Paso Basin Cooperative Committee
Notice of Meeting

NOTICE IS HEREBY GIVEN that the Paso Basin Cooperative Committee will hold a Regular Meeting at **4:00 P.M. on Wednesday, November 18, 2020**. Based on the threat of COVID-19 as reflected in the Proclamations of Emergency issued by both the Governor of the State of California and the San Luis Obispo County Emergency Services Director, as well as the Governor's Executive Order N-29-20 issued on March 17, 2020 relating to the convening of public meetings in response to the COVID-19 pandemic, this meeting will be conducted as a phone in/web-based meeting only. There will be no physical meeting location for this Cooperative Committee Meeting. Members of the public can participate via phone or by logging into the web-based meeting.

TO JOIN THE MEETING FROM YOUR COMPUTER, TABLET OR SMARTPHONE, GO TO:
https://zoom.us/j/92184703953?pwd=VGVLNmJIaENBeWlyOXc4alFaTno3dz09
(This link will help connect both your browser and telephone to the call)
Passcode: 603939

YOU CAN ALSO DIAL IN USING YOUR PHONE:
- United States: +1 669 900 6833
- Webinar ID: 921 8470 3953
- Passcode: 603939

All persons desiring to speak during any Public Comment can submit a comment by:
- Email at arford@co.slo.ca.us by 5:00 PM on the day prior to the Cooperative Committee meeting
- Teleconference meeting at link and/or phone number above
- Mail (*must be received by 5:00 PM on the day prior to the Committee meeting*) to:
  County of San Luis Obispo Department of Public Works
  Attn: Angela Ford
  County Government Center, Room 206
  San Luis Obispo, CA 93408
- Additional information on how to submit Public Comment is provided on page 3 of this Agenda

NOTE: The Paso Basin Cooperative Committee reserves the right to limit each speaker to three (3) minutes per subject or topic. In compliance with the Americans with Disabilities Act, all possible accommodations will be made for individuals with disabilities so they may attend and participate in meetings.

John Hamon, Treasurer, City of Paso Robles
Kelly Dodds, Vice Chairperson, San Miguel CSD
John Peschong, Chairperson, County of SLO
Matt Turrentine, Secretary, Shandon-San Juan WD

Steve Martin, Alternate, City of Paso Robles
Vacant, Alternate, San Miguel CSD
Debbie Arnold, Alternate, County of SLO
Kevin Peck, Alternate, Shandon-San Juan WD

Agenda
November 18, 2020

1. **Call to order**
2. **Pledge of Allegiance**
3. **Roll call**
4. **Public Comment – items not on Agenda**
5. **Approval of September 23, 2020 Meeting Minutes**
6. **Consider proposed modifications to, and approval of, Paso Robles Subbasin First Annual Report** *(County of SLO, Angela Ford)*
7. **Consider recommended Consultant for Second Annual Report development and related contract consistent with MOA Section 6.3** *(County of SLO, Angela Ford)*
8. **Receive update regarding grant opportunity and consider signing letter of support for San Miguel Community Services District's submission of Prop 68 GSP Implementation Round 1 Grant Application** *(San Miguel CSD, Blaine Reely)*
9. **Discussion of Groundwater Replenishment Credit concept** *(San Miguel CSD, Blaine Reely)*
10. **Presentation and Discussion of Continuation of Groundwater Neutrality concept** *(Shandon-San Juan Water District, Ray Shady)*
11. **Receive Project Status Update**
12. **Committee Member Comments –** Committee members may make brief comments, provide status updates, or communicate with other members, staff, or the public regarding non-agenda topics
13. **Upcoming meeting(s)**
    a. 2021 PBCC Regular Meeting Schedule (January 27, April 28, July 21, October 27)
14. **Future Items**
15. **Adjourn**

CONFERENCE CALL/WEBINAR ONLY

Wednesday, November 18, 2020 at 4:00 p.m.

Important Notice Regarding COVID-19 based on guidance from the California Department of Public Health and the California Governor's Officer, to minimize the spread of the COVID-19 virus, please note the following:

1. The meeting will only be held telephonically and via internet via the number and website link information provided on the agenda. After each item is presented, Committee Members will have the opportunity to ask questions. Participants on the phone will then be provided an opportunity to speak for 3 minutes as public comment prior to Committee deliberations and/or actions or moving on to the next item.

2. The Committee's agenda and staff reports are available at the following website: www.slocounty.ca.gov/pasobasin

3. If you choose not to participate in the meeting and wish to make a written comment on any matter within the Committee's subject matter jurisdiction, regardless of whether it is on the agenda for the Committee's consideration or action, please submit your comment via email or U.S. Mail to ensure it is received by 5:00 p.m. on the day prior to the Committee meeting. Please submit your comment to Angela Ford at arford@co.slo.ca.us. Your comment will be placed into the administrative record of the meeting.

   Mailing Address:
   County of San Luis Obispo Department of Public Works
   Attn: Angela Ford
   County Government Center, Room 206
   San Luis Obispo, CA 93408

4. If you choose not to participate in the meeting and wish to submit verbal comment, please call (805) 781-5139 and ask for Angela Ford. If leaving a message, state and spell your name, note the agenda item number you are calling about and leave your comment. The verbal comments must be received by no later than 9:00 a.m. on the morning of the noticed meeting and will be limited to 3 minutes. Every effort will be made to include your comment into the record, but some comments may not be included due to time limitations.

NOTE: The Paso Basin Cooperative Committee reserves the right to limit each speaker to three (3) minutes per subject or topic. In compliance with the Americans with Disabilities Act and Executive Order N-29-20, all possible accommodations will be made for individuals with disabilities, so they may participate in the meeting. Persons who require accommodation for any audio, visual or other disability in order to participate in the meeting of the Paso Basin Cooperative Committee are encouraged to request such accommodation 48 hours in advance of the meeting from Joey Steil at (805) 781-5252.

Paso Basin Cooperative Committee
Minutes (DRAFT)
September 23rd, 2020

The following members or alternates were present:

John Peschong, Chairperson, County of San Luis Obispo
Kelly Dodds, Alternate Member, San Miguel CSD
Matt Turrentine, Secretary, Shandon-San Juan WD
John Hamon, Treasurer, City of Paso Robles

1. Call to Order

Chairperson Peschong: calls the meeting to order at 4:00 p.m.

2. Pledge of Allegiance

Chairperson Peschong: leads the Pledge of Allegiance.

3. Roll call

County Staff, Angela Ford: calls roll.

4. Public Comment – items not on Agenda

Meeting Audio: Item start ~ 00:03:26

Chairperson Peschong: opens the floor for public comment.

Greg Grewal: comments on a property acquisition and asks if it affects Committee Member's status of sitting on a board.

Chairperson Peschong: asks for additional public comments, hearing none, closes the public comment period and moves on to Item #5.

5. Approval of November 20, 2019 Meeting Minutes

Meeting Audio: Item start ~ 00:05:20

Audio from the November 20, 2019, Paso Basin Cooperative Committee Meeting is available at: www.slocounty.ca.gov/pasobasin

Chairperson Peschong: opens discussion for Agenda Item 5 – Approval of November 20, 2019 Cooperative Committee Meeting Minutes; asks for comments from the Committee, and then from the public; there are none.

Motion by: Treasurer Hamon
Second by: Alternate Member Dodds
Motion: The Committee moves to approve the October 23, 2019 Meeting Minutes.

Members	Ayes	Noes	Abstain	Recuse
John Peschong (Chairperson)	X			
Kelly Dodds (Alternate Member)	X			
Matt Turrentine (Secretary/Clerk)	X			
John Hamon (Treasurer)	X			

6. Approval of Paso Robles Subbasin First Annual Report

Meeting Audio: Item start ~ 00:06:43

Meeting materials for Agenda Item #6 are available at: www.slocounty.ca.gov/pasobasin

County Staff, Angela Ford: provides an overview of the purpose, development and submittal of the Paso Robles Subbasin First Annual Report (Annual Report) by the April 1, 2020 deadline; proposes removal of Section 8.3.2

	"Extension of Water Neutral New Develop Program" and recommends that the Committee approve the modified First Annual Report for resubmission to DWR. Treasurer Hamon: asks County Staff for clarification on why the extension of Water Neutral New Develop Program is being recommended for removal from the First Annual Report. County Staff, Angela Ford: responds that Annual Reports are intended to provide updates on GSP implementation, and that the Water Neutral New Development Program does not fall under GSP implementation, nor is it a project per the Plan; therefore, it was requested to be removed from the First Annual Report. Secretary Turrentine: comments that Section 8.3.2 is an appropriate update and does not need to be removed the First Annual report due to its relevance to the GSP and the County's efforts to extend the Water Neutral New Development Program. Chairperson Peschong: recommends that Section 8.3.2 be removed from the First Annual Report and resubmitted to DWR, and to have staff agendize a discussion on the chapter during the next Cooperative Committee meeting; asks for consensus on this approach. Alternate Member Dodds: recommends that a discussion on Section 8.3.2 be agendized at the next Cooperative Committee meeting to provide further clarification on the removal of the section, prior to being resubmitted to DWR. Anne Myhre and Greg Grewal: speak. County Staff, Angela Ford: responds to public comment by stating that DWR has not requested any modifications to the First Annual Report. Chairperson Peschong: asks for additional comments from the public, seeing none, closes the public comment period and brings the item back to the Committee; recommends and receives consensus to bring this item back at the next Cooperative Committee meeting for further discussion.
7. 2020 Conflict of Interest Code Biennial Update	*Meeting Audio: Item start ~ 00:22:06* Meeting materials for Agenda Item #7 are available at: www.slocounty.ca.gov/pasobasin County Staff, Angela Ford: presents on the 2020 Conflict of Interest Code Biennial Update, including the recommended actions to review the Committee's Conflict of Interest Code, authorize the Committee's chairperson to sign the Biennial Notice, adopt a resolution amending Appendix A of the

Committee Code, and authorize the Committee Code Coordinator to submit the singed Biennial Notice and resolution to the Clerk of the Board of Supervisors of the County of San Luis Obispo.

Chairperson Peschong: opens the floor for public comments, seeing none, closes the public comment period and brings the item back to the Committee.

Motion by: Treasurer Hamon
Second by: Secretary Turrentine
Motion: The Committee moves to authorize Chairperson Peschong to sign the 2020 Conflict of Interest Code, adopt the resolution amending Appendix A of the Committee Code, and authorize the Committee Code Coordinator to submit both documents to the Code reviewing body.

Members	Ayes	Noes	Abstain	Recuse
John Peschong (Chairperson)	X			
Kelly Dodds (Alternate Member)	X			
Matt Turrentine (Secretary/Clerk)	X			
John Hamon (Treasurer)	X			

8. Provide direction to GSA staff regarding upcoming grant opportunity

Meeting Audio: Item start ~ 00:26:00
The presentation for Agenda Item #8 is available at:
www.slocounty.ca.gov/pasobasin

County Staff, Angela Ford: provides an overview of the upcoming Proposition 68 grant opportunity for GSP implementation projects opening November 2020, which will require consultant procurement, project refinement, and grant application development, and asks the Cooperative Committee to provide direction to GSA staff regarding feasibility of pursuing the grant opportunity.

