PASO ROBLES SUBBASIN GSP DEVELOPMENT

Project Status Update




Paso Robles Basin GSAs

City of Paso Robles

County of San Luis Obispo

San Miguel CSD

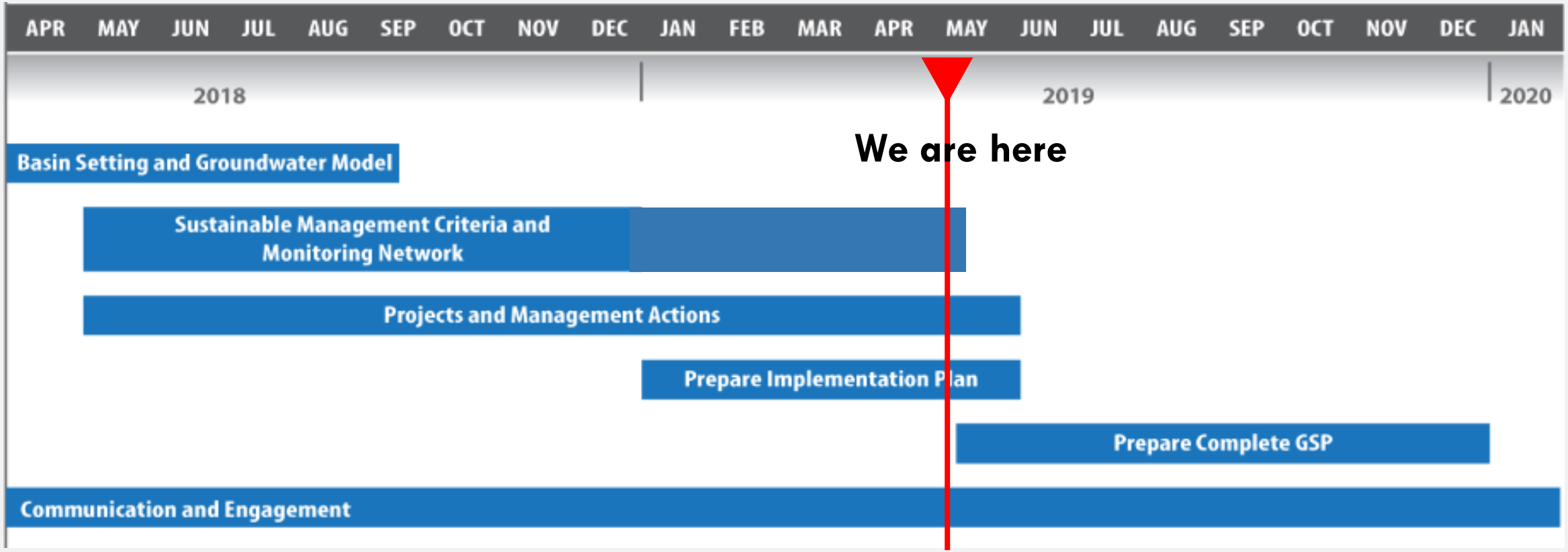
Shandon-San Juan Water District

April 24, 2019

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

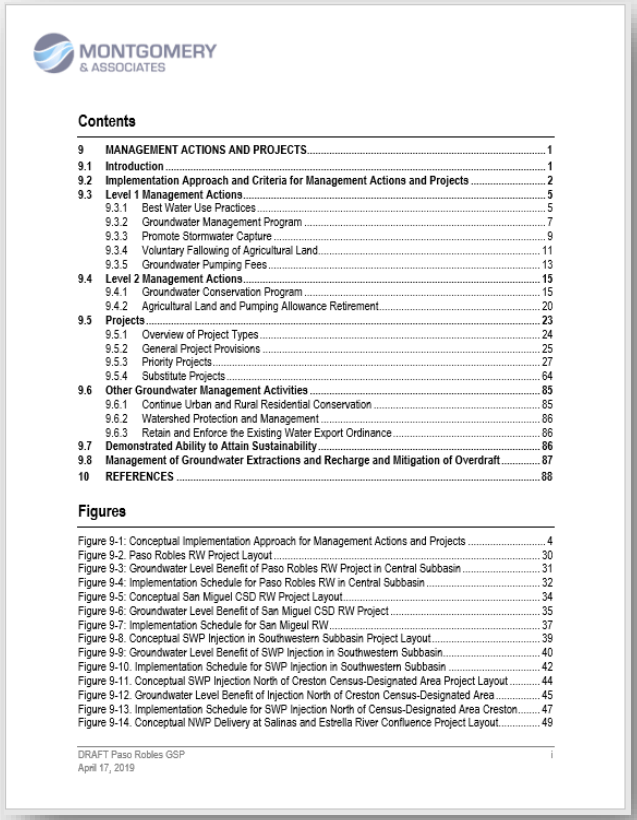


GSP Chapters

CHAPTER 1.	Introduction to Paso Robles Subbasin GSP	Receive/Recommend 7/25/18
CHAPTER 2.	Agency Information	Receive/Recommend 7/25/18
CHAPTER 3.	Description of Plan Area	Receive/Recommend 7/25/18
CHAPTER 4.	Hydrogeologic Conceptual Model	Receive/Recommend 9/12/18
CHAPTER 5.	Groundwater Conditions	Receive/Recommend 10/17/18
CHAPTER 6.	Water Budgets	Receive/Recommend 3/6/19
CHAPTER 7.	Monitoring Networks	Receive/Recommend 3/6/19
CHAPTER 8.	Sustainable Management Criteria	Receive/Recommend 3/6/19
CHAPTER 9.	Projects and Management Actions	Receive/Recommend 4/24/19
CHAPTER 10.	Plan Implementation	Update 4/24/19
CHAPTER 11.	Notice and Communications	Receive/Recommend 4/24/19
Appendix F	Communications and Engagement Plan	Receive/Recommend 7/25/18
CHAPTER 12.	Interagency Agreements	Pending

