

Paso Robles Basin Groundwater Management Plan



Presentation Overview

- Review of Paso Basin Analysis Efforts
- The Situation
- The Solutions

Basin Analysis

- Paso Basin Study and Model (2002, 2005, 2009)
- Paso Basin ('PRIOR') Agreement (2005)
- Groundwater Banking Study (2007)
- Support for Grant Application (2007)
- MOU with the City of Paso Robles (2009)
- Resource Capacity Study (2011)

Basin Analysis

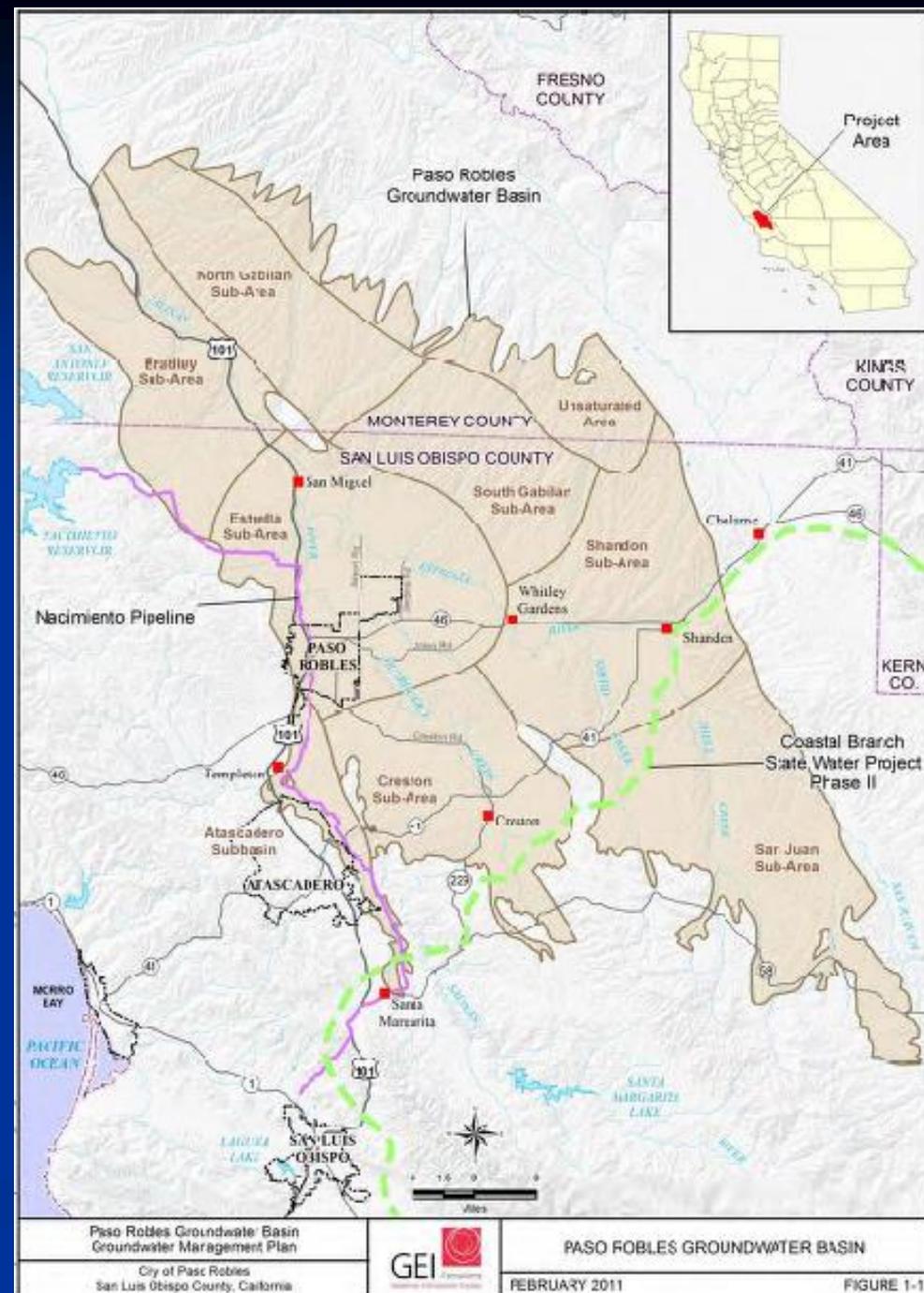
Resource Capacity Study

- RCS Recommendations
 - Create Groundwater Steering Committee
 - Improve Data Collection
 - Model the Data
 - Develop Outreach and Communication Programs
 - Propose Solutions