Chairperson Peschong: asks if the Committee has any questions for staff.

Member Hamon: asks if staff can provide a cost estimate for consultant procurement.

County Staff, Angela Ford: responds that the previous consultant cost of grant application development was approximately $35,000.

Chairperson Peschong: asks for the total grant funding amount.

County Staff, Angela Ford: replies between 2-5 million dollars.

Chairperson Peschong: opens the floor for public comments.

Greg Grewal: speaks.

	Chairperson Peschong: recommends and receives consensus to bring this item back at the next Cooperative Committee meeting for further discussion, and to have GSA staff present an update on other grant opportunities including stormwater capture and well monitoring.
9. Receive and file Project Status Update	*Meeting Audio: Item start ~ 00:31:04* Meeting materials for Agenda Item #9 are available at: www.slocounty.ca.gov/pasobasin County Staff, Angela Ford: presents a project status update on the Paso Basin GSAs efforts to improve the monitoring network, increase understanding of groundwater conditions, fill data gaps, and support basin sustainability. Chairperson Peschong: asks for questions from the Committee, seeing none, opens the floor for public comment. Greg Grewal: speaks. County Staff, Angela Ford: responds to public comment by stating that the aerial groundwater mapping survey was completed in November of 2019 and that the data is currently being analyzed by Stanford University and the other project partners, and the County anticipates presenting the results in late 2020 or early 2021. The Committee Receives and files.
10. Consider Approval of Recommended FY 2020-21 Annual Budget and contribution percentages	*Meeting Audio: Item start ~ 00:34:20* www.slocounty.ca.gov/pasobasin County Staff, Angela Ford: presents on the recommended Fiscal Year 2020-21 Annual Budget and contribution percentages for consideration and approval by each of the GSAs, consistent with the Memorandum of Agreement (MOA) Section 5.2. Chairperson Peschong: asks for questions from the Committee. Treasurer Hamon: asks if the recommended budget and contribution percentages have been shared with all GSA staff. County Staff, Angela Ford: confirms that the recommended budget and contribution percentages have been distributed to GSA staff. Chairperson Peschong: asks for additional comments from the public, seeing none, closes the public comment period and brings the item back to the Committee.

Motion by: Treasurer Hamon
Second by: Secretary Turrentine
Motion: The Committee moves to recommend the Fiscal Year 2020-21 Annual Budget and contribution percentages for each GSA.

Members	Ayes	Noes	Abstain	Recuse
John Peschong (Chairperson)	X			
Kelly Dodds (Alternate Member)	X			
Matt Turrentine (Secretary/Clerk)	X			
John Hamon (Treasurer)	X			

11. Committee Member Comments

Meeting Audio: Item start ~ 00:37:05
www.slocounty.ca.gov/pasobasin

Chairperson Peschong: suggests adding a Cooperative Committee meeting in November to accommodate agendizing additional items.

The Committee agrees to hold their next Meeting on November 18, 2020 at 4:00 p.m.

Secretary Turrentine: asks if California Department of Water Resources (DWR) representative, Tom Berg, could provide and update on the GSP review process.

Tom Berg: DWR is in the process of reviewing different groups of Plans at different times; adding that because the GSAs for the Paso Basin submitted a single Plan, it will be one of the preliminary groups being reviewed, with feedback coming at or before the two year review deadline.

Secretary Turrentine: comments on the importance of maintaining the County's water neutrality provisions, enforced through Title 22, until more permanent decisions are made for balancing the basin; expresses concern over timing associated with extension of the Water Neutral New Development Program and establishment of a fallowing program, commenting that the Cooperative Committee should be prepared to enshrine water neutrality and develop a reasonable fallowing program before County's provisions expire.

Alternate Member Dodds: requests that the Cooperative Committee direct staff to bring a future agenda item to discuss developing a program for groundwater replenishment credits for in-lieu use of recycled water and other non-groundwater supplies, including Nacimiento Lake Water, adding that the success of the recycled water programs being developed by the City of Paso Robles and San Miguel CSD, as well as the J. Lohr blended irrigation water pipeline project will be dependent on the development and implementation of such a program.

<table>
<tr><td></td><td>Chairperson Peschong: asks for additional comments from the Committee, seeing none, opens the floor for public comment.
Greg Grewal: speaks.</td></tr>
<tr><td>12. Upcoming Meetings(s)</td><td>Next Meeting: Regular Meeting set for November 18, 2020 at 4:00 PM
Location: Online/phone-in meeting only – details TBD</td></tr>
<tr><td>13. Future Items</td><td>Chairperson Peschong: asks for any additional future items to be brought before the Committee.

Secretary Turrentine: recommends agendizing a future discussion on what the Cooperative Committee can do to create a fallowing program and/or preserve water neutrality pending direction from the County.

Chairperson Peschong: asks for additional items from the Committee; there are none.</td></tr>
<tr><td>14. Adjourn</td><td>Motion by: Treasurer Hamon
Second by: Alternate Member Dodds
Motion: The Committee moves to adjourn at 4:50 p.m.
<table>
<tr><th>Members</th><th>Ayes</th><th>Noes</th><th>Abstain</th><th>Recuse</th></tr>
<tr><td>John Peschong (Chairperson)</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Kelly Dodds (Alternate Member)</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Matt Turrentine (Secretary/Clerk)</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>John Hamon (Treasurer)</td><td>X</td><td></td><td></td><td></td></tr>
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I, Matt Turrentine, Secretary to the Paso Basin Cooperative Committee, do hereby certify that the foregoing is a fair statement of the proceedings of the meeting held on September 23, 2020, by the Paso Basin Cooperative Committee.

Matt Turrentine, Secretary of the Paso Basin Cooperative Committee.
Drafted by: Joey Steil and Angela Ruberto Ford, County of San Luis Obispo

PASO BASIN COOPERATIVE COMMITTEE
November 18, 2020

Agenda Item #6 – Consider proposed modifications to, and approval of, Paso Robles Subbasin First Annual Report

Recommendation

It is recommended that the Paso Basin Cooperative Committee (Committee) consider approval of the Paso Robles Subbasin First Annual Report (Report), as modified, for submission to the Department of Water Resources (DWR).

Prepared By

Angela Ford, County of San Luis Obispo

Background

The GSP Annual Reports are intended to provide technical information on groundwater conditions and effects of implementation of the GSP over the prior water year. SGMA regulations require GSAs to submit an Annual Report to DWR by April 1 following adoption of a GSP and annually thereafter. The First Annual Reports for basins designated high-priority and in critical overdraft, such as the Paso Basin, were due to the California Department of Water Resources (DWR) by April 1, 2020.

Discussion

GSA staff worked with GSI Water Solutions, Inc. to develop the Paso Robles Subbasin First Annual Report (Report) by the April 1, 2020 SGMA deadline and planned to seek Committee approval at the March 18, 2020 Regular Meeting. Following cancellation of that meeting due to COVID-19, GSA staff requested that the County Director of Public Works, as the appointed GSP Plan Manager, authorize submission of the Report to DWR by the submittal deadline with the understanding that the Report would be brought to the Committee for consideration at the next meeting.

On September 23, 2020, the Committee considered removal of the section "Extension of Water Neutral New Development Program" since the referenced program is administered by the County Department of Planning and Building, was not identified as a project in the Paso Robles Subbasin GSP and is, therefore, not part of GSP Implementation. The Committee discussed the recommendation, the program and its impact on Paso Basin sustainability and directed staff to bring the item back.

The section "Extension of Water Neutral New Development Program" has now been modified to clarify the representation of the program as a current, temporary, management action enacted by the County pursuant to its police powers and set to expire January 1, 2022.

Section 4.8 of the Memorandum of Agreement between the GSAs states that any action or recommendation considered by the Committee shall require the affirmative vote of 67 percent of the Committee. Therefore, it is recommended that the Committee consider approval of the Report as modified, propose and discuss any other potential revisions, and authorize staff to coordinate with DWR on submission of the updated Report.

Attachments

1. Redlined Section 8.3.2 "Extension of Water Neutral New Development Program" of Paso Robles Subbasin First Annual Report (2017 – 2019)

* * *

8.3.2 Extension of Water Neutral New Development Program

In October 2015, the County Board of Supervisors established the Countywide Water Conservation Program (CWWCP), which includes the County's Water Neutral New Development (WNND) program, in response to declining groundwater levels. WNND programs that are being implemented in the Subbasin include:

- The Urban/Rural Water Offset and Rebate Programs
- The Agricultural Offset Program

These programs required new urban/rural development using groundwater from the Subbasin to offset new water use at a 1:1 ratio and limited new or expanded irrigated commercial crop production in areas within the Subbasin except by offset of existing irrigated crop production at a 1:1 ratio either on the same property or on a different property in the Subbasin. The Agricultural Offset Program also identified areas of severe decline in groundwater elevation and further restricted properties overlying these areas from planting new or expanded irrigated crops except for those converting irrigated crops on the same property to a different crop type. The Agricultural Offset Program was originally intended to be a stop-gap measure to avoid further depletion of the Subbasin until SGMA implementation~~became effective~~. The ordinances that created the programs included a termination clause that stated the programs in the Subbasin shall expire upon the effective date of a final and adopted GSP.

In June 2019, the County Board of Supervisors directed the County of San Luis Obispo Department of Planning and Building to develop recommendations for extending the WNND programs such that there would be~~was~~ no gap between the expiration of the County's programs and any pumping restrictions or controls that may be implemented as part of the GSP. Modification of the Agricultural Offset Program was proposed to occur in several phases, with the first phase starting in November 2019 to avoid the gap. The first phase amendments, adopted by the County Board of Supervisors on November 5, 2019, did not require environmental review because the changes from the existing ordinance were relatively minor. These items include the following:

- Extend the WNND ordinance expiration dates by two years
- Include a process to add water duty factors to unlisted crops
- Include a water duty factor for supplementally irrigated Dry Cropland and a methodology for determining previous five-year onsite water use
- Include a water duty factor for hemp
- Eliminate off-site offsets
- Require a recorded disclosure form
- The County Board of Supervisors anticipates addressing additional items in early 2020, including:
- Re-evaluate the extent of the "red zone," the zone of critical impact in the central portion of the Subbasin
- Update and set the Subbasin boundary map to match the DWR Bulletin 118 boundary
- Establish a registration process for voluntary fallowing of irrigated agricultural lands

Items that will likely be addressed in mid-to-late 2020 are those that could trigger additional environmental review because they have the potential to result in adverse environmental impacts, and as such, more time is needed to complete those amendments. These later-phase items as they pertain to the Subbasin include the following:

- Consider expanding the definition of de minimis use from 5 AFY to 25 AFY per site, considering parcel size
- Consider extending the lookback period beyond five years
- Revisit the Paso Robles Subbasin planning area standards that prohibit general plan amendments and land divisions (to allow for water-neutral housing projects)
- Revisit water offset fees and water usage assumptions
- Discuss allowing off-site offsets

The extension of the WNND has been included in the Annual Report because the WNND represents a current management action. However, it is a temporary management action enacted by the County pursuant to its police powers that is set to expire on January 1, 2022 rather than a long-term management action identified in the GSP. Thus, its inclusion in the Annual Report and reference to future potential items to be addressed shall not be construed as any sort of commitment on the part of the County to a further extension.

