

## Philip Bachand

---

**From:** grantsadmin@water.ca.gov  
**Sent:** Friday, November 8, 2019 4:17 PM  
**To:** Philip Bachand  
**Subject:** GRanTS Notification - Proposal Received

Your proposal has been successfully submitted to the Department of Water Resources for the following:

PSP Name: SGM Planning - Round 3

Organization Name: Sierra Valley Groundwater Management District Proposal Name: GSP Development and Critical Programs for Efficient and Effective Sustainable Groundwater Management under an Adaptive Management Approach  
Program Name: Sustainable Groundwater Management (SGM) Grant Program Amount Requested: \$2,000,000.00 Date Submitted: 11/8/2019 4:16:31 PM

Please login to <https://grants.water.ca.gov> for more information.

We would like to know whether you had any problems during your proposal creation and submission. Take the Survey here [https://docs.google.com/forms/d/e/1FAIpQLSc-95nQM0Sn100pFOLMgSY-3yLsDye8c5GqpXjDwZ8\\_C5exRg/viewform?c=0&w=1](https://docs.google.com/forms/d/e/1FAIpQLSc-95nQM0Sn100pFOLMgSY-3yLsDye8c5GqpXjDwZ8_C5exRg/viewform?c=0&w=1). Your feedback is appreciated and will help us improve GRanTS.

GRanTS Administrator,  
Department of Water Resources  
888-907-4267  
[GRanTSAdmin@water.ca.gov](mailto:GRanTSAdmin@water.ca.gov)

## Proposal Full View

Applicant Information				
<b>Organization Name*</b>	Sierra Valley Groundwater Management District			
<b>Point Of Contact</b>	<b>First Name:*</b>	Jenny	<b>Last Name:*</b>	Gant
	<b>Email:*</b>	sierravalleygmd@sbcglobal.net		
	<b>Division Name:</b>	SVGMD Board Clerk	<b>Phone:*</b>	(530) 4146831 Ext:
	<b>Address Line 1:*</b>	P.O. Box 88, Chilcoot, CA 96105	<b>Address Line 2:</b>	
	<b>City:*</b>	Chlcoot	<b>State:*</b>	California
	<b>Zip:*</b>	96105		
<b>Point Of Contact Position Title*</b>	Board Clerk			
<b>Proposal Name*</b>	GSP Development and Critical Programs for Efficient and Effective Sustainable Groundwater Management under an Adaptive Management Approach			
<b>Proposal Objective*</b>	<p>The proposal's objectives are 1) to develop a rigorous, SGMA-compliant, on-time and transparent GSP; 2) to initiate adaptive management programs for its implementation; and 3) to assemble a qualified professional team to lead these efforts for SVGMD. Complex hydrology and geology complicate the GSP effort. Geologic faults and layered heterogenous basin sediments affect aquifer hydraulic connectivity and conductivity. Mountainous terrain complicates subsurface flow modeling and quantification. Climate and weather factors (e.g., W-E and S-N precipitation gradients, changing climate) limit accuracy of precipitation calculations. Annual hydrologic uncertainty from these factors likely exceeds the magnitude of sustainable yield itself and compromise the utility of hydrologic models and tools to inform on sustainability strategies. This proposal targets developing for SVGMD a robust, defensible and informative monitoring network and the necessary data, decision tools and regulatory framework to manage groundwater and to guide and enforce adaptive management decisions. The approach will be designed to be efficient, informative, actionable and cost-effective to promote a sustainable process within the financial resources of Sierra Valley Basin, designated a DA throughout. Sierra Valley (SV) is home to a unique ranching heritage and rich ecological and cultural resources. This project will seek to move groundwater sustainability forward in a way that preserves Sierra Valley's heritage and resources. Finally, this proposal will engage stakeholders outside the basin, particularly the USFS which manages most the public lands that compose 57% of the watershed and DWR which manages Frenchman Dam and relies upon the Upper Feather River Watershed for the State Water Project. Both agencies have interest in Sierra Valley's groundwater sustainability. This project will seek to form cooperative and mutually beneficial land and water resource management strategies.</p>			

Budget Information	
<b>Other Contribution</b>	\$0.00
<b>Local Contribution</b>	\$538,186.00
<b>Federal Contribution</b>	\$0.00
<b>Inkind Contribution</b>	\$0.00
<b>Amount Requested*</b>	\$2,000,000.00
<b>Total Proposal Cost*</b>	\$2,538,186.00

Geographic Information						
<b>Latitude*</b>	<b>DD(+/-):</b>	39	<b>MM:</b>	45	<b>SS:</b>	6
<b>Longitude*</b>	<b>DD(+/-):</b>	-120	<b>MM:</b>	18	<b>SS:</b>	20
<b>Longitude/Latitude Clarification</b>						
<b>Location</b>	Intersection of Dyson Ln (A24) and Harriet Ln					
<b>County*</b>	Plumas, Sierra					
<b>Ground Water Basin</b>	5-012.01 Sierra Valley-Sierra Valley					
<b>Hydrologic Region</b>	Sacramento River					
<b>Watershed</b>	Feather River (Upper Middle Fork Feather River)					

Legislative Information	
<b>Assembly District*</b>	1st Assembly District
<b>Senate District*</b>	1st Senate District
<b>US Congressional District*</b>	District 1 (CA)

## Project Information

<b>Project Name: Sierra Valley Basin GSP Development and Critical Programs for Efficient and Effective Sustainable Groundwater Mgmt. under an Adaptive Mgmt. Approach</b>	
<b>Implementing Organization</b>	Sierra Valley Groundwater Management District
<b>Secondary Implementing Organization</b>	
<b>Proposed Start Date</b>	2/3/2020
<b>Proposed End Date</b>	10/31/2022
<b>Scope Of Work</b>	The Project has three Components (C): C1. Grant Agreement Admin: Overall project management and administration. C2. GSP Development: Compliance with all subarticles. Completion of related outreach/engagement, monitoring and submittal activities. C3. Implementing GSP Adaptive Management Programs and Strategies: Monitoring network implementation. Technical materials to motivate local and regional sustainable land and water resources management.
<b>Project Description</b>	For SVGMD, this project 1) develops a rigorous, SGMA-compliant, on-time and transparent GSP; 2) initiates adaptive management programs for its implementation; and 3) assembles a qualified professional team to lead these efforts. The GSP centers around an adaptive management approach rather than modeling tools because of Sierra Valley's complex hydrology and geology that introduce uncertainty and error into these tools: e.g, 1) geologic faults and layered heterogenous basin sediments affecting aquifer hydraulic connectivity and conductivity; 2) mountainous terrain complicating subsurface flow modeling and quantification; 3) precipitation gradients and changing climate limiting precipitation calculations. Annual hydrologic uncertainty from these factors likely exceeds the magnitude of sustainable yield itself. The project develops a robust, defensible and informative monitoring network and the necessary data, decision tools and regulatory framework to guide and enforce adaptive management decisions for sustainable groundwater management. The approach will be designed to be efficient, informative, actionable and cost-effective to promote a sustainable process within the financial resources of Sierra Valley Basin, designated a DA throughout. With Sierra Valley home to a unique ranching heritage and rich ecological and cultural resources, this project will seek to move forward in a way that preserves the region's heritage and resources. Finally, this project will engage stakeholders outside the basin, particularly the USFS which manages most the public lands that compose 57% of the watershed and DWR which manages Frenchman Dam and relies upon the Upper Feather River Watershed for the State Water Project. This project will seek to form cooperative and mutually beneficial land and water resource management strategies.
<b>Project Objective</b>	1. With broad stakeholder engagement, develop rigorous, defensible and cost-effective GSP within SV's financial resources. 2. Begin implementing GSP with engineering, implementation and baseline sampling of the monitoring network; and technical materials to motivate land/water resource management partnerships with the USFS and DWR. Both conduct watershed land/water management activities that likely affect basin groundwater sustainability.

### Project Benefits Information

No records found.

### Budget Information

<b>Other Contribution</b>	\$0.00
<b>Local Contribution</b>	\$538,186.00
<b>Federal Contribution</b>	\$0.00
<b>Inkind Contribution</b>	\$0.00
<b>Amount Requested*</b>	\$2,000,000.00
<b>Total Project Cost*</b>	\$2,538,186.00

### Geographic Information

<b>Latitude*</b>	<b>DD(+/-):</b>	39	<b>MM:</b>	45	<b>SS:</b>	6
<b>Longitude*</b>	<b>DD(+/-):</b>	-120	<b>MM:</b>	18	<b>SS:</b>	20
<b>Longitude/Latitude Clarification</b>	Note 5-012.01 is Sierra Valley?Sierra Valley subbasin per Bulletin 118					
<b>Location</b>	Intersection of Dyson Ln (A24) and Harriet Ln					
<b>County*</b>	Plumas, Sierra					
<b>Ground Water Basin</b>	5-012.01 Sierra Valley-Sierra Valley					

<b>Hydrologic Region</b>	Sacramento River
<b>Watershed</b>	Feather River (Upper Middle Fork Feather River)

<b>Legislative Information</b>	
<b>Assembly District*</b>	1st Assembly District
<b>Senate District*</b>	1st Senate District
<b>US Congressional District*</b>	District 1 (CA)

## Section : Questions

### **Q1. Project Description:**

**Provide a brief abstract of the proposal. This abstract must provide an overview of the proposal including the main issues and priorities addressed in the proposal. (25 words or less)\***

The proposal develops the Sierra Valley sub-basin GSP and begins its implementation through engineering/establishing monitoring networks and through developing local/regional adaptive management programs.

### **Q2. Previous Funding:**

**Has the applicant received prior funding through the Proposition 1 SGWP Round 2 grant?\***

- a)  Yes  
b)  No

**If so, how much funds did the applicant receive?**

NA

### **Q3. Project Representative:**

**Provide the name and details of the person responsible for signing and executing the grant agreement for the applicant. Persons that are subcontractors to be paid by the grant cannot be listed as the Project Representative. Other entities included in the GSA can be listed here.\***

Einen Grandi, Chairman, Sierra Valley Groundwater Management District GSA, P.O. Box 88, Chilcoot, CA 96105. 530-428-5002.  
sierravalleygmd@sbcglobal.net

### **Q4. Project Manager:**

**Provide the name, title, and contact information of the Project Manager from the applicant agency or organization that will be the day-to-day contact on this application.\***

Jenny Gant, SVGMD Board Clerk, (530) 414-6831, sierravalleygmd@sbcglobal.net, P.O. Box 88 Chilcoot, CA 96105

### **Q5. Eligibility:**

**Has the applicant met the requirements of DWR's CASGEM Program?\***

- a)  Yes  
b)  No

### **Q6.1. Eligibility:**

**Is the applicant an agricultural water supplier?\***



- a)  Yes
- b)  No

**Q6.1.a Eligibility:**

**If yes, has the applicant submitted a complete Agricultural Water Management Plan (AWMP) to DWR?**

- a)  Yes
- b)  No

**Q6.1.b Eligibility:**

**If yes, has the AWMP been verified as complete by DWR?**

- a)  Yes
- b)  No

**Q6.1.c Eligibility:**

**If the AWMP has not been submitted, explain and provide the anticipated submittal date.**

NA

**Q7.1. Eligibility:**

**Is the applicant an urban water supplier?\***

- a)  Yes
- b)  No

**Q7.1.a Eligibility:**

**If yes, has the applicant submitted a complete Urban Water Management Plan (UWMP) to DWR?**

- a)  Yes
- b)  No

**Q7.1.b Eligibility:**

**If yes, has the UWMP been verified as complete by DWR?**

- a)  Yes
- b)  No

**Q7.1.c Eligibility:**

**If the UWMP has not been submitted, explain and provide the anticipated date for submittal.**

NA

**Q8.1 Eligibility:**

**Is the applicant a surface water diverter?\***

- a)  Yes
- b)  No

**Q8.1.a Eligibility:**

If yes, has the applicant submitted to the SWRCB their surface water diversion reports in compliance with requirements outlined in Part 5.1 (commencing with §5100) of Division 2 of the Water Code?

- a)  Yes
- b)  No

**Q8.1.b Eligibility:**

If the reports have not been submitted, explain and provide the anticipated date for meeting the requirements.

NA

**Q9. Eligibility:**

Does the proposal include any of the following activities:

- 1.) The potential to adversely impact a wild and scenic river or any river afforded protection under the California or Federal Wild and Scenic Rivers Act
- 2.) Acquisition of land through eminent domain
- 3.) Design, construction, operation, mitigation, or maintenance of Delta conveyance facilities
- 4.) Acquisition of water except for projects that will provide fisheries or ecosystem benefits or improvements that are greater than required currently applicable environmental mitigation measures or compliance obligations
- 5.) Pay any share of the costs of remediation recovered from parties responsible for the contamination of a groundwater storage aquifer
- 6.) Projects or groundwater planning activities associated with adjudicated groundwater basins.

If yes, the project is not eligible for grant funding.\*

- a)  Yes (not eligible for grant funding)
- b)  No

**Q10. Eligibility: Consistency with California SB 985– Stormwater Resource Planning Act:**

To satisfy SB 985 requirements, stormwater and dry weather capture project must be listed in a SWRP that is consistent with the relevant code provisions enacted by SB 985 (Water Code §10562 (b)(7)) as determined by the SWRCB.

- a)  This Project is Consistent

**Q11. DA Cost Share Waiver or Reduction:**

Are you applying for cost share waiver or reduction as a DA? Fill out Attachment 6 – DAC, SDAC, and/or EDA, as appropriate.\*

- a)  Yes; See Attachment 6
- b)  No

**Q12. Certification:**

By submitting the application, the Project Director is certifying that:

- a) The applicant is an eligible entity;
- b) He/She is aware that any attachment exceeding the page limit listed in the attachment templates will not be reviewed;
- c) He/She is aware that, once the proposal is submitted in GRanTS, any privacy rights and other confidentiality protections offered by law with respect to the application package and project location are waived; and
- d) He/She has read and agrees to all of the Terms and Conditions of the grant agreement.\*

- a)  Yes (Certified)
- b)  No

**Section : Climate Risk in Investments**

**Climate Risk in Investment**

**Q13: Does the organization have a strategic business plan?**

- a)  Yes
- b)  No

**If Yes, please submit a copy.**

**Q14: Has the organization conducted a climate change vulnerability assessment?**

- a)  Yes
- b)  No

**If Yes, please submit a copy.**

**Q15: Does the organization have a main contact person for climate change?**

- a)  Yes
- b)  No

**If Yes, to what position in the origination does that person report?**

NA

**Q16: Has the organization considered the risk of climate change in its capital reserves and investments? (Open ended; one-three paragraphs, with specific examples, should suffice).**

No.

## Section : Attachments

---

**Attachment 1: Authorizing Documentation (e.g. resolution)**

**Upload Authorizing Documentation here. The Attachment is mandatory.\***

Last Uploaded Attachments: Att1\_SGM\_AuthDoc\_1of1.pdf

**Attachment 2: Eligibility Applicant Documentation**

**Upload Eligibility Applicant Documentation here. The attachment is mandatory.\***

Last Uploaded Attachments: Att2\_SGM\_EligDoc\_1of1.pdf

**Attachment 3: Work Plan**

**Upload Work Plan here. (Applicant MUST use supplied template) The attachment is mandatory.\***

Last Uploaded Attachments: Att3\_SGM\_WrkPlan\_1of3.pdf, ATT3\_SGM\_WrkPlan\_2of3.pdf, ATT3\_SGM\_WrkPlan\_3of3.pdf

**Attachment 4: Budget**

**Upload Budget here. (Applicant MUST use supplied template) The attachment is mandatory.\***

Last Uploaded Attachments: Att4\_SGM\_Budget\_1of1.pdf

**Attachment 5: Schedule**

**Upload Schedule here. (Applicant MUST use supplied template) The attachment is mandatory.\***

Last Uploaded Attachments: Att5\_SGM\_Schedule\_1of1.pdf

**Attachment 6: SDAC, DAC, and/or EDA**

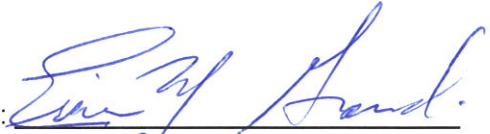
**Upload SDAC, DAC, and/or EDA (as applicable) here.**

Last Uploaded Attachments: Att6\_SGM\_SDAC-DAC-EDA\_1of2.pdf,Att6\_SGM\_SDAC-DAC-EDA\_2of2.pdf

RESOLUTION NO. 19-05

Resolved by the Sierra Valley Groundwater Management District Board of Directors, 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 to enter into an agreement to receive a grant for the: GSP Development and Critical Programs for Efficient and Effective Sustainable Groundwater Management under an Adaptive Management Approach. The Chairman of the Sierra Valley Groundwater Management District, or designee is hereby authorized and directed to prepare the necessary data, conduct investigations, file such application, and execute a grant agreement with California Department of Water Resources. Passed and adopted at a meeting of the Sierra Valley Groundwater Management District on October 21, 2019.

Authorized Original Signature: \_\_\_\_\_



Printed Name: \_\_\_\_\_

Eileen M. Grandi

Title: \_\_\_\_\_

SVGMD chairman

Clerk/Secretary: \_\_\_\_\_

Jenny Grant

**CERTIFICATION**

I do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the Sierra Valley Groundwater Management District held on October 21, 2019.

Clerk/Secretary: \_\_\_\_\_

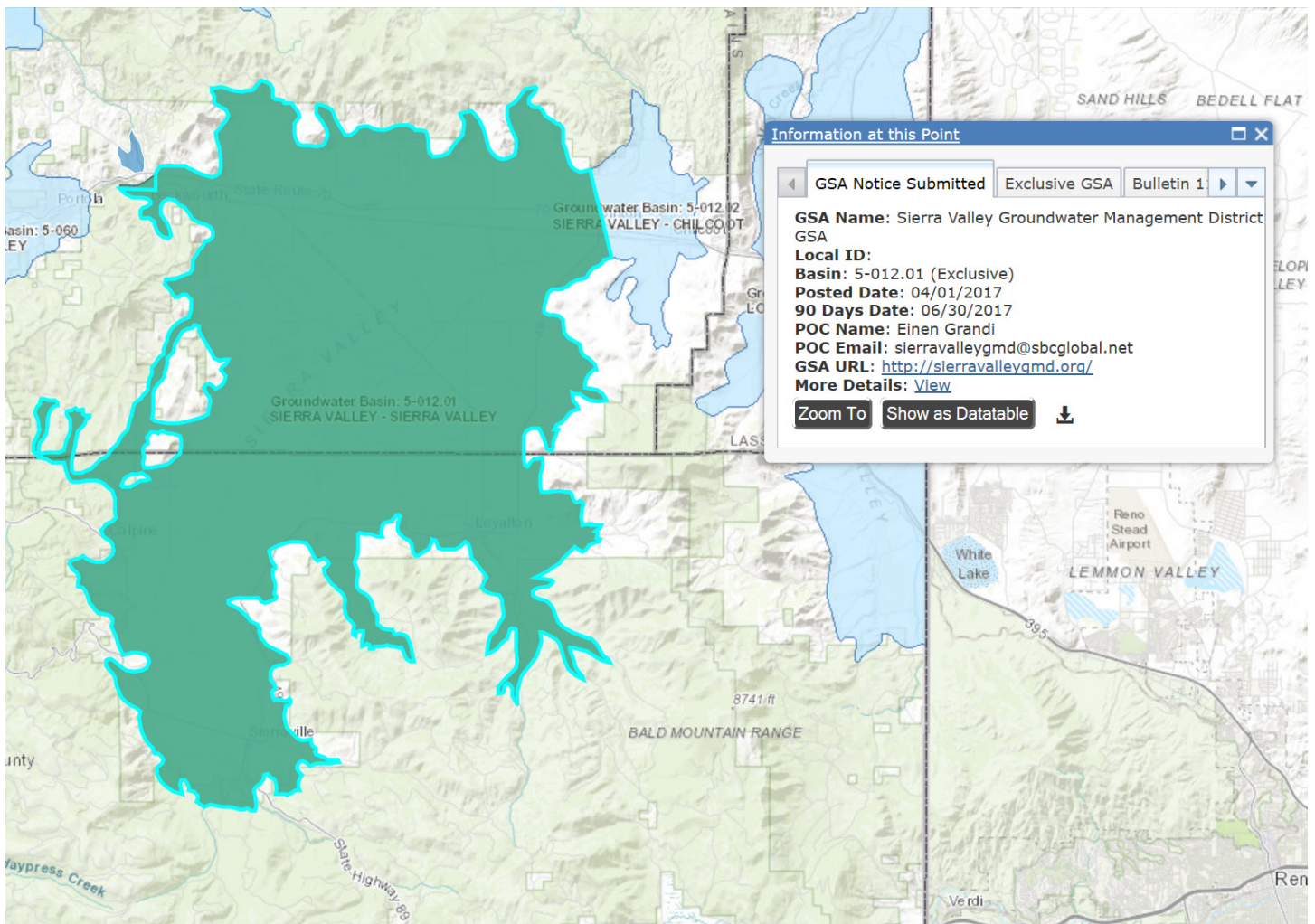
Jenny Grant

## Attachment 2. Eligibility Documentation

The applicant must provide the following information, as applicable. Details for the following eligibility

Eligible applicants for Proposition 1 funding under Category 2 proposals (Groundwater Sustainability Plan preparation and development) include “a GSA, a member agency of a GSA, or a member agency of an approved Alternative to a GSP”.

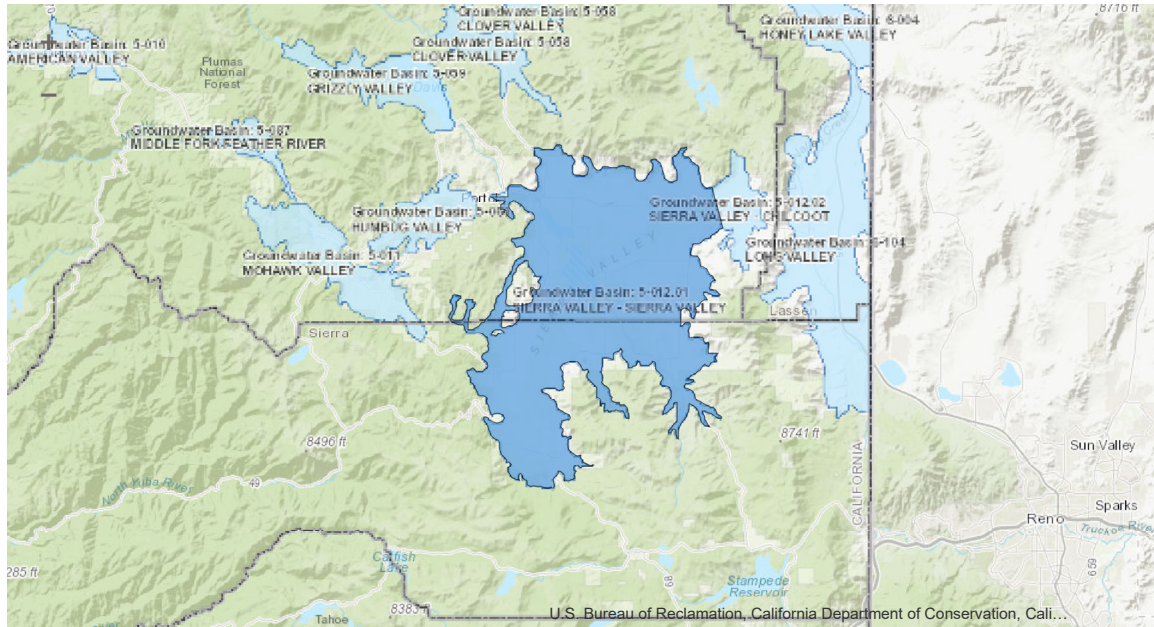
The applicant for the proposed Project, Sierra Valley Groundwater Management District (SVGMD), is the Groundwater Sustainability Agency (GSA) for Sierra Valley Sub-basin 5-12.01. The Point of Contact for the GSA is Einen Grandi. Attached to this page is detailed GSA information on the SVGMD GSA.





# Sierra Valley Groundwater Management District GSA

(5-012.01 SIERRA VALLEY SIERRA VALLEY)



## Point of Contact Information

Einen Grandi, Chairman  
Sierra Valley Groundwater Management District GSA  
P.O. Box 88 | Chilcoot, CA 96105  
530-428-5002 | [sierravalleygmd@sbcglobal.net](mailto:sierravalleygmd@sbcglobal.net)  
<http://sierravalleygmd.org/>

## A GSA Eligibility Determination

1. Provide a description of your local agency's water supply, water management, or land use responsibilities within the groundwater basin / basins intend to manage.

The Sierra Valley Groundwater Management District (SVGMD) was created through California special act legislation (SB 1391 in 1980) for the specific purpose of implementing sustainable management and regulation of groundwater aquifers, underlying its jurisdiction within Sierra Valle (including Department of Water Resources Bulletin 118 subbasin 5-12.01). The SVGMD was formed under a joint powers agreement between Plumas County and Sierra County.

2. Are you an "exclusive local agency" listed in [Water Code §10723\(c\)](#)?

Yes

Select exclusive local agency name.

Sierra Valley Groundwater Management District GSA

Upload your statutory area boundary shape file if you are an exclusive local agency.

[SVGMD District Boundary.zip \(4.8kB\)](#) Uploaded on 03/31/2017 at 04:53PM

## B Decision to Become a GSA

1. Please enter the date your local agency, or agencies, decided to become or form a GSA.

03/13/2017

2. Upload a copy of the [Government Code §6066](#) notice.

3. Upload a copy of resolution forming the new agency.

[SVGMD GSA notification.pdf \(2.1MB\)](#) Uploaded on 03/31/2017 at 04:44PM

4. If desired, please upload or provide additional information related to your local agency's decision to become or form a GSA.

### C Type of GSA Formation and Contact Information

GSA Name

Sierra Valley Groundwater Management District GSA

1. Select a Point of Contact (POC) for your GSA.

Einen Grandi

2. If you anticipate submitting multiple GSA notices on behalf of your local agency/GSA, please consider adding a "Local ID" for reference purpose distinctly identify separate areas you intend to manage.

3. Is this a Single-Agency or Multiple-Agency GSA?

SINGLE

### D Map & Service Area Boundaries

1. Select Basin(s)/Subbasin(s) to be managed by the GSA.

5-012.01 SIERRA VALLEY SIERRA VALLEY

2. Upload a PDF map that clearly defines: (1) the service area boundaries of each local agency that is part of your GSA; and (2) the boundaries of basin(s) or portion of the basin(s) your GSA intends to manage.

[District AND Subbasin boundaries.pdf \(163.6kB\)](#) Uploaded on 03/31/2017 at 01:35PM

3. Upload service area boundary GIS shape file.

[SVGMD District Boundary.zip \(4.8kB\)](#) Uploaded on 03/31/2017 at 04:50PM

4. Upload GSA area boundary GIS shape file.

[GSA Boundary.zip \(30.4kB\)](#) Uploaded on 03/31/2017 at 04:51PM

5. If desired, please provide information that clarifies your service area boundary and GSA boundary, if those boundaries are different.

[District AND Subbasin boundaries.pdf \(163.6kB\)](#) Uploaded on 03/31/2017 at 04:59PM

### E Required Documents

1. Provide a list of interested parties developed pursuant to [Water Code Section 10723.2](#) and an explanation of how their interests will be considered in the development and operation of the GSA and the development and implementation of the GSP.

The SVGMD has identified the following interested parties as defined in Water Code Section 10723.2. The SVGMD will consider all beneficial uses and users of groundwater within the Sierra Valley Groundwater Subbasin. The SVGMD will engage with and encourage feedback from interested parties during GSP development. While this list may be altered during GSP development, current interested parties include: All property owners in SVGMD and Sierra Valley Basin outside District; all Agricultural Producers; City of Loyalton; City of Loyalton Planning Commission; Sierraville Public Utilities District; Calpine Water District; Sierra County Water System; Plumas County Planning Department; Plumas County Planning Commission; Plumas County Flood Control District and Water Conservation District; Sierra County Planning Department; Sierra County Planning Commission; Sierra County Flood Control and Water Conservation District; US Forest Service; BLM; Grizzly Ranch CSD; California Dept. of Fish & Wildlife; Plumas Audubon Society; The Nature Conservancy; Plumas-Sierra Community Food Council; Plumas-Sierra Cattlemen's Association; Farm Bureau (local); Tribal contact lists (Mountain Maidu, Washoe); and the Sierra Valley Watermaster.

2. Provide a list of the other agencies managing or proposing to manage groundwater within the basin, or upload a document or map that provides same information.

Plumas County has passed a resolution to become the GSA for the small section of the Sierra Valley sub-basin that extends outside Sierra Valley Groundwater District boundaries.

[Plumas County GSA map.pdf \(1.7MB\)](#) Uploaded on 03/31/2017 at 01:45PM



3. Provide a description or upload a copy of any new by laws, ordinances, or new authorities adopted by the local agency.

No new bylaws, ordinances, or other authorities were adopted in conjunction with the District's decision to become the GSA.

**ATTACHMENT 3**  
**WORK PLAN – TEMPLATE**

**Grant Proposal Title:** GSP Development and Critical Programs for Efficient and Effective Sustainable Groundwater Management under an Adaptive Management Approach

**Applicant:** Sierra Valley Groundwater Management District (SVGMD)

**PROJECT JUSTIFICATION**

**A. Project Description**

**Project Goals and Objectives**

The proposed project's goal is to create and begin implementing a plan to move Sierra Valley Basin (SVB : Sierra Valley – Sierra Valley sub-basin 5-012.01) towards groundwater sustainability in a way that –

- is cost-effective, efficient and practical;
- protects and supports the region's unique ranching, environmental and ecological heritage; and
- complements and leverages regional efforts associated with improving land and water management, particularly in the face of climate change pressures (e.g., increased droughts, increased fire, rising snow levels).

To achieve this goal, the proposal lays out two primary objectives: To develop a Groundwater Sustainability Plan (GSP) (Component 2) and to implement the GSP and Adaptive Management Strategies (Component 3).

**Develop a Groundwater Sustainability Plan (GSP) (Component 2).** The proposal identifies the tasks and associated deliverables for GSP development. These tasks and deliverables will lead to a GSP that

- Meets the requirements identified in Sustainable Groundwater Management Act (SGMA) regulations (GSP Emergency Regulations, Title 23, Division 2, Chapter 1.4, Subchapter 2)<sup>1</sup>;
- Is consistent with mandated ([Water Code Section 10729\(d\)](#)) Best Management Practices (BMPs) and Guidance Documents developed by DWR to assist Groundwater Sustainability Agencies (GSAs) in the development of Groundwater Sustainability Plans (GSPs);
- Develops appropriate tools and protocols to effectively and cost-effectively implement the program and plan;
- Develops a legal and regulatory framework for enforcement for each applicable sustainability indicator; and
- Provides a roadmap to groundwater sustainability in the SVB.

The deliverables from this effort will be measurable compliance with this objective and include GSP development, associated stakeholder engagement and outreach and the development of necessary technical and reporting standards.

**Implement the GSP and Adaptive Management Strategies (Component 3).** The DWR Basin Prioritization identifies groundwater, groundwater dependent ecosystems, and subsidence as the primary sustainable indicators needing to be addressed, while also citing basin complexity. Several technical studies have provided data regarding these sustainability indicators<sup>2</sup>. From these technical reports and studies and from publicly available data, Bachand et al (2019 a,b) have summarized key data gaps and suggested opportunities for local and regional adaptive management, including greater engagement and collaboration with water and land resource agencies in the Sierra Valley watershed. This objective, as detailed in Component 3, begins two parallel efforts:

- Implementation of monitoring networks for subsidence, groundwater level and pumping, and groundwater dependent ecosystems based on monitoring network determinations from the GSP (Component 2); and
- Implementation of initiatives to guide the SVB with regard to local and regional adaptive management strategies to improve SVB groundwater sustainability.

Both these objectives will be measurable by the completion of associated deliverables (e.g. engineering, implementation

---

<sup>1</sup> Component 1 is for Grant Agreement Administration. The Grant Agreement Manager will serve as the General Project Manager and be responsible for ensuring all components are on schedule and that the component teams collaborate and share information as required.

<sup>2</sup>e.g., DWR, Historical GW Basin Conditions (1983); VESTRA Resources Inc., Watershed Ecology & History (2005); K. Schmidt, GW Levels Updates (2003, 2005, 2012, 2015, 2017); B. Bohm, Aquifer Delineation & Geohydrology (2016); C Dib et. al, GW Basin Hydrologic Model (2016); Bachand & Associates, SGMA Compliance Assessment (2019); Bachand & Associates, Current GW Basin Conditions & Recharge Opportunities (2019)

and data collection from monitoring networks, technical memorandums). Together, these goals and objectives target basin needs that are discussed below in more detail:

- A sustainable vision and goals for Sierra Valley and the SVB;
- Defining unreasonable and significant for sustainability indicators;
- Effective, efficient and cost-effective sustainable management criteria;
- Capacity building and tools as related to data collection, management and use, as well as expertise and skills; and
- Broad stakeholder engagement and the development of agreements.