Chapter 9: Projects and Actions

SGMA Regulations §354.42 *et seq.*



MONTGOMERY & ASSOCIATES

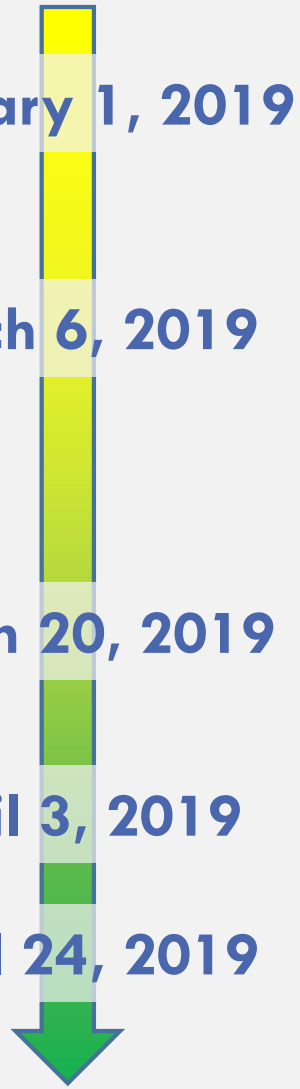
Contents

9 MANAGEMENT ACTIONS AND PROJECTS 1
9.1 Introduction 1
9.2 Implementation Approach and Criteria for Management Actions and Projects 2
9.3 Level 1 Management Actions 5
9.3.1 Best Water Use Practices 5
9.3.2 Groundwater Management Program 7
9.3.3 Promote Stormwater Capture 9
9.3.4 Voluntary Fallowing of Agricultural Land 11
9.3.5 Groundwater Pumping Fees 13
9.4 Level 2 Management Actions 15
9.4.1 Groundwater Conservation Program 15
9.4.2 Agricultural Land and Pumping Allowance Retirement 20
9.5 Projects 23
9.5.1 Overview of Project Types 24
9.5.2 General Project Provisions 25
9.5.3 Priority Projects 27
9.5.4 Substitute Projects 64
9.6 Other Groundwater Management Activities 85
9.6.1 Continue Urban and Rural Residential Conservation 85
9.6.2 Watershed Protection and Management 86
9.6.3 Retain and Enforce the Existing Water Export Ordinance 86
9.7 Demonstrated Ability to Attain Sustainability 86
9.8 Management of Groundwater Extractions and Recharge and Mitigation of Overdraft 87
10 REFERENCES 88

Figures

Figure 9-1: Conceptual Implementation Approach for Management Actions and Projects 4
Figure 9-2. Paso Robles RW Project Layout 30
Figure 9-3: Groundwater Level Benefit of Paso Robles RW Project in Central Subbasin 31
Figure 9-4: Implementation Schedule for Paso Robles RW in Central Subbasin 32
Figure 9-5: Conceptual San Miguel CSD RW Project Layout 34
Figure 9-6: Groundwater Level Benefit of San Miguel CSD RW Project 35
Figure 9-7: Implementation Schedule for San Migeul RW 37
Figure 9-8. Conceptual SWP Injection in Southwestern Subbasin Project Layout 39
Figure 9-9: Groundwater Level Benefit of SWP Injection in Southwestern Subbasin 40
Figure 9-10. Implementation Schedule for SWP Injection in Southwestern Subbasin 42
Figure 9-11. Conceptual SWP Injection North of Creston Census-Designated Area Project Layout 44
Figure 9-12. Groundwater Level Benefit of Injection North of Creston Census-Designated Area 45
Figure 9-13. Implementation Schedule for SWP Injection North of Census-Designated Area Creston 47
Figure 9-14. Conceptual NWP Delivery at Salinas and Estrella River Confluence Project Layout 49

Management Actions & Projects Development



- Released Fact Sheet and supplemental information outlining approach to management actions & projects
- Updated Cooperative Committee on Fact Sheet and supplemental information
- Public meetings to review Fact Sheet
- Presented Chapter 9 to GSA staff based on revised Fact Sheet approach
- Received comments from GSA staff and revised projects and actions in Chapter 9
- 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