PASO BASIN COOPERATIVE COMMITTEE
November 18, 2020

Agenda Item #7 – Consider recommended Consultant for Second Annual Report development and related contract consistent with MOA Section 6.3

Recommendation

It is recommended that the Paso Basin Cooperative Committee (Committee) confirm the GSA staff recommendation to contract with GSI Water Solutions, Inc. (GSI), and forward said confirmed recommendation to the City of Paso Robles for its award of the related contract, consistent with MOA Section 6.3, for Water year 2020 Annual Report development.

Prepared By

Angela Ford, County of San Luis Obispo

Background

The GSP Annual Reports are intended to provide technical information on groundwater conditions and effects of implementation of the GSP over the prior water year. SGMA regulations require GSAs to submit an Annual Report to DWR by April 1 following adoption of a GSP and annually thereafter. The next Annual Report for the Paso Basin is due to the California Department of Water Resources (DWR) by April 1, 2021.

Discussion

On September 23, 2020, the Committee approved a recommended budget which included an amount not to exceed $80,000 for development of the Water Year 2020 Annual Report (Report) for the Paso Basin and, on October 28, 2020, GSI Water Solutions, Inc. provided a proposal for the Report.

A staff (of the GSAs) working group reviewed and evaluated the proposal based on project approach, successful completion of similar projects, including the Paso Basin First Annual Report, qualifications or personnel, and cost. Based on these criteria, the staff working group recommends GSA as the recommended qualified consultant for the Water Year 2020 Annual Report development.

GSA staff recommends the Committee consider the attached proposal, confirm the recommendation, and forward on to the City of Paso Robles, consistent with MOA Section 6.3 and subject to budget ratification from each GSA to fund the effort.

Attachments

1. GSI Proposal

* * *

PROPOSAL

Second Annual Report for the Paso Robles Subbasin Groundwater Sustainability Plan, Water Year 2020

Presented to the City of Paso Robles GSA, Paso Basin – County of San Luis Obispo GSA, San Miguel Community Services District GSA, Shandon-San Juan GSA

OCTOBER 2020

Submitted by:
GSI Water Solutions, Inc.
5855 Capistrano Avenue, Suite C
Atascadero, CA 93422
805.460.4622

GSI Water Solutions, Inc.

Section 1
Cover Letter

October 28, 2020

Christopher Alakel
City of Paso Robles Groundwater Sustainability Agency
City of Paso Robles – City Hall
1000 Spring Street
Paso Robles, CA 93446

Angela Ford
Paso Basin – County of San Luis Obispo Groundwater Sustainability Agency
Public Works Department
County of San Luis Obispo
976 Osos Street, Ste. 207
San Luis Obispo, CA 93408

Blaine Reely
San Miguel Community Services District Groundwater Sustainability Agency
1150 Mission Street
San Miguel, CA 93451

Willy Cunha
Shandon-San Juan Groundwater Sustainability Agency
PO Box 150
Shandon, CA 93461

Re: Proposal to Prepare the Second Annual Report, Water Year 2020
Paso Robles Subbasin Groundwater Sustainability Plan (GSP)

Dear Mr. Alakel and Paso Robles Subbasin GSA representatives:

GSI Water Solutions, Inc. (GSI), is pleased to present our proposal to help the City of Paso Robles (City) and its Groundwater Sustainability Agency (GSA) partners develop the Second Annual Report for the Paso Robles Subbasin (Basin) GSP. We were involved in GSP development in an advisory role since the beginning of the process and, on behalf of the GSAs, prepared the First Annual Report that was submitted on March 31, 2020.

The Sustainable Groundwater Management Act (SGMA) required the GSAs that represent critically overdrafted Basins to submit a GSP by January 31, 2020, outlining steps for achieving basin sustainability within 20 years. Following submittal of the GSP, SGMA regulations also required the GSAs to prepare an annual report to measure the effectiveness of the plan and demonstrate to the Department of Water Resources (DWR) that the Basin is on track to sustainably manage the groundwater resource. The Paso Robles Subbasin GSP was submitted on January 31, 2020. The First Annual Report, submitted on March 31, 2020, compiled data, summarized the results of monitoring efforts, documented changes in groundwater supplies, tabulated basin-wide groundwater use, and tracked the effectiveness of initial GSP implementation efforts.

We appreciate the confidence that the GSA staff has placed in GSI to request this proposal for the preparation and development of the Second Annual Report. We look forward to the opportunity to support this project for the Basin. Please do not hesitate to contact me with questions.

Sincerely,

GSI Water Solutions, Inc.

Paul A. Sorensen
Principal Water Resources Consultant
805.460.4621
psorensen@gsiws.com
5855 Capistrano Avenue, Suite C Atascadero, CA 93422

Section 2

Qualifications, Approach, and Scope of Work

Experience Providing SGMA-Related Services

GSI is a specialized groundwater and water resources consulting firm that helps clients develop and manage groundwater supplies to ensure long-term sustainability and reliability. Our groundwater experts have been working in the Basin for decades, bring a wealth of experience in groundwater management projects in the Basin, and have been heavily involved in GSP development both in the Basin and elsewhere in southern California.

We are immersed in the details of the Basin's GSP, and we understand what is needed to develop an annual report template that meets DWR requirements and provides an effective yardstick for measuring the success of plan implementation over time. Our hydrogeologists and water resources consultants are experts in groundwater management and supply planning, specifically as it relates to SGMA compliance.

Currently, we are working on a number of GSP development and SGMA-related projects, including GSP development for the Atascadero Basin GSA, San Luis Obispo Valley Basin GSAs, Arroyo Grande Valley Subbasin GSAs, Carpinteria Valley Basin GSA, San Antonio Basin GSA, Santa Ynez River Valley Basin Eastern Management Area GSA, Santa Clarita Valley GSA, Kaweah Subbasin GSAs, and Cuyama Basin GSA.

This work includes evaluating the complexities of water in the subsurface, developing water budgets that can achieve sustainability, identifying potential undesirable results, effectively communicating with basin stakeholders on technical matters and helping to identify commonalities that set the stage for a collaborative process, and identifying and implementing practical solutions to achieve sustainability goals. Our SGMA experience includes the following projects:

	Hydrogeologic assessments	Groundwater management planning	Groundwater modeling and water budgets	Data management systems	Groundwater/ surface water interaction	Stakeholder engagement	GSP preparation, Annual Report
Expertise and Input to the Paso Robles Basin GSP, Shandon-San Juan Water District and Estrella-El Pomar-Creston Water District ■ San Luis Obispo County, CA	●	●	●		●	●	●
Hydrogeological Characterization and GSP Preparation, Atascadero Basin GSA ■ Atascadero, CA	●	●	●		●	●	●
Hydrogeological Characterization and GSP Preparation, Cuyama Basin GSA ■ Santa Barbara and San Luis Obispo County, CA	●	●			●		●
GSP Development, Santa Ynez River Valley Eastern Management Area GSA ■ Santa Barbara County, CA	●	●	●	●	●	●	●
GSP Development, San Antonio Basin GSA ■ Santa Barbara County, CA	●	●	●	●	●	●	●
GSP Development, Santa Clarita Valley GSA ■ Santa Clarita, CA	●	●	●	●	●	●	●
SGMA Basin Boundary Modification, Santa Clarita Valley GSA ■ Santa Clarita, CA	●	●				●	●
GSP Development, Carpinteria Valley GSA ■ Santa Barbara County, CA	●	●				●	●
GSP Development, San Luis Obispo Valley Basin GSAs ■ San Luis Obispo County, CA	●	●	●		●	●	●
SGMA/GSP Preparation, Mid-Kaweah and Greater Kaweah GSAs ■ Tulare, CA	●	●	●		●	●	●
SGMA Basin Boundary Modification, Atascadero Mutual Water Company and Templeton Community Services District ■ Atascadero, CA	●	●				●	●
SGMA Basin Boundary Modification for the Santa Maria Groundwater Basin, County of San Luis Obispo, CA	●	●				●	●

Project Descriptions for Annual Reporting Projects and GSPs

In addition to SGMA-specific projects listed above, GSI's experts have worked on numerous annual reporting projects. The following projects speak to GSI's ability to deliver a comprehensive annual report that meets DWR requirements. Three recent examples of Annual Report preparation projects (in addition to the Paso Robles Subbasin GSP Annual Report) include:

Adjudicated Groundwater Basin Annual Report Preparation

Northern Cities Management Area (NCMA), Santa Maria River Valley Groundwater Basin, San Luis Obispo County, California

GSI manages the preparation and submittal of the court-mandated annual reports for the Northern Cities Management Area of the Santa Maria River Valley Groundwater Basin—which represents the Cities of Pismo Beach, Arroyo Grande, and Grover Beach, and the Oceano Community Services District. Tasks include sampling and monitoring key sentry wells in the Northern Cities area to assess potential seawater intrusion and providing technical support and report preparation of quarterly and annual reporting required by the Superior Court and by DWR as a result of the Santa Maria Basin adjudication.

California Valley Solar Ranch Annual Report

High Plains Ranch II, LLC, San Luis Obispo County, California

GSI staff members prepared annual operations-phase groundwater monitoring reports for the California Valley Solar Ranch, a 250-megawatt photovoltaic power plant in eastern San Luis Obispo County. The project's conditional use permit stipulated the preparation of a groundwater monitoring and reporting plan with annual reporting of groundwater conditions. GSI collected all required data and developed the reports—which detailed groundwater levels, water quality, and pumping monitoring results— and analyzed trends in groundwater levels to determine whether project pumping resulted in declines of 5 feet or more below the baseline trend at nearby private monitoring wells.

Groundwater Monitoring and Reporting

Santa Paula Water Recycling Facility, City of Santa Paula, California

For more than a decade, GSI team member Tim Nicely has helped guide the City of Santa Paula to support compliance with groundwater monitoring and reporting requirements provided by the California Regional Water Quality Control Board. This has involved design of water recycling facility percolation ponds and installation of a network of dedicated groundwater monitoring wells and water level transducers. To confirm that the project does not adversely affect groundwater quality of the Santa Paula groundwater basin, we have conducted monthly groundwater sampling and prepared quarterly and annual monitoring reports on behalf of the City, presenting groundwater elevation contours and historical water quality data in compliance with permit requirements.

