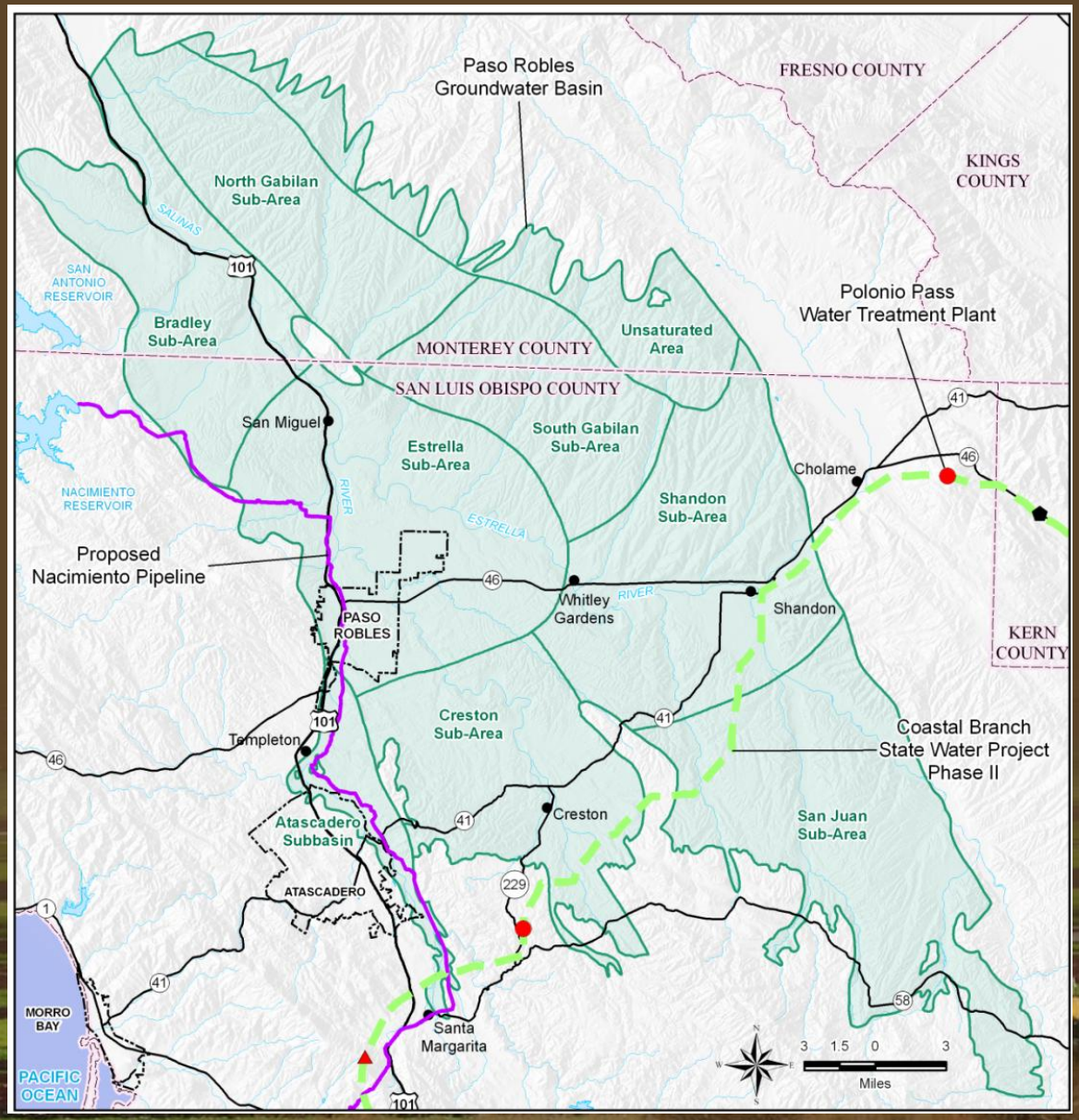
Water Resources Advisory Committee

April 6, 2011

GEI Consultants in association with FUGRO CHG

Paso Robles Groundwater Basin Management Plan

Paso Robles Groundwater Basin

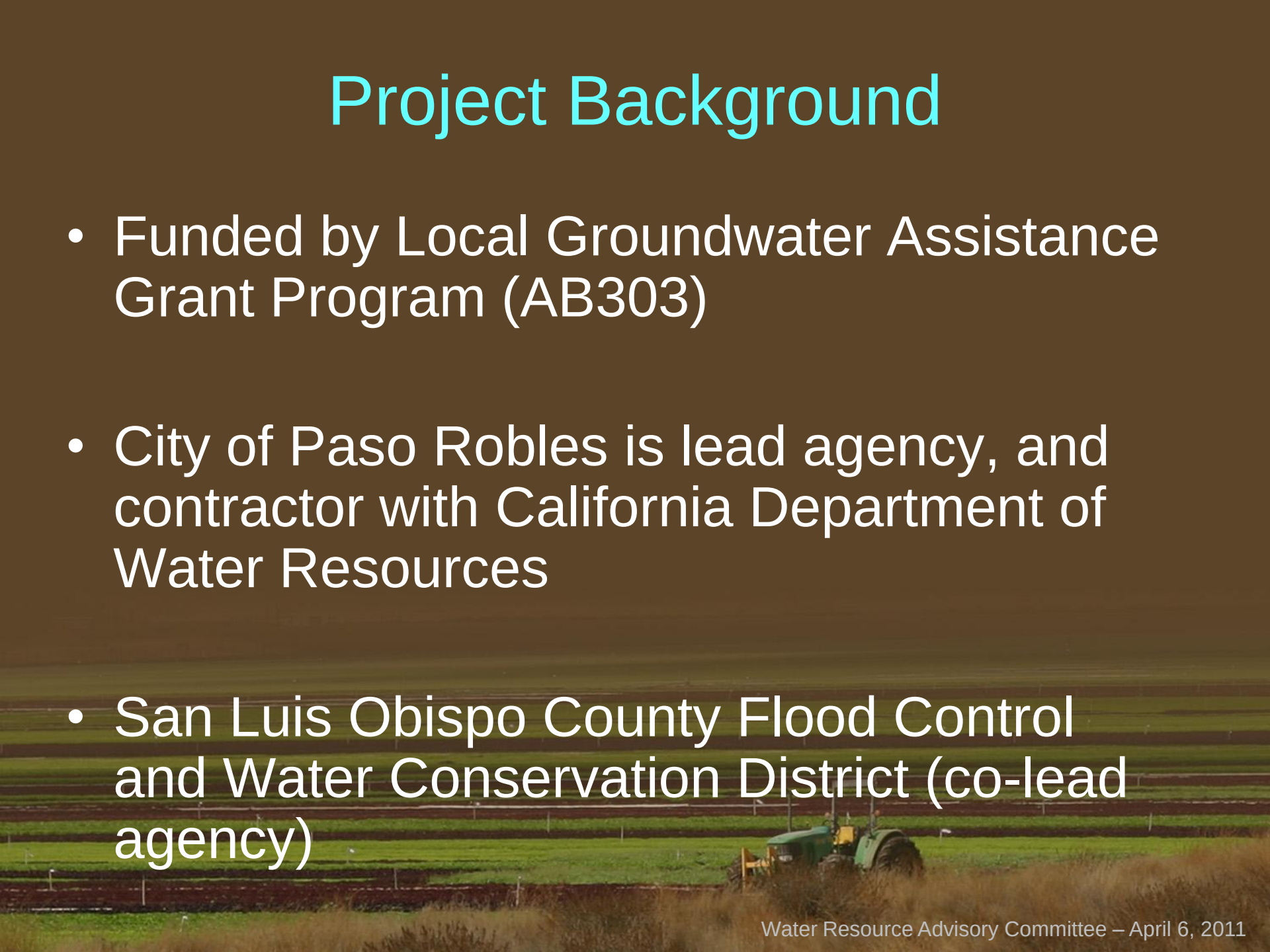


SUBAREAS

- North Gabilan
- Bradley
- South Gabilan
- Estrella
- Creston
- Shandon
- San Juan
- Atascadero

Project Background

- Funded by Local Groundwater Assistance Grant Program (AB303)
- City of Paso Robles is lead agency, and contractor with California Department of Water Resources
- San Luis Obispo County Flood Control and Water Conservation District (co-lead agency)



Project Purpose

Establish a regional approach to groundwater management in the Paso Robles Basin that:

- Builds upon existing hydrogeology and groundwater work in the Basin
- Compliant with Groundwater Planning Act of 2002 (SB 1938)
- Coordinates with other water management-related projects in the Basin
- Identifies projects and programs to improve long-term supply reliability in the Basin

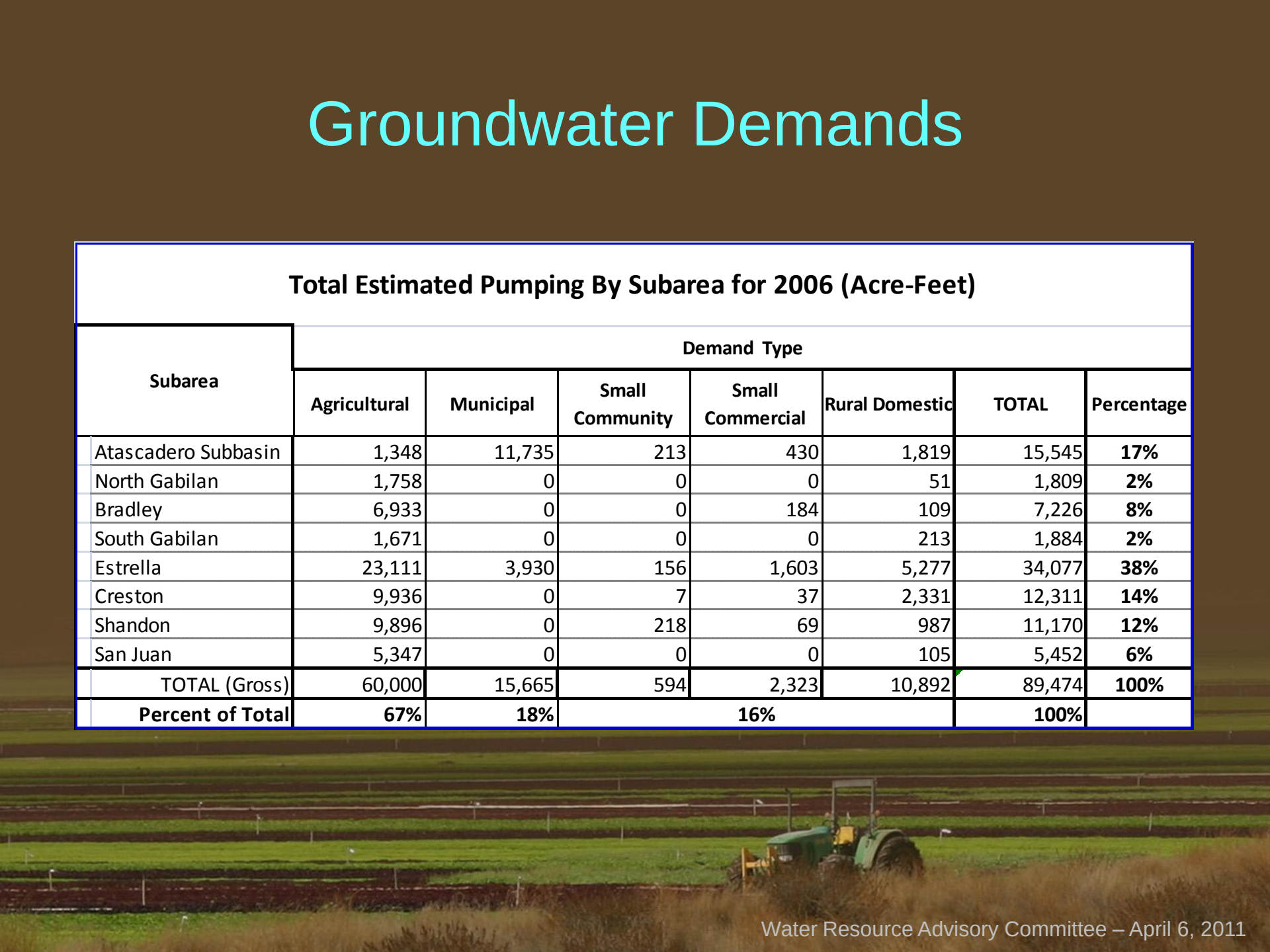
Stakeholder Driven Plan

- Participation from over 30 different stakeholders in the Basin through:
  - 6 Groundwater Advisory Committee Meetings
  - 3 BMO workshops
  - Review of draft reports
  - Participation in Steering Committee