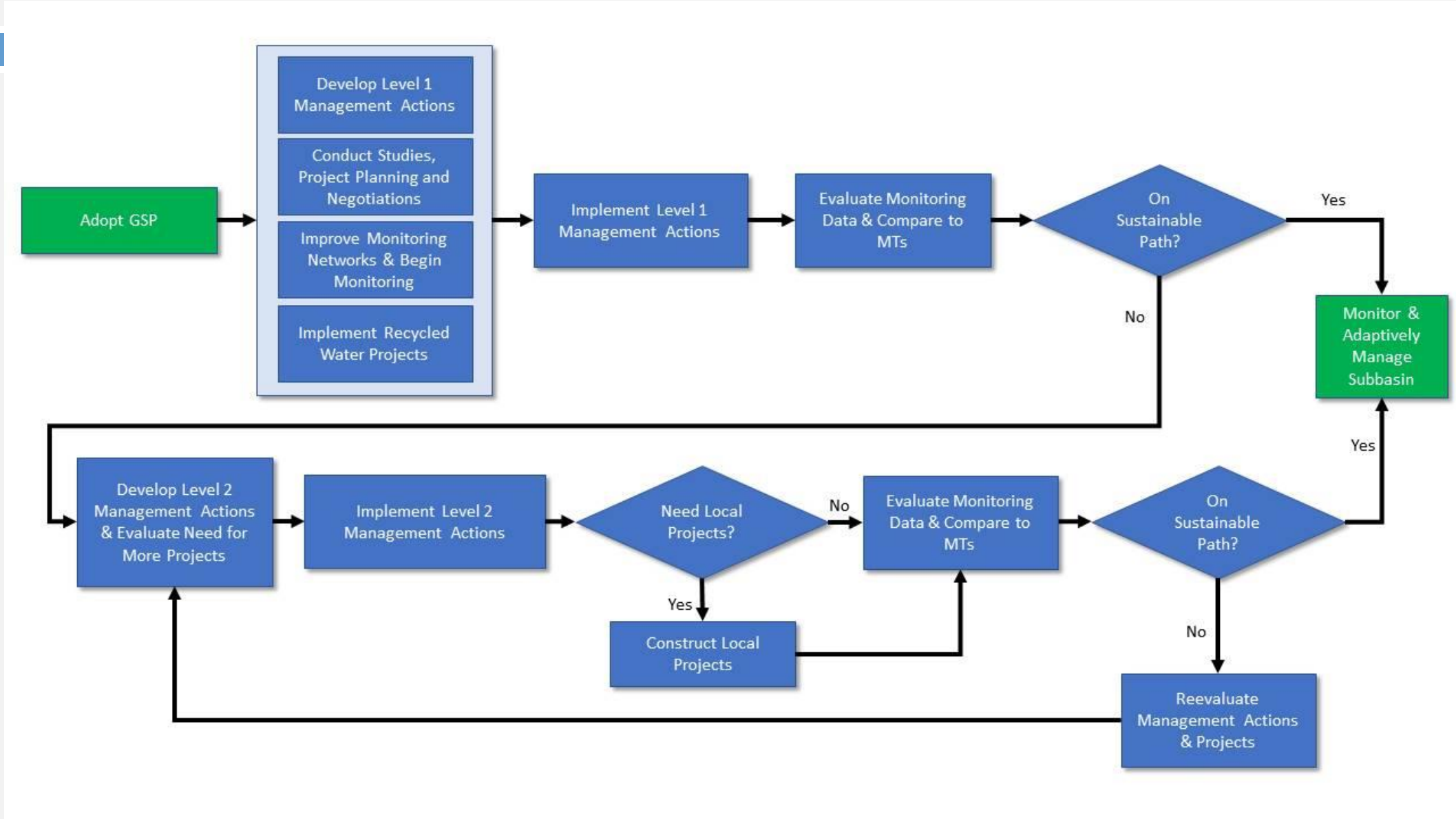
Priority projects

- 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

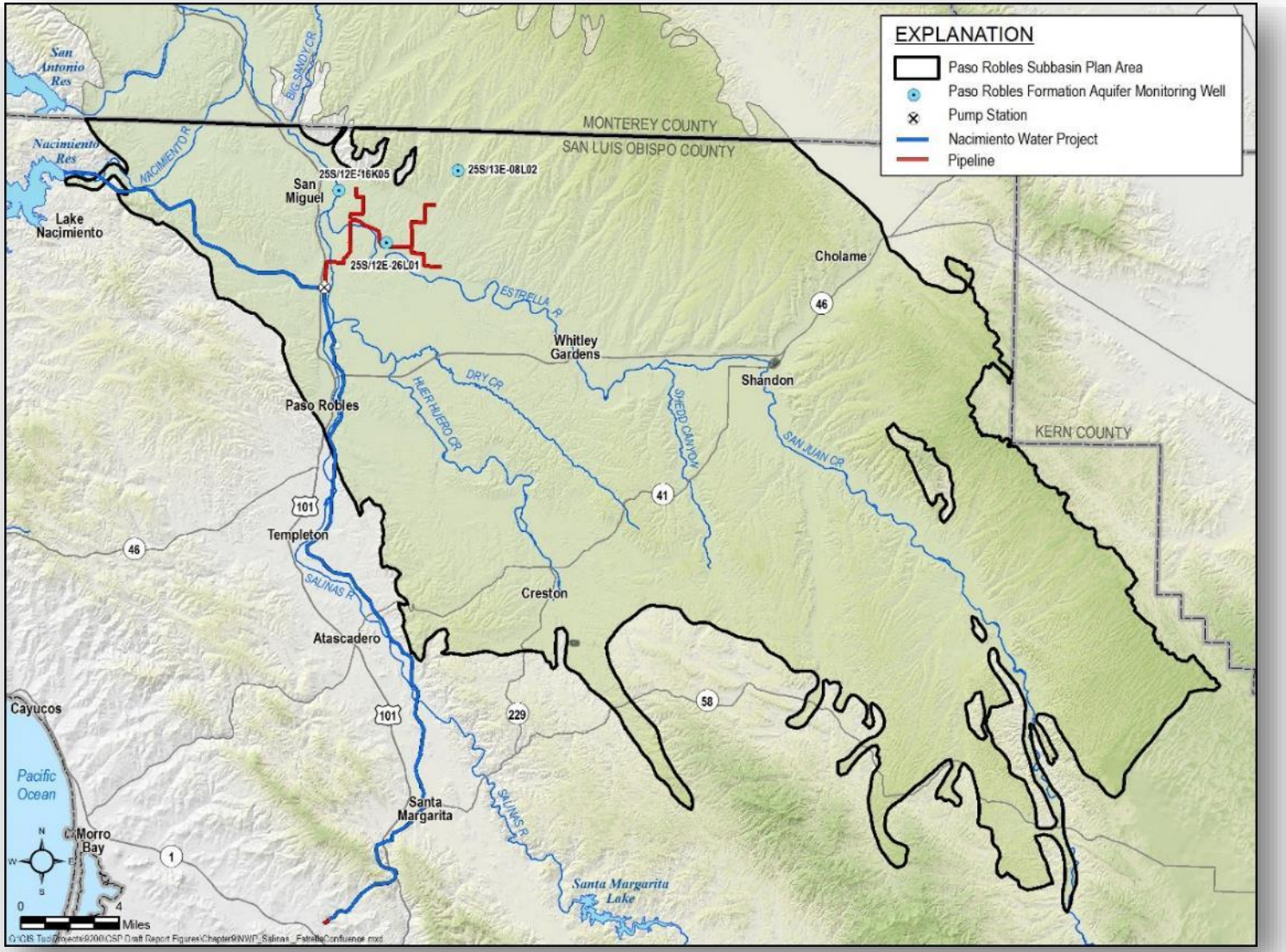
- Trigger: Data establishes that Level 1 management actions are insufficient
- Groundwater conservation program
  - May be similar to the management approach in the previous Fact Sheet and include:
    - tiered pumping fees
    - establishing pumping levels for the tiered fees (not water rights)