The Situation

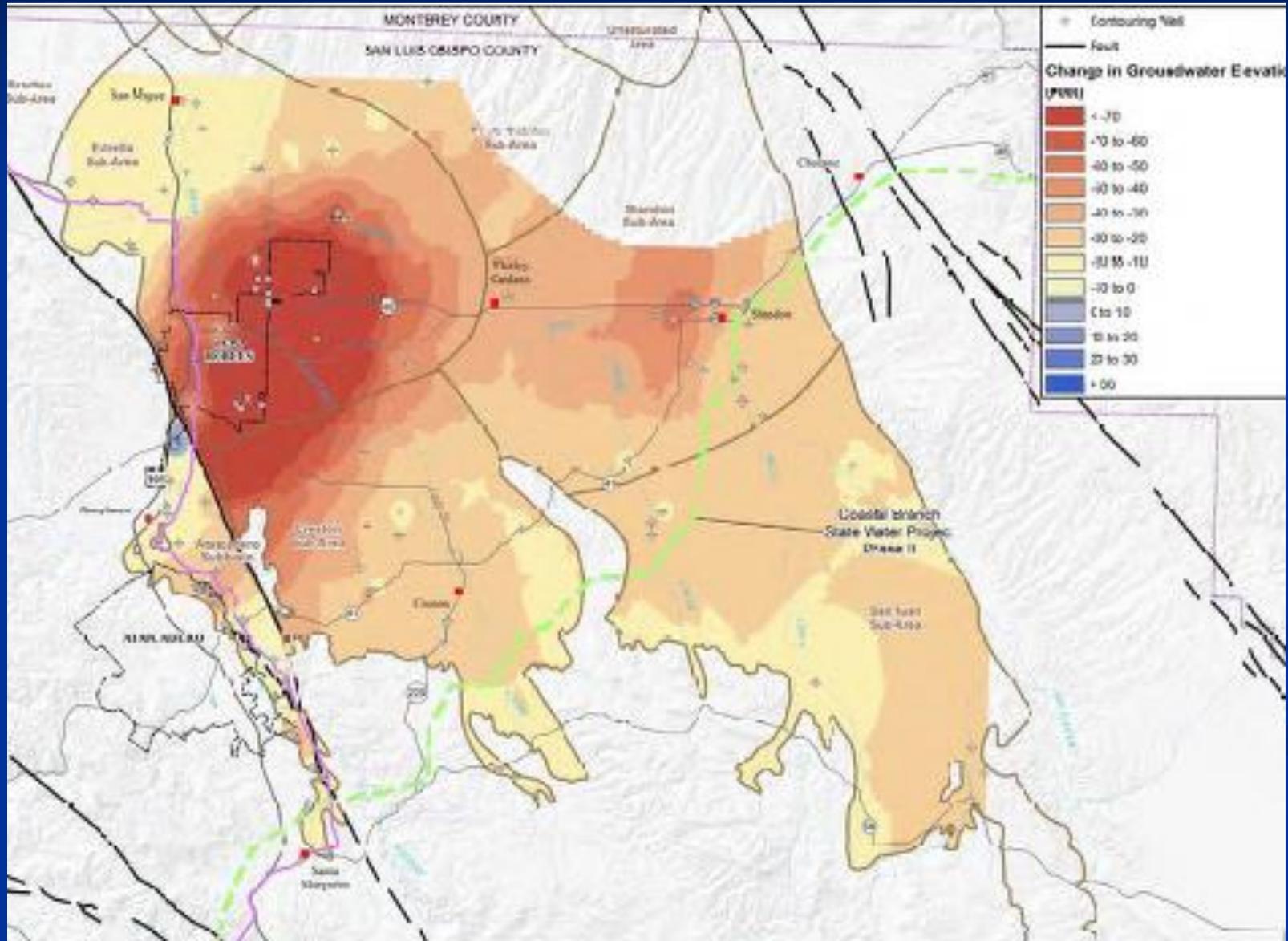
Groundwater Basin Statistics

- 505,000 Acres
- 790 Square Miles
- 8 Subareas



The Situation

Groundwater Elevation Declines



The Situation

Sub-Area WSE Trend Analysis

Mon. Entity The County of San Luis Obispo, CA

Date 05/03/2013

Sub-Area Information	
Sub-Area	Estrella
Basin Name	Paso Robles

Sub-Area Well Records	
Period of Record	1977-2013
Num. BMO Wells	6

Report Information	
Report Start Year	1981
Period of Record	1981-2013

