin County	468-3034	<a href="mailto:fbuchman@sigov.org">fbuchman@sigov.org</a>
<i>GP</i>	Glenn Prasad	San Joaquin County	468-3089	<a href="mailto:grasad@sigov.org">grasad@sigov.org</a>
<i>MC</i>	Mike Callahan	San Joaquin County	468-9360	<a href="mailto:mcallahan@sigov.org">mcallahan@sigov.org</a>
<i>AC</i>	Alicia Connelly	San Joaquin County	468-3531	<a href="mailto:aconnelly@sigov.org">aconnelly@sigov.org</a>
	Jessica Jones	San Joaquin County	468-3073	<a href="mailto:jessicajones@sigov.org">jessicajones@sigov.org</a>
	Andy Nguyen	San Joaquin County	953-7948	<a href="mailto:aynguyen@sigov.org">aynguyen@sigov.org</a>
<i>KS</i>	Kristy Smith	San Joaquin County	468-0219	<a href="mailto:kmsmith@sigov.org">kmsmith@sigov.org</a>
	Rod Attebery	Neumiller & Beardslee / Legal Counsel	948-8200	<a href="mailto:rattebery@neumiller.com">rattebery@neumiller.com</a>
<i>MS</i>	Monica Streeter	Neumiller & Beardslee / Legal Counsel	948-8200	<a href="mailto:mstreeter@neumiller.com">mstreeter@neumiller.com</a>
<i>JJ</i>	J.J. Beyronneau	San Joaquin County	468-3060	<a href="mailto:jbeyronneau@sigov.org">jbeyronneau@sigov.org</a>
<i>RV</i>	Roy Valadez	San Joaquin County		<a href="mailto:rvaladez@sigov.org">rvaladez@sigov.org</a>





**OTHER INTERESTED PARTIES - SIGN-IN SHEET**

Location: SJ COUNTY ROBERT J. CABRAL AG CENTER Date: 09/11/2019 Time: 11:00 AM

INITIAL	Member's Name	Organization	Phone	Email
DM	Dennis Mills	CALAVERAS COUNTY		
EW	Paul Wells	DWR		
	Valerie Kincaid	SD / SSSID		
D.T.	Danny Tres	City of Stockton		
RF	Rodrig Frick	Sac County GSA - Cosumnes		
RAH	Robert Holmes	SSJGSA		
GB	Geo. Biagi			
CL	Carthy Lee	SEWD		
MS	Genie Schmidt	EDMWD		
ER	Eric Ringler	NDGSA		
RS	Rob Schumann	Klein Felder		
MAZ	Mark Ziden	self		

**Eastern San Joaquin Groundwater Authority  
GSA Outreach Activities - October 2019**

Agency Name	Update Website	Use Outreach Slides	Post to Social Media	Other
Cal Water				
Central Delta Water Agency				
Central San Joaquin Water Conservation District				
City of Lathrop				
City of Lodi				
City of Manteca				
City of Stockton				
Eastside San Joaquin GSA				
Linden County Water District				
Lockeford Community Services District				
North San Joaquin Water Conservation district				
Oakdale Irrigation District				
San Joaquin County				
South Delta Water Agency				
South San Joaquin Groundwater Sustainability Agency				
Stockton East Water District				
Woodbridge Irrigation District GSA				

Please indicate which of the above outreach activities your GSA has planned for the upcoming month. Please approximate date of completion.

**Eastern San Joaquin Groundwater Authority  
GSA Outreach Activities - September 2019**

Agency Name	Update Website	Use Outreach Slides	Post to Social Media	Other
Cal Water				
Central Delta Water Agency				
Central San Joaquin Water Conservation District				
City of Lathrop				
City of Lodi	Updated language regarding public comment period			
City of Manteca		Added to website		
City of Stockton				
Eastside San Joaquin GSA				
Linden County Water District				
Lockeford Community Services District				
North San Joaquin Water Conservation district	Updated for September	Added to website		Action item on Meeting Agenda
Oakdale Irrigation District	Updated for September	Added to website		Meeting on 9/3/19.
San Joaquin County				
South Delta Water Agency				
South San Joaquin Groundwater Sustainability Agency				
Stockton East Water District				
Woodbridge Irrigation District GSA				

Please indicate which of the above outreach activities your GSA has planned for the upcoming month. Please approximate date of completion.



EASTERN SAN JOAQUIN GROUNDWATER  
AUTHORITY

1810 E. Hazelton  
Avenue  
P. O. Box 1810  
Stockton, CA  
95201

(209) 468-3089  
ESJgroundwater@sjgov.org  
esjgroundwater.org

Eastern San Joaquin Groundwater Authority Groundwater Sustainability  
Workgroup  
June 12, 2019  
4 – 5:30 p.m.  
San Joaquin County Public Works Department  
1810 E. Hazelton Ave., Stockton  
Conference Room A

Committee Members in Attendance

	Name	Organization
	Colin Bailey	The Environmental Justice Coalition for Water
	Drew Cheney	Machado Family Farms
	Robert Dean	Calaveras County Resource Conservation District
X	Mary Elizabeth	Sierra Club
X	David Fries	San Joaquin Audubon
X	Joey Giordano	The Wine Group
	Jack Hamm	Lima Ranch
	Mary Hildebrand	South Delta Water Agency
X	George V. Hartmann	The Hartmann Law Firm
	Michael Machado	Farmer
	Ara Marderosian	Sequoia Forest Keeper
	Ryan Mock	J.R. Simplot Company
	Yolanda Park	Coop
X	Veronica Tovar	Catholic Charities Diocese of Stockton
	Will Price	University of the Pacific & Vice Chair, SJ County Advisory Water Commission
X	Daryll Quaresma	2Q Farming, Inc.
	Jennifer Shipman	Manufacturers Council of the Central Valley
X	Linda Turkatte	San Joaquin County Environmental Health Department
	Ken Vogel	San Joaquin Farm Bureau Federation
	Ted Wells	Trinchero Family Estates and Sutter Home Winery
X	Kristy Smith	San Joaquin County Public Works
X	Jessica Jones	San Joaquin County Public Works
	<b>General Public</b>	
X	Jane Wagner-Tyack	League of Women Voters of SJ County
	Paul Wells	Department of Water Resources

	Andrew Watkins	Stockton East Water District
	Bryan Pilkington	Private citizen
	<b>Staff and Consultants</b>	
X	Brandon Nakagawa	County ESJ GSP Project Representative
	Michael Callahan	County ESJ
	Alicia Connelly	County ESJ
	Alyson Watson	ESJ GSP Project Manager
	Christy Kennedy	ESJ GSP Deputy Project Manager
X	Lindsay Martien	ESJ GSP Deputy Project Manager
X	Lucy Crocker	Stakeholder Engagement & Public Outreach Consultant
X	Fanny Cano	Stakeholder Engagement & Public Outreach Consultant
	<b>Guest Speaker</b>	
X	Cathy Lee	Stockton East Water District

## Meeting Notes

### I. Welcome

- a. Lindsay Martien welcomed the group at 4:07 p.m.
- b. Lindsay Martien reviewed the meeting agenda.

### II. Meeting Objectives

- a. Lindsay Martien discussed the meeting objectives:
  - i. Existing groundwater recharge project successes and lessons learned.
  - ii. Draft GSP chapters and review of Water Budget/Sustainable Management Criteria.
  - iii. Identify elements needed in GSP implementation plan - Discussion of elements needed in the GSP implementation plan and next steps.

### III. Guest Speaker Presentation and Q&A

- a. Cathy Lee (Stockton East Water District) began a presentation and discussion around:
  - i. Recharge Projects in ESJ
  - ii. Existing Recharge Project (Farmington Recharge Project)
    - Constructed in 2002
    - To date, about 57,000 AF has been recharged.
    - Observed recharge ranges from 2,800 to 5,800 AF/Y with an average of 4,400 AF/Y.
    - The District extracted close to 20,000 AF during the drought.
  - iii. Challenges:
    - Cost of initial construction and lack of water during dry years.
  - iv. Lessons learned:
    - Valuable way to recharge the groundwater basin and wish there were more opportunities where groundwater levels are low.
    - For water treatment operations, it provides another avenue for raw water storage.
- b. Darryl Quaresma asked where they get the 57,000 AF of water.
- c. Cathy Lee said the water comes from New Melones and extra water supply.
- d. Darryl Quaresma asked if it was like a setting pond.
- e. Cathy Lee said yes.
- f. A member of the public asked about evaporation.
- g. Cathy Lee said it depends on basin depth to drive the water down.

- h. A member of the public asked what maintenance is required.
- i. Cathy said maintenance activities include water quality treatment, mowing the lawn around the area, and cleaning off the bottom of the basin.
- j. Darryl Quaresma asked what time of the year they conduct operations.
- k. Cathy Lee said they operate all year long.
- l. Darryl Quaresma asked its size and how much the basin cost.
- m. Cathy Lee said they are 8 feet deep and cost depends on the parameters.
- n. Mary Elizabeth asked the length of the conveyance system.
- o. Cathy Lee said the conveyance is 14 miles long and it is located on a sweet spot in the geology. She added it was built in the 1990s and they are trying to use rivers to convey it.
- p. Mary Elizabeth asked if any surface water conveyers would do this type of project.
- q. Cathy Lee said yes.
- r. A member of the public said it is important to mention that Stockton East Water District has excess water rights.
- s. Darryl Quaresma asked how the GSP and others determine excess water rights.
- t. Mary Elizabeth said the City of Stockton has a project underway for recharge projects. Some may not require as much infrastructure to be constructed. She added questions need be addressed for environmental permitting.
- u. Linda Turkatte said it may be considered an injection but because it is not clean water, it may need monitoring requirements. Some new projects are seeking site-specific recharge within new development.
- v. A member of the public said if you want to inject water in the ground, you need a permit from the California State Water Resources Control Board. It can only be left in the ground for five years. He stated that the process is much more complicated than it seems.
- w. Brandon Nakagawa clarified that new water rights will need permits. Stormwater is not regulated in the same way as potable water. There is a requirement to treat some stormwater.
- x. Mary Elizabeth asked where the current recharge basins in our region are located.
- y. A member of the public asked if the GSP should focus on what they are doing regionally.
- z. Mary Elizabeth stated if water is obtained at the source, it is less likely to be polluted.

#### **IV. Draft Bundles 2 & 3 on the Website**

- a. Draft GSP Bundles 2 and 3 are available on the website homepage:  
[www.esjgroundwater.org](http://www.esjgroundwater.org)
- b. Content includes: water budgets, current and historical groundwater conditions, sustainable management criteria, and monitoring network.
- c. Comments are due July 1 (note: this is in addition to the 45-day public review period for the draft GSP)
- d. Review: What is a water budget?
  - i. A water budget is an accounting of the total groundwater and surface water entering and leaving a groundwater basin.
- e. Water Budget Time Frames
  - i. Historical Water Budget: Uses historical information for temperature, precipitation, water year type, and land use going back a minimum of 10 years.
  - ii. Current Conditions Baseline: Uses the most recent data on population, land use, temperature, year type, and hydrologic conditions projected out over 50 years of hydrology.
  - iii. Projected Water Budget: Uses estimated future population growth, land use changes, climate change, and sea level rise projected out over 50 years of hydrology.
- f. Sustainable Management Criteria

- i. Undesirable Results
  - ii. Minimum Threshold
  - iii. Measurable Objective
  - iv. Interim Milestones
  - v. Margin of Operational Flexibility
- g. Mary Elizabeth asked what the difference is between stormwater and return flow.
  - h. George V. Hartmann clarified return flow is a deliberate process as opposed to storm drainage which is an accidental process that is a result of an incident. Return process returns just as much water but no one gets “credit” for it.
  - i. Darryl Quaresma said that when creating water by pumping (in Delta Islands for example), the more that is pumped, the more water that is drawn in. It is really more recycled water than a new water source.
  - j. Linda Turkatte asked about considering the use of recycled water.
  - k. Mary Elizabeth asked if all the different water types are described in the water budget.
  - l. Brandon Nakagawa said most types are centered on how irrigation takes place and how to get water from one side to another. The model accommodates all the different water types except the ones in the Delta.
  - m. George V. Hartmann clarified that part of the Delta is in San Joaquin and no one uses groundwater. He added that tail water is water returned from flood-irrigated farms but it is not as prevalent now.
  - n. Linda Turkatte asked if there are opportunities to use water that have not been considered.
  - o. Brandon Nakagawa said City of Lodi is serving 3,500 acres of treated recycled water.
  - p. Linda Turkatte asked if recycled water in wineries can be used more effectively.
  - q. George V. Hartmann explained that it gets really expensive for wineries. Clean water is easy to use; he said there is much to learn from the Israelis’ water planning. Most of the water in Israel is recycled. For more information on Israeli technology, he said there is information under an internet search for “plastic balls in reservoir.”
  - r. George V. Hartmann also asked where the GSP was getting their sea level rise information (referring to the 10 feet by 2050).
  - s. Lindsay Martien clarified the plan does not set thresholds for sea level rise but does consider sea water intrusion.
  - t. Darryl Quaresma asked if the City of Stockton recycles its water.
  - u. George V. Hartmann said the City of Stockton’s permit is based on being able to divert the same amount of potable water as they discharge to the river. He added that the City of Manteca is working on a permit for its water treatment level.
  - v. Darryl Quaresma asked if areas like Lodi were recharging.
  - w. George Turkatte asked if the water was tertiary treated and if they have to treat it for human contact.
  - x. Linda Turkatte said they have to figure out if nitrate is causing problems. She added they have to determine the amount of groundwater being extracted to use for surface water. She made a comment that it could be double dipping.
  - y. A member of the public said the team needs to figure out if wastewater goes back to the river and asked for clarification in the industrial process, etc.