    - 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

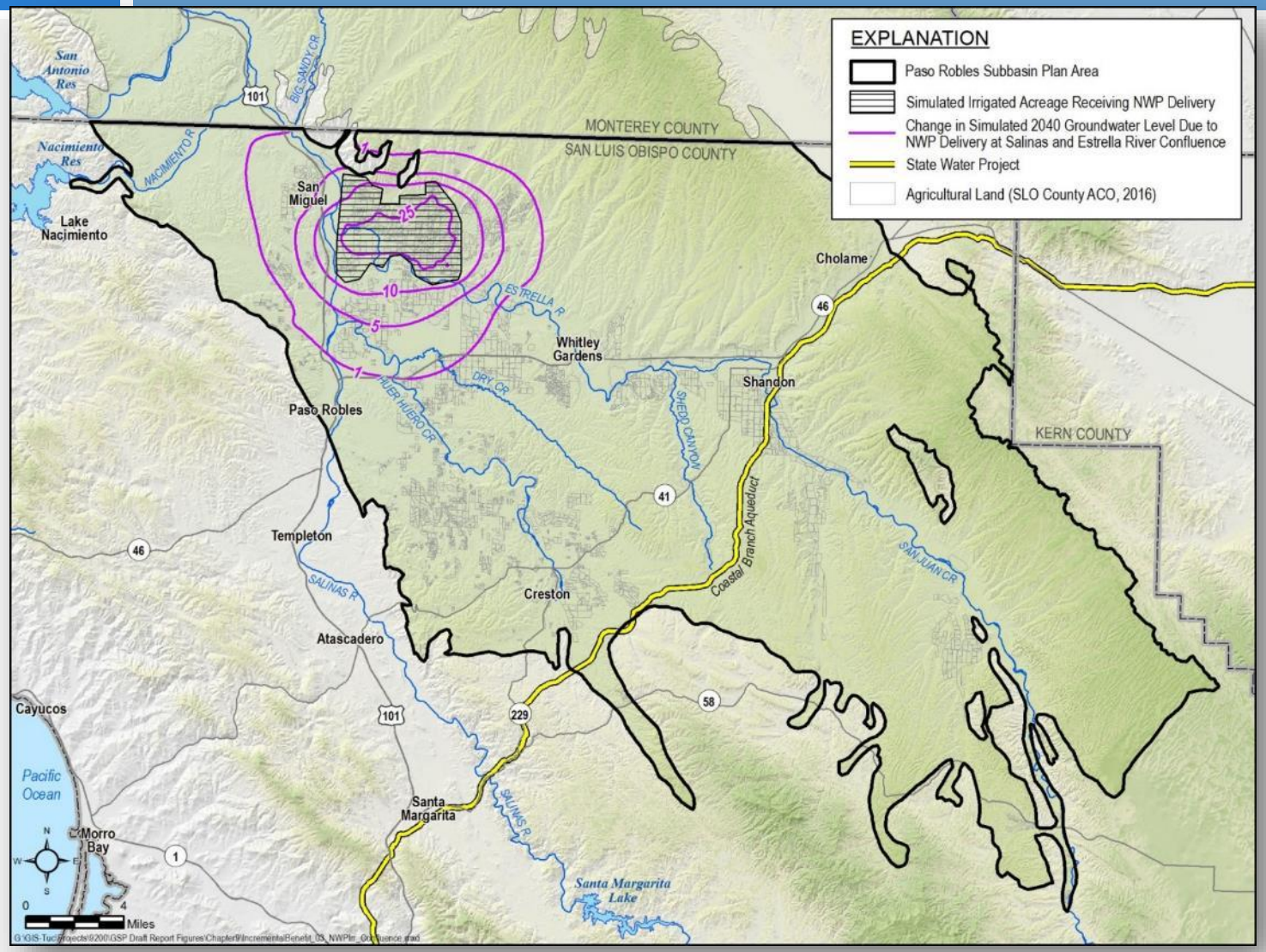
1. City Recycled Water Delivery
2. San Miguel Recycled Water Delivery
3. State Water Project Injection south of Creston
4. State Water Project Injection north of Creston
5. Nacimiento Water Delivery to Salinas and Estrella River Confluence
6. Nacimiento Water Delivery North of City of Paso Robles
7. 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



