Paso Basin Cooperative Committee

NOTICE IS HEREBY GIVEN that the Paso Basin Cooperative Committee will hold a Special Meeting at **4:00 P.M. on Wednesday, March 6, 2019** at the City of Paso Robles Council Chambers (1000 Spring St., Paso Robles, CA 93446).

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, Chairperson, City of Paso Robles
Reginald Cousineau, Member, Heritage Ranch CSD
Joe Parent, Member, San Miguel CSD
John Peschong, Vice Chairperson, County of SLO
Willy Cunha, Secretary, Shandon-San Juan WD

Steve Martin, Alternate, City of Paso Robles
Scott Duffield, Alternate, Heritage Ranch CSD
Kelly Dodds, Alternate, San Miguel CSD
Debbie Arnold, Alternate, County of SLO
Matt Turrentine, Alternate, Shandon-San Juan WD

Agenda
March 6, 2019

1. **Call to order**
2. **Pledge of Allegiance**
3. **Roll call**
4. **Public Comment – items not on Agenda**
5. **Approval of October 17, 2018 Meeting Minutes**
6. **Update on Basin Boundary Modifications impacting the Paso Robles Subbasin & GSP**
7. **Project Status Update**
    a. Budget
    b. Schedule
    c. Projects and Management Actions Concepts
8. **Request that the County Board modify the sunset date of the County's Water Conservation Ordinance related to the Paso Basin**
9. **Consider recommending that each GSA receive and file Paso Robles Subbasin GSP Draft Sections and provide direction as necessary**
    a. Chapter 6. Groundwater Budgets
    b. Chapter 7. Monitoring Networks
    c. Chapter 8. Sustainable Management Criteria
    d. Appendix A. Additional Well Logs Used to Supplement Cross Sections
    e. Appendix B. Identification of Groundwater Dependent Ecosystems
    f. Appendix C. Hydrographs
    g. Appendix D. Summary of Model Update and Modifications
    h. Appendix E. Monitoring Protocols
    i. Appendix G. Paso Robles Formation Aquifer RMS Hydrographs and Well Data
10. **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
11. **Upcoming meetings**
    a. Regular Meeting – April 24, 2019
12. **Future Items**
13. **Adjourn**

Paso Basin Cooperative Committee
Minutes (DRAFT)
October 17, 2018

The following members or alternates were present:

John Hamon, Chairperson, Member, City of Paso Robles
John Peschong, Vice Chairperson, Member, County of San Luis Obispo
Willy Cunha, Secretary, Member, Shandon-San Juan WD
Reginald Cousineau, Member, Heritage Ranch CSD
Joe Parent, Treasurer, Member, San Miguel CSD

1. Call to Order **2. Pledge of Allegiance** **3. Roll call**	Chairperson Hamon calls the meeting to order at 4:00PM. Secretary Cunha leads the Pledge of Allegiance. County Staff, Angela Ruberto: calls roll.
4. Public Comment – Items not on Agenda	Chairperson Hamon: opens the floor for public comment on Items not on the Agenda. Greg Grewal: comments that several questions remain unanswered from the previous two public workshops on sustainable management criteria; is concerned about the words "water banking" being removed from GSP Draft Chapter 4 and states understanding that discussion of the chapter will occur later in the meeting; states that a private meeting between Mr. Williams and EPCWD and Luminaire should have been held in a public forum; would prefer other sources of water be used in lieu of pumping from the basin and states that natural recharge should be the first and highest priority–does not want contaminated water being used for recharge; asks if there is a legal requirement under SGMA to maintain water levels at historic full levels to protect the basin from overdraft; asks if setting water levels at below historic levels would circumvent SGMA and create an artificial, permanently overdrafted basin. Jerry Reaugh: comments that water banking was not discussed during meeting between EPCWD and Luminaire; unsure of what meeting Mr. Grewal is referencing. Chairperson Hamon: closes public comment.
5. Approval of September 12, 2018 Meeting Minutes	Chairperson Hamon: moves to discuss approval of September 12, 2018 Cooperative Committee meeting minutes. Chairperson Hamon: opens floor for public comment and, seeing none, closes public comment. Vice Chairperson Peschong: notes a typo in his name (Item 8 voting table).

Motion By: Willy Cunha
Second By: Joe Parent
Motion: The Committee moves to approve Meeting Minutes from September 12, 2018

Members	Ayes	Noes	Abstain	Recuse
John Hamon (Chairperson)	X			
John Peschong (Vice Chairperson)	X			
Willy Cunha (Secretary)	X			
Reginald Cousineau (Member)	X			
Joe Parent (Treasurer)	X			

6. Consider recommending that each GSA receive and file Paso Robles Subbasin GSP Draft Sections and provide direction as necessary
a. Chapter 4. Hydrogeologic Conceptual Model (Revised)
b. Chapter 5. Groundwater Conditions

Meeting handouts and Presentation for Agenda Item #6 available at: https://www.slocountywater.org/site/Water%20Resources/SGMA/paso/

Montgomery & Associates, Derrik Williams: provides an overview of GSP Draft Chapter 4 (revised); recommends that each GSA receive, file and provide comments on Draft Chapter 4 – Hydrogeologic Conceptual Model (revised); the comment period will be open for 45 days.

Chairperson Hamon: asks the Board for questions or comments on Draft Chapter 4.

Vice Chairperson Peschong: requests footnotes citing data sources.

Chairperson Hamon: opens the floor for public comment.

Kay Mercer, Dennis Loucks and Greg Grewal: speak.

Chairperson Hamon: agrees with Vice Chairperson Peschong's recommendation to footnote data sources throughout Chapters.

Montgomery & Associates, Derrik Williams: responds to public comments stating that safe yield numbers came from the 2005 Fugro Groundwater Model, which was updated in 2014 and 2016; model was adopted and updated over the last year which will be reflected in the GSP; safe yield calculations have changed from previously seen numbers due to Monterey County being excluded from the model, which is a change from previous studies; explains that submitted Draft Chapters contain in-line citations instead of footnotes when citing data sources, but will begin using citations on slides as recommended.

Vice Chairperson Peschong: asks for clarification on the years that the Fugro groundwater model was updated.

	Montgomery & Associates, Derrik Williams: responds that updates to the Fugro groundwater model were done by Geoscience Support Services in 2014 and 2016. Montgomery & Associates, Derrik Williams: provides an overview of GSP Draft Chapter 5; recommends that each GSA receive, file and provide comments on Draft Chapter 5 – Groundwater Conditions; the comment period will be open for 45 days. Chairperson Hamon: asks the Board for questions or comments on Draft Chapter 5. Vice Chairperson Peschong: recognizes that there are limited data sources on potential land subsidence; asks consultant if USGS or California Department of Water Resources will provide technical information on land subsidence in the Basin and asks if these agencies have been contacted; asks who will be responsible for filling in data gaps in the future. Montgomery & Associates, Derrik Williams: replies that subsidence data (via InSAR) has been requested from the Department of Water Resources, as recently as September; the Department responded that they will request funds to provide the data, however it remains unclear whether the data will be provided. Vice Chairperson Peschong: recommends pursuing subsidence data; moves on to thank participants of the October 8 Creston public workshop on sustainable management criteria; appreciates the community input and recognizes the desire to be a sub area; recommends pursuing Creston as a subarea and asks if El Pomar and Estrella should also be separated into sub areas. Montgomery & Associates, Derrik Williams: replies that he will leave that decision up to Committee Members and Staff; if pursued, the next step would be meeting with Staff to outline the types of areas that stakeholders and constituents are interested in seeing. Vice Chairperson Peschong: recognizes that creating sub areas would mean additional well monitoring and data collection but that would be necessary in order to get an accurate portrayal of the Basin; suggests moving in that direction. Chairperson Hamon and Secretary Cunha: concur that feedback from the Creston workshops indicate a preference for becoming a sub area.

	Montgomery & Associates, Derrik Williams: suggests that recent feedback indicates that San Miguel may also be interested in becoming a subarea. Secretary Cunha: comments under SGMA, creating jurisdictional boundaries would be acceptable. Montgomery & Associates, Derrik Williams: clarifies that potential subareas would not be considered management areas, and that subareas would be based on physical areas each community associates with and would like to see. Vice Chairperson Peschong: reiterates that the Creston community views itself as distinctly separate from the El Pomar/Estrella area; asks if changes can be made to figures from GSP Draft Chapter 3 if Creston were to become a sub area. Montgomery & Associates, Derrik Williams: replies that changes to figures can still be made. Chairperson Hamon opens the floor for public comment. Patricia Wilmore, Dennis Loucks, Greg Grewal, and Claudia Engel: speak. Chairperson Hamon: Asks how often the USGS updates their subsidence data; asks whether public comments received on Draft GSP Chapters are currently being posted for public review; requests City Staff, Dick McKinley, respond to public comment regarding the City's 2015 Urban Water Management Plan and tables contained for current and projected water supply, listing the total right or safe yield as 9,215AF, a quantity similar to the water supply of the entire basin. City Staff, Dick McKinley clarifies that the City of Paso Robles is not claiming that amount as prescriptive right. Montgomery & Associates, Derrik Williams: responds that subsidence data updates do not frequently occur; explains that obtaining the satellite data is costly and relatively complex to perform analysis with; maintains that the best approach is to ask the Department of Water Resources to purchase, analyze and share the data; states that each GSA receives all public comments per Chapter and that public comments are not currently posted online for public review, however all public comments will be released after the report is written; will consider new approach if requested to do so by the Committee.

Vice Chairperson Peschong: prefers seeing public comments posted online to promote transparency, participation and prevent potential conflict.

Secretary Cunha: would also like to see comments posted online; comments that it would benefit the community and reinforce the fact that the public is being heard.

Montgomery & Associates, Derrik Williams: seeks input on when comments should be posted online.

The Committee discusses when and where public comments will be posted; consultant will work with GSA staff to coordinate posting logistics and consolidate comments for posting online.

The Committee concludes that public comments to individual GSAs shall be posted to their respective websites; additionally, a compilation of all received comments shall be posted to the main GSP website: pasogcp.com.

Motion By: Willy Cunha
Second By: John Peschong
Motion: The Committee moves to recommend the GSAs receive and file Paso Robles Subbasin GSP Draft Chapters:

- 4 – Hydrogeologic Conceptual Model (Revised)
- 5 – Groundwater Conditions

Members	Ayes	Noes	Abstain	Recuse
John Hamon (Chairperson)	X			
John Peschong (Vice Chairperson)	X			
Willy Cunha (Secretary)	X			
Reginald Cousineau (Member)	X			
Joe Parent (Treasurer)	X			

7. Project Status Update
a. Budget
b. Schedule
c. Projects and Management Actions

Meeting handouts and Presentation for Agenda Item #7 available at: https://www.slocountywater.org/site/Water%20Resources/SGMA/paso/

City Staff, Dick McKinley: provides a project status update on development of Paso Basin GSP – Budget.

Chairperson Hamon: opens floor for public comment, there are none.

Montgomery & Associates, Derrik Williams: provides a project status update on development of Paso Basin GSP – Schedule.

Chairperson Hamon: inquires when the public comment period closes for GSP Draft Chapters 4 & 5.

Montgomery & Associates, Derrik Williams: replies that public comment periods for Draft Chapters remain open for 45 days, and that the comment period for Draft Chapters 4 & 5 will close on December 10, 2018.

Montgomery & Associates, Derrik Williams: provides a project status update on development of Paso Basin GSP – Projects and Management Actions. He emphasizes we are looking for public feedback.

O'Laughlin & Paris, Valerie Kincaid: presents slides 4 & 5 on Water Rights.

WestWater Research, Matt Payne: continues presentation of Projects and Management Actions.

Vice Chairperson Peschong: asks if "storage credits" is another name for "water banking".

WestWater Research, Matt Payne: responds that the term "storage credits" is not intended to be used as "water banking" (although some people do use it this way); the concept is to incentivize recharge; provides storage credit example.

Chairperson Hamon: opens the floor for public comment.

Greg Grewal, Patricia Wilmore, Cody Ferguson, Steve Carter, and Dennis Loucks: speak.

Montgomery & Associates, Derrik Williams: replies to public comment stating that the approach for how to treat De Minimis users is up to the GSAs; in response to questions about fee structure (see presentation): states that within the standard fee structure, only those who over pump will have to pay a surcharge; any exemptions in the fee structure (e.g. City of Paso Robles) would be up to the GSP framework approved by the Committee.

Chairperson Hamon: asks if there is a known number of de minimis users throughout the GSA areas.

Montgomery & Associates, Derrik Williams: replies that there are efforts underway to identify how many de minimis users there are throughout the Basin; will be looking into the collective effects of de minimis pumpers and how they can be managed.

Carrollo Engineers, Lydia Holmes: continues presentation on Projects and Management Actions.

Chairperson Hamon: opens floor for public comment.

Greg Grewal and Randy Diffenbaugh: speak.

Vice Chairperson Peschong: asks if the previously referenced inter-lake tunnel is located between Lake San Antonio and Lake Nacimiento.

Montgomery & Associates, Derrik Williams: replies yes; comments that use of the inter-lake tunnel is not being considered as an option to reach sustainability.

Vice Chairperson Peschong: cites the Army Corps of Engineers as being the funding source for the Salinas Dam, at an estimated 50 million dollars; recommends including a provision in the GSP stating recharge projects shall be developed, implemented and operated by the five GSAs, rather than individual land owners, for the benefit of the overall basin and all basin users.

Montgomery & Associates, Derrik Williams: will consider Chairperson Peschong's recommendation; discusses next steps as seen on slide #48 (see presentation) finishes presentation on Item 7.

Chairperson Hamon: asks for comments from the Board.

Secretary Cunha: states concern over implementing allocations; does not believe that current Basin conditions require instant action; would like to see a framework guided by groundwater levels to trigger need for management actions and using the model to understand potential benefits of selected actions; believes that forcing allocations now would be very expensive and not very successful but should be discussed for future use.

Vice Chairperson Peschong: reiterates importance of citing data sources, noting that there are many questions around where the data is coming from and how it is different from information seen in the past; suggests that communication begin around refinement of sub areas to present to the public.

City Staff, Dick McKinley: comments that the five GSAs are working together to write a plan, but that the GSAs are not entitled to determine what another GSA does with their resources.

<table>
<tr><td></td><td>Vice Chairperson Peschong: comments on the need to work cooperatively on exploring all avenues of recharge for the Basin.

Chairperson Hamon: states that the main focus should be to share resources equally and to the best of our abilities; sees no problem moving forward after determining the terms of sustainability and getting feedback from the GSAs and the public; asks the consultant if there are any public workshops currently scheduled.

Montgomery & Associates, Derrik Williams: replies that there are no public workshops currently scheduled; states his appreciation for the feedback received at previous workshops.

Secretary Cunha: reiterates the importance of providing feedback via the use of the online comment forms found on pasogcp.com</td></tr>
<tr><td>8. 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</td><td>Chairperson Hamon: opens the floor for additional comments from the Committee.