## **Project Overview and Background**

### **Overview**

The Sierra Valley groundwater basin lies at about 4950 ft, covering an area of 117,700 acres, and is situated at the juncture between the Sierra Nevada and Cascade ranges, roughly 30 miles northeast of Truckee. Surrounded by heavily faulted volcanic and granitic peaks, the groundwater basin is filled with layers of lacustrine and upland sediments, capable of storing upwards of 7 million ac-ft (MAF) of water and provides water for many cattle and hay ranches (DWR, 2003). The 350,000-acre watershed encompassing Sierra Valley is the headwaters of the Middle Fork of the Feather River, an important water source for the State Water Project's Oroville Reservoir. The valley is also a hotspot for wildlife diversity and its wetlands form critical habitat for migratory birds, making the valley a top priority for conservation.

The Sierra Valley Groundwater Management District (SVGMD) and Plumas County have each elected to assume the responsibilities of GSAs and have signed a Memorandum of Understanding (see Letters of Support) to co-develop a unified GSP for the SV sub-basin. The SVGMD GSA services the majority of the sub-basin, except for a small slice in the west of the basin outside of the District's boundaries for which Plumas County GSA has taken responsibility. This application is submitted by the SVGMD to develop the GSP for the Sierra Valley sub-basin 5-012.01 (Map 1).

### **Background**

Since the 1960s, groundwater levels, particularly for deeper groundwater approximately 300 feet or more below ground surface, have been in general decline in Sierra Valley (SV) due to pumping and overdraft (Map 2). East and northeast of the faults, shallow groundwater is commonly 10 – 20 feet below ground surface but deep groundwater is commonly 30 – 70 feet below ground surface (Bachand et al, 2019a,b). Aside from decreasing groundwater levels, groundwater overdraft has been linked to subsidence and loss of artesian wells. Dropping groundwater levels may also reduce surface flows in local streams and creeks. Alterations to stream flows could impact local wildlife by changing habitat availability. Sierra Valley supports the largest wetland complex in the Sierra Nevada (approximately 20,000 acres) and 30,000 acres of montane meadow (FRLT 2019). This wetland and wet meadow habitat benefits 280 bird species, including 25 special status bird species, and over 1200 plant species, 18% of California's flora (FRLT 2019).

SGMA mandates active monitoring and management of a groundwater basin's water resources. The regulation's goal is to achieve sustainability in a basin by preventing the significant and unreasonable occurrence of any of six sustainability indicators: 1) groundwater level declines, 2) groundwater storage reductions, 3) seawater intrusion, 4) water quality degradation, 5) land subsidence and 6) surface water depletions. GSAs define when groundwater conditions become significant and unreasonable, at which point they become undesirable effects of groundwater use (DWR, 2016b).

DWR (2019) designated the SVB a medium priority basin due to the potential for undesirable effects, notably declining groundwater levels, subsidence and surface water depletion. The SVB received additional priority points for challenges to groundwater management outside the GSA's (SVGMD's) control (DWR 2019). Challenges include precipitation and climate change, reservoir operations, and upland watershed management. Key hydrologic findings are presented in Bachand et al (2019):

- Greater water availability (groundwater, streamflow, rainfall and snowfall) occurs in the western and southwestern valley and less in the northern, northeastern and eastern valley. Irrigated agriculture is more prevalent in the latter regions.
- Deep groundwater is more sensitive and affected by agricultural pumping. Throughout the SVB, fine grained low-permeability layers (aquitards) limit downward recharge flows to the deeper aquifer.
- Groundwater declines have occurred since the 1970s. Deep groundwater depressions are found in the north and northeastern valley. Long-term groundwater declines have not occurred in deep and shallow groundwater elevations in the western and southwestern SVB. Faulting is limiting lateral groundwater flows and connectivity in the SVB.
- Variances in seasonal and annual precipitation and evapotranspiration (ET) directly affect surface and subsurface flows into the valley and directly and indirectly affect annual groundwater pumping volumes. Climate change will likely increase groundwater demand by decreasing late summer surface water availability, increasing crop ET, and reducing groundwater recharge.

- Frenchman Dam, constructed in the 1960s, has changed surface flow regimes in ways that likely reduce recharge opportunities. Leveling surface flow deliveries during irrigation season through spring impoundments has likely promoted agricultural growth.

These groundwater changes also have led to land subsidence throughout the valley (DWR, 1983; Farr et. al, 2016). Direct measurements in the 1980's revealed several feet of subsidence, corresponding with areas of overdraft and resulting in damage to private well infrastructure (DWR, 1983). A Caltrans survey of roads in Sierra Valley also found that up to 2 feet of subsidence occurred between 2012 and 2016, though no public infrastructure damage was reported (FRLT, 2019). Publicly available, DWR-funded, aerial Interferometric Synthetic Aperture Radar (InSAR) surveys show that six inches of subsidence occurred between April 2015 and 2016 in the northeast of Sierra Valley (Farr et. al, 2016). These surveys indicate Sierra Valley subsidence is linked with groundwater level declines and areas with high annual pumping are at risk for further subsidence.

Map 2 shows the current groundwater level and subsidence conditions based on recent data. Error! Bookmark not defined.

### Complexity Adds Uncertainty to Modeling and Management

Complex geology creates challenges to understanding and managing the valley's hydrology. Layered fine-grained lacustrine silts and clays effectively create shallow and deep groundwater zones and impede vertical hydrologic flow and connectivity, limiting the rate and/or depth of water infiltration from surface recharge in the SVB. Geologic features such as faults limit recharge flowing from the western valley to the northeast, thus forming boundaries for overdraft zones. Faults limit hydrologic flow paths from the watershed and laterally across the SVB, though these faults are not well characterized and introduce uncertainties regarding the volume, timing and locations of groundwater flow into the basin (Bachand et al 2019a). Hydrology is further complicated by a gradient of less precipitation and greater ET from west to east; by annual precipitation variability; and by hydrologic uncertainties beginning to occur from climate change (e.g., precipitation, ET, temperature, snowline).

The total annual surface water input to SVB is approximately 189,000 Acre-Feet (AF), (Dib et al 2016). Bachand et al (2019b) estimate Sustainable Yield for the northern to eastern valley to be in the range of 5000 – 6000 AF, which is about 40% below the average annual groundwater pumping (8300 AF; 2000 – 2018). The temporal and spatial variability of precipitation, as well as unquantified groundwater inflows, create uncertainty in this estimate. This uncertainty affects the utility of numerical models and other sophisticated modeling tools because errors associated with evaporation, precipitation, and subsurface flows are likely to exceed the magnitude of Sustainable Yield itself.

Given the hydrologic and geologic complexity found in Sierra Valley, the most promising strategy to achieve sustainability is an adaptive management approach, with well-defined protocols and methods to assess success. Built-in to this approach will be a within-basin enforcement framework with a defined blueprint for corrective actions. To guide management decisions and strategies and provide sufficient and defensible (scientifically, legally) information, the SVGMD will need more comprehensive and robust data, including protocols for its collection, management and analyses.

### **Project Needs**

A number of project needs exist related to groundwater sustainability, stakeholder engagement, and capacity buildings (e.g. tools, expertise).

### **Sustainability Vision and Goal**

Sierra Valley has a rich ranching heritage **AND** rich ecological and cultural resources. Portions of the Middle Fork of the Feather River (MFFR) are designated Wild and Scenic. As such, they are federally protected from flow impairments and popular for water dependent recreation. Sierra Valley's wetlands and meadows benefit 300 bird species and 1200 plant species as discussed earlier, making it a top conservation priority (e.g., The Nature Conservancy 1999; Audubon 2008; NRCS 2016). The native people of the Washoe, Paiute, and Maidu tribes claim Sierra Valley as part of their ancestral territory (Waechter and Norton 2002; Vestra 2005). They have actively participated in watershed and drinking water improvement projects to implement the Upper Feather River Integrated Regional Water Management Plan (UFRIRWMP 2016), a stakeholder process integrating local, regional, state and federal stakeholders to improve resource planning and management across the Upper Feather River Basin (UFRB). Over 30,000 acres of private land in Sierra Valley are protected with conservation easements that conserve ranching and its culture and the valley's extraordinary ecological richness. SGMA is an opportunity to develop a vision for sustainability that addresses both the sustainability of Sierra Valley's unique natural resources and the sustainability of its culture, history and economy.

### **Defining Unreasonable and Significant for Sustainability Indicators**

The SVB basin prioritization (DWR 2019) classifies the SVB as a medium priority basin, citing groundwater reliance and level declines, measured subsidence, potential effects to surface water beneficial uses and groundwater dependent ecosystems, and factors outside of SVB control complicating groundwater management. Such factors include the effects of climate change on precipitation and hydrology, the existence and management of Frenchman Dam, and the management of public lands outside of the SVB that make up 57% of the watershed. Thus, key SVB sustainability indicators are

groundwater levels and storage, subsidence and interconnected surface water and groundwater. Water quality is also discussed but is currently considered less critical. A key need under this effort will be defining unreasonable and significant for each of these sustainability indicators and developing stakeholder inclusive strategies to mitigate or prevent these effects. Unreasonable and significant conditions for any sustainability indicator leads to an undesirable result.

### **Effective, Efficient and Cost-Effective Sustainable Management Criteria**

Compliance with SGMA has fixed costs for a GSA, including GSP development (\$1 - \$2M depending upon basin size and complexity, and on GSA distribution within the basin) and infrastructure and staff requirements. Basins requiring GSPs are predominantly concentrated in the southern Central Valley / San Joaquin Valley and south, and more lightly scattered along coastal regions and mountain fronts. While the fixed cost requirements of complying with SGMA overlay somewhat uniformly across all affected basins, some basins have significantly greater resources than others. Basins in the Central Valley and coastal regions have specialty crops that provide higher returns and generally cover larger geographical areas with larger numbers of agricultural operators. These factors allow greater distribution of costs. In contrast, the SVB is among a small group of basins with small ranching and farming populations and few (if any) high-value specialty crops. In Sierra Valley, ranching is the primary economic driver and hay the primary crop.

To be successful, the SGMA program in the SVB must address these financial and economic constraints. The program will need to be effective, informative, efficient and cost-effective. And the program will need to focus on capacity building as related to data collection, management and processing. This will require developing appropriate data tools and providing foundations for staff training.

### **Broad Stakeholder Engagement and the Development of Agreements**

Related to the above need, is the need to broaden stakeholder engagement to regional, state and federal stakeholders beyond the SVB, as required by SGMA. The basin prioritization (DWR 2019) recognizes that factors outside of the GSA's control complicate sustainable groundwater management and may affect groundwater hydrology. These factors include 1) Frenchman's Dam operation, 2) a changing climate with changing spatial and temporal precipitation trends and 3) resource management activities in the surrounding watershed. The valley floor is privately owned but 57% of the surrounding watershed consists of public lands owned by the US Forest Service, Bureau of Land Management or California Department of Fish and Wildlife. Public land management strategies to reduce fuel loads, restore forests and streams, and eliminate roads can benefit and potentially be leveraged with projects to improve regional groundwater conditions. Under SGMA, the federal government can enter into agreements with the GSA if there are shared interests in groundwater sustainability. As the headwaters of the MFFR which provides water to the State Water Project via Lake Oroville, the SVB is important to water deliveries throughout California.

Given the importance of the SVB to stakeholders beyond the basin's borders and groundwater sustainability's potential sensitivity to factors outside the GSA's control, a broad stakeholder engagement effort is needed to ensure the inclusion of local, state and federal agencies, tribal entities and other organizations. Every effort needs to be made to engage the various stakeholders discussed herein in developing collaborative and complementary resource management programs and priorities, and outside funding. Making progress towards broader stakeholder engagement needs to be a priority for the region; this proposal recommends funding to support the development of technical materials and programs to support this effort.

### **Tools for Development**

Tools are needed to support capacity building and data collection, processing and utilization. Such tools include:

- the development of Standard Operating Protocols (SOPs) to define data sampling, quality control, and documentation methods;
- a data management system (DMS) which includes standard reports that help managers, planners and stakeholders understand and act on data; and
- agreements and understandings that facilitate collaborative and complementary activities between SVGMD and other agencies and stakeholders.

The development of these tools is included in this application.

### **Components and their Integration**

The project includes three components which align with project objectives:

1. **Grant Agreement Administration.** Ensure that the SVGMD has a qualified, experienced professional in place to guide GSP planning and implementation over the next two years.
2. **GSP Development.** Develop a legally defensible GSP.
3. **Implement the GSP and Adaptive Management Strategies.** Develop adaptive management programs and strategies to support GSP implementation

### **Component 1**

More specifically, **Component 1** provides overall grant agreement management. For this project, the grant agreement manager will serve as the General Project Manager (General-PM) and oversee the progress of each component as well as their integration. Component 1 is to be led by an individual from an environmental / civil engineering firm with expertise in project management and experience in GSP development.

### **Component 2**

**Component 2** incorporates all of the requirements for developing the GSP as defined in the legislation and summarized in DWR guidance documents for GSP submittal: e.g., <sup>3 4</sup>

- Outreach, stakeholder engagement and facilitation;
- Administrative Information (Subarticle 1);
- Basin Setting (Subarticle 2);
- Sustainable Management Criteria (Subarticle 3);
- Monitoring Networks (Subarticle 4);
- Projects and Management Actions (Subarticle 5); and
- Technical and Reporting Standards

The GSP will include appendices documenting actions, milestones and achievements (e.g., coordination agreements, contact information, public meeting lists).

For Component 2, work in the basin has begun in developing the GSP<sup>5</sup> with primary focus on outreach, stakeholder engagement and facilitation; and on administrative information. Component 2 will be led by an environmental engineering firm with expertise in GSP development and associated skills/experience in Stakeholder Engagement and Facilitation, and technical reporting standards and tool development;

### **Component 3**

**Component 3** will develop adaptive management programs and strategies to support GSP implementation. The projects include the implementation and initial baseline monitoring of expanded data monitoring networks, and technical studies to inform and motivate local and regional sustainable resource management. The technical studies offer an opportunity to begin important adaptive management initiatives that study and assess potential and promising local and regional scale adaptive management. Component 3 will be led by an environmental / applied science firm with experience in data science, irrigation and hay production practices, data monitoring system.

Effectively, Component 1 is putting the expertise in place within SVGMD to guide the development and implementation of the GSP. Component 2 is developing the GSP and Component 3 is implementing the GSP.

Section C provides more information on the teams and their needed expertise. The engagement of more than one team of professionals will diversify the skill set of the team to better meet the requirements of the project and expedite the timeline for grant agreement implementation. Both teams will be encouraged to recruit local experts to assist in developing deliverables that are tailored to the unique needs and circumstances of SV.

#### **Expanded Data Monitoring Networks**

The SVB lacks sufficient data for effective and efficient groundwater management. A more robust monitoring network is needed to provide sufficient coverage within management areas to target sustainability indicators (e.g., groundwater level, subsidence) deemed to be at risk of becoming significant and unreasonable in each management area. Under Component 2, the SVGMD will define significant and unreasonable for each sustainability indicator. Expanded monitoring networks will be designed to efficiently and cost-effectively provide data that allows effective and informed decision making under an adaptive management approach. Specifically, this component focuses on upgrading the data networks for subsidence, groundwater monitoring, groundwater pumping, and groundwater dependent ecosystems. Previous technical reports and reviews Error! Bookmark not defined. show data gaps related to these data.

Under Component 2, these networks will be designed to leverage available data like California Statewide Groundwater Elevation Monitoring Program (CASGEM), Interferometric Synthetic-Aperture Radar (INSAR) land surface deformation data and in-place water quality programs. Expanded data and monitoring networks will be critical for documenting progress in achieving groundwater sustainability under SGMA regulations and for informing the proposed adaptive management

---

<sup>3</sup> Guidance Document for Sustainable Management of Groundwater, Preparation Checklist for GSP Submittal, Draft. November 2017.

<sup>4</sup> Guidance Document for Sustainable Management of Groundwater, Groundwater Sustainability Plan (GSP) Annotated Outline, December 2016.

<sup>5</sup> Sierra Valley Groundwater Management District. Sierra Valley Groundwater Sustainability Plan, Concept. Preliminary Draft. July 15, 2019 most recent version.

approach for implementing SGMA in the SVB.

This Component 3 will engineer and implement monitoring network programs. The GSP completed under Component 2 requires a 60-day public review process. Thus, a working draft ready for public review will need to be ready by October 2021, approximately one year prior to the completion date for Component 3. Thus, the Component 3 timeline can generally lag that of Component 2 and is well suited for the envisioned monitoring network implementation tasks. The Schedule (Attachment 5) provides more timeline information.

#### Technical Adaptive Management Studies

These technical efforts will provide critical technical information to inform local and regional adaptive management programs and frame potential strategies and actions. Studies to support local actions will include a financial and economic study to estimate costs for different monitoring alternatives and programs, and recommend preferable approaches, associated cost saving measures, and potential funding sources/partners. The goal of this study will be to ensure the GSP is environmentally and economically sustainable. The second local action would be to extend technical field studies and literature reviews currently being conducted through funding from the Feather River Land Trust in partnership with UC Cooperative Extension. This study is investigating equipment and operations improvements to pivot sprinklers in the SVB to increase irrigation efficiencies and reduce groundwater pumping. This work will provide more actionable data and recommendations with a second year of funding. Improving irrigation efficiencies is the primary tool available to ranchers and farmers to decrease groundwater pumping short of taking land out of irrigated hay production. Desktop studies are planned to inform and promote regional cross-agency sustainable resource management. These studies include 1) assessing opportunities to save groundwater and improve regional groundwater recharge through improved public land management and restoration activities (e.g., fuel reductions, roads rehabilitation, stream floodplain connections) and 2) considering potential opportunities to improve water resources in SVB through Frenchman Dam re-operation. These studies will result in fact sheets / technical memorandum that can be used with regional, state and federal stakeholders to motivate and justify actions and programs to improve sustainable water and land management in SV.

#### **Coordination Efforts**

The Sierra Valley – Sierra Valley sub-basin (5-012.01) is designated a medium priority basin under SGMA and is within both Plumas and Sierra Counties. The only adjacent sub-basin is Sierra Valley – Chilcoot 5-012.02. The Chilcoot sub-basin is not designated a priority basin under SGMA. Thus, no coordination is needed with surrounding basins or within the basin for SGMA compliance.

Two GSAs are identified for the Sierra Valley sub-basin: SVGMD and Plumas County. The SVGMD is the GSA for Sierra Valley – Sierra Valley sub-basin 5-012.01 that are within its boundaries. Serving on the 7-person SVGMD GSA board are a Plumas County Supervisor and a two additional Plumas County Appointees, a Sierra County Supervisor and two additional Sierra County appointees and an at large appointment. Plumas County is the GSA for the small portion of the sub-basin that extends outside of SVGMD boundaries. Plumas County is represented on the SVGMD Board. Plumas County and Sierra County also provide technical and legal support to the SVGMD. A Memorandum of Understanding (MOU) between the two GSA's was signed to implement a unified GSP that is led by the SVGMD.

The SVGMD has identified the following interested parties (Water Code Section 10723.2): All property owners in the SVGMD and SVB outside the District; all SV agricultural producers; City of Loyalton; City of Loyalton Planning Commission; Sierraville Public Utilities District; Calpine Water District; Sierra County Water System; Plumas County Planning Department; Plumas County Planning Commission; Plumas County Flood Control District and Water Conservation District; Sierra County Planning Department; Sierra County Planning Commission; Sierra County Flood Control and Water Conservation District; US Forest Service; Bureau of Land Management; Grizzly Ranch CSD; California Dept. of Fish & Wildlife; Plumas Audubon Society; The Nature Conservancy; Feather River Land Trust; Plumas-Sierra Community Food Council; Plumas-Sierra Cattlemen's Association; Farm Bureau (local); Maidu, Paiute and Washoe tribes; and the Sierra Valley Watermaster.

#### **Previous SGM Program Funding (Round 2)**

No funding was received under Round 2.

## B. Project Benefits

### Tribes and DAs within the basin

The entire Sierra Valley sub-basin (the benefit area) is located about 40 miles north of Truckee and within both Plumas and Sierra Counties. The entire sub-basin is classified as a Disadvantaged Area (DA) under a census tract analysis (Attachment 6):

- Census Tract 3 is designated a Disadvantaged Community (DAC) in Plumas County. Census Tract 3 has median incomes at 65% of 2016 California's Median Household Income (MHI); and
- Census Tract 100 covering Sierra Co. is designated a DAC. Census Tract 100 has median incomes at 69% of 2016 MHI.

Specific areas are identified as DACs under block group and places scale analyses. Loyalton and Sierra Brooks are classified as meeting DAC thresholds. 2012 – 2016 ACS data is not available for Sattley, Calpine, Sierraville and Chilcoot-Vinton. Block Groups with DAC status cover Loyalton, Sierra Brooks, Sattley and Sierraville.

The Washoe, Paiute, and Maidu tribes claim SV as part of their ancestral territory and have a tribal representation in the governance of the Upper Feather River Integrated Regional Water Management Group.

No SDAC are identified within the benefit area.

### Benefits List and Applicability to Tribes and DAs

Benefits from this project include both specific and broader benefits to the long-term sustainability of Sierra Valley for all beneficial users.

A critical benefit to DAs will be the protection of groundwater as a **drinking water source** through the maintenance groundwater elevations and water quality. Two Letters of Support (LOS) directly address this critical need. **Sierra Brooks Water Advisory Board** and **Sierra County Waterworks District #1** (Calpine) have provided Letters of Support noting the DAC status of Sierra Valley. They highlight groundwater's importance as a drinking water source to municipal well operators, public water systems and all residents using groundwater for drinking water. They identify water quality degradation that significantly and unreasonably affects groundwater supply or suitability for use in drinking water systems as an undesirable result that must be prevented. They believe SGMA will add to the protection to groundwater and water quality offered by the State Water Board and the Sierra County Environmental Health Department. The **City of Loyalton** has provided a LOS supporting that position. **Plumas County Environmental Health Department** offered a LOS as a longtime partner in promoting and protecting Sierra Valley groundwater resources. Their staff regulates and oversees public water systems, small water systems, and domestic water systems serving DAs and households throughout the basin. They also inspect new groundwater well installations to protect groundwater quality and offer informal technical expertise to the SVGMD Board of Directors and the community on groundwater protection. Through SGMA, Environmental Health would serve on a more formal, collaborative TAC that would work to ensure that the most vulnerable populations have adequate supplies of clean, affordable, and accessible water for human consumption, cooking, and sanitary purposes. **Sierraville Public Utility District (PUD)**, providing water to a DAC, passed a resolution in support of this application on October 16, 2019. **Plumas County Board of Supervisors (BOS)** note an executed MOU with SVGMD that memorializes their commitment and intent to collaboratively develop the GSP with SVGMD that will include the priorities of local land and water owners and managers, interested citizens and public members, and federal and tribal entities. They note the DAC status of all of Sierra Valley, and their decades of working with SVGMD on sustainable water and land management in Sierra Valley. They believe adequate funding by DWR is critical to develop a successful GSP and associated programs to protect area groundwater and its beneficial uses. **Sierra Co. BOS** has offered a LOS, noting the DAC status of all of Sierra Valley. **The Upper Feather River Integrated Regional Water Management Group (UFR IWRM)** provided a letter on October 18, 2019 identifying the overlapping objectives and strategies between this project and the IRWM, including protecting drinking water supplies, and addressing DA water resources and wastewater needs. All these LOS speak to the importance of groundwater as a drinking water source, a critical need and benefit for DAs in Sierra Valley. Measures for groundwater sustainability, and its management and enforcement as a drinking water source will be developed during development of the GSP and then implemented under its implementation.

Sustainable groundwater management also needs to be both **environmentally and economically sustainable**. Sierra Valley has a rich ranching heritage. Much the area's livelihood has depended upon ranching and ranching has been a primary economic driver. Several LOS (i.e. **Cattlemen's Association, local Farm Bureau, Sierra Co. BOS**) have provided the perspective that stabilizing groundwater and its management will reduce resource uncertainties for the ranching communities and help stabilize the area's agricultural economy. The health of the area's economy directly affects the income levels of DAs and their members. The **Feather River Land Trust (FRLT)** provided a LOS that supports this position. They also note their support of area ranching, protection of that heritage, and protection of the rich ecosystems and habitats in Sierra Valley. They call attention to the limited financial resources available to address this challenge. This project proposes measures to identify sustainable levels of funding for the groundwater management program, is focusing on



capacity building to create an effective and cost-effective SGMA program and will jumpstart important adaptive management programs to broader watershed collaboration including with state and federal agencies. The **Northern Sierra Partnership**, a collaborative initiative of **the Truckee Donner Land Trust, The Nature Conservancy, the Trust for Public Land, the Sierra Business Council and the Feather River Land Trust**, has provided a LOS stating their concern about the impacts of declining groundwater on natural systems, wildlife habitat and the ranching economy; the Partnership supports this application to bring in highly skilled and experienced professionals to develop and support the implementation of a technically-sound GSP for Sierra Valley.

This project will be a first step in addressing **climate change pressures** and their impacts. **FRLT LOS and UFR IWRM LOS** both note the importance of climate change considerations in planning and programs. Sierra Valley is especially at risk from climate change because of its proximity to the snow line. As California's climate continues to warm, the movement upslope of snow levels will greatly affect the frequency and magnitude of surface runoff in Sierra Valley and the distribution to groundwater. The immediate groundwater effects to Sierra Valley cannot be determined due to geologic and hydrologic complexity and uncertainties as discussed earlier. However, the effects on DAs and other beneficial users will become more evident in the long-term if adaptive management measures and their enforcement, as suggested in this application, are not begun. This project will develop the data and data tools to inform decision making and will jump start efforts to engage the USFS and DWR in public resource management in the watershed. **The Tahoe National Forest District Ranger** has provided a LOS for this project stating the shared interest in groundwater sustainability and their interest in facilitating shared resource management activities to promote sustainability and resiliency of the region's land, water and forest resources.

Finally, this project will **directly engage the tribes** in the decision-making process and planning. **The California Indian Water Commission** provided a Letter of Support representing the interests of the three tribes who have traditionally shared stewardship of the ancestral lands and waters within Sierra Valley and surrounding areas. The letter notes SGMA regulations will help support the Tribal Cultural Beneficial Uses established by the State Water Resources Control Board. The tribes intend to participate in SGMA to protect the cultural, spiritual, ceremonial and traditional uses of water by Californian tribes; and work closely with the SVGMD, Plumas County and the Forest Service in areas within the basin where tribes have deep and enduring cultural connections. The three tribes' vast ancestral territories overlap in portions of Sierra Valley and the tribes will work to promote management strategies that reflect a tribal perspective and benefit the Wild and Scenic River corridor of the Middle Fork Feather River. The tribes will also develop their own basin setting and water management narratives as sovereign nations and will work to coordinate tribal perspectives and priorities with SGMA stakeholder and the SGMA process. The tribes will have an opportunity to participate in the TAC and other workshops and forums regarding these benefits. **Plumas National Forest Supervisor** has provided a LOS in support of and offering resources under this goal.

Other benefits will be to help create a more active community, provide residents opportunities to become more engaged in planning and decision making, and create the foundation for sustainable groundwater management.

This project will create **an active and informed TAC**. The many letters of support show broad support for this application and represent a wide range of local and regional interests. Current projects to improve irrigation efficiencies and to promote improved recharge have included collaboration from UC Cooperative Extension, DWR, UC Davis (UCD) and the Feather River Land Trust (FRLT), directly or indirectly. This program will enable the formation and engagement of a strong TAC able to draw from a large community (e.g., Plumas and Sierra County Environmental Health Departments, UCCE, UCD, FRLT, PUDs, city representatives, local and regional experts, USGS, UFR IRWM) that can provide expertise across all areas related to groundwater sustainability.

This project will also help in developing a **universal vision for groundwater sustainability**. Under the GSP Planning and Development, a universal vision for sustainability will be developed through the facilitation and engagement process. This process invites stakeholders and beneficial users to participate in prioritizing Sustainability Indicators throughout the sub-basin and encourages public participation in the discussion of what represents significant and unreasonable effects. The process to develop the vision will include dialogue beyond agricultural water use and will include groundwater level and quality issues related to domestic wells used to supply drinking water; effects of subsidence on public well life and condition; and groundwater pumping effects on groundwater dependent ecosystems, such as marshes and wetlands in Sierra Valley which are critical to the flora and fauna, including state threatened species like the greater sandhill crane. These benefits are relevant to tribes and DAs because of drinking water conditions, public health and environmental and ecological benefits.

This project will conduct **extensive impact/vulnerability assessments in all Management Areas and DAs**. The GSP process includes an impact and vulnerability assessment throughout the entire sub-basin and within Management Areas, if needed. These analyses cover DAs at a Census tract level but also will assess smaller communities that have been identified as DAs specifically in Census block and place analyses. Assessments will ensure that impacts on the most vulnerable communities and households are considered. These analyses will be integrated with and leverage other environmental and public health programs in the basin and will also consider the results of the socio-economic and needs

assessment prepared for the Integrated Regional Water Management (IRWM) Disadvantaged Community Involvement efforts for the Upper Feather River (UFR) IRWM region as well studies completed under the UFR IRWM such as a Sierra Valley DA well vulnerability assessment (see Technical Expertise section).

As part of this project, **workshops and other outreach activities** will be conducted under the Stakeholder Communications and Engagement Plan. DAs, tribes, other community members and their representative and spokespeople will have the opportunity to participate in workshops so their concerns and priorities can be incorporated into the plan. Workshops will be an important stakeholder and community outreach and involvement element. Workshops will be utilized to provide information to the public in order to inform and maintain transparency about the SV GSP development process and deliverables. Additionally, workshops will be scheduled and facilitated to solicit input on GSP draft sections as they are ready for public review. Workshops will be tracked and documented throughout the GSP process and for all Components discussed in this application, and all source documents, meeting notes and public comments will be made available to the public online via the SVGMD's website.

All these activities will lead to **greater integration of DAs, tribes, and agencies**. GSAs under SGMA are tasked with integrating groundwater sustainability and related factors under a single organization, and compiling and developing a unified vision and action plan. In Sierra Valley, this effort is expected to include other local and federal resource management agencies, DAs, and tribes for the benefit of multiple beneficial users of interconnected surface water and groundwater.

Finally, this program will provide **capacity building and employment opportunities**. This project represents a significant effort to improve resource management in Sierra Valley. Capacity building includes development of tools and practices for efficiently implementing the GSP. Part of this effort will be a determination of a sustainable funding level to implement the GSP and the SGMA program. Implementation funding will support salaries and benefits for trained and skilled position(s) over the 20-year planning horizon. The level of implementation funding will determine the magnitude and distribution of benefits. Regardless of the funding level, GSP implementation presents potential employment opportunities in Sierra Valley.

The fifteen LOS discussed above are provided in Attachment 3, page 2 of 2 in the Workplan.

#### **Measuring Benefits**

Progress towards achieving benefits can be in part measured by the tasks and deliverables completed. This grant agreement presents the tasks and deliverables that will be completed in the development of the GSP and its initial implementation. Outreach and stakeholder engagement also measure progress. Contribution, incorporation and documentation of recommendations from the public and other stakeholders into the GPS process also shows measurable progress towards achieving benefits. Table 1 presents a summary of actions taken that when documented will provide measures for each benefit.

### C. Technical Expertise

Since its creation by state law in 1980, the SVGMD has operated with minimal staffing and used contracts with independent professionals to secure technical expertise, as needed. The SVGMD understands that the technical demands of preparing and implementing a GSP necessitate the District expand its professional bench. This project outlines a tiered approach to doing so which – critically -- starts with SVGMD hiring a skilled professional to serve as General Project Manager, tasked with overseeing the development and implementation of the GSP. The General Project Manager will be hired through a Request for Proposals (RFP) process. Once he or she is in place, he or she will spearhead the hiring of a qualified firm or firms to complete the tasks outlined in Components 2 and 3. SVGMD expects to award two or three contracts: one for Component 1 and either one or two contracts for Components 2 and 3, depending on the qualifications and capacity of the firm hired to complete Component 2. This proposal outlines a thoughtful, step-by-step process for securing the technical expertise necessary to develop and implement a scientifically rigorous and achievable GSP for the SVB by January 2022, as required by law.