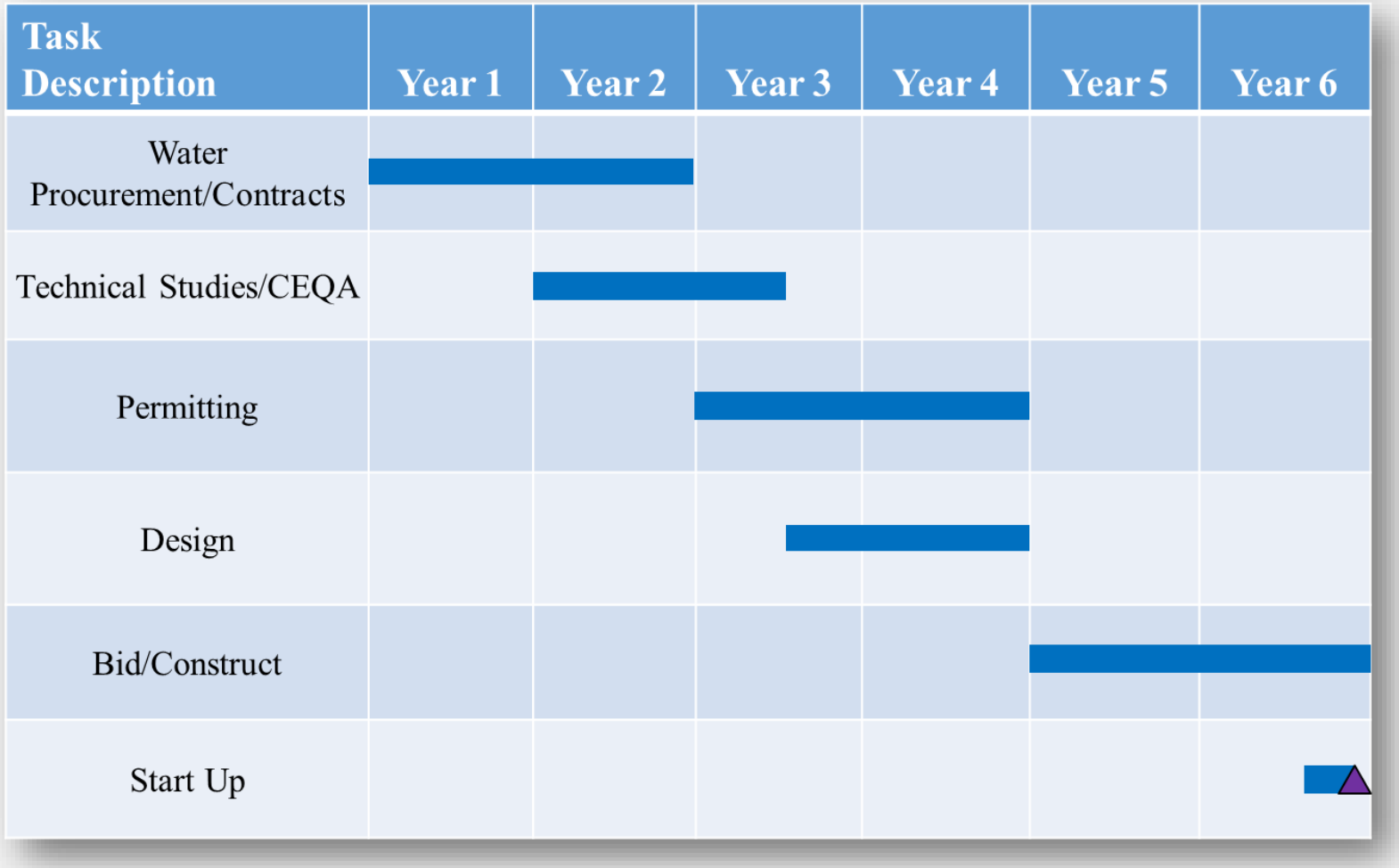
Location and generalized infrastructure map