Vice Chairperson Peschong: recommends contacting him with any comments or opinions regarding di minimis users.</td></tr>
<tr><td>9. Upcoming Meetings</td><td>Next meeting: Regular Meeting set for Wednesday, January 23, 2018 at 4:00PM, Location: Paso Robles - City Council Chambers.</td></tr>
<tr><td>10. Future Items</td><td>No Future Items discussed.</td></tr>
<tr><td>11. Adjourn</td><td>Motion By: Willy Cunha
Second By: John Peschong
Motion: The Committee moves to adjourn the meeting.
<table>
<tr><th>Members</th><th>Ayes</th><th>Noes</th><th>Abstain</th><th>Recuse</th></tr>
<tr><td>John Hamon (Chairperson)</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>John Peschong (Vice Chairperson)</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Willy Cunha (Secretary)</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Reginald Cousineau (Member)</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Joe Parent (Treasurer)</td><td>X</td><td></td><td></td><td></td></tr>
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I, Willy Cunha, 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 October 17, 2018, by the Paso Basin Cooperative Committee.

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

PASO BASIN COOPERATIVE COMMITTEE
March 6, 2019

Agenda Item #6 – Receive update on Basin Boundary Modification Requests impacting the Paso Robles Subbasin and provide direction

SUBJECT

Receive an update on Basin Boundary Modifications impacting the Paso Robles Subbasin and provide direction as it relates to the Memorandum of Agreement (MOA) for Preparation of a Groundwater Sustainability Plan (GSP) for the Paso Robles Subbasin.

RECOMMENDATION

It is recommended that the Paso Basin Cooperative Committee (Committee):

1. receive an update on DWR's approved Basin Boundary Modification Requests (BBMR) impacting the Paso Robles Subbasin; and
2. reassess the contributions of each remaining Party to fund the current budget consistent with the Section 9.1 of the MOA

PREPARED BY

Angela Ruberto, County of San Luis Obispo

BACKGROUND

On February 11, 2019 the State Department of Water Resources (DWR) released the Final 2018 Basin Boundary Modifications. The following are DWR's final Basin Boundary Modifications impacting the Paso Basin; DWR approved:

1. Salinas Valley Basin GSA's (SVBGSA) request: Extending existing shared boundary of the Upper Valley Aquifer and Paso Robles Area subbasins to coincide with the Monterey and San Luis Obispo County line, thereby placing the entire Paso Basin entirely within San Luis Obispo County
2. Heritage Ranch Community Services District's (HRCSD) request: Revising minor part of western external boundary of the Paso Basin making coincident with the Rinconada Fault and resulting in the removal of the basin area underlying HRCSD GSA

On January 18, 2019 HRCSD sent a letter (Attachment 4) to the GSAs noticing their withdrawal from the MOA Regarding Preparation of a Groundwater Sustainability Plan for the Paso Robles Groundwater Basin.

DISCUSSION

DWR's approval of SVBGSA's BBMR results in the northern boundary of the Paso Basin coinciding with the Monterey and San Luis Obispo County line, thereby placing the entire Paso Basin in San Luis Obispo. Though coordination with Monterey County is anticipated, this change makes formal coordination with Monterey County optional.

DWR's approval of HRCSD's BBMR results in HRCSD's exclusion from the Paso Robles Subbasin and no longer subject to SGMA. HRCSD provided notice of withdrawal from the MOA

to the other four GSAs, in accordance with Section 8 of the MOA. Section 9 of the MOA addresses Withdrawal and Termination, stating:

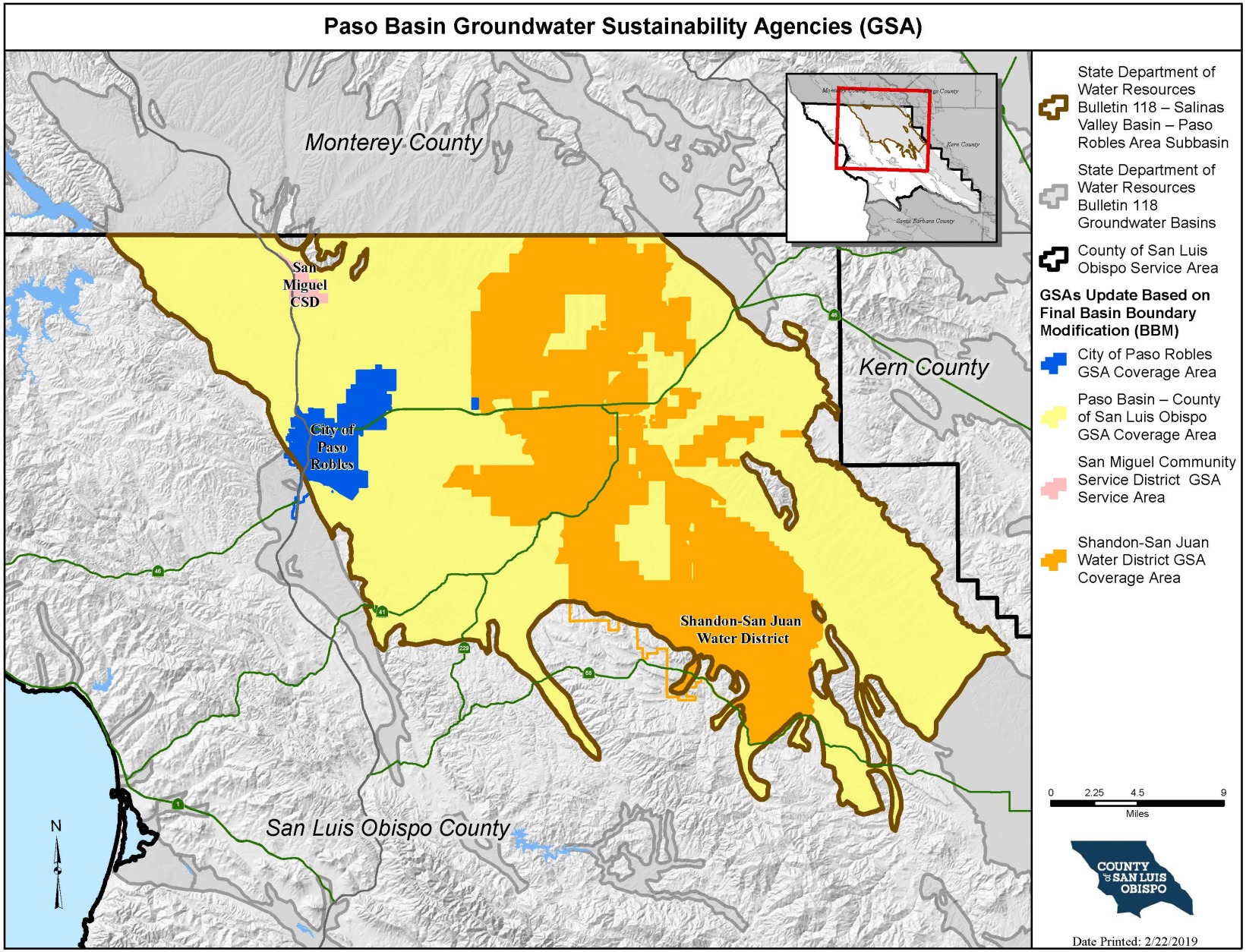
> *9.1 Any Party may unilaterally withdraw from this MOA without causing or requiring termination of this MOA. Withdrawal shall become effective upon thirty (30) days written notice to the remaining Parties' designated addresses… A Party that has withdrawn from this MOA shall remain obligated to pay its percentage cost share of expenses and obligations as outlined in the current budget incurred, accrued or encumbered up to the date the Party provided notice of withdrawal, including, but not limited to, its cost share obligation under any existing consultant contract for which the City has issued a notice to proceed. If a Party withdraws, the Cooperative Committee shall reassess the contributions of each remaining Party to fund the current budget and determine if the Cooperative Committee needs to request the contribution of additional funding from the governing board of each Party.*

Based on the above, it is recommended that the Committee reassess the contributions of each remaining Party to fund the current budget and determine if additional funding needs to be requested from the governing body of each remaining Party. Pursuit of an amendment to the MOA in response to HRCSD's withdrawal is not recommended at this time given that the MOA provides the terms and conditions under which a party may withdrawal (without necessitating an amendment), the size of HRCSD's funding contribution obligation and the fact that the MOA automatically terminates upon DWR approval of the GSP.

ATTACHED

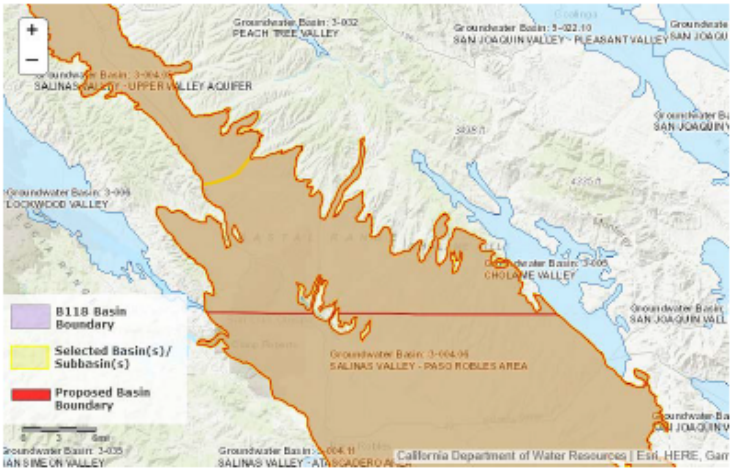
i. Updated Bulletin 118 DWR map for the Paso Robles Subbasin
ii. DWR's Summary of Basin Boundary Modification for Salinas Valley Basin GSA
iii. DWR's Summary of Basin Boundary Modification for Heritage Ranch CSD GSA
iv. Heritage Ranch Community Services District letter (1/18/2019): "Withdrawal from the Memorandum of Agreement Regarding Preparation of a Groundwater Sustainability Plan for the Paso Robles Groundwater Basin (MOA)."

* * *


Paso Basin Groundwater Sustainability Agencies (GSA)
Monterey County
Kern County
San Luis Obispo County
San Miguel CSD
City of Paso Robles
Shandon-San Juan Water District
N
State Department of Water Resources Bulletin 118 – Salinas Valley Basin – Paso Robles Area Subbasin
State Department of Water Resources Bulletin 118 Groundwater Basins
County of San Luis Obispo Service Area
GSAs Update Based on Final Basin Boundary Modification (BBM)
City of Paso Robles GSA Coverage Area
Paso Basin – County of San Luis Obispo GSA Coverage Area
San Miguel Community Service District GSA Service Area
Shandon-San Juan Water District GSA Coverage Area
0 2.25 4.5 9
Miles
COUNTY OF SAN LUIS OBISPO
Date Printed: 2/22/2019

2018 Basin Boundary Modifications - Final

Basin(s): 3-004.05 SALINAS VALLEY – UPPER VALLEY AQUIFER; 3-004.06 SALINAS VALLEY – PASO ROBLES AREA



Requesting Agency: Salinas Valley Basin Groundwater Sustainability Agency

Modification Category: Jurisdictional Internal

Agency Description: A jurisdictional modification of the Upper Valley Aquifer and Salinas Valley Paso Robles Area subbasins.

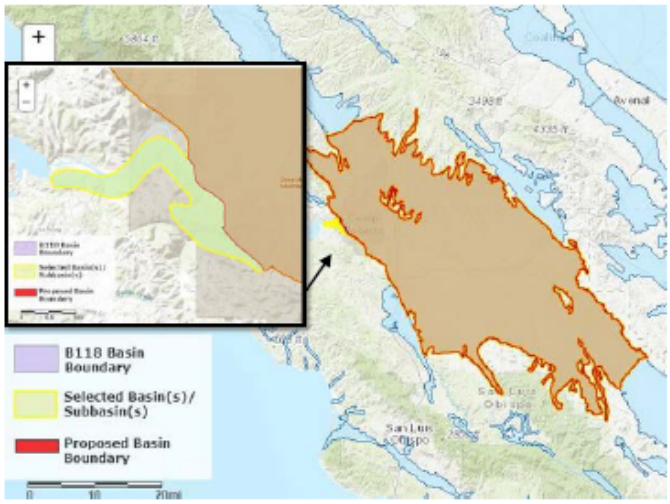
Other Affected Basins: None

DWR Final Decision: Approve

Basis for Decision: The basin boundary modification extends the existing shared boundary of the Upper Valley Aquifer and Paso Robles Area subbasins to coincide with the Monterey and San Luis Obispo county line. The request would place the Monterey County portions of the Paso Robles Area subbasin entirely within Monterey County. The resulting boundary between these subbasins would be consistent with existing County and Groundwater Sustainability Agency jurisdictions. Several letters of support are associated with the request. The request meets regulatory requirements.

2018 Basin Boundary Modifications - Final

Basin(s): 3-004.06 SALINAS VALLEY - PASO ROBLES AREA



Requesting Agency: Heritage Ranch Community Services District

Modification Category: Scientific External

Agency Description: Establish the structurally controlled geologic contact and a portion of the Rinconada Fault system as the western Paso Robles Basin boundary in the area of the Nacimiento River.

Other Affected Basins: None

DWR Final Decision: Approve

Basis for Decision: The basin boundary modification would revise a minor part of western external boundary of the Paso Robles Area subbasin. The initial request included technical information suggesting a part of the revised boundary that includes a local fault and geologic contacts act as hydrologic barriers. The request also included information on subsurface conditions and land and water use. Two letters of support are associated with the request. The initial submittal by Heritage Ranch lacked adequate technical demonstration to support the scientific external modification request. One public comment was received on the initial DWR draft decision that supported the agency's original request. Heritage Ranch provided a technical study which further explained and supported the primary definition of the Paso Robles subbasin as reliant on the Paso Robles Formation (aquifer). The proposed boundary would occur at the contact of the Paso Robles and Monterey Formations coincident with the Rinconada Fault. The additional supporting information satisfactorily meets the regulatory requirements.

Heritage Ranch Communiy Services District

4870 Heritage Road, Paso Robles, CA 93446
(805) 227-6230 ~ Fax (805) 227-6231
www.heritageranchcsd.com

January 18, 2019

County of San Luis Obispo
976 Osos Street, Room 206
San Luis Obispo, CA 93408
Attention: Colt Esenwein, Public Works Director

City of El Paso de Robles
1000 Spring Street
Paso Robles, CA 93451
Attention: Dick McKinley, Public Works Director

San Miguel Community Services District
1150 Mission Street
San Miguel, CA 93451
Attention: Rob Roberson, Interim General Manager

Shandon San Juan Water District
365 Truesdale Road PO Box 150
Shandon, CA 93461
Attention: Willy Cunha, President, Board of Directors

Subject: Withdrawal from the Memorandum of Agreement Regarding Preparation of a Groundwater Sustainability Plan for the Paso Robles Groundwater Basin (MOA).