## V. Implementation Plan

- a. Implementation elements
  - i. Monitoring and Reporting

- 2020 Annual Report (due April 2020)
  - DMS Updates
- ii. Data Collection and Analysis
  - iii. Administrative Actions
  - iv. Five-year Update
  - v. Public Outreach and Website Maintenance
  - vi. Grant Writing
- b. George V. Hartmann asked who will be responsible for plan implementation.
  - c. Lindsay Martien explained the Groundwater Authority (GWA) is discussing implementation of all the elements.
  - d. George V. Hartmann said each GSA is different; some will not have any problems but others may need to curtail water use. He stated outreach is very important when the curtailing or assessing fees.
  - e. Mary Elizabeth asked why it is not possible to send a postcard to all property owners in the basin notifying them of the GSP adoption.
  - f. George V. Hartmann said more information about the GSP draft and public meeting needs to take place.
  - g. Lindsay Martien reminded the group about the public meeting outreach toolkit contents for their use and what currently takes place (meeting invites, e-blasts, news releases, social media, etc.) to inform and invite the public.
  - h. George V. Hartmann stated some agencies are jumping to a different GSP.
  - i. Darryl Quaresma discussed the difficulty of being in many different districts. He also mentioned there would be a South Delta Water Agency (SDWA) meeting Thursday night on the east side of San Joaquin River.
  - j. George V. Hartmann said that in 2015, farmers gave up 25 percent of their water during the drought and 100 percent of agricultural users participated in meetings. He stated the average person is not interested when there is no drought and water comes out of the faucet.
  - k. Brandon Nakagawa said it costs \$50,000 to send a postcard to everyone in the basin.
  - l. Linda Turkatte asked if there are water use curtailments and discussed 2.5 and 10 acre parcels.
  - m. Brandon Nakagawa said there no curtailments and there is not an ask for money. He said noticing is even more important when it comes to rates and fees.
  - n. Darryl Quaresma asked how the GSP was being funded. Another GSP is only focusing significantly on funding.
  - o. George V. Hartmann stated the finances will be discussed but the Plan isn't there yet.
  - p. Mary Elizabeth asked when curtailments may be imposed.
  - q. George V. Hartmann said the demand side would involve curtailments but the supply approach does not.
  - r. Darryl Quaresma asked if there were any curtailments anywhere.
  - s. George V. Hartmann said no.
  - t. Darryl Quaresma stated there should be curtailments.
  - u. George V. Hartmann said it takes significant money to create infrastructure and move water. He reminded everyone the GSP does not need to achieve sustainability until 2040.
  - v. Mary Elizabeth stated she does not want to continue to lose groundwater and she does not want more extractions to take place.
  - w. Brandon Nakagawa said it is beneficial to look at the project growth/water demand and use a model to do an analysis. He said every year, it is required to have 80,000 AF but it should be double.



- x. Linda Turkatte feels the community is not informed.
- y. Lindsay Martien asked for input from the group on GSP public outreach during implementation.
- z. George V. Hartmann said the GSAs should be required to mail updated information to landowners and suggested one to four mailings a year. He added bill inserts are also effective.
- aa. Brandon Nakagawa asked how we hold each district accountable for outreach while giving them autonomy to do their own outreach. He added they should each be responsible for their own outreach.

**VI. Announcements**

- a. GSP Public Draft public comment period: July 10 – August 25.
- b. Comments due August 25 to [info@esjgroundwater.org](mailto:info@esjgroundwater.org).
- c. Fourth informational meeting: July 18, 5-8p.m.
- d. GWA Board and Advisory Committee meeting will be rescheduled for September (TBD).

**VII. Additional Comments**

- a. Mary Elizabeth is concerned about having adequate time to get people to the next public meeting.
- b. George V. Hartmann said he would like to set a goal of 200 people to attend public meeting.
- c. Mary Elizabeth asked to call members who have not been attending meetings.

**VIII. Public Comment**

- a. None

**Lindsay Martien adjourned the meeting.**



**BEFORE THE BOARD OF DIRECTORS OF THE  
EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY**

**RESOLUTION R-19-XX**

**RESOLUTION REINSTATING WOODBRIDGE IRRIGATION DISTRICT TO  
THE EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY**

WHEREAS, the Eastern San Joaquin Groundwater Authority is a Joint Powers Authority pursuant to the State of California statute, which is a public entity separate and apart from the Members; and

WHEREAS, Woodbridge Irrigation District ("WID") is a local agency which elected to establish itself as a Groundwater Sustainability Agency ("GSA") in 2016 in response to the Sustainable Groundwater Management Act of 2014; and

WHEREAS, in 2017 WID elected to join the Eastern San Joaquin Groundwater Authority ("ESJGWA") for the purposes of developing and implementing a legally sufficient Groundwater Sustainability Plan ("GSP") for the Eastern San Joaquin Subbasin; and

WHEREAS, in 2018, the WID Board of Directors elected to rescind WID's status as a GSA under SGMA and to subsequently withdraw WID's membership in the ESJGWA; and

WHEREAS, on December 14, 2018, WID provided a formal written ninety day notice to unilaterally withdraw its membership in the ESJGWA in accordance with Article 6.4 of the Joint Exercise of Powers Agreement, dated February 8, 2017; and

WHEREAS, WID's withdrawal from the ESJGWA became effective on March 14, 2019; and

WHEREAS, on January 15, 2019, WID provided written notification to the California Department of Water Resources ("DWR") that the WID Board of Directors had elected to withdraw its status as a GSA pursuant to Water Code section 10723.8; and

WHEREAS, at the August 8, 2019 WID Board of Directors meeting, the WID Board took an action to continue as a GSA; and

WHEREAS, on August 8, 2019, WID provided written notification to DWR of WID's decision to continue functioning as a GSA in accordance with WID's original filing with DWR dated January 21, 2016 as the January 15, 2019 letter to DWR purporting to withdraw as a GSA was sent in error as that action was not expressly authorized by the resolution adopted by the WID Board of Directors and referenced in the January 2019 letter; and

WHEREAS, DWR acknowledged WID's August 8, 2019 letter and reinstated WID as a GSA; and

WHEREAS, WID would like to reinstate its membership in the ESJGWA; and

WHEREAS, prior to WID's withdrawal from the ESJGWA it had fully paid its funding liability and did not receive a refund of any funds paid.

NOW, THEREFORE, BE IT RESOLVED that in accordance with Article 6.1 of the ESJGWA Joint Exercise of Powers Agreement, the Board of Directors does hereby recognize and reinstate Woodbridge Irrigation District as a member of the Eastern San Joaquin Groundwater Authority.

PASSED AND ADOPTED this 17<sup>th</sup> day of October, 2019, by the following vote of the Board of Directors of the Eastern San Joaquin Groundwater Authority, to wit:

AYES:

NOES:

ABSENT:

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ATTEST: KRIS BALAJI  
Secretary of the  
Eastern San Joaquin  
Groundwater Authority

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CHUCK WINN, Chairman  
Board of Directors of the  
Eastern San Joaquin  
Groundwater Authority

**Before the Board of Directors of the  
Eastern San Joaquin Groundwater Authority**

**Resolution R-19-XX**

**RESOLUTION APPROVING SUBMITTAL OF A GRANT APPLICATION FOR AN AMOUNT  
OF \$575,000 TO THE DEPARTMENT OF WATER RESOURCES FOR STUDIES AND  
EQUIPMENT TO SUPPORT DEVELOPMENT OF THE EASTERN SAN JOAQUIN  
GROUNDWATER SUSTAINABILITY PLAN UNDER THE SUSTAINABLE GROUNDWATER  
MANAGEMENT GRANT PROGRAM.**

WHEREAS, in 2014, the California Legislature passed and the Governor signed Senate Bills 1168 and 1319 and Assembly Bill 1739, known collectively as the Sustainable Groundwater Management Act of 2014 (SGMA); and,

WHEREAS, SGMA requires all high- and medium-priority groundwater Basins, as designated by the California Department of Water Resources (DWR) in Bulletin 118, to be managed under a Groundwater Sustainability Plan (GSP); and,

WHEREAS, SGMA requires a Groundwater Sustainability Plan (GSP) be developed and implemented for each medium- or high-priority basin by a Groundwater Sustainability Agency (GSA) or combination of GSA's; and,

WHEREAS, the Eastern San Joaquin Subbasin (ESJ Subbasin), DWR Basin No. 5-22.01 has, been designated by DWR as a high-priority basin; and,

WHEREAS, the Eastern San Joaquin Groundwater Authority is a joint powers agency comprised of Members that are each a GSA, duly established in accordance with SGMA, and each of the Members overlie the ESJ Subbasin; and,

WHEREAS, one of the purposes of the Eastern San Joaquin Groundwater Authority is to provide for coordination among the Members to develop and Implement a GSP; and,

WHEREAS, the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1) was passed by the voters of California on November 4, 2014 and the Eastern San Joaquin Subbasin received grant funding under that program for GSP development; and,

WHEREAS, the California Drought, Water, Parks, Climate, Coastal protection and Outdoor Access for All Act of 2018 (Proposition 68) was passed by the voters of California on June 5, 2018; and,

WHEREAS, the Eastern San Joaquin Groundwater Authority is eligible to apply for funding under Proposition 1 and Proposition 68; and,

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Eastern San Joaquin Groundwater Authority hereby approves that application be made to the California Department of Water Resources to obtain a grant under the 2019 Sustainable Groundwater Management (SGM) Grant Program Planning – Round 3 Grant pursuant to the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1) (Wat. Code, § 79700 et

seq.), and/or the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68) (Pub. Resources Code, § 80000 et seq.), and if such grant funding is awarded, to enter into an agreement to receive said grant funds to be used in the manner described in the grant application titled, "The Eastern San Joaquin Proposal for Studies and Equipment to Support GSP Development."

NOW, THEREFORE, BE IT FURTHER RESOLVED the Secretary of the Eastern San Joaquin Groundwater Authority , or designee, is hereby authorized and directed to compile the necessary data and investigations, file such application, and if grant funds are awarded to execute the grant agreement and all documents related to the grant agreement with California Department of Water Resources.

The foregoing Resolution was introduced at a special meeting of the Eastern San Joaquin Groundwater Authority on the 17<sup>th</sup> day of October 2019. A motion was made and seconded to adopt the foregoing Resolution. Motion carried and the Resolution was adopted. .

PASSED and ADOPTED this 17<sup>th</sup> day of October, 2019 by the following vote of the Board of Directors of the Eastern San Joaquin Groundwater Authority, to wit:

AYES:

NOES:

ABSENT:

---

ATTEST: KRIS BALAJI, PMP, P.E.  
Secretary of the Eastern San Joaquin  
Groundwater Authority

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CHUCK WINN, Chairman Board of Directors  
of the Eastern San Joaquin Groundwater  
Authority

### **Attachment 3: Work Plan**

Attachment 3 consists of the Work Plan Template, including the following sections:

- ❖ **Project Justification** – Included in this section is a description of the proposed components along with a summary of project benefits and justification of technical expertise for the proposed components. In addition, the financial need and support for the proposed components are described.
- ❖ **Project Details** – This section includes a description of the proposed work plan and detailed scope of work necessary to implement the Eastern San Joaquin Proposal for Studies and Equipment to Support GSP Development within the Eastern San Joaquin Groundwater Subbasin. Also included in a list of project deliverables and a summary of regional support for the proposal.
- ❖ **Miscellaneous** – This section summarizes support of the proposal, including letters of support received from GSA members and Subbasin stakeholders.

Grant Proposal Title: Eastern San Joaquin Proposal for Studies and Equipment to Support GSP Development  
Applicant: Eastern San Joaquin Groundwater Authority

## Project Justification

### A. Project Description

#### A1. Detailed Project Description

The Eastern San Joaquin Groundwater Authority (ESJGWA) is applying for Proposition (Prop) 68 Sustainable Groundwater Management (SGM) – Planning Grant, Round 3 funding for the implementation of the Eastern San Joaquin Proposal for Studies and Equipment to Support GSP Development for the Eastern San Joaquin Subbasin (Subbasin) (Figure 1). The primary purpose of this proposal is multifaceted and includes: to establish a robust monitoring network and ensure the Subbasin's ability to conduct required monitoring activities under the Eastern San Joaquin Subbasin Groundwater Sustainability Plan (GSP), conduct a funding plan to identify the most feasible option(s) for financing GSP implementation for at least the next five years, and for data management system (DMS) refinement.

In 2017, in response to SGMA, the ESJGWA was formed. A Joint Exercise of Powers Agreement establishes the ESJGWA, which is comprised of 15 Groundwater Sustainability Agencies (GSAs): Central Delta Water Agency, Central San Joaquin Water Conservation District, City of Lodi, City of Manteca, City of Stockton, Eastside San Joaquin (comprised of Calaveras County Water District, Stanislaus County, and Rock Creek Water District), Linden County Water District, Lockeford Community Services District, North San Joaquin Water Conservation District, Oakdale Irrigation District, San Joaquin County #1, San Joaquin County #2 (with participation from California Water Services Company Stockton District), South Delta Water Agency, South San Joaquin (comprised of South San Joaquin Irrigation District, City of Ripon, and City of Escalon), and Stockton East Water District. ESJGWA is governed by a Board of Directors (ESJGWA Board) with one representative from each GSA and one (1) representative from California Water Services Company. The ESJGWA Board is guided by an Advisory Committee, also with one representative from each GSA, that is tasked with making recommendations to the ESJGWA Board on technical and substantive matters. The GSAs boundaries are provided in Figure 2.

The GSAs in the Eastern San Joaquin Subbasin represent a diverse range of water management organizations, including water agencies, irrigation districts, water conservation districts, and local governments at the city and county level. The GSAs have worked through ESJGWA to develop the Eastern San Joaquin Subbasin GSP, which covers the entire geographic extent of the Eastern San Joaquin Subbasin. Under this Proposal, ESJGWA is requesting funding for activities associated with development of five components, all of which are being implemented by the ESJGWA:

- Component 1: Grant Agreement Administration
- Component 2: Monitoring Equipment Acquisition
- Component 3: Financing Plan
- Component 4: Monitoring Network Expansion
- Component 5: Data Management System Refinement

Further project description (including specific tasks and deliverables), objectives, and needs are described below.

#### **Objectives and Needs**

The Eastern San Joaquin Groundwater Subbasin is a critically-overdrafted high-priority groundwater subbasin, and as such, is required to comply with SGMA regulations, including conformity with GSP Emergency Regulations. To comply with the technical aspects of these regulations, improved understanding of groundwater supply and quality conditions within the Subbasin is needed to support development and implementation of sustainability goals and sustainability criteria (minimum thresholds, and measurable objectives), and to identify and fund projects and management actions for obtaining and maintaining sustainable groundwater conditions.