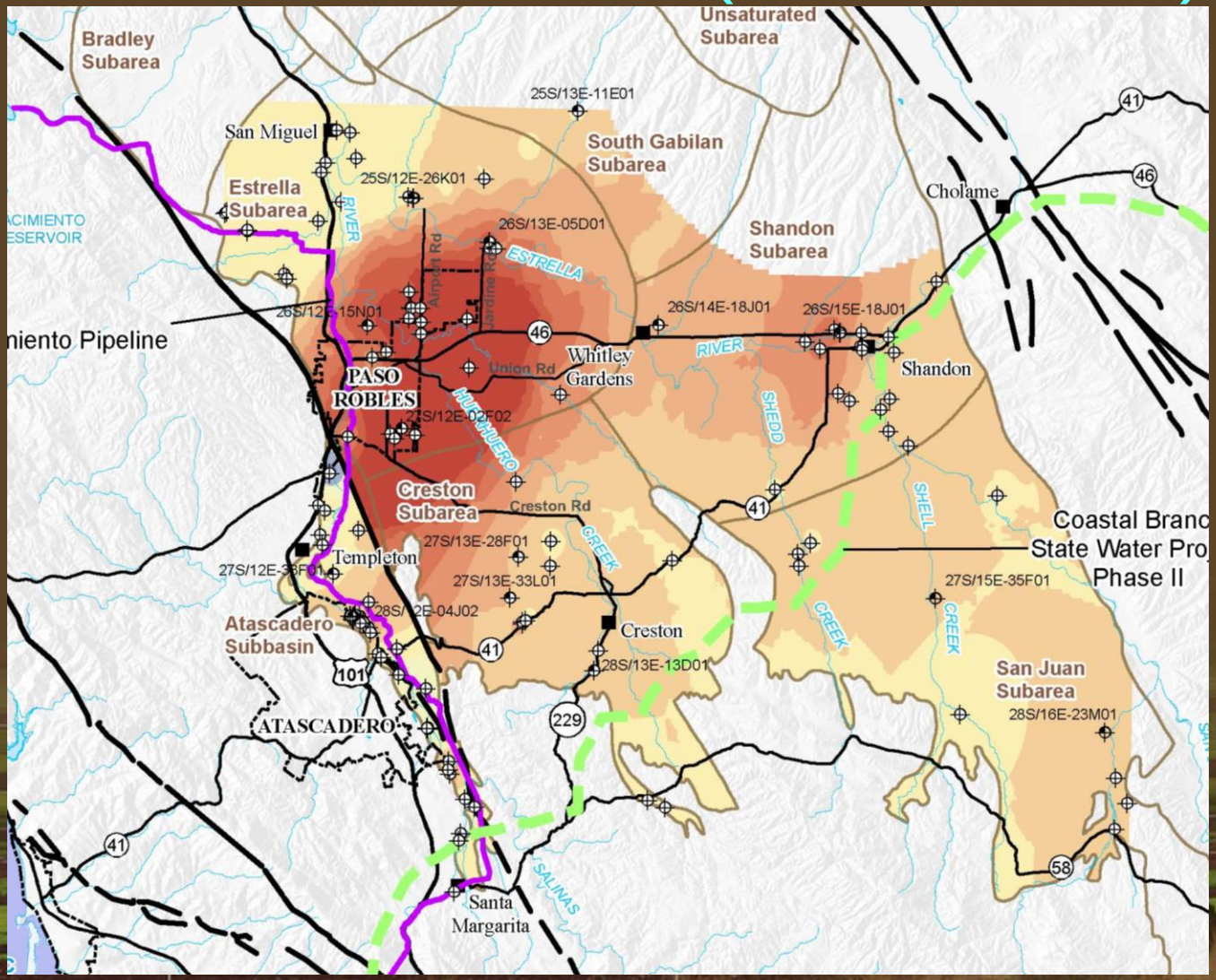
Groundwater Demands

Total Estimated Pumping By Subarea for 2006 (Acre-Feet)

