PASO ROBLES SUBBASIN GSP DEVELOPMENT

Paso Robles Basin GSAs

City of Paso Robles County of San Luis Obispo San Miguel CSD Shandon-San Juan Water District

April 24, 2019

Project Status Update



Presentation Outline

- GSP Schedule and Chapter Delivery
- Projects and Actions (Chapter 9)
- Introduction to Plan Implementation (Chapter 10)
- Communication and Engagement (Chapter 11)
- Appendices H, I, and J

GSP Schedule



GSP Chapters

- CHAPTER 1.
- CHAPTER 2.
- CHAPTER 3.
- CHAPTER 4.
- CHAPTER 5.
- CHAPTER 6.
- CHAPTER 7.
- CHAPTER 8.
- CHAPTER 9.
- CHAPTER 10.
- CHAPTER 11.
 - Appendix F
- CHAPTER 12.

- Introduction to Paso Robles Subbasin GSP
- Agency Information
- Description of Plan Area
- Hydrogeologic Conceptual Model
- Groundwater Conditions
 - Water Budgets
- Monitoring Networks
 - Sustainable Management Criteria
 - **Projects and Management Actions**
- Plan Implementation
- Notice and Communications
- Communications and Engagement Plan
- Interagency Agreements

Receive/Recommend 7/25/18 Receive/Recommend 7/25/18 Receive/Recommend 7/25/18 Receive/Recommend 9/12/18 Receive/Recommend 10/17/18 Receive/Recommend 3/6/19 Receive/Recommend 3/6/19 Receive/Recommend 3/6/19 Receive/Recommend 4/24/19 Update 4/24/19 Receive/Recommend 4/24/19 Receive/Recommend 7/25/18 Pending

Chapter 9: Projects and Actions

SGMA Regulations §354.42 et seq.

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| 9 | MANAGEMENT ACTIONS AND PROJECTS | | | | | | | | | | | |
| 9.1 | Introduction | | | | | | | | | | | |
| 9.2 | Implementation Approach and Criteria for Management Actions and Projects | | | | | | | | | | | |
| 9.3 | Level 1 Management Actions | | | | | | | | | | | |
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| | 9.3.2 Groundwater Management Program | | | | | | | | | | | |
| | 9.3.3 Promote Stormwater Capture | | | | | | | | | | | |
| | 9.3.4 Voluntary Fallowing of Agricultural Land | | | | | | | | | | | |
| | 9.3.5 Groundwater Pumping Fees | | | | | | | | | | | |
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| | 9.6.2 Watershed Protection and Management | | | | | | | | | | | |
| | 9.6.3 Retain and Enforce the Existing Water Export Ordinance | | | | | | | | | | | |
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DRAFT Paso Robles GSF April 17, 2019

Management Actions & Projects Development

| February 1, 2019 | Released Fact Sheet and supplemental information outlining approach to management actions & projects |
|-----------------------------|--|
| March <mark>6</mark> , 2019 | Updated Cooperative Committee on Fact Sheet and supplemental information |
| | Public meetings to review Fact Sheet |
| March 20, 2019 | Presented Chapter 9 to GSA staff based on revised Fact Sheet approach |
| April 3, 2019 | Received comments from GSA staff and revised projects and actions in Chapter 9 |
| April 24, 2019 | Present to Cooperative Committee |

Management Actions & Projects Goals

- One of the two fundamental chapters of the GSP
- Provide a mechanism for achieving sustainability
 - No undesirable results for all five sustainability indicators at 2040
- Sustainability measured in 2040

Project and Management Actions Requirements

- Identify triggers for each management actions or project
- Describe public notice for each management action or project
- Describe how the management actions or projects mitigate overdraft
- Summarize permitting and regulatory requirements
- Estimate a time table for implementation (Chapter 10)
- Explain the anticipated benefit of each management action or project
- Describe the legal authority for implementing each action
- Estimate the cost of each management action and project (incorporated into Chapters 9 & 10)

Management Actions & Projects Overview

- Adaptive Management
 - Initiate projects/actions
 - Monitor and assess success
 - Potentially update or modify projects/actions
 - Public meetings to agree upon additional projects/actions
 - Initiate additional projects/actions
- Initial focus on all Level 1 management actions
- Ramp up to more demanding management actions and/or projects
- De minimis pumpers exempt