GSP development requires the compilation of data, development and refinement of a data management system (DMS), preparation of a Hydrogeologic Conceptual Model (HCM), and establishment of a Subbasin-wide monitoring network. While groundwater and surface water data have been collected via various monitoring networks throughout the Subbasin, ongoing development of the GSP has identified data gaps and indicated the need for additional monitoring locations in order to improve understanding of the Subbasin's hydrology, boundary flows and the impacts of current and projected future groundwater use on the long-term sustainability of the Subbasin. The goal of this proposal is to assist with the implementation of the Eastern San Joaquin Subbasin GSP by improving tools for gathering and disseminating information to support sustainable groundwater management. Implementation of the GSP will require a funding strategy for implementation activities and to support development, maintenance and data gathering activities under a robust groundwater monitoring program. Extensive and robust data are a cornerstone for effective sustainability, thus requiring the assessment of data gaps and implementation of a plan as to how to fill those data gaps.

Currently, the Eastern San Joaquin GSA lacks an effective and long-term plan for funding GSP implementation without resulting in undue economic impacts on Subbasin Disadvantage Areas or DAs (collectively defined as disadvantaged communities, severely disadvantaged areas, and economically distressed areas). Additionally, at present, San Joaquin County does not currently possess the necessary equipment to perform groundwater monitoring that it has volunteered to conduct on behalf of the GSP. Obtaining the needed equipment is integral in implementing the monitoring network developed through the GSP. The GSP, along with technical analysis performed under funding from Round 2 of the Sustainable Groundwater Planning (SGWP) grant program, has identified data gaps within the Subbasin. While some of these data gaps are being addressed through Technical Support Services (TSS) provided by the California Department of Water Resources (DWR), additional data gaps remain. A technical assessment of those remaining gaps and recommendations on how to address those gaps will provide an effective and efficient path towards maximizing groundwater resources during the planning horizon. The components contained in this proposal will address these needs along with providing the funding needed to properly administer the grant agreement and meet DWR requirements as set forth in that agreement.

### **Goals**

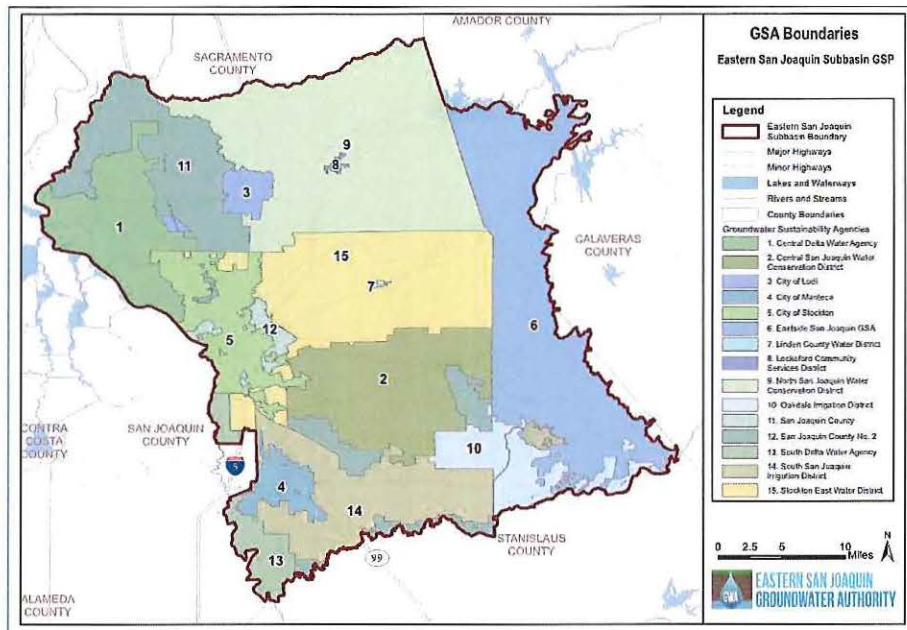
This Proposal has the following objectives for supporting GSP development:

- Provide effective and efficient grant agreement administration;
- Acquire necessary monitoring equipment for San Joaquin County to properly and effectively implement SGMA-required Subbasin monitoring programs;
- Develop a flexible and effective financing plan that provides guidance for funding GSP implementation throughout and beyond the planning horizon;
- Expand the currently identified Subbasin monitoring network to provide data necessary to fill data gaps associated with boundary flows in areas adjacent to the Delta; and
- Provide refinements to the Subbasin DMS to facilitate data collection and upload efforts while reducing associated labor costs and potential input errors; and ensuring data sharing, access, and transparency.

### **Project Components' Relations with One Another**

The aforementioned Proposal components provide a cohesive platform for the Eastern San Joaquin Subbasin GSAs to fill identified data gaps and improve and strengthen sustainability monitoring and related efforts during the beginning of the GSP planning horizon, including ensuring inclusion of those data in the Subbasin DMS with limited errors. Additionally, the proposed financing plan will provide guidance for implementing the necessary funding mechanisms for GSP implementation. Completion of the components included in this proposal will provide additional data for model refinement and more detailed information for making informed and effective sustainability decisions and assessing the progression and effectiveness of implementation measures. Lastly, DMS refinement would help improve the accurate and streamlined incorporation of new data and provide transparent and user-friendly access to all data.





Commented [ME1]: Need to update with Woodbridge

Figure 2: Eastern San Joaquin Subbasin GSAs

## **A2. Coordination and Funding Need**

### **Intra-Subbasin and GSA Coordination Efforts**

The Eastern San Joaquin Groundwater Subbasin GSP was developed jointly by ESJGWA, a joint powers authority formed by the 15 GSAs within the Eastern San Joaquin Subbasin. The GSAs executed a Joint Powers Agreement (JPA) to form the ESJGWA for the purpose of acting as the SGMA coordinating agency and to cooperatively carry out the purposes of SGMA in the Eastern San Joaquin Subbasin. ESJGWA is a public entity separate from the member organizations and holds the authority to coordinate and exercise the common powers of its members within the geographical areas of the Subbasin.

Since its formation, ESJGWA has employed a consensus-based approach in its goal to providing a dynamic, cost-effective, and collegial organization to achieve initial and ongoing SGMA compliance within the Subbasin. Collaboration among ESJGWA member agencies has strengthened the potential for broad public support for groundwater management activities as well as the ability to leverage local, State, and federal funds. The governing body of ESJGWA is the ESJGWA Board of Directors. The ESJGWA Board currently convenes monthly to formulate the GSP by debating and finalizing key discussion points and decisions incorporated in the GSP. The ESJGWA Board is guided by an Advisory Committee that is made up of representatives from each GSA and is responsible for developing recommendations on technical and substantive Subbasin-wide matters. Additionally, the ESJGWA Board is informed by a Groundwater Sustainability Workgroup (Workgroup) which consists of 23 community representatives of agricultural communities, groundwater users, environmental groups, businesses, industry, and the community at large. The Workgroup is tasked with reviewing groundwater conditions, management issues and needs, and projects and management actions to improve sustainability in the Subbasin. Ad Hoc work groups are formed as needed to address specific issues. For example, one group was formed to respond to public comments of the draft GSP and another to work on annual cost allocation strategies for the first five years of GSP implementation. Each GSA will formally adopt the GSP consistent with its requirements and will coordinate on capital projects, including separate implementation agreements where appropriate. Common programs (monitoring, administration, reporting, model application, DMS administration, etc.) are shared costs, basin wide and programs will be implemented under direction of the ESJGWA.

### **Inter-Subbasin Coordination Efforts**

As part of the SGMA process, stakeholder outreach has included inter-basin coordination efforts. To date, there has been at least one meeting between representatives of the ESJGWA and neighboring basins of Cosumnes Subbasin and Tracy Subbasin to initiate this process. The purpose of these meetings was to share and discuss elements included in the Eastern San Joaquin Subbasin Draft GSP, including water budget estimates, boundary flow assumptions, and minimum thresholds. During the meetings, participants discussed next steps for data sharing and ongoing coordination. There are plans to increase the level of inter-basin coordination as the Eastern San Joaquin Subbasin GSP is implemented. Below is a summary of initial inter-basin coordination meetings with neighboring subbasins:

- Cosumnes Subbasin – April 15, 2019
- Tracy Subbasin – June 20, 2019
- Modesto Subbasin – July 10, 2019
- South American, Solano, and East Contra Costa Subbasins – anticipated summer 2019

### **Previous Grant Awards**

GSAs of the Eastern San Joaquin Subbasin received \$1.5 million in grant funding under the Prop 1 Round 2 SGWP grant program to support GSP development. Included in this grant award were monies for installing up to 10 additional monitoring wells and development of a DMS for the Subbasin. At present, two of the proposed 10 monitoring wells are being installed as part of the TSS program being administered by DWR. The remaining eight new monitoring wells are being installed by the GSAs to provide accurate water levels for the aquifer systems and to provide refined information about streamflow-aquifer interaction. However, even with these additional wells, additional data gaps remain, especially in the northwestern portion of the Subbasin adjacent to the Delta. Numerical groundwater model calibration as part of the required water budget development lacked good calibration results in this portion of the Subbasin due to a lack of available data, so the additional wells included in this proposal (Component 4)

will help to resolve this data gap. Additionally, Round 2 SGWP funding will result in the development of a Subbasin DMS, however the existing funding for these efforts limits the ability to develop additional input and export interfaces to facilitate real-time data entry in the field and to support public interfaces for exploring data contained in the DMS (Component 5). Finally, the Round 2 SGWP funding did not include monies for either the Financing Plan (Component 3) nor the monitoring equipment acquisition (Component 2) contained in this proposal.

Overall, the components include in this proposal will either refine ongoing GSP development efforts or provide additional information, equipment or services not otherwise covered under the existing grant agreement. Regardless of whether funding will be received under the Prop 68 SGM – Planning Grant, Round 3 funding program, the Subbasin’s GSP will be completed and submitted to DWR by the January 31, 2020 required deadline, fulfilling existing funding agreement obligations.

## **B. Project Benefits**

Implementation of this proposal will support GSP development and implementation resulting in the long-term sustainability of shared groundwater resources, providing a reliable water supply for the DAs that depend on groundwater for their portable water supply (Figure 3). While there are no tribal communities within the Subbasin, 55% of the population are located in DACs, 25% qualify as a SDACs, and 60% qualify as EDAs (additional information provided in Attachment 6). Because the proposed component and benefit area is the entire Subbasin, all DA communities would benefit from the proposal and resultant support of the Eastern San Joaquin Subbasin GSP.

Effective groundwater management through informed decision-making supported by data collection and the installation of additional monitoring wells is crucial to achieving sustainability within the Subbasin using the most efficient and cost-effective strategies. This will also help ensure long-term adequate water supplies for users within the Subbasin. Completion of this proposal will provide several benefits both to DAs within the Subbasin (as described in Attachment 6) and for future groundwater conditions and sustainability within the Subbasin. These benefits are described below by component.

### Component 2 – Monitoring Equipment Acquisition

SGMA requires the development of a monitoring network throughout the Subbasin to monitoring groundwater conditions relative to established sustainability indicators. Monitoring requires the acquisition of specialized equipment which San Joaquin County currently does not possess and must be purchased. Grant awarded funds provided through this application would offset the cost of the equipment required to comply with SGMA. ESJGWA is seeking \$25,000 in grant funding, and if awarded, would reduce the financial burden on the County and its DAs by \$25,000, thus providing a direct economical relief to those communities.

### Component 3 – Financing Plan

GSP implementation and the continued management of the Subbasin by ESJGWA requires an adequate funding stream. While costs will be incurred to some degree locally, conducting an assessment of various funding strategies can result in a feasible financing strategy that provides the necessary long-term funding required for GSP implementation while imposing minimal economic burden to Subbasin groundwater users (directly or through other fees and taxes currently incurred by County residents). The financing plan will assess multiple funding strategies and ultimately provide recommendations for a funding strategy that minimizes the economic burden on the participating agencies and ultimately the groundwater users within the Subbasin, which include DAs. The financing plan is a priority for ESJGWA and will evaluate funding alternative and identify a fair and equitable mechanism for revenue generation for at least the next five years. ESJGWA is seeking \$50,000 in grant awards to conduct the financing plan, and if awarded, would reduce the financial burden on the groundwater users and thus DA communities within the Subbasin by \$50,000.

#### Component 4 – Monitoring Network Expansion

This component aims to reduce some of the data gaps identified in the Subbasin during model development and calibration in support of Subbasin water budgets. The identification of data gaps, and plans on how to fill those data gaps, are required under SGMA. As described above in the Previous Grant Awards subsection, the Subbasin has previously received funding to reduce data gaps through the installation of 10 new monitoring wells. However, as noted in the Subbasin's existing grant agreement, the installation of those new wells is intended to provide additional information relative to groundwater/surface water interactions and will not address the dearth of information relative to groundwater conditions and boundary flows in the northwestern portion of the Subbasin, adjacent to the Sacramento-San Joaquin Delta.

Filling these data gaps is necessary to adequately understand Subbasin conditions and ensure that the numerical groundwater model used is adequately calibrated and representative of the entire Subbasin. Costs associated with the construction of these additional monitoring wells would be incurred directly by ESJGWA and thus groundwater users within the Subbasin. ESJGWA is seeking \$400,000 in grant funding, which would reduce the direct economic burden on groundwater users (and DAs) in the Subbasin by offsetting costs by \$400,000 that would otherwise be passed down to them.

#### Component 5 – Data Management System Refinement

Previous GSP development work and grant funding has assisted in the development of a desktop-based DMS system. Needs were identified for improvement to the system to make it more user friendly, increase efficiency of field data collection and QA/QC, expedite reporting, increase transparency and access, streamline the use of the data for subsequent project evaluations, and for documenting benefits to all overlying users and to DAs. Component 5 funding will be used to refine the DMS to ensure cost effective monitoring support. Work under this component would include coordination with all GSAs and ensure that their needs for field data collection using mobile and tablet devices are sufficiently met. This component will not only streamline data collection and input into the data management system, thus saving time and money, but also increase data integrity for field crews collecting measurements by limiting double handling and allowing real-time data cross-checks in the field to identify erroneous readings and permitting duplicate data collection if necessary. Additionally, public access enhancements will be incorporated for a more transparent and accessible user platform of the DMS.