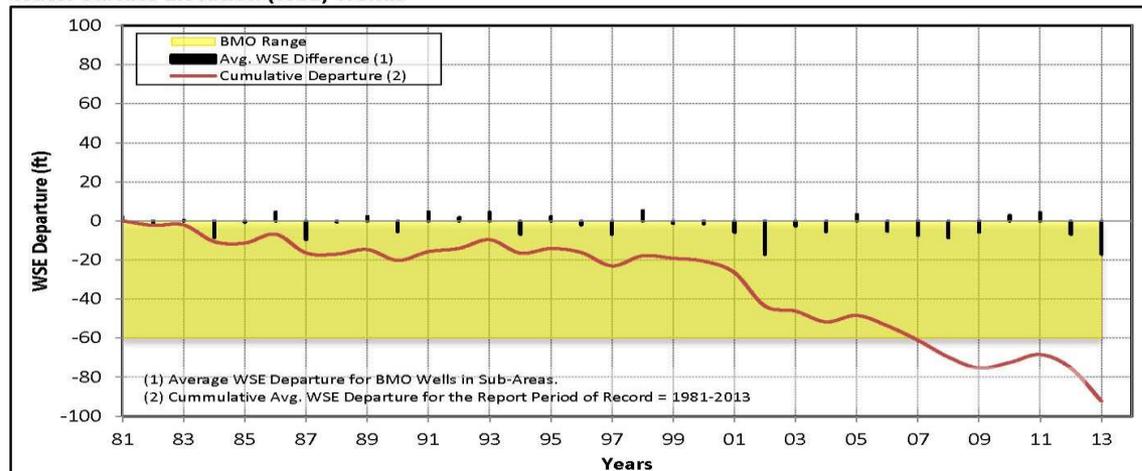
Raingage Information	
Raingage Name	Atas. Mutual Water # 34
Raingage Elev.	835.00 ft

Raingage Records	
Period of Record	1928-2013
Average Precip.	17.77 in

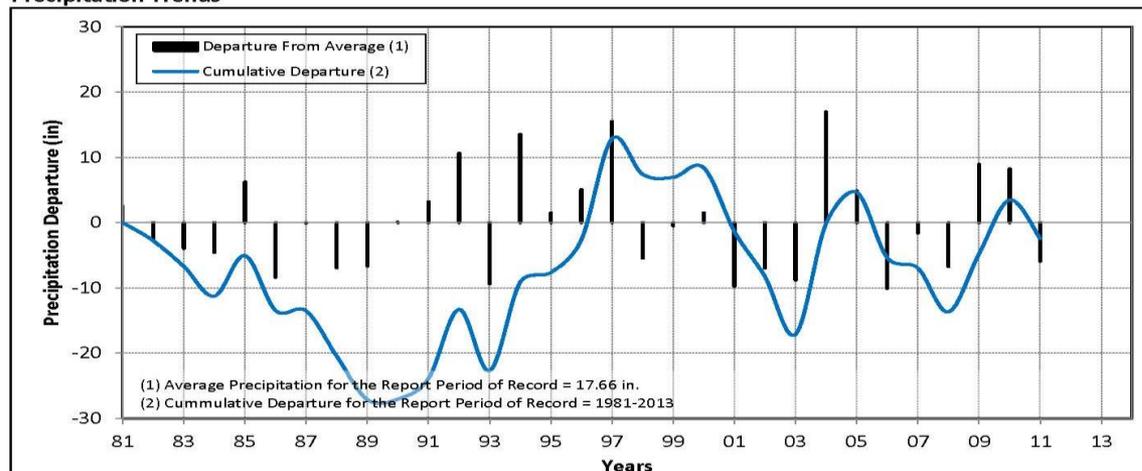
Trend Analysis Results	
BMO Target ⁽¹⁾	(60.00 ft)
2013 CD	(92.37 ft)

NOTES: 1) The Basin Management Objective (BMO) is to maintain the Cummulative Departure (CD) above the BMO Target

Water Surface Elevation (WSE) Trends



Precipitation Trends



Who uses the water?