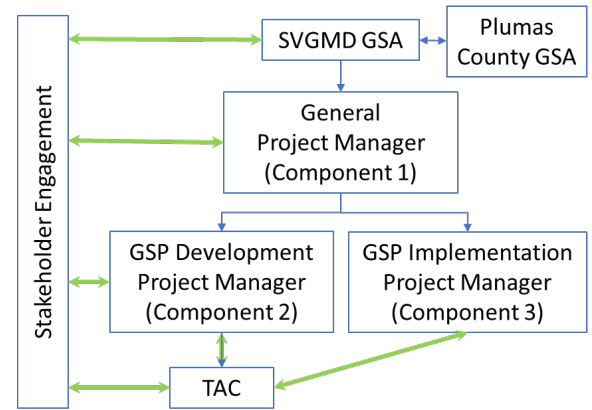


Figure 1. Organization Chart. Hierarchy is shown with blue arrows and communication shown orange arrows.

Figure 1 provides an organization chart for this project. The chart shows the organizational hierarchy (blue arrows) and the communication lines (green arrows). The hierarchy includes SVGMD, the Plumas County GSA, the General Project Manager and the Components Project Managers, as well as the TAC.

### SVGMD Expertise and Plumas and Sierra County Support and Experience

SVGMD’s board members have experience in agriculture and in county government. Both Plumas County and Sierra County currently provide support to SVGMD. Plumas County has provided staff support and in its Letter of Support states its continued intent to support SVGMD throughout this grant agreement. Plumas County and SVGMD also signed a MOU on February 11, 2019 stating: *“This MOU is entered into by and between the Parties to facilitate a cooperative and ongoing working relationship to develop a single Sierra Valley GSP that will allow compliance with SGMA and State law, both as amended from time to time. The primary goal of the MOU is to eliminate overlap between the GSAs and to establish a working partnership to move toward a multi-GSA agreement to cover all portions of the Sierra Valley Groundwater Basin designated in DWR Bulletin 118 and to prepare and adopt a SGMA compliant GSP prior to the January 31, 2022 deadline set under SGMA.”* The MOU is included with the Letters of Support. Sierra County has also provided support, providing legal counsel.

Plumas and Sierra Counties have many years of experience managing projects of this complexity. The 2007 Upper Feather River IRWM program funded seven water quality and watershed restoration projects and \$7M in Prop 50 grant funds have been awarded to implement IRWM Plan projects. The 2016 UFR Integrated Regional Water Management Plan (UFR IRWMP) received nearly \$1M from the 2012 Prop 84 IRWM (Round 2) Planning Grant, with match funds from Plumas County Flood Control and Water Conservation District. Additional 2016 Prop 1 grant funds resulted in the Final UFR IRWM Plan 2016 compliant with 2012 and 2016 IRWM Program Guidelines. The UFR IRWM Plan 2016 was unanimously adopted by the Regional Water Management Group (RWMG) and was the State’s first Prop 1 compliant IRWM Plan. In 2013, Plumas County successfully completed a \$1M 2035 (20-year) Plumas County General Plan Update to promote a healthy physical and aesthetic environment, a vital economy, and a supportive social climate. The project included 1) comprehensive planning efforts, 2) transparent and inclusive public engagement efforts (e.g. workshops, tribal consultation), and 3) the environmental analysis efforts to disclose and mitigate potential impacts.

### Bid Process General Overview

For each component, SVGMD will issue a written public notice with a RFP to solicit competitive bids from qualified contractors for professional services. SVGMD will then review proposals and conduct interviews to select highly qualified, competitive teams. Proposal evaluation will be based on predetermined criteria identified in the RFP and require prospective contractors to submit a statement of qualifications (SOQ) to demonstrate expertise, certifications and licensing. The primary goal of the bid process will be to select highly qualified and competitive teams to complete the tasks outlined herein. The process will be documented and the documentation (e.g., selection team and qualifications, applicants, applicant packages, selection committee, selection criteria, ranking and selection) will be provided as deliverables. More specifics are provided below for each component.

### Technical Expertise and Team Requirements

As noted above, the SVGMD will use a RFP process to select a qualified firm to lead each component of the work, with each component having its own Project Manager (PM). Each PM will 1) manage day-to-day project scope, schedule, and budget; 2) be responsible for overall quality assurance/quality control of deliverables; 3) address human resource team

issues; 4) effectively communicate and distribute information; and 5) manage project risks. Each component will have its own goals, deliverables, requirements and responsibilities. These specifics are discussed below for each component.

### **Component 1: Grant Agreement Administration**

Component 1 is Grant Agreement Administration which includes *overall project management and administration*.

**Requirements and Responsibilities.** The General Project Manager (General-PM) will oversee the entire project and is critical to its success. In addition to the Project Manager requirements outlined above, the General-PM will oversee the hiring of qualified contractors and manage overall project implementation to keep all components progressing on schedule and all deliverables completed in time for the SVGMD to submit the GSP by January 31, 2022. Because of the SVGMD's minimal staffing, the General-PM will be the DeFacto SVGMD General Manager, serving as the primary liaison between SVGMD and DWR, and between other contractors and SVGMD.

Qualifications for the General-PM will include –

- California licensed PE/PG;
- Demonstrated and qualified competency with GSP/SGMA regulatory compliance, planning efforts, and reporting;
- Demonstrated project management experience of large-scale and complicated public projects or programs including identifying critical path items;
- Broad technical expertise across scientific disciplines (e.g., geology, hydrology, climate change, agriculture, water quality, aquatic ecosystems);
- Experience in conducting RFPs and interviewing / selecting candidates.

**Solicitation and Contracting.** The selection process for the General Project Manager will initiate immediately upon grant award by DWR. SVGMD will solicit competitive bids for qualified applicants as described in the above section. The requirements for the General-PM are identified in Section C. The selection committee will be composed of the GSP Planning Group members (**Tania Carlone**, CBI; **Greg Hinds**, PE, Hinds Engineering; **Philip Bachand, Ph.D.**, Bachand & Associates; **Kristi Jamason**, FRLT; **Tracey Ferguson**, Plumas County) and the GSP Board of Supervisors Subcommittee (**Einen Grandi**, Chairperson; **Jim Roberti**, Board Member) in consultation with **Debbie Spangler** of DWR. The RFP process and the selection scoring will be confidential. No person on the selection committee will be eligible for the General-PM position. All members will be eligible to lead or be members of teams for subsequent awards under the following task. The process to interview and select the General Project Manager is expected to require up to 12 weeks.

### **Component 2: GSP Development**

An engineering firm will be selected through a RFP process. Component 2 includes development of the GSP which includes compliance with all subarticles, and completion of related outreach/engagement, monitoring and submittal activities.

**Requirements and Responsibilities.** The Component 2 Project Manager (C2-PM) will be a California licensed PE/PG with the necessary experience per Public Resources Code § 354.12 Subarticle 2. The C2-PM will lead this team/organization (C2-Team) to successfully complete all Component 2 tasks and deliverables. In addition to the Project Manager requirements outlined above, the C2-PM will coordinate Component 2 subcontractors, manage its implementation, and collaborate with the Component 3 Project Manager (C3-PM) to help each component be successful and use the best available information. The primary management target for the C2-PM will be completion and on time submittal of the GSP in accordance with the attached proposed schedule (January 31, 2022).

Qualifications for the C2-PM will include –

- California licensed PE/PG;
- Demonstrated and qualified competency with SGMA/GSP regulatory compliance, planning efforts, and reporting;
- Demonstrated project management experience of GSP development projects (providing professional references);
- Broad technical expertise across scientific disciplines (e.g., geology, hydrology, climate change, agriculture, water quality, aquatic ecosystems); and
- Experience in collaborative stakeholder processes including with tribes and disadvantaged communities.

This C2-Team (including subcontractors) will require appropriate expertise and skills: e.g.,

- **Scientific knowledge and familiarity with Sierra Valley (Comp. 2, c).** Local geologic, environmental and hydrologic knowledge and experience regarding the SVB will be needed to ensure the team is efficient and informed regarding technical issues, challenges and opportunities with regard to implementing SGMA in the SVB.
- **Professional Facilitation and Stakeholder Engagement (Comp. 2, b).** Effective facilitation, outreach and stakeholder engagement is critical in managing communication and relationships 1) to provide opportunities for all beneficial users, including DAs and Tribes, to be represented and interact in the SGMA process; and 2) to facilitate TAC involvement, effectively and successfully.
- **GSP Development (Comp. 2, c).** Demonstrated engineering, scientific and regulatory expertise and experience

to successfully address all GSP subarticles (Administrative Information, Basin Setting, Sustainable Management Criteria, Monitoring Network, Project and Management Actions).

- **Technical Reporting Standards, and Data Tool Development (Comp. 2, d).** Development of data monitoring, analyses and management protocols, tools and databases will require applied science and data science skills, experience and expertise associated with field and satellite data sets. Local knowledge of current data collection practices and efforts (e.g., regulatory, water quality, flow monitoring) will benefit this effort.

**Solicitation and Contracting.** The solicitation will be *led by the General-PM* and be similar to the process discussed under Component 1. The bid solicitation, selection and contracting process is expected to require up to 12 weeks. This solicitation will begin immediately upon selection of the General-PM.

### **Component 3: Implementing GSP Adaptive Management Programs and Strategies**

An environmental / applied science or engineering firm will be selected through a RFP process. The firm will have deep and broad (e.g., hydrologic, water quality, environmental) data collection and analyses experience, and experience with developing peer-reviewed technical materials. Component 3 includes monitoring network implementation, and technical materials development to inform and motivate local and regional sustainable management of land and water resources. As noted above, it is possible that the same firm hired to complete Component 2 may be hired to complete Component 3.

**Requirements and Responsibilities.** The C3-PM will be an applied scientist with Ph.D. in an appropriate discipline. The C3-PM will lead his or her team (C3-Team) to successfully complete all Component 3 tasks and deliverables. In addition to the Project Manager requirements outlined above, the C3-PM will coordinate Component 3 subcontractors, manage its implementation, and collaborate with the General-PM and the C2-PM to help each component be successful and use the best available information.

Candidates for the C3-PM will be sought with qualifications that include –

- California licensed PE/PG;
- Demonstrated and qualified competency with SGMA regulatory compliance, planning efforts, and report development associated with the GSP;
- Demonstrated project management experience of environmental data centric projects, including references.
- Experience in design, setup and management of data networks, and in data analyses and integration;
- Broad scientific and engineering knowledge and skills across environmental and earth sciences (e.g., geology, hydrology, climate change, agriculture, water quality, aquatic ecosystems);
- Outreach experience and experience in stakeholder processes; and
- Strong reporting background and skills including in fact sheet and technical manuscript development.

This C3-Team (including subcontractors) will require appropriate expertise and skills: e.g.,

- **Data processing and analyses skills (Comp 3, c-2).** Needed and beneficial data processing and interpretation skills include GIS spatial analyses; data management and integration; statistics; engineering analyses; engineering and applied agricultural economics; hydrologic cycle analyses; and interpretation, utilization and integration of field, satellite and modeled data.
- **Irrigation and Hay Production Practices (Comp 3, c-2).** Familiarity with irrigation and hay production practices is needed to understand potential opportunities and constraints associated with options and technologies to improve water use efficiencies.
- **Scientific knowledge and familiarity with Sierra Valley (Comp 3, c-2,3).** SVB and its watershed is a hydrologically, geologically and environmentally complex system. Developing technical materials to effectively and efficiently assess potential watershed-scale solutions would benefit from local knowledge and relationships.
- **Data monitoring networks (Comp 3, c-1; d-1; e-1).** Groundwater level, subsidence, pipe/pump flows and ecosystem monitoring systems will need to be established or expanded requiring significant experience in developing and implementing appropriate and reliable data collection methods. These systems present applied science and engineering challenges.
- **EQIP program (Comp 3, d-1).** The pump metering program is planned to be modeled after NRCS EQIP.

**Solicitation and Contracting.** A similar process is planned as for Component 1. The solicitation will be led by the General-PM. The process to require up to 12 weeks. This solicitation will follow that of Component 2.

### **Assurances**

Section E (Project Support) presents fifteen LOS and discusses intra-basin support and communications. Plumas County and SVGMD have executed a MOU to ensure intra-basin collaboration (provided with LOS) and for Plumas County to provide support as related to SGMA compliance, GSP development and completion, and groundwater sustainability planning. The schedule to complete the GSP on time, including SVMGD adoption and public review is presented in Attachment 5.

## PROJECT DETAILS

### D. Scope of Work and Deliverables (maximum of 3 points possible)

#### a. Scope of Work

The Scope of Work describes tasks performed under the project consistent with the Budget and Schedule (Attachments 4 and 5, respectively). It has been developed referencing all DWR BMPs and guidance documents. The Scope of Work describes tasks included in three components: **1) Grant Agreement Administration; 2) GSP Development; and 3) Implementing GSP Adaptive Management Programs and Strategies.** The Technical Expertise section describes the leads for each component and their selection through an RFP process.

#### **Component 1: Grant Agreement Administration**

Component 1 identifies the work needed for Grant Agreement Administration. The General-PM will lead this task which will include overseeing administration of the grant. The General-PM will lead the entire grant agreement and general managers for Components 2 and 3 will report to the General-PM. The needed expertise is described in Section C. The RFP selection process is described in Section C and in Task 4 below. This component will begin immediately upon draft grant award announcements in order to expedite the project and meet GSP completion deadline requirements (January 31, 2022).

##### **(a) Grant Agreement Administration**

Grant Agreement Administration provides program supervision and coordination of the project to ensure all components are completed within cost and schedule, and to provide stated deliverables. The General-PM required expertise are previously identified and discussed in Section C. The following tasks will be completed under Component 1:

##### **Task 1. Cost tracking, invoicing and payments**

This task will include tracking of costs and progress; development and maintenance of project and task-level schedules and budgets; collection, approval and payment of subcontractor invoices; and preparation and submittal of project invoices. Project payment retention will be passed down to subcontractors to ensure completion of all deliverables.

##### **Task 2. Quarterly and final progress reports**

Quarterly and final progress reports will be developed to report on task level progress, identify challenges, and identify steps taken to overcome challenges.

##### **Task 3. Project Management**

The General-PM will have several general duties. The General-PM will be responsible for day-to-day project management of the grant agreement. The General-PM will serve as the project manager and oversee work conducted by the Component General Managers to ensure the project and all its components are progressing sufficiently and to ensure collaboration, communication and coordination between the teams as needed. Project management will also include periodic project status meetings with DWR, consulting teams, and other agencies as necessary. These meetings will be conducted as necessary but expected to be at least quarterly and at times monthly, depending upon the project needs. Meetings may be in person or on conference calls. Finally, the General-PM will attend all SVGMD Board meetings to give updates, bring forth key decisions, make recommendations, and take other actions as needed for successful completion of this Grant and to promote future successful implementation of the GSP.

##### **Task 4. RFP Process: General-PM Selection**

SVGMD will use a RFP process to select the Grant Agreement Project Manager, who is referred to in this document as the General Project Manager (General-PM). The requirements for the General-PM are identified in Section C. The selection committee will be composed of the GSP Planning Group members (**Tania Carlone**, CBI; **Greg Hinds**, PE, Hinds Engineering; **Philip Bachand, Ph.D.**, Bachand & Associates; **Kristi Jamason**, FRLT; **Tracey Ferguson**, Plumas County) and the GSP Board of Supervisors Subcommittee (**Einen Grandi**, Chairperson; **Jim Roberti**, Board Member) in consultation with **Debbie Spangler** of DWR. The RFP process will initiate immediately upon grant award. The RFP process and the selection scoring will be confidential. No person on the selection will committee will be eligible for the General-PM position. All members will be eligible to lead or be members of teams for subsequent awards under the following task.

##### **Task 5. RFP Process: Components 2 and 3 Teams Selection**

The General Project Manager will conduct the RFP process to hire the contractor(s) for Components 2 and 3. Each component may be led by separate firms, or one firm may be selected to oversee both sets of tasks. The solicitation process for both components will be conducted sequentially with Component 2 first and Component 3 next.

#### **Component 2: GSP Development**

Component 2 will be led by a consulting firm selected through the RFP process discussed in Section C and in Component 2, (b) Grant Agreement Administration, Task 5 and led by C2-PM.

##### **(a) Component Administration**

**Task 1. Cost tracking, invoicing and payments**

This task will include tracking costs and progress; development and maintenance of component and task-level schedules and budgets; collection, approval and payment of subcontractor invoices; and invoice preparation and submittal to the General-PM.

**Task 2. Quarterly and final progress reports**

Quarterly and final progress reports will be developed to report on task level progress, identify challenges, and identify steps taken to overcome challenges.

**Task 3. Project Management**

Day-to-day project management of the component will occur under this task. Administration will be coordinated with and in compliance with grant agreement administration requirements. Project management will also ensure collaboration across component teams as necessary. The component lead and necessary staff will participate in meetings with DWR, consulting teams, and other agencies as necessary. These meetings will be conducted as necessary but expected to be at least quarterly and at times monthly, depending upon the project needs. Meetings may be in person or on conference calls.

**(b) Stakeholder Engagement / Outreach****Task 1. Stakeholder Engagement and Outreach**

The goals of outreach and facilitation are to engage a diverse group of stakeholders and other interested parties in a transparent SGMA process that provides the information necessary to understand SGMA-related activities and to engage in meaningful dialogue with the GSAs and other agencies about their concerns and questions. A successful GSP process is one that results in a comprehensive, scientifically rigorous GSP being submitted on time with broad support from agricultural, municipal, environmental, tribal and governmental interests, as well as local residents. Facilitation support will be provided by a professional facilitator who will guide the stakeholder engagement process through GSP adoption. Facilitation support will be consistent with DWR guidance document recommendations and guidelines to ensure an open, inclusive, and collaborative process that provides access, opportunity and meaningful input.

This task will include the following activities: 1) identification and engagement of interested parties; 2) maintenance and sharing of contact list within the project team; 3) meeting facilitation (public, intra-basin), including development and review of meeting materials; and 4) interest-based negotiation/consensus building, as requested by the SVGMD for support in reaching agreement on controversial GSP elements. A Draft Stakeholder Communications and Engagement Plan (SCEP, Draft version October 22, 2019) is in development through State Water Board funding. This draft will provide a framework to engage stakeholders in current and future SGMA activities in the SVB. The SCEP, a living document that can be modified as needed, will include elements required by GSP regulations as well as other components:

- Explanation of Groundwater Sustainability Agencies' (GSA) decision-making process;
- Identification of opportunities for public engagement and involvement;
- Description of GSAs' encouragement of active involvement of diverse elements of population within basin; and
- Method the GSAs shall follow to inform the public about GSP progress, including a plan for tribal engagement.

Outreach and communication efforts will take many forms (e.g., traditional media – newspapers; website for public meeting notice and information on the GSP process; individual contact through email, mail, or phone; meetings and workshops; flyers and meeting handouts). Public workshops will be the primary means to educate and inform stakeholders about SGMA implementation and to participate in GSP planning. Workshop timing and topics will align with the scope and sequence of required GSP development and will include public hearings by the SVGMD, as required by the GSP regulations. All workshops will be documented throughout the GSP process and the public will have full, online access to all source documents, meeting notes and public via the SVGMD's website, kept current so as to serve as a public information hub for public engagement in the GSP process. To encourage active public participation in GSP development, SVGMD will encourage interested members of the public to sign up to receive regular updates from the SVGMD on the GSP process, including notices of all opportunities to comment – either in person or in writing -- on draft documents.

**Task 2. Technical Advisory Committee (TAC)**

The TAC will include individuals from a range of disciplines who are willing to lend their expertise to the GSP development and implementation process. The TAC is likely to include soil scientists, engineers, hydrologists and biologists, among other disciplines, and be represented by a broad group of stakeholders. This program will enable the formation and engagement of a strong TAC able to draw from a large community (e.g., Plumas and Sierra County Environmental Health Departments, UCCE, UCD, FRLT, PUDs, city representatives, local and regional experts, USGS, UFR IRWM) that can provide expertise across all areas related to groundwater sustainability. The TAC will serve as forum to enable interdisciplinary expertise. The TAC will review, comment and advise during GSP development regarding technical issues throughout GSP development relevant to all tasks described in Section (c) – GSP Development; and Section (d) – Monitoring / Assessment under this component (Component 2: GSP Development).

### **Task 3. Tribal Engagement**

The Paiute, Washoe and Maidu tribes will engage with the GSP process in coordination with the Plumas National Forest (PNF) and Plumas County. This task will engage the tribes, through Plumas County acting as their primary point of contact, for 1) input into the SGMA process with regard to Tribal Cultural Beneficial Uses established by the State Water Resources Control Board (Water Board); 2) recognition and integration of tribal water rights (e.g., uses of water that support the cultural, spiritual, ceremonial, or traditional rights or lifeways of California Indians); and 3) lands where the tribes have deep and enduring cultural connections. Plumas County will consult with DWR's Office of Tribal Policy Advisor for guidance (Anecita Agustinez, DWR Tribal Policy Advisor - Anecita.Agustinez@water.ca.gov).

#### **(c) GSP Development**

The GSP will be developed in compliance with SGMA regulations utilizing DWR guidance documents, BMPs and advice from DWR. Tasks are consistent with regulation subarticles. Under each task, report drafts will be developed for sequential review from an internal draft to a final draft for inclusion into the final GSP:

- an **Internal Draft** will be developed for review by the General PM, other PMs and the GSAs;
- a **TAC Draft** will be developed for review by the TAC and will be a public document for distribution and comments from interested stakeholders and DWR;
- a **Final Draft** will be developed for final review by the GSAs; and
- a **Final Version** will be developed for compliance and assembly into the final GSP.

### **Task 1. GSP Document Preparation and Adoption**

#### *Task 1.1 Preparation for Public Comment.*

The draft GSP will be assembled for public review by compiling various sections of the GSP, including review of each section to ensure all required GSP content is included. GSP draft copies will be reproduced and distributed as needed to facilitate stakeholder review, and available online as soon as they are available for public review. GSP draft availability will be announced online and advertised within the sub-basin and within the Upper Feather River Watershed.

#### *Task 1.2 Response to Public Comment*

Comments from all stakeholders will be recorded and made available to the public on the SVGMD website and incorporated as appropriate into the GSP and as required by DWR guidelines.

### **Task 2. Administrative Information (Subarticle 1)**

#### *Task 2.1 General and Agency Information*

This task will include the following:

- General Information (§354.4). General information will include references incorporated into the technical memorandum and GSP and will include published and available technical studies, and guidance documents
- GSP Organization. An outline based upon DWR guidance documents will be developed and include a checklist to be used during GSP submittal
- Agency Information (§354.6). Agency information will be prepared at the start of GSP development.
- Executive Summary. An executive summary will be developed near project end to summarize key goals, findings and next steps as identified and discussed in the GSP.

#### *Task 2.2 Description of Plan Area ((§354.8)*

The geographic area of the sub-basin will be described with 1) map(s) and description of plan area (e.g., the adjacent sub-basins; other jurisdictional boundaries; land uses, water use sectors, and water source types; well densities); 2) description of existing water resource monitoring and management programs, including integration into monitoring network, how they may limit operational flexibility, and how the plan adapts to those limits; 3) description of conjunctive use programs in the sub-basin; and 4) additional Plan elements included in Water Code Section 10727.4 and determined to be appropriate.

#### *Task 2.3 Notice and Communication (§354.10)*

This subtask will describe beneficial uses and users in the basin and describe communication. This subtask will include stakeholder outreach database; public meeting lists, documented comments and associated GSA actions and decisions; summary of notices and communications (e.g., decision-making process, public engagement process, encouragement of active involvement, notification method(s) and process).

### **Task 3. Basin Setting (Subarticle 2)**

This task will rely upon appropriate DWR BMPs for guidance and be conducted in collaboration with DWR staff and experts as needed.

#### *Task 3.1 Hydrogeologic Conceptual Model (HCM) (§354.14)*

The HCM will include the following:



- Graphical and written description of the physical components of the basin (e.g., regional geologic and structural setting; lateral basin boundaries and major geologic features potentially affecting groundwater flow; basin boundaries; principal aquifers and aquitards; consumptive water users and water sources; data gaps/uncertainty).
- At least two scaled cross-sections depicting major stratigraphic and structural features.
- Maps of physical characteristics (e.g. topography; surficial geology; soils; existing and potential recharge areas and discharge areas; significant surface water bodies; and sources and points of delivery for imported supplies).

**Task 3.2 Current and Historic Groundwater Conditions (§354.16)**

Current and historic groundwater condition descriptions will use best available data for Sierra Valley<sup>2</sup>. This subtask will develop the following information with necessary graphics and maps: groundwater elevations, gradients and regional pumping patterns; annual and cumulative estimates in groundwater storage, including annual use and water year type; groundwater quality issues, including any known contamination sites and plumes; land subsidence; and inter-connected surface water, depletion quantity and timing estimates; and related groundwater dependent ecosystems (GDEs).

**Task 3.3 Water Budget Information (§354.18)**

The subtask will describe inflows, outflows and change of storage; identify and quantify overdraft areas; estimate sustainable yield and its boundaries based upon best available data; quantify current, historic and future water budgets; and describe surface water supply and its use for groundwater recharge or in-lieu recharge. This section will assess potential climate change issues and uncertainty, using DWR guidance materials and other peer reviewed materials. Additionally, this budget will describe uncertainty, error propagation and implications on future water budgets and basin management.

**Task 3.4 Management Areas (§354.20)**

Management areas will be assessed as an approach to facilitate GSP implementation and SGMA compliance. Management area determination will be documented: e.g., justification; descriptions; monitoring and analyses strategies to prioritize sustainability indicators to avoid or mitigate undesirable results; how management area operations will not cause undesirable results in adjacent areas; and planned integration into an adaptive management approach.

**Task 4. Sustainable Management Criteria (Subarticle 3)**

Sustainable Management Criteria define conditions that constitute sustainable groundwater management for the basin, including the process for characterizing undesirable results, establishing minimum thresholds, defining measurable objectives and developing a legal and regulatory framework for enforcement for each applicable sustainability indicator. Essentially, this section will define –

- Identifying by management area the sustainability indicators currently or at risk of having significant and unreasonable effects;
- The data metrics used to track the applicable sustainability indicators
- The acceptable numeric range of the data metrics with sustainable groundwater management AND the triggers/thresholds that define unsustainable groundwater management;
- The planned adaptive management actions to correct unsustainable groundwater conditions;
- The success trigger/thresholds that allows those corrective actions to stop or be adjusted;
- An enforcement framework for compliance; and
- The integration of lessons learned during corrective process into the adaptive management protocols and plans.

This task will leverage available DWR guidance documentation.

**Task 4.1 Sustainability Goal (§354.24)**

This task will summarize and document the sustainability goal utilizing basin setting information to establish the goal; to describe measures to be implemented to operate the basin within sustainable yield; and to discuss how the sustainability goals will likely be achieved within 20 years of GSP implementation and then maintained thereafter. This section will discuss the role of adaptive management to achieve groundwater sustainability as defined under the sustainability indicators and outline the suite of measures/tools SVGMD will use to ensure compliance with the GSP. This section will also summarize potential cooperative action with stakeholders within the greater watershed.

**Task 4.2 Measurable Objectives (§354.30)**

Measurable Objectives (MOs) for each sustainability indicator and Interim Milestones (IMs) on 5-year increments (i.e., 5, 10, 15, 20 yrs) will be developed. The MOs and IMs will be established through a collaborative, public process informed by technical data and analysis based on the basin setting, monitoring results, and other information. This process will be described, as well as the development of a reasonable margin of safety for operational flexibility, and reasonable paths to achieve and maintain the sustainability goals. Decisions to use groundwater MOs as proxies for other sustainability indicators will be documented and justified with supporting data and technical documents.

**Task 4.3 Minimum Thresholds (§354.28)**

Minimum thresholds (MTs) will be developed for each sustainability indicator. Material will include: 1) information and criteria

(including basin setting information) used to establish and justify MT; 2) how selection will avoid undesirable results and allow the basin to operate within its sustainable yield within 20 years; 3) how MTs may impact other beneficial uses, groundwater users, land uses and property interests; 4) how other (State, Federal, etc.) standards relate to MTs; 5) how each MT will be quantifiably measured; and 6) how MTs satisfy requirements specific for each SI and within GSA enforcement framework. **This section essentially describes when unsustainable conditions are occurring and the methods and enforcement to correct.**

**Task 4.4 Undesirable Results (§354.26)**

This subtask will define conditions currently leading to undesirable results (URs) or that could lead to URs. URs occur when significant and unreasonable effects for any sustainability indicator (SI) occur. This task will describe 1) processes and criteria to define URs; 2) existing or potential URs and their causes; 3) how they would be measured or monitored; and 4) their potential effects on beneficial uses and users of groundwater, land uses, property interests and other potential effects.

**Task 5. Monitoring Networks (Subarticle 4)**

This subtask will reference appropriate DWR BMPs and include collaboration with DWR staff to develop the monitoring networks. Existing monitoring networks are expected insufficient and requiring upgrade.

**Task 5.1 Description of Monitoring Network (§354.34)**

This subtask will define a monitoring network capable of demonstrating trends in groundwater and related surface conditions over different time frames (short and long-term, seasonal) as necessary to evaluate Plan implementation, and as related to each Sustainability Indicator. This description will 1) describe monitoring network objectives; 2) describe the current monitoring networks and what improvements are needed to effectively track key Sustainability Indicator metrics; 3) describe methods, protocol and analytical tools to demonstrate progress towards MOs including MO changes compared to MTs, beneficial users or uses impacts, and changes to key water budget metrics; 4) leverage of management areas to optimize network utility; 5) provide necessary scientific and engineering justification and rationale; 6) define steps and quality control measures to meet data and reporting standards and to effectively monitor Sustainability Indicators; 7) estimate costs for replacements and upgrades of network infrastructure or components; and 8) develop reference materials. Maps, graphics, tables and figures will be used to simplify and clarify the information provided. Reports and outputs will be developed to be consistent with DWR requirements. Specific activities within the above description under Task 5.1 but related to specific design of monitoring networks for complying with GSP development are provided below:

**Subsidence Network.** The goal will be to select and ground-truth ground level monitoring points to monitor subsidence and to ascertain significance and unreasonable effects. This task will include 1) establish, map, and describe level monitoring points or areas; 2) obtain landowner access agreements where necessary for the network; 3) develop sample datasets to ensure data monitoring, management and analyses will be consistent with DMS data management and processing tools; 4) identify additional tools for inclusion in the GSP; and 5) finalize reporting structure and SOPs.

**Groundwater Well Network Expansion Utilizing CASGEM.** Expanded groundwater well monitoring will expand through utilizing the CASGEM network (and other private wells as available). This task will consider CASGEM wells (and available private wells) to address spatial or temporal data gaps defined in the GSP or in collaboration with the GSP effort. Potential groundwater level wells will be verified for suitability (e.g., access, instrumentation suitability, internal video log of considered wells, location). The potential benefits of new wells will be assessed during this effort as well. At current, a new nested well construction is being pursued through DWR Technical Support Services (TSS) and TSS can potentially support the construction of other new nested wells.

**Agricultural Pump Flow Metering Program.** While active production wells are all metered in Sierra Valley, agricultural pumping data lacks uniformity (e.g., instrumentation, installations, data collection methods) and temporal data of sufficient accuracy to synchronize with monitoring well data of higher temporal density. This activity will 1) identify the temporal and spatial data requirements for the agricultural pump flow metering program; 2) identify and prioritize metering locations for inclusion in the agricultural pump metering program; 3) develop SOPs for agricultural pump flow metering, including upgrades to current systems and for new installations; 4) specify instrumentation and equipment.

**Groundwater Dependent Ecosystems.** Sierra Valley has far-ranging and high environmental and ecological value as discussed earlier. Hydrologic and geologic complexity increase the difficulty and the costs associated with monitoring. This task will focus on approaches for GDE monitoring (e.g., paired aquatic water level monitoring with shallow groundwater piezometers; vegetation surveys; stream/river monitoring). This task will: 1) develop and assess monitoring alternatives, including discussion of opportunities and constraints, cost, and access needs; 2) identify potential funding and implementation partners based on monitoring goals and value, including outside of SGMA and for broader ecosystem/environmental assessment; 3) collaborate with DWR to determine if TSS funding is available so support implementation of this monitoring network (e.g., funds for shallow piezometer installation); and 4) develop the monitoring network system design (e.g., expected monitoring equipment and instrumentation, identified sites, installation designs). Given the ecological sensitivity of habitats being monitored, implementation may require CEQA review and permitting, as well as permits for installations of shallow piezometers.