Dear Parties to the MOA:

The Heritage Ranch Community Services District (HRCSD) is providing this notice in accordance with Section 8 of the MOA.

Please consider this as notice that the HRCSD is hereby withdrawing from the MOA pursuant to Section 9. The HRCSD understands that our withdrawal shall become effective thirty (30) days from the date of this notice, and that we shall remain obligated to pay our percentage cost share of expenses and obligations as outlined in the current budget incurred, accrued or encumbered up to the date we provided this notice of withdrawal.

If you have any questions you may reach me at (805) 227-6230, or by email at scott@heritageranchcsd.ca.gov. The HRCSD remains supportive of your efforts and confident that sustainable groundwater management in the Paso Robles Area Subbasin will be realized.

Sincerely,

Scott B. Duffield, PE
General Manager

Cc: HRCSD Board of Directors (all via email)
HRCSD Counsel
Angela Ruberto, County of San Luis Obispo
Dick McKinley, City of Paso Robles
Randy Diffenbaugh, Shandon-San Juan Water District
Blaine Reely, San Miguel Community Services District

File: SGMA GSA

PASO BASIN COOPERATIVE COMMITTEE
March 6, 2019

Agenda Item #7 – Project Status Update

SUBJECT
Project Status Update: Budget, Schedule, Projects & Management Actions

RECOMMENDATION
It is recommended that the Paso Basin Cooperative Committee (Committee) receive updated material related to development of the Paso Basin Groundwater Sustainability Plan (GSP), including:

a. Budget
b. Schedule
c. Projects & Management Actions Concepts

PREPARED BY
Not Applicable – See attached material provided by GSA Staff and Consultant Team

ATTACHED
i. Budget Report (2/28/2019)
ii. Updated Schedule (1/29/2019)
iii. Projects & Management Actions Concept Material (2/20/2019)

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Paso Robles Basin Cooperative Committee Agenda Report

From: Joe Parent, Cooperative Committee Treasurer
Dick McKinley, Public Works Director, City of El Paso de Robles GSA
Subject: Budget Report
Date: March 6, 2019

Background

The GSA partners have agreed, through the MOA, to share costs of preparing the GSP. The partners applied for and received a grant from the State to prepare the GSP. The City of Paso Robles is the grant administrator as well as the contract administrator.

Response

To date the City has received ten invoices from the consultant team. The GSA partners have a signed Grant Agreement, and are preparing a large grant reimbursement request at this time.

Grant Amount	$1,500,000
Contract Amount	$1,363,515
Total Invoiced To Date Amount	$1,009,729.60 (74%)
Remaining Contract Amount	$353,785.40 (26%)

Recommendation

Receive and file this information.

Paso Basin GSP Timeline Worksheet **DRAFT** **VER 1.30.2019**

Paso Robles GSP Tentative Chapter Release Schedule	Internal Draft Chapters: Draft to GSA Staff	Internal Draft Chapters: GSP Staff Round Table Discussions	Internal Draft Chapters: Staff Comments Due	Public Draft Chapters: Post CC Agenda Packet	Public Draft Chapters: CC Meeting	Public Draft Chapters: Public Posting: Paso GCP.com	Public Draft Chapters: Public Comment to GSAs	Public Draft Chapters: GSA Comments to Consultants	Admin. Draft Chapters: Consultants address comments
Days elapsed since previous deadline/event	*-14*		*-14*	*-7*	*--*	*-7*	*45*	*14*	*15*
Chapters 1-3; C&E in Ch 11					**25-Jul-18**	31-Aug	15-Oct	9-Nov	14-Dec
Chapter 5, Chapter 4 *revised*	12-Sep-18		26-Sep-18	10-Oct-18	**17-Oct-18**	24-Oct	10-Dec	26-Dec	10-Jan
Appendices 4A, 4B, 5	26-Sep-18		9-Oct-18	27-Feb-19	**6-Mar-19**	27-Feb-19	15-Apr-19	29-Apr-19	13-May-19
Chapter 6 & Appendix 6A	14-Dec-18	23-Jan-19	25-Jan-19	27-Feb-19	**6-Mar-19**	27-Feb-19	15-Apr-19	29-Apr-19	13-May-19
Chapter 7 & 8	30-Jan-19	6-Feb-19	13-Feb-19	27-Feb-19	**6-Mar-19**	27-Feb-19	15-Apr-19	29-Apr-19	13-May-19
Chapter 9, 10, 12 (rest of 11)	20-Mar-19	21-Mar to 3-Apr	3-Apr-19	17-Apr-19	**24-Apr-19**	17-Apr-19	3-Jun-19	17-Jun-19	**1-Jul-19**
Explanation of timing					No change to CC Date	Post same time as CC Agenda	Consistent w/ previous	requested time to review comments w/CC rep and other GSA's	

Days from Public receiving all Chapters to final GSP adoption - 244

GSP Publicly Available

Paso Robles GSP, Tentative GSP Release Schedule	Draft GSP: Consultants issue Draft GSP (all chapters) to CC/CC receive	Draft GSP: GSAs Issue Notice of Intent to Adopt (90+ Days required Notice)	Draft GSP: 90 Days: Public and GSA Comments on Draft GSP	Draft GSP: 90 Days: Consultants address comments, issue Final Draft GSP	Final Draft GSP: Finalize Plan: CC Review, Vote Recommendation on adopting	Final Draft GSP: GSA Review: Last Window to Resolve Differences	Final Draft GSP: Period when GSAs must adopt GSP: Begin GSA governing bodies each adopt GSP	Final GSP: Deadline to Submit to DWR
Days elapsed since previous deadline/event	*30*	*20*	*45*	*45*	*2*	*23*	*4*	
Estimated completion date	31-Jul-19	**20-Aug-19**	4-Oct-19	18-Nov-19	**20-Nov-19**	13-Dec-19	**17-Dec-19**	***31-Jan-20***
Explanation of timing	CT requested time * CC Mtg Required	* coincide w/BOS mtg (provides buffer if any missed dates earlier) (Assumes BOS last to NOI)	*consistent w/ previous time for comments	Per original (15 CT + 30 days)	3rd Wed		* BOS Mtg on calendar for 17-Dec	

Days Final GSP release to Adoption - 27

Days from Public reciving full draft to final GSP adoption - 139

INTRODUCTION

Derrik Williams with Montgomery and Associates, GSA Consultant assisting in writing the GSP for the Paso Basin, has sent out the four attached documents describing potential approaches to Projects and Management Actions for addressing supplementing groundwater or reducing groundwater use. The two messages below are excerpts from emails that accompanied the four review documents:

FIRST:

#1. A fact sheet that outlines the approach to implementing projects and management actions in the Paso Robles subbasin. These are our current opinions on a viable way forward. We are presenting these ideas as a starting point for discussions. We realize that this approach will change based on feedback from GSAs and their constituents.

This fact sheet should serve as a basis for public discussion. Because this is for public consumption, we have tried to avoid project detail that might sidetrack public conversation. The point of this fact sheet is to prompt discussion on the overarching approach, not details of particular projects.

#2. We've also attached a list of points of discussion that relate to some of the assumptions and ideas in this fact sheet. You can use these points of discussion to prompt conversation with your Board of Directors or your constituents. We believe these are some of the issues that will be of concern to various constituents in the Subbasin. As we state on the points of discussion document, we do not need to come to agreement on all these points. However, we should identify conceptual agreements on these points to make sure there is an agreed to process after the GSP is adopted.

SECOND:

We have attached two more documents that supplement the information in the Projects and Actions Fact Sheet. The Fact Sheet was intentionally written at a high level. Our goal is to prompt public discussion and engage stakeholders around the general structure of implementing projects and management actions. We intentionally avoided adding too much detail to the Fact Sheet to keep the initial conversations and public input at a programmatic level. It is important that we get public buy-in to the overall projects and management action framework before we adjust project details.

We realize however that some members of your GSA and members of the public may be interested in additional details. Therefore, we are providing these two supplemental documents.

#3. This document provides additional detail on the potential water supply projects included in the fact sheet. Each project includes a discussion of assumptions underpinning the project costs, potential technical difficulties with the project, estimated project costs, and a map of the project area. These are conceptual level costs only and there are many assumptions that will need to be refined. While the costs are rough, they do provide a method for comparing various projects.

#4. document is named "Pumping Fees Example". This document provides a theoretical example of how the water charge framework will be implemented; and what the fees might mean financially to an individual grower. This document is presented as a series of slides. As with the supplemental projects information, there are a number of assumptions in this document that are not applicable to all growers. The example included in this document assumes that no agricultural growers reduce their pumping and the future overdraft is addressed by retiring land and importing water from two sources. The final slide shows the per-acre cost to an example grower, and the impact that per acre cost has on the growers bottom line. It is important to acknowledge that there are many assumptions in these calculations, however we believe it is important to illustrate example costs that growers may incur in the future, and how this program leads to sustainability while growers remains profitable.

We believe the Fact Sheet remains the primary document for engaging public conversation about projects and management actions. We reiterate that these public conversations must start immediately.

If you have any questions about these two supplemental documents, do not hesitate to call me.

Sincerely,

Derrik Williams, P.G., C.Hg.
Principal Hydrogeologist | Director of California Business Development

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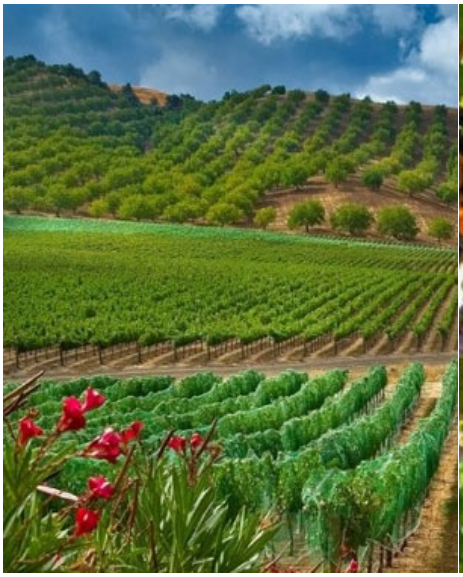
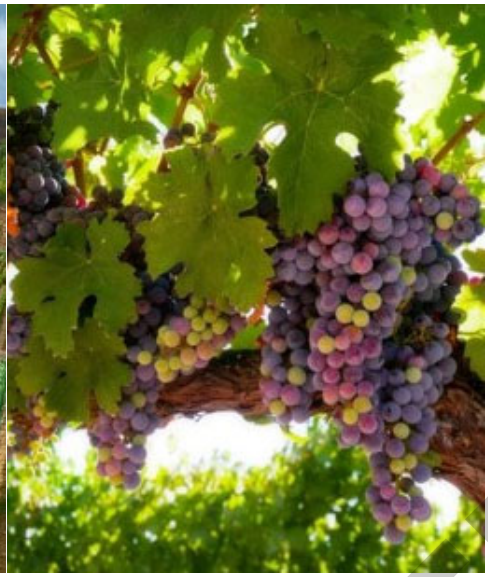




DRAFT MANAGEMENT ACTIONS AND PROJECTS FACT SHEET

Paso Robles Subbasin GSP Development

Disclaimer *These Draft Documents are provided for information only and are intended to help facilitate discussions related to Projects & Management Actions to be considered in the Paso Basin Groundwater Sustainability Plan (GSP), currently under development. The information contained herein is subject to change and does not commit, nor does it necessarily reflect the views, opinions or endorsement of, the Cooperative Committee or any Agency.*

PURPOSE

This fact sheet provides an overview of the potential management actions and projects that are being considered for the Paso Robles Subbasin Groundwater Sustainability Plan (GSP). These management actions and projects will be implemented to sustainably manage groundwater resources in the Subbasin.

The Sustainable Groundwater Management Act (SGMA) requires the GSP to demonstrate how the proposed management actions and projects will lead to sustainability. The concepts presented herein are not final. The intent of the fact sheet is to prompt discussion and feedback from the Groundwater Sustainability Agencies (GSAs) and stakeholders on acceptable management actions and projects that will lead to sustainable groundwater conditions in the Subbasin and will maintain the social and economic vitality of the region.

A combination of management actions and projects adopted for the Subbasin will achieve a number of outcomes including:

- Achieving groundwater sustainability by meeting Subbasin-specific sustainable management criteria. These criteria must be achieved for each relevant sustainability indicator by 2040.
- Providing equity between who benefits from projects and who pays for projects.
- Providing a source of funding for project implementation (not operational costs).
- Providing incentives to constrain groundwater pumping within limits. Unregulated pumping in the future would require importation of new water supplies that are likely unavailable.

OVERVIEW

The approach for implementing management actions and projects will provide individual landowners and public entities flexibility in how they manage water and how Subbasin achieves groundwater sustainability. All groundwater pumpers will be allowed to make individual decisions on how much groundwater they pump based on their perceived best interests. Some groundwater pumpers may choose to reduce pumping; others may choose to buy water from neighbors or retire land, while others may choose to pay for new water supply projects.

The proposed approach for implementing management actions and projects is based on a **water charges framework.** This framework is designed to achieve two important outcomes:

1. Promote voluntary pumping reductions; and

2. Fund new water supply projects by charging groundwater pumpers a fee if they choose to not voluntarily reduce pumping.

This conceptual water charges framework would include:

- Quantifying pumping allowances for every groundwater pumper. **These allowances are not water rights.** Instead, they form the basis of a financial rate structure to fund new water supply projects.
- Developing a tiered rate structure for pumping groundwater. Groundwater pumped within a pumping allowance would be charged a base rate. Groundwater pumped above a pumping allowance would incur a higher cost (surcharge).
- Using base rate funds to plan, design, and permit one or more of the management actions or projects described below.
- Using surcharge funds to purchase and treat water, and bring it into the Subbasin.

Alternate approach to the framework outlined above could be implemented. One alternate approach would be to first develop new water supply projects. In this case, all pumpers would pay a surcharge and the GSAs would immediately begin developing projects and brining in water to the Subbasin. Pumpers would pay a smaller surcharge or possibly no surcharge if they decided to voluntarily reduce pumping. This has the same net effect as the proposed structure, except the initial focus would be on building new water supply projects instead of promoting voluntary pumping reductions.

In considering a water charges framework, some new water supply projects may be so important or desirable that they would be implemented outside of the proposed fee structure. For example, obtaining State Water Project water could be initiated outside of the water charges framework and could be funded by a general fund developed by the GSAs.

WATER CHARGES FRAMEWORK

WATER CHARGES

Base Pumping Assessment $
Fee per acre-foot charged for all non-exempt pumping.

Overproduction Surcharge $ $$
Additional fee per acre-foot charged for any non-exempt pumping above the Production Allowance.

The water charges framework is the fundamental structure for managing groundwater pumping and funding projects. The framework includes developing pumping allowances, ramping down pumping to an allowable limit, developing and implementing a fee payment program, and funding projects.