Santa Paula Water Recycling Facility

Project Approach

Section 356.2 of the SGMA emergency regulations outlines the specific requirements of the annual report, which must be submitted to DWR by April 1 of each year following adoption of the GSP. The Paso Robles Basin GSP was submitted by January 31, 2020 and the First Annual Report for the Basin was submitted on March 31, 2020. The regulations require that the annual report be based on the preceding water year (a water year covers the period from October 1 to September 30); thus the Second Annual Report, due March 31, 2021, will be for Water Year (WY) 2020, reporting on data and actions from October 1, 2019 through September 30, 2020.

DWR requires that the annual report describe the effectiveness of GSP implementation. One of the means by which the GSAs can measure effectiveness and demonstrate to DWR that the plan is on track to achieve sustainability is through the compilation of data and information that summarize the results of the monitoring efforts, document changes in groundwater supplies, tabulate basin-wide groundwater use, and document progress toward meeting interim milestones and (ultimately) basin sustainability.

Scope of Work

GSI developed the following scope of work based on the requirements in the September 2019 RFP for the First Annual Report, the requirements as outlined in the SGMA Emergency Regulations, and our experience preparing various other annual reports to meet DWR and other agency standards.

Task 1 –Data Compilation

The initial efforts will concentrate on developing the data needs, requesting data, and compiling the requirement information and data to prepare the report. All of the historical data in the GSP is compiled in the GSP Access® database. We will make data requests of the appropriate agencies to gather groundwater level data and production records. We will update the database files and the requisite data sets for the annual report. The data sources are varied and will require coordination and cooperation from a wide variety of agencies and entities.

Task 2 – Data Analysis and Representation

Several discrete data sets are required to be included in the annual report, including the following:

- Groundwater elevation data (for each principal aquifer)
- Groundwater extractions and use
- Surface water supply use
- Total water use
- Change in groundwater in storage
- Precipitation

Task 2.1 Groundwater Elevation Data. Groundwater elevation data are collected and compiled through the County of San Luis Obispo Groundwater Level Monitoring Program, operated by the San Luis Obispo County (County) Public Works Department with data collected twice a year (typically in April and October). We have worked extensively with the program, the County's data set, and the confidential nature of much of the data.

For purposes of preparing water level contour maps of each of the principal aquifers (Paso Robles Formation Aquifer and the Alluvial Aquifer), the entire County water level database can be used, as long as no individual data or data points are shown that would conflict with confidentiality agreements. For this Second Annual Report, water level contour maps for each aquifer will be prepared representing groundwater conditions in April 2020 and October 2020.

The Plan monitoring network includes hydrographs for 22 monitoring wells, which is a subset of the County monitoring program consisting of wells whose owners have agreed to allow their data to be made public. Each of the hydrographs presented in the GSP (Appendix D) will be updated with data through October 2020.

Task 2.2 Groundwater Extractions. Groundwater extraction data through September 2019 was compiled and represented in the First Annual Report. These data will be updated for WY 2020, including the estimates of extractions and general locations, the water use by sector, and methodology of measurement. Updated groundwater extraction information will be estimated using crop coverage information and water use factors used in the groundwater model. We will follow the same methodology used in the GSP and in the First Annual Report. We will prepare estimates of groundwater use by sector and method of measurement, and will provide a map showing general locations and volumes of extraction.

Task 2.3 Surface Water Supply. The regulations require that a description of surface water supplies be incorporated into the report. Use of surface water in the Basin is relatively small and limited to a very few sources. These data will be compiled, described, and incorporated into the total basin water use data compilation and descriptions (Task 2.4).

Task 2.4 Total Water Use. We will compile and present total basin water use information, including water sector, water source type, method of measurement, and a relative representation of accuracy of the measurement methodology (DWR standards require qualitative judgments such as "high," "medium," and "low").

Task 2.5 Change in Groundwater in Storage. Calculations of changes in groundwater in storage in each of the principal aquifers as presented in the GSP were performed through use of the groundwater flow model. To perform similar calculations for the annual reports would require updating the model every year, which is neither planned nor advised. An alternative standard method for calculating changes in groundwater in storage from one year to another is to create water level contour maps for each year of interest (Task 2.1) and calculate the volume changes between years. An ArcGIS® tool will be used to compute the volume difference between the initial groundwater surface and the following year's water surface. By applying a storativity factor (for the semi-confined Paso Robles Formation) or specific yield (for the unconfined alluvial aquifer) value, we can compute a change in the volume of water present in each aquifer. It is not necessary to know the total volume of groundwater in storage; it is the storage change (positive or negative) from year to year that we want to know. Following is a step-by-step process that we used for preparation of the this task in the First Annual Report, and that we intend to apply this year to estimate change in storage in both the Alluvial Aquifer and Paso Robles Formation Aquifer:

1. Create a water level contour map for April 2020 using groundwater level elevation data from the basin-wide monitoring program and Surfer® contouring and 3D surface mapping software. We will use professional judgment to adjust contours in places that do not make sense.
2. Import the Surfer file into ArcGIS and adjust the contoured water level elevation surface to fit the boundaries of the Basin.
3. Repeat steps 1 and 2 for October 2020 water level data.
4. Using ArcGIS, compute the difference in the water surface elevation between April 2019 water level data (which was prepared for the First Annual Report) and April 2020 water level data and compute the change in volume of saturated aquifer.
5. Multiply the specific yield or storage coefficient values by the volume calculated in Step 4. This is the change in groundwater in storage between April 2019 and April 2020.
6. Calculate the change in storage between October 2019 and October 2020 water level data by repeating the preceding steps.
7. Determine whether this makes technical sense and identify where the biggest changes (plus or minus) are occurring.

Note that the resulting calculated change in storage values may be quite different from the values that would otherwise be calculated as a model output if the groundwater model were updated and utilized because the methodologies are quite different and the averaged storativity value may or may not be fully representative of conditions throughout the Basin, both laterally and vertically.

Task 3 – Report Preparation, including Plan Implementation Progress

The overall purpose of the annual report is to update and use the compiled data to assess the progress that the basin GSAs and various stakeholders are making towards the ultimate goal of basin sustainability. The results of the data analysis will be evaluated and compared with the goals of the GSP implementation plan, then described in

the annual report to demonstrate to DWR the efforts of the GSAs and the effectiveness of GSP implementation.

GSI will prepare an initial administrative draft report for the GSA staff. The report will be based on data collected and the analysis performed as described above, on other data that may become available, and on ongoing discussions with the GSA staff. The general organization of the report is expected to be the following:

- Executive Summary
- Introduction
- Basin Setting and Monitoring Networks
  - Subbasin Setting
  - Precipitation and Climatic Periods
  - Groundwater Elevation Monitoring
- Groundwater Elevations, including water level contour maps and updated hydrographs
- Groundwater Extractions
  - Municipal Metered
  - Agricultural Irrigation
  - Rural Domestic and Small Public Water Systems
  - Total Groundwater Extraction Summary
- Surface Water Use
- Total Water Use
- Change in Groundwater in Storage
- Progress Towards Basin Sustainability
- Appendices
  - A. GSP Regulations
  - B. Precipitation Data
  - C. Groundwater Level and Groundwater Storage Monitoring Well
  - D. Potential Future Monitoring Wells
  - E. Hydrographs
  - F. Paso Robles Formation Aquifer Storage Coefficient Derivation and Sensitivity Analysis

Deliverables include the following:

- Administrative Draft report, for review and approval by the GSA staff
- Public Review Draft report, for review by the Paso Basin Cooperative Committee (PBCC) and the public
- Final Draft, for approval at the PBCC meeting
- Final report

Task 4 – Report Submittal

Following final approval of the annual report by the GSAs and the Paso Basin Cooperative Committee, GSI will submit the report to DWR in accordance with the department's requirements.

Task 5 – Meetings

GSI has budgeted for the following meetings:

- GSA staff meetings (4), including the kickoff meeting
- Paso Basin Cooperative Committee meeting

Task 6 – Project Management and Administration

The key individuals identified for this project will be the same individuals that successfully completed the First Annual Report, including Paul Sorensen as Project Manager and Nate Page, Managing Hydrogeologist and lead analyst. With our office in Atascadero, we can effectively apply our time and resources to the effort at hand. We will draw upon the full GSI team for expertise in specific areas of need.

Project Scope and Budget Assumptions:

- GSAs will provide timely assistance in providing the following data:
  - Water levels for April and October 2020
  - Groundwater production data for San Miguel Community Services District, County Service Area 16, and the City of Paso Robles for WY 2020
  - Pesticide report files and land-use data from the Agricultural Commissioner's office that will enable estimation of irrigation demand for 2020

Our scope includes:

- Four GSA staff meetings, including the kickoff meeting, lasting 2 hours each
- One Paso Basin Cooperative Committee meetings lasting 2 hours
- One set of revisions to Administrative Draft report
- One set of revisions to Public Draft report
- One set of minor revisions to Final Draft
- Submittal of Final Annual Report

Section 3

Staffing

The following key team members will be responsible for the on-time, on-budget delivery of project deliverables. Please see Appendix A for detailed resumes with project descriptions and references.

Paul Sorensen, PG, CEG, CHG

Principal Water Resources Consultant

Atascadero, California

ROLE
Project Manager

EXPERIENCE
30+ years

EDUCATION
MA, Geology; BS, Geological Sciences

For more than 30 years, Paul has lived and worked in the Basin. He has not only witnessed the changes in the Basin over that period and understands how and why the changes have transpired, but has also documented those changes through numerous investigations and studies, and has worked with the local water agencies, government entities, stakeholders, and landowners to help manage groundwater resources. Since joining GSI and opening the firm's North County office in April 2016, Paul has continued to dedicate his efforts to addressing San Luis Obispo County water supply issues. For the past two and one-half years, Paul has participated at the GSA staff level on behalf of the Shandon-San Juan GSA to assist with the development and preparation of the Paso Robles Basin GSP. To compile the most recent data, assess the effectiveness of the beginning of the implementation plan, and prepare the first annual report is an extension of work that Paul and the entire GSI staff have already been performing. Paul's considerable technical expertise includes sustainable groundwater management, regional groundwater basin analyses, perennial yield and basinwide water balance calculations, groundwater quality studies, aquifer test analyses, and production well and monitoring well design and construction.

For this project, Paul will be responsible for overall project management and project administration, and will serve as the primary point of contact. He will provide oversight and guidance to the project team for all tasks described in our scope of work.