**Environmental Compliance and Permitting.** A CEQA compliance plan will recommend network monitoring initially in areas of lowest environmental sensitivity. The CEQA compliance plan will identify less intrusive or low impact monitoring approaches or evaluate monitoring data surrogates; 2) identify areas of data coverage overlap; and 3) identify opportunities for leveraging currently available state, local and federal data collection programs.

**Task 5.2 Monitoring Protocols for Data Collection and Monitoring (§352.2).**

Monitoring protocols will be developed for data collection, processing, quality assurance, and management protocols and procedures. MPs will be descriptions of technical standards, data collection methods, and other procedures or protocols to ensure comparable data and methodologies. Monitoring protocols will be consistent with DWR BMPs and with GSP regulations. Also included will be protocols for data management, analyses and reporting tools. Data outputs will be consistent and comply with DWR requirements.

**Task 5.3 Representative Monitoring (§354.36).**

Representative monitoring will be considered as a means to simplify or make more efficient data sampling. This could include the use of groundwater levels as a proxy for other sustainability indicators, or representative monitoring sites or approaches as an indicator for spatial or temporal trends. An analysis will be conducted to incorporate into monitoring strategies as appropriate and with justification.

**Task 5.4 Assessment and Improvement of Monitoring Network (§354.38).**

Monitoring network will be assessed as related to potential data gaps and potential actions to address; and as related to uncertainties and their potential impact on success. Improvement alternatives will be assessed as related to necessary permits, CEQA reviews, approvals and landowner access agreements, and costs.

**Task 6. Projects and Management Actions (PMAs) (Subarticle 5)**

This task will identify PMA opportunities and constraints and the implementation process: 1) the addressed MOs, 2) triggers specific PMAs be implemented or terminated, 3) their timetable, 4) their legal authority, 5) costs and financing, and permitting and environmental/CEQA requirements. PMAs will be updated as part of implementation of the GSP.

**Task 7. Plan Implementation (Subarticle 5)**

**Task 7.1 Financial and Economic Resources Assessment and Estimate of GSA Implementation Costs (Reg. § 354.6)**

As discussed elsewhere, the small population and low agricultural returns in the SVB are important factors to consider when designing GSP implementation strategies. This task will quantify the financial resources that are sustainably available. These resources will constrain the types of monitoring networks and representative monitoring that can be sustained. This task will: 1) develop cost structures for potential monitoring network alternatives using best available data, estimate required funding levels for each, and discuss data products and their use and value. The monitoring programs will consider the different sustainability indicators currently or at risk of becoming significant and unreasonable. The analyses will recommend cost savings opportunities and consider alternative funding sources. The assessment will solicit input from DWR to determine the potential limits and opportunities of different approaches.

**(d) Monitoring / Assessment**

This section describes the data tools being developed under this project. For the various deliverables, an internal draft to be reviewed by the GSAs and by the TAC, and a Final Version will be developed. These deliverables include technical memorandum, data tools, data management systems and user guides. These materials will undergo a review that will include the SVGMD, the General and component GMs and the TAC.

**Task 1. Technical and Reporting Standards (Article 3)**

**Task 1.1 Data and Reporting Standards (§352.4)**

Data and reporting standards will be identified and compiled in compliance with the regulations (352.4). Past data and future data procedures will be checked to comply with standards. This task will: 1) review existing compiled data for use in GSP preparation for compliance with the data and reporting standards; 2) correct, reformat and qualify, as necessary; 3) determine data gaps resulting from non- or partial compliance with standards; and 4) provide data gap information for consideration in Component 2, Section (c), Task 5.

**Task 1.2 Data Management System (DMS) (§352.6)**

The DMS system will be developed consistent with DWR reporting requirements and guidance documents. This task will 1) define DMS System specifications and requirements (e.g., data types, temporal and spatial requirements, data import needs) with this step in collaboration with GSP development technical efforts; 2) evaluate DMS options based on project needs, cost, and ease of use; 3) develop beta DMS system including quality control procedures; 4) test beta system; and 5) finalize DMS system including completing of a DMS user guide. Monitoring data shall be stored in the DMS pursuant to Section 352.6. A copy of the monitoring data shall be included in the Annual Report and submitted electronically on forms provided by the Department. A goal of DWR is to promote data transparency.

### **Component 3: Implementing the GSP and Adaptive Management Strategies**

Component 3 will be led by a consulting firm selected through the RFP process discussed in Section C and in Component 1, (b) Grant Agreement Administration, Task 5 and led by C3-PM. Component 3 focuses on the implementation of the GSP and the adaptive management strategies outlined therein. Task 1 uniformly crosses budget categories (c) – (e) on implementation of monitoring networks and programs to address expected data gaps based upon current knowledge<sup>2</sup>. Task 2 focuses on developing technical materials to support involvement by watershed stakeholders (e.g., DWR, US Forest Service) who have an interest in groundwater sustainability and water resources sustainability but are not member beneficial users under SGMA. Task 2 could form the foundation of SVGMD initiatives to investigate, implement and partner on local and regional adaptive management programs.

#### **(a) Component Administration**

All administrative tasks are consistent among each Component. Tasks included for Component Administration are **Task 1 – Cost tracking, invoicing and payments**; **Task 2 – Quarterly and final progress reports**; and **Task 3 – Project Management**. Descriptions for each administrative task can be found under Component 2. The C3-PM required expertise are previously identified and discussed in Section C.

#### **(b) Land Purchase / Easement**

No land purchasing will be required for implementation.

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

##### **Task 1. Engineering Monitoring Networks**

This task describes engineering for implementation of monitoring networks defined in Component 2, Section c (GSP Development), Task 5 (Monitoring Networks). Most elements below require no structural or capital upgrades nor investments, and therefore should not trigger CEQA. For each subtask, the deliverables will include an internal draft, a public draft, a final draft and a Final Version (as defined earlier).

*Task 1.1 Subsidence Network – No engineering needed.*

*Task 1.2 Groundwater Well Network Expansion Utilizing CASGEM – No engineering needed.*

*Task 1.3 Agricultural Pump Flow Metering Program*

This subtask will focus on need engineering for field installations and system upgrades as recommended from GSP Development (Component 2, Section (c) Task 5). This task will develop from the supplied design an engineering packet (e.g., standard design technical drawings, specifications, SOPs, site installation maps, specified instrumentation and equipment) for reference and use during installation).

*Task 1.4 Groundwater Dependent Ecosystems*

This subtask will focus on design and engineering for field installations and system upgrades as recommended from GSP Development (Component 2, Section (c) Task 5). This subtask will develop a site instrumentation engineering packet (e.g., standard design technical drawings, specifications, SOPs, site installation maps, specified instrumentation and equipment) for reference and use during installation. This subtask will also identify needed permitting, such as for installations of piezometers, and other environmental compliance requirements associated with setting up the monitoring network as identified in GSP Development (Component 2, Section (c), Task 5).

##### **Task 2. Adaptive Management Strategies, Technical Materials and Memorandums**

This task focuses on developing technical materials to justify and inform adaptive management strategies. For all subtasks, a technical report and other outreach materials will be provided to the GSP team for stakeholder outreach and engagement. Materials will undergo internal review by the GSAs and the TAC. These subtasks are could form the foundation of SVGMD initiatives to investigate, implement and partner on local and regional adaptive management programs.

*Task 2.1 Irrigation Efficiency Alternatives Program*

This program considers potential improvement to ranch irrigation methods to improve water use efficiencies. A current study is underway assessing pivot technology. This program targets an additional year of data to create more robust data and to assess other operational or structural strategies to improve irrigation efficiencies. Ranchers currently rely heavily upon manufacturers who have a conflict of interest. UC Cooperative Extension has provided cost share on these studies to date and would be expected to continue to support the program. This program is critical to empowering local ranchers with opportunities for compliance and for economic sustainability and is thus critical to the region whose economy relies heavily upon agriculture. This task would 1) continue a second year of the current pivot study funded through the Feather River Land Trust with support by UCCE; 2) solicit from manufacturers and irrigation/crop specialist recommendations on potential operational or structural changes to improve water use efficiencies; 3) conduct engineering analyses and literature review to provide an independent assessment; and 4) complete technical memorandum and fact sheet.

*Task 2.2 Watershed Management Opportunities Program*

This task seeks to motivate watershed stakeholders who have shared interest in groundwater and water resources sustainability but are not member beneficial users under SGMA to develop watershed-level programs to promote long-term and watershed wide resource sustainability programs. DWR Basin Prioritization states factors outside of the control of the basin are affecting groundwater sustainability; these factors include climate change, Frenchman Dam and other public water infrastructure operations; and public land management including fuels reduction to help combat climate change and to promote healthy forests. Many of these public land programs have been identified in the Upper Feather River Integrated Regional Water Management Group (UFRIRWM, 2016). Given Sierra Valley's limited financial resources and the potential impacts of outside factors and resource management, SVGMD has a critical need to identify potential opportunities for shared resource management, benefits and funding. Towards this end, technical materials will be required to motivate and justify cross agency collaboration to promote resource sustainability: e.g., 1) regional public land management opportunities to improve groundwater recharge; 2) opportunities to adjust operation of Frenchman Dam; 3) Opportunities for upland recharge through ecosystem restoration and related efforts.

## **(d) Implementation/Construction**

### **Task 1. Implementing Monitoring Networks**

This task describes the implementation of monitoring networks defined in Component 2, Section (c), Task 5.

#### *Task 1.1 Subsidence Network*

Ground surveying (e.g., RTK, point surveying) of level monitoring points will be implemented during the project to develop baseline data for INSAR ground truthing. INSAR data will be collected as baseline satellite data if available from DWR.

#### *Task 1.2 Groundwater Well Network Expansion Utilizing CASGEM*

The expanded groundwater well network will be documented based on the preceding design and field confirmation of well suitability (e.g., access, site suitability, compatibility with instrumentation). All wells selected will be surveyed to ensure accurate elevation data. For a subset of wells, Instrumentation (i.e., pressure transducers) will be identified to provide higher resolution temporal data. The final implemented system will be documented (e.g., well meta data, maps).

#### *Task 1.3 Agricultural Pump Flow Metering Program*

Agricultural pump flow metering program will focus on implementing flow meters based upon the engineering packet. This subtask will include acquiring access agreements, site visits to field validate the engineering design and modify as needed, determination of the appropriate vendor and meter for supplying and installing the flow meter and tracking and documenting the installations. Certification will require agreed access by SVGMD to flow monitoring data and require the delivery or availability of flow monitoring data at an appropriate temporal frequency as determined during GSP development.

#### *Task 1.4 Groundwater Dependent Ecosystems*

Instrumentation and equipment will be installed as determined from the alternative analyses. Permits for shallow wells will be acquired as necessary. Installation will be documented (e.g., maps, photo documentation, design as-built information, recommended maintenance).

## **(e) Monitoring Assessment**

### **Task 1. Network Data Assessment and Protocol Refinements**

Data protocols, processing and reports will follow the GSP document. Reported data will be available to the GSP team to check and refine procedures and protocols.

#### *Task 1.1 Subsidence Network*

Ground surveying locations will be mapped and documented, and the document will identify any actions required or modifications needed prior to future ground surveying.

#### *Task 1.2 Groundwater Well Network Expansion Utilizing CASGEM*

Well data will be collected during a spring and fall sampling period in coordination with SVGMD and DWR groundwater monitoring schedule. Instrument data will be collected over 6 months to provide a baseline data set for integration into the DMS and to check methods and protocols.

#### *Task 1.3 Agricultural Pump Flow Metering Program*

Groundwater flow data will be provided by ranchers participating in flow metering program at the appropriate temporal frequency. Groundwater flow data from one irrigation season will be collected as baseline data and for quality assurance of protocols, methods and tools. Necessary permits and access will be acquired.

#### *Task 1.4 Groundwater Dependent Ecosystems*

Data during one irrigation season will be collected as baseline data and use for quality assurance of methods, protocols and tools.

## b. Project Deliverables

The following table describes the deliverables by task, summarizes the current status, and estimates percent completion. Some notes follow:

### Environmental Compliance and Permitting

The Scope of Work does not include new infrastructure construction and thus is not expected to trigger California Environmental Quality Act (CEQA) obligations. For instance, the project does not include new well installations. The planned monitoring network improvements primarily rely upon existing infrastructure. Any survey monuments will rely upon existing, suitable public and private infrastructure (e.g., bridges, wells). Implementation of Groundwater Dependent Ecosystem Monitoring may potentially require CEQA review and environmental permitting if affecting ecologically sensitive areas. The development of a CEQA compliance plan is discussed in Component 3 and listed as a deliverable below.

### Reporting Draft

Deliverable technical documents are defined by the terminology Internal Draft, TAC Draft, Final Draft and Final Version. These terms are defined under Component 2, Section C in the Scope of Work. Each version requires review by identified groups. All tasks do not require the same review process for its deliverables. In general, the GSP development (Component 1, Section c) require the full review process whereas most other tasks require the internal draft for technical review and a Final Version for distribution.

T#	Task	Deliverables	Status Notes	%
<b>Component 1. Administration</b>				
<b>a. Grant Agreement Administration</b>				
		<b>Project Administration</b>		
1	<b>Cost tracking, invoices and payments</b>	<ul style="list-style-type: none"> <li>Reimbursement requests.</li> </ul>		0%
2	<b>Quarterly and final progress report</b>	<ul style="list-style-type: none"> <li>Quarterly and final progress reports.</li> </ul>		0%
3	<b>Project Management</b>	<ul style="list-style-type: none"> <li>Board Presentations</li> <li>Meeting summaries and identified key action items</li> </ul>		0%
4	<b>RFP Process: General-PM Selection</b>	RFP announcement and solicitation for Component 1 Selection of Grant Agreement Manager (General Project Manager) with documentation (e.g., selection team and qualifications, applicants, applicant packages, selection committee, selection criteria, ranking and selection)		0%
5	<b>RFP Process: Components 2 and 3 Team Selections</b>	RFP announcement and solicitation for Component 2 Selection of Component 2 Team and named Project Manager with documentation (e.g., selection team and qualifications, applicants, applicant packages, selection committee, selection criteria, ranking and selection) RFP announcement and solicitation for Component 3 Selection of Component 3 Team and named Project Manager with documentation (e.g., selection team and qualifications, applicants, applicant packages, selection committee, selection criteria, ranking and selection)		0%
<b>Component 2. GSP Development</b>				
<b>a. Component Administration</b>				
1	<b>Cost tracking, invoices and payments</b>	<ul style="list-style-type: none"> <li>Reimbursement requests.</li> </ul>		0%
2	<b>Quarterly and final progress report</b>	<ul style="list-style-type: none"> <li>Quarterly and final progress reports.</li> </ul>		0%
3	<b>Project Management</b>	<ul style="list-style-type: none"> <li>Technica Meetings: Summary and Key Action Items</li> <li>Technical Meetings: Associated Presentations</li> </ul>		0%

<b>b. Stakeholder Engagement</b>						
	<b>1 Stakeholder Engagement and Outreach</b>	<ul style="list-style-type: none"> <li>Stakeholder Communication and Engagement Plan (SCEP), working draft</li> <li>Meeting announcements, agendas, presentations, and minutes or meeting summaries when applicable</li> <li>GSA web</li> </ul>	Draft SCEP is under development by professional facilitator. Two workshops on SGMA have occurred in the past 18 months	10%		
	<b>2 Technical Advisory Committee</b>			0%		
	<ul style="list-style-type: none"> <li>Compilation of TAC GSP reviews and recommendations</li> </ul>					
	<b>3 Tribal Engagement</b>	<ul style="list-style-type: none"> <li>GSA / Tribes MOUs</li> <li>Technical Memo: Wild and Scenic management priorities</li> </ul>	Plumas County has been in discussions with tribes regarding SGMA	10%		
<b>c. GSP Development</b>						
<b>GSP Planning and Preparation</b>						
	<b>1 GSP Document Preparation and Adoption</b>	<ul style="list-style-type: none"> <li>Internal Draft, including attachments, appendices, comment and response documentation</li> <li>Final Draft, including attachments, appendices, comment and response documentation</li> <li>Final Version</li> </ul>		0%		
	<b>2 Administrative Information (Subarticle 1)</b>			<ul style="list-style-type: none"> <li>Internal Draft. Include compilation of comments/responses.</li> <li>TAC Draft, includes compilation of comments/responses.</li> <li>Final Draft for final review by GSA. Include compilation of comments/responses.</li> <li>Final Version for assembly in Draft GSP.</li> </ul>	Draft materials have been compiled describing plan area.	15%
	<b>3 Basin Setting (Subarticle 2)</b>					<ul style="list-style-type: none"> <li>Internal Draft. Include compilation of comments/responses.</li> <li>TAC Draft, includes compilation of comments/responses.</li> <li>Final Draft for final review by GSA. Include compilation of comments/responses.</li> <li>Final Version for assembly in Draft GSP.</li> </ul>
	<b>4 Sustainability Management Criteria (Subarticle 3)</b>	<ul style="list-style-type: none"> <li>Internal Draft. Include compilation of comments/responses.</li> <li>TAC Draft, includes compilation of comments/responses.</li> <li>Final Draft for final review by GSA. Include compilation of comments/responses.</li> <li>Final Version for assembly in Draft GSP.</li> </ul>	Undesirable results have been discussed with SVGMD and materials have been presenteed at board meetings and workshops. SMC has been discussed with SVGMD subcommittee.			
	<b>5 Monitoring Networks (Subarticle 4)</b>			<ul style="list-style-type: none"> <li>10%, 30%, 60% and 90% design for moinitoring network plans</li> <li>Environmental Compliance Memorandum</li> <li>Internal Draft. Include compilation of comments/responses.</li> <li>TAC Draft, includes compilation of comments/responses.</li> <li>Final Draft for final review by GSA. Include compilation of comments/responses.</li> <li>Final Version for assembly in Draft GSP.</li> </ul>	Recent technical review has identified potential data gaps. Monitoring strategies have been explored by GSP Planning Group and shared with SVGMD subcommittee and Board	
	<b>6 Projects and Management Actions (Subarticle 5)</b>					<ul style="list-style-type: none"> <li>Internal Draft. Include compilation of comments/responses.</li> <li>TAC Draft, includes compilation of comments/responses.</li> <li>Final Draft for final review by GSA. Include compilation of comments/responses.</li> <li>Final Version for assembly in Draft GSP.</li> </ul>

	<b>7 Plan Implementation (Subarticle 5)</b>		0%	
	<ul style="list-style-type: none"> <li>Internal Draft. Include compilation of comments/responses.</li> <li>TAC Draft, includes compilation of comments/responses.</li> <li>Final Draft for final review by GSA. Include compilation of comments/responses.</li> </ul>			
<b>d. Monitoring / Assessment</b>				
	<b>1 Technical and Reporting Standards</b>		0%	
	<ul style="list-style-type: none"> <li>Data protocols and standard operating procedures (SOPs): monitoring, management, QAQC, analyses, reporting. Internal Draft.</li> <li>Data protocols and SOPs. Final Version.</li> <li>Compilation of data and reporting standards. Internal Draft.</li> <li>Compilation of data and reporting standards. Final Version.</li> <li>Technical Memo (TM): Summary report of corrective actions, identification of data gaps and defined priorities. Internal Draft.</li> <li>TM: Summary report of corrective actions, identification of data gaps and defined priorities. Final Version.</li> <li>DMS, beta</li> <li>DMS evaluation, internal draft.</li> <li>DMS evaluation, Final Version</li> <li>DMS user guide, internal draft</li> <li>DMS user guide, Final Version</li> </ul>			
<b>Component 3: Implementing the GSP and Adaptive Management Strategies</b>				
<b>a. Component Administration</b>				
	<b>1 Cost tracking, invoices and payments</b>		0%	
	<ul style="list-style-type: none"> <li>Reimbursement requests.</li> </ul>			
	<b>2 Quarterly and final progress report</b>		0%	
	<ul style="list-style-type: none"> <li>Quarterly and final progress reports.</li> </ul>			
	<b>3 Project Management</b>		0%	
<b>b. Land Purchase / Easement</b>				
<b>c. Planning/Design/Environmental</b>				
	<b>1 Engineering Monitoring Networks</b>	Have considered management area boundaries, and preliminarily identified groundwater elevation and pumping dat gaps.	10%	
	<ul style="list-style-type: none"> <li>Internal Draft. Include compilation of comments/responses.</li> <li>TAC draft. Include compilation of comments/responses.</li> <li>Final Draft. Include compilation of comments/responses.</li> <li>Final Version.</li> </ul>			
	<b>2 Adaptive Management Strategies, Technical Materials and Memorandums</b>		Potential strategies have been explored in technical review of Sierra Valley.	10%
	<ul style="list-style-type: none"> <li>TMs: Internal Draft. Include compilation of comments/responses.</li> <li>TMs: TAC Draft. Include compilation of comments/responses.</li> <li>TMs: Final Draft. Include compilation of comments/responses.</li> <li>TMs: Final Version Draft.</li> </ul>			
<b>d. Implementation / Construction</b>				
	<b>1 Implementing Monitoring Networks</b>			0%
	<ul style="list-style-type: none"> <li>Data collection system documentation as appropriate (e.g.maps, as-builts, participant agreements and certifications.) Internal Draft.</li> <li>Data collection system documentation as appropriate (e.g.maps, as-builts, participant agreements and certifications.) TAC Draft.</li> <li>Data collection system documentation as appropriate (e.g.maps, as-builts, participant agreements, confidentiality agreements and certifications.) Final Version.</li> <li>TM: Ag pump station selection procedure documentaton. Internal Draft</li> <li>TM: Ag pump station selection procedure documentaton. Final Version</li> <li>TM: Recommended vendor list for pumps.</li> </ul>			
<b>e. Monitoring Assessment</b>				
	<b>1 Network Data Assessment and Protocol Refinement</b>		0%	
	<ul style="list-style-type: none"> <li>Baseline data reporting. All data networks. Internal Draft.</li> <li>Baseline data reporting. Final Version.</li> </ul>			



## **MISCELLANEOUS**

### **E. Project Support**

Support letters have been received from or by representatives of the California Indian Water Commission, the Plumas County Board of Supervisors, Plumas County Environmental Health, Sierra County Board of Supervisors, Sierra Brooks Water Advisory Board, Sierraville Public Utility District, California Cattlemen's Association, Plumas-Sierra Farm Bureau, Upper Feather River Integrated Regional Water Management Group, USFS – Plumas National Forest, USFS – Tahoe National Forest, Feather River Land Trust, the City of Loyalton, Sierra County Waterworks (Calpine) District #1, and the Northern Sierra Partnership. These entities represent a broad range of beneficial users of groundwater including local land and water owners and managers, local jurisdictions, and federal and tribal entities within and surrounding the SVB that will be affected by implementation of the GSP. Letters are provided as Att3\_SGM\_WrkPlan\_2of2.

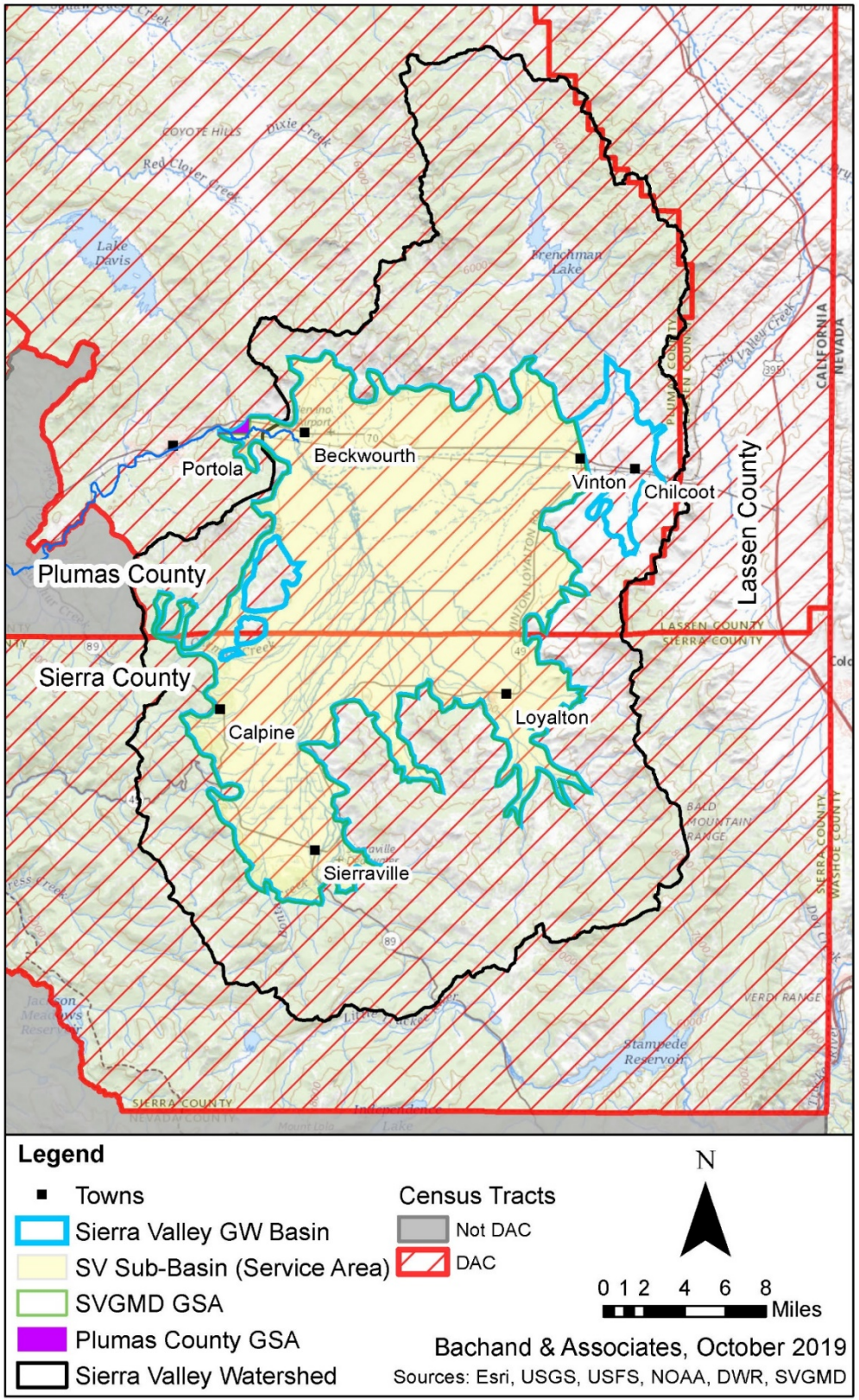
#### **Intra-Basin Support**

Plumas County and the SVGMD—the two GSA's within the Sierra Valley groundwater basin boundary—have executed a MOU that memorializes their commitment to manage groundwater at the local level and to collaboratively develop one GSP tailored to SV community resources and needs. Plumas County, Sierra County, and SVGMD have a long-term and cooperative relationship from decades of working together on sustainable water and land management. Plumas County and Sierra County strongly support this GSP grant application, including providing staff support to the SVGMD for water and land management issues that cross county boundaries, such as SGMA compliance, GSP development, and groundwater sustainability planning. The LOS attachment includes the MOU.

The SV basin area is comprised of the Sierra Valley sub-basin and the adjacent small sub-basin, Chilcoot. The Chilcoot sub-basin is not designated a priority basin under SGMA and is hydrogeologically disconnected from Sierra Valley sub-basin due to faulting. No coordination with the Chilcoot sub-basin is needed for SGMA compliance.

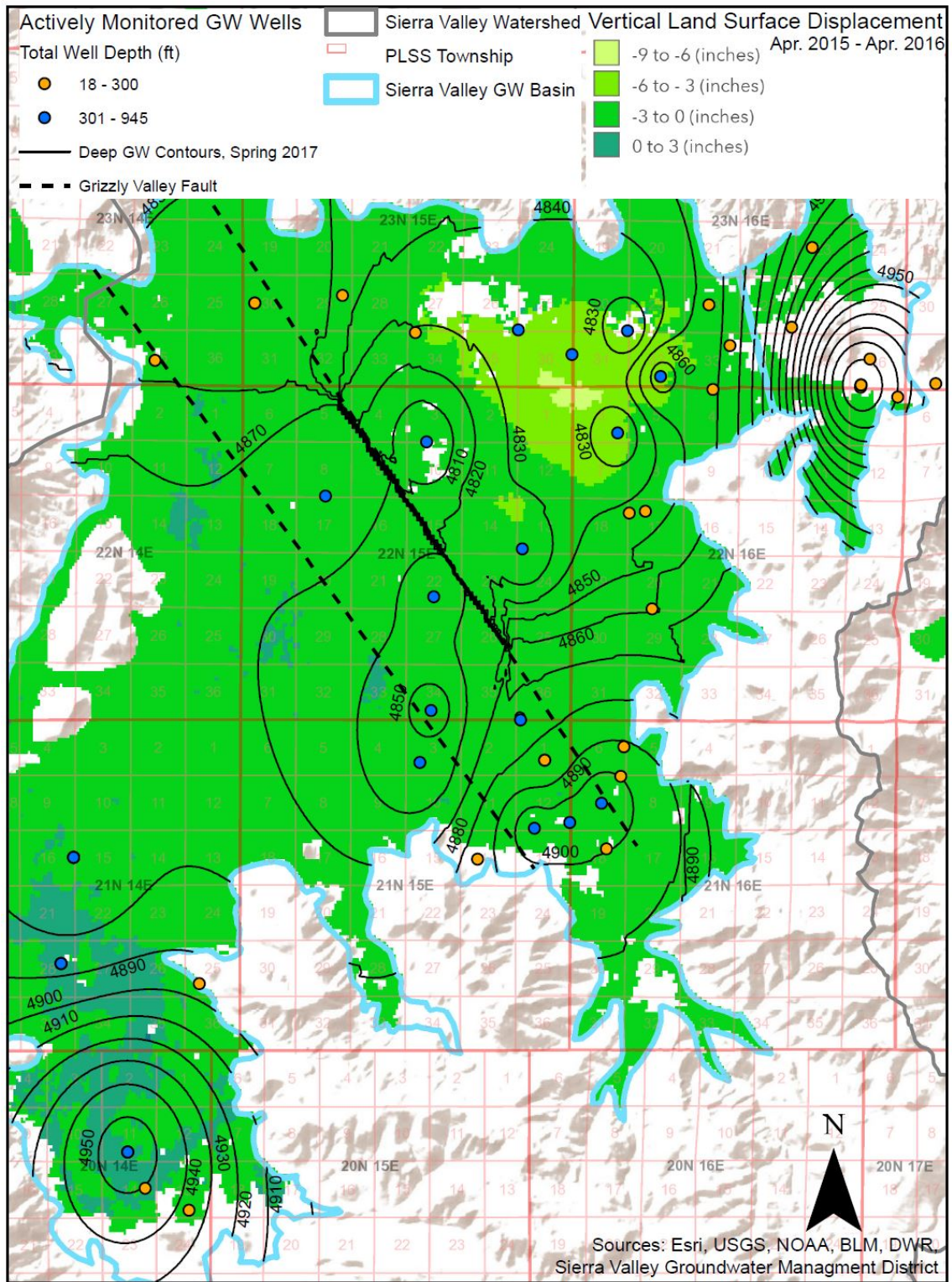
#### **Inter-Basin Communication**

According to SV studies and data collection, the SVB is hydrogeologically disconnected from groundwater sustainability areas managed by GSAs in Butte County, Lassen County, Nevada County and Yuba County. Therefore, the GSP does not include extensive outreach to adjoining GSAs, although neighboring GSA staff frequently engage and information share at conferences, workshops, trainings, and public meetings. Butte and Plumas counties routinely coordinate in other water management venues where inter-basin coordination is desirable such as FERC hydroelectric facility relicensing in the North Fork of the Feather River and Upper Feather River Integrated Regional Management (IRWM) Plan implementation. Butte County and Plumas County share responsibility for assessing and addressing drinking water and wastewater needs of DAs in the Upper Feather Region in the “overlap IRWM area” that includes foothill communities like Yankee Hill and Concow in Butte County.



Map 1. Proposed Project Map. Map shows the geographical location, the service area, the benefitting area, the basin boundary, the GSA boundaries, and the DAC Census Tracts





**Map 2. Current Sierra Valley Basin (SVB) Groundwater Conditions:** Estimated groundwater level contours, interpolated from spring 2017 deep well (> 300 ft) data at 10 ft intervals, show lower deep groundwater elevations northeast of east fault lineament. Overlaid InSAR survey results indicate subsidence in the northeastern part of the valley. All wells shown have been monitored at least once since 2010.