The GSP will not impose mandatory pumping restrictions. Instead, the framework promotes voluntary pumping reductions that may be achieved in a variety of ways. For example, a pumper may choose to switch to less water-intensive crops, implement water use efficiencies, or transition to non-groundwater sources. Alternatively, if reducing pumping is not of interest or acceptable, a pumper may instead pay an

overproduction surcharge. *De minimis* pumpers, defined as domestic groundwater pumpers using up to 2 acre-feet per year, would be exempted from water charges.

Funds from the water charges program would be used by the GSAs to develop new water supplies, as described below. Revenues could also fund incentive-based programs to reduce water demand - for example, agricultural land acquisition and retirement. Under the framework, there would be two categories of water charges: base pumping assessments and overpumping surcharges (defined in the callout box). Revenues from the pumping assessments would fund the fixed costs associated with new water projects that benefit all pumpers. Revenues from the overpumping surcharge would fund the variable costs associated with new water projects as the water is used to offset or replace overproduction.

PUMPING ALLOWANCES

Pumping allowances are not water rights and do not limit pumping. Pumping allowances would be established only to enable calculation of overpumping surcharges. The proposed process for establishing initial pumping allowances is as follows:

- **Agricultural Pumpers**: Initial pumping allowances are established for agricultural pumpers based on average cropped acreage for the years 2010 through 2015. The assumed amount of pumping per acres is consistent with water use factors established in San Luis Obispo County's existing Agriculture Offset Program.
- **Municipal & Industrial (M&I) Pumpers**: Initial pumping allowances are assigned according to actual pumping amounts (estimated or measured).
- ***De minimis* Pumpers**: Exempt.

RAMP DOWN

Pumping allowances will be ramped down in areas where overdraft exists. The ramp down will occur over a number of years to ensure pumping is within the Subbasin's sustainable yield. A number of ramp down options are available. We propose that pumping be reduced in specific areas of the basin where overdraft exists according to copping patterns and historically observed changes in groundwater elevations. Different water rights holders will be subject to different ramp downs:

- Surface water rights holders are not subject to this ramp down
- Pumping of any water owned and recharged by and individual or entity is not subject to ramp down

- Overlying water rights holders and quantified prescriptive rights holders are subject to equal ramp downs within a geographic area
- Appropriative rights holders are subject to a greater ramp down than the overlying water rights holders in the same geographic area.

Such adjustments would be timed to meet the interim milestones set forth in the GSP. Other options may also be appropriate and would be developed by the GSAs.

CARRYOVER

Groundwater pumping can fluctuate from year-to-year depending on weather conditions, particularly for agricultural pumpers. To provide pumpers the flexibility to pump more during dry years and less during wet years, the unused portion of a Pumping Allowance for a given year may be carried over for use in subsequent years. For example, an agricultural pumper with 10 acre-feet (AF) of Pumping Allowance who only pumps 5 AF this year would be able to pump 15 AF next year (10 AF of annual Production Allowance plus 5 AF of carryover) without incurring an overproduction surcharge. The amount a pumper can carryover would be limited. For example, one approach might be to limit each pumper's individual carryover amount to an amount equal to that pumper's pumping allowance. Additionally, carryover is discounted over time. Every year, a pumper loses a percentage of their carryover.

RE-LOCATION AND TRANSFER OF PUMPING ALLOWANCES

Pumping allowances may be moved between properties temporarily or permanently. For example, an agricultural pumper could voluntarily fallow marginal farmland, and move the pumping allowance to highly productive farmland to expand irrigation on the better land. Such re-location of pumping allowances would be subject to review by GSAs to ensure that sustainability goals are being met. GSAs will model the re-location using the GSP model to assess any significant and unreasonable impacts from the proposed relocation. Re-locating pumping allowances provides pumpers with flexibility, and maintains consistency with San Luis Obispo County's current Agriculture Offset Program. Pumping allowances could also be permanently or temporarily sold between water users, and could be used for another pumping purpose. For example, agriculture use to M&I use, subject to pumping amount adjustments for changes in consumptive use.

ADMINISTRATION, ACCOUNTING, AND MANAGEMENT

The GSAs would administer the water charges program. Administrative duties would include developing initial pumping allowances, tracking pumping allowance ownership, accounting for water use, calculating, assessing, and collecting fees, and reviewing proposed re-location of

pumping allowances. GSAs would use Water Charges revenues to fund projects that develop new water supplies for the benefit of the Subbasin.

The total amount of groundwater pumped by each land owner or entity will be measured in a number of ways:

- Municipal groundwater users and small water systems report their measured groundwater usage to the SWRCB Division of Drinking Water. These data are available on the State's Drinking Water Information Clearinghouse website ("Drinking Water Information Clearinghouse"). These data will be used to quantify municipal and small water system pumping.
- Agricultural pumping will be collected in two ways:
    - Agricultural pumpers may report metered pumping directly to their GSA.
    - Pumping will be estimated by the GSA for agricultural pumpers that do not report their pumping. The annual pumping will be estimated using the County of San Luis Obispo's crop data and crop duty estimates, times a multiplier. For example, if the crop duty for wine grapes is 1.2 acre-feet/year, using a multiplier of 1.5 means a grower is assessed 1.8 acre-feet of water (1.2 time 1.5) for every acre of unreported wine grape pumping.

MANAGEMENT ACTIONS

Management actions are new or revised programs or policies that are intended to improve local groundwater use. Several potential management actions are being considered by the GSAs, including urban conservation, agricultural conservation, and land use restrictions. Management actions can be implemented by individual landowners or by GSAs.

A combination of management actions will be required to achieve sustainability and avoid adversely impacting the local economy. Some management actions may work for one pumper, while others may work for a different pumper. the water charges framework provides a flexible structure that allows each pumper to select their preferred management actions.

POTENTIAL MANAGEMENT ACTIONS

- Urban conservation
- Agricultural conservation/efficiency
- Land use restrictions
- Mandatory pumping restrictions

One example of management actions that could be undertaken by GSAs is agricultural land retirement. Water charges revenues may be used by a GSA to acquire and retire irrigated land to reduce pumping. In some areas of the Paso Robles Subbasin where groundwater levels are declining, delivering non-groundwater sources to offset pumping is infeasible because of high cost and/or technical limitations. Irrigated land purchased by a GSA would be done on a voluntary basis from willing sellers at negotiated market prices. GSAs would cease irrigation on acquired land to reduce pumping. GSAs would coordinate with other local agencies and stakeholders to determine beneficial uses of the acquired land.

WATER SUPPLY PROJECTS

Funds raised from the water charges framework could be used to develop projects that enhance groundwater recharge either directly or through in-lieu methods. There are five potential new water sources available to the Paso Robles Subbasin, and three methods of distributing and using these new water supplies. Available water supplies, procurement options, and considerations are summarized in Table 1.

AVAILABLE WATER SUPPLIES

- State Water Project
- Nacimiento Water Project
- Recycled Water
- Diversion of Local Rivers/Streams
- Expansion of Salinas Dam

AVAILABLE WATER SUPPLIES

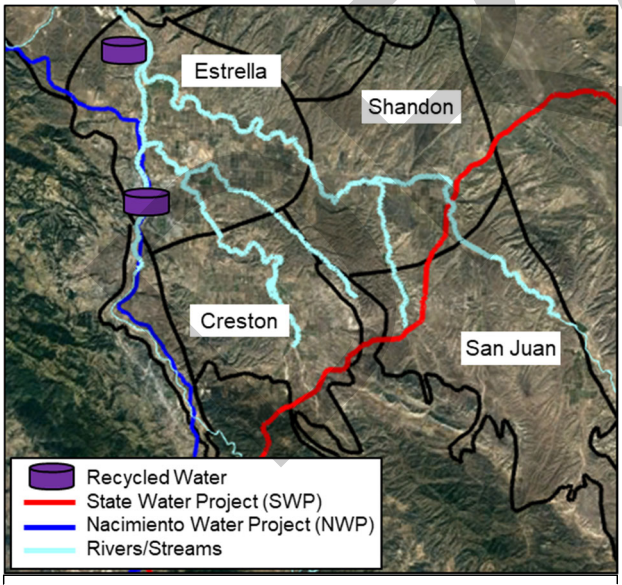


Figure 1. Available Water Supplies

State Water Project (SWP) – Treated SWP water is conveyed through the southeastern portion of the Subbasin via the Coastal Branch Aqueduct. San Luis Obispo County Flood Control and Water Conservation District (the District) currently has a SWP allocation of 25,000 AFY, of which about 14,500 AFY is unused "excess" allocation. SWP could be purchased either through a long-term agreement with an existing subcontractor, or by becoming a new SWP subcontractor under the District. Under the latter approach, one of the GSAs – likely the County – will become a subcontractor.

Historically, DWR delivers about 58% of allocated supplies. Multiplying 58% by the unused excess amount of 14,500 acre-feet per year yields an average annual supply of 8,900 acre-feet per year that may be available for use in the Subbasin. Actual availability would be less in dry years and more in wet years. Developing

SWP supplies for use in the Subbasin will require negotiation of contracts, engineering studies, and environmental permits. Because these activities are time-consuming, the GSAs will recommend in the GSP to initiate work on developing SWP water shortly after adoption of the GSP. This includes immediate negotiations on acquiring the use and rights to the district as excess allocation

Nacimiento Water Project (NWP) – Raw water from Nacimiento Reservoir is currently conveyed through the NWP pipeline to five contractors in the region. To use NWP water to achieve sustainability, GSAs could contract with and purchase water from an existing contractor or through a turnback pool among all existing contractors. The NWP water is fully allocated, although surplus supplies exist because subcontractors are not using their full allocation. The current average annual surplus supply is about 8,600 AFY; this amount is projected to decrease to about 5,700 AFY in 2040. The NWP contractors are currently developing a formalized water marketing program to trade and sell unused allocation. This formalized program may simplify the GSAs ability to obtain NWP water. The GSAs will recommend in the GSP that negotiation of long-term contracts with existing contractors begin shortly after approval of the GSP.

Recycled Water (RW) – RW projects are already being planned by both the San Miguel Community Services District (San Miguel) and the City of Paso Robles. San Miguel plans to reuse 200 AFY. The City of Paso Robles expects to reuse between 2,900 and 5,000 AFY. A total of about 2,600 AFY of recycled water are assumed available as new supply.

Local Rivers/Streams – Excess surface water from Salinas River, Estrella River, and/or Huer Huero Creek could be used to achieve sustainability. To do this, GSAs could apply for either a standard diversion permit or possibly a new temporary flood flows permit (currently being developed by the State Water Resources Control Board). Standard diversion permits are challenging to obtain, subject to protest by existing users, and would only allow for diversion during spring months due to existing water rights. Temporary flood flow permits are anticipated to be easier to obtain; however, substantial high cost infrastructure would be required to make use of rare winter high flood flow events. Due to these challenges, diverting and using local surface water as a new supply will be included in the GSP as a potential back-up project.

Localized recharge of rainfall runoff before it enters a stream or river is also possible. This type of program is currently being implemented in Pajaro Valley. While this is a simpler project to implement, the amount of water realized from these types of programs is generally small. However, the GSAs should develop a program to promote local, on farm recharge of runoff. The program could include reductions in the water charges framework surcharge cost for every acre-foot of water recharged.

Expansion of Salinas Dam – Expansion of the Salinas Dam on Lake Santa Margarita is being investigated by the County. The transfer of ownership, benefits of expansion, and funding

options are yet to be determined. Expansion of Salinas Dam to derive new water supplies for the Subbasin will be included in the GSP as a potential back-up project.

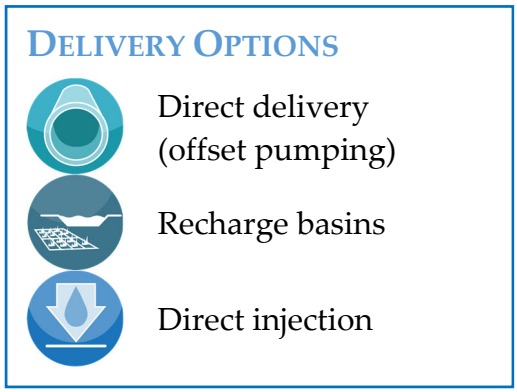
Table 1: Summary of Available Supplies in the Paso Robles Subbasin

Source	Procurement Options	Important Considerations
SWP	• Become new SWP subcontractor under the District • Negotiate contract with an existing subcontractor	Less water available during dry years. Water available during growing season
NWP	• Long-term purchase agreement from existing contractor • Turnback pool among existing contractors	Potential water quality issues
RW	• City of Paso Robles planned project underway • City of San Miguel planned project underway	Requires blending with other water to reduce salt loading
Local Rivers & Streams	• Standard diversion permit • Anticipated temporary flood flows permitting process	Permits are uncertain
Salinas Dam Expansion	County is in the process of investigating transfer of ownership, benefits of expansion, and funding options	Legal and timing concerns are currently unclear

OPTIONS TO DELIVER NEW WATER SUPPLIES

There are several options to deliver new water to the Subbasin, including:

Direct Delivery – A new non-groundwater supply could be delivered directly to irrigators to offset the use of groundwater. Direct delivery projects would require design, permitting and construction of pumping stations, pipelines, and storage facilities to convey the variable supply of new water to agricultural users. Direct delivery requires that the water be available during the growing season (i.e. summer and shoulder months) for immediate use or stored in on-site ponds.



Recharge Basins – Recharge basins are artificial ponds that would be filled with available new water supplies. Water from the recharge basin slowly seeps into the groundwater system.

Recharge basins would be appropriately located to maximize the benefit of recharge to the underlying aquifers. Recharge basins can be used throughout the year. Water recharged into the groundwater basin through recharge ponds can flow to other parts of the basin, resulting in benefits to the Subbasin in areas away from the recharge ponds.

Direct Injection – Injection wells could be used to inject available new water supplies directly into the groundwater basin. Treated water (e.g., treated SWP water) could be injected directly; raw water would need to be treated before injection. Injection wells can be operated continuously throughout the year. Injection wells are typically more efficient at getting water to productive aquifers than recharge basins. Water injected into the groundwater basin through direct injection can flow to other parts of the basin, resulting in benefits to the Subbasin in areas away from the injection wells.

DEVELOPMENT OF PROJECT ALTERNATIVES FOR GSP

For the GSP, projects alternatives were developed from combinations of available new water supplies and delivery options. Total planning-level costs were estimated for each alternative, including capital, operation and maintenance costs. Important assumptions used to develop project alternatives are shown in Table 2.

Table 2: Project Alternatives Assumptions

GENERAL ASSUMPTIONS	• The Basin will be managed as a whole but projects will be needed in target areas to address local groundwater deficits. • The shortest pipelines with the smallest elevation gains were selected for conceptual evaluation of water delivery to target. • For direct delivery projects, pipeline alignments were selected to deliver water to the largest users closest to the water source.
SWP ASSUMPTIONS	• SWP water is treated water and is therefore suitable for direct injection. • SWP pipeline is located in the southern portion of the basin; therefore, water injected near the SWP pipeline will benefit the whole basin by flowing north into the regions with lower water table elevations.
NWP ASSUMPTIONS	• NWP water supply projects were selected to not conflict with the recycled water service area.
OTHER SUPPLY ASSUMPTIONS	• Expansion of Salinas Dam is being investigated and a disposition study for transfer to the District is underway. Timing and legal requirements remain unclear so is currently assumed to be a back-up project.