Potential Management Actions & Project Hierarchy

Management Action

Level 1

- Best water use practices
- Groundwater Management Program
- Flat pumping fee

Level 2

- Groundwater Conservation Program
- Raise funds for land retirement & projects

Projects

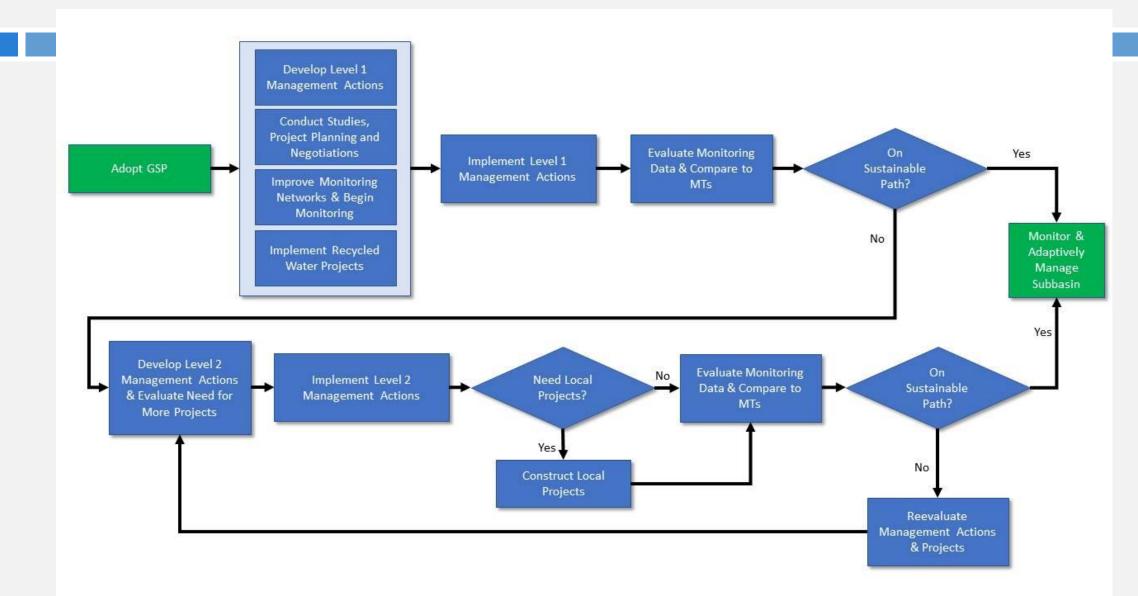
Priority projects

- Eight projects
- Designed to reasonably reach sustainability

Substitute projects

- Four projects
- Contribute to sustainability

Management Actions & Project Flowchart



Level 1 Management Actions

- Trigger is declining groundwater levels implement immediately –
- Develop and promote best water use practices
- Direct outreach to every greater than de minimis well owner
- Encourage or mandate
 - Rotation of pumping schedules
 - Minimum well spacing requirements for new wells
 - Require reporting measured or estimated groundwater pumping amounts
- Impose groundwater pumping fee to cover operational and planning costs
 - Potentially increase fees as necessary and legally acceptable