**Table 1. Measures of Benefits**

Benefits	Notes on Measures of Benefits	Component 1								Component 2	
		# and attendance at workshops, public meetings and other forums	Involvement in TAC	Basin Setting (Subarticle 2)	Sustainability Management Criteria (Subarticle 3)	Monitoring Networks (including design and protocols) (Subarticle 4)	Projects and Management Actions (Subarticle 5)	Plan Implementation (Subarticle 5)	Technical Reporting Standards	Engineered and Implemented Monitoring Networks	Local and regional Adaptive Management Strategies
Drinking water source/drinking water quality	The GSP sections will characterize the problem, and develop management criteria and monitoring approaches. Task deliverables and resulting collaboration are measures for this benefit.			Water quality and groundwater level basin setting	SCM for ensuring water quality and groundwater level are sustainably managed	Documentation of integration with current SVB water quality and public health efforts	Identification of future water quality and public health needs.			Implementation of monitoring networks for lonterm sustainability	
environmentally and economically sustainable	Components 2 and 3 cover the development of sustainable criteria including the defining SVB financial resources and regional resource management partnerships. Task deliverables and resulting collaboration are measures for this benefit.			Basin setting regarding all Sustainability Indicators	SCM for all Sustainability Indicators.	Development of effective, cost-effective and informative network	Identification of future project needs	Financial assessment to ensure within financial resources of the GSA	Monitoring standards and protocols developed for defensible data monitoring	Implementation of monitoring networks for lonterm sustainability	Partnerships with regional stakeholders
climate change pressure	Sustainable management criteria and measures of sustainability are providing information and methods to adapt to climate change. Task deliverables and resulting collaboration are measures for this benefit				SCM for all Sustainability Indicators.	Development of effective, cost-effective and informative network				Implementation of monitoring networks for lonterm sustainability	Partnerships with regional stakeholders
Tribes and DA engagement	Attendance at workshops & other outreach events, involvement in TAC and document of recommendations / responses are measures for this benefit.	Attendance, meeting documentation	Participation, TAC documentation								
TAC involvement	TAC participating in outreach and providing technical feedback are measures for this benefit.		Participation, TAC documentation								
Vision groundwater sustainability	A common sustainability leads GSP development. Completion of those components are measures for those benefits	Attendance, meeting documentation									
extensive impact / vulnerability assessment	Implementation of both Components provides robust and thorough assessment of risks and provides. Completion of those components are measures for this benefit.	Attendance, meeting documentation	Participation, TAC documentation	Basin setting regarding all Sustainability Indicators	SCM for all Sustainability Indicators.	Development of effective, cost-effective and informative network	Identification of future project needs	Financial assessment to ensure within financial resources of the GSA	Monitoring standards and protocols developed for defensible data monitoring		Partnerships with regional stakeholders
Capacity building	The development of data tools, technical expertise, and value from improved resource sustainability are measures for this benefit					Monitoring Protocols and Methodss			Databases and data management systems	Baseline monitoring beta tests tools	Partnerships with regional stakeholders

## California Indian Water Commission

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To Whom it May Concern:

This letter of support by the California Indian Water Commission (CIWC) is written in support of the Sierra Valley Groundwater Management District (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a Groundwater Sustainability Plan (GSP) to be completed for the Basin by January 31, 2022, CIWC strongly supports the SVGMD in its goal of developing a GSP to achieve groundwater sustainability in the Basin in accordance with SGMA. Sierra Valley is sparsely populated (< 2200 per the 2010 Census), and the entire basin has Disadvantaged Community (DAC) status, with the two census tracts covering the area at 66% and 70% of California's Median Household Income. The grant funding being offered by DWR will offer critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts.

Tribal representatives from the Paiute, Washoe and Maidu tribes that have traditionally shared stewardship of the ancestral lands and waters within and surrounding the Sierra Valley Basin (SVB) seek to engage with the Sierra Valley Groundwater Sustainability Plan (SVGSP) development process in order to reconnect tribal values with groundwater management assessments and priority actions that will be developed during the SVGSP process. As an intertribal organization pursuant to PL 93-638, the CIWC supports tribal interests in these stewardship opportunities.

Of particular interest to the tribes is the intersection of the Sustainable Groundwater Management Act (SGMA) regulations and the Tribal Cultural Beneficial Uses established by the State Water Resources Control Board (Water Board), but also the recognition and integration of tribal water rights as follows:

### Tribal Tradition and Culture (CUL):

Uses of water that support the cultural, spiritual, ceremonial, or traditional rights or lifeways of California Indians, including, but not limited to: navigation, ceremonies, fishing, gathering, consumption of natural aquatic resources, including fish, shellfish, vegetation, and materials.

The three tribes intend to engage with the SVGSP process in coordination with the Plumas National Forest (PNF) and with Plumas County, the Groundwater Sustainability Agency (GSA) for portions of the Ramelli Allotment where tribes have deep and enduring cultural connections that pre-date non-tribal settlement of the region and the establishment of the National Forest system of federal ownership and

## California Indian Water Commission

management in the region. The Maidu, Paiute and Washoe tribes managed vast ancestral territories for centuries that overlapped in portions of the Sierra Valley Basin. Although non-tribal ownership of shared ancestral lands now dominates land and water management in the Sierra Valley Basin, the tribes seek to affect such management over the 50-year SGMA planning period through the public involvement requirements afforded by the SGMA regulations.

First, the tribes will communicate public participation opportunities afforded by the SV GSP development process to tribal members.

And secondly, tribes will engage with tribal members in developing tribal perspectives on basin setting characterizations and water management priorities for the SVGSP for lands and waters managed by the Plumas National Forest (PNF) within the Wild and Scenic River Corridor of the Middle Fork of the Feather River from the A-23 Bridge to Rocky Point.

As “sovereigns” under SGMA, the Plumas National Forest and the Washoe, Paiute, and Maidu tribes will speak for themselves pursuant to self-determination. The PNF and the three tribes will draft their own basin setting narratives and water management narratives for the SVGSP and coordinate perspectives and priorities as desired by the parties and Plumas County. The CIWC is hopeful this will bring better awareness to tribal water rights and understanding of fulfillment of tribal trust responsibilities.

Coordination and consultation frameworks developed among the tribes, the PNF and Plumas County under SGMA for the SVGSP will be provided to DWR with dedicated support provided by the Sierra Valley Groundwater Sustainability Planning Grant.

CIWC exists to uphold traditional responsibilities to creation (water, land, air, fire) per our sustained ancestral lifeways and responsibilities to ensure resiliency for future generations.

CIWC Board of Directors is extremely interested in understanding the nexus between SGMA and the needs and priorities of water to tribal communities of California. We believe this effort will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users, tribes and other area stakeholders. For support of meaningful tribal engagement in the SGMA process we strongly support this application and encourage the Sustainable Groundwater Management Grant Program to award funding to the Sierra Groundwater Management District. We are happy to further discuss this application and the unique challenges that face Sierra Valley and can be contacted at (530) 521-8141 or by email at [trinacunningham.maidu@gmail.com](mailto:trinacunningham.maidu@gmail.com).

Sincerely,



Trina Cunningham  
(530) 521-8141  
PO Box 224  
Quincy, CA 95971



# BOARD OF SUPERVISORS

---

VACANT, DISTRICT 1  
KEVIN GOSS, DISTRICT 2  
SHARON THRALL, DISTRICT 3  
LORI SIMPSON, DISTRICT 4  
JEFF ENGEL, DISTRICT 5



October 21, 2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

Plumas County strongly supports of the Sierra Valley Groundwater Management District (SVGMD) application for Round 3 Program Funding as this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

Plumas County—the Groundwater Sustainability Agency (GSA) for a small portion of the Sierra Valley Groundwater Basin that is outside of the SVMGD's jurisdictional GSA boundary—has executed a Memorandum of Understanding (enclosed herein) with the SVGMD that memorializes our commitment and intent to collaboratively develop one Sierra Valley Groundwater Sustainability Plan (SV GSP) that encompasses the SVGMD and Plumas County GSA areas and that includes the water management perspectives and priorities of local land and water owners and managers, interested citizens and public members, and federal and tribal entities.

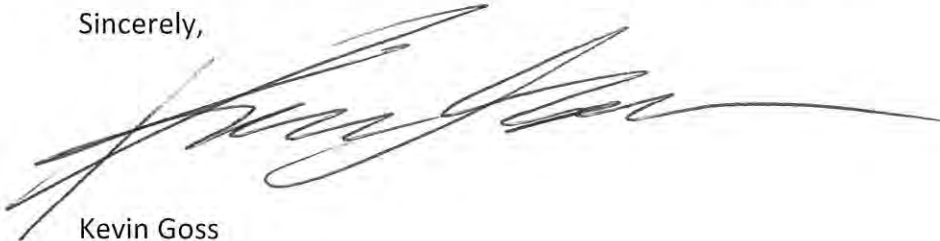
In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a Groundwater Sustainability Plan (GSP) to be completed for the Basin by January 31, 2022, Plumas County actively supports the SVGMD in the development of this SV GSP grant application and in achieving our shared goal of developing and implementing a GSP in order to achieve groundwater sustainability in the Basin in accordance with SGMA. Sierra Valley is sparsely populated (< 2200 per the 2010 Census), and the entire basin has Disadvantaged Community (DAC) status, with two census tracts covering the entire Sierra Valley basin at 66% and 70% of California's Median Household Income.

PLUMAS COUNTY BOARD OF SUPERVISORS  
Letter in Support of Sierra Valley Groundwater Management District application  
for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

Plumas County has a long-term and cooperative relationship with the SVGMD and knows from decades of working together on sustainable water and land management in the Sierra Valley, that adequate funding for developing the SV GSP is an essential part of enabling the SVGMD to implement an effective and economically sustainable groundwater management program that is supported by SGMA beneficial users; stakeholders; and local, tribal, and federal governments. DWR grant funding will offer critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts by the SVGMD.

Plumas County has provided staff support for the development of this application and commits to continue to be an active partner with the SVGMD throughout the SGMA planning process. Plumas County encourages the Sustainable Groundwater Management Grant Program to award funding to the Sierra Valley Groundwater Management District. We are happy to further discuss this application and the unique challenges that face Sierra Valley. Please contact the Plumas County Planning Director, Tracey Ferguson, AICP, at [traceyferguson@countyofplumas.com](mailto:traceyferguson@countyofplumas.com) or (530) 283-6214.

Sincerely,



Kevin Goss  
Plumas County Supervisor, District 2

Enclosed: Memorandum of Understanding between Parties in the Sierra Valley  
Groundwater Basin as Related to the Sustainable Groundwater Management Act

cc: Sharon Thrall, Plumas County Supervisor, District 3  
Lori Simpson, Plumas County Supervisor, District 4  
Jeff Engel, Plumas County Supervisor, District 5



MEMORANDUM OF UNDERSTANDING BETWEEN PARTIES IN THE SIERRA VALLEY GROUNDWATER BASIN AS RELATED TO THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT.

THIS MEMORANDUM OF UNDERSTANDING (MOU) is made and entered into on January 8, 2019 by and between the County of Plumas ("County" herein) and the Sierra Valley Groundwater Management District ("District" herein), each a "Party" and collectively the "Parties").

WHEREAS, on September 16, 2014, Governor Jerry Brown signed into law Senate Bills 1168 and 1139 and Assembly Bill 1739 known collectively as the Sustainable Groundwater Management Act ("SGMA"); and

WHEREAS, the purpose of SGMA is to create a comprehensive management system in California by creating a structure to manage groundwater at the local level, while providing authority to the State to oversee and regulate, if necessary, the local groundwater management system; and

WHEREAS, SGMA empowers and requires local agencies to develop and adopt Groundwater Sustainability Plans ("GSP") that are tailored to the resources and needs of their communities, provide a buffer against drought and contribute to reliable water supply for the future; and

WHEREAS, Water Code Section 10723.6 authorizes a combination of local agencies overlying a groundwater basin to elect to become a Groundwater Sustainability Agency ("GSA") by using a memorandum of agreement or other agreement; and

WHEREAS, the Department of Water Resources (DWR) granted the Sierra Valley Groundwater Management District GSA authority over the portion of Sierra Valley Groundwater Basin within the District's boundaries on 4-1-2017; and

WHEREAS, the Department of Water Resources (DWR) granted Plumas County GSA authority over portions of the Sierra Valley Groundwater Basin outside of the District boundary and within Plumas County on 4-14-2017; and

NOW THEREFORE, incorporating the above recitals herein it is mutually understood and agreed as follows:

1. PURPOSE. This MOU is entered into by and between the Parties to facilitate a cooperative and ongoing working relationship to develop a single Sierra Valley GSP that will allow compliance with SGMA and State law, both as amended from time to time. The primary goal of the MOU is to eliminate overlap between the GSAs and to establish a working partnership to move toward a multi-GSA agreement to cover all portions of the Sierra Valley Goundwater Basin designated in DWR Bulletin 118 and to prepare and adopt a SGMA compliant GSP prior to the January 31, 2022 deadline set under SGMA.

All Parties agree that all actions taken and/or contemplated under the GSP will be based on sound groundwater science and local expertise that will drive the development of the sustainability goals of the basin as outlined under SGMA.

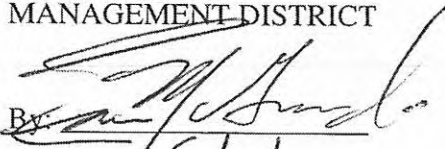
2. TERM. This MOU shall remain in effect unless terminated by the mutual consent of the Parties and as allowed by State law.

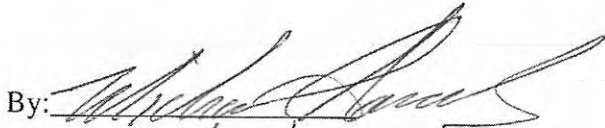
3. AMENDING THE MOU. This MOU hereto may only be amended by subsequent writing, approved and signed by all Parties.

4. HOLD HARMLESS. No Party, not any officer or employees of a Party, shall be responsible for any damage or liability occurring by reason of anything done or omitted to be done by another Party in connection with this MOU.

SIERRA VALLEY  
GROUNDWATER  
MANAGEMENT DISTRICT

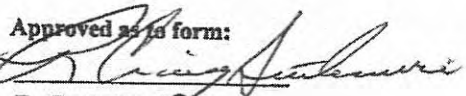
COUNTY OF PLUMAS

By: 

By: 

DATE: 2/11/19

DATE: 1/8/19

Approved as to form:  
  
R. Craig Settlemyre  
Plumas County Counsel

AGREEMENT NO. \_\_\_\_\_



# Plumas County Environmental Health

270 County Hospital Road, Ste. 127, Quincy CA 95971

Phone: (530) 283-6355 ~ Fax: (530) 283-6241

---

October 21, 2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Support for Sierra Valley Groundwater Management District's Grant Application  
Sustainable Groundwater Management Planning, Round 3 Funding

To whom it may concern:

Plumas County Environmental Health enthusiastically supports the Sierra Valley Groundwater Management District's (SVGMD) application for Round 3 Sustainable Groundwater Management Funding. This funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a Groundwater Sustainability Plan (GSP) to be completed for the Basin by January 31, 2022, Plumas County Environmental Health strongly supports the SVGMD in its goal of developing a comprehensive GSP to achieve groundwater sustainability in the Basin in accordance with SGMA. Sierra Valley is sparsely populated (< 2200 per the 2010 Census), and the entire basin has Disadvantaged Community (DAC) status, with the two census tracts covering the area at 66% and 70% of California's Median Household Income. The grant funding being offered by DWR will provide critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts.

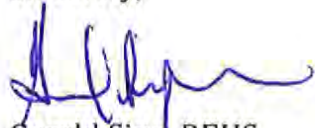
Plumas County Environmental Health has long been a partner in promoting and protecting the groundwater resources of this important Basin. Our staff regulates and oversees public water systems, state small water systems, and domestic water systems serving disadvantaged communities and households throughout the Basin. We also provide field inspection of new groundwater well installations, ensuring proposed well locations and construction protect groundwater quality. Furthermore, we offer informal technical expertise to the SVGMD Board of Directors and educate the community on groundwater protection. Through this sustainable groundwater management planning application, Environmental Health would serve on a more formal, collaborative Technical Advisory Committee that is anticipated to include representatives of Plumas and Sierra County Environmental Health Departments, University of California Cooperative Extension staff, and a local engineer with expertise in sustainable groundwater management. This committee would greatly benefit disadvantaged communities and households throughout the Sierra Valley by ensuring that these most vulnerable populations have safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.



Environmental Health also foresees considerable technical benefits from this sustainable groundwater management application. The development of standardized groundwater monitoring protocols, improved data networks and databases, and overall better planned and managed data as related to water quality, water levels and subsidence are all deliverables in this application. Having accurate, defensible, and comprehensive groundwater data is crucial if SVGMD is to successfully develop a sustainable groundwater management plan that has local buy-in, meets the needs of the diverse group of local stakeholders, and satisfies SMGA.

In summary, I believe this sustainable groundwater management application will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders. I strongly support this application and encourage the Sustainable Groundwater Management Grant Program to award funding to the Sierra Valley Groundwater Management District. I am happy to further discuss this application and the unique challenges faced by SVGMD. Please feel free to contact me at 530-283-6367 or by email at [jerrysipe@countyofplumas.com](mailto:jerrysipe@countyofplumas.com).

Sincerely,



Gerald Sipe, REHS  
Director, Plumas County Environmental Health

**COUNTY OF SIERRA  
BOARD OF SUPERVISORS**

PO Drawer D  
Downieville, CA 95936  
Telephone: (530) 289-3295  
Fax: (530) 289-2830



October 15, 2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

The Sierra County Board of Supervisors is writing in support of the Sierra Valley Groundwater Management District (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

Sierra County and Plumas County have lands overlying the Sierra Valley Groundwater Basin, for which we have executed a joint powers agreement for the preservation and management of groundwater in Sierra Valley. In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a Groundwater Sustainability Plan (GSP) to be completed for the Basin by January 31, 2022, the Sierra County Board of Supervisors strongly supports the SVGMD in its goal of developing a GSP to achieve groundwater sustainability in the Basin in accordance with SGMA. Sierra Valley is sparsely populated (< 2200 per the 2010 Census), and the entire basin has Disadvantaged Community (DAC) status, with the two census tracts covering the area at 66% and 70% of California's Median Household Income. The grant funding being offered by DWR will offer critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts.

We believe this effort will promote development of an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders. We strongly support this application and encourage the Sustainable Groundwater Management Grant Program to award funding to the Sierra Valley Groundwater Management District. We are happy to further discuss this application and the unique challenges that face Sierra Valley and can be contacted at 530-289-3295.

Sincerely,

Sierra County  
Board of Supervisors

Paul Roen  
Chairman

October 15, 2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

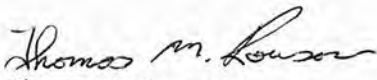
The Sierra Brooks Water Advisory Board is writing in support of the Sierra Valley Groundwater Management District (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a Groundwater Sustainability Plan (GSP) to be completed for the Basin by January 31, 2022, the Sierra Brooks Water Advisory Board strongly supports the SVGMD in its goal of developing a GSP to achieve groundwater sustainability in the Basin in accordance with SGMA. Sierra Valley is sparsely populated with less than 2200 people per the 2010 Census, and the entire basin has Disadvantaged Community (DAC) status, with the two census tracts covering the area at 66% and 70% of California's Median Household Income. The grant funding being offered by DWR will offer critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts.

SGMA requires Groundwater Sustainability Agencies to consider the interests of all beneficial uses and users of groundwater, including municipal well operators and public water systems. Water quality degradation that significantly and unreasonably affects the supply or suitability of groundwater for use in drinking water systems is an undesirable result that must be prevented. A high-quality Groundwater Sustainability Plan for Sierra Valley would add to the protections offered by the State Water Board and Sierra County Environmental Health Department to ensure a groundwater supply suitable to the needs of our residents.

We believe this effort will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders. We strongly support this application and encourage the Sustainable Groundwater Management Grant Program to award funding to the Sierra Valley Groundwater Management District. We are happy to further discuss this application and the unique challenges that face Sierra Valley and can be contacted at 530-251-7772 or by email at [tkrowson@psln.com](mailto:tkrowson@psln.com)

Sincerely,

  
Thomas M. Rowson

Chairman





P.O. Box 325 Sierraville, CA 96126

530-832-4649 / 530-913-8032

10/16/2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

The Sierraville Public Utility District is writing in support of the Sierra Valley Groundwater Management District (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a Groundwater Sustainability Plan (GSP) to be completed for the Basin by January 31, 2022, Sierraville Public Utility District strongly supports the SVGMD in its goal of developing a GSP to achieve groundwater sustainability in the Basin in accordance with SGMA. Sierra Valley is sparsely populated (< 2200 per the 2010 Census), and the entire basin has Disadvantaged Community (DAC) status, with the two census tracts covering the area at 66% and 70% of California's Median Household Income. The grant funding being offered by DWR will offer critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts.

SGMA requires Groundwater Sustainability Agencies to consider the interests of all beneficial uses and users of groundwater, including municipal well operators and public water systems. Water quality degradation that significantly and unreasonably affects the supply or suitability of groundwater for use in drinking water systems is an undesirable result that must be prevented. A high-quality Groundwater Sustainability Plan for Sierra Valley would add to the protections offered by the State Water Board and Sierra County Environmental Health Department to ensure a groundwater supply suitable to the needs of our residents.

We believe this effort will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders. We strongly support this application and encourage the Sustainable Groundwater Management Grant Program to award funding to the Sierra Valley Groundwater Management District. We are happy to further discuss this application and the unique challenges that face Sierra Valley and can be contacted at 530-913-8032 or by email at [landswright@digitalpath.net](mailto:landswright@digitalpath.net).

Sincerely,

Lee Wright

President

*SPUD is an equal opportunity provider*

**SPUD Board Members:**

| **Lee Wright** 994-1098 [landswright@digitalpath.net](mailto:landswright@digitalpath.net) | **John Shaffer** 559-4404 [jshaffer@tdrpd.org](mailto:jshaffer@tdrpd.org)  
| **Mike Blide** 320-5711 [mikeblide@gmail.com](mailto:mikeblide@gmail.com) | **Al Pombo** 392-5534 [aljpombo@gmail.com](mailto:aljpombo@gmail.com)  
| **Rhynie Hollitz** 401-8281 [hollitzranch@yahoo.com](mailto:hollitzranch@yahoo.com)



Plumas-Sierra Cattlemen's Association  
PO Box 693  
Loyalton, CA 96118-0035

*October 16, 2019*

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

The Plumas-Sierra Cattlemen's Association is writing to support Sierra Valley Groundwater Management District's (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

Ranching has existed in Sierra Valley for generations and faces many regulatory and resource challenges. Declining area groundwater threatens ranching in many ways:

- Lowering groundwater levels threaten stock wells;
- Groundwater supplies are under greater demand pressure with negative implications for local ranchers;
- Groundwater uncertainty affects business assumptions and creates business uncertainty, increasing the challenge of maintaining one's livelihood;
- Regulatory costs are further stressing narrow profit margins.

The Sustainable Groundwater Management Act (SGMA) requires completion of a Groundwater Sustainability Plan (GSP) by the SVGMD, the basin's Groundwater Sustainability Agency (GSA). As Sierra Valley is designated a medium priority basin, the GSP is legally required to be completed by January 31, 2022. Required by SGMA, the SVGMD, the areas GSA, needs to consider the interests of all beneficial uses and users of groundwater, The grant funding being offered by DWR will offer critical support to develop a legally defensible GSP to protect groundwater. A desirable outcome would be an effective and cost effective program for sustainable groundwater management.



The Plumas-Sierra Cattlemen's Association has its own goals from SGMA as related to the health and sustainability of the cattle industry in Sierra Valley:

- Stabilize groundwater levels to create greater certainty regarding groundwater supplies and their costs;
- Promote a legally defensible process for governing groundwater supply and its predictability, that provides a transparent and clear strategy for groundwater management;
- Engage with others with a stake in groundwater and natural resource stability, including the U.S. Forest Service and the California Department of Water Resources (DWR), to improve watershed-wide land and water resource management;
- Develop an approach that is legally and scientifically defensible, effective and affordable;
- Create regulatory efficiencies through better integration of regulatory agencies; and
- Provide a forum to improve communication between Sierra Valley and its stakeholders, with California government agencies.

Achieving these goals is important to the Plumas-Sierra Cattlemen's Association to help maintain a vibrant ranching economy in Sierra Valley that directly and indirectly drives much of the region's economy.

The Plumas-Sierra Cattlemen's Association is committed to preserving California's rich ranching heritage, which is why we strongly support SVGMD's application for Round 3 SGM Planning funding. We believe this effort will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders. We are happy to further discuss this application and the unique challenges that face Sierra Valley and can be contacted at (530) 249-4988.

Sincerely,

A handwritten signature in blue ink that reads "Rick Roberti". The signature is written in a cursive, flowing style.

Rick Roberti

President

Plumas-Sierra County Farm Bureau  
PO Box 35  
Loyalton, CA 96118-0035

*October 15, 2019*

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

CALIFORNIA



FARM BUREAU  
FEDERATION

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

The Plumas-Sierra County Farm Bureau is writing to support the Sierra Valley Groundwater Management District's (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

Sierra Valley has a rich and vibrant ranching heritage, and is located in one of California's most beautiful places. Located in the Sierra Nevada, Sierra Valley is home to wonderful meadows, wetlands and vistas. For over a century, ranchers in Sierra Valley have been stewards of this unique valley and its resources.

The ranching community understands groundwater levels have been in general decline over the last few decades. We understand the decline in groundwater resources is a threat to our livelihood by increasing costs of water acquisition, by creating business uncertainties, and potential environmental impacts to local wetlands and meadows

The Sustainable Groundwater Management Act (SGMA) requires completion of a Groundwater Sustainability Plan (GSP) by the SVGMD, the basin's Groundwater Sustainability Agency (GSA). As Sierra Valley is designated a medium priority basin, the GSP is legally required to be completed by January 31, 2022. Required by SGMA, the GSA needs to consider the interests of all beneficial uses and users of groundwater. The grant funding being offered by DWR will offer critical support to develop a legally defensible GSP to protect groundwater.



The process will also build important infrastructure and data tools to enable efficient and cost effective monitoring and management efforts. A high-quality Groundwater Sustainability Plan for Sierra Valley will help add to the protections offered by the State Water Board and Sierra County Environmental Health Department to ensure a groundwater supply suitable to the needs of our residents.

The Plumas-Sierra County Farm Bureau also has goals for the SGMA process:

- Stabilize groundwater levels to create greater certainty regarding groundwater supplies and their costs;
- Promote a legally defensible process for governing groundwater supply and its predictability, that provides a transparent and clear strategy for groundwater management;
- Engage with others with a stake in groundwater and natural resource stability, including the U.S. Forest Service and the California Department of Water Resources (DWR), to improve watershed-wide land and water resource management;
- Develop an approach that is legally and scientifically defensible, effective and affordable;  
Create regulatory efficiencies through better integration of regulatory agencies; and
- Provide a forum to improve communication between Sierra Valley and its stakeholders, with California government agencies.

These goals are somewhat optimistic, but we feel that area commitment with support and help from DWR can help us achieve these goals.

The mission of the California Farm Bureau is to protect family farms and ranches, which is why the Plumas-Sierra County Farm Bureau strongly supports SVGMD's application for Round 3 SGM Planning funding. We believe this effort will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders. We are happy to further discuss this application and the unique challenges that face Sierra Valley and can be contacted at (530) 993-4550.

Sincerely,

A handwritten signature in blue ink that reads "Dave Roberti". The signature is written in a cursive, flowing style.

Dave Roberti

President

# Upper Feather River Integrated Regional Water Management Group

555 Main Street | Quincy, CA | 95971 | (530) 283-6214 | <http://featherriver.org> | [ufr.contact@gmail.com](mailto:ufr.contact@gmail.com)

---

October 18, 2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

The Upper Feather River Integrated Regional Water Management Group (RWMG) is writing in support of the Sierra Valley Groundwater Management District (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a Groundwater Sustainability Plan (GSP) to be completed for the Basin by January 31, 2022, the Upper Feather River RWMG strongly supports the SVGMD in its goal of developing a GSP to achieve groundwater sustainability in the Basin in accordance with SGMA. Sierra Valley is sparsely populated (<2,200 persons per the 2010 Census), and the entire basin has Disadvantaged Community (DAC) status, with the two census tracts covering the area at 66% and 70% of California's Median Household Income.

The grant funding being offered by DWR will offer critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts.

The development of a Groundwater Sustainability Plan is identified as an implementation project within the 2016 Upper Feather River Integrated Regional Water Management (IRWM) Plan. As such, we strongly support the efforts of the SVGMD and their grant application for funding.

The proposed project addresses a number of objectives within the IRWM Plan, as well as resource management strategies, specifically identified as follows:

2016 Upper Feather River Integrated Regional Water Management Plan Objectives:

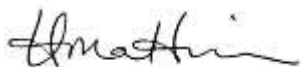
- Restore natural hydrologic functions.
- Build communication and collaboration among water resources stakeholders in the Region.
- Protect, restore, and enhance the quality of surface and groundwater resources for all beneficial uses, consistent with the Regional Water Quality Control Basin Plan.
- Address water resources and wastewater needs of disadvantaged communities and Native Americans.
- Coordinate management of recharge areas and protect groundwater resources.
- Maximize agricultural, environmental and municipal water use efficiency.
- Effectively address climate change adaptation and/or mitigation in water resources management.
- Improve efficiency and reliability of water supply and other water-related infrastructure.
- Enhance public awareness and understanding of water management issues and needs.
- Address economic challenges of agricultural producers.
- Work with counties/communities/groups to make sure staff capacity exists for actual administration and implementation of grant funding.

California Water Plan Resource Management Strategies addressed:

- Agricultural water use efficiency
- Conjunctive management
- Agricultural land stewardship
- Land use planning and management
- Recharge area protection
- Watershed management
- Public outreach and engagement

We believe this effort will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders. We strongly support this application and encourage the Sustainable Groundwater Management Grant Program to award funding to the Sierra Valley Groundwater Management District. We are happy to further discuss this application and the unique challenges that face Sierra Valley. Please contact the Plumas County Planning Director, Tracey Ferguson, AICP, at [traceyferguson@countyofplumas.com](mailto:traceyferguson@countyofplumas.com) or (530) 283-6214.

Sincerely,



Uma Hinman, Coordinator

Upper Feather River Integrated Regional Water Management Group

ON BEHALF OF

Sharon Thrall, Chair

Upper Feather River Integrated Regional Water Management Group

cc: Assemblyman Brian Dahle  
Senator Ted Gaines  
Joe Hoffman, Plumas National Forest  
Matt Jedra, Plumas National Forest - Beckwourth District Ranger  
Ryan Bauer, Plumas National Forest - Forest Fuels Program Manager  
Sharon Thrall, Vice Chair, Plumas County Board of Supervisors  
Tracey Ferguson, Planning Director, Plumas County Planning Department  
Hannah Hepner, Coordinator, Plumas County Fire Safe Council



United States  
Department of  
Agriculture

Forest  
Service

Plumas  
National  
Forest

159 Lawrence Street  
Quincy, CA 95971-6025  
(530) 283-2050 Voice  
(530) 534-7984 Text (TDD)

---

**File Code:** 2560

**Date:** October 23, 2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

To whom it may concern:

Plumas National Forest (PNF) is writing in support of the Sierra Valley Groundwater Management District (SVGMD) application for Round 3 Program Funding under the California Department of Water Resource (CADWR) Sustainable Groundwater Management Grant. PNF believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

PNF manages a culturally rich and hydrologically important area within Sierra Valley along the federally designated Wild and Scenic River corridor for Middle Fork Feather River. This area stretches from the Plumas County road A-23 bridge over the river downstream to the outlet of Sierra Valley at Rocky Point. The relatively small 155-acre "sliver" of land that is part of the Sierra Valley groundwater management area designated by CADWR, but is not located within the SVGMD boundary, is included in this Wild and Scenic corridor and is located entirely on National Forest System lands. For the purposes of the Sierra Valley Groundwater Sustainability Plan (SVGSP), this small area is the responsibility of Plumas County. Plumas County and SVGMD have agreed to develop one Ground Water Sustainability Plan (GSP) for the Sierra Valley basin, with SVGMD as the grant application.

This area of the Middle Fork Feather Wild and Scenic River corridor includes a grazing allotment managed by PNF. The Ramelli Allotment is also the location of a sizable irrigation water right from Grizzly Creek near its confluence with Middle Fork Feather River. For the local Maidu, Paiute, and Washoe tribes, this part of the Wild and Scenic corridor is an area with deep and enduring cultural connections that predate both establishment of the U.S. Forest Service and non-tribal settlement of the region. Over the past eight months, PNF staff, Plumas County staff, and tribal representatives have been meeting to develop an integrated and collaborative approach for working with SVGMD to develop a GSP that includes water management priorities for federal lands and tribal interests in the Wild and Scenic corridor of Middle Fork Feather River. These interests will include providing substantial basin setting information for this vital area of Sierra Valley, as well as considerations of different objectives for future management of the area. PNF will continue to dedicate staff resources towards developing this aspect of the SVGSP and no grant funds are sought to support PNF costs. PNF commends Plumas County and SVGMD for including resources for tribal participation in the SVGSP planning grant application.