Demand Type	2006	Percent
Agriculture	60,000 AFY	67%
Municipal	15,665 AFY	18%
Small Commercial Systems	2,323 AFY	3%
Rural	11,485 AFY	13%
Total Demand	89,473 AFY	100%
Perennial Yield	97,700 AFY	92%

Demand in Acre Feet per Year
1 Acre Foot = 325,851 Gallons of water

Solutions

- Conservation Programs
- Optimize Nacimiento Water Project
- Land Use Management
- Recycled Water
- Optimize State Water Project
- Groundwater Banking/Recharge
- Salinas Reservoir Expansion/Exchange
- Desalination
- Lopez Lake Expansion/Exchange
- Precipitation Enhancement
- New Off/On-Stream Storage/Recharge

Solutions

Blue Ribbon Steering Committee Efforts

- Reviewed GMP and developed Task List
- Developed more data
 - Added 21 monitoring wells in targeted areas
- Distributed 6,000 Water Awareness flyers
- Assisted in obtaining grants to model Groundwater Basin
- Created a website: <http://prwaterbasin.wordpress.com/>
- Developed a potential “Solutions” list/Ranking system
- Presented recommendations to BOS on May 7, 2013

Solutions

San Luis Obispo County Efforts

- Provided Basin Studies and Computer Model
- Coordinated with City of Paso Robles and stakeholders to develop GMP
- Provided Updated Hydrographs
- Coordinated with BRC to:
 - Add new monitoring wells
 - Provide Technical Assistance/Support
- Presented recommendations to BOS on May 7, 2013

Preliminary Top Solutions

Paso Robles Groundwater Basin Management Plan Steering Committee
 Top Ranked Solutions
 August 5, 2013

Short Term Solutions (Implementation in 1 to 5 years)				AFY	Est. Cost	Feasi - bility	Total Score
Index	Solution Category	Solution	Time Frame				
1	Management	Create a Basin-wide groundwater management district management system.	S	H	L	H	3.00
2	Conservation	Identify and implement specific Best Management Practices.	S	M	L	H	2.70
3	Supplemental	Utilize the full allocation (2,000 AFY) by fully utilizing the existing percolation ponds.	S	M	L	H	2.70
4	Conservation	Reduce water usage on a per acre basis for perennial crops.	S	H	L	M	2.55
5	Conservation	Install water meters on irrigation and ag processing wells.	S	H	L	M	2.55
6	Conservation	Participate in California Urban Water Conservation Council policies and practices.	S	L	L	H	2.40
7	Conservation	Conduct outreach for County's groundwater level monitoring program.	S	U	L	H	2.40
8	Conservation	Identify Best Management Practices and set targets to measure success.	S	U	L	H	2.40
9	Conservation	Conduct regular outreach activities.	S	U	L	H	2.40
10	Conservation	Conduct regular outreach activities.	S	U	L	H	2.40
11	Conservation	Conduct regular outreach activities.	S	U	L	H	2.40
12	Management	Provide a potable water source for use in trucking water to homes for emergency purposes.	S	L	L	H	2.40
13	Management	Implement ordinances to prohibit subdivisions of land or General Plan Amendments in the Basin.	S	L	L	H	2.40
14	Management	Implement landscaping ordinance.	S	L	L	H	2.40
15	Management	Require new development to be water neutral.	S	L	L	H	2.40

May 7th Board Actions

Pieces of the Solutions Puzzle

- Continue to Develop Data and Model Data
- Evaluate Supply Options
- Evaluate Demand Management Options

Additional May 7th Board Actions

- Proceed with evaluation of water district and management options.
- Identify a possible emergency program in coordination with the Nacimientto Commission.
- Look into potential fee waivers and low interest loans to provide immediate relief.

Board of Supervisors Action

- Directed Staff to:
 - Investigate options for a GWM District
 - Investigate options for assistance to rural homeowners
 - Continue with Solutions related to Salinas River, State water and other supply options
 - Develop options for an Interim Ordinance as an emergency measure

Since then:

- Finalized Solutions Ranking
- Presented Solutions to Board of Supervisors
- Assisting in the development of a Groundwater Management District
 - Stakeholders/County
- Assist in monitoring results
- Board of Supervisors passed Interim Ordinance on August 27th.

What is next:

- BOS to vote on extending Interim Ordinance on Aug 8th.
- Finalize “Vesting Rights”
- Finalize “Offset Program”
- Develop a Groundwater Management District