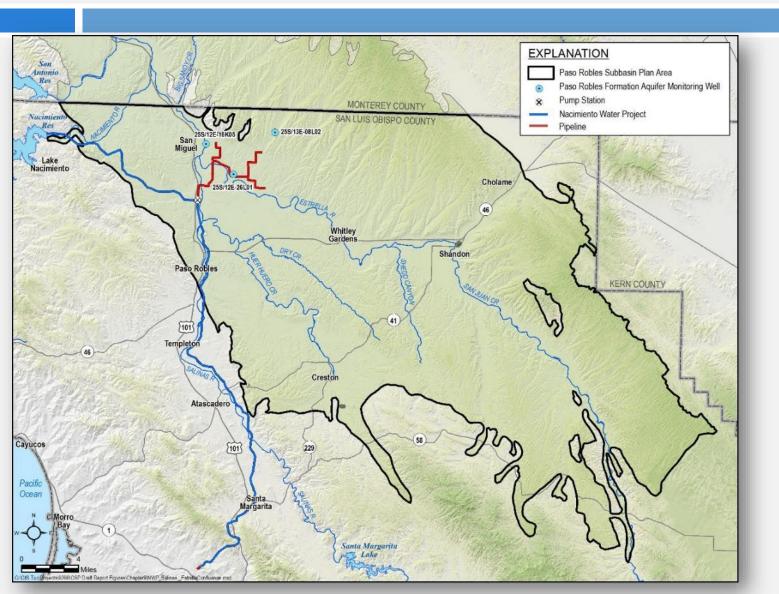
Level 2 Management Actions

- Trigger: Data establishes that Level 1 management actions are insufficient
- Groundwater conservation program
 - May be similar to the management approach in the previous Fact Sheet and include:
 - tiered pumping fees
 - establishing pumping levels for the tiered fees (not water rights)
 - Allowance of carry-over and relocation of pumping (similar to existing offset ordinance)
- Acquisition of pumping allowances to reduce pumping

Priority Projects

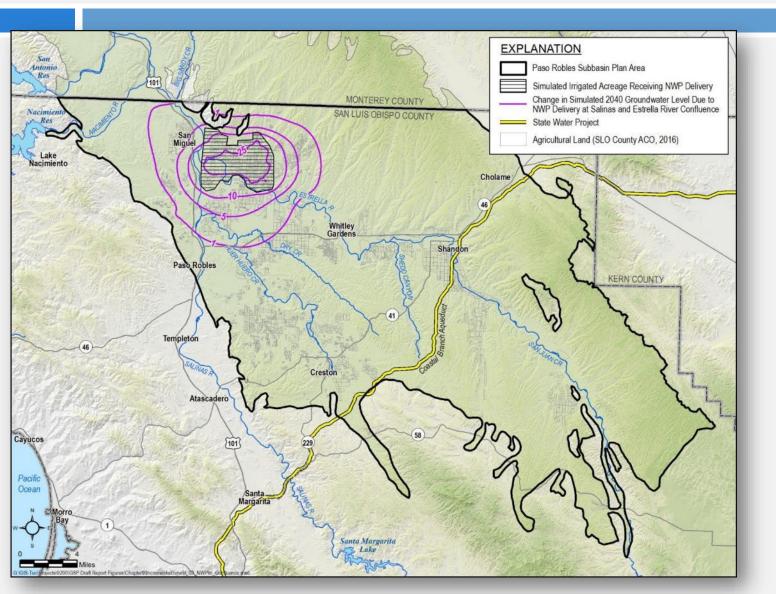
- Triggers:
 - Data establishes that Level 1 management actions are insufficient
 - After five years, groundwater levels in the area of the proposed project continue to decline at unsustainable rates
- 1. City Recycled Water Delivery
- 2. San Miguel Recycled Water Delivery
- 3. State Water Project Injection south of Creston
- 4. State Water Project Injection north of Creston
- 5. Nacimiento Water Delivery to Salinas and Estrella River Confluence
- 6. Nacimiento Water Delivery North of City of Paso Robles
- 7. Nacimiento Water Delivery East of City of Paso Robles
- 8. Salinas Dam Expansion

Example Priority Project: NWP Delivered to Confluence of Estrella and Salinas River



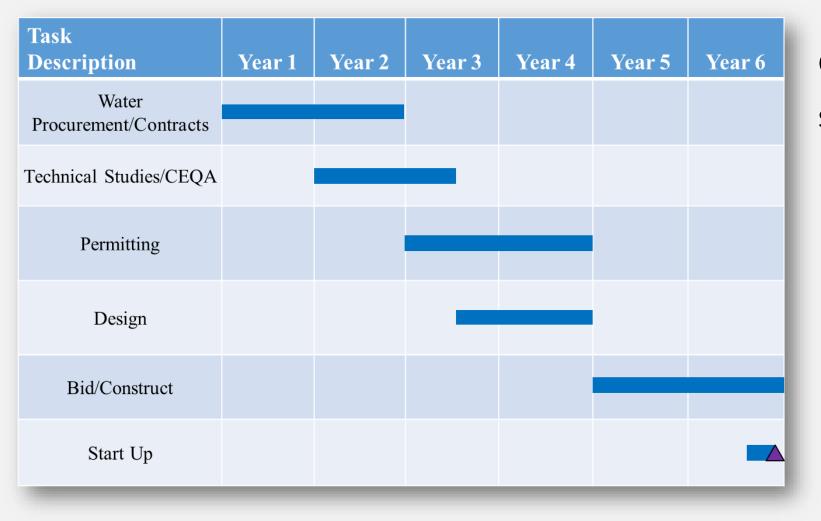
Location and generalized infrastructure map