In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a GSP to be completed for the Sierra Valley basin by January 31, 2022, PNF strongly supports SVGMD in its goal of developing



a GSP to achieve groundwater sustainability in the basin in accordance with SGMA. Sierra Valley is sparsely populated and the entire basin is designated by CADWR as a Disadvantaged Community. The grant funding being offered by CADWR will offer critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts.

PNF believes this effort will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders. PNF strongly supports this application and encourages the Sustainable Groundwater Management Grant Program to award funding to SVGMD. We are happy to further discuss this application and the unique characteristics of PNF's land management in Sierra Valley. PNF's contact for this project is Joe Hoffman, who can be reached at 530-283-7868 or at [joseph.hoffman@usda.gov](mailto:joseph.hoffman@usda.gov).

Sincerely,



CHRIS CARLTON

Forest Supervisor

Cc: Nancy Francine  
Joe Hoffman  
Elaine Vercruysse  
Dan Elliott





United States  
Department of  
Agriculture

Forest  
Service

Sierraville  
Ranger  
District

317 South Lincoln St.  
Sierraville, CA  
96126  
530 994-3401

---

File Code: 2500

Date: October 18, 2019

California Department of Water Resources  
Sustainable Groundwater Management Grant  
Program  
1416 9th Street  
Sacramento, CA 95814

Re: Support for Sierra Valley Groundwater  
Management District's application for  
Sustainable Groundwater Management  
(SGM) Planning Grant, Round 3 SGM  
Planning

To whom it may concern:

The Sierraville Ranger District of the Tahoe National Forest is providing their respective support for the Sierra Valley Groundwater Management District's (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

Sierra Valley is an area with significant conservation values - ecological, economic and cultural. The basin is the headwaters of the Middle Fork Feather River, one of the first designated Wild and Scenic Rivers in the country, and a significant source of water for the State Water Project aligned with Lake Oroville. The basin has thousands of acres of wetlands and marshes, the largest such complexes in the Sierra Nevada and home to hundreds of plant and animal species, many protected or endangered. The Valley also has a rich agricultural heritage, with many cattle ranches using a combination of private and USFS allotments to support their livestock operations. Lands managed by the Tahoe National Forest surround the Sierra Valley basin and contribute significant surface runoff and groundwater infiltration as well as provide a continuum of habitat from high mountain ridges and montane meadows down to Sierra Valley.

As land managers of the Tahoe National Forest, the Sierraville Ranger District strives for sustainable resource management and works closely with permittees on grazing management, as well as advancing restoration goals aligned with forest health and meadow function projects. Climate changes threatens our Sierra Nevada forests through reduced snowpack, extended fire seasons and increased fire risks. Management innovations are needed in forest management to reduce forest fuels while still maintaining a healthy forest with broad value to people and the environment.



The Sustainable Groundwater Management Act (SGMA) requires completion of a Groundwater Sustainability Plan (GSP) by the basin's Groundwater Sustainability Agencies (GSAs), with the Sierra Valley Groundwater Management District representing all but a sliver. As Sierra Valley is designated a medium priority basin, the GSP needs to be completed by January 31, 2022. As required by SGMA, the GSP needs to consider the interests of all beneficial uses and users of groundwater. This includes groundwater demands to meet both human and environmental needs. The rural communities aligned with the greater Sierra Valley are designated as Disadvantaged Communities, and groundwater is important for the health and well-being of residents who predominantly rely on groundwater for drinking water. Stabilizing groundwater levels through sustainable groundwater management will help support the local economy as well, a benefit to all in Sierra Valley in the sustaining local economy and maintaining the Valley's agricultural heritage.

The funding provided by this grant through DWR will provide critical support to develop a legally defensible GSP to sustain groundwater. The SGMA process will provide an opportunity for all area beneficial users to better understand groundwater and its management. This process affords the DACs and other beneficial users to participate in the process through various outreach avenues, such as involvement in Technical Advisory Committees and in workshops. Finally, the process will build important infrastructure and data tools to enable efficient and cost-effective monitoring and management efforts.

Under the SGMA, the federal government can enter into agreements with the GSA if there are shared interests in groundwater sustainability. The Sierraville Ranger District has a shared interest in groundwater sustainability in the region, given that Tahoe National Forest lands both impact and rely on healthy aquifers. With nearly 115,000 acres in the Sierra Valley Groundwater Management District, lands managed by the Tahoe National Forest contribute approximately 39% of the SVGMD's service area. Over 7% of the Sierra Valley sub-basin acreage (~8500 acres) are within the jurisdictional boundary of the Tahoe National Forest. The Sierraville Ranger District is committed to contributing to the SGMA process as a stakeholder and believe our interests align in facilitating shared resource management activities that help improve the sustainability and resiliency of the region's land, water and forest resources. We are hoping the process to develop the GSP can be a catalyst to help further integrate the strategies through coordinated actions between all area stakeholders, including the Sierraville Ranger District.

For these reasons, the Tahoe National Forest strongly supports SVGMD's application for Round 3 SGM Planning funding. We are happy to further discuss this application and the unique challenges that face Sierra Valley and I can be contacted at [qyoungblood@fs.fed.us](mailto:qyoungblood@fs.fed.us) or 530-994-3401.

Sincerely,

  
QUENTIN L. YOUNGBLOOD  
District Ranger



## FEATHER RIVER



## LAND TRUST

### Mission Statement

To conserve the lands and waters of the Feather River region and steward their ecological, cultural and educational values for current and future generations.

### Board of Directors

**Clare Churchill**  
*President*

**Ken Roby**  
*Vice President*

**Bob Marshall**  
*Secretary*

**Alan Morrison**  
*Treasurer*

**JP Harrison**

**Thomas Hayes**

**William Keese**

**Bill Knudsen**

**Tom Tisch**

## *Protecting the Places that Make the Feather River Country Special*

October 14, 2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

Feather River Land Trust is writing to express its strong support of the Sierra Valley Groundwater Management District's (SVGMD's) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater in the basin.

According to published technical reports, the Sierra Valley Basin's groundwater levels have been declining since the 1960s, causing subsidence and loss of artesian wells. Most overdraft has been attributed to agricultural pumping for hay to support a ranching industry with deep cultural and economic roots in Sierra Valley. Declining groundwater may also be affecting local streams and creeks, which in turn may be affecting wildlife. Sierra Valley has approximately 20,000 acres of wetland and 30,000 acres of montane meadows, the largest in the Sierra Nevada and critical habitat to nearly 300 bird and 1200 plant species.

Feather River Land Trust (FRLT) is a strong supporter of the agricultural operations in Sierra Valley, holding agricultural conservation easements on several properties, with many more in-progress. We recognize the important contribution these ranches make to the community, local culture and the environment, with much of the landscape relatively unchanged in the 150+ years of farming and ranching, and the habitat provided by the rich combination of open fields, riparian, wet meadow, upland sage and other habitats. In addition, FRLT is a property owner in Sierra Valley, having established 2500-acre fee title Sierra Valley Preserve at the headwaters of the Wild & Scenic Middle Fork Feather River.

In keeping with our keen interest in sustainable surface- and groundwater in Sierra Valley, FRLT has been administering a private grant to summarize what is known about Sierra Valley groundwater, to study the potential for groundwater recharge and irrigation efficiency improvements in the basin, and to help SVGMD prepare this grant proposal.

SVGMD has been moving toward sustainable groundwater management through increased monitoring of groundwater; limitations on new agricultural wells in the overdrafted area of the basin; through leveraging expertise from the Upper Feather River Watershed Integrated Regional Watershed Management Plan effort; and through engagement with local and regional water and agricultural experts, including experts and pioneers in FloodMAR. Efforts have begun toward developing the Groundwater Sustainability Plan (GSP) and toward compliance with the Sustainable Groundwater Management Act (SGMA), e.g., engagement of DWR's Facilitation Services, formation of the two GSAs, development of draft plan sections; engagement with tribes; outreach to ranchers and other beneficial users through multiple public workshops; discussions with the U.S. Forest Service; engagement with the

counties; advising on local studies to improve irrigation methods and efficiencies; and working with DWR's Technical Services on installation of new groundwater monitoring wells.

While we are proud of the accomplishments to-date, and our role in them, we also must acknowledge that SVGMD and the area lack sufficient resources to meet the challenges of SMGA implementation at this time. Defined with census-tract-level Disadvantaged Community status, the Valley is also home to a small number of residents (almost entirely dependent on wells for drinking water) and few family-owned ranches pumping groundwater to help support the effort. The Sierra Valley watershed is complex hydrologically, geologically and culturally. Sierra Valley is intersected by geologic faults; surrounded by (mostly federally owned) mountains; sits just below the snow line; and is at a west-to-east and south-to-north climate gradient. It is at the Feather River headwaters; is affected by the State Water Project's Frenchman Dam; and is the ancestral land of the Washoe and Maidu tribes. All these factors result in groundwater sustainability strategies having broad implications environmentally, economically, culturally and agronomically.

The SVGMD grant application proposes tasks for developing the Groundwater Sustainability Plan as well as other critical components to address this challenge:

- Defining the area financial resources to ensure compliance approaches are economically sustainable for this ranching area;
- Developing key programs to create robust and economically affordable data sets that will aid future adaptive management (e.g., subsidence network, improved groundwater monitoring network (including leveraging CASGEM), program to standardize groundwater pump monitoring, groundwater-dependent ecosystem monitoring);
- Programs to improve irrigation water use and its efficiencies;
- Technical program to support broad outreach that includes federal and state agencies (e.g., DWR and US Forest Service).

We believe this effort will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders. We strongly support this application and encourage the Sustainable Groundwater Management Grant Program to award funding. We are happy to further discuss this application and the unique challenges that face Sierra Valley and can be contacted at 530-283-5758 or by email [sdouthit@frlt.org](mailto:sdouthit@frlt.org).

Sincerely,



Shelton Douthit  
Executive Director



# CITY OF LOYALTON

COUNTY OF SIERRA  
605 SCHOOL STREET  
P.O. BOX 128  
LOYALTON, CALIFORNIA 96118  
(530) 993-6750  
cityofloyalton@digitalpath.net



OFFICE OF THE MAYOR

City Of Loyalton  
Box 128  
Loyalton, Ca. 96118

*October 31, 2019*

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

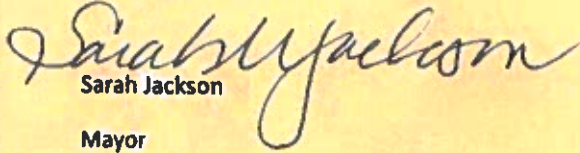
To whom it may concern:

The City of Loyalton is writing to support Sierra Valley Groundwater Management District's (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (S-12.01).

The Sustainable Groundwater Management Act (SGMA) requires completion of a Groundwater Sustainability Plan (GSP) by the SVGMD, the Groundwater Sustainability Agency (GSA). As a Sierra Valley is designated a medium priority basin, the GSP is legally required to be completed by January 31, 2022. Required by SGMA, GSAs need to consider the interests of all beneficial uses and users of groundwater, including municipal well operators and public water systems. Water quality degradation that significantly and unreasonably affects the supply or suitability of groundwater for use in drinking water systems is an undesirable result that must be prevented. Groundwater supply and quality for drinking water use is particularly important for Disadvantaged Communities (DACs) because of their reliance on groundwater and their limited financial resources to treat groundwater or acquire alternative sources. Sierra Valley is sparsely populated with less than 2200 people per the 2010 Census, and the entire basin has Disadvantaged Community (DAC) status, with the two census tracts covering the area at 66% and 70% of California's Median Household Income. The grant funding being offered by DWR will offer critical support to develop a legally defensible GSP to protect groundwater. The SGMA process will provide an opportunity for all area beneficial users to better understand groundwater and its management, and will enable DACs and other beneficial users to participate in the process through various outreach avenues, such as involvement in Technical Advisory Committees and in workshops. Finally, the process will build important infrastructure and data tools to enable efficient and cost effective monitoring and management efforts. A high-quality Groundwater Sustainability Plan for Sierra Valley will help add to the protections offered by the State Water Board and Sierra County Environmental Health Department to ensure a groundwater supply suitable to the needs of our residents.

For these reasons, the City of Loyaltan strongly supports SVGMD's application for Round 3 SGM Planning funding. We believe this effort will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders.

Sincerely,

A handwritten signature in cursive script that reads "Sarah Jackson". The signature is written in dark ink and is positioned to the right of the typed name.

Sarah Jackson

Mayor



Sierra County Waterworks (Calpine) District #1  
P.O. Box 25  
Calpine, CA 96124

October 21, 2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

The Sierra County Waterworks (Calpine) District #1 is writing in support of the Sierra Valley Groundwater Management District (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a Groundwater Sustainability Plan (GSP) to be completed for the Basin by January 31, 2022, the Sierra County Waterworks (Calpine) District #1 strongly supports the SVGMD in its goal of developing a GSP to achieve groundwater sustainability in the Basin in accordance with SGMA. Sierra Valley is sparsely populated (< 2200 per the 2010 Census), and the entire basin has Disadvantaged Community (DAC) status, with the two census tracts covering the area at 66% and 70% of California's Median Household Income. The grant funding being offered by DWR will offer critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts.

SGMA requires Groundwater Sustainability Agencies to consider the interests of all beneficial uses and users of groundwater, including municipal well operators and public water systems. Water quality degradation that significantly and unreasonably affects the supply or suitability of groundwater for use in drinking water systems is an undesirable result that must be prevented. A high-quality Groundwater Sustainability Plan for Sierra Valley would add to the protections offered by the State Water Board and Sierra County Environmental Health Department to ensure a groundwater supply suitable to the needs of our residents.

We believe this effort will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders. We strongly support this application and encourage the Sustainable Groundwater Management Grant Program to award funding to the Sierra Valley Groundwater Management District. We are happy to further discuss this application and the unique challenges that face Sierra Valley and can be contacted at 530-994-3649 or by email at [jndrummond123@gmail.com](mailto:jndrummond123@gmail.com).

Sincerely,

Janet Drummond, Secretary, Sierra County Waterworks (Calpine) District # 1





October 30, 2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District's application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

I'm writing to express the Northern Sierra Partnership's strong support for the Sierra Valley Groundwater Management District's (SVGMD) application for Round 3 Program Funding. Grant funds from the DWR are absolutely essential to the preparation of a scientifically rigorous, carefully-conceived Groundwater Sustainability Plan (GSP) for Sierra Valley by January 2022.

As you know, groundwater levels in Sierra Valley have been declining since the 1960s, causing subsidence and the loss of artesian wells. While unsustainable levels of groundwater pumping for hay production are the primary cause of groundwater level declines, other factors like the construction of Frenchman's Reservoir may also have contributed to the problem.

The decline in groundwater levels is of deep concern to agricultural pumpers and to everyone else in Sierra Valley who depends on groundwater, including the many local residents who depend on the Sierra Valley aquifer for their drinking water. The decline in groundwater levels is also of concern to natural resource agencies because of the potential impacts of groundwater pumping on surface water resources and on wildlife. Sierra Valley is the largest wetland and wet meadow complex in the Sierra Nevada and one that provides critical habitat to nearly 300 bird and 1,200 plant species. Since the Partnership's launch in 2007, we have worked with our partners – the Feather River Land Trust and The Nature Conservancy – and local landowners to conserve working ranches in Sierra Valley for ranching and for wildlife. Clearly bringing groundwater use into balance with groundwater supplies is essential to the long-term sustainability of both the ranching economy and the environment in Sierra Valley.

The Northern Sierra Partnership's concern about declining groundwater levels in Sierra Valley motivated us to secure private funds to advance groundwater sustainability in the region. In partnership with the Feather River Land Trust, we enlisted the services of Phil Bachand & Associates to assess the current condition of groundwater resources in Sierra Valley and work with the SVGWD to prepare this Round 3 Program Funding application for your consideration.

While the SVGMD does not have the staff or expertise to develop a GSP, the SVGMD Board is to be commended for working with Bachand & Associates – and the rest of the GSP team – to identify the human and financial resources necessary to prepare a scientifically and technically rigorous GSP for Sierra Valley. The Board of the SVGMD is also to be commended for taking the first steps towards sustainable groundwater management by expanding groundwater monitoring, limiting new agricultural wells, leveraging expertise from the Upper Feather River Watershed Integrated



Regional Watershed Management Plan effort and engaging with local and regional water and agricultural experts.

While the intentions of the SVGMD Board are positive, bringing groundwater pumping into alignment with groundwater supply in Sierra Valley will not be resolved without expert support. The Sierra Valley Basin is intersected by geologic faults that impede the movement of groundwater from the southern valley (where most of the precipitation falls and most of the surface water enters the valley) to the northern valley, where most of the groundwater pumping occurs. Groundwater recharge solutions that have been promising in other parts of the state may not work in Sierra Valley or may not be affordable given the relatively low return of most ranching and agricultural enterprises in Sierra Valley.

The SVGMD's application divides the work into three components:

- Hiring a highly skilled and experienced professional to oversee the development and implementation of the GSP process for the SVGMD;
- Working with the public, other stakeholders and the SVGMD to develop a scientifically rigorous, carefully-conceived GSP for Sierra Valley by January 2022; and
- Putting the pieces in place to implement the GSP using an adaptive management approach that monitors the impact of implementation strategies to ensure that they are working as anticipated.

The Northern Sierra Partnership is hopeful that, with your strong support, the SVGMD will put a highly competent team in place to guide GSP planning and implementation in Sierra Valley. Absent your help, the SVGMD clearly lacks the human and financial resources to address a challenge of this complexity in the time required. We strongly support this application and encourage the Sustainable Groundwater Management Grant Program to award funding. I hope you will contact me if you have any questions about this project at 650-323-2050 or by email [lblake@northernsierrapartnership.org](mailto:lblake@northernsierrapartnership.org).

Sincerely,



Lucy Blake  
President

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

**Grant Proposal Title:** **GSP Development and Critical Programs for Efficient and Effective Sustainable Groundwater Management under an Adaptive Management Approach**

**APPLICANT:** **SIERRA VALLEY GROUNDWATER MANAGEMENT DISTRICT**

**DESCRIPTION**

The methods to estimate and justify grant requests are discussed below. Calculations are from spreadsheet calculations. Cost share is discussed in this application. *Note Sierra Valley qualifies for a cost share waiver (0% Cost Share) based upon the DA status. A waiver has been submitted with this application.*

**COMPONENT 1: GRANT ADMINISTRATION.**

Grant administration costs were determined from estimating required consultant and supporting staff time for the identified subtasks. District will be hiring a professional consultant to serve as the General Project Manager (General-PM) for all components and provide staff support. The General-PM will coordinate this work with SVGMD and with Plumas Co. Upon hiring, the General-PM will lead the solicitation process (e.g. Request for Proposal – RFP) for hiring the organization(s) to lead Component 2 and Component 3. Plumas Co. is providing support in the RFP process as discussed in the Work Plan and their Letter of Support. The total grant request for Grant Administration is \$200,000 with an expected cost share from Plumas Co. of \$45,000. The grant request for Grant Administration is 10% of the total grant request for all components.

**COMPONENT 2: GSP DEVELOPMENT.**

An Environmental Engineering, Civil Engineering, Hydrology firm or equivalent will be solicited and selected under a RFP process to lead Component 2. Component 2 includes sections as identified in the template: Component Administration (a), Stakeholder Engagement (b), GSP Development (c) and Monitoring / Assessment (d).

Component Administration (a) provides approximately \$2300/month over the expected period of the project for grant administration and management. For a typical composite administrative billing rate (\$120 – 150/hr), this corresponds to 48 – 60 billable hours per quarter over the contract period. Project Management associated with technical or facilitation sections are expected to be billed by individual task.

Stakeholder Engagement (b) estimated budget is based upon information from professionals currently associated with efforts in Sierra Valley. The Stakeholder Engagement and Outreach budget is based upon a current budget estimate for these activities (e.g., Stakeholder Engagement Meetings, Communication and Engagement Plan Refinements, GSOP Preparation and Adoption, Project Management) by the current professional facilitator in Sierra Valley. The tribal engagement budget is provided by Plumas County, developed in association with the tribes and Plumas Forest Service. Budget for the Technical Advisory Committee (TAC) is estimated based on the level of effort and supplies to solicit the TAC and engage them to review and advise across the various tasks under GSP Development (c) and Monitoring / Assessment (d) reviews. Estimated costs for Stakeholder Engagement are consistent with budgets from previous and current GSP development efforts.

GSP Development (c) and Monitoring / Assessment (d) are based upon estimated levels of effort for each task and subtask. Tasks and subtasks are based upon the legislation and DWR guidance documents. The following assumptions, considerations and steps were in the budget estimate process for these sections:

- **Billing rates and associated level of effort.** Budget estimates have planned for a composite environmental / civil engineering rate for a consulting firm of approximately \$140 - \$160/hr, assuming an industry standard multiplier in the 2.8 – 3 range. Assuming this billing rate, \$10,000 is equivalent to approximately 60 – 70 billable hours. Budgets were first developed by task and subtask assuming this level of billable work per each \$10,000 increment.

- **Review Process.** Importantly, all sections in the GSP as well as all data methods and protocols require technical and public review. For all work conducted for GSP Development (c), three levels of review are anticipated resulting in four drafts before incorporation into the GSP: **Internal Draft** (for review by the GSA and by the Project Manager); **Technical Advisory Committee (TAC) Draft** (for review by the TAC and for distribution and comment from interested stakeholders and DWR); **Final Draft** (for final review by the GSA); and **Final Version** (for inclusion in GSP). GSP Development includes technical, policy and political decisions, thus requiring a robust and broad review process. For Monitoring / Assessment (d), a single review is anticipated by the GSA and the TAC simultaneously. Monitoring / Assessment is primarily associated with technical and methodological issues.
- **Internal review.** The budget has been discussed and reviewed by the SVGMD Board, the SVGMD subcommittee formed to facilitate GSP associated decisions and actions, and the GSP planning group, formed to aid SVGMD with representation from Plumas County, SVGMD and other water and engineering professionals.
- **Checked against other GSP applications.** Estimated budgets were checked against budget / effort estimates from previously awarded, current GSP development efforts (e.g. Lassen, Tulelake Irrigation Subbasin, West Turlock, Sonoma Valley).
- **Supporting Cost Share Efforts.** Supporting cost share for Component 2 is \$288,383. These costs have supported initial technical analyses to understand the basin, education, and facilitation. These efforts have been needed in excess of normally anticipated costs to account for the complexity and uncertainty discussed in the Work Plan and to provide needed financial resources to begin the GSP process.
- **Environmental Compliance and Permitting (c, Task 3).** Environmental compliance is expected to be minimal given the approaches described to broaden the monitoring network and the reliance upon current private and public structures.
- **Design Efforts.** Design efforts were developed for expanding the groundwater well level monitoring utilizing the CASGEM network, establishing a subsidence network to leverage INSAR data, improving groundwater pumping data, and designing a groundwater dependent ecosystem monitoring network. These efforts were based upon the work currently being conducted under a grant from the Feather River Land Trust, expertise from Bachand & Associates, and familiarity with other SGMA efforts (e.g. Sonoma County GSAs).

From this above methodology, we estimated Component 2 grant request at \$1,075,000. Previous cost share is estimated at \$288,383 for a total budget of \$1,363,383.

### **COMPONENT 3: IMPLEMENTING THE GSP AND ADAPTIVE MANAGEMENT STRATEGIES**

An Environmental or Hydrologic Engineering or Science firm or equivalent will be solicited and selected under a RFP process to lead Component 3. Component 3 includes Component Administration (a), Land Purchase / Easement (b), Planning / Design / Environmental (c), Implementation / Construction (d), and Monitoring / Assessment (e).

Component Administration (a) provides approximately \$2000/month over the expected period of the project for grant administration and management. For a typical composite administrative billing rate (\$120 – 150/hr), this corresponds to 40 – 50 billable hours per quarter over the contract period. Project Management associated with technical sections are expected to be billed by individual task.

Similar process and assumptions were used to develop the task and subtask budget as discussed under the budget justification for Component 2. Additional assumptions and considerations are listed below:

- **Task 1 Budgets.**
  - **Planning / Design / Environmental (c).** Budget efforts developed under this task are estimates to engineer the systems using the design information from the GSP Development. The budgets proposed represent expected levels of effort.
  - **Implementation / Construction (d).** Implemented groundwater well and subsidence networks are expected to incorporate current private and public structures rather than build new structures. These networks will improve coverage such as through expanding use of CASGEM and private wells determined suitable. Groundwater Dependent Ecosystems budget represents a reasonable monitoring effort given uncertainties and unknowns. Agricultural Pump Flow Metering Program assumes an EQIP type program to upgrade agricultural flow metering with eligible ranchers and landowners receiving a cost share from the grant (e.g. up to 50%; approximately \$3000 – 5000 per pump). Implementation costs also

include cost tracking and installation certification. Additional structural improvements outside the expected efforts described would likely seek additional funding support, including Technical Services Support from DWR.

- **Monitoring / Assessment (e).** These costs are based upon estimated costs to collect, QAQC and process baseline GSP data, and refine data processing / management tools.
- **Adaptive Management Studies (c, Task 2).** Financial and Economic Resource Assessments (c, Task 2.1) and Watershed Management Opportunities Program (c, Task 2.3) are desktop studies with the goals of producing scientifically defensible technical memorandum for specific questions. The Irrigation Efficiency Alternatives Program (c, Task 2.2) is planned to extend a current study to assess irrigation efficiencies and their potential improvements. The proposed budgets represent a reasonable technical effort to address the specific questions and goals based upon the experience of Bachand & Associates, an applied research company supporting science and engineering efforts in Sierra Valley with a broad background in these types of studies.
- **Supporting Cost Share Efforts.** Supporting cost share for Component 3 is \$204,803, primarily from a Feather River Land Trust grant . These costs have supported investigations to better understand area hydrology and its potential management. These efforts have been conducted to better understand potential adaptive management opportunities and their potential challenges.

From this above methodology, we estimated Component 3 grant request at \$725,000. Previous cost share is estimated at \$204,803 for a total budget of \$929,803.

## TABLES

Tables 5B and 6b follow with budget summaries for the multiple components.

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

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

**Grant Proposal Title: GSP Development and Critical Programs for Efficient and Effective Sustainable Groundwater Management under an Adaptive Management Approach**

**Applicant: Sierra Valley Groundwater Management District**

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

Local Cost Share requested:  25%     15%     10%     0%<sup>1</sup>

<b>Budget Categories<sup>1</sup></b>	<b>(a) Requested Grant Amount</b>	<b>(b) Local Cost Share: Non-State Fund Source<sup>2</sup></b>	<b>(c) Total Cost</b>	<b>(d) % Local Cost Share (Col (b)/ Col (c))</b>
Component 1 Grant Administration	\$200,000	\$45,000 Feather River Land Trust (FRLT); Plumas County	\$245,000	18%
Component 2: GSP Development	\$1,075,000	\$288,383 FRLT; Bachand & Associates In-Kind (BA); Plumas County; Sierra Valley Groundwater Management District (SVGMD)	\$1,363,383	21%
Component 3: Implementing the GSP and Adaptive Management Strategies	<b>\$725,000</b>	<b>\$204,803</b> FRLT, BA	<b>\$929,803</b>	22%
Grand Total <i>Sum rows (1) through (n) for each column</i>	<b>\$2,000,000</b>	<b>\$538,186</b>	<b>\$2,538,186</b>	<b>21%</b>

<sup>1</sup> These components are shown here for example purpose only. Actual number of components may vary.

<sup>2</sup> List sources of funding: *Use as much space as required. Local Cost Share is calculated based on the total project cost (grant amount plus match), **not** the grant amount. Total project cost x %Local Cost Share = required match.*

<sup>1</sup> Applicant is a DA and has submitted a cost share waiver request. Cost share shown represents funding totals \$538,186 from several sources including Plumas Co. (60,000), the Feather River Land Trust (\$378,537), SVGMD (\$46,749) and Bachand & Associates (\$52,900, in-kind). Cost share not included in this tally is Facilitation Support Services by CBI through DWR and by the State Water Resources Control Board funding, or the groundwater monitoring well installation currently under DWR's TSS program.

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

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

**Grant Proposal Title: GSP Development and Critical Programs for Efficient and Effective Sustainable Groundwater Management under an Adaptive Management Approach**

**Applicant: Sierra Valley Groundwater Management District**

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

Budget Categories <sup>1</sup>	(a) Requested Grant Amount	(b) Local Cost Share: Non- State Fund Source <sup>2</sup>	(c) Total Cost
<b>(a) Grant Administration</b>	<b>\$200,000</b>	<b>\$45,000</b>	<b>\$245,000</b>
Task 1. Cost tracking, invoices and payments	\$25,000		
Task 2. Quarterly and final progress report	\$25,000		
Task 3. Project Management	\$130,000	\$12,000; Plumas County	
Task 4. RFP Process: General-PM Selection	\$10,000	\$16,500; Plumas County, Feather River Land Trust (FRLT)	
Task 5. RFP Process: Components 2 and 3 Teams Selection	\$10,000	\$16,500; Plumas County, FRLT	
Grand Total <i>Sum rows in Category (a) for each column</i>	<b>\$200,000</b>	<b>\$45,000</b>	<b>\$245,000</b>

<sup>1</sup> Only these Budget Categories shall be used. Tasks should be added for more detail.

<sup>2</sup> List sources of funding: *Use as much space as required here. Local Cost Share is calculated based on the total project cost (grant amount plus match), **not** the grant amount. Total project cost x %Local Cost Share = required match.*

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

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

**Grant Proposal Title: GSP Development and Critical Programs for Efficient and Effective Sustainable Groundwater Management under an Adaptive Management Approach**

**Applicant: Sierra Valley Groundwater Management District**

**Component Title: Component 2: GSP Development**

Budget Categories 1	(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source <sup>2</sup>	(c) Total Cost
<b>(a) Component Administration</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$50,000</b>
Task 1. Cost tracking, invoices and payments	\$20,000	\$0	
Task 2. Quarterly and final progress report	\$15,000	\$0	
Task 3. Project Management	\$15,000	\$0	
<b>(b) Stakeholder Engagement / Outreach</b>	<b>\$210,000</b>	<b>\$49,935</b>	<b>\$259,935</b>
Task 1. Stakeholder Engagement and Outreach	\$110,000	\$42,935; FRLT, Bachand & Associates In-Kind (BA), Plumas County, Sierra Valley Groundwater Management District (SVGMD)	
Task 2. Technical Advisory Committee (TAC)	\$50,000	\$0	
Task 3. Tribal Engagement	\$50,000	\$7,000; Plumas County	
<b>(c) GSP Development</b>	<b>\$675,000</b>	<b>\$238,448</b>	<b>\$913,448</b>
Task 1. GSP Document Preparation and Adoption			
• Task 1.1. Preparation for Public Comment	\$5,000	\$0	
• Task 1.2. Response to Public Comment	\$10,000	\$0	
Task 2. Administrative Information			
• Task 2.1. General and Agency Information	\$10,000	\$0	
• Task 2.2. Description of Plan Area	\$20,000	\$12,250; Plumas County, SVGMD	
• Task 2.3. Notices and Communications	\$15,000	\$0	
Task 3. Basin Setting			
• Task 3.1. Hydrologic Conceptual Model (HCM)	\$40,000	\$15,000; FRLT	



Budget Categories 1	(a) Requested Grant Amount	(b) Local Cost Share: Non-State Fund Source <sup>2</sup>	(c) Total Cost
<ul style="list-style-type: none"> <li>Task 3.2. Current and Historic Groundwater Conditions</li> </ul>	\$40,000	\$169,253; FRLT, Bachand & Associates In-Kind (BA), Plumas County, Sierra Valley Groundwater Management District (SVGMD)	
<ul style="list-style-type: none"> <li>Task 3.3. Water Budget Information</li> </ul>	\$40,000	\$15,000; FRLT	
<ul style="list-style-type: none"> <li>Task 3.4. Management Areas</li> </ul>	\$40,000	\$16,946; FRLT	
Task 4. Sustainability Management Criteria			
<ul style="list-style-type: none"> <li>Task 4.1. Sustainability Goal</li> </ul>	\$10,000	\$10,000 FRLT	
<ul style="list-style-type: none"> <li>Task 4.2. Measurable Objectives</li> </ul>	\$40,000	\$0	
<ul style="list-style-type: none"> <li>Task 4.3. Minimum Thresholds</li> </ul>	\$40,000	\$0	
<ul style="list-style-type: none"> <li>Task 4.4. Undesirable Results</li> </ul>	\$40,000	\$0	
Task 5. Monitoring Networks			
<ul style="list-style-type: none"> <li>Task 5.1. Description of Monitoring Network</li> </ul>	\$170,000	\$0	
<ul style="list-style-type: none"> <li>Task 5.2. Monitoring Protocols for Data Collection and Monitoring</li> </ul>	\$50,000	\$0	
<ul style="list-style-type: none"> <li>Task 5.3. Representative Monitoring</li> </ul>	\$10,000	\$0	
<ul style="list-style-type: none"> <li>Task 5.4. Assessment and Improvement of Monitoring Network</li> </ul>	\$20,000	\$0	
Task 6. Projects and Management Actions	\$15,000	\$0	
Task 7. Plan Implementation			
<ul style="list-style-type: none"> <li>Task 7.1. Financial and Economic Resource Assessment and Estimate of GSA Implementation Costs</li> </ul>	\$60,000	\$0	
<b>(d) Monitoring / Assessment</b>	<b>\$140,000</b>	<b>\$0</b>	<b>\$140,000</b>
Task 1. Technical and Reporting Standards			
<ul style="list-style-type: none"> <li>Task 1.1. Data and Reporting Standards</li> </ul>	\$40,000	\$0	
<ul style="list-style-type: none"> <li>Task 1.2. Data Management Systems</li> </ul>	\$100,000	\$0	
Grand Total <i>Sum rows (a) through (d) for each column</i>	<b>\$1,075,000</b>	<b>\$288,383</b>	<b>\$1,363,383</b>

<sup>1</sup> Only these Budget Categories shall be used. Tasks should be added for more detail.