Letters of support from DA communities within the Eastern San Joaquin Subbasin are included as an appendix to Attachment 6.

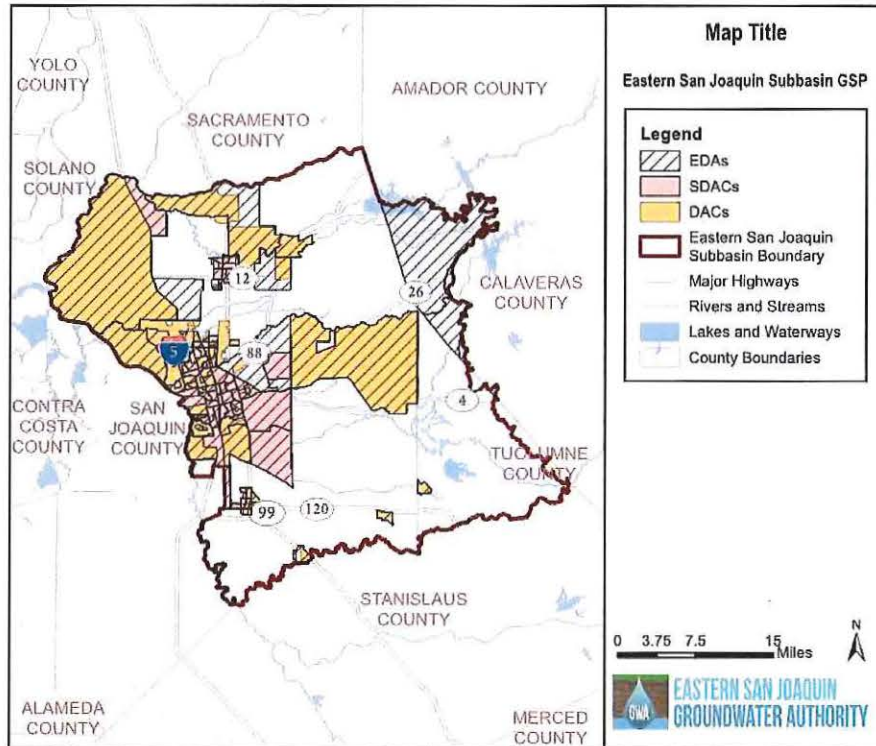


Figure 3: Eastern San Joaquin Subbasin DAAs, DAC, and SDACs

## C. Technical Expertise

### C4. Demonstration of Technical Experience and Knowledge

ESJGWA has been granted the responsibility and authority to apply for Prop 68 SGM – Planning Grant, Round 3 grant funding on behalf of the 15 GSAs of the Eastern San Joaquin Subbasin. The ESJGWA has experience in obtaining funding under, and executing funding agreements associated with, water bond grants (Component 1 of this proposal). The ESJGWA successfully applied and was awarded \$1,500,000 under the Prop 1 Round 2 SGWP grant program. To date, this grant award has been successfully managed and is in good standing with DWR.

ESJGWA is responsible for the administration of the grant and associated activities. As previously noted, the ESJGWA is staffed by San Joaquin County staff and therefore the County will be the day-to-day contact for any consultant retained for conducting work included herein. The 15 member GSAs will be responsible for providing any additional support as needed to ESJGWA but are not projects sponsors or specifically responsible for grant administration or activities.

The Eastern San Joaquin Subbasin GSP, a large-scale planning document, is currently under development by the Subbasin GSAs in a collaborative forum with support from consulting staff from Woodard & Curran. The GSP is being prepared under the direction of Jim Blanke, Professional Engineer and Professional Geologist in the State of California and Mr. Blanke will be responsible for stamping the final GSP, which will be submitted to DWR by January 31, 2020. The final GSP will include all required components as outlined in the GSP Emergency Regulations. GSP development has included stakeholder outreach and involvement, the production and refinement of a groundwater model for developing the required water budgets, an assessment and evaluation of groundwater conditions, and sustainability goals and criteria (interim goals, measurable objectives and minimum thresholds) to guide the Subbasin towards sustainability by 2040. The Notice of Intent (NOI) to Adopt the GSP was released on August 16, 2019; a copy of the NOI is included here as [Att3\\_SGM\\_WrkPlan\\_2of2.pdf](#). The GSP is expected to be adopted by the ESJGWA Board in late 2019 and provided to DWR for review by the required deadline.

Prior to developing the Subbasin's GSP, San Joaquin County and the Northeastern San Joaquin County Groundwater Banking Authority (a predecessor organization to the ESJGWA composed of many of the same entities) prepared the *Eastern San Joaquin Groundwater Basin Groundwater Management Plan* in accordance with Assembly Bill (AB) 303 and Senate Bill (SB) 1938. This Groundwater Management Plan sought to review, enhance, assess, and coordinate existing groundwater management policies and programs in Eastern San Joaquin County and to develop new policies and programs to ensure the long-term sustainability of groundwater resources in Eastern San Joaquin County. This Groundwater Master Plan, developed in 2004, was used as a template for groundwater subbasin management and formed the basis for and informed development of the Eastern San Joaquin Subbasin GSP. Furthermore, in their capacity as cities, counties and water/irrigation districts, the Subbasin's GSAs have, over the years, developed and implemented large-scale planning documents such as General Plans (e.g. San Joaquin County and City of Stockton), Urban Water Management Plans (e.g. Cities of Stockton, Lodi, Manteca), and Agricultural Water Management Plans (e.g. Stockton East Water District and South San Joaquin Irrigation District).

Part of the proposal funded under the Subbasin's Prop 1 Round 2 SGWP grant award included the installation of ten additional groundwater monitoring wells to assist in the reduction in spatial data gaps across the Subbasin relating to understanding the implications of groundwater use on interconnected surface water. Design, development, and construction of these wells is currently underway, and implementation of this portion of the current grant agreement has provided the ESJGWA with direct experience in the well design and construction process necessary for implementation of Component 4 of this proposal. Wells are currently being sited to address data gaps around groundwater/ surface water interactions and to support the assessment of potential impacts to groundwater dependent ecosystems (GDEs). Drilling is scheduled to begin early Winter 2019. Additionally, the ESJGWA is composed of 15 GSAs, many of whom are counties and water agencies who own and manage wells and have extensive knowledge and experience in groundwater well construction.

San Joaquin County has volunteered to conduct the groundwater monitoring outlined in the GSP's monitoring network chapter. San Joaquin County does not currently conduct extensive groundwater



monitoring in the Subbasin, but under Component 2 and 5 of this Proposal County staff will receive training on sampling and equipment procedures as well as in use of the new data entry resources to ensure competent implementation. Other GSAs within the Subbasin include several water agencies with extensive groundwater monitoring experience that may provide insight and assistance to San Joaquin County to ensure efficient and accurate sampling throughout the Subbasin.

The proposed financing plan (Component 3) will be contracted by ESJGWA to a consulting firm experienced in preparing these types of studies. Lastly, the ESJGWA and their consultant, Woodard & Curran, are currently developing the Subbasin DMS required by SGMA. Woodard & Curran has a dedicated computer science and development team that has developed multiple DMS with desktop computer portals for clients around the state, including DWR. Development of a mobile and tablet user interface for data recording and creating a user-friendly public portal for transparency (Component 5) is well within the experience of the consultant.

### **C5. Demonstration of SGMA Knowledge**

ESJGWA has been granted the responsibility and authority to develop a Groundwater Sustainable Plan under the JPA formed by the 15 GSAs within the Eastern San Joaquin Subbasin. ESJGWA will be the contracting agency for work to be conducted for any award won under Round 3 of the Sustainable Groundwater Management Grant Program. ESJGWA is thus ultimately responsible for ensuring that any work conducted for the GSP meets SGMA regulation and DWR requirements, and that the resultant data and information from well construction and testing is incorporated into the GSP currently under development.

The scope of work described in this work plan will be prepared in parallel with, and coordinated with, the ongoing GSP development activities currently underway. ESJGWA, as grant applicant for the Subbasin's Prop 1 Round 2 SGWP grant, will continue to act in that role and oversee the completion of invoicing, progress reporting and other activities required under that agreement. As completion of this Proposal will be conducted in parallel with GSP development and requires a much shorter timeframe for completion, it will not affect the overall completion schedule of the Eastern San Joaquin Subbasin GSP, which will still be adopted and submitted to DWR prior to the January 31, 2020 deadline. As shown in Attachment 5 – Schedule, the expected dates of completion for Component 2 (monitoring equipment purchase and training) is October 2020, with completion dates of November 2020 for Component 3 (financing plan), October 2021 for Component 4 (new well construction and reporting), and March 2021 for Component 5 (DMS refinements).

Letters of support for this Proposal were not solicited from adjoining subbasins, most of whom will have submitted their GSPs by January 31, 2020. The proposed work herein will provide additional monitoring locations in the Eastern San Joaquin Subbasin and, subsequently, additional data which will improve the overall long-term management of the Subbasin. As such, the proposed Project will benefit not only the Eastern San Joaquin Subbasin, but the adjoining subbasins, by providing additional information and data that can be used on a regional basis for sustainable groundwater management.

## Project Details

### D. Scope of Work and Deliverables

#### D.6.a. Scope of Work

#### Component 1: Grant Agreement Administration

Component 1 includes an amendment to the Eastern San Joaquin Subbasin's existing Prop 1 Round 2 SGWP grant agreement with the State for inclusion of the new Components 2 through 5 as described herein. Component 1 will allow for continued grant administration once the existing funding agreement has been amended to reflect the addition of this work plan, and the associated budget and schedule, to account for the schedule extension and additional progress reports and invoicing packages required for inclusion of the work outlined in Components 2 through 5, below.

##### (a) Grant Administration

#### Task 1: Project Management and Communications (0% complete)

The intent of Task 1 is to manage and administer the grant funding to be received under the Prop 68 SGM – Planning Grant, Round 3 grant. As required under the Subbasin's current funding agreement, this task will involve the preparation of reimbursement request packages containing invoices from those implementing the components and quarterly progress reports. Under this task, invoices will be checked and incorporated into monthly invoices that clearly show team members, hours, costs, and progress on component tasks. Quarterly progress reports will be prepared showing progress made during the month, next steps for the following billing cycle, and status of both schedule and budget. Activities under this task will also include review of component-related documents to ensure adherence to the requirements of the DWR Grant Agreement.

This task also involves bi-weekly to monthly progress conference calls with the technical team(s) implementing Components 2 through 5 to ensure coordination among tasks and sharing of information and data. Additionally, this task includes preparation of a final report to DWR, in addition to submittal of quarterly progress reports and invoices, as required by the grant agreement.

Finally, as part of this task, stakeholders, including groundwater users, the general public, and other interested parties, will be kept informed about the components' progress, relevant reports and data and the incorporation of such into GSP development, and on work and products completed, in coordination with other GSP development and implementation outreach activities.

As mentioned earlier in the proposal, the ESJGWA is a JPA comprised of 15 member-GSAs within the Eastern San Joaquin Groundwater Subbasin, all of which rely on the successful completion of this project. This task assumes monthly presentations to the ESJGWA Board of Directors and ongoing outreach activities to the public as part of ongoing GSP outreach efforts throughout the duration of the grant agreement to keep the GSAs and the public informed of the progress.

#### Component 2: Monitoring Equipment Acquisition

This component will facilitate the purchasing of equipment needed by San Joaquin County to perform the necessary groundwater monitoring required under SGMA. An assessment of the Eastern San Joaquin Subbasin GSP, monitoring wells, and existing and potential future groundwater conditions was performed and used to compile a list of equipment required to effectively monitor the GSP-required groundwater monitoring networks. This equipment list is intended to both effectively monitor groundwater conditions and provide adequate levels of redundancy to ensure equipment malfunctions, decommissioning, and other factors do not prevent the collection of necessary data.

The equipment list will then be used to collect product estimates from vendors. Estimates will then be reviewed by the Eastern San Joaquin Subbasin GSAs for review and selection of a chosen vendor. Equipment will then be purchased and used by San Joaquin County and other Subbasin GSAs to begin groundwater monitoring and data collection efforts throughout the Subbasin.

**(a) Component Administration**

**Task 1: Project Management and Communications (0% complete)**

The intent of Task 1 is to manage and administer the grant funding to be received for this component. This task will involve contracting and contract management (if required) and bi-weekly to monthly progress conference calls with the technical team implementing this component to ensure coordination with other GSP development-related activities. Also included in this task is the compilation of invoices for inclusion in reimbursement request packages and preparation of quarterly progress reports showing progress made during the month, next steps for the following billing cycle, and status of both schedule and budget.

**(b) Land Purchase / Easement**

This component does not include land purchases or easements.

**(c) Planning / Design / Environmental Compliance**

**Task 1: Review and Approval of the Equipment List (0% Complete)**

The designated technical team will review the Eastern San Joaquin Subbasin GSP to determine what data are to be collected through the required groundwater monitoring network(s). This may include data such as groundwater levels; water quality information for parameters such as salinity, nitrates, etc.; and other groundwater-related data such as subsidence fluctuations. The team will also assess current groundwater conditions within the Subbasin, and what conditions are expected in the future to assess how sensitive monitoring equipment needs to be, as well as their effective range of measurement.

Using this information, the technical team will compile a list of equipment needed to monitor the Subbasin, taking into account an adequate level of equipment redundancy to reduce impacts of equipment malfunctions and equipment lifetime.

**Task 2: Collect Vendor Estimates and Selection (0% Complete)**

Using the equipment list compiled in Task 1, vendors will be asked to prepare a cost estimate for review. The cost estimate may also include other important information regarding the equipment, such as O&M schedules and additional supplies (e.g. calibration solutions), that may help the GSA in the decision making. Once this information is submitted, the Eastern San Joaquin Subbasin GSAs will review the materials received and select a vendor or mix of vendors for the purchase of the equipment.

**(d) Implementation / Construction**

**Task 1: Purchase of Equipment (0% Complete)**

Under this task, the technical team (or designated team lead) will purchase the equipment specified the equipment list from the approved vendor.