Subarea	Demand Type						
	Agricultural	Municipal	Small Community	Small Commercial	Rural Domestic	TOTAL	Percentage
Atascadero Subbasin	1,348	11,735	213	430	1,819	15,545	**17%**
North Gabilan	1,758	0	0	0	51	1,809	**2%**
Bradley	6,933	0	0	184	109	7,226	**8%**
South Gabilan	1,671	0	0	0	213	1,884	**2%**
Estrella	23,111	3,930	156	1,603	5,277	34,077	**38%**
Creston	9,936	0	7	37	2,331	12,311	**14%**
Shandon	9,896	0	218	69	987	11,170	**12%**
San Juan	5,347	0	0	0	105	5,452	**6%**
TOTAL (Gross)	60,000	15,665	594	2,323	10,892	89,474	**100%**
Percent of Total	**67%**	**18%**	**16%**			**100%**	



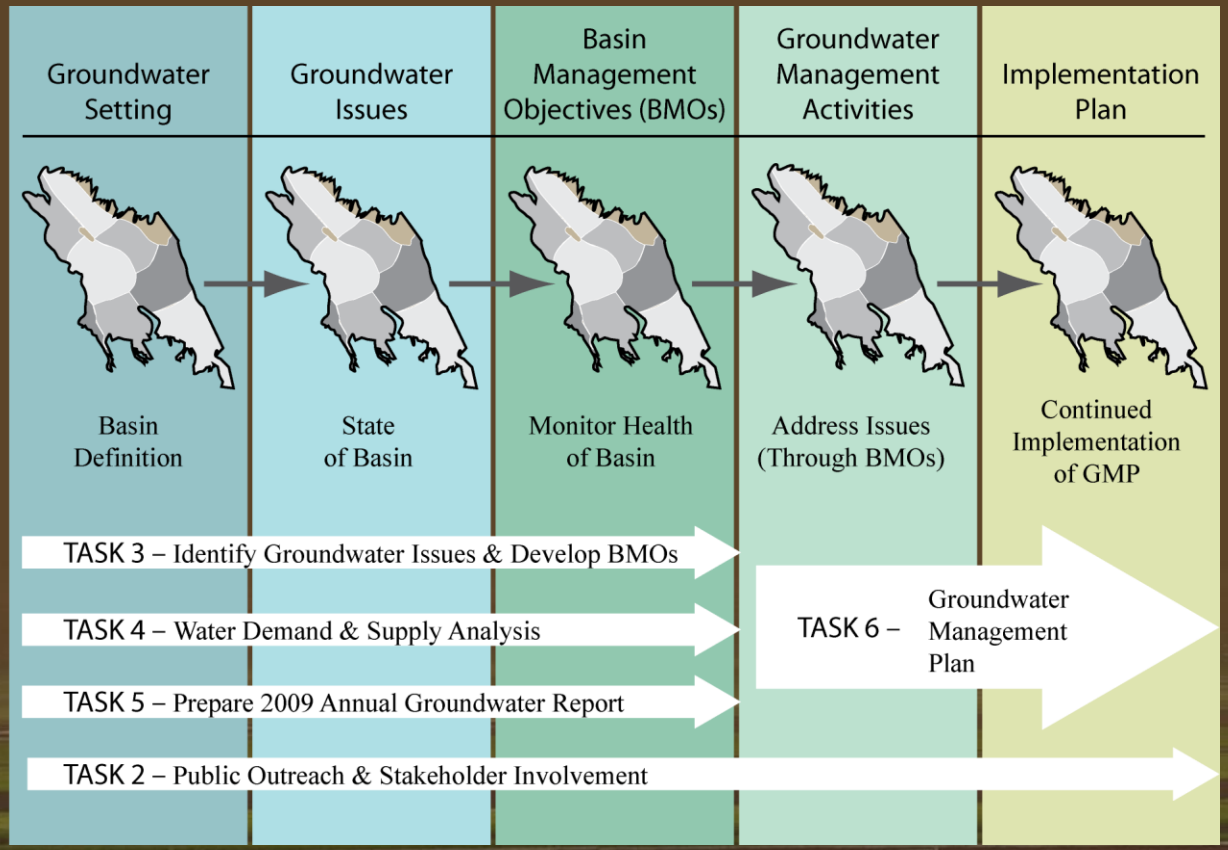
Generalized Change in Spring Groundwater Levels (1997 to 2009)



Change in Groundwater Elevation (Feet)

- < -70
- -70 - -60
- -60 - -50
- -50 - -40
- -40 - -30
- -30 - -20
- -20