Nate Page, PG

Consulting Hydrogeologist

Atascadero, California

ROLE
Data Analyst and Technical Lead

EXPERIENCE
13 years

EDUCATION
MS, Hydro-geophysics; BS, Geology

Nate's expertise includes aspects of hydrogeology and geographic information system (GIS) analysis, specifically related to groundwater supply development, groundwater basin analysis, and water resource management. He is experienced in analyzing regional groundwater basins and conducting groundwater quality studies, developing salt and nutrient management plans, supporting GSP development, conducting surface water/groundwater studies, and calculating perennial yield and basin water balance components. Nate has expertise in aquifer testing and analysis, data analysis, and numerical modeling, as well as groundwater and surface water sampling, QA/QC of laboratory water quality data, and water quality database management. He provides essential support for the development of technical memorandums, reports, GSP chapters, and other documents and has periodically assisted Paul with technical groundwater issues in the Basin. Nate also has experience in 3D geological modeling and land surveying.

For this project, Nate will serve as technical lead and data analyst for all tasks described in our scope of work. He will work closely under Paul's guidance to ensure that deliverables meet quality, budget, and schedule expectations.

Section 4

Fee Proposal and Schedule

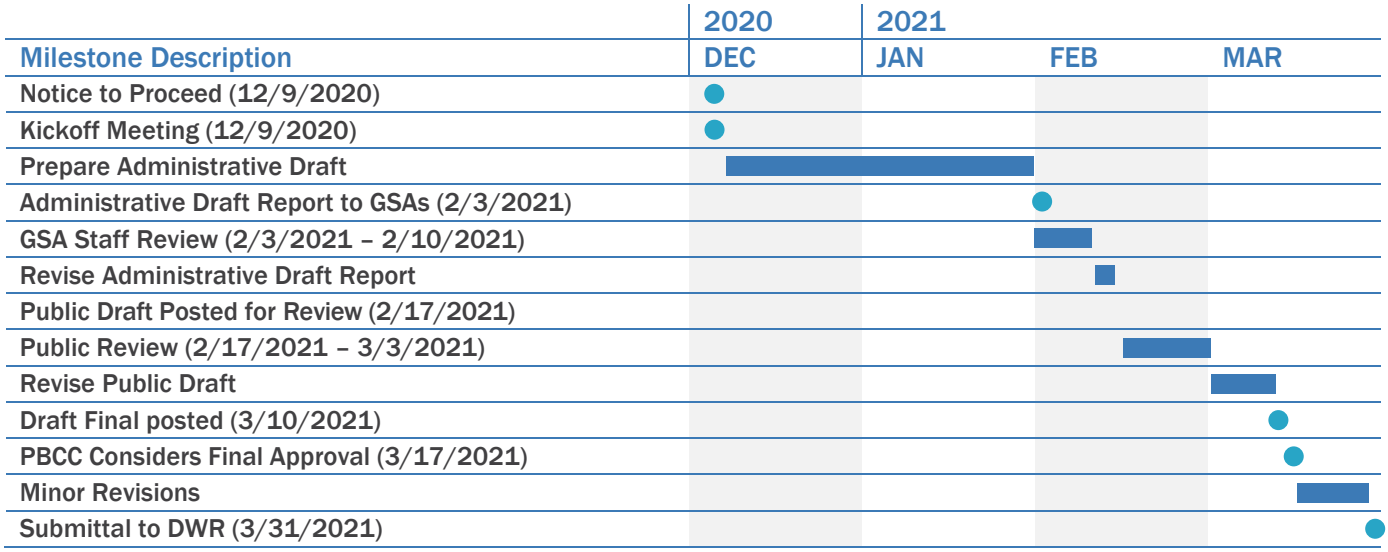
Fee Proposal

Table 1 presents a task-by-task breakdown of our proposed budget for all required services. No expenses for travel, lodging, or meals are included in our cost proposal.

Project Tasks	Labor Hours	Labor Cost	Outside Services	Direct Expenses	Total
Task 1 –Data Compilation	34	$5,420	$0	$0	$5,420
Task 2 – Data Analysis and Representation	223	$38,365	$0	$0	$38,365
Task 3 – Report Preparation	115	$20,945	$0	$0	$20,945
Task 4 – Report Submittal to DWR	4	$700	$0	$0	$700
Task 5 – Meetings	46	$10,140	$0	$0	$10,140
Task 6 – Project Management and Administration	19	$4,320	$0	$0	$4,320
Project Totals	**441**	**$79,890**	**$0**	**$0**	**$79,890**

Schedule

Meeting your schedule is a top priority for the GSI team. The following schedule outlines a way to submit the final deliverable by March 31, 2021. Should any schedule deviation occur, the GSI team will address it immediately and propose a solution to the GSA staff.



APPENDIX A
Resumes

Paul Sorensen, PG, CEG, CHG

Principal Water Resources Consultant

Paul has more than 30 years of experience managing projects related to hydrogeology and geology with specific expertise in groundwater supply, basin analysis, and water resource management. His technical expertise includes regional groundwater basin analyses, perennial yield and basinwide water balance calculations, groundwater quality studies, aquifer test analyses, and water well and monitoring well design and construction.

EDUCATION

MA, Geology, University of California, Santa Barbara

BS, Geological Sciences, University of Washington

PROFESSIONAL REGISTRATIONS

Professional Geologist: California

Certified Engineering Geologist: California

Certified Hydrogeologist: California

DISTINGUISHING QUALIFICATIONS

- ✓ Expertise in western U.S. water resource issues: supply, quality, and management
- ✓ Expertise in assessment of groundwater basin yield, water quality, natural recharge, and sustainability
- ✓ Experience in well design, construction, and maintenance
- ✓ Experience in groundwater exploration, development, and management
- ✓ Expertise in basinwide numerical modeling

REFERENCES

- **John Neil**, Atascadero Mutual Water Company, 805.466.2428, jneil@amwc.us. Projects: Atascadero Basin Groundwater Sustainability Plan (GSP); Atascadero Basin Boundary Modification Request
- **Jeff Briltz**, Templeton Community Services District, 805.434.4900, jbriltz@templetoncsd.org. Projects: Atascadero Basin GSP, Atascadero Basin Boundary Modification Request, Bonita Well Replacement, Creekside Ranch Nacimiento Water Project Recharge and Recovery Project.

REPRESENTATIVE PROJECTS

Staff Extension Services and Hydrogeologic Expertise and Input to the Paso Robles Basin GSP, Shandon-San Juan Water District (SSJWD) and Estrella-El Pomar-Creston Water District (EPCWD), San Luis Obispo County, California. On behalf of the two agricultural water districts in the Paso Robles Basin (Basin), Paul provides technical expertise and assistance in support of the preparation of a basinwide GSP. Paul acts as an extension of staff for the SSJWD, which is one four GSAs in the Basin, representing the district in a working group of staff members from the four GSAs that provides guidance to the GSP consultant team regarding the development of the GSP. In his role with the districts, Paul has reviewed and assisted in the writing of all chapters and components of the GSP.

Adjudicated Groundwater Basin Annual Report Preparation, Northern Cities Management Area Technical Group, Santa Maria Groundwater Basin, San Luis Obispo County, California. Paul manages the preparation and submittal of the Court-mandated annual reports for the Northern Cities Management Area (composed of the Cities of Pismo Beach, Arroyo Grande, and Grover Beach, and the Oceano Community Services District). Tasks include sampling and monitoring key sentry wells in the Northern Cities area to assess potential seawater intrusion, and technical support and report preparation of quarterly and annual reporting required by the Superior Court as a result of the Santa Maria Basin litigation solution.

Preparation of Annual Reports, Hydrogeologic Support and Planning for Water Supply, SunPower, San Luis Obispo County, California. Paul managed hydrogeologic services for the California Valley Solar Ranch (CVSR) project to construct a 250-megawatt photovoltaic solar generation facility and associated connection tie line. The facility includes solar arrays that covers nearly 2,000 acres in the Carrizo Plain. Water supply facilities for the project include a 271,000-gallon water tank for water supply and fire safety, onsite septic system and leach field, a reverse osmosis (RO) water treatment facility to provide treated potable water, and 1.5 acres of evaporation brine ponds to dispose of RO reject water. All water for the project is groundwater; additional onsite and offsite supplies are being developed to supplement existing wells. Paul managed hydrogeologic support to meet the County's conditions of permit approval, including preparation of the Water Supply Contingency Plan, Groundwater Monitoring and Reporting Plan, Drought Water Management Plan, and Annual Reports to document compliance with permit conditions.

Groundwater Sustainability Agency (GSA) Formation and Groundwater Sustainability Plan (GSP) Preparation, Atascadero Basin, Templeton Community Services District (TCSD), Atascadero Mutual Water Company (AMWC), Atascadero, San Luis Obispo County, California. Working with a public agency, mutual water company, and municipality, Paul provided the key technical analyses and support during creation of the GSA and led the technical work to formally define the basin boundaries and management area. He now is leading the technical efforts for the preparation of the GSP for the Atascadero Area Subbasin. The work includes developing the geologic and hydrogeologic framework of the basin, compiling and calculating the water budget (basin water balance), and working with the GSA and California Department of Water Resources (DWR) to ensure a compelling, defensible GSP.

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Basin Modification and Delineation/Definition of the Atascadero Subbasin, Templeton CSD, AMWC, San Luis Obispo, California. Paul directed a detailed geologic and hydrogeologic investigation to formally define the boundaries of a groundwater basin through extensive geologic and hydrogeologic mapping and analysis and well log review. Working with DWR in advance of the issuance of the basin boundary modification regulations, he prepared a technical report and attendant maps to formally and successfully modify and redefine the DWR Bulletin 118 basin boundaries and worked with the clients to submit the request to DWR.

Groundwater Basin Key Well Index Analysis, County of San Luis Obispo Public Works Department, San Luis Obispo County, California. As the responsible agency for programs such as the California Statewide Groundwater Elevation Monitoring (CASGEM) and the Sustainable Groundwater Management Act (SGMA), the County of San Luis Obispo Public Works Department needed to establish a representative well index for each of the San Luis Obispo County's (County's) five medium- or high-priority basins. Paul managed the effort on behalf of GSI to evaluate the County's water elevation monitoring program, establish data collection criteria and analytical techniques to be used to understand and present the groundwater conditions and changes in groundwater supplies, and document and effectively communicate information related to aquifer conditions and threats to groundwater supplies. The result of the work was to select key representative wells within each basin that efficiently represent the relative health of each basin, without compromising the confidentiality of the well owners.

SGMA Support Services, Mid-Kaweah GSA, Tulare, California. As a sub-consultant to GEI Consultants, GSI provided SGMA support services to the Mid-Kaweah GSA. Paul supervised and oversaw GSI's efforts, which included coordination with and outreach to other GSAs in the Kaweah Subbasin to develop a framework for agreement regarding data and analysis techniques for assessing groundwater elevation, groundwater extraction, surface water supply, total water use, change in storage, water budget, and sustainable yield. GSI identified data needed for SGMA GSP compliance and provided additional data collection and performed subbasin-wide groundwater modeling services to provide predictive scenarios and future water budgets. GSI then conducted a sustainability analysis, consisting of a basin characterization, water budget, and identification of strategies for achieving groundwater sustainability, and provided a review of the draft Mid-Kaweah GSA-GSP outline.