**Task 2: Staff Training (0% Complete)**

Task 2 includes training of GSA staff on the proper use, calibration, and maintenance of the purchased equipment. It is assumed that one (1) training session will be held at a centralized location within the Subbasin.

**(e) Monitoring / Assessment**

This component does not include monitoring or assessment activities.

**Component 3: Financing Plan**

Component 3 is the development of a financing plan for funding implementation of the Eastern San Joaquin GSP to meet SGMA requirements. For the purposes of this proposal, the terms financing and funding are considered to be synonymous. The proposed plan will provide an evaluation of various funding strategies and a final recommendation for the ESJGWA Board for approval. The financing plan is intended to provide specific funding strategies to fund GSP implementation activities at least through to

the first 5-year GSP update in 2025, with recommendations for a longer-term funding plan that considers future uncertainties such as changing regulations and compliance requirements.

**(a) Component Administration**

**Task 1: Project Management and Communications (0% complete)**

The intent of Task 1 is to manage and administer the grant funding to be received for this component. This task will involve contracting with the consultant preparing the study, and will include contract management, invoicing and quarterly progress reports showing progress made during the month, next steps for the following billing cycle, and status of both schedule and budget. Activities under this task will also include bi-weekly to monthly progress conference calls with the technical team to ensure coordination among tasks and sharing of information and data.

**(b) Stakeholder Engagement / Outreach**

**Task 1: Stakeholder Outreach and Communications (0% complete)**

Under this task, stakeholders, including groundwater users, the general public, and other interested parties, will be kept informed about the progress of Component 3, the results of the tasks implemented, and recommendations for financing GSP implementation. Outreach materials will be created and outreach activities to stakeholders and landowners (i.e. attending growers' workshops with district representatives) conducted to disseminate information gathered as part of this component. These outreach efforts will be coordinated with ongoing stakeholder outreach and communications regarding the Subbasin GSPs.

**(c) GSP Development**

**Task 1: Refined Cost Analysis and Revenue Requirement Calculation (0% Complete)**

Calculating a funding mechanism for an agency to collect its costs is a multi-step process. It involves first determining the revenue requirement, which is the amount of revenue that must be recovered for an agency to meet its budgeted costs less its revenue offsets. Under this task, the GSP implementation costs developed for inclusion in the Eastern San Joaquin Subbasin GSP will be revised to provide more detailed planning-level implementation costs and to establish the required revenue on an annual basis over the first five years of GSP implementation with a broader cost estimate for long-term financing that considers uncertainties associated with future SGMA compliance. This effort will include consideration of operating expenses (including administrative services, communications, engineering services, legal services and other operations and maintenance [O&M] expenses). The availability of future grant funding will be considered in this analysis along with a consideration of various options for GSP delivery (e.g. the entire GSP implementation conducted by a single entity versus implementation of specific GSP requirements at the GSA level). For each option, capital, annual, and long-term (five-year) costs will be estimated to facilitate the analysis and scoring of the options. Where possible and available, construction cost estimates will be developed for data gap activities involving construction using GSA and consultant experience in design, bidding and construction of similar projects. Capital costs will be developed for implementing one-time activities and will include an allowance for engineering, legal, and administrative costs and services. Recurring costs (e.g. for annual reports) will be estimated as present worth costs for the first anticipated delivery. From this analysis, a technical memorandum will be prepared which will include a compilation of the planning level costs specific to each option considered. This study will focus on implementing non-project related GSP implementation costs.

**Task 2: Financing Analysis (0% Complete)**

Once the required revenue has been estimated and a preferred option selected for implementation delivery, potential funding sources for the preferred option will be identified. Alternatives considered may include assessing regulatory fees (as allowed under CWC Section 10730) or extraction fees (as allowed under CWC Section 10730.2) at the subbasin level, evaluating the ability of the Subbasin GSAs to include fees in their water rates (and the ability to secure those rate increases under Prop 218) for continued member agency contribution, creating a service fee for charges relating to property ownership, and/or the ability to include fees in a parcel or other existing tax structure or to create a new special tax. This study will focus on implementing non-project related GSP implementation costs.

The results of the financial analysis will be summarized and a schedule for funding will be developed. The funding planning process will use information developed through the prior cost estimating and schedule development tasks. A cash flow needs assessment will be developed for the entire program and will include the total dollars needed and timing for major expenditures. It is assumed that the consultant will meet with the Subbasin GSAs and various funding agencies as needed and determine the process, timing and key elements of the various grant/loan programs.

**Task 3: Financing Plan (0% Complete)**

The results of Tasks 1 and 2 will be compiled in a financing plan that will provide a narrative and, when relevant, a quantitative assessment of each funding strategy. The financing plan will also include a final recommendation as to which funding strategy(ies) would potentially be the most effective for the Subbasin for funding GSP implementation.

**(d) Monitoring / Assessment**

This component does not include monitoring or assessment activities.

**Component 4: Monitoring Network Expansion**

Groundwater model calibration conducted during development of the GSP water budgets identified boundary flows in the northwestern portion of the Subbasin to be a data gap as little to no groundwater elevation data in this area (adjacent to the Sacramento-San Joaquin Delta [Delta]) were available. This component directly addresses this data gap by identifying the location for and installing at least two (2) additional new monitoring wells to provide groundwater elevation data relative to boundary flows in the Delta-portion of the Subbasin. Specifically, tasks included in this component cover preliminary design of the wells, sollicitating bids by drillers and consultants for field services, bid review, selection and contracting, and ultimately the drilling and construction of the new monitoring wells. Final tasks incorporate the new wells into the GSP monitoring network and program and submittal of required reporting documents.

**(a) Component Administration**

**Task 1: Project Management and Communications (0% complete)**

The intent of this task is to manage and administer the grant funding to be received for this component. This task will include contracting and contract management, and bi-weekly to monthly progress conference calls with the technical team to ensure coordination among tasks and sharing of information and data. Also included in this task is the preparation of invoices for compilation in reimbursement request packages and preparation of quarterly progress reports showing progress made during the month, next steps for the following billing cycle, and status of both schedule and budget.

**(b) Land Purchase / Easement**

This component does not include land purchases or the acquisition of easements and assumes that all new wells will be installed in public rights-of-way and/or on land currently owned by the Subbasin GSAs.

**(c) Planning / Design / Environmental Compliance**

**Task 1: Preliminary Design of Wells (0% Complete)**

In Task 1, the Subbasin GSAs will identify the locations for new monitoring wells in the northwestern portion of the Subbasin by reviewing materials developed for the GSP and model calibration records and results relative to potential well sites on public or GSA-owned lands and/or rights-of-way. After identifying potential well sites, available geologic data in and around those locations will be used to prepared preliminary well designs. The preliminary designs will then be used in Task 2 as part of the bid documents.

**Task 2: Plans, Specifications, and Bid Packages (0% Complete)**

Under Task 2, monitoring well preliminary designs will be used to develop plans, specifications, and other bid package materials for solliciting estimates from drillers and consultants for field support. It is assumed that a bid package will be prepared for the drilling contractor and a Request for Proposals will be

developed for the hydrogeological consultant to provide field support and inspection during well construction (e.g. borehole logging).

**Task 3: Monitoring Well Bidding (0% Complete)**

Activities included in Task 3 support bidding of the new monitoring wells and includes releasing and advertising bid packages, conducting pre-bid site visits, providing responses to Requests for Information (RFI), and compiling and reviewing the bids received. Once drilling contractor and field consultant bids have been selected, contracting with the awarded bidding organization will be completed under the Component Administration task, above.

**Task 4: Well Construction Permitting (0% Complete)**

Required permits for well construction will be obtained from San Joaquin County under Task 4. This task includes the preparation, coordination, and submittal for the required well construction permit package to the County, with follow-on communications and documents prepared and provided as requested.

**Task 5: Notice of Exemption for CEQA (0% Complete)**

Construction of monitoring wells for the expressed purpose of data collection is considered to be Categorically Exempt under the California Environmental Quality Act (CEQA). Specifically, Class 6 exemptions include information collection activities that do not result in a serious or major disturbance to environmental resources. As such, under this task, a Notice of Exemption (NOE) for CEQA will be prepared and submitted to the State Clearinghouse.

**Task 6: Field Work Plan and Pre-Construction Meeting (0% Complete)**

Task 6 includes the preparation of a field work plan detailing how the new monitoring wells will be drilled, constructed, developed, and tested. Completion of the field work plan forms the basis for the scope of field activities (necessary to identify 'out-of-scope' items should they arise during the field program) and will ensure that all team members are on the same page relative to field activities. A pre-construction meeting will also be held with the Subbasin GSAs technical team, selected drilling contractor, and hydrogeological consultant to ensure effective communication during field activities.

**(d) Implementation / Construction**

**Task 1: Construction of Additional Boundary Flow Monitoring Wells (0% Complete)**

This task incorporates the drilling, construction, development, and testing of the new monitoring wells within the Subbasin. Specific activities included in this task are:

- Mobilization to the field and underground clearance of well locations
- Site clearing and grubbing (if required)
- Field logging and geologic sample collection and testing during borehole drilling
- Final well design using the results of the logging and sample collection/analysis
- Well construction, including:
  - Borehole drilling
  - Geophysical logging (caliper surveys, resistivity, spontaneous potential, and spectral gamma surveys)
  - Well construction and development
  - Well sampling and testing
  - Well head completion (including the installation of a well pad, bollards, and other equipment necessary to ensure protection of the monitoring well site)
- Demobilization and site clean-up

Following well construction, the Subbasin GSAs technical team will tour the new monitoring locations prior to site demobilization and prepare a final completion checklist. After site demobilization, the technical team will perform a final site walkthrough with the contractor and hydrogeological consultant for final acceptance of the new wells.

**(e) Monitoring / Assessment**

**Task 1: As-Built Report (0% Complete)**

Following completion of monitoring well construction and acceptance, the hydrogeologic consultant retained for field oversight will prepare an as-built report documenting the field program implemented, final monitoring well construction details, and water quality results. The report will contain maps showing the locations of the new monitoring wells, well logs, e-logs, and well construction diagrams, in addition to a summary of analytical laboratory data. In addition to the as-built report, Well Completion Reports will be prepared and submitted to the County and DWR.

**Task 2: GSP Refinement (0% Complete)**

Using the As-Built Report completed in Task 1, the Subbasin GSAs will review the new geologic and hydrogeologic information and data on groundwater conditions for inclusion into the Subbasin GSP. Specifically, these data will be used for refining the numerical groundwater flow model used to develop the Subbasin water budgets and the new monitoring wells added to the GSP monitoring network(s).

**Component 5: Data Management System Refinements**

As part of their Prop 1 Round 2 SGWP grant, the Eastern San Joaquin Subbasin GSAs received funding for development of the SGMA-required DMS. With this funding, the Subbasin is developing the overall DMS structure, plus wizards for data analysis, viewing, and reporting. However, given the size of the Subbasin, it is anticipated that much of the monitoring data collection will occur at remote locations. Therefore, Component 5 funds the development of a mobile/tablet interface with the DMS for field data collection and to enhance public access to the DMS to ensure data transparency. Currently, field data collection requires recording measurements on a temporary medium, such as notebook. Development of a mobile and tablet interface with the DMS system will allow field technicians to enter data directly into the DMS while still at the measurement site. This reduces the overall time for implementing the monitoring program by reducing the need to return to a desktop or laptop computer with internet access and re-enter all data, thereby ensuring cost effective monitoring support, data exchange, transfer, access, and transparency. Additionally, entering the data in the field significantly reduces the likelihood for data errors associated with double-handling of data sets and allows for the real-time confirmation of data collected in the event of erroneous data.

**(a) Component Administration**

**Task 1: Project Management and Communications (0% complete)**

The intent of Task 1 is to manage and administer the grant funding to be received for this component. This task will involve bi-weekly to monthly progress conference calls with the technical team to ensure coordination among tasks and sharing of information and data, in addition to the preparation of invoices for compilation in reimbursement request packages and preparation of quarterly progress reports showing progress made during the month, next steps for the following billing cycle, and status of both schedule and budget.

**(b) Stakeholder Engagement / Outreach**

**Task 1: Stakeholder Outreach and Communications (0% complete)**

Under this task, stakeholders, including groundwater users, the general public, and other interested parties, will be kept informed about the progress of this component, including how the new interface will work with the Subbasin DMS. Information about this component will be disseminated to stakeholders in coordination with ongoing stakeholder outreach and communications regarding the Subbasin GSP.

**Task 2: DMS Training (0% Complete)**

A DMS training/workshop will be held under Task 2 to train GSA entities charged with data collection from the Subbasin's monitoring network. This training will include how to use the new mobile interface and how the interface works with other aspects of the Subbasin DMS. Training materials will be prepared for this workshop once the DMS system has been updated and will be provided to all Subbasin GSAs for staff and other DMS users.

**(c) GSP Development**

**Task 1: Mobile and Tablet Interface Integration into the DMS (0% Complete)**

Under this task, a mobile and tablet interface will be developed for data collection and input into the Eastern San Joaquin Subbasin DMS. This work would be conducted by the consultant currently retained to construct the Subbasin DMS and will be overseen by the GSAs or a designated technical team.

**Task 2: DMS Public Access Enhancements (0% Complete)**

This task includes enhancements to the current desktop portal to improve public access to DMS data. This may include such enhancements as dedicated public access points, enhancements to user experience, and training/information material. This work would be conducted by the consultant currently retained to construct the Subbasin DMS and will be overseen by the GSAs or a designated technical team.

**(d) Monitoring / Assessment**

This component does not include monitoring or assessments.



**D.6.b. Project Deliverables**

The following table summarizes the current status of each task, including the percent complete and deliverables for Components 1 through 5.