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

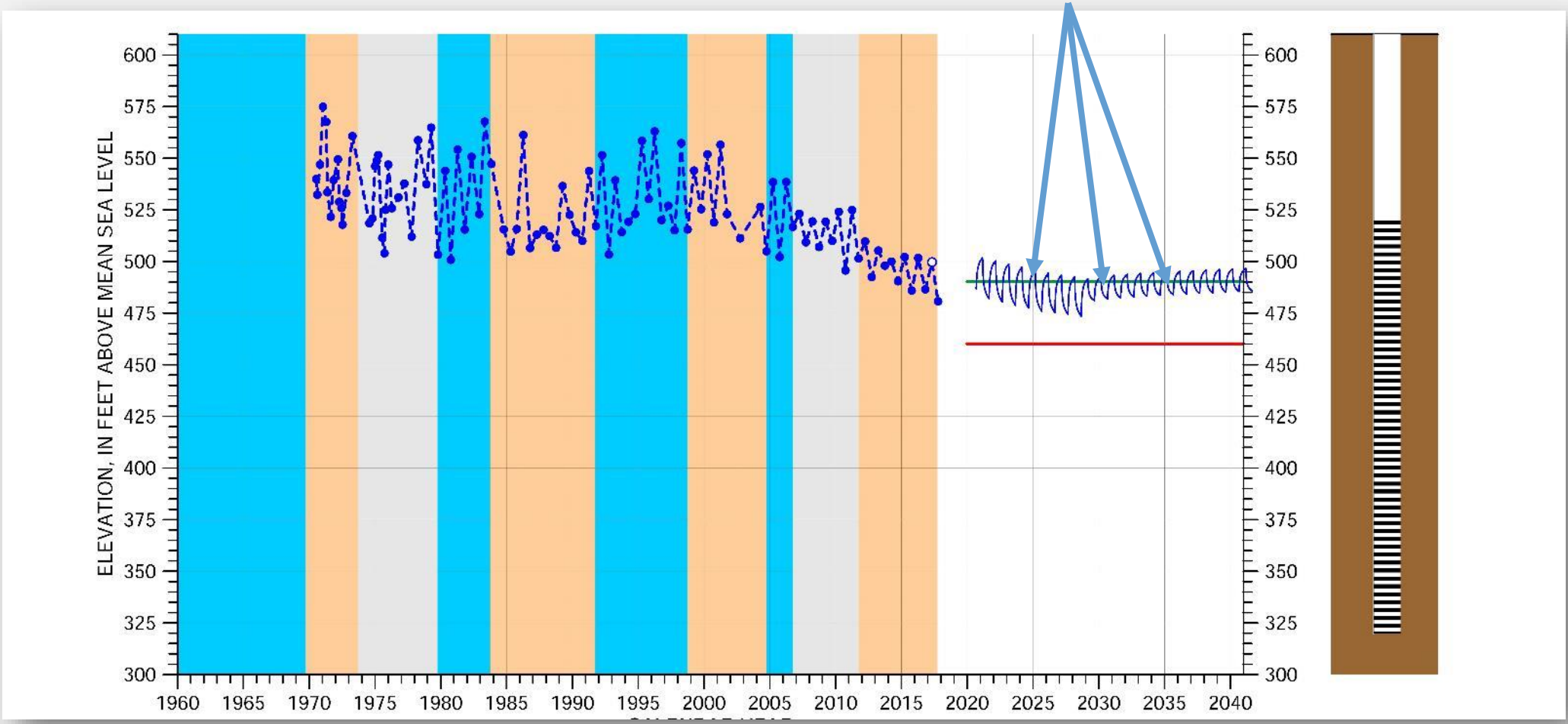
Additional Best Practices

- 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

Interim Milestones



Projects and Management Actions Cost

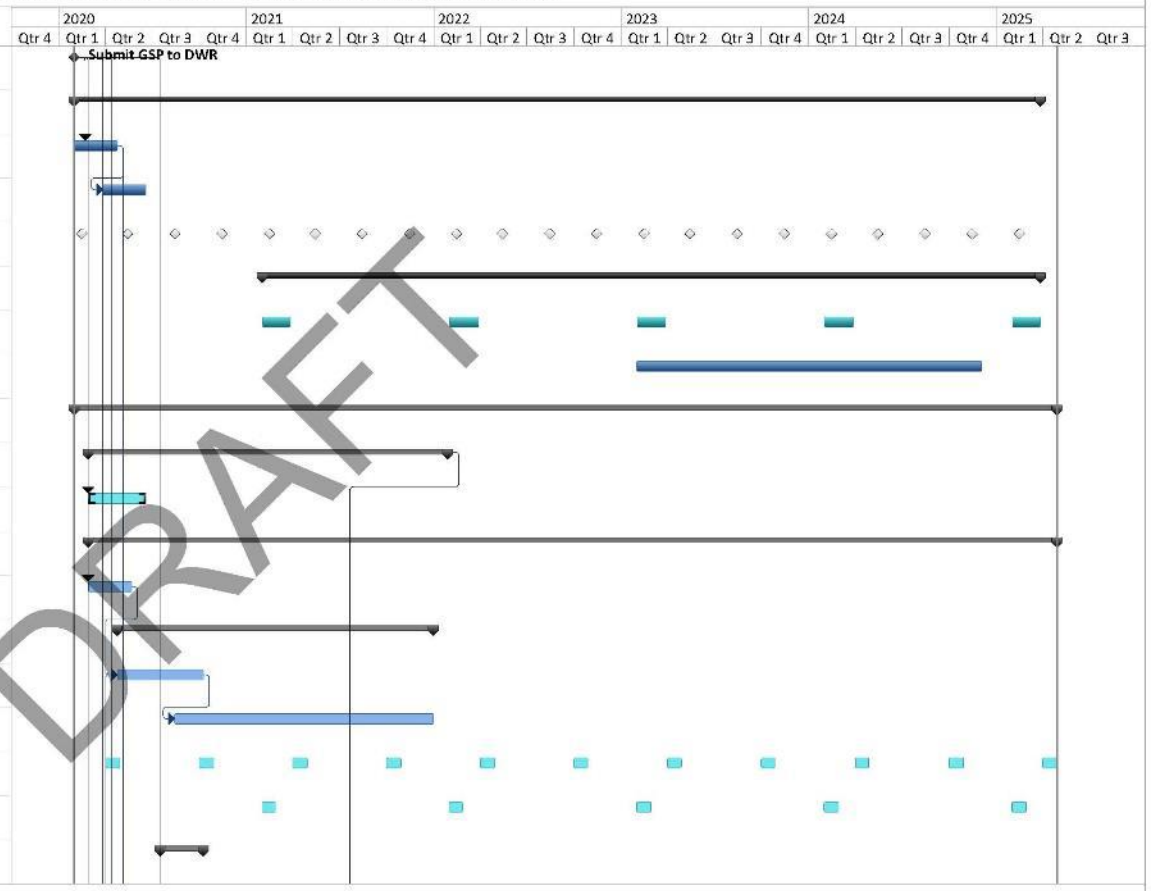
- Detailed in Chapter 10: Implementation Plan
- First five year budget
  - Annual operations costs including annual reporting
  - Improve and expand monitoring systems
  - Refine and implement Level 1 management actions
  - Implement well registration program
  - Refine Level 2 management actions – costs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