Fringe Area Basin Characterization, San Luis Obispo County Flood Control and Water Conservation District, San Luis Obispo County, California. Paul is the project principal for a characterization of the fringe areas of the Santa Maria Groundwater Basin. The project involves the hydrogeologic characterization of five geographically distinct areas that are within basin boundaries defined by the California Department of Water Resources (DWR), but were not included in the adjudicated basin area and thus are subject to SGMA management requirements. For each fringe area, GSI generated calculations of groundwater flow direction, Darcy groundwater flow quantities, well construction details, aquifer test results, and irrigated acreage. GSI developed geologic cross sections to understand the extent of hydraulic communication between the fringe areas and the adjudicated basin. As a result of these efforts, scientific Basin Boundary Modification Application requests were submitted to formally exclude three of the fringe areas from the Santa Maria Basin as non-basins, and to designate the two other areas as separate subbasins. Four of the five requests were subsequently approved by DWR.

Characterization and Planning Activities, San Luis Obispo Valley (Edna) Groundwater Basin, San Luis Obispo County Flood Control and Water Conservation District, San Luis Obispo County, California. Paul was the project principal for the San Luis Obispo Valley Groundwater Basin Characterization project that provided a foundation for future SGMA efforts by the County, City of San Luis Obispo, and local stakeholders, as well as served as the basis for development of a groundwater model. The effort included compilation of available hydrogeologic data into a comprehensive database; analysis of geologic cross sections, aquifer tests, streamflow infiltration, and enhanced recharge areas; and monitoring well installation. Paul is now the principal SGMA advisor with the project team for the preparation and development of the basinwide GSP.

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EDUCATION

MS, Hydrogeophysics, Colorado State University

BS, Geology, St. Lawrence University

PROFESSIONAL REGISTRATIONS

Professional Geologist (California and Utah)

DISTINGUISHING QUALIFICATIONS

- ✓ Groundwater supply development and water resource management
- ✓ Groundwater basin analyses
- ✓ Sustainable Groundwater Management Act (SGMA) studies and GSP preparation
- ✓ Aquifer testing and analysis
- ✓ GIS spatial analysis and 3D geologic modeling
- ✓ Water quality database management

Nate Page, PG

Consulting Hydrogeologist

Nate has 13 years of experience working with clients to manage water resources. His expertise includes aspects of hydrogeology and geographic information system (GIS) analysis, specifically related to groundwater supply development, groundwater basin analysis, and water resource management. He is experienced in analyzing regional groundwater basins and conducting groundwater quality studies, developing salt and nutrient management plans, supporting groundwater sustainability plan (GSP) development, conducting surface water/groundwater studies, and calculating perennial yield and basin water balance components. Nate has expertise in aquifer testing and analysis, data analysis, and numerical modeling, as well as groundwater and surface water sampling, quality control of laboratory water quality data, and water quality database management. He provides essential support for the development of technical memorandums, reports, GSP chapters, and other documents.

REFERENCES

- **John Neil**, Atascadero Mutual Water Company, 805.466.2428, jneil@amwc.us. Projects: Atascadero Basin GSP; Atascadero Basin Boundary Modification Request
- **Jeff Briltz**, Templeton Community Services District, 805.434.4900, jbriltz@templetoncsd.org. Projects: Atascadero Basin GSP, Atascadero Basin Boundary Modification Request

REPRESENTATIVE PROJECTS

Staff Extension Services and Hydrogeologic Expertise and Input to the Paso Robles Basin GSP, Shandon-San Juan Water District (SSJWD) and Estrella-El Pomar-Creston Water District (EPCWD), San Luis Obispo County, California. Nate has assisted with GSI's role as technical expert in support of the preparation of a basinwide GSP on behalf of the two agricultural water districts in the Paso Robles Basin (Basin). GSI staff acted as an extension of staff for the SSJWD, which is one of four GSAs in the Basin, representing the district in a working group of staff members from the four GSAs that provides guidance to the GSP consultant team regarding the development of the GSP.

Northern Cities Management Area Annual Monitoring Reports, Cities of Arroyo Grande, Grover Beach, Pismo, and Oceano Community Services District, California. Nate has prepared the annual monitoring report for the Northern Cities Management Area (NCMA) technical group. The reports are prepared pursuant to the requirements of the Stipulation and Judgment After Trial for the Santa Maria Groundwater Basin Adjudication. The annual reports provides an assessment of hydrologic conditions for the NCMA based on data collected during the calendar year of record.

Santa Paula Water Recycling Facility Groundwater Modeling and Monitoring, Santa Paula, Ventura County. Nate was part of the project team that supported all aspects of planning, monitoring well installation, well development, installation of required groundwater level transducers, hydrogeologic assessment, impacts analysis, and required reporting related to the discharge of effluent to on-site percolation ponds.

Groundwater Sustainability Plan Development, San Luis Obispo Basin, San Luis Obispo, California. Nate is part of the project team supporting the development of the GSP for the San Luis Obispo Basin. The GSP development is a coordinated effort with Water Systems Consultants. Nate has generated a 3D geological model of the basin and is assisting in development of the basin groundwater model.

Groundwater Basin Boundary Modification, Heritage Ranch Community Services District, Lake Nacimiento, California. Nate led the preparation of a successful basin boundary modification request to exclude Heritage Ranch Community Services District from the Paso Robles Basin based on scientific external boundary modification. The modification request included preparation of a technical report, correspondence and meetings with California Department of Water Resources (DWR) staff, and preparation of addendum materials.

San Luis Obispo Basin Characterization, County of San Luis Obispo, California. Nate was part of the project team that collected and summarized all available geologic and hydrogeologic data describing the San Luis Obispo Valley Groundwater Basin. GSI generated cross sections, hydrographs, and water level maps, and summarized all aquifer test data available from stakeholders.

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Groundwater Sustainability Plan Development, Atascadero Subbasin, Atascadero, California. Nate is the lead analyst and author for GSI's effort to develop GSP for the Atascadero Subbasin. The GSP development is a coordinated effort with GEI Consultants. Currently, GSI is leading the coordinated effort to develop the Hydrogeologic Conceptual Model and Groundwater Conditions chapters of the GSP.

Santa Maria Groundwater Basin Fringe Area Boundary Modification, County of San Luis Obispo, California. Nate was part of the project team that completed characterization of five "fringe areas" in the Santa Maria Groundwater Basin to determine whether San Luis Obispo County should pursue the SGMA basin boundary modification process with the California Department of Water Resources.

Groundwater Basin Boundary Modifications, Castaic Lake Water Agency (CLWA), Santa Clarita Valley, California. GSI helped CLWA identify the type and location of groundwater basin boundary adjustments to meet SGMA regulations for boundary modification. Nate provided groundwater level and quality data research and analysis, GIS analysis, and figure production.

Fringe Area Basin Characterization, San Luis Obispo County Flood Control and Water Conservation District, San Luis Obispo County, California. Nate is part of the project team working to characterize the fringe areas of the Santa Maria Groundwater Basin. The project involves the hydrogeologic characterization of five geographically distinct areas that are within basin boundaries defined by DWR, but were not included in the adjudicated basin area and thus are subject to SGMA management requirements. For each fringe area, GSI generated calculations of groundwater flow direction, Darcy groundwater flow quantities, well construction details, aquifer test results, and irrigated acreage. GSI developed geologic cross sections to understand the extent of hydraulic communication between the fringe areas and the adjudicated basin. If determined necessary based on the results of the characterization, the project will involve the preparation of a basin boundary modification request to DWR.

Groundwater Basin Key Well Index Analysis and Data Gap Analysis, San Luis Obispo County, Public Works Department, California. As the responsible agency for programs such as the California Statewide Groundwater Elevation Monitoring (CASGEM) and SGMA, the Public Works Department needed to establish a representative well index for each of the County's five medium- or high-priority basins. Nate supported GSI's effort to evaluate the County's water elevation monitoring program, establish data collection criteria and analytical techniques to be used to understand and present the groundwater conditions and changes in groundwater supplies, document and effectively communicate information related to aquifer conditions and threats to groundwater supplies, and to evaluate data gaps in the monitoring network.

Historical Water Use Studies, Various Clients, California. Nate has prepared several historical water use studies for private clients interested in establishing a record of historical water usage. These studies are used to sustain agricultural operations, help plan for the future, and bolster property values.

Desalination Intake Wells Hydrogeologic Evaluation, City of Morro Bay, California. Nate was a key member of the project team conducting a hydrogeologic evaluation of the existing Morro Bay desalination wells. Nate provided field oversight for instrumentation and coordination with City personnel for several long-term pumping tests and water quality sample collection. Nate also performed data reduction, including tidal response corrections, and aquifer testing analysis.

Desalination Subsurface Intake and Indirect Potable Reuse Feasibility Study, City of Santa Barbara, California. Nate was part of the project team conducting a study to evaluate the feasibility of several subsurface intake technologies that could be alternatives to the City's existing direct ocean intake for the desalination plant. Alternatives evaluated included conventional wells, slant wells, collector wells, beach infiltration galleries, seawater infiltration galleries, and directionally drilled wells. The study estimated yield, spacing, number of facilities required, and evaluated water quality and potential impacts. In addition, Nate helped to determine whether it is feasible to store highly treated wastewater within Santa Barbara's production aquifers through infiltration basins and injection wells, as part of an indirect potable reuse feasibility study.

GSI Water Solutions, Inc.

Paso Basin Cooperative Committee
Staff Report

November 18, 2020 **AGENDA ITEM: 8**

TO: **Paso Basin Cooperative Committee**

FROM: **Blaine T. Reely, PhD, PE – District Engineer for San Miguel Community Services District**

DATE: **November 18, 2020**

SUBJECT: **Receive update regarding grant opportunity and consider signing letter of support for San Miguel Community Services District's submission of Prop 68 GSP Implementation Round 1 Grant Application**

Recommendation

It is recommended that the GSA Cooperative Committee:

1. Receive an update regarding grant opportunity, discuss the merits of the San Miguel Community Services District GSA proposal to prepare a grant application on the District's behalf for a project which meets the Prop 68 GSP Implementation Grant Program PSP Round 1 submission guidelines. The grant application will identify the upgrade and expansion of the District's Machado Wastewater Treatment Facility (WWTF) and the construction of a new recycled water ("purple pipe") distribution system (or a component thereof) as the specific project to be implemented under the terms of the grant agreement.
2. Consider providing the District with a letter supporting the District's submission of the application for Prop 68 GSP Implementation Grant Round 1 funding.

Discussion

The California Department of Water Resources (DWR) has issued a Proposal Solicitation Package (PSP) for the implementation of Groundwater Sustainability Plans (GSPs). Funding for the program will be from the Sustainable Groundwater Management (SGM) Grant Program Implementation Grants using funds authorized by the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68). These funds can be used for eligible for projects that address drought and groundwater challenges to achieve regional sustainability for investments in groundwater recharge projects with surface water, stormwater, recycled water, and other conjunctive use projects. Eligible projects include those activities associated with the implementation of an adopted GSP or approved Alternative and must also be listed within an adopted GSP or approved Alternative.