Example Priority Project: NWP Delivered to Confluence of Estrella and Salinas River



Benefit location and quantification map

Example Priority Project: NWP Delivered to Confluence of Estrella and Salinas River



Generalized cost and schedule

Projects Considerations

- Water rights/water access negotiations are necessary
- Costs are generalized and will change

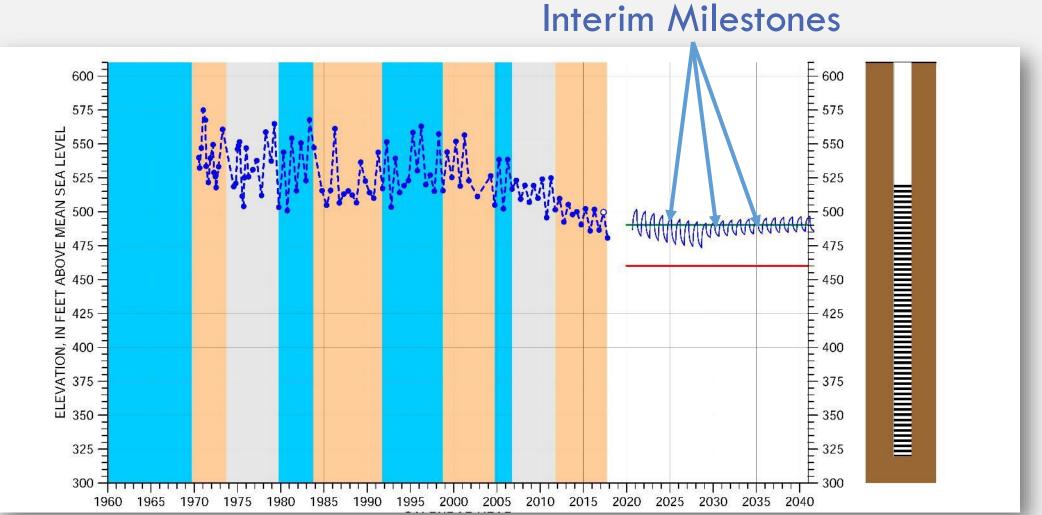
• Feasibility studies, permitting, and pilot testing are required



Additional Best Practices

- Should be implemented and encouraged
- Difficult to quantify reliable benefit
- 1. Continue urban and rural residential conservation
- 2. Promote stormwater capture
- 3. Watershed protection and management
- 4. Retain and enforce the existing water export ordinance

Ability to Achieve Sustainability



Projects and Management Actions Cost

- Detailed in Chapter 10: Implementation Plan
- First five year budget
 - Annual operations costs including annual reporting
 - Improve and expand monitoring systems
 - Refine and implement Level 1 management actions
 - Implement well registration program
 - Refine Level 2 management actions costs do not cover implementation
 - Preliminary studies to address data gaps and plan priority projects
- Estimated cost \$2.0M/year