<sup>2</sup> List sources of funding: *Use as much space as required here. Local Cost Share is calculated based on the total project cost (grant amount plus match), **not** the grant amount. Total project cost x %Local Cost Share = required match.*

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

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

**Grant Proposal Title: GSP Development and Critical Programs for Efficient and Effective Sustainable Groundwater Management under an Adaptive Management Approach**

**Applicant: Sierra Valley Groundwater Management District**

**Component Title: Component 3: Implementing the GSP and Adaptive Management Strategies**

<b>Budget Categories <sup>1</sup></b>	<b>(a) Requested Grant Amount</b>	<b>(b) Local Cost Share: Non- State Fund Source<sup>2</sup></b>	<b>(c) Total Cost</b>
<b>(a) Component Administration</b>	<b>\$50,000</b>	<b>\$0</b>	<b>\$50,000</b>
Task 1. Cost tracking, invoices and payments	\$20,000	\$0	
Task 2. Quarterly and final progress report	\$15,000	\$0	
Task 3. Project Management	\$15,000	\$0	
<b>(b) Land Purchase / Easement</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>(c) Planning / Design / Environmental</b>	<b>\$250,000</b>	<b>\$204,803</b>	<b>\$454,803</b>
Task 1. Engineering Monitoring Networks			
• Task 1.1. Subsidence Network	NA		
• Task 1.2. Groundwater Well Network Expansion Utilizing CASGEM	NA		
• Task 1.3. Agricultural Pump Flow Metering Program	\$15,000		
• Task 1.4. Groundwater Dependent Ecosystems	\$25,000		
Task 2. Adaptive Management Strategies, Technical Materials and Memorandums			
• Task 2.1. Irrigation Efficiency Alternatives Program	\$110,000	\$151,072; FRLT, BA	
• Task 2.2. Watershed Management Opportunities Program	\$100,000	\$53,731; BA	
<b>(d) Implementation / Construction</b>	<b>\$330,000</b>	<b>\$0</b>	<b>\$330,000</b>
Task 1. Implementing Monitoring Networks		\$0	
• Task 1.1. Subsidence Network	\$40,000	\$0	
• Task 1.2. Groundwater Well Network Expansion Utilizing CASGEM	\$50,000	\$0	
• Task 1.3. Agricultural Pump Flow Metering Program	\$160,000	\$0	
• Task 1.4. Groundwater Dependent Ecosystems	\$80,000	\$0	
<b>(e) Monitoring / Assessment</b>	<b>\$95,000</b>	<b>\$0</b>	<b>\$95,000</b>

<b>Budget Categories <sup>1</sup></b>	<b>(a) Requested Grant Amount</b>	<b>(b) Local Cost Share: Non- State Fund Source<sup>2</sup></b>	<b>(c) Total Cost</b>
Task 1. Network Data Assessment and Protocol Refinements			
• Task 1.1. Subsidence Network	\$15,000	\$0	
• Task 1.2. Groundwater Well Network Expansion Utilizing CASGEM	\$25,000	\$0	
• Task 1.3. Agricultural Pump Flow Metering Program	\$25,000	\$0	
• Task 1.4. Groundwater Dependent Ecosystems	\$30,000	\$0	
Grand Total <i>Sum rows (a) through (e) for each column</i>	<b>\$725,000</b>	<b>\$204,803</b>	<b>\$929,803</b>

<sup>1</sup> Only these Budget Categories shall be used. Tasks should be added for more detail.

<sup>2</sup> List sources of funding: *Use as much space as required here. Local Cost Share is calculated based on the total project cost (grant amount plus match), **not** the grant amount. Total project cost x %Local Cost Share = required match.*

**ATTACHMENT 5**  
**SCHEDULE – TEMPLATE**

**Grant Proposal Title:** **GSP Development and Critical Programs for Efficient and Effective Sustainable Groundwater Management under an Adaptive Management Approach**

**Applicant:** Sierra Valley Groundwater Management District

A Gantt chart has been provided after the summary table, Table 7b. The Gantt chart identifies the linkages and the dependencies between the different elements. Key critical path items have been identified:

1. Expediting contracting and the award process is critical in conducting the project on schedule:
  - a. The Gantt chart assumes the best possible start date as 2/3/2020. This date assumes an announcement of draft awards by DWR prior to this date. On that date, we assume Sierra Valley Groundwater Management District (SVGMD) can begin the solicitation process to select and hire the Grant Agreement Manager (General Project Manager) with an expectation the award will go forward at some level and that reimbursements are reasonably assured. The best possible start date is required in the template for the Start Date.
  - b. Upon selection of the Project General Manager, solicitations will begin for Component 2 and then Component 3. Component 2 assumes an 8/4/2020 start date and Component 3 a 9/29/2020 start date. The award date for the teams will be their contractual start dates. Considering the selection process and the requirement to complete the GSP about 90-days prior to the end date in order to provide 60-d public comment period, Component 2 will have fifteen to 16 months to be completed and to complete the GSP. Component 3 will have about two years.
  - c. Component 1 includes the process to conduct the RFP for awarding work for Components 2 and 3. Both Component 2 and 3 may be led by different organizations in order to expedite work once awarded, and to ensure the most appropriate expertise and teams. If the RFP process can begin earlier, this step could be expedited. The RFP process for Component 2 is currently scheduled to begin upon selection of Component 1 team. Plumas County has committed to providing staff support for this process.
2. Prior efforts have been underway by SVGMD and collaborating experts to understand the basin regarding groundwater sustainability, basin settling, sustainability indicators at or at risk to be reasonably and significantly effected, and monitoring strategies. These efforts should aid the selected team in meeting the GSP development schedule.
3. Environmental compliance is likely not a critical path item as no structures or infrastructure are being constructed that would trigger CEQA. All monitoring programs will consider approaches to minimize environmental impacts and related permitting.

**ATTACHMENT 5**  
**SCHEDULE – TEMPLATE**

**Table 7b – Grant Proposal Schedule (Multiple Components)**

**Grant Proposal Title:** GSP Development and Critical Programs for Efficient and Effective Sustainable Groundwater Management under an Adaptive Management Approach

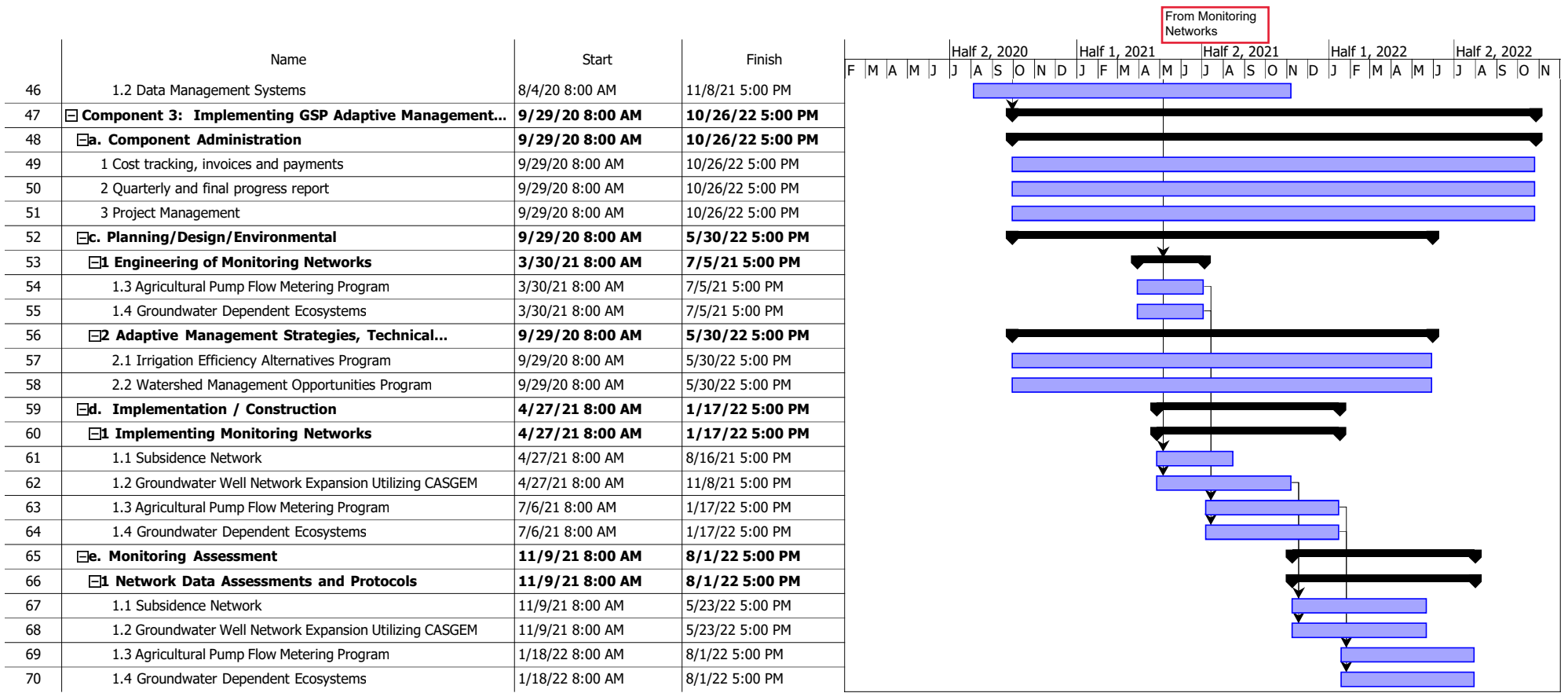
Categories	Start Date	End Date
<b>Component 1: Grant Agreement Administration</b>		
<b>(a) Grant Agreement Administration</b>	<b>2/3/2020</b>	<b>10/31/2022</b>

Task 1. Cost tracking, invoicing and payments	2/3/2020	10/31/2022
Task 2. Quarterly and final progress reports	2/3/2020	10/28/2022
Task 3. Project Management	2/3/2020	10/28/2022
Task 4. RFP Process: General-PM Selection	2/3/2020	5/4/2020
Task 5. RFP Process: Components 2 and 3 Team Selections	5/7/2020	9/3/2020
<b>Component 2: GSP Development</b>		
<b>(a) Component Administration</b>	<b>8/4/2020</b>	<b>4/27/2022</b>
Task 1. Cost tracking, invoicing and payments	8/4/2020	4/27/2022
Task 2. Quarterly and final progress reports	8/4/2020	4/27/2022
Task 3. Project Management	8/4/2020	4/27/2022
<b>(b) Stakeholder Engagement / Outreach</b>	<b>8/4/2020</b>	<b>1/31/2022</b>
Task 1. Stakeholder Engagement and Outreach	8/4/2020	1/31/2022
Task 2. Technical Advisory Committee (TAC)	8/4/2020	1/31/2022
Task 3. Tribal Engagement	8/4/2020	1/31/2022
<b>(c) GSP Development</b>	<b>8/4/2020</b>	<b>1/31/2022</b>
Task 1. GSP Development and Preparation	7/20/2021	1/31/2022
Task 2. Administrative Information (Subarticle 1)	8/4/2020	11/2/2020
Task 3. Basin Setting (Subarticle 2)	8/4/2022	12/7/2020
Task 4. Sustainable Management Criteria (Subarticle 3)	9/29/2020	3/1/2021
Task 5. Monitoring Networks (Subarticle 4)	12/8/2020	4/26/2021
Task 6. Projects and Management Actions	12/24/2020	4/14/2021
Task 7. Plan Implementation	10/27/2020	2/1/2021
<b>(d) Monitoring / Assessment</b>	<b>8/4/2020</b>	<b>11/8/2021</b>
Task 1. Technical and Reporting Standards	8/4/2020	11/8/2021
<b>Component 3: Implementing the GSP and Adaptive Management Strategies</b>		
<b>(a) Component Administration</b>	<b>9/29/2020</b>	<b>10/26/2022</b>
Task 1. Cost tracking, invoicing and payments	9/29/2020	10/26/2022
Task 2. Quarterly and final progress reports	9/29/2020	10/26/2022
Task 3. Project Management	9/29/2020	10/26/2022
<b>(b) Land Purchase / Easement</b>	<b>NA</b>	<b>NA</b>



<b>(c) Planning / Design / Environmental</b>	<b>9/29/2020</b>	<b>5/30/2022</b>
Task 1. Engineering of Monitoring Networks	3/30/2021	7/5/2021
Task 2. Adaptive Management Strategies, Technical Materials and Memorandums	9/29/2020	5/30/2022
<b>(d) Implementation / Construction</b>	<b>4/27/2021</b>	<b>1/17/2022</b>
Task 1. Implementing Monitoring Networks	<b>4/27/2021</b>	<b>1/17/2022</b>
<b>(e) Monitoring / Assessment</b>	<b>11/9/2021</b>	<b>8/1/2022</b>
Task 1. Network Data Assessment and Protocols Refinement	11/9/2021	8/1/2022

ID	Name	Start	Finish	Half 2, 2020					Half 1, 2021					Half 2, 2021					Half 1, 2022					Half 2, 2022									
				F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J
1	<b>Component 1. Administration</b>	<b>2/3/20 8:00 AM</b>	<b>10/31/22 5:00 PM</b>	[Gantt bar]																													
2	<b>a. Grant Administration</b>	<b>2/3/20 8:00 AM</b>	<b>10/31/22 5:00 PM</b>	[Gantt bar]																													
3	1 Cost tracking, invoices and payments	2/3/20 8:00 AM	10/31/22 5:00 PM	[Gantt bar]																													
4	2 Quarterly and final progress report	2/3/20 8:00 AM	10/28/22 5:00 PM	[Gantt bar]																													
5	3 Project Management	2/3/20 8:00 AM	10/28/22 5:00 PM	[Gantt bar]																													
6	4 RFP Process: General-PM Selection	2/3/20 8:00 AM	5/4/20 5:00 PM	[Gantt bar]																													
7	4 RFP Process: Component 2 and 3 Teams Selection	5/7/20 8:00 AM	9/3/20 5:00 PM	[Gantt bar]																													
8	<b>Component 2. GSP Development</b>	<b>8/4/20 8:00 AM</b>	<b>4/27/22 5:00 PM</b>	[Gantt bar]																													
9	<b>a. Component Administration</b>	<b>8/4/20 8:00 AM</b>	<b>4/27/22 5:00 PM</b>	[Gantt bar]																													
10	1 Cost tracking, invoices and payments	8/4/20 8:00 AM	4/27/22 5:00 PM	[Gantt bar]																													
11	2 Quarterly and final progress report	8/4/20 8:00 AM	4/27/22 5:00 PM	[Gantt bar]																													
12	3. Project Management	8/4/20 8:00 AM	4/27/22 5:00 PM	[Gantt bar]																													
13	<b>b. Stakeholder Engagement</b>	<b>8/4/20 8:00 AM</b>	<b>1/31/22 5:00 PM</b>	[Gantt bar]																													
14	1 Stakeholder Engagement and Outreach	8/4/20 8:00 AM	1/31/22 5:00 PM	[Gantt bar]																													
15	2 Technical Advisory Committee	8/4/20 8:00 AM	1/31/22 5:00 PM	[Gantt bar]																													
16	3 Tribal Engagement	8/4/20 8:00 AM	1/31/22 5:00 PM	[Gantt bar]																													
17	<b>c. GSP Development</b>	<b>8/4/20 8:00 AM</b>	<b>1/31/22 5:00 PM</b>	[Gantt bar]																													
18	<b>1 GSP Document Preparation and Adoption</b>	<b>7/20/21 8:00 AM</b>	<b>1/31/22 5:00 PM</b>	[Gantt bar]																													
19	1.1 Preparation for public comment	7/20/21 8:00 AM	10/25/21 5:00 PM	[Gantt bar]																													
20	1.2 Response to public comment	12/21/21 8:00 AM	1/31/22 5:00 PM	[Gantt bar]																													
21	<b>2 Administrative Information</b>	<b>8/4/20 8:00 AM</b>	<b>11/2/20 5:00 PM</b>	[Gantt bar]																													
22	2.1 General and Agency Information	8/4/20 8:00 AM	11/2/20 5:00 PM	[Gantt bar]																													
23	2.2 Description of Plan Area	8/4/20 8:00 AM	11/2/20 5:00 PM	[Gantt bar]																													
24	2.3 Notices and Communications	8/4/20 8:00 AM	11/2/20 5:00 PM	[Gantt bar]																													
25	<b>3 Basin Setting</b>	<b>8/4/20 8:00 AM</b>	<b>12/7/20 5:00 PM</b>	[Gantt bar]																													
26	3.1 HCM	8/4/20 8:00 AM	12/7/20 5:00 PM	[Gantt bar]																													
27	3.2 Current and Historic Groundwater Conditions	8/4/20 8:00 AM	12/7/20 5:00 PM	[Gantt bar]																													
28	3.3 Water Budget Information	8/4/20 8:00 AM	12/7/20 5:00 PM	[Gantt bar]																													
29	3.4 Management Areas	8/4/20 8:00 AM	12/7/20 5:00 PM	[Gantt bar]																													
30	<b>4 Sustainability Management Criteria</b>	<b>9/29/20 8:00 AM</b>	<b>3/1/21 5:00 PM</b>	[Gantt bar]																													
31	4.1 Sustainability Goal	9/29/20 8:00 AM	3/1/21 5:00 PM	[Gantt bar]																													
32	4.2 Measurable Objectives	9/29/20 8:00 AM	3/1/21 5:00 PM	[Gantt bar]																													
33	4.3 Minimum Thresholds	9/29/20 8:00 AM	3/1/21 5:00 PM	[Gantt bar]																													
34	4.4 Undesirable Results	9/29/20 8:00 AM	3/1/21 5:00 PM	[Gantt bar]																													
35	<b>5 Monitoring Networks</b>	<b>12/8/20 8:00 AM</b>	<b>4/26/21 5:00 PM</b>	[Gantt bar]																													
36	5.1 Description of Monitoring Network	12/8/20 8:00 AM	4/26/21 5:00 PM	[Gantt bar]																													
37	5.2 Monitoring Protocols for Data Collection and Monitoring	12/8/20 8:00 AM	4/26/21 5:00 PM	[Gantt bar]																													
38	5.3 Representative Monitoring	12/8/20 8:00 AM	4/26/21 5:00 PM	[Gantt bar]																													
39	5.4 Assessment and Improvement of Monitoring Network	12/8/20 8:00 AM	4/26/21 5:00 PM	[Gantt bar]																													
40	6 Projects and Management Actions	12/24/20 8:00 AM	4/14/21 5:00 PM	[Gantt bar]																													
41	<b>7 Plan Implementation</b>	<b>10/27/20 8:00 AM</b>	<b>2/1/21 5:00 PM</b>	[Gantt bar]																													
42	7.1 Financial and Economic Resource Assessment...	10/27/20 8:00 AM	2/1/21 5:00 PM	[Gantt bar]																													
43	<b>d. Monitoring / Assessment</b>	<b>8/4/20 8:00 AM</b>	<b>11/8/21 5:00 PM</b>	[Gantt bar]																													
44	<b>1 Technical and Reporting Standards</b>	<b>8/4/20 8:00 AM</b>	<b>11/8/21 5:00 PM</b>	[Gantt bar]																													
45	1.1 Data and Reporting Standards	8/4/20 8:00 AM	11/8/21 5:00 PM	[Gantt bar]																													



## Attachment 6. SDAC, DAC, And/OR EDA (Revised)

Sierra Valley Groundwater Management District (SVGMD), the applicant for this grant funding, is requesting a full waiver of cost share requirements. The Proposal Solicitation Package (PSP) and Grant Guidelines (Guidelines) require the attached documentation to establish the Sierra Valley Sub-basin (DWR Basin 5-12.01) as a Disadvantaged Community (DAC) to justify a cost share waiver.

### Methods

1. 2017 ACS 5-year total population and financial estimates were used. These data were provided by US Census Bureau web data set.  
<https://data.census.gov/cedsci/all?q=&g=&lastDisplayedRow=6&table=B23025&tid=ACSDT5Y2017.B23025&layer=place&vintage=2017&hidePreview=false>
2. Census data was collected for specific census designated places in Sierra Valley. This approach was conducted because of issues associated with using either Census Tract or Block Group data.
  - a. The Census Tracts are too large for Sierra Valley and most populations for these tracts are outside the GSA designated boundaries. Data estimates and calculations based on this data would misrepresent Sierra Valley DA communities.
  - b. The Block Groups do not line up with the GSA boundaries. Because many of the Block Groups boundaries extend beyond Sierra Valley, they would provide unrepresentative data and calculations as well.
  - c. The census designated places used in these calculations included Beckwourth and Chilcoot-Vinton in Plumas Co. and Calpine, Loyalton, Sattley, Sierra Brooks and Sierraville in Sierra Co. These census designated communities are the total such communities in the GSA designated boundaries and the Sierra Valley sub-basin.
3. Two communities (Sattley, Sierraville) did not have 2017 ACS 5-Year MHI Estimate data. The MHI Estimate was calculated using a weighted average across income ranges. See Table 2.
4. The total population for the area was based upon summing the 2017 ACS 5-year population estimates for the census designated places. Population in Sierra Valley is estimated to have declined since the last census conducted in 2010.
5. The % of the CA MHI for the GSA area and the sub-basin was calculated using a weighted average against census designated places.
6. The total population within DA was calculated by totaling the populations of the census designated places that qualify as SDAC, DACS and EDAs. These classifications were based on % of CA MHI as shown in Table 1. This population was converted to a percent of the population by dividing the total population within the DAs by the total population of Census Designated Places within the Sierra Valley sub-basin, using the 2017 ACS data.
7. Maps for all the different census approaches are shown in Figures 1 – 3 and are developed using the DWR mapping tool as referenced in the application.

### Results

Table 1 summarizes the DA status by census designated places. Table 1 shows 2010 Census data, 2017 ACS 5-year data, and some estimates of financial well-being within the communities (i.e. % below poverty line, % of CA MHI, % unemployed). Table 1 also identifies which communities are SDACs, DAC, and EDAs, and provides Notes on calculations made. Table 1 draws upon Table 2 to fill in data regarding %CA MHI and DA designation based on that calculation as discussed in the Methods.

Table 3 provides a summary of those findings. The total population of Sierra Valley is calculated as 2048 as estimated by the data for the Census Designated Places within the sub-basin and GSA using the 2017 ACS-5 total population data. The total population within the Sierra Valley DAs is calculated as 1650. ***This value corresponds to 81% of the Sierra Valley population living within a DA.***

***Based upon these findings, the Sierra Valley sub-basin qualifies for a full waiver of cost share requirements.***

### Letters of Support

For a full cost match waiver, the PSP requests the applicant Letters of Support for the project by DACs. Given that the Census tract best represents the disadvantaged community status, SVGMD's submission provides support for the project from both Plumas and Sierra Counties. Both counties have three members on the SVGMD Board of Directors. Additionally,

---

we have provided an attachment (Att6\_SGM-DAC-EDA\_20f2) with additional letters of support reflecting communities identified at the smaller geographic scales and relate to groundwater supplies and public health. The following Letters are provided in the attachment:

- Plumas County Board of Supervisors
- Plumas County Environmental Health
- Sierra County Board of Supervisors
- California Indian Water Commission
- Sierra Brooks Water Advisory Board
- Sierraville Public Utility District
- City of Loyalton



**Table 1. Total Population and Economic Data for Census Designated Places within the Sierra Valley Sub-basin**

County	Census Designated Place	US Census 2010 Total Population	2017 ACS 5-Year Household Population (Note 3)	Data		% Below Poverty Level (last 12 months)	2017 ACS 5-Year MHI Estimate	DA population	% of CA MHI 2017 (Note 4)	DAs			Methods Notes
				2017 ACS 5-Year Estimated % Unemployed	2017 ACS 5-Year MHI Estimate					Severe DAC	EDA	Severe DAC	
Plumas	Beckwourth	432	186	0.0%	0%	\$93,006	0	138%	FALSE	FALSE	FALSE		
	Chilcoot-Vinton	454	140	10.0%	28.6%	\$38,482	140	57%	TRUE	TRUE	TRUE		
Sierra	Calpine	205	212	9.7%	0%	\$87,250	0	130%	FALSE	FALSE	FALSE		
	Loyalton	769	1055	2.5%	12.9%	\$42,045	1055	63%	FALSE	TRUE	TRUE		
	Sattley	49	57	0.0%	42.0%	<b>\$9,192</b>	57	14%	TRUE	TRUE	TRUE	Note 1	
	Sierra Brooks	478	318	0.0%	0%	\$51,823	318	77%	FALSE	TRUE	TRUE		
	Sierraville	200	80	1.3%	1.3%	<b>\$42,712</b>	80	64%	FALSE	TRUE	TRUE	Note 1	
<b>Total</b>		<b>2587</b>	<b>2048</b>	<b>3.0%</b>	<b>9.8%</b>	<b>\$51,739</b>	<b>1650</b>	<b>77%</b>				<b>Note 2</b>	

**Notes**

- 1 Calculated based on number of households earning within income ranges, as provided by 2017 ACS 5-yr. The MHI estimate is a weighted average across income range and number of households
- 2 Weighted average across census designated places
- 3 Household population includes persons of all ages
- 4 The communities as a whole has income levels less than 80% of the CA MHI

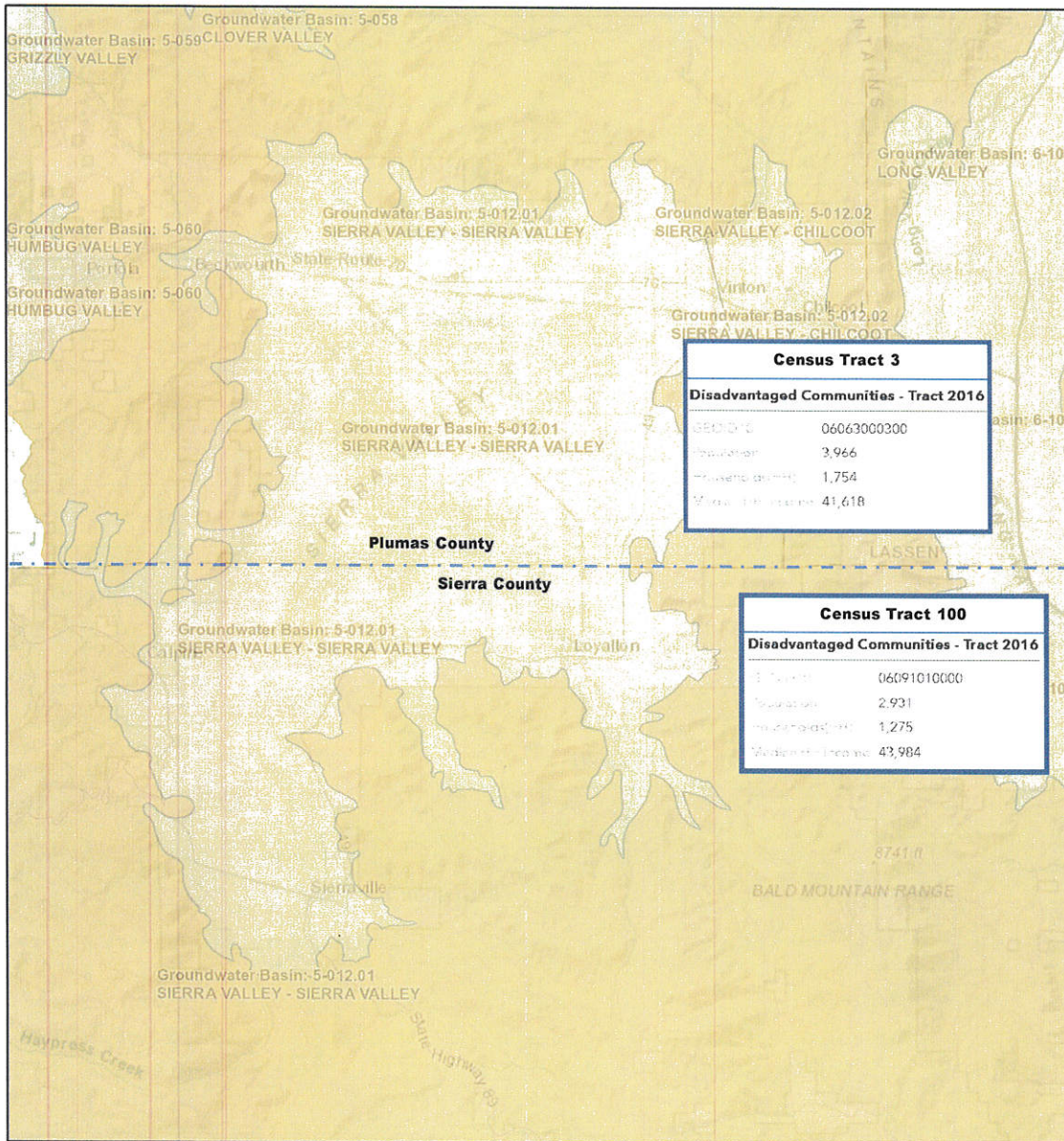
**Table 2. Estimated MHI for Sattley and Sierraville**

Income Bracket Range			Sierraville, Occupied Housing		Sattley, Occupied Housing Units	
low	high	ave/median	%	#	%	#
\$0	\$9,999	\$5,000	45%	26	44%	30
\$10,000	\$14,999	\$12,500	0%	0	56%	38
\$15,000	\$19,999	\$17,500	0%	0	0%	0
\$20,000	\$24,999	\$22,500	0%	0	0%	0
\$25,000	\$34,999	\$30,000	0%	0	0%	0
\$35,000	\$49,999	\$42,500	17%	10	0%	0
\$50,000	\$74,999	\$62,500	0%	0	0%	0
\$75,000	\$99,999	\$87,500	38%	11	0%	0
<b>MHI (Weighted Average)</b>			<b>\$42,712</b>		<b>\$9,192</b>	

**Table 3. Summary of Sub-basin DA status**

Category	Number	Data and Methods Summary
Total population of CDPs in subbasin	2048	
Total population of DAs	1650	2017 ACS 5-year data set. See
% of DA population	81%	Methods Section

## Various Water Management Boundaries in California

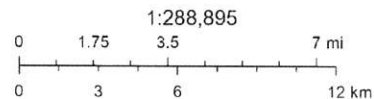


10/13/2019, 2:15:20 PM

Bulletin 118 Groundwater Basins

Disadvantaged Communities - Tract 2016

- Data Not Available
- Severely Disadvantaged Communities
- Disadvantaged Communities



US Census Bureau. Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, California

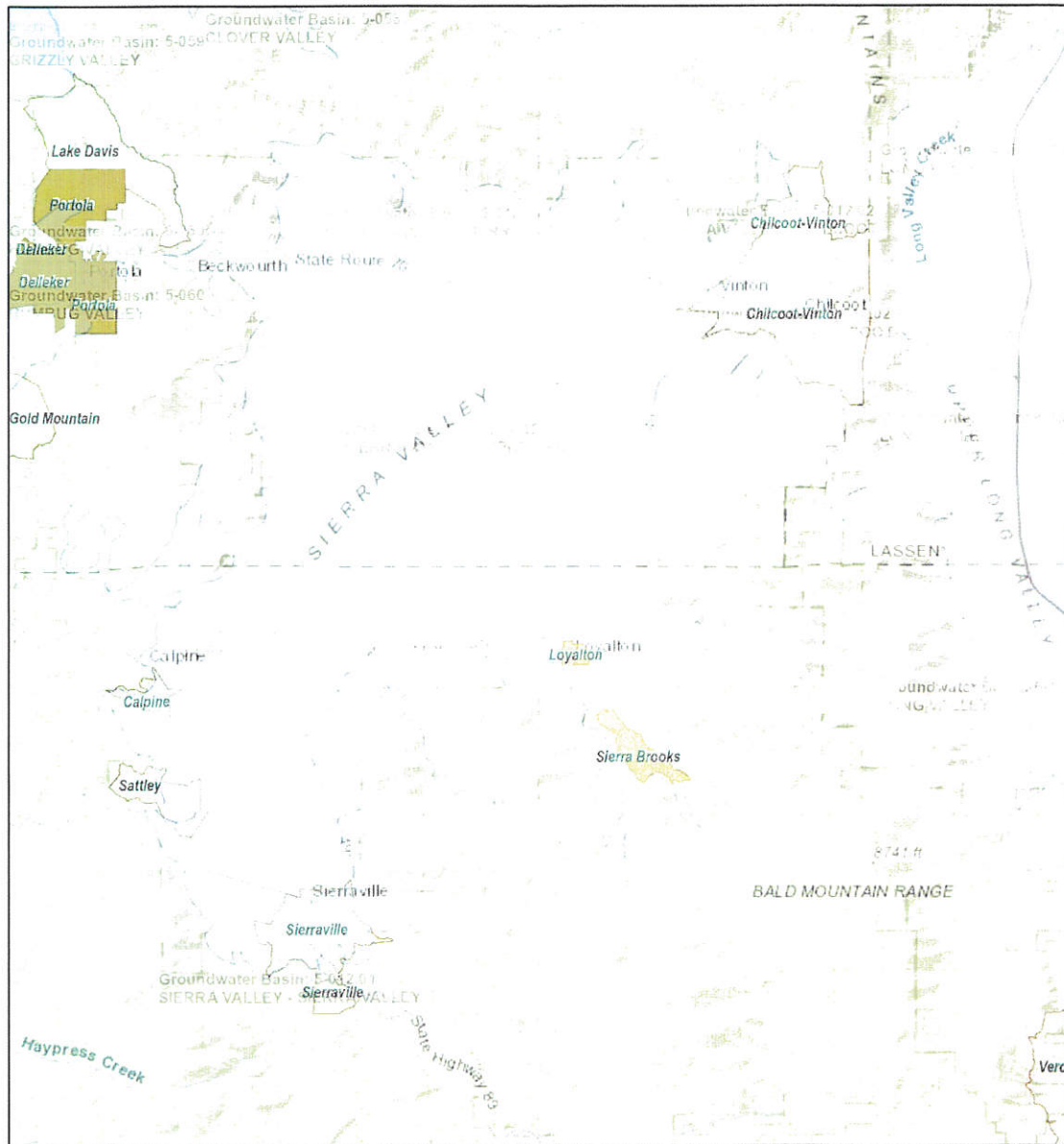
Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS | California Citizens Redistricting Commission (2012). | US Census Bureau | USGS TNM - National Hydrography

### Figure 1. Census Tracts Covering Sierra Valley.

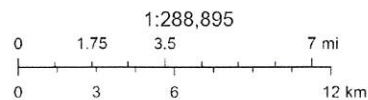
All census tracts covering Sierra Valley meet DAC thresholds. Census Tract 3 (GEOID10 ending in 00300) in Plumas Co. has median incomes at 65% at 2016 California's Median Household Income (MHI). Census Tract 100 (GEOID10 ending in 10000) covering Sierra Co. has median incomes at 69% of 2016 MHI. Sierra Valley in its entirety is designated a DAC.