For the GSP, projects alternatives will be evaluated that include practical combinations of water supply and delivery options that could be implemented to deliver new water supplies to areas where pumping has depleted groundwater storage in the basin. Table 3 summaries estimated project costs, which would vary by water supply type, delivery option, area within the Subbasin, and cost of the water. Costs were not estimated for backup projects.

Table 3: Estimated Planning-Level Cost of Project Alternatives

Supply	Area	Delivery Option	Estimated Amount AFY	Cost ($/AF)[1]
SWP	Creston	Direct delivery for irrigation	4,000 – 9,000	$2,600 – 3,900/AF
		Recharge basins[1]	4,000 – 9,000	$1,300 – 2,600/AF
		Direct Injection	4,000 – 9,000	$1,800 – 3,100/AF
	Shandon	Direct delivery for irrigation	4,000 – 9,000	$2,400 – 3,700/AF
		Recharge basins[1]	4,000 – 9,000	$1,300 – 2,600/AF
	San Juan	Direct delivery for irrigation	4,000 – 9,000	$2,900 – 5,400/AF
NWP	Estrella	Direct delivery for irrigation	4,000 – 8,000	$2,200 – 3,200/AF
		Recharge basins[1]	4,000 – 8,000	$1,500/AF
RW	San Miguel	Direct delivery for irrigation	200	to be determined
	City of Paso Robles	Direct delivery for irrigation	2,900+	<$1,900/AF

Notes:
(1) Include cost to purchase raw water, capital and construction costs annualized over 30 years, and operations and maintenance costs. Costs do not include efficiency factors. For example, the cost ($/AF) for recharge basin projects appears lower than others; however, only a portion of recharge basin water will directly benefit the deeper aquifers.

Recommended Preliminary Project Alternatives and Costs

Table 4 summarizes preliminary project alternatives that were developed based on the following criteria: the cost per acre foot of water, the ability of recharged water to benefit the deep aquifers in the Paso Robles Formation that are overdrafted, the ability of the project to meet sustainable management criteria, capital costs, and project feasibility. Direct delivery and injection project types were prioritized above recharge basins since they have the highest recharge (or in-lieu recharge) efficiency.

Table 4: Preliminary Recommended Projects for GSP

Supply	Area	Delivery Option	Estimated Supply AFY
SWP	Creston	Direct injection	4,400
	Shandon	Direct injection	4,400
NWP	Estrella/Salinas Confluence	Direct delivery for irrigation	2,300
RW	Near Airport	Direct delivery for irrigation	2,425+
	San Miguel	Direct delivery for irrigation	200
		Total AFY:	**13,725+**

The candidate project alternatives are described briefly below.

Direct Injection of SWP Water

GSAs would negotiate an agreement to acquire excess SWP water from the District. This water supply could be up to about 8,900 AFY, although for planning purposes it was assumed that 4,400 AFY could be obtained. SWP water would be taken from the Coastal Branch pipeline at new or expanded turnouts in the Shandon and Creston areas. Because this water is treated, this water could be directly injected via wells with minimal pretreatment in the Creston and Shandon areas.

Direct Delivery of NWP Water

GSAs would negotiate agreements with existing NWP water contractors to secure long-term contract for NWP water. This water would be directly delivered via pipeline to growers near the confluence of the Estrella and Salinas River to offset a portion of their groundwater pumping in that area. Recharge basins to recharge the groundwater basin with NWP water are potential back-up project, although suitable locations for basins near the NWP pipeline would need to be identified and proven. Direct injection may also be feasible; however, this option would require some forms of pretreatment. Additional studies would be needed to evaluate the feasibility of recharge via basins and/or injection wells.

Recycled Water Use

The planned RW projects of the City and San Miguel will be included in the GSP because they would offset some groundwater pumping and contribute to reducing the

future groundwater storage deficit. RW would be directly delivered to growers for irrigation to offset a portion of their groundwater pumping. These projects will be undertaken by the Cities and not by the GSAs.

OTHER CONSIDERATIONS

Not all areas of the Subbasin will have all options open to them. For example, the cost to bring new water supplies to the southern end of the San Juan area was found to be high; therefore, to meet sustainable management criteria in this area, management actions like pumping cutbacks, land retirement and/or conservation measures would need to be implemented.

POTENTIAL TOPICS OF DISCUSSION REGARDING PROJECTS AND MANAGEMENT ACTIONS

The projects and management actions fact sheet includes a number of assumptions and proposals that stakeholders, GSA board members, or others may want to modify, change, or eliminate. The list below includes assumptions and ideas that we have identified in the fact sheet that could be changed, and may be of interest to various stakeholders and constituents.

This list is not exhaustive; however, it does provide guidance for topics that GSAs may want to discuss with their constituents. Many of these topics could require extensive discussion and negotiation. We recommend that GSAs **immediately** begin discussing these topics (and others) with their constituents.

Remember that it will not be necessary to reach agreement on all of these topics prior to finalizing the GSP. Many details will remain be negotiated after the GSP is adopted. However, the GSP must demonstrate that the four GSAs have an agreed to path to sustainability. Therefore, we will likely want to set conceptual agreements on the following topics in our GSP, even if the details have yet to be worked out. Setting these conceptual agreements will furthermore give stakeholders and other constituents confidence that the final agreement will be within the bounds of their expectations.

Items that are included in the fact sheet that could be modified, and should be discussed with your boards of directors and stakeholders, include the following:

- Equity. Should heavy pumpers pay more for projects, or should projects be paid for by all (likely as a land-based tax)

- Should operational costs be included in the water charges framework, or are those separate? Example activities that will be covered by operational costs include:
  - Installing new monitoring wells
  - Negotiating details of the water charges framework
  - Video-logging existing wells that may be part of our monitoring system
  - Setting up and running groundwater extraction monitoring system for the water charges framework
    - Maintaining recent crop data
    - Developing a well registration system
    - Implementing a flowmeter calibration system
    - Collecting or developing semi-annual estimates of pumping

- Setting up a pumping allowance trading platform and system

- Should GSAs implement some projects outside of the water charges framework structure? Should we start bringing in State Water Project water outside of this financial structure? Should we fund this based on a flat fee per acre?

- Status of de-minimis pumpers
  - Do we monitor their pumping?
  - Do they pay the base fee?
  - Are they exempt from monitoring and paying any fee?
  - Do we cap the total number of de-minimis pumpers allowed before they start paying a base fee?
  - Are they a special class with a lower base fee?

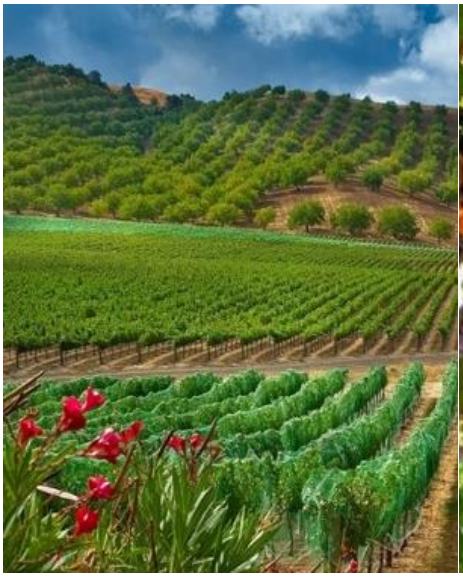
- What are the options for calculating pumping allowances?
  - Use only 2015 crop acreage
  - Use a longer period than 2010 to 2015 for averaging
  - Use the maximum crop acreage (by water use) between 2010 and 2015
  - Use other standardized crop duties – not San Luis Obispo crop duties.

- What are the options for the pumping allowance ramp down?
  - Should we ramp down over five, seven, or 10 years?
  - How does the ramp down acknowledge various types of water rights? Do all water rights holders ramp down at the same rate, or do some water rights holders ramp down more quickly or more slowly than others?
  - Should ramp downs be equal across the Subbasin (not recommended).

- Carryover
  - How much should carryover be capped?

- Pumping Re-Location
  - Can pumping for one use be transferred to another use?

- State Water Project
  - Is the county the correct subcontractor?
  - How would the county be repaid by other GSAs?



DRAFT PROJECTS SUMMARIES

Paso Robles Subbasin GSP Development

Disclaimer *These Draft Documents are provided for information only and are intended to help facilitate discussions related to Projects & Management Actions to be considered in the Paso Basin Groundwater Sustainability Plan (GSP), currently under development. The information contained herein is subject to change and does not commit, nor does it necessarily reflect the views, opinions or endorsement of, the Cooperative Committee or any Agency.*

INTRODUCTION

This document provides a brief overview of projects that could be implemented to bring additional water supplies into the Paso Robles Basin as part of the GSP. Short descriptions are included for each project along with a map showing general project locations. Rough costs are also included.

Assumptions that were made to design each project, as well as potential issues, are listed. Assumptions and issues would need to be checked and tested during the pre-design phase of each project. Project designs, and therefore costs, could change considerably as more information is gathered.

The cost estimates shown herein are class 5 (i.e. "Order of Magnitude") estimates. These were estimates made with little to no detailed engineering data. The expected accuracy range for such an estimate is within +50 percent or –30 percent. The cost estimates are based on our perception of current conditions at the project location. They reflect our professional opinion of costs at this time and are subject to change as project designs mature.

Capital costs include major infrastructure including pipelines, pump stations, customer connections, turnouts, injection wells, recharge basins, and storage tanks. Capital costs also include 30% contingency for plumbing appurtenances, 15% increase for general conditions, 15% for contractor overhead and profit, and 8% for sales tax. Engineering, legal, administrative, and project contingencies was assumed as 30% of the total construction cost and included within the capital cost. Land acquisition at $30,000/acre was also included within capital costs.

Annual operations and maintenance (O&M) fees included the costs to operate and maintain new project infrastructure. O&M costs also include any pumping costs associated with new infrastructure. O&M costs do not include O&M or pumping costs associated with existing infrastructure (e.g. State Water Project (SWP) or Nacimiento Water Project (NWP) O&M costs), as these were assumed to be part of water purchase costs.

Water purchase costs were assumed to include repayment of loans for existing infrastructure.

Capital costs were annualized over thirty years and added with annual O&M costs and water purchase costs to determine a cost in $/AF per project. This $/AF value might not

always represent the $/AF of basin benefit (i.e. "$/AF-benefit"). For instance, if the Department of Water Resources (DWR) delivered less than 100% of the allocation, the $/AF-benefit would increase. Similarly, if water that is delivered to a recharge basin recharges into the deep aquifer at a rate of 50%, then the $/AF-benefit would increase. The projects described herein are summarized in Table 1 below.

Table 1. Summary of Projects

Supply	Area	Project Type
SWP	Creston	Direct delivery for irrigation
		Recharge basin
		Direct Injection
	Shandon	Direct delivery for irrigation
		Recharge basin
NWP	Estrella	Direct delivery for irrigation
		Recharge basin

SWP Injection Wells in Creston

Description:
This project would utilize injection wells in the Creston region to directly recharge the basin with an average of 1,100 AFY of treated water from the SWP Coastal Branch pipeline. As shown in Figure 1, the project would consist of a new SWP Coastal Branch turnout, 1 mile long pipeline, and six injection wells. No pumps were assumed necessary to deliver water to the wellheads with at least 50 psi of residual pressure to this location, as the pressure in the Coastal Branch is likely sufficient. Locations further from the SWP pipeline might require a pump station.

An injection capacity of 200 gallons per minute (gpm) was conservatively assumed as 50% of production capacity in the region, 400 gpm. The actual injection capacity would need to be determined through a pilot study. The cost of the pilot study was included in the project capital cost. Other factors would also impact feasibility, including hydrogeological characteristics, land available for purchase, Coastal Branch capacity, and water quality impacts.

Summary:

- Major Infrastructure: Turnout, pipeline, 6 injection wells.
- Pipeline Length: 1 mile
- Storage required: None
- Infrastructure sized to recharge: 1,900 AFY
- Average annual water recharged: 1,100 AFY
- Estimated Basin Benefit: ~100%

Major Assumptions:

- Injection capacity (200 gpm) is 50% of production capacity for wells in the area (400 gpm).
- 50 psi residual pressure required at the well heads.
- Sufficient pressure within the Coastal Branch pipeline to reach the wellhead.

Potential design flaws:

- This project is assumed to be located very close to the SWP line. If the project had to be located at a distance much further, it could cost a lot more.
- While this project is sized for 1,900 AFY of injected water, annual SWP deliveries vary.
- Assumes treated SWP water is suitable for injection without further treatment.
- SWP Coastal Branch might not have sufficient capacity at the Creston area.

- SWP buy-in cost is unknown but negotiable.