- Examples of eligible project activities, tasks, and/or components can include, but are not limited to, the following:
- Groundwater recharge projects with surface water, stormwater, recycled water, and other conjunctive use projects

- Groundwater contaminant remediation or prevention projects for groundwater that serves as a source of drinking water
- Construction, rehabilitation, or expansion of conveyance facilities for groundwater recharge projects
- Wastewater treatment and water recycling facility upgrades for groundwater recharge project sources
- Stormwater and runoff capture projects that support groundwater recharge
- Groundwater recharge facility expansion
- Seawater barrier injection wells
- Groundwater recharge projects that address groundwater dependent ecosystems (GDEs)
- Projects and programs that support water supply reliability, water conservation, water use efficiency and water banking, exchange, and reclamation

The minimum and maximum grant award amounts are:

- Minimum Grant Amount – $2 million per basin
- Maximum Grant Amount – $5 million per basin

There will be two rounds of funding with Round 1 applications due in January 2021. The grant funding will require a 25% matching funds, but these local cost share requirement for projects benefiting a severely disadvantaged community (SDAC), DAC, EDA, Tribes, and more (collectively referred to as URC) may be waived or reduced as shown in Table 1 below.

TABLE 1 – ELIGIBILITY FOR COST SHARE WAIVER

0% Local Cost Share:	The Project is located within an URC and solely benefits the URC
5% Local Cost Share:	The Project is not located within an URC, but solely benefits the URC
15% Local Cost Share:	The Project is not located within an URC, but a minimum of 50% of the project benefits the URC
25% Local Cost Share:	The Project is not located within an URC and does not benefit an URC

NOTE: The minimum local cost share is calculated based upon the total project cost. For this program, the total project cost is the grant funds plus the local cost share amounts. To calculate the local cost share percent: local cost share/ (grant funds + local project cost).

Per direction from the Cooperative Committee, the GSA Cooperative Committee staff participated in a virtual meeting to discuss a strategy for submitting an application for Prop 68 grant funds for an eligible project (or projects) that would meet the program requirements. Cooperative committee staff discussed the possibility of retaining the services of a consultant to assist in the preparation of a grant application and specifically what projects would be identified in the grant application. Given the extremely tight timeframe for submitting an application for Round 1 funding (Round 1 Grant Solicitation closes January 8, 2021), the consensus of the staff was to plan to submit an application for the Round 2 funding cycle (Round 2 Grant Solicitation Opens Spring 2022). Given this consensus, the San Miguel CSD GSA made a request to the GSA CC staff that the District be allowed to submit a grant application for Round 1 for funding to support implementation of the District's WWTP Upgrade & Recycled Water Project. This project is identified in the GSP and meets the eligibility criteria set forth in the PSP. Further, our communities DAC status will provide added leverage against competing proposals. Based on input from GSA CC staff, San Miguel CSD GSA requests the support of the other GSA's (i.e. County of San Luis Obispo GSA, City of Paso Robles GSA, and the Shandon – San Juan GSA) in its proposal to prepare a grant application for a project

which meets the Prop 68 GSP Implementation Grant Program PSP requirements and to upload the District approved application in accordance with the Round 1 submission guidelines. The grant application will identify the WWTP Upgrade & Recycled Water Project (or a component thereof) as the specific project to be implemented under the terms of the grant agreement.

Other Agency Involvement/Impact

Other than providing letters of support for the San Miguel CSD GSA Prop 68 GSP Implementation grant application, the District does not anticipate any other agency involvement or impact.

Financial Considerations

Funding for the preparation and submittal of the GSA Prop 68 GSP Implementation grant application will be the sole responsibility of San Miguel CSD. No cost share is being requested from the other GSA's.

Results

Approval of the recommended action will demonstrate support San Miguel Community Services District GSA's preparation and submittal of an Application for Prop 68 Sustainable Groundwater Management (SGM) Grant Program Implementation Round 1 Grant Funding.

ATTACHMENTS

1. Sample language for the requested Letter of Support

ON LETTERHEAD OF Paso Basin Cooperative Committee

California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001

Subject: Letter of Support for the San Miguel Community Services District Groundwater Sustainability Agency Application for Prop 68 Sustainable Groundwater Management (SGM) Grant Program Implementation Round 1 Grant Funding.

Attention: Division of Regional Assistance

I write on behalf of { *SUPPORTING ENTITY* } in support of the San Miguel Community Services District (SMCSD) GSA proposal to the Department of Water Resources for a Prop 68 Sustainable Groundwater Management Round 1 Implementation Grant to help fund the upgrade and expansion of the District's Machado Wastewater Treatment Facility (WWTF) and the construction of a new recycled water ("purple pipe") distribution system. This project will eventually provide the SMCSD with the capacity to produce and convey a supply of high-quality effluent that will meet California Code of Regulations, Title 22, Division 4, Chapter 3 (Title 22) requirements for non-contact irrigation of vineyards, with a supply capacity of 0.5 Million Gallons per Day (MGD). The future use of the treated effluent for agricultural irrigation, in-lieu of groundwater withdrawals from within the Paso Robles Groundwater Basin, will result in a significant reduction of groundwater use that otherwise would have been pumped from basin. The project that SMCSD is proposing was identified in the Paso Robles Groundwater Basin GSP and we strongly support this grant application and the combined efforts of the Paso Robles Groundwater Basin GSAs to achieve sustainability in our basin.

Sincerely,

Paso Basin Cooperative Committee
Staff Report

November 18, 2020 **AGENDA ITEM: 9**

TO: **Paso Basin Cooperative Committee**

FROM: **Blaine T. Reely, PhD, PE – District Engineer for San Miguel Community Services District**

DATE: **November 18, 2020**

SUBJECT: **Discussion of Groundwater Replenishment Credit concept**

Recommendation

It is recommended that the Paso Basin Cooperative Committee discuss the concept of creating a Groundwater Replenishment Credit (GRC) Program to incentivize the use of recycled wastewater and other renewable water supplies in-lieu of pumping groundwater from the Paso Robles Groundwater Basin.

Discussion

The Sustainable Groundwater Management Act (SGMA) became law on January 1, 2015, forever changing the manner in which groundwater will be managed in California. SGMA specifically authorizes GSA's to control groundwater by regulating, limiting, or suspending extractions from individual wells or extractions in the aggregate (California Water Code § 10726.4(a)(2)). In many groundwater basins, potentially including the Paso Robles basin, groundwater overdraft conditions may require GSA's to impose reductions in groundwater pumping in order to achieve sustainable conditions in the basin. To do this, GSAs may need set a limit or "cap" on the overall amount of groundwater that is removed from the basin, assigning portions of this capped amount to groundwater pumpers in the form of a pumping allocation.

Making pumping allocation decisions will be a difficult task for GSA's, as it will require restricting access to groundwater resources upon which the agricultural community, cities and towns, and others depend. SGMA expressly does not create or adjust groundwater rights and the basic law of groundwater rights remains largely unchanged. Simply put, this means that while GSA's are tasked with managing groundwater with the goal of bringing groundwater conditions into balance and stopping further depletions and other undesirable impacts, they do not have the authority to change or modify groundwater rights. Further, studies have demonstrated that placing groundwater pumping restrictions on municipal and agricultural pumpers will have a significant adverse impact on the economy of the region.

To address these challenges, GSA's are confronted with the need to consider demand management of groundwater as well as supply augmentation. Some GSAs are considering creating crediting programs to incentivize pumpers to engage in programs that benefit the groundwater subbasin. One of these programs includes the use of Groundwater Replenishment Credits (GRC's) to incentivize groundwater pumpers to offset groundwater pumping by using renewable water supplies such as treated wastewater recycled

water or other surface water supplies, such as Lake Nacimiento excess supplies, in lieu of pumping groundwater.

It is important to understand that groundwater credit systems necessarily involve volumetric limitations on groundwater extraction and use. Absent such restrictions, it is unlikely that such incentive-based systems could be successfully implemented. While many GSAs have expressed interest in groundwater crediting programs, few (if any) have clearly established the nexus between such programs (which are attractive to many groundwater users) and the need to establish pumping limits (which are equally unpopular).

The GSA staff have discussed the possible formulation of a GRC program for consideration and possible implementation in the Paso Robles Groundwater Basin. For the purposes of initiating conversation between the GSA Cooperative Committee members and the public, the following concepts are presented:

1. What are Groundwater Replenishment Credits (GRC)? GRC's are created when groundwater withdrawals from within the Paso Robles Aquifer are eliminated or reduced by recipients who use "in-lieu" water on a substitute basis for groundwater that otherwise would have been pumped from within the aquifer.

2. How are GRC's related to the Water Offset Credits (WOC) identified the Countywide Water Conservation Program (CWWCP)? Under the provisions of the CWWCP, the Water Neutral New Development (WNND) requires that all new urban and rural development and new irrigated agriculture in the Paso Robles Groundwater Basin (excluding the Atascadero Sub-basin) offset new water use at a 1:1 ratio. Currently, offset requirements for new urban and rural development is implemented by generating credits through two primary methods: plumbing retrofits and the Cash for Grass program. WNND also requires that, in the PRGWB (excluding the Atascadero Sub-basin), all new or expanded irrigated agriculture offset new water use at a 1:1 ratio. Under the proposed concept, GRC's would be included as an additional WOC, and be applied in a similar way for new urban and rural development as credits for plumbing retrofits and the Cash for Grass Program.

3. How are GRC's created? GRC's are created when an entity, such as the San Miguel CSD, delivers a renewable water supply, called "in-lieu" water, to a recipient who agrees to replace groundwater pumping with in "lieu water", thus creating a groundwater savings. The recipient must agree in writing that for every gallon of "in-lieu" water received, the recipient will reduce groundwater withdrawals from the Paso Robles Aquifer by a specified ratio (1:1+). Reductions in groundwater pumping will be subject to verification by the supplier of "in-lieu" water.

4. Can the use of "in-lieu" water be used to plant new or expand irrigated agricultural crop production? No

5. Can GRC's be used to meet future (if applicable) groundwater pumping curtailment requirements that owners of existing irrigated agriculture crop production operations may be subjected to? Yes, under the proposed concept, GRC's could be acquired by an irrigator to "offset" the volume of groundwater that is being required to curtail. By acquiring these GRC's, the irrigator could continue to pump groundwater at the historical usage rate.

6. Can GRC's be accumulated or is there a term limit for their use? Under the proposed concept, GRC's can be accumulated and used to offset groundwater pumping at some time in the future? (It would probably be appropriate to set a term limit)

7. Who has the responsibility for managing and accounting for the GRC program? Under the proposed concept, the GSA in which the supplier of the "in-lieu" water is provided, will have the responsibility for managing, tracking, and accounting for the GRC program.