Preliminary Management Actions & Projects Schedule

DRAFT

FIGURE 10-1. CONCEPTUAL IMPLEMENTATION SCHEDULE

ID	Task Name	Duration	Start	Finish
1	Submit GSP to DWR	0 mons	1/31/20	1/31/20
2	**GSP Administration**	**67.25 mons**	**1/31/20**	**3/27/25**
3	Governance and Management Structure	3 mons	1/31/20	4/23/20
4	Develop/Deploy Website	3 mons	3/27/20	6/18/20
5	**Meetings**	**65.25 mons**	**2/15/20**	**2/15/25**
27	**Reporting**	**54.2 mons**	**2/1/21**	**3/27/25**
28	**Annual Report to DWR**	**54.2 mons**	**2/1/21**	**3/27/25**
34	GSP Amendment	24 mons	1/31/23	12/2/24
35	**Monitoring Networks**	**68.35 mons**	**1/31/20**	**4/28/25**
36	**Supplemental Hydrogeologic Investigation**	**25 mons**	**2/28/20**	**1/27/22**
41	Develop Groundwater Well Registration Program	4 mons	2/28/20	6/18/20
42	**Groundwater Levels Network**	**67.35 mons**	**2/28/20**	**4/28/25**
43	Verify Proposed Network	3 mons	2/28/20	5/21/20
44	**Expand Network**	**22 mons**	**4/24/20**	**12/30/21**
45	Add Existing Wells	6 mons	4/24/20	10/8/20
46	Add New Wells	18 mons	8/14/20	12/30/21
47	**Conduct Monitoring**	**66.2 mons**	**4/1/20**	**4/28/25**
59	**Evaluate Monitoring Network**	**53.2 mons**	**1/31/21**	**2/27/25**
65	**Storage Network**	**3 mons**	**7/17/20**	**10/8/20**