Costs:

- Capital Cost: $16M
- Annual O&M Cost: $94k
- Project Cost annualized over 30 years: $3M
- Assumed cost to purchase SWP water: $1,200/AF
- Cost/AF: $1,800/AF

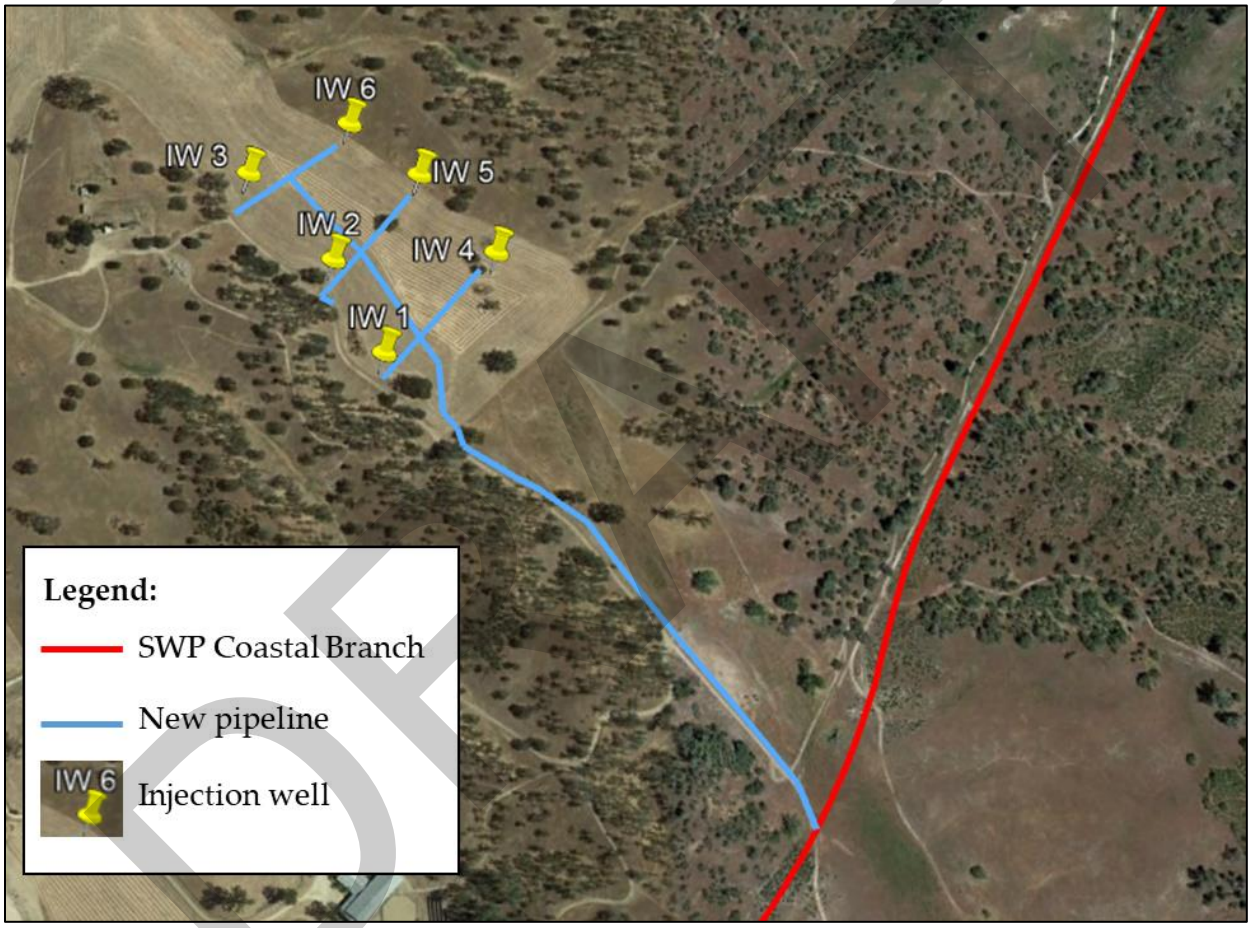


Figure 1. SWP Injection Wells in Creston

SWP Direct Delivery in Creston

Description

Delivery of treated SWP water for irrigation in the Creston area. This project consists of a turnout, pump station, tank, and pipeline sized to deliver up to 3,200 gpm. The project is sized to deliver 2,030 AFY to a group of agricultural water users in Creston near the SWP pipeline. It is assumed that 100% of demand of the users served is met by SWP water. The pipeline was sized to deliver 3,200 gpm to meet peak summer pumping demands.

Summary:

- Major Infrastructure: Turnout, pump station, tank, pipeline
- Pipeline Length: 5 miles
- Storage required: 1.7 million gallons
- Infrastructure sized to deliver: 2,030 AFY
- Average annual water delivered: 1,200 AFY
- Estimated Basin Benefit: ~100%

Assumptions

- Pipeline alignments were selected to deliver water to the largest users closest to the SWP Coastal Branch.
- Pipeline is sized to meet 100% of the demands of the modeled pumping that the pipeline delivers to.
- Assumes that farmers irrigate for 12 hours per day.
- Assumes 100% of agricultural demand is met by SWP water.
- Does not include dechlorination of SWP treated water.
- Assumes that farmers do not have daily onsite storage, and require 50 psi residual pressure at connection.
- Assumes low flow demands can be met.
- Includes agricultural customer turnouts, but not private pipelines.

Potential design flaws:

- SWP Coastal Branch might not have sufficient capacity at the Creston area to deliver the peak instantaneous flow assumed in this project based on peak monthly demand.
- SWP buy-in cost is unknown but negotiable.

Costs

- Capital Cost: $40M
- Annual O&M Cost: $203k
- Project Cost annualized over 30 years: $5M
- Cost/AF: $2600/AF

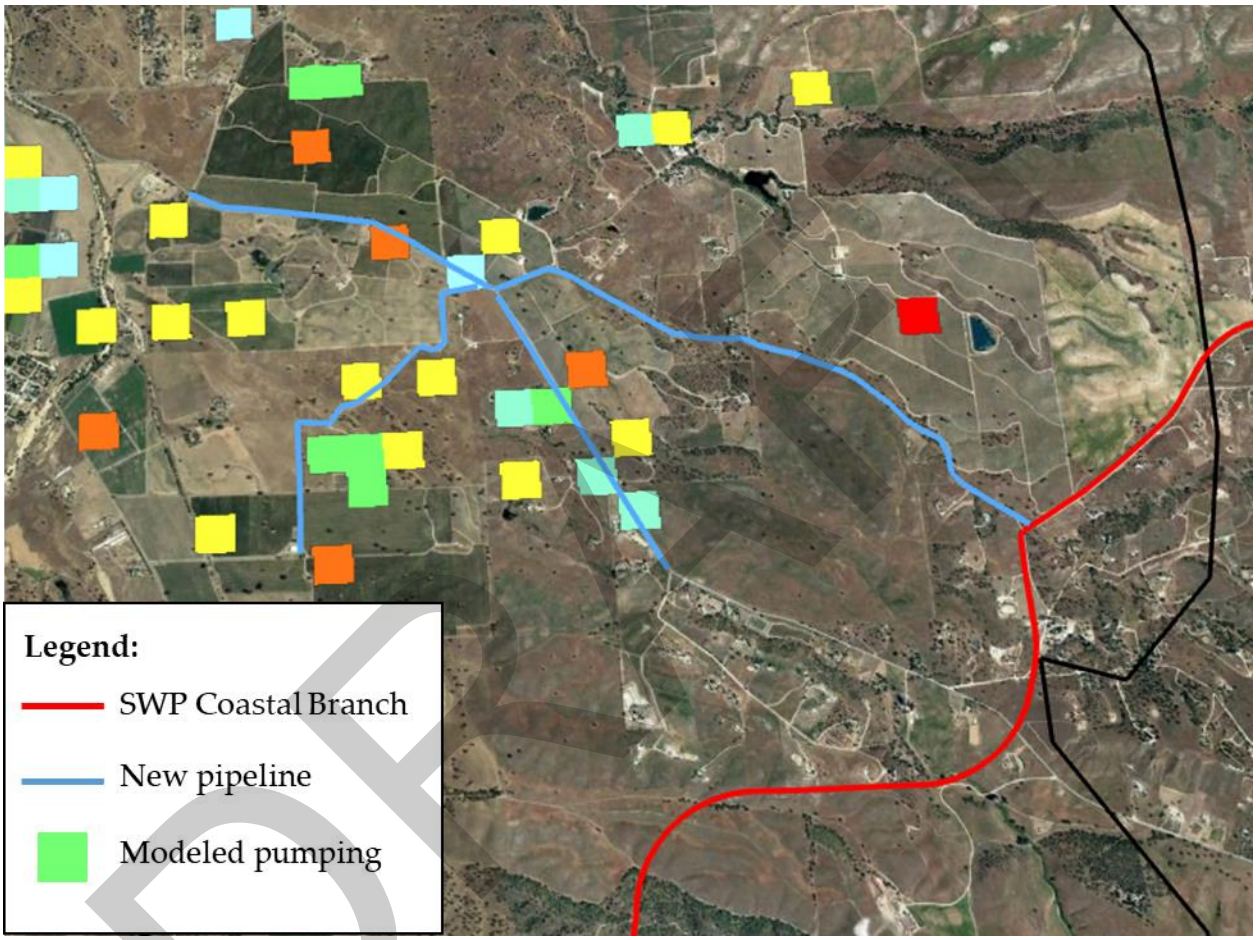


Figure 2. SWP direct delivery in Creston

SWP TO RECHARGE BASIN IN CRESTON

Description

This project consists of a short pipeline to deliver 1,900 AFY of SWP to a recharge basin close to the SWP pipeline. Locating the recharge basin close to the SWP Coastal Branch pipeline enables to the pipeline to flow by gravity without the use of a pump station. If land near the SWP is not available for purchase, this project could become more expensive.

Recharge capacity for this project is unknown. While 1,900 AFY of water might be delivered to the basin, it does not necessarily mean that 1,900 AFY of water will infiltrate into the aquifer. Therefore, the basin benefit might be much lower than the amount of water purchased and recharged.

Summary

- Major Infrastructure: Turnout, pipeline, recharge basin
- Pipeline Length: 3,900 feet
- Recharge basin size: 21 acres
- Infrastructure sized to deliver: 3,800 AFY
- Average annual water delivered: 2,200 AFY
- Estimated Basin Benefit: Unknown

Assumptions

- Neglects minor losses.
- Recharge rate of 6 inches per day, back-calculated from the Basin Supply Options Feasibility Study.

Potential design flaws

- The land very close and downhill from the SWP pipeline might not be available. If the project required a pump station, it would be more expensive.
- Infiltration rate and long-term capacity is unknown and would need to be determined through a pilot study.
- SWP Coastal Branch might not have sufficient capacity at the Creston area.
- SWP buy-in cost is unknown but negotiable.

Cost

- Capital Cost: $4M
- Annual O&M Cost: $42k
- Project Cost annualized over 30 years: $5M

- Assumed cost to purchase SWP water: $1,200/AF
- Cost/AF: $1,300/AF

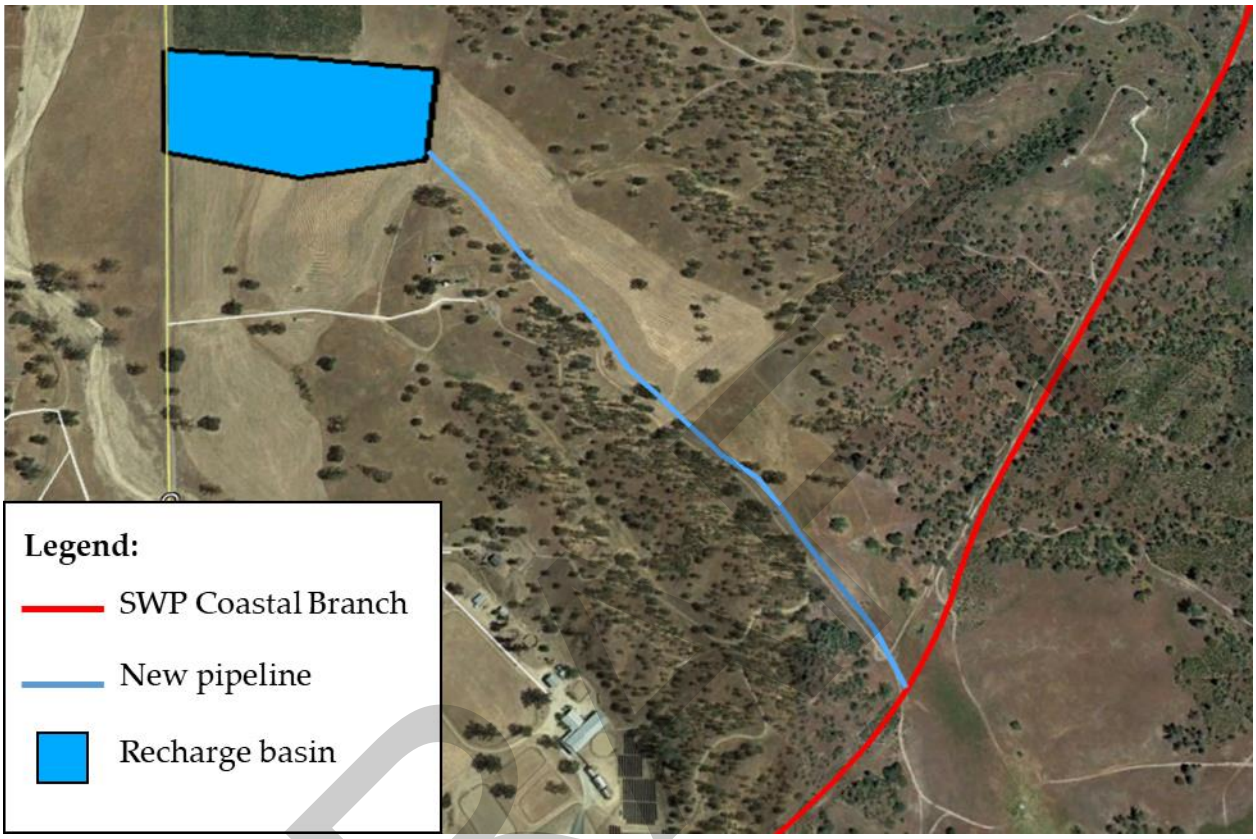


Figure 3. SWP to recharge basin in Creston

SWP Direct Delivery in Shandon

Description

This project consists of delivering treated SWP water to agricultural pumpers in Shandon near the SWP pipeline. The project is sized to meet 13% of demand in June for each user and 25% of total demand of the users reached.

Summary

- Major Infrastructure: Turnout, pipeline, pump station, storage tank
- Pipeline Length: 3.5 miles
- Storage required: none
- Infrastructure sized to deliver: 830 AFY
- Average annual water delivered: 480 AFY

Assumptions

- Pipeline alignments were selected to deliver water to the largest users closest to the SWP Coastal Branch
- Pipeline is sized to meet 25% of the demands of the modeled pumping that the pipeline delivers to
- Assumes that farmers irrigate for 12 hours per day
- Does not include dechlorination of SWP treated water
- Takes water from below the Shandon turnout
- Assumes that farmers do not have daily onsite storage, and require 50 psi residual pressure
- Assumes low flow demands can be met
- Includes agricultural customer turnouts, but not private pipelines

Potential design flaws:

- SWP Coastal Branch might not have sufficient capacity at the Creston area to deliver the peak instantaneous flow assumed in this project based on peak monthly demand.
- SWP buy-in cost is unknown but negotiable.