### Various Water Management Boundaries in California



10/13/2019, 2:11:34 PM



Bulletin 118 Groundwater Basins

Disadvantaged Communities - Places 2016

- Data Not Available
- Severely Disadvantaged Communities
- Disadvantaged Communities

US Census Bureau. Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, California

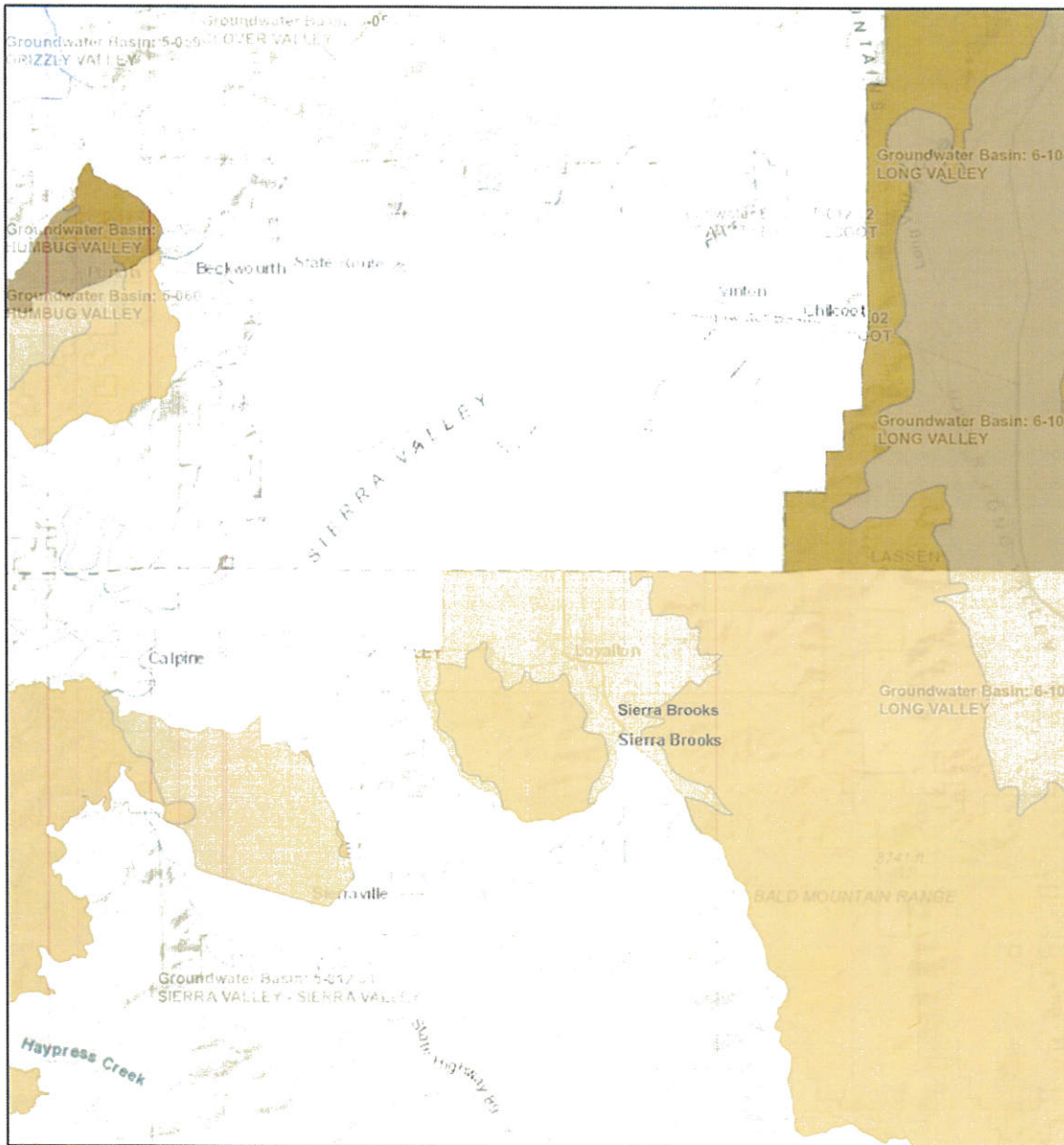
Water Management Planning Tool

Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS | California Citizens Redistricting Commission (2012). | US Census Bureau | USGS TNM - National Hydrography

**Figure 2. Census Designated Places in Sierra Valley.**

Loyalton and Sierra Brooks are classified as meeting DAC thresholds. 2012 – 2016 ACS data is not available for Sattley, Calpine, Sierraville and Chilcoot-Vinton.

### Various Water Management Boundaries in California

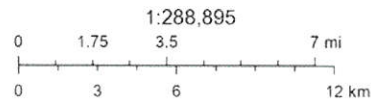


10/13/2019, 2:47:37 PM

Bulletin 118 Groundwater Basins

Disadvantaged Communities - Block Group 2016

- Data Not Available
- Severely Disadvantaged Communities
- Disadvantaged Communities



US Census Bureau Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan (METI), Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, California

Water Management Planning Tool  
 Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, IISDA, NPS | California Citizens Redistricting Commission (2012). | US Census Bureau | USGS THM - National Hydrography

**Figure 3. Block Groups covering Sierra Valley.**  
 Block Groups with DAC status cover Loyaltan, Sierra Brooks, Sattley and Sierraville.



# BOARD OF SUPERVISORS

---

VACANT, DISTRICT 1  
KEVIN GOSS, DISTRICT 2  
SHARON THRALL, DISTRICT 3  
LORI SIMPSON, DISTRICT 4  
JEFF ENGEL, DISTRICT 5



October 21, 2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

Plumas County strongly supports of the Sierra Valley Groundwater Management District (SVGMD) application for Round 3 Program Funding as this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

Plumas County—the Groundwater Sustainability Agency (GSA) for a small portion of the Sierra Valley Groundwater Basin that is outside of the SVMGD's jurisdictional GSA boundary—has executed a Memorandum of Understanding (enclosed herein) with the SVGMD that memorializes our commitment and intent to collaboratively develop one Sierra Valley Groundwater Sustainability Plan (SV GSP) that encompasses the SVGMD and Plumas County GSA areas and that includes the water management perspectives and priorities of local land and water owners and managers, interested citizens and public members, and federal and tribal entities.

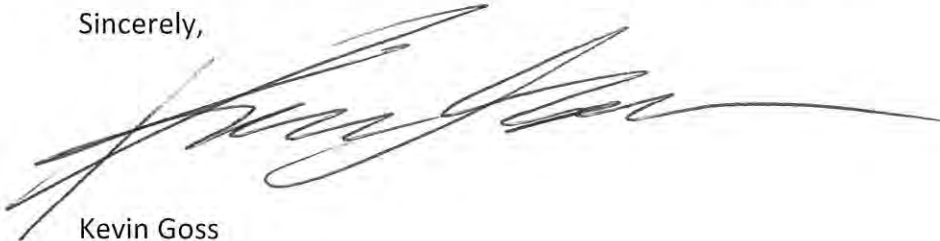
In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a Groundwater Sustainability Plan (GSP) to be completed for the Basin by January 31, 2022, Plumas County actively supports the SVGMD in the development of this SV GSP grant application and in achieving our shared goal of developing and implementing a GSP in order to achieve groundwater sustainability in the Basin in accordance with SGMA. Sierra Valley is sparsely populated (< 2200 per the 2010 Census), and the entire basin has Disadvantaged Community (DAC) status, with two census tracts covering the entire Sierra Valley basin at 66% and 70% of California's Median Household Income.

PLUMAS COUNTY BOARD OF SUPERVISORS  
Letter in Support of Sierra Valley Groundwater Management District application  
for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

Plumas County has a long-term and cooperative relationship with the SVGMD and knows from decades of working together on sustainable water and land management in the Sierra Valley, that adequate funding for developing the SV GSP is an essential part of enabling the SVGMD to implement an effective and economically sustainable groundwater management program that is supported by SGMA beneficial users; stakeholders; and local, tribal, and federal governments. DWR grant funding will offer critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts by the SVGMD.

Plumas County has provided staff support for the development of this application and commits to continue to be an active partner with the SVGMD throughout the SGMA planning process. Plumas County encourages the Sustainable Groundwater Management Grant Program to award funding to the Sierra Valley Groundwater Management District. We are happy to further discuss this application and the unique challenges that face Sierra Valley. Please contact the Plumas County Planning Director, Tracey Ferguson, AICP, at [traceyferguson@countyofplumas.com](mailto:traceyferguson@countyofplumas.com) or (530) 283-6214.

Sincerely,



Kevin Goss  
Plumas County Supervisor, District 2

Enclosed: Memorandum of Understanding between Parties in the Sierra Valley  
Groundwater Basin as Related to the Sustainable Groundwater Management Act

cc: Sharon Thrall, Plumas County Supervisor, District 3  
Lori Simpson, Plumas County Supervisor, District 4  
Jeff Engel, Plumas County Supervisor, District 5

MEMORANDUM OF UNDERSTANDING BETWEEN PARTIES IN THE SIERRA VALLEY GROUNDWATER BASIN AS RELATED TO THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT.

THIS MEMORANDUM OF UNDERSTANDING (MOU) is made and entered into on January 8, 2019 by and between the County of Plumas ("County" herein) and the Sierra Valley Groundwater Management District ("District" herein), each a "Party" and collectively the "Parties").

WHEREAS, on September 16, 2014, Governor Jerry Brown signed into law Senate Bills 1168 and 1139 and Assembly Bill 1739 known collectively as the Sustainable Groundwater Management Act ("SGMA"); and

WHEREAS, the purpose of SGMA is to create a comprehensive management system in California by creating a structure to manage groundwater at the local level, while providing authority to the State to oversee and regulate, if necessary, the local groundwater management system; and

WHEREAS, SGMA empowers and requires local agencies to develop and adopt Groundwater Sustainability Plans ("GSP") that are tailored to the resources and needs of their communities, provide a buffer against drought and contribute to reliable water supply for the future; and

WHEREAS, Water Code Section 10723.6 authorizes a combination of local agencies overlying a groundwater basin to elect to become a Groundwater Sustainability Agency ("GSA") by using a memorandum of agreement or other agreement; and

WHEREAS, the Department of Water Resources (DWR) granted the Sierra Valley Groundwater Management District GSA authority over the portion of Sierra Valley Groundwater Basin within the District's boundaries on 4-1-2017; and

WHEREAS, the Department of Water Resources (DWR) granted Plumas County GSA authority over portions of the Sierra Valley Groundwater Basin outside of the District boundary and within Plumas County on 4-14-2017; and

NOW THEREFORE, incorporating the above recitals herein it is mutually understood and agreed as follows:

1. PURPOSE. This MOU is entered into by and between the Parties to facilitate a cooperative and ongoing working relationship to develop a single Sierra Valley GSP that will allow compliance with SGMA and State law, both as amended from time to time. The primary goal of the MOU is to eliminate overlap between the GSAs and to establish a working partnership to move toward a multi-GSA agreement to cover all portions of the Sierra Valley Groundwater Basin designated in DWR Bulletin 118 and to prepare and adopt a SGMA compliant GSP prior to the January 31, 2022 deadline set under SGMA.

All Parties agree that all actions taken and/or contemplated under the GSP will be based on sound groundwater science and local expertise that will drive the development of the sustainability goals of the basin as outlined under SGMA.

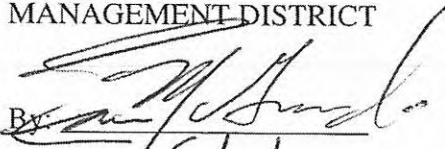
2. TERM. This MOU shall remain in effect unless terminated by the mutual consent of the Parties and as allowed by State law.

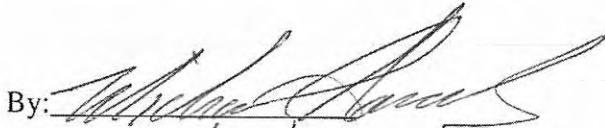
3. AMENDING THE MOU. This MOU hereto may only be amended by subsequent writing, approved and signed by all Parties.

4. HOLD HARMLESS. No Party, not any officer or employees of a Party, shall be responsible for any damage or liability occurring by reason of anything done or omitted to be done by another Party in connection with this MOU.

SIERRA VALLEY  
GROUNDWATER  
MANAGEMENT DISTRICT

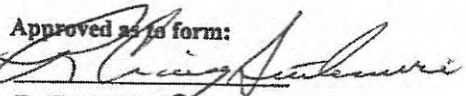
COUNTY OF PLUMAS

By: 

By: 

DATE: 2/11/19

DATE: 1/8/19

Approved as to form:  
  
R. Craig Settlemyre  
Plumas County Counsel

AGREEMENT NO. \_\_\_\_\_





# Plumas County Environmental Health

270 County Hospital Road, Ste. 127, Quincy CA 95971

Phone: (530) 283-6355 ~ Fax: (530) 283-6241

---

October 21, 2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Support for Sierra Valley Groundwater Management District's Grant Application  
Sustainable Groundwater Management Planning, Round 3 Funding

To whom it may concern:

Plumas County Environmental Health enthusiastically supports the Sierra Valley Groundwater Management District's (SVGMD) application for Round 3 Sustainable Groundwater Management Funding. This funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a Groundwater Sustainability Plan (GSP) to be completed for the Basin by January 31, 2022, Plumas County Environmental Health strongly supports the SVGMD in its goal of developing a comprehensive GSP to achieve groundwater sustainability in the Basin in accordance with SGMA. Sierra Valley is sparsely populated (< 2200 per the 2010 Census), and the entire basin has Disadvantaged Community (DAC) status, with the two census tracts covering the area at 66% and 70% of California's Median Household Income. The grant funding being offered by DWR will provide critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts.

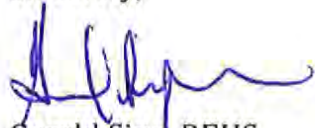
Plumas County Environmental Health has long been a partner in promoting and protecting the groundwater resources of this important Basin. Our staff regulates and oversees public water systems, state small water systems, and domestic water systems serving disadvantaged communities and households throughout the Basin. We also provide field inspection of new groundwater well installations, ensuring proposed well locations and construction protect groundwater quality. Furthermore, we offer informal technical expertise to the SVGMD Board of Directors and educate the community on groundwater protection. Through this sustainable groundwater management planning application, Environmental Health would serve on a more formal, collaborative Technical Advisory Committee that is anticipated to include representatives of Plumas and Sierra County Environmental Health Departments, University of California Cooperative Extension staff, and a local engineer with expertise in sustainable groundwater management. This committee would greatly benefit disadvantaged communities and households throughout the Sierra Valley by ensuring that these most vulnerable populations have safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.



Environmental Health also foresees considerable technical benefits from this sustainable groundwater management application. The development of standardized groundwater monitoring protocols, improved data networks and databases, and overall better planned and managed data as related to water quality, water levels and subsidence are all deliverables in this application. Having accurate, defensible, and comprehensive groundwater data is crucial if SVGMD is to successfully develop a sustainable groundwater management plan that has local buy-in, meets the needs of the diverse group of local stakeholders, and satisfies SMGA.

In summary, I believe this sustainable groundwater management application will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders. I strongly support this application and encourage the Sustainable Groundwater Management Grant Program to award funding to the Sierra Valley Groundwater Management District. I am happy to further discuss this application and the unique challenges faced by SVGMD. Please feel free to contact me at 530-283-6367 or by email at [jerrysipe@countyofplumas.com](mailto:jerrysipe@countyofplumas.com).

Sincerely,



Gerald Sipe, REHS  
Director, Plumas County Environmental Health

**COUNTY OF SIERRA  
BOARD OF SUPERVISORS**

PO Drawer D  
Downieville, CA 95936  
Telephone: (530) 289-3295  
Fax: (530) 289-2830



October 15, 2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

The Sierra County Board of Supervisors is writing in support of the Sierra Valley Groundwater Management District (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

Sierra County and Plumas County have lands overlying the Sierra Valley Groundwater Basin, for which we have executed a joint powers agreement for the preservation and management of groundwater in Sierra Valley. In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a Groundwater Sustainability Plan (GSP) to be completed for the Basin by January 31, 2022, the Sierra County Board of Supervisors strongly supports the SVGMD in its goal of developing a GSP to achieve groundwater sustainability in the Basin in accordance with SGMA. Sierra Valley is sparsely populated (< 2200 per the 2010 Census), and the entire basin has Disadvantaged Community (DAC) status, with the two census tracts covering the area at 66% and 70% of California's Median Household Income. The grant funding being offered by DWR will offer critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts.

We believe this effort will promote development of an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders. We strongly support this application and encourage the Sustainable Groundwater Management Grant Program to award funding to the Sierra Valley Groundwater Management District. We are happy to further discuss this application and the unique challenges that face Sierra Valley and can be contacted at 530-289-3295.

Sincerely,

Sierra County  
Board of Supervisors

Paul Roen  
Chairman

## California Indian Water Commission

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To Whom it May Concern:

This letter of support by the California Indian Water Commission (CIWC) is written in support of the Sierra Valley Groundwater Management District (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a Groundwater Sustainability Plan (GSP) to be completed for the Basin by January 31, 2022, CIWC strongly supports the SVGMD in its goal of developing a GSP to achieve groundwater sustainability in the Basin in accordance with SGMA. Sierra Valley is sparsely populated (< 2200 per the 2010 Census), and the entire basin has Disadvantaged Community (DAC) status, with the two census tracts covering the area at 66% and 70% of California's Median Household Income. The grant funding being offered by DWR will offer critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts.

Tribal representatives from the Paiute, Washoe and Maidu tribes that have traditionally shared stewardship of the ancestral lands and waters within and surrounding the Sierra Valley Basin (SVB) seek to engage with the Sierra Valley Groundwater Sustainability Plan (SVGSP) development process in order to reconnect tribal values with groundwater management assessments and priority actions that will be developed during the SVGSP process. As an intertribal organization pursuant to PL 93-638, the CIWC supports tribal interests in these stewardship opportunities.

Of particular interest to the tribes is the intersection of the Sustainable Groundwater Management Act (SGMA) regulations and the Tribal Cultural Beneficial Uses established by the State Water Resources Control Board (Water Board), but also the recognition and integration of tribal water rights as follows:

### Tribal Tradition and Culture (CUL):

Uses of water that support the cultural, spiritual, ceremonial, or traditional rights or lifeways of California Indians, including, but not limited to: navigation, ceremonies, fishing, gathering, consumption of natural aquatic resources, including fish, shellfish, vegetation, and materials.

The three tribes intend to engage with the SVGSP process in coordination with the Plumas National Forest (PNF) and with Plumas County, the Groundwater Sustainability Agency (GSA) for portions of the Ramelli Allotment where tribes have deep and enduring cultural connections that pre-date non-tribal settlement of the region and the establishment of the National Forest system of federal ownership and

## California Indian Water Commission

management in the region. The Maidu, Paiute and Washoe tribes managed vast ancestral territories for centuries that overlapped in portions of the Sierra Valley Basin. Although non-tribal ownership of shared ancestral lands now dominates land and water management in the Sierra Valley Basin, the tribes seek to affect such management over the 50-year SGMA planning period through the public involvement requirements afforded by the SGMA regulations.

First, the tribes will communicate public participation opportunities afforded by the SV GSP development process to tribal members.

And secondly, tribes will engage with tribal members in developing tribal perspectives on basin setting characterizations and water management priorities for the SVGSP for lands and waters managed by the Plumas National Forest (PNF) within the Wild and Scenic River Corridor of the Middle Fork of the Feather River from the A-23 Bridge to Rocky Point.

As “sovereigns” under SGMA, the Plumas National Forest and the Washoe, Paiute, and Maidu tribes will speak for themselves pursuant to self-determination. The PNF and the three tribes will draft their own basin setting narratives and water management narratives for the SVGSP and coordinate perspectives and priorities as desired by the parties and Plumas County. The CIWC is hopeful this will bring better awareness to tribal water rights and understanding of fulfillment of tribal trust responsibilities.

Coordination and consultation frameworks developed among the tribes, the PNF and Plumas County under SGMA for the SVGSP will be provided to DWR with dedicated support provided by the Sierra Valley Groundwater Sustainability Planning Grant.

CIWC exists to uphold traditional responsibilities to creation (water, land, air, fire) per our sustained ancestral lifeways and responsibilities to ensure resiliency for future generations.

CIWC Board of Directors is extremely interested in understanding the nexus between SGMA and the needs and priorities of water to tribal communities of California. We believe this effort will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users, tribes and other area stakeholders. For support of meaningful tribal engagement in the SGMA process we strongly support this application and encourage the Sustainable Groundwater Management Grant Program to award funding to the Sierra Groundwater Management District. We are happy to further discuss this application and the unique challenges that face Sierra Valley and can be contacted at (530) 521-8141 or by email at [trinacunningham.maidu@gmail.com](mailto:trinacunningham.maidu@gmail.com).

Sincerely,



Trina Cunningham  
(530) 521-8141  
PO Box 224  
Quincy, CA 95971



October 15, 2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

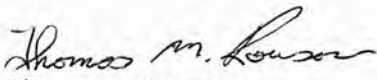
The Sierra Brooks Water Advisory Board is writing in support of the Sierra Valley Groundwater Management District (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a Groundwater Sustainability Plan (GSP) to be completed for the Basin by January 31, 2022, the Sierra Brooks Water Advisory Board strongly supports the SVGMD in its goal of developing a GSP to achieve groundwater sustainability in the Basin in accordance with SGMA. Sierra Valley is sparsely populated with less than 2200 people per the 2010 Census, and the entire basin has Disadvantaged Community (DAC) status, with the two census tracts covering the area at 66% and 70% of California's Median Household Income. The grant funding being offered by DWR will offer critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts.

SGMA requires Groundwater Sustainability Agencies to consider the interests of all beneficial uses and users of groundwater, including municipal well operators and public water systems. Water quality degradation that significantly and unreasonably affects the supply or suitability of groundwater for use in drinking water systems is an undesirable result that must be prevented. A high-quality Groundwater Sustainability Plan for Sierra Valley would add to the protections offered by the State Water Board and Sierra County Environmental Health Department to ensure a groundwater supply suitable to the needs of our residents.

We believe this effort will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders. We strongly support this application and encourage the Sustainable Groundwater Management Grant Program to award funding to the Sierra Valley Groundwater Management District. We are happy to further discuss this application and the unique challenges that face Sierra Valley and can be contacted at 530-251-7772 or by email at [tkrowson@psln.com](mailto:tkrowson@psln.com)

Sincerely,

  
Thomas M. Rowson

Chairman

RESOLUTION NO. 2019-10

Resolved by the Board of Directors of the Sierraville Public Utility District, that proposal be made to the California Department of Water Resources to obtain a Round 1 Integrated Regional Water Management Implementation Grant pursuant to the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Water Code § 79700 et seq.), and to enter into an agreement to receive a grant for the: Alternative Water Source Project. The Plumas County Community Development Commission, or designee, is hereby authorized and directed to prepare the necessary data, conduct investigations, file such proposal, and execute a grant agreement with California Department of Water Resources.

Passed and adopted at a meeting of the Sierraville Public Utility District on October 16, 2019.

Authorized Original Signature:

Lee Wright  
Printed Name:

Lee Wright 10-16-19  
Title: Board Director

Clerk/Secretary:  
Joel Gibbs



P.O. Box 325 Sierraville, CA 96126

530-832-4649 / 530-913-8032

10/16/2019

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

The Sierraville Public Utility District is writing in support of the Sierra Valley Groundwater Management District (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (5-12.01).

In recognition of the passage of the Sustainable Groundwater Management Act (SGMA) in 2014 and the State of California's requirement for a Groundwater Sustainability Plan (GSP) to be completed for the Basin by January 31, 2022, Sierraville Public Utility District strongly supports the SVGMD in its goal of developing a GSP to achieve groundwater sustainability in the Basin in accordance with SGMA. Sierra Valley is sparsely populated (< 2200 per the 2010 Census), and the entire basin has Disadvantaged Community (DAC) status, with the two census tracts covering the area at 66% and 70% of California's Median Household Income. The grant funding being offered by DWR will offer critical support to develop a legally defensible GSP, while building important infrastructure and capacity for ongoing monitoring and management efforts.

SGMA requires Groundwater Sustainability Agencies to consider the interests of all beneficial uses and users of groundwater, including municipal well operators and public water systems. Water quality degradation that significantly and unreasonably affects the supply or suitability of groundwater for use in drinking water systems is an undesirable result that must be prevented. A high-quality Groundwater Sustainability Plan for Sierra Valley would add to the protections offered by the State Water Board and Sierra County Environmental Health Department to ensure a groundwater supply suitable to the needs of our residents.

We believe this effort will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders. We strongly support this application and encourage the Sustainable Groundwater Management Grant Program to award funding to the Sierra Valley Groundwater Management District. We are happy to further discuss this application and the unique challenges that face Sierra Valley and can be contacted at 530-913-8032 or by email at [landswright@digitalpath.net](mailto:landswright@digitalpath.net).

Sincerely,

Lee Wright

President

*SPUD is an equal opportunity provider*

**SPUD Board Members:**

| Lee Wright 994-1098 [landswright@digitalpath.net](mailto:landswright@digitalpath.net) | John Shaffer 559-4404 [jshaffer@tdrpd.org](mailto:jshaffer@tdrpd.org)  
| Mike Blide 320-5711 [mikeblide@gmail.com](mailto:mikeblide@gmail.com) | Al Pombo 392-5534 [aljpombo@gmail.com](mailto:aljpombo@gmail.com)  
| Rhynie Hollitz 401-8281 [hollitzranch@yahoo.com](mailto:hollitzranch@yahoo.com)



# CITY OF LOYALTON

COUNTY OF SIERRA  
605 SCHOOL STREET  
P.O. BOX 128  
LOYALTON, CALIFORNIA 96118  
(530) 993-6750  
cityofloyalton@digitalpath.net



OFFICE OF THE MAYOR

City Of Loyalton  
Box 128  
Loyalton, Ca. 96118

*October 31, 2019*

California Department of Water Resources  
Sustainable Groundwater Management Grant Program  
1416 9th Street  
Sacramento, CA 95814

Re: Letter in Support of Sierra Valley Groundwater Management District application for Sustainable Groundwater Management (SGM) Grant, Round 3 SGM Planning

To whom it may concern:

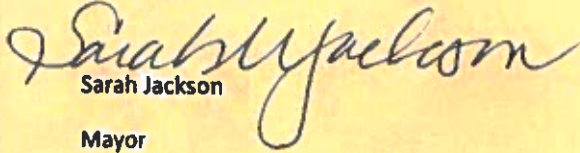
The City of Loyalton is writing to support Sierra Valley Groundwater Management District's (SVGMD) application for Round 3 Program Funding and believes this funding is critical to achieving sustainable groundwater management in the Sierra Valley Groundwater Basin (S-12.01).

The Sustainable Groundwater Management Act (SGMA) requires completion of a Groundwater Sustainability Plan (GSP) by the SVGMD, the Groundwater Sustainability Agency (GSA). As a Sierra Valley is designated a medium priority basin, the GSP is legally required to be completed by January 31, 2022. Required by SGMA, GSAs need to consider the interests of all beneficial uses and users of groundwater, including municipal well operators and public water systems. Water quality degradation that significantly and unreasonably affects the supply or suitability of groundwater for use in drinking water systems is an undesirable result that must be prevented. Groundwater supply and quality for drinking water use is particularly important for Disadvantaged Communities (DACs) because of their reliance on groundwater and their limited financial resources to treat groundwater or acquire alternative sources. Sierra Valley is sparsely populated with less than 2200 people per the 2010 Census, and the entire basin has Disadvantaged Community (DAC) status, with the two census tracts covering the area at 66% and 70% of California's Median Household Income. The grant funding being offered by DWR will offer critical support to develop a legally defensible GSP to protect groundwater. The SGMA process will provide an opportunity for all area beneficial users to better understand groundwater and its management, and will enable DACs and other beneficial users to participate in the process through various outreach avenues, such as involvement in Technical Advisory Committees and in workshops. Finally, the process will build important infrastructure and data tools to enable efficient and cost effective monitoring and management efforts. A high-quality Groundwater Sustainability Plan for Sierra Valley will help add to the protections offered by the State Water Board and Sierra County Environmental Health Department to ensure a groundwater supply suitable to the needs of our residents.



For these reasons, the City of Loyaltan strongly supports SVGMD's application for Round 3 SGM Planning funding. We believe this effort will effectively develop an environmentally and economically sustainable and effective groundwater management program supported by SGMA beneficial users and other area stakeholders.

Sincerely,

A handwritten signature in cursive script that reads "Sarah Jackson". The signature is written in dark ink and is positioned to the right of the typed name.

Sarah Jackson

Mayor