Component / Task	% Complete	Deliverables
<b>Component 1: Grant Agreement Administration</b>		
<b>(a) Grant Administration</b>		
Task 1: Project Management and Communication	0%	<ul style="list-style-type: none"> <li>Amendment to the Subbasin's existing SGWP grant agreement</li> <li>Quarterly reimbursement request packages</li> <li>Quarterly progress reports</li> <li>Final proposal report</li> <li>Presentation materials for monthly presentations to the ESJGWA governing bodies.</li> </ul>
<b>Component 2: Monitoring Equipment Acquisition</b>		
<b>(a) Component Administration</b>		
Task 1: Project Management and Communication	0%	<ul style="list-style-type: none"> <li>Quarterly invoices</li> <li>Quarterly progress reports</li> <li>Meeting agenda and minutes</li> </ul>
<b>(b) Land Purchase / Easement</b>		
N/A	N/A	N/A
<b>(c) Planning / Design / Environmental Compliance</b>		
Task 1: Review and Approval of Equipment List	0%	<ul style="list-style-type: none"> <li>Equipment List for quotes</li> </ul>
Task 2: Collect Vendor Estimates and Selection	0%	<ul style="list-style-type: none"> <li>Vendor Estimates</li> <li>Vendor Estimate Ranking</li> </ul>
<b>(d) Implementation / Construction</b>		
Task 1: Purchase of Equipment	0%	<ul style="list-style-type: none"> <li>Purchase Receipts for Equipment</li> </ul>
Task 2: Staff Training	0%	<ul style="list-style-type: none"> <li>One (1) training session and associated training materials</li> </ul>
<b>(e) Monitoring / Assessment</b>		
N/A	N/A	N/A
<b>Component 3: Financing Plan</b>		
<b>(a) Component Administration</b>		
Task 1: Project Management and Communications	0%	<ul style="list-style-type: none"> <li>Quarterly invoices</li> <li>Quarterly progress reports</li> </ul>
<b>(b) Stakeholder Engagement / Outreach</b>		
Task 1: Stakeholder Outreach and Communications	0%	<ul style="list-style-type: none"> <li>Component-specific outreach materials</li> </ul>
<b>(c) GSP Development</b>		
Task 1: Refined Cost Analysis and Revenue Requirement Calculation	0%	<ul style="list-style-type: none"> <li>Required Revenue Technical Memorandum</li> </ul>
Task 2: Financing Analysis	0%	<ul style="list-style-type: none"> <li>Identification of potential funding sources</li> <li>Summary and schedule for funding</li> <li>Cash Flow Needs Assessment</li> </ul>
Task 3: Financing Plan	0%	<ul style="list-style-type: none"> <li>Financing Plan</li> </ul>
<b>(d) Monitoring / Assessment</b>		
N/A	N/A	N/A
<b>Component 4: Monitoring Network Expansion</b>		
<b>(a) Component Administration</b>		
Task 1: Project Management and Communications	0%	<ul style="list-style-type: none"> <li>Quarterly invoices</li> <li>Quarterly progress reports</li> <li>Meeting agenda and minutes</li> </ul>

Component / Task	% Complete	Deliverables
		<ul style="list-style-type: none"> <li>• Drilling Contractor and Consultant contracts</li> </ul>
<b>(b) Land Purchase / Easement</b>		
N/A	N/A	N/A
<b>(c) Planning / Design / Environmental Compliance</b>		
Task 1: Preliminary Design of Wells	0%	<ul style="list-style-type: none"> <li>• Preliminary Well Designs</li> </ul>
Task 2: Plans, Specifications, and Bid Packages	0%	<ul style="list-style-type: none"> <li>• Plans</li> <li>• Specifications</li> <li>• Bid Packages (for drilling contractor) and Request for Proposals (for hydrogeological consultant)</li> </ul>
Task 3: Monitoring Well Bidding	0%	<ul style="list-style-type: none"> <li>• Responses to Requests for Information</li> <li>• Tabulation of Bids Received</li> <li>• Bid Evaluation</li> </ul>
Task 4: Well Construction Permitting	0%	<ul style="list-style-type: none"> <li>• Well Construction Permit Applications</li> </ul>
Task 5: Notice of Exemption for CEQA	0%	<ul style="list-style-type: none"> <li>• Notice of Exemption under CEQA prepared and submitted to the State Clearinghouse</li> </ul>
Task 6: Field Work Plan and Pre-Construction Meeting	0%	<ul style="list-style-type: none"> <li>• Field Work Plan</li> <li>• Pre-Construction meeting agenda and materials</li> </ul>
<b>(d) Implementation / Construction</b>		
Task 1: Construction of Additional Boundary Flow Monitoring Wells	0%	<ul style="list-style-type: none"> <li>• Installation of monitoring wells</li> <li>• Field Inspection Daily Report</li> <li>• Access to Project Construction Files (including submittals, RFI's, and change orders).</li> </ul>
<b>(e) Monitoring / Assessment</b>		
Task 1: As-Built Report	0%	<ul style="list-style-type: none"> <li>• As-Built Report</li> <li>• Well Completion Reports</li> </ul>
Task 2: GSP Refinement	0%	<ul style="list-style-type: none"> <li>• Refined numerical groundwater flow model for water budget development and new monitoring wells incorporated into the Subbasin GSP</li> </ul>
<b>Component 5: Data Management System Refinements</b>		
<b>(a) Component Administration</b>		
Task 1: Project Management and Communications	0%	<ul style="list-style-type: none"> <li>• Quarterly invoices</li> <li>• Quarterly progress reports</li> </ul>
<b>(b) Stakeholder Engagement / Outreach</b>		
Task 1: Stakeholder Outreach and Communications	0%	<ul style="list-style-type: none"> <li>• Component-specific outreach materials</li> </ul>
Task 2: DMS Training	0%	<ul style="list-style-type: none"> <li>• DMS mobile and tablet training material</li> </ul>
<b>(c) GSP Development</b>		
Task 1 – Mobile and Tablet Interface Integration into the DMS	0%	<ul style="list-style-type: none"> <li>• Mobile and tablet interface for Subbasin GSP</li> </ul>
Task 2 – DMS Public Access Enhancements	0%	<ul style="list-style-type: none"> <li>• Public access FAQ and/or training material</li> </ul>
<b>(d) Monitoring / Assessment</b>		
N/A	N/A	N/A

### **Environmental Compliance and Permitting**

Component 4 requires filing a CEQA Notice of Exemption and obtaining well construction permits from San Joaquin County. As noted in Component 4 under Planning/Design/Environmental, permits for well construction will be obtained prior to construction from the San Joaquin County Environmental Health Department for the new well construction. As these wells will be located in public rights-of-way and/or on land currently owned by the Subbasin GSAs, no additional permits or easements will be required.

As all of the proposed monitoring wells to be constructed under this Proposal are for monitoring and in support of GSP development and implementation, they are exempt from CEQA review as information collection that does not result in a serious or major disturbance to an environmental resource (Class 6 Categorical Exemption). As such, it is anticipated that a Notice of Exemption will be prepared for the Component.

Applications for well construction permits will be filed with the San Joaquin County Environmental Health Department by the contracted driller as part of the Component 4 planning and environmental process. Permit applications will be filed after completion of the field workplan (Task 6 under (b) Planning/Design/Environmental) using the preliminary plans and specifications prepared for bidding (Task 1 under (b) Planning/Design/Environmental) and the Notice of Exemption. The Gantt chart for Component 4, included in Attachment 5 – Schedule, shows the timing of these tasks (obtaining well construction permits and preparing the NOE) and the linkages with other component tasks. As part of Task 2 under (e) Monitoring/Assessment, an As-Built Report will be prepared following completion of the field tasks. Included under this task is preparation of Well Completion Reports and submittal of those reports to DWR.

## Miscellaneous

### E. Project Support

Applicants should provide documentation to demonstrate the proposed project support by the local entities, where possible, and should include the following items for proposals. If letters of support are not possible for the region, a brief explanation should be included explaining why letters of support are not included.

Commented [LD2]: 2 pages max; to be added after receiving letters of support

- If the applicant is not the GSA(s) for the basin, demonstrate and provide evidence that the Applicant has coordinated with the GSA(s) for the basin or the local agency in the basin which submitted an Alternative Plan, regarding implementation of the project (e.g., meeting minutes, letters of support, emails, other forms of correspondence). Refer to any letters of support provided by the GSA(s) for the proposed project.
- If one GSA is established in the basin, describe and provide documentation of any communication with GSA(s) in neighboring basins regarding groundwater sustainability planning and GSP development.
- Describe and provide documentation of any communication with beneficial users of groundwater in the basin that may potentially be affected by implementation of the project, including, but not limited to DAs, agricultural water users, municipal water users, wildlife refuges, or other stakeholders.

Project support must not exceed 2 pages using a minimum Arial, 10-point type font, not including letters of support.

## ATTACHMENT 4. BUDGET

Attachment 4 consists of the following:

- ❖ **Budget Template.** A summary of the budget for the entire Proposal and the estimated costs for each Component task as described in the Work Plan (Attachment 3) is present herein.
- ❖ **Detailed Budget Estimate.** A detailed budget estimate based on typical standard rates provided by a consulting firm used to create the Budget Template.

## Budget Overview

The following tables and explanatory text documents the estimated costs associated with the proposed work plan as described in Attachment 3 - Work Plan, resulting in completion of Eastern San Joaquin Proposal for Studies and Equipment to Support GSP Development for the Eastern San Joaquin Subbasin (Subbasin). The Eastern San Joaquin Groundwater Authority (GWA), on behalf of the Subbasin GSAs, is requesting a total of \$500,000 in supplemental grant funding to:

- Acquire monitoring equipment suitable for collecting data in the Eastern San Joaquin Subbasin GSP-required Monitoring Network.
- Develop a financing plan to determine the most economic and feasible means to fund future GSP implementation activities to comply with the Sustainable Groundwater Management Act (SGMA).
- Expand the monitoring network described in the Eastern San Joaquin Subbasin GSP to fill data gaps associated with Subbasin boundary flows.
- Refine the Subbasin Data Management System (DMS) to ensure efficient data recording with increased data integrity and to provide user-friendly and transparent public access to the DMS.

Grant funding awarded under this proposal would offset economic impacts on Eastern San Joaquin Subbasin disadvantaged communities, severely disadvantaged communities, and economically distressed areas (collectively referred to as Disadvantaged Areas [DAs]) resulting from the funding of activities required to comply with SGMA regulations (including the development and implementation of the Subbasin's GSP) and for filling data gaps. The total proposal cost is estimated to be \$575,000, of which \$75,000 (or 13%) would be a local funding match and \$500,000 would be additional grant funding received under the Round 3 Sustainable Groundwater Management (SGM) Grant Program.

Each subsection below will briefly describe how cost estimates were derived for the five components contained in this proposal.

### Component 1: Grant Agreement Administration

The GWA has applied for and been awarded grant funds under Round 2 of the Sustainable Groundwater Planning (SGWP) Grant Program. Experience administering this grant award, along with the professional experience of subconsultants assisting with activities specified under the proposal, assisted in developing the estimate of \$50,000 for grant agreement administration. Estimates for labor required to complete grant agreement-required reporting included herein were based on the anticipated schedule for this proposal and past experience in completing the required reporting and invoicing documentation. Activities also include support for ongoing ESJGWA meetings, coordination of GSA interaction, and project management for other tasks included herein. In addition, the 2019 Planning Grant Proposal Solicitation Package for Round 3 of the Sustainable Groundwater Management (SGM) Grant Program specifies administration cannot exceed 10% of the total proposal cost, of which, Component 1 is only 8.7% of the total proposal costs.

### Component 2: Monitoring Equipment Acquisition

This component primarily involves tasks for specification of new equipment, soliciting estimates and purchase of new equipment, and subsequent training on the use and maintenance of that equipment. Equipment estimates were based on reviews of equipment catalog pricing for the preliminary draft equipment list; with labor estimates for conducting the necessary activities to support the equipment purchase and training based on experience working with, purchasing, and using similar equipment assuming estimated unit labor rates for a contracted consultant to implement this component.

### Component 3: Financing Plan

This component includes assessing multiple funding strategies the Subbasin GSAs could utilize for funding non-project GSP implementation, evaluating alternatives, case study of other GSAs, and providing a recommendation for consideration and adoption by ESJGWA. Cost estimates for this component were derived based on professional opinion and experience in conducting similar studies assuming unit labor rates for a contracted consultant.

#### Component 4: Monitoring Network Expansion

While groundwater and surface elevation data have been collected in the Subbasin via various existing monitoring networks, data gaps still exist throughout the Subbasin. Through a review of these existing monitoring networks and numerical groundwater flow model calibration efforts conducted prior to development of the Subbasin water budgets, data gaps associated with groundwater dependent ecosystems (GDEs), groundwater/surface water interactions, and subbasin boundary flows, especially in the northwestern portion of the Subbasin adjacent to the Delta, were identified. Portions of grant funds awarded to the Subbasin under Round 2 of the SGWP Grant Program have focused on filling data gaps associated with GDEs and groundwater/surface water interactions. Funds sought under this component are to fill data gaps associated with subbasin boundary flows in the northwestern portion of the Subbasin. This component includes designing, siting, bidding, permitting, and construction of new monitoring wells. Cost estimates for this component were based on the previous grant award, current experience with well design, siting, drilling, and estimated drilling and field consultant labor rates and estimated levels of efforts for completing the planning, construction and post-construction documentation tasks.

#### Component 5: Data Management System Refinements

This component includes the development of a mobile/tablet interface with the existing DMS to ensure data recording efficiency and increased data integrity, as well as an updated desktop portal for user friendly and transparent public access to data collected under the implementation of the GSP. Cost estimates for this component utilize the professional experience and knowledge of the consultant team who developed the current DMS system, including unit labor rates and estimated levels of efforts for completing the tasks in this component.

### **Cost Share Justification**

As described in Attachment 6 of this proposal, a substantial portion of the Subbasin consists of DAs. Approximately 60% of the total population of the Eastern San Joaquin Subbasin lives within DAs and would benefit directly from grant funding for the proposal principally through the offset of local fees that would otherwise be used to fund this work. Per the *Planning Grants Proposal Solicitation Package for the 2019 Sustainable Groundwater Management Grant Program*, the Subbasin is eligible to receive a 90% cost share waiver (10% local cost share) since between 51% - 75% of the Subbasin's population lives within DAs. In order to alleviate the financial burden of this Proposal on DAs, the GWA is therefore formally requesting that up to a 90% funding match waiver be granted for the Subbasin. More supporting information is provided in Attachment 6 – SDAC, DAC, and/or EDA. It should be noted, that while the GWA is eligible for a 10% cost share it has elected to do a 13% cost share, as shown in the following budget tables.