Cost

- Capital Cost: $14M
- Annual O&M Cost: $42k
- Project cost annualized over 30 years: $2M
- Assumed cost to purchase SWP water: $1,200/AF
- Cost/AF: $2,400/AF

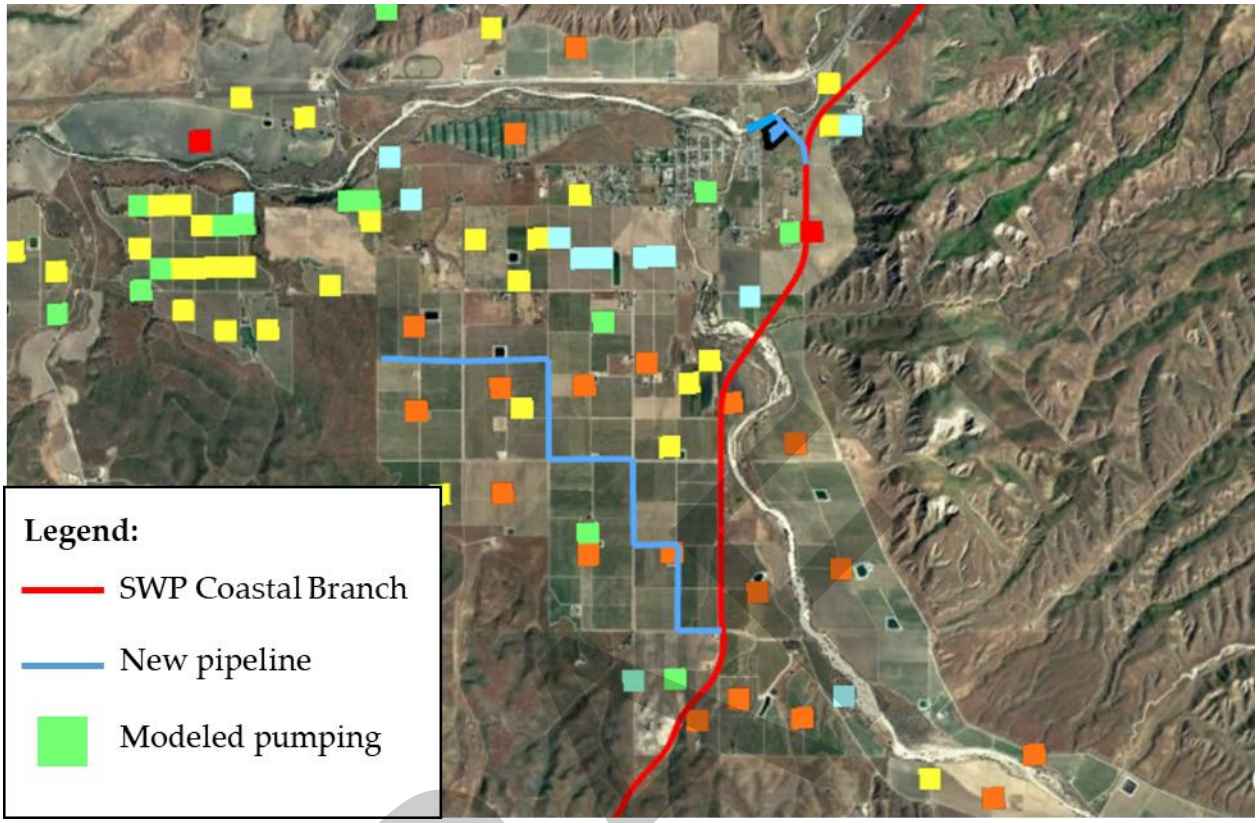


Figure 4. SWP direct delivery in Shandon

SWP TO RECHARGE BASIN IN SHANDON

Description

This project consists of a pipeline to a recharge basin in Shandon near the Estrella River. This project is sized to deliver 1,400 AFY of water. This project relies on the availability of land near the SWP pipeline such that water could be delivered from the SWP Coastal Branch to the recharge basin via gravity. If land near the SWP is not available for purchase, this project could become more expensive.

Recharge capacity for this project is unknown. While 1,600 AFY of water might be delivered to the basin, it does not necessarily mean that 1,600 AFY of water will infiltrate into the aquifer. Therefore, the basin benefit might be much lower than the amount of water purchased and recharged. Previous analyses showed that basin benefit in this region might be close to 50%.

Summary

- Major Infrastructure: Turnout, pipeline, recharge basin
- Pipeline Length: 1225 ft
- Recharge basin size: 9 acres
- Infrastructure sized to deliver: 1,600 AFY
- Annual Water Delivered to Recharge Basin: 930 AFY

Assumptions

- Recharge rate of 6 inches per day, back-calculated from the Basin Supply Options Feasibility Study. This is likely a conservative estimate, as a study on the Huerhuero shows infiltration rates of 1-4 feet per day close to the river.
- Assumes sufficient pressure exists in the Coastal Branch to flow to the recharge basin without a pump station.

Potential design flaws

- Infiltration rate and long-term capacity is unknown and would need to be determined through a pilot study.
- The land very close and downhill from the SWP pipeline might not be available. If the project required a pump station, it would be more expensive.
- SWP buy-in cost is unknown but negotiable.
- According to the 2008 Basin Study, the Estrella and North of the Estrella River have a fine-grained layer with low permeability above Paso Formation. This layer might impede aquifer recharge and lead to low infiltration capacities and basin benefit.

Cost

- Capital Cost: $2M
- Annual O&M Cost: $40,000
- Project Cost annualized over 30 years: $2M
- Assumed cost to purchase SWP water: $1,200/AF
- Cost/AF: $1,300/AF

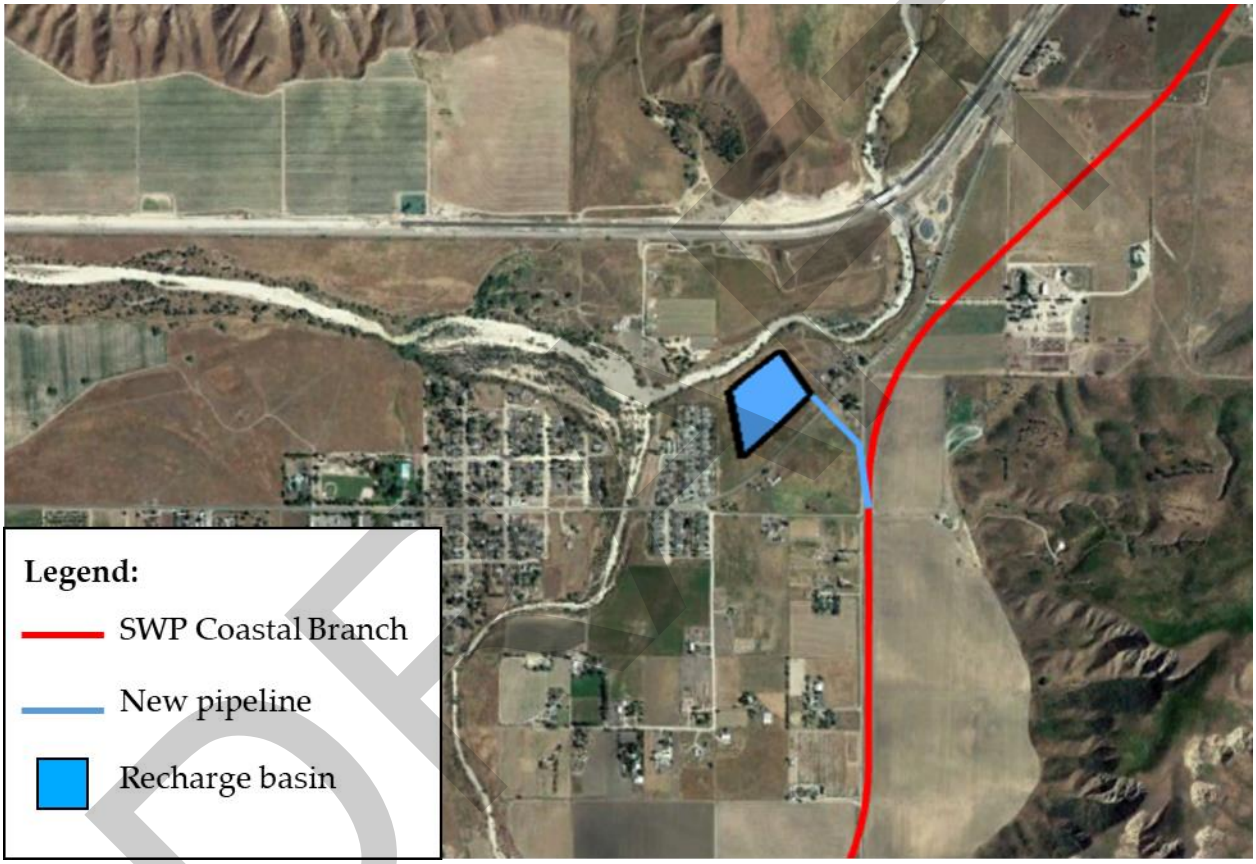


Figure 5. SWP to recharge basin in Shandon

NWP Direct Delivery in Estrella

Description

This project delivers NWP water through a new pipeline to agricultural water users near the confluence of the Salinas and Estrella Rivers. This location was selected since it does not conflict with the planned recycled water pipeline near the airport. To deliver the most water using a short pipeline, 100% of water demand to these users was assumed to be met by NWP water and the pipeline was sized to meet peak summer month demands. The pipeline diameter and pump station size could be significantly lower if growers had the ability to store water on-site.

Summary

- Major Infrastructure: Turnout, pipeline, storage tank, pump station
- Pipeline Length: 3 miles
- Storage required: 3.6MG
- Annual water delivered: 3,800 AFY
- Average annual water delivered: 3,800 AFY

Assumptions

- Pipeline alignments were selected to deliver water to the largest users closest to the NWP pipeline without interfering with the planned recycled water service area
- Pipeline is sized to meet 100% of the demands of the modeled pumping that the pipeline delivers to
- Assumes that farmers irrigate for 12 hours per day
- Assumes that farmers do not have daily onsite storage, and require 50 psi residual pressure
- Assumes low flow demands can be met
- Assumes no pretreatment
- Includes agricultural customer turnouts, but not private pipelines

Potential design flaws

- To ensure that this project provides in-lieu recharge, it would need to be confirmed that these agricultural users currently pump groundwater from the deep basin as opposed to the shallow aquifer. Since these growers are located at the confluence of two rivers, it is possible that they pump much of their groundwater from the shallow alluvium. Deep basin benefit would be higher by offsetting pumping from the deep basin.

- NWP water might require some form of treatment as it is known to be high in suspended solids and metals.
- NWP water cost is unknown and will require some form of negotiation
- NWP water would need to be secured through a long-term contract to support capital investments.

Cost

- Capital Cost: $52M
- Annual O&M Cost: $264K
- Project Cost annualized over 30 years: $8M
- Assumed cost to purchase NWP water: $1,200/AF
- Cost/AF: $2,200/AF

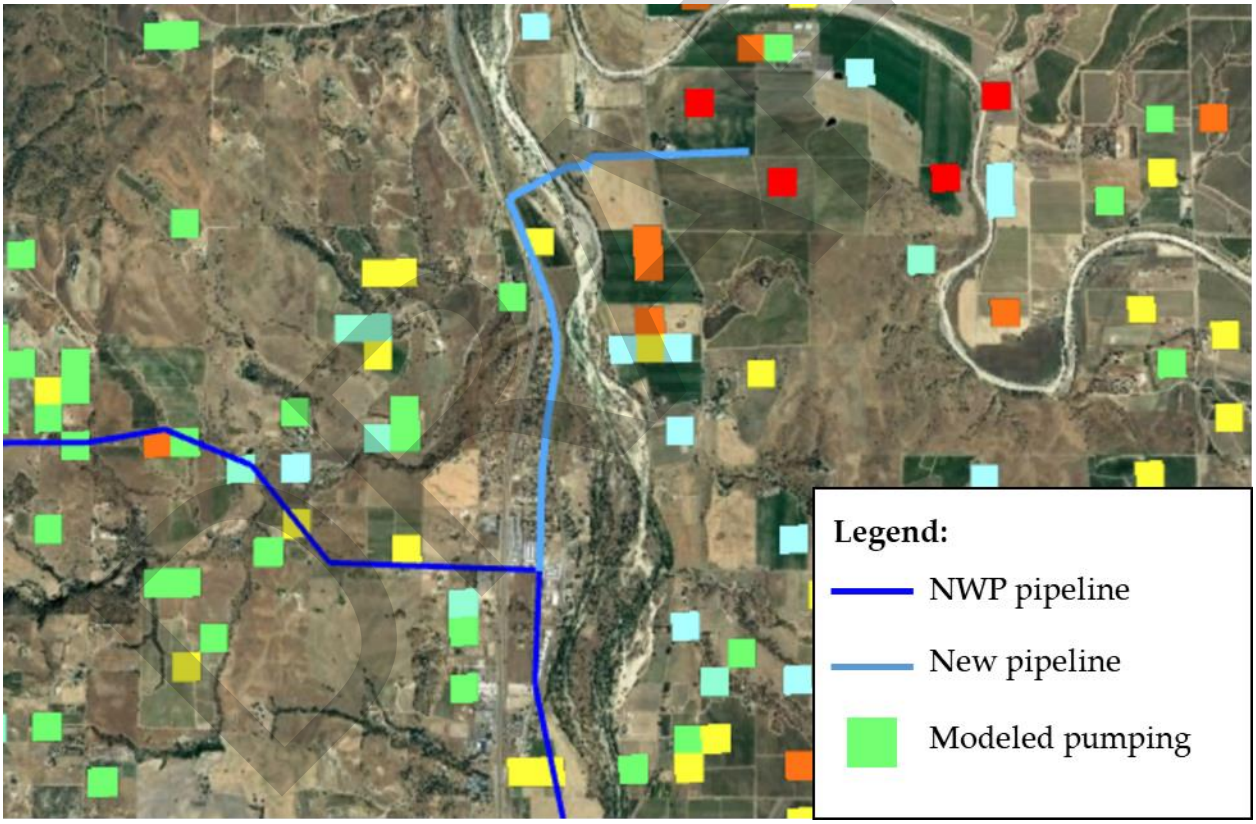


Figure 6. NWP direct delivery in Estrella

NWP TO RECHARGE BASIN IN ESTRELLA

Description

This project is sized to deliver 6,950 AFY of NWP water to a recharge basin near the airport. This location was selected as having a large area of apparently unused land. Options nearer to the pipeline also appeared limited due to housing and commercial developments. Previous studies have also shown that this region has relatively high recharge efficiency. Because the basin is far from the NWP pipeline, a pump station is required to deliver the water to the basin.

Summary

- Major Infrastructure: Turnout, pipeline, pump station, recharge basin
- Pipeline Length: 3.8 miles
- Recharge basin size: 45 acres
- Annual water recharged: 8,400 AFY
- Estimated basin benefit: Unknown

Assumptions

- Recharge rate of 6 inches per day, back-calculated from the Basin Supply Options Feasibility Study. This is likely a conservative estimate, as a study on the Huerhuero shows infiltration rates of 1-4 feet per day close to the river.

Potential design flaws

- The land might not be available, and there may be an issue locating a large body of water close to the airport due to bird nuisance.
- Infiltration rate and long-term capacity is unknown and would need to be determined through a pilot study.
- NWP water cost is unknown and will require some form of negotiation
- NWP water would need to be secured through a long-term contract to support capital investments.