Preliminary Management Actions & Projects Schedule

| 0 | instruction of the second second | | Duration | Start | Finish | | 2020 | | | 2021 | | | 2022 | | | 2023 | | 2024 | | | 2025 | |
|--------------------|--|---|--|--|--|---|--|--|--|---|---|--|--|---|---|--|--|---|---|--|--|---|
| | Submit GSP to DW | | 0 mons | 1/31/20 | 1/31/20 | Qtr 4 | Qtr 1 0 | tr 2 Q | tr 3 Qtr 4 | Qtr 1 Qt | r 2 Qtr i | 3 Qtr 4 | Qtr 1 Qtr | 2 Qtr 3 | Qtr 4 | Qtr 1 Qtr 2 | Qtr 3 Qtr | 4 Qtr 1 | Qtr 2 0 | tr 3 Qtr 4 | Qtr 1 | Qtr 2 Qtr |
| | Submit GSP to DW | n | OTHONS | 1/51/20 | 1/31/20 | | | | | | | | | | | | | | | | | |
| | GSP Administratio | n | 67.25 mons | 1/31/20 | 3/27/25 | | + | | | | | | | | | | | | | | v | |
| | Governance and Structure | i Management | 3 mons | 1/31/20 | 4/23/20 | | - | | | | | | | | | | | | | | | |
| | Develop/Deploy | v Website | 3 mons | 3/27/20 | 6/18/20 | | 9 | | | | | | | | | | | | | | | |
| 0 | Meetings | | 65.25 mons | 2/15/20 | 2/15/25 | | \$ | \$ | 0 0 | \$ (| <u>ه</u> | 1 | ۵ ¢ | 0 | ¢ | \$ \$ | ۵ ۵ | Ŷ | \diamond | ۵ ¢ | ¢ | |
| | Reporting | | 54.2 mons | 2/1/21 | 3/27/25 | | | | | - | | | | | | | | | | | | |
| 0 | Annual Repo | rt to DWR | 54.2 mons | 2/1/21 | 3/27/25 | | | | | - | | | - | | | - | | - | | | | |
| | GSP Amendm | ient | 24 mons | 1/31/23 | 12/2/24 | | | | | | | | | | | - | | | | _ | | |
| | Monitoring Netwo | orks | 68.35 mons | 1/31/20 | 4/28/25 | | ++++ | - | | - | \leftarrow | | | | | | | | | | | + |
| | Supplemental H Investigation | lydrogeologic | 25 mons | 2/28/20 | 1/27/22 | | ++ | | 1 | - | | | • | | | | | | | | | |
| | Develop Groundwater Well Registration Program | | 4 mons | 2/28/20 | 6/18/20 | | Ĩ. | 2 | | | | | _ | | | | | | | | | |
| | | | 67.35 mons | 2/28/20 | 4/28/25 | | 1 | | | | - | | | | | | | | | | | ¥ |
| | Verify Propos | ed Network | 3 mons | 2/28/20 | 5/21/20 | | | | | P | | | | | | | | | | | | |
| | Expand Network | | 22 mons | 4/24/20 | 12/30/21 | | | | | | _ | - | | | | | | | | | | |
| Add Existing Wells | | 6 mons | 4/24/20 | 10/8/20 | | | | 1 | | | | | | | | | | | | | | |
| | Add New V | Vells | 18 mons | 8/14/20 | 12/30/21 | | | q | <u> </u> | | | | | | | | | | | | | |
| 0 | Conduct Mor | itoring | 66.2 mons | 4/1/20 | 4/28/25 | | | | = | - | | | | | | | - | 1 | - | | | |
| 0 | Evaluate Mor | nitoring Network | 53.2 mons | 1/31/21 | 2/27/25 | | | | | | | | | | | | | | | | | |
| 65 Storage Netwo | | k | 3 mons | 7/17/20 | 10/8/20 | | | • | - • | | | | | | | | | | | | | |
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Management Actions & Projects Observations

• Now

• DWR Acceptance

• Future

- Ability to attain sustainability
- Legal issues

Projects and Management Action Observations

DWR Acceptance

- GSP due in January 2020
- DWR's review process is still in development
- Paso GSP addresses all SGMA regulations
- Concepts that DWR might question:
 - Soft triggers for implementing Level 2 management actions and priority projects
 - Groundwater storage / groundwater level proxy

Management Actions & Projects Observations

Ability to Attain Sustainability

- GSP includes ample tools to attain sustainability
 - May require pumping reductions and many projects
- 20 years to achieve sustainability is a short time frame
 - Required early and active adaptive management
 - Triggers should be as definitive as possible
- Increases in pumping immediately following plan adoption will significantly hamper our ability to achieve sustainability
 - Consider continuing offset ordinance
 - Implement management actions that control pumping quickly

Projects and Management Action Observations

Legal Issues

- Get legal advice !!
- Clarify legal restrictions on funding mechanisms
 - Example, prop. 218 or prop. 26 fees must be related to cost of service
 - May influence our ability to increase fees
- Clearly articulate effects of future management actions