The majority of the work described in Attachment 3 – Work Plan is anticipated to be completed by consultants in coordination with the GWA and Subbasin GSA member agencies. The following tables summarize the estimated budgets for the proposed tasks included in the Work Plan (Attachment 3).

**ATTACHMENT 4**  
**GRANT PROPOSAL SUMMARY BUDGET – TEMPLATES**

**Table 5B – Grant Proposal Summary Budget (Multiple Components)**

**Grant Proposal Title:** Eastern San Joaquin Proposal for Studies and Equipment to Support GSP Development

**Applicant:** Eastern San Joaquin Groundwater Authority

Grant Proposal serves a need of a DA?:  Yes  No

Local Cost Share requested:  25%  15%  10%  0%

Budget Categories	(a) Requested Grant Amount	(b) Local Cost Share: Non- State Fund Source <sup>1</sup>	(c) Total Cost	(d) % Local Cost Share (Col (b)/ Col (c))
Component 1: Grant Agreement Administration	\$0	\$50,000	\$50,000	100%
Component 2: Monitoring Equipment Acquisition	\$0	\$25,000	\$25,000	100%
Component 3: Financing Plan	\$50,000	\$0	\$50,000	0%
Component 4: Monitoring Network Expansion	\$400,000	\$0	\$400,000	0%
Component 5: Data Management System Refinement	\$50,000	\$0	\$50,000	0%
<b>Grand Total</b>	<b>\$500,000</b>	<b>\$75,000</b>	<b>\$575,000</b>	<b>13%</b>

<sup>1</sup> Sources of funding: *Eastern San Joaquin Groundwater Authority member assessments.*



**ATTACHMENT 4**  
**PROPOSAL/COMPONENT DETAILED BUDGET – TEMPLATE**

*To obtain points for the Budget, the applicants must use the prepared templates. Table 6B must be completed for each component in the proposal. Table 6 includes the required budget categories listed in Table 5B. If applicable, additional rows must be added under the applicable budget categories to present the cost of each task described in Attachment 3 (Work Plan).*

**Table 6B – Proposal/Component Detailed Budget (Multiple Components)**

**Grant Proposal Title:** Eastern San Joaquin Proposal for Studies and Equipment to Support GSP Development

**Applicant:** Eastern San Joaquin Groundwater Authority

**Component Title:** Component 1: Grant Agreement Administration

Budget Categories	(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source <sup>1</sup>	(c) Total Cost
(a) Grant Administration	\$0	\$50,000	\$50,000
Task 1. Project Management and Communications	\$0	\$50,000	\$50,000
Grand Total	\$0	\$50,000	\$50,000

<sup>1</sup> Sources of funding: *Eastern San Joaquin Groundwater Authority member assessments.*

**ATTACHMENT 4**  
**PROPOSAL/COMPONENT DETAILED BUDGET – TEMPLATE**

**Table 6B – Proposal/Component Detailed Budget (Multiple Components)**

**Grant Proposal Title:** Eastern San Joaquin Proposal for Studies and Equipment to Support GSP Development

**Applicant:** Eastern San Joaquin Groundwater Authority

**Component Title:** Component 2: Monitoring Equipment Acquisition

Budget Categories	(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source <sup>1</sup>	(c) Total Cost
<b>(a) Component Administration</b>	\$0	\$1,380	\$1,380
Task 1. Project Management and Communications	\$0	\$1,380	\$1,380
<b>(b) Land Purchase / Easement</b>	\$0	\$0	\$0
<b>(c) Planning / Design / Environmental Compliance</b>	\$0	\$4,140	\$4,140
Task 1. Review and Approval of the Equipment List	\$0	\$1,380	\$1,380
Task 2. Collect Vendor Estimates and Selection	\$0	\$2,760	\$2,760
<b>(d) Implementation / Construction</b>	\$0	\$19,480	\$19,480
Task 1. Purchase of Equipment	\$0	\$16,260	\$16,260
Task 2. Staff Training	\$0	\$3,220	\$3,220
<b>(d) Monitoring / Assessment</b>	\$0	\$0	\$0
<b>Grand Total</b>	<b>\$0</b>	<b>\$25,000</b>	<b>\$25,000</b>

<sup>1</sup> Sources of funding: *Eastern San Joaquin Groundwater Authority member assessments*

**ATTACHMENT 4**  
**PROPOSAL/COMPONENT DETAILED BUDGET – TEMPLATE**

**Table 6B – Proposal/Component Detailed Budget (Multiple Components)**

**Grant Proposal Title:** Eastern San Joaquin Proposal for Studies and Equipment to Support GSP Development

**Applicant:** Eastern San Joaquin Groundwater Authority

**Component Title:** Component 3: Financing Plan

Budget Categories	(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source <sup>1</sup>	(c) Total Cost
<b>(a) Component Administration</b>	<b>\$3,450</b>	<b>\$0</b>	<b>\$3,450</b>
Task 1. Project Management and Communications	\$3,450	\$0	\$3,450
<b>(b) Stakeholder Engagement / Outreach</b>	<b>\$3,020</b>	<b>\$0</b>	<b>\$3,020</b>
Task 1. Stakeholder Outreach and Communications	\$3,020	\$0	\$3,020
<b>(c) GSP Development</b>	<b>\$43,530</b>	<b>\$0</b>	<b>\$43,530</b>
Task 1. Refined Cost Analysis and Revenue Requirement Calculation	\$10,360	\$0	\$10,360
Task 2. Financing Analysis	\$25,750	\$0	\$25,750
Task 3. Financing Plan	\$7,420	\$0	\$7,420
<b>(d) Monitoring / Assessment</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Grand Total</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$50,000</b>

<sup>1</sup> Sources of funding: *Eastern San Joaquin Groundwater Authority member assessments.*

**ATTACHMENT 4**  
**PROPOSAL/COMPONENT DETAILED BUDGET – TEMPLATE**

**Table 6B – Proposal/Component Detailed Budget (Multiple Components)**

**Grant Proposal Title:** Eastern San Joaquin Proposal for Studies and Equipment to Support GSP Development

**Applicant:** Eastern San Joaquin Groundwater Authority

**Component Title:** Component 4: Monitoring Network Expansion

Budget Categories	(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source <sup>1</sup>	(c) Total Cost
<b>(a) Component Administration</b>	<b>\$15,820</b>	<b>\$0</b>	<b>\$15,820</b>
Task 1. Project Management and Communications	\$15,820	\$0	\$15,820
<b>(b) Land Purchase / Easement</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>(c) Planning / Design / Environmental Compliance</b>	<b>\$38,570</b>	<b>\$0</b>	<b>\$38,570</b>
Task 1. Preliminary Design of Wells	\$4,280	\$0	\$4,280
Task 2. Plans, Specifications, and Bid Package	\$9,420	\$0	\$9,420
Task 3. Monitoring Well Bidding	\$4,000	\$0	\$4,000
Task 4. Well Construction Permitting	\$7,040	\$0	\$7,040
Task 5. Notice of Exemption for CEQA	\$690	\$0	\$690
Task 6. Field Work Plan and Pre-Construction Meeting	\$13,140	\$0	\$13,140
<b>(d) Implementation / Construction</b>	<b>\$294,450</b>	<b>\$0</b>	<b>\$294,450</b>
Task 1. Construction of Additional Boundary Flow Monitoring Wells	\$294,450	\$0	\$294,450
<b>(e) Monitoring / Assessment</b>	<b>\$51,160</b>	<b>\$0</b>	<b>\$51,160</b>
Task 1. As-Built Report	\$27,440	\$0	\$27,440
Task 2. GSP Refinement	\$23,720	\$0	\$23,720
<b>Grand Total</b>	<b>\$400,000</b>	<b>\$0</b>	<b>\$400,000</b>

<sup>1</sup> Sources of funding: Eastern San Joaquin Groundwater Authority member assessments.

**ATTACHMENT 4**  
**PROPOSAL/COMPONENT DETAILED BUDGET – TEMPLATE**

**Table 6B – Proposal/Component Detailed Budget (Multiple Components)**

**Grant Proposal Title:** Eastern San Joaquin Proposal for Studies and Equipment to Support GSP Development

**Applicant:** Eastern San Joaquin Groundwater Authority

**Component Title:** Component 5: Data Management System Refinements

Budget Categories	(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source <sup>1</sup>	(c) Total Cost
<b>(a) Component Administration</b>	<b>\$5,820</b>	<b>\$0</b>	<b>\$5,820</b>
Task 1. Project Management and Communications	\$5,820	\$0	\$5,820
<b>(b) Stakeholder Engagement/Outreach</b>	<b>\$8,700</b>	<b>\$0</b>	<b>\$8,700</b>
Task 1. Stakeholder Outreach and Communications	\$4,140	\$0	\$4,140
Task 2. DMS Training	\$4,560	\$0	\$4,560
<b>(c) GSP Development</b>	<b>\$35,480</b>	<b>\$0</b>	<b>\$35,480</b>
Task 1. Mobile and Tablet Interface Integration into the DMS	\$22,660	\$0	\$22,660
Task 2. DMS Public Access Enhancements	\$12,820	\$0	\$12,820
<b>(d) Monitoring/ Assessment</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Grand Total</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$50,000</b>

<sup>1</sup> Sources of funding: *Eastern San Joaquin Groundwater Authority member assessments.*

## ATTACHMENT 5. SCHEDULE

Attachment 5 consists of the following:

- ❖ **Schedule Template.** This attachment includes a schedule for each Work Plan task in the Proposal and is consistent with how tasks are presented in the Work Plan and Budget (Attachments 3 and 4, respectively).
- ❖ **Gantt Chart.** A Gantt chart has been included to show linkages between tasks for components contained in this Proposal, along with predecessor and successor tasks.

## Project Schedule

The Eastern San Joaquin Proposal for Studies and Equipment to Support GSP Development (Proposal) will be completed to:

- Acquire monitoring equipment suitable for collecting data from the Eastern San Joaquin Subbasin GSP-required Monitoring Network.
- Develop a financing plan to determine the most economic and feasible means to fund future GSP implementation activities to comply with the Sustainable Groundwater Management Act (SGMA).
- Expand the monitoring network described in the Eastern San Joaquin Subbasin GSP to fill data gaps associated with Subbasin boundary flows.
- Refine the Subbasin Data Management System (DMS) to promote efficient data recording with increased data integrity and to provide user-friendly and transparent public access to the DMS.

The Proposal's five (5) components and combined twenty-six (26) tasks will be conducted as described in Attachment 3 – Work Plan. The schedule presented herein begins on April 1, 2020 (following execution of an amendment to the Subbasin's existing Prop 1 Sustainable Groundwater Planning grant agreement) and will conclude on January 4, 2022, ahead of the April 30, 2022 grant funding deadline.

The tasks comprising the Proposal components will be, for the most part, implemented sequentially. A Gantt chart (Att5\_SGM\_Schedule\_2of2.pdf) for the components in this Proposal has been included in addition to the required schedule template in order to illustrate the order in which the components will be implemented and the dependencies, linkages, and predecessors between tasks. As shown in the Gantt chart and summarized in the Schedule template, the overall proposal would begin April 1, 2020, following completion of the grant agreement amendment, and will be completed by January 2022.

Component 1: Grant Agreement Administration will begin (continue) from the April 1 agreement amendment date, with the first quarterly progress report due to DWR by July 6, 2020. The anticipated completion date of January 4, 2022 for this component allows time for completion of all Proposal components, receipt of final invoices, completion of a final Proposal report, and completion of a final reimbursement request package.

Component 2: Monitoring Equipment Acquisition will begin April 1, 2020, after the grant agreement amendment has been executed. The majority of this component is relatively straight forward and requires the solicitation of quotes for and purchase of monitoring equipment. Delivery of the new equipment will be at the discretion of the equipment manufacturer. Once the equipment is received, staff training can commence.

Component 3: Financing Plan will begin concurrently with other components. Work will be conducted by a contracted consultant and is expected to require approximately five months to complete, including drafting and finalization based on professional experience. This component will commence on April 1, 2020 and conclude on November 3, 2020.

Component 4: Monitoring Network Expansion is expected to require the most time to complete. Preliminary design of the wells will begin once the grant agreement has been amended (estimated to be April 1, 2020), which will then lead to the release of the plans, specifications, and bid packages. Bids solicitation and selection period will occur over an approximately two-month period. Once a driller and a field consultant have been selected and contracted, preparation of well construction permit application packages, a Notice of Exemption for CEQA, and the Field Work Plan can take place concurrently. A pre-construction meeting will occur at the end of this planning period, in December 2020. Well construction is anticipated to begin in December 2020 and will require approximately four months. Following construction, development, and testing of the new monitoring wells, an as-built report will be prepared and refinements made to the Subbasin GSP between March and September 2021.

Component 5: Data Management System (DMS) Refinement, will also start on April 1, 2020 following execution of the grant agreement amendment. Most tasks under this component will occur at the same time over 2020, with training on the new mobile/tablet interface taking place during the first quarter of 2021 after such capabilities have been integrated in to the DMS.

## **Permitting and CEQA Considerations**

The components contained within this Proposal are for activities that will directly support GSP development, and for the most part, are just studies or activities that are not considered a project under CEQA nor require permits. Specifically, Components 1, 2, 3, and 5 will not require permits or environmental review under CEQA.

Component 4: Monitoring Network Expansion will require acquiring well construction permits from San Joaquin County and preparation of a notice of exemption for CEQA compliance. All new monitoring wells will require well construction permits before construction begins. Permit application packages will be developed and submitted to San Joaquin County and are anticipated to take approximately four months to complete (from start of application package preparation to receipt of permits) based on professional experience. Additional permits may be required from cities for disposal of drilling-associated wastewater to sewer systems and/or a Notice of Intent to comply with the statewide general permit for disposal of low threat waters to land will be filed with the State as needed based on site-specific conditions.

Additionally, the new monitoring wells qualify for a Notice of Exemption for CEQA under Section 15306, Class 6 exemptions. Class 6 exemption are for projects that consist of "basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource." Completion and submittal of the CEQA notice of exemption to the State Clearinghouse is expected to take approximately 10 days, based on professional experience.