Project: GSP Implementation sche
Date: 4/19/19

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

Page 1

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

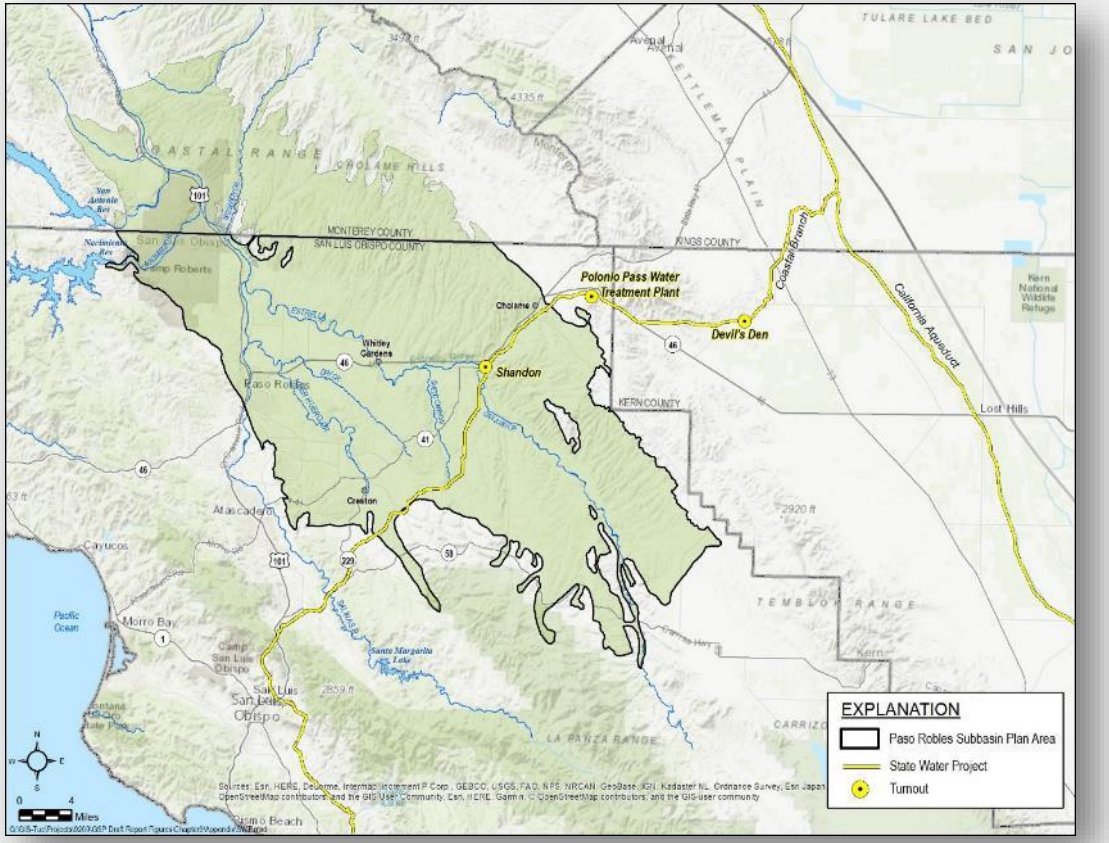
Appendix H – Water Supplies

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

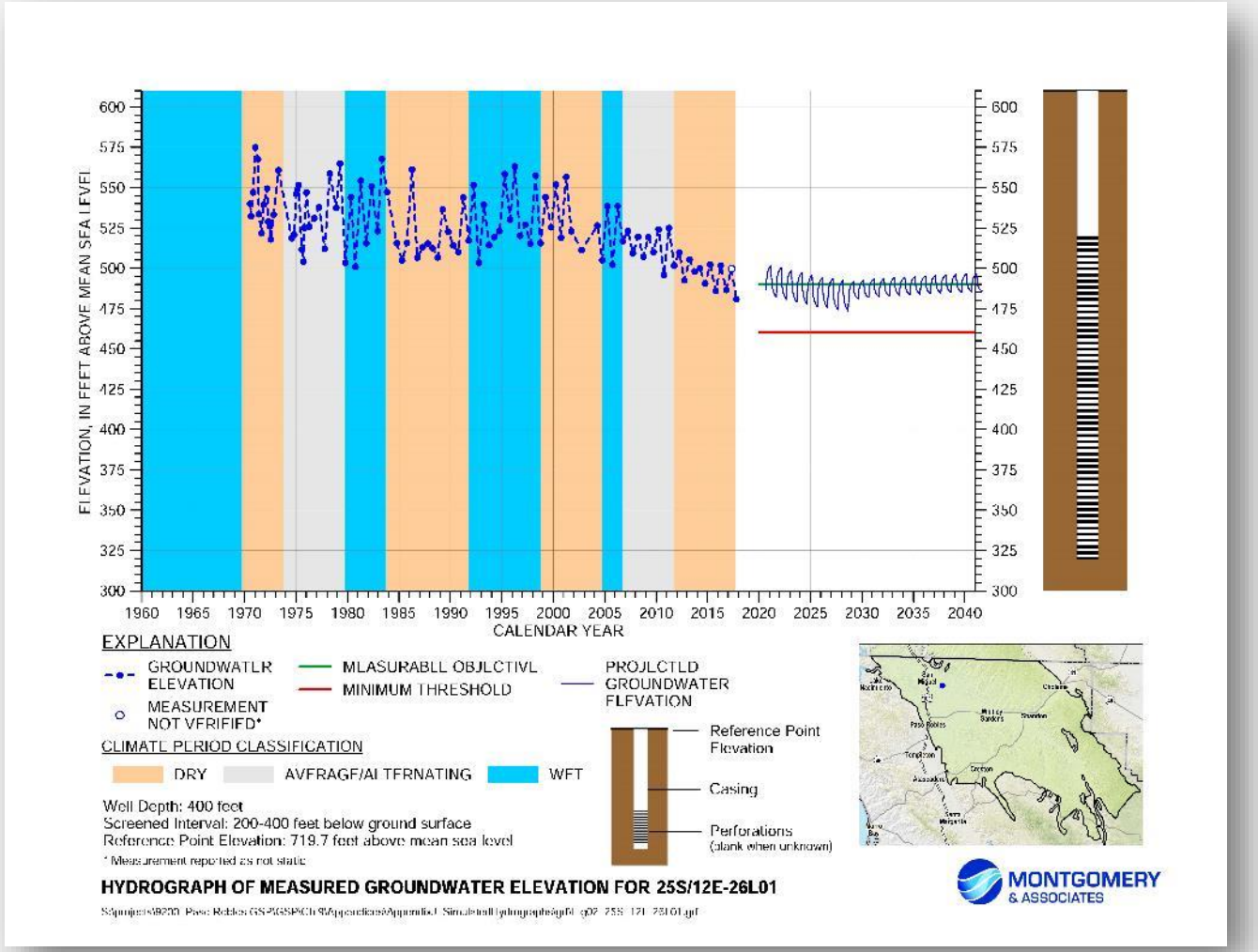
- 2013 Reliability Report estimated 58% long term average reliability
- 2015 Capability Report stated that current reliability was 62% of allocations
- 2017 Capability Report stated that current reliability was 62% of allocations

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

Questions