Cost

- Capital Cost: $27M
- Annual O&M Cost: $742k
- Project Cost annualized over 30 years: $11M
- Assumed cost to purchase NWP water: $1,200/AF
- Cost/AF: $1,600/AF

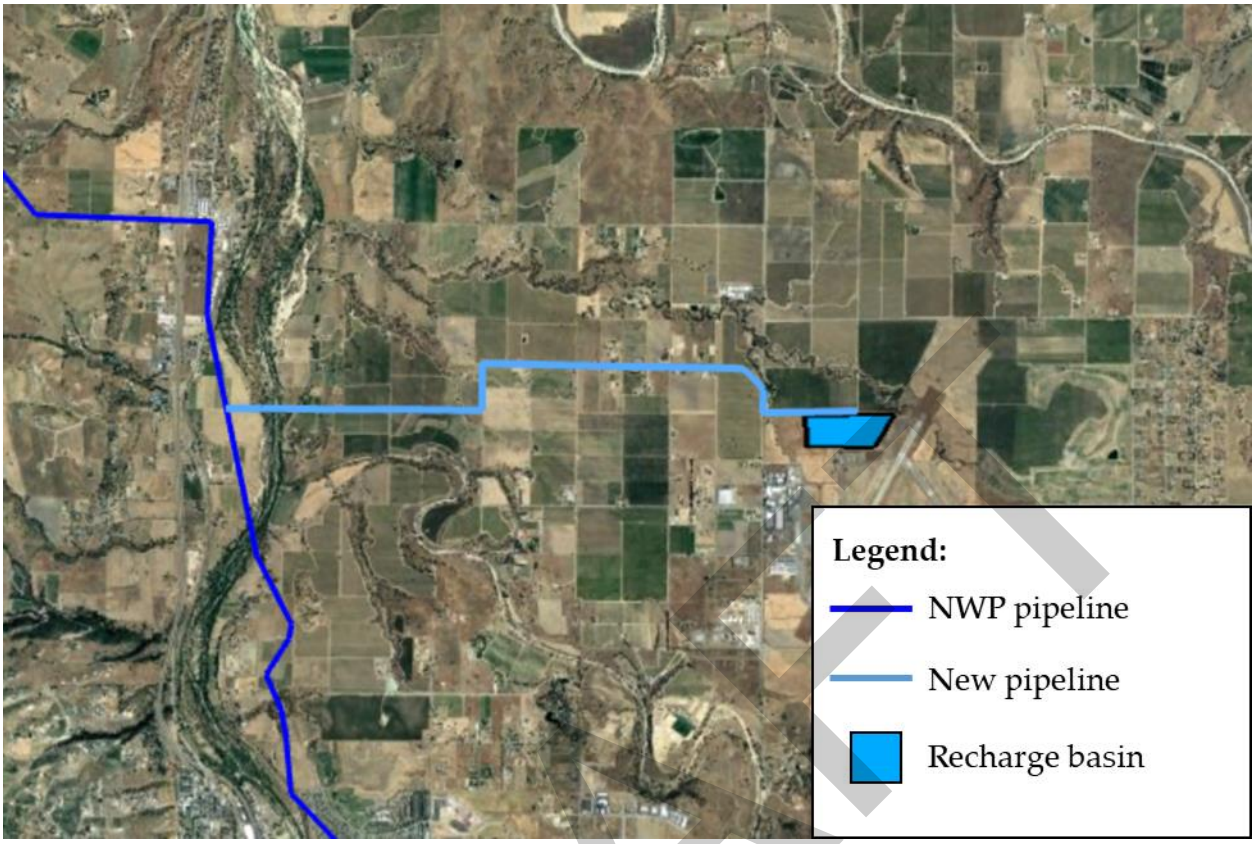


Figure 7. NWP to recharge basin in Estrella

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Paso Robles Basin GSP Development

Example Water Charges Calculation and Financial Impacts

DRAFT

February 2019

Privileged and Confidential Information

Illustrative Projects Portfolio

- **State Water Project (SWP):**
  - Injection wells in Creston.
  - Average volume: 1,100 AF.
- **Nacimiento Project (NWP):**
  - Recharge basin in Estrella.
  - Average volume: 8,400 AF.
- **Land Retirement:**
  - Purchase and retire irrigated land in key areas where groundwater levels are declining.
  - 1,150 acres based on 50% of alfalfa and pasture land in the basin.
  - Average volume: 5,220 AF.

Area	Supply	Annual Volume (AF)
Creston	SWP	1,100
Estrella	NWP	8,400
All	Land Retirement	5,220
TOTAL		**14,720**

Preliminary Project Cost Estimates

	SWP	NWP	Land Retirement	Total, All Projects
CAPEX	$990,834	$1,672,032	$2,879,610	**$5,542,476**
OPEX	$94,000	$742,000	$232,500	**$1,068,500**
Water	$1,320,000	$10,080,000	$0	**$11,400,000**
Total Annual	**$2,404,834**	**$12,494,032**	**$3,112,110**	**$18,010,976**

- All capital expenditures (CAPEX) are annualized over 30 years using a 4.6% discount rate.
- Operating expenditures (OPEX) escalate annually at CPI.
- SWP and NWP cost estimates prepared by Carollo Engineers.
- Land retirement costs:
  - Acquisition CAPEX: $30,000/ac based on vineyard land values of $50,000/ac minus $20,000/ac establishment costs.
  - Land management OPEX: $150/ac annually.

Establishment of Water Charges

- **Base Pumping Assessment:**
  - Fee per acre-foot charged for all non-exempt pumping.
  - Intended to cover infrastructure CAPEX, infrastructure OPEX, and all land retirement costs as these investments benefit all pumpers in the basin.
- **Overproduction Surcharge:**
  - Additional fee per acre-foot charged for any non-exempt pumping above an individual's pumping allowance.
  - Intended to cover water costs which are incurred to directly replace overpumping by individuals.

		SWP	NWP	Land Retirement	Total, All Projects
Base Pumping Assessment	CAPEX	$990,834	$1,672,032	$2,879,610	**$5,542,476**
	OPEX	$94,000	$742,000	$232,500	**$1,068,500**
Overproduction Surcharge	Water	$1,320,000	$10,080,000	$0	**$11,400,000**
	Total Annual	**$2,404,834**	**$12,494,032**	**$3,112,110**	**$18,010,976**

Water Charges Calculations

Base Pumping Assessment:

CAPEX	$5,542,476
OPEX	$1,068,500
Total Costs	$6,610,976
Total Pumping	70,780 AF (after land retirement)
	$93/AF

Overproduction Surcharge:

Water Costs	$11,400,000
Overproduction	13,700 AF
	$832/AF

Financial Implications for Growers

Revenue and cost assumptions obtained from crop enterprise budgets published by UC Davis, and personal interviews with growers. Actual revenues and costs vary across growers and properties.

Illustrative Enterprise Budget (Vineyard)

Assumption	Value	Unit
Yield	7	Tons/ac
Price	$1,200	Per ton
Gross Revenue	*$8,400*	*Per ac*
Operating Costs	$2,400	Per ac
Cash Overhead	$1,200	Per ac
Total Cash Costs	*$3,600*	*Per ac*
Net Revenue	**$4,800**	**Per ac**
Pumping Allowance	1	AF/ac
Actual Pumping	1.25	AF/ac
Overproduction	0.25	AF/ac
Base Assessment	$116	Per ac ($93/AF x 1.25 AF)
Overproduction Surcharge	$208	Per ac ($832/AF x 0.25 AF)
Total Water Charges	*$324*	*Per ac*
Net Revenue	**$4,476**	**Per ac**

Without water charges →

With water charges →

PASO BASIN COOPERATIVE COMMITTEE
March 6, 2019

Agenda Item #8 – Request that the County Board modify the sunset date of the County's Water Conservation Ordinance related to the Paso Basin

SUBJECT

Request that the County Board direct staff to bring an item to the County Board to consider modifying the sunset date of the County's Water Conservation Ordinance provisions related to the Paso Basin.

RECOMMENDATION

It is recommended that the Paso Basin Cooperative Committee (Committee) request that the County Board direct staff to bring an item to the County Board to modify the sunset date[1] of the County's Water Conservation Ordinance provisions related to the Paso Basin to when conservation provisions in the adopted GSP are implemented.

PREPARED BY

Courtney Howard, County of San Luis Obispo

BACKGROUND

The Countywide Water Conservation Program (CWWCP) was established by the Board of Supervisors (Board) in response to the declining groundwater levels in County groundwater basins, including the Paso Robles Groundwater Subbasin. A key strategy of the CWWCP was to ensure all new construction and new or expanded agriculture offset its predicted water use by reducing existing water use on other properties within the same groundwater basin. The CWWCP will sunset with the adoption of GSP, however the conservation provisions that are expected to be included in the GSP will not go into effect until subsequent action is taken. That action will likely be subject to the California Environmental Quality Act (CEQA) and may take significant time to implement.

There is no direction currently from the County Board to modify the sunset date of the CWWCP so that there is no "gap" between CWWCP sunset and adoption of subsequent GSP conservation provisions. Further, the draft of Chapter 6 of the Groundwater Sustainability Plan does not include a quantification of increased demand on the basin associated with increased land use activity

[1] Title 22.30.204 H. "Termination. The provisions of this section for the Paso Robles Groundwater Basin (excluding the Atascadero Sub-basin) shall expire upon the effective date of a final and adopted Water Code section 10720 et seq. groundwater sustainability plan(s) by a local groundwater sustainability agency or agencies, covering the entirety of the Paso Robles Groundwater Basin within the land use jurisdiction of the County of San Luis Obispo." [Added 2015, Ord. 3308]

during that gap.[2] This means that the projected deficit to address with programs and projects would be understated and may impact the ability to meet interim milestones for SGMA compliance.

Additionally, the County Board is considering the process to change certain ministerial land use decisions into discretionary land use decisions in May, which may involve refining related provisions in the CWWCP (e.g. the CWWCP changed irrigating previously unirrigated lands to a discretionary process for the Paso Basin). Consideration of this request to address the "gap" while changes are being considered would be relevant to that Board discussion.

ATTACHED

i. Draft Letter Requesting the County Board's Consideration of Extending the Water Conservation (Offset) Ordinance Sunset Date

[2] Draft Chapter 6 Water Budget, pg. 27. "The CWWCP will sunset with the adoption of GSP, however, conservation provisions in the GSP are expected to be similar to the existing program. This expectation supports the approach of using 2016 crop acreage and irrigation efficiencies for the future water budget."

PASO BASIN COOPERATIVE COMMITTEE

March 6, 2019

Ms. Debbie Arnold, Chairperson
San Luis Obispo County Board of Supervisors
1055 Monterey Street Suite D430
San Luis Obispo, CA 93408

Subject: Request that the County Board consider Extending the Water Conservation (Offset) Ordinance Sunset Date

Dear Ms. Arnold:

At its meeting on March 6, 2019, the Paso Basin Cooperative Committee authorized me to sign this letter requesting that the County Board direct staff to bring an item to your Board to consider extending the Water Conservation (Offset) Ordinance sunset date.

The Countywide Water Conservation Program (CWWCP) was established by the Board of Supervisors (Board) in response to the declining groundwater levels in County groundwater basins, including the Paso Robles Groundwater Subbasin. A key strategy of the CWWCP was to ensure all new construction and new or expanded agriculture offset its predicted water use by reducing existing water use on other properties within the same groundwater basin. The CWWCP will sunset with the adoption of GSP, however the conservation provisions that are expected to be included in the GSP will not go into effect until subsequent action is taken. That action will likely be subject to the California Environmental Quality Act (CEQA) and may take significant time to implement.

It is our understanding that there is no direction currently from the County Board to modify the sunset date of the CWWCP so that there is no "gap" between CWWCP sunset and adoption of subsequent GSP conservation provisions. Further, the draft of Chapter 6 of the Groundwater Sustainability Plan does not include a quantification of increased demand on the basin associated with increased land use activity during that gap. This means that the projected deficit to address with programs and projects would be understated and may impact the ability to meet interim milestones for SGMA compliance.

It is also our understanding that the County Board is considering the process to change certain ministerial land use decisions into discretionary land use decisions in May, which may involve refining related provisions in the CWWCP (e.g. the CWWCP changed irrigating previously unirrigated lands to a discretionary process for the Paso Basin). Consideration of this request to address the "gap" while changes are being considered would be relevant to that Board discussion.

Thank you for your consideration.
Respectfully yours,

John Hamon
Chairperson, Paso Basin Cooperative Committee
Council Member, City of El Paso de Robles

PASO BASIN COOPERATIVE COMMITTEE
March 6, 2019

Agenda Item #9 – Consider recommending that each GSA receive and file Paso Robles Subbasin GSP Draft Sections and provide direction as necessary

SUBJECT

Consider recommending that each GSA receive and file Draft GSP Chapters and Appendices and provide direction as necessary.

RECOMMENDATION

It is recommended that the Paso Basin Cooperative Committee (Committee) receive and consider recommending that each GSA receive and file Paso Robles Subbasin GSP Draft Chapters and Appendices.

GSP Chapter		**Status**
1	Introduction to Paso Robles Subbasin GSP	To be included in Compiled Draft GSP, anticipated mid 2019
2	Agency Information	To be included in Compiled Draft GSP, anticipated mid 2019
3	Description of Plan Area	To be included in Compiled Draft GSP, anticipated mid 2019
4	Hydrogeologic Conceptual Model	To be included in Compiled Draft GSP, anticipated mid 2019
5	Groundwater Conditions	To be included in Compiled Draft GSP, anticipated mid 2019
6	**Water Budgets**	**To be considered by Committee on 3/6/2019**
7	**Monitoring Networks**	**To be considered by Committee on 3/6/2019**
8	**Sustainable Management Criteria**	**To be considered by Committee on 3/6/2019**
9	*Projects and Management Actions*	*Under Development, anticipated 4/24/2019*
10	*Plan Implementation*	*Anticipated 4/24/2019*
11	*Notice and Communications*	*Under Development, anticipated 4/24/2019*
12	*Interagency Agreements*	*Anticipated 4/24/2019*
	Reference List	*Anticipated 4/24/2019*
GSP Appendix		**Status**
A	Additional Well Logs Used to Supplement Cross Sections	**To be considered by Committee on 3/6/2019**
B	Identification of Groundwater Dependent Ecosystems	**To be considered by Committee on 3/6/2019**
C	Hydrographs	**To be considered by Committee on 3/6/2019**
D	Summary of Model Update and Modifications	**To be considered by Committee on 3/6/2019**
E	Monitoring Protocols	**To be considered by Committee on 3/6/2019**
F	Communication & Engagement Plan	To be included in Compiled Draft GSP anticipated mid 2019
G	Paso Robles Formation Aquifer RMS Hydrographs and Well Data	**To be considered by Committee on 3/6/2019**

PREPARED BY

Not Applicable – See referenced Draft GSP Chapters and Appendices provided by the GSP Consultant Team, available during public comment period at: www.pasogcp.com

REFERENCED

i. Chapter 6. Groundwater Budgets
ii. Chapter 7. Monitoring Networks
iii. Chapter 8. Sustainable Management Criteria
iv. Appendix A. Additional Well Logs Used to Supplement Cross Sections
v. Appendix B. Identification of Groundwater Dependent Ecosystems
vi. Appendix C. Hydrographs
vii. Appendix D. Summary of Model Update and Modifications
viii. Appendix E. Monitoring Protocols
ix. Appendix G. Paso Robles Formation Aquifer RMS Hydrographs and Well Data

These Chapters and Appendices will be posted at: www.pasogcp.com for duration of public comment period.

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