Finally, Component 4 includes the completion of an As-Built Report which includes location maps, well logs, e-logs, well construction diagrams, and laboratory data, as well as Well Completion Reports that will be submitted to DWR. This is estimated to require approximately three months based on professional experience.



## Schedule Template

Table 7b – Grant Proposal Schedule (Multiple Components)

Grant Proposal Title: Eastern San Joaquin Proposal for Studies and Equipment to Support GSP Development

Applicant: Eastern San Joaquin Groundwater Authority

Categories	Start Date	End Date
<b>Component 1: Grant Agreement Administration</b>	<b>04/01/2020</b>	<b>01/04/2022</b>
<b>(a) Grant Agreement Administration</b>	<b>04/01/2020</b>	<b>01/04/2022</b>
Task 1. Project Management and Communications	04/01/2020	01/04/2022
<b>Component 2: Monitoring Equipment Acquisition</b>	<b>04/01/2020</b>	<b>10/16/2020</b>
<b>(a) Component Administration</b>	<b>04/01/2020</b>	<b>10/16/2020</b>
Task 1. Project Management and Communications	04/01/2020	10/16/2020
<b>(b) Land Purchase / Easement</b>	<b>N/A</b>	<b>N/A</b>
<b>(c) Planning / Design / Environmental</b>	<b>04/01/2020</b>	<b>06/23/2020</b>
Task 1. Review and Approval of Equipment List	04/01/2020	04/28/2020
Task 2. Collect Vendor Estimates and Selection	04/29/2020	06/23/2020
<b>(d) Implementation / Construction</b>	<b>06/24/2020</b>	<b>09/15/2020</b>
Task 1. Purchase of Equipment	06/24/2020	07/21/2020
Task 2. Staff Training	07/22/2020	09/15/2020
<b>(e) Monitoring / Assessment</b>	<b>N/A</b>	<b>N/A</b>
<b>Component 3: Financing Plan</b>	<b>04/01/2020</b>	<b>11/13/2020</b>
<b>(a) Component Administration</b>	<b>04/01/2020</b>	<b>11/13/2020</b>
Task 1. Project Management and Communications	04/01/2020	11/13/2020
<b>(b) Stakeholder Engagement / Outreach</b>	<b>04/01/2020</b>	<b>10/13/2020</b>
Task 1: Stakeholder Outreach and Communications	04/01/2020	10/13/2020
<b>(c) GSP Development</b>	<b>04/01/2020</b>	<b>10/13/2020</b>
Task 1. Refined Cost Analysis and Revenue Requirement Calculation	04/01/2020	05/26/2020
Task 2. Financing Analysis	05/27/2020	08/18/2020

Task 3. Financing Plan	08/19/2020	10/13/2020
<b>(d) Monitoring / Assessment</b>	<b>N/A</b>	<b>N/A</b>
<b>Component 4: Monitoring Network Expansion</b>	<b>04/01/2020</b>	<b>10/15/2021</b>
<b>(a) Component Administration</b>	<b>04/01/2020</b>	<b>10/15/2021</b>
Task 1. Project Management and Communications	04/01/2020	10/15/2021
<b>(b) Land Purchase / Easement</b>	<b>N/A</b>	<b>N/A</b>
<b>(c) Planning / Design / Environmental</b>	<b>04/01/2020</b>	<b>12/08/2020</b>
Task 1. Preliminary Design of Wells	04/01/2020	04/28/2020
Task 2. Plans, Specifications, and Bid Package	04/29/2020	06/23/2020
Task 3. Monitoring Well Bidding	06/24/2020	08/18/2020
Task 4. Well Construction Permitting	08/19/2020	12/08/2020
Task 5. Notice of Exemption for CEQA	08/19/2020	09/01/2020
Task 6. Field Work Plan and Pre-Construction Meeting	08/19/2020	12/08/2020
<b>(d) Implementation / Construction</b>	<b>12/09/2020</b>	<b>03/30/2021</b>
Task 1. Construction of Additional Boundary Flow Monitoring Wells	12/09/2020	03/30/2021
<b>(e) Monitoring / Assessment</b>	<b>03/31/2021</b>	<b>09/14/2021</b>
Task 1. As-Built Report	03/31/2021	06/22/2021
Task 2. GSP Refinement	06/23/2021	09/14/2021
<b>Component 5: Data Management System Refinement</b>	<b>04/01/2020</b>	<b>03/02/2021</b>
<b>(a) Component Administration</b>	<b>04/01/2020</b>	<b>03/02/2021</b>
Task 1. Project Management and Communications	04/01/2020	03/02/2021
<b>(b) Stakeholder Engagement / Outreach</b>	<b>04/01/2020</b>	<b>03/02/2021</b>
Task 1: Stakeholder Outreach and Communications	04/01/2020	03/02/2021
Task 2. DMS Training	12/09/2020	02/02/2021
<b>(c) GSP Development</b>	<b>04/01/2020</b>	<b>12/08/2020</b>
Task 1. Mobile and tablet Interface Integration into the DMS	04/01/2020	12/08/2020
Task 2. DMS Public Access Enhancements	04/01/2020	12/08/2020
<b>(d) Monitoring / Assessment</b>	<b>N/A</b>	<b>N/A</b>

INSERT GANTT CHARTS HERE

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Gantt Chart (M, M, Half 2, 2020, S, N, Half 1, 2021, M, M, Half 2, 2021, S, N, Half 1, 2022)						
1	Task	Eastern San Joaquin Proposal for Studies and Equipment to Support GSP Development	460 days	Wed 4/1/20	Tue 1/4/22		[Gantt bar from 4/1/20 to 1/4/22]						
2	Task	Grant Agreement Amendment Execution	0 days	Wed 4/1/20	Wed 4/1/20		[Gantt bar at 4/1/20]						
3	Task	Component 1: Grant Agreement Administration	460 days	Wed 4/1/20	Tue 1/4/22		[Gantt bar from 4/1/20 to 1/4/22]						
4	Task	a) Direct Project Administration	460 days	Wed 4/1/20	Tue 1/4/22		[Gantt bar from 4/1/20 to 1/4/22]						
5	Task	Task 1: Project Management and Communications	23 mons	Wed 4/1/20	Tue 1/4/22	2	[Gantt bar from 4/1/20 to 1/4/22]						
6	Task	Component 2: Monitoring Equipment Acquisition	143 days	Wed 4/1/20	Fri 10/16/20		[Gantt bar from 4/1/20 to 10/16/20]						
7	Task	a) Component Administration	143 days	Wed 4/1/20	Fri 10/16/20		[Gantt bar from 4/1/20 to 10/16/20]						
8	Task	Task 1: Project Management and Communications	143 days	Wed 4/1/20	Fri 10/16/20	2	[Gantt bar from 4/1/20 to 10/16/20]						
9	Task	b) Land Purchase / Easement					[Gantt bar from 4/1/20 to 10/16/20]						
10	Task	c) Planning / Design / Environmental Compliance	60 days	Wed 4/1/20	Tue 6/23/20		[Gantt bar from 4/1/20 to 6/23/20]						
11	Task	Task 1: Review and Approval of Equipment List	1 mon	Wed 4/1/20	Tue 4/28/20	2	[Gantt bar from 4/1/20 to 4/28/20]						
12	Task	Task 2: Collect Vendor Estimates and Selection	2 mons	Wed 4/29/20	Tue 6/23/20	11	[Gantt bar from 4/29/20 to 6/23/20]						
13	Task	d) Implementation / Construction	60 days	Wed 6/24/20	Tue 9/15/20		[Gantt bar from 6/24/20 to 9/15/20]						
14	Task	Task 1: Purchase of Equipment	1 mon	Wed 6/24/20	Tue 7/21/20	12	[Gantt bar from 6/24/20 to 7/21/20]						
15	Task	Task 2: Staff Training	2 mons	Wed 7/22/20	Tue 9/15/20	14	[Gantt bar from 7/22/20 to 9/15/20]						
16	Task	e) Monitoring/Assessment					[Gantt bar from 6/24/20 to 9/15/20]						
17	Task	Component 3: Financing Plan	163 days	Wed 4/1/20	Fri 11/13/20		[Gantt bar from 4/1/20 to 11/13/20]						
18	Task	a) Component Administration	163 days	Wed 4/1/20	Fri 11/13/20		[Gantt bar from 4/1/20 to 11/13/20]						
19	Task	Task 1: Project Management and Communications	163 days	Wed 4/1/20	Fri 11/13/20	2	[Gantt bar from 4/1/20 to 11/13/20]						
20	Task	b) Stakeholder Engagement/Outreach	140 days	Wed 4/1/20	Tue 10/13/20		[Gantt bar from 4/1/20 to 10/13/20]						
21	Task	Task 1: Stakeholder Outreach and Communications	140 days	Wed 4/1/20	Tue 10/13/20	1955	[Gantt bar from 4/1/20 to 10/13/20]						
22	Task	c) GSP Development	140 days	Wed 4/1/20	Tue 10/13/20		[Gantt bar from 4/1/20 to 10/13/20]						
23	Task	Task 1: Refined Cost Analysis and Revenue Requirement Calculation	2 mons	Wed 4/1/20	Tue 5/26/20	2	[Gantt bar from 4/1/20 to 5/26/20]						
24	Task	Task 2: Financing Analysis	3 mons	Wed 5/27/20	Tue 8/18/20	23	[Gantt bar from 5/27/20 to 8/18/20]						
25	Task	Task 3: Financing Plan	2 mons	Wed 8/19/20	Tue 10/13/20	24	[Gantt bar from 8/19/20 to 10/13/20]						
26	Task	d) Monitoring/Assessment					[Gantt bar from 5/27/20 to 8/18/20]						
27	Task	Component 4: Monitoring Network Expansion	403 days	Wed 4/1/20	Fri 10/15/21		[Gantt bar from 4/1/20 to 10/15/21]						
28	Task	a) Component Administration	403 days	Wed 4/1/20	Fri 10/15/21		[Gantt bar from 4/1/20 to 10/15/21]						
29	Task	Task 1: Project Management and Communications	403 days	Wed 4/1/20	Fri 10/15/21	2	[Gantt bar from 4/1/20 to 10/15/21]						
30	Task	b) Land Purchase / Easement					[Gantt bar from 4/1/20 to 10/15/21]						
31	Task	c) Planning / Design / Environmental Compliance	180 days	Wed 4/1/20	Tue 12/8/20		[Gantt bar from 4/1/20 to 12/8/20]						
32	Task	Task 1: Preliminary Design of Wells	1 mon	Wed 4/1/20	Tue 4/28/20	2	[Gantt bar from 4/1/20 to 4/28/20]						
33	Task	Task 2: Plans, Specifications, and Bid Package	2 mons	Wed 4/29/20	Tue 6/23/20	32	[Gantt bar from 4/29/20 to 6/23/20]						
34	Task	Task 3: Monitoring Well Bidding	2 mons	Wed 6/24/20	Tue 8/18/20	33	[Gantt bar from 6/24/20 to 8/18/20]						
35	Task	Task 4: Well Construction Permitting	4 mons	Wed 8/19/20	Tue 12/8/20	34	[Gantt bar from 8/19/20 to 12/8/20]						
36	Task	Task 5: Notice of Exemption for CEQA	10 days	Wed 8/19/20	Tue 9/1/20	34	[Gantt bar from 8/19/20 to 9/1/20]						
37	Task	Task 6: Field Work Plan and Pre-Construction Meeting	4 mons	Wed 8/19/20	Tue 12/8/20	34	[Gantt bar from 8/19/20 to 12/8/20]						
38	Task	d) Implementation / Construction	80 days	Wed 12/9/20	Tue 3/30/21		[Gantt bar from 12/9/20 to 3/30/21]						
39	Task	Task 1: Construction of Additional Boundary Flow Monitoring Wells	4 mons	Wed 12/9/20	Tue 3/30/21	37	[Gantt bar from 12/9/20 to 3/30/21]						
40	Task	e) Monitoring / Assessment	120 days	Wed 3/31/21	Tue 9/14/21		[Gantt bar from 3/31/21 to 9/14/21]						
41	Task	Task 1: As-Built Report	3 mons	Wed 3/31/21	Tue 6/22/21	39	[Gantt bar from 3/31/21 to 6/22/21]						
42	Task	Task 2: GSP Refinement	3 mons	Wed 6/23/21	Tue 9/14/21	41	[Gantt bar from 6/23/21 to 9/14/21]						
43	Task	Component 5: Data Management System Refinement	240 days	Wed 4/1/20	Tue 3/2/21		[Gantt bar from 4/1/20 to 3/2/21]						
44	Task	a) Component Administration	240 days	Wed 4/1/20	Tue 3/2/21		[Gantt bar from 4/1/20 to 3/2/21]						
45	Task	Task 1: Project Management and Communications	240 days	Wed 4/1/20	Tue 3/2/21	2	[Gantt bar from 4/1/20 to 3/2/21]						
46	Task	b) Stakeholder Engagement/Outreach	240 days	Wed 4/1/20	Tue 3/2/21		[Gantt bar from 4/1/20 to 3/2/21]						
47	Task	Task 1: Stakeholder Outreach and Communications	12 mons	Wed 4/1/20	Tue 3/2/21	5055	[Gantt bar from 4/1/20 to 3/2/21]						
48	Task	Task 2: DMS Training	2 mons	Wed 12/9/20	Tue 2/2/21	50	[Gantt bar from 12/9/20 to 2/2/21]						
49	Task	c) GSP Development	180 days	Wed 4/1/20	Tue 12/8/20		[Gantt bar from 4/1/20 to 12/8/20]						
50	Task	Task 1: Mobile and Tablet Interface Integration into the DMS	9 mons	Wed 4/1/20	Tue 12/8/20	2	[Gantt bar from 4/1/20 to 12/8/20]						
51	Task	Task 2: DMS Public Access Enhancements	9 mons	Wed 4/1/20	Tue 12/8/20	5055	[Gantt bar from 4/1/20 to 12/8/20]						
52	Task	d) Monitoring / Assessment					[Gantt bar from 4/1/20 to 12/8/20]						

Project: Draft Schedule  
Date: Fri 10/11/19

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

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