Questions on Projects and Actions

Chapter 11: Notice and Communication

Notice and Communication

- Shortest chapter
- All information is in the Communication and Engagement Plan completed in July 2018
 - Communication plan included as an appendix to the GSP
 - Communication plan will be updated to include all public meeting notices, attendee lists, meeting notes, etc.
 - All information is currently stored in the PasoGCP web portal

Questions on Notice and Communication

Appendices H, I, and J

Appendix H – Water Supplies

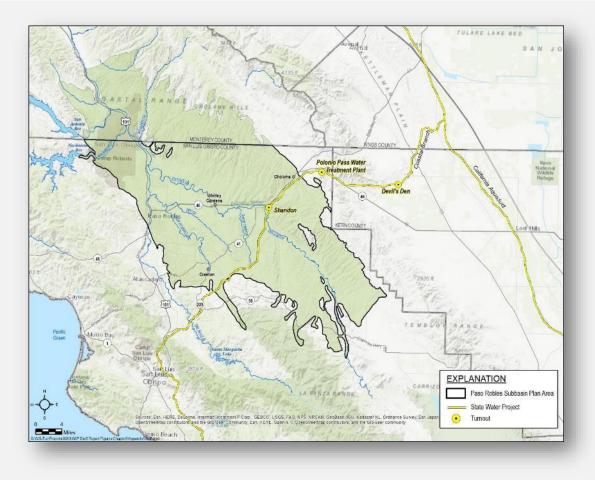
Appendix I – Technical Project Information

Appendix J – Hydrographs with Future Anticipated Groundwater Levels

Appendix H – Water Supplies

- Provides assumptions on water availability for projects
 - Recycled Water
 - State Water Project
 - Nacimiento Water
 - Salinas Dam
 - Stormwater

• Includes existing per acre-foot costs



Appendix H – Water Supplies

Request during March 6, 2019 Cooperative Committee Meeting to provide justification of the 60% State Water Project reliability

Estimates derived from DWR's planning documents

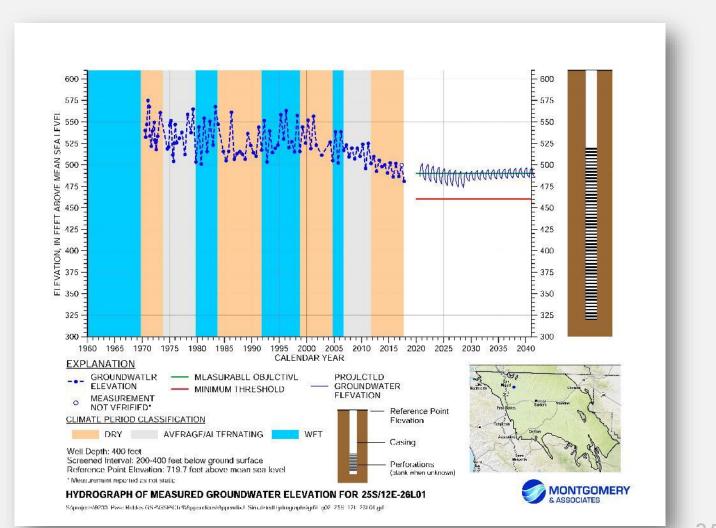
- 2013 Reliability Report estimated 58% long term average reliability
- 2015 Capability Report stated that current reliability was 62% of allocations
- 2017 Capability Report stated that current reliability was 62% of allocations

Appendix I – Technical Project Information

- Provides additional data on the projects in Chapter 9
 - Water reliability
 - Cost assumptions
 - Anticipated water volumes

Appendix J – Hydrographs with Anticipated Future Groundwater Levels

- Includes 12 hydrographs (public wells) with initial minimum thresholds measurable objectives, and simulated future groundwater levels
- More wells currently being added



Presentation Summary

- GSP framework consistent with SMGA regulations and DWR expectations – expected to be approved
- GSAs have adequate tools to achieve sustainability
- Success may depend on temporarily maintaining the offset ordinance or replacing it with a comparable management action
- Need public input on management actions and projects