8. If an irrigator acquires GRC's for the purposes of meeting their curtailment requirements for a specific year, will they have to acquire additional GRC's for subsequent years? Yes, the GRC's are a direct offset for the volume of water that is subject to curtailment but actually pumped.

9. What will GRC's cost originally and can they be sold or traded once they are sold by the actual supplier of "in-lieu" water? The cost is TBD, but under the proposed concept, once the GRC's are sold by the actual supplier, the GRC's can subsequently be sold or traded to another party so long as the GRC's are used to offset groundwater pumping from the Paso Robles Aquifer.

10. Can the GRC's be used to offset groundwater pumping anywhere in the Paso Robles Groundwater Basin? TBD, but it seems reasonable to tie the general location within the basin of where the GRC's can be applied to the location where the actual "in-lieu" use is occurring.

Other Agency Involvement/Impact

None at this time.

Financial Considerations

The only costs to be incurred would be associated with GSA staff time to develop a framework for defining how a GRC Program could be structured and implemented in the Paso Robles Groundwater Basin

ATTACHMENTS

None

PASO BASIN COOPERATIVE COMMITTEE
November 18, 2020

Agenda Item #10 – Paso Basin Water Neutrality

SUBJECT: **Presentation and Discussion of Continuation of Groundwater Neutrality Concept** (Shandon San Juan GSA)

RECOMMENDATION:

- No recommendation is being made, only a conceptual presentation intended to inspire discussion and direction from the Cooperative Committee

PREPARED BY:
Raymond Shady, Shandon San Juan GSA

BACKGROUND:

- Continuing Paso's neutral groundwater consumption is fundamental to long term sustainability of the Basin and lays the groundwork for the GSAs management under SGMA as referred to repeatedly in the GSP.
- The County's land-use controls under Title 22 has been effective in limiting new water consumption.
- Title 22's controls are set to expire in 13 months.
- The GSAs are currently considering how best to monitor and manage groundwater extraction.

DISCUSSION:

- The proposed concept is for the GSAs to create a database of water usage in the Basin, replicating what already exists in Title 22's land-use tracking but written in groundwater extraction metrics under the GSA's authority.
- What would this accomplish?
    - Implement the GSAs' first step to formally quantify, monitor and manage groundwater extraction across the Basin
    - Present a familiar structure, replicating what already exists but under the unique authority afforded to the GSAs
    - Deliver the clarity and confidence all stakeholders are hoping to see from the SGMA process.

ATTACHED
Slide deck: "PBCC-11-18-2020-#10-PasoWaterNeutrality.pdf"

Continuing Water Neutrality

Paso Basin Cooperative Committee

November 18th, 2020

CONTENT

A. FUNDAMENTALS

B. CONTEXT

C. CONCEPT

D. DETAILS

E. NEXT STEPS

FUNDAMENTALS

- Groundwater consumption must be **balanced and sustainable**
- The Basin's GSAs exist to ensure **groundwater sustainability**
- Title 22 has been effective in **limiting new water consumption**
- GSAs need to anticipate how to address a loss of the Ag Offset Ordinance

CONTEXT

Title 22's restrictions on expanded water use **ARE SET TO EXPIRE** in 13 months

The GSAs & property owners need **clarity and confidence** to plan long-term operations

The GSAs **have yet to build a structure** for monitoring and managing extraction

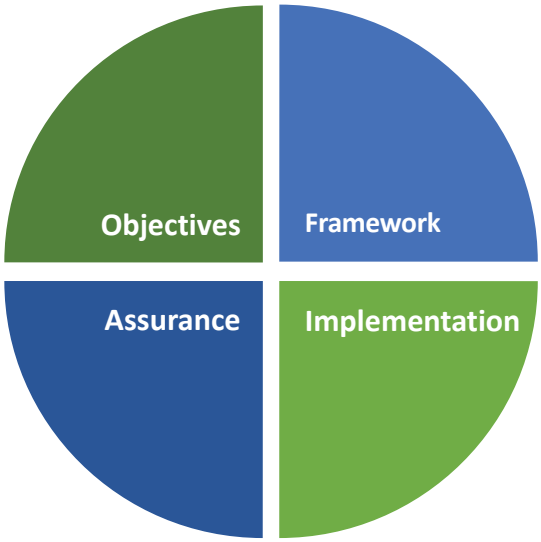
There are properties being irrigated today because landowners aren't sure if they will be "recognized" if they stop

CONCEPT

GSAs create a formal database of water usage in the basin.

- *Follow the existing framework of Title 22*
- *Encourage and protect neutrality going forward*
- *Support a self-sustaining funding framework for GSAs*

CONCEPT DETAILS

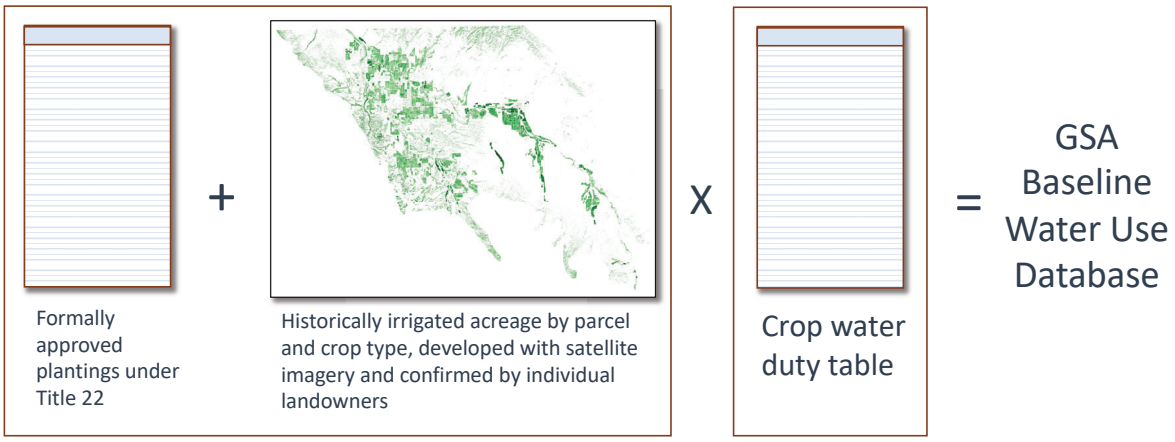


CONCEPT DETAILS - **OBJECTIVES**

- Maintain groundwater neutrality
- Create a baseline for water extraction in the Basin
- Unify management of land use and water extraction
- Provide assurance to landowners that a system of rules will persist
- Back-stop Title 22 in case it expires

CONCEPT DETAILS - **FRAMEWORK**

- Utilize the water duty table in Title 22.



CONCEPT DETAILS - **IMPLEMENTATION**

- GSA staff draft structure
- Review recommendation and discuss potential revisions
- PBCC Board vote on final plan structure
- Engage external consultant to analyze historical imagery and determine irrigated baseline
- Conduct outreach to landowners to review/confirm irrigated acreage
- Finalize database and fund monitoring/reporting on basin water usage

CONCEPT DETAILS - **Assurance**

- Monitor on an ongoing basis
- Changes in water usage will be flagged and reported to the Board
- Confirmed water usage in conflict with the finalized database will require action
- Based on severity of non-compliance, GSAs can:
  - Contact landowner and warn of non-compliance
  - Apply fines
  - Limit extraction from specific wells
  - Limit new permits

Thank you for your time and attention

We hope this framework inspires fruitful discussion and action from the Cooperative Committee

PASO BASIN COOPERATIVE COMMITTEE
November 18, 2020

Agenda Item #11 – Receive and file Project Status Update

Recommendation
It is recommended that the Paso Basin Cooperative Committee (Committee) receive an update on various efforts related and/or relevant to the Paso Basin, including:

a. Paso Basin Aerial Groundwater Mapping Pilot Study
b. US Bureau of Reclamation (USBR) Salinas and Carmel Rivers Basin Study
c. Salinas Dam Disposition Study
d. Supplemental Environmental Project (SEP)
e. DWR's Technical Support Services (TSS)

Prepared By
Angela Ford, County of San Luis Obispo

Discussion
The GSAs are engaged in various efforts to improve the Paso Basin monitoring network and increase understanding of groundwater conditions, fill data gaps and support basin sustainability:

Paso Basin Aerial Groundwater Mapping Pilot Study

- The County is engaged in a pilot study to collect data over part of the Paso Basin using Aerial Electromagnetic Method (AEM). The groundwater mapping survey was completed in November 2019 and the data is being analyzed by Stanford University and other project partners.
- The County anticipates presenting results in January 2021. For more information, please visit the County's webpage:

  https://www.slocounty.ca.gov/Departments/Public-Works/Current-Public-Works-Projects/Paso-Basin-Aerial-Groundwater-Mapping-Pilot-Study.aspx

US Bureau of Reclamation (USBR) Salinas and Carmel Rivers Basin Study

- The County is participating in the USBR's WaterSMART Basin Study Program on the Salinas and Carmel Rivers Basin Study. The Basin Study is developing leading-edge technical information regarding water supply and will provide comprehensive data to inform local water management decisions regarding how to adapt to impacts associated with competing demands, climate change, and drought.
- The Basin Study Partners anticipate providing progress updates in Fall/Winter 2020 and final results in early 2021. For more information, please visit the Basin Study webpage: https://totalwatermanagement.org/rivers-basins-studies/

Salinas Dam Disposition Study

- The U.S. Army Corps of Engineers (USACE) owns the Salinas Dam and, since it serves no federal purposes, is conducting a Disposition Study to evaluate various disposal alternatives for the Dam, including transferring ownership to the San Luis Obispo County Flood Control and Water Conservation District.
- Taking ownership of the Salinas Dam to retrofit and expand its capacity has been identified in the Paso Basin GSP and the County's 2019 Legislative Platform as a potential project to help address issues with declining groundwater levels in the Paso Basin. On September 22, 2020, the County Board took action to submit a Letter of Interest to USACE regarding ownership of Salinas Dam. This action was required to facilitate County staff proceeding to coordinate with USACE and the City of San Luis Obispo to undertake efforts to evaluate dam ownership considerations and start discussions on ownership models, potential beneficiaries, maintenance, uses and long term capital upkeep.

Supplemental Environmental Project (SEP)

- The City of Paso Robles has engaged Cleath-Harris Geologists, Inc. to provide hydrogeologic services for the SEP. The goal of the SEP is the siting and installation of stream gauges and monitoring wells in the Paso Basin to help fill data gaps.

DWR's Technical Support Services (TSS)

- Shandon-San Juan Water District and San Miguel CSD GSA staff are engaged with DWR under the TSS Program; the online TSS application has been completed for two sites as proposed locations for paired stream gauges and monitoring wells. The goal of this effort is to leverage DWR funding and support in the GSAs' efforts to fill data gaps related to the alluvial aquifer and groundwater/surface water interaction and to gain understanding of where and how much water enters the Basin from the surrounding watershed and where it percolates below stream channels into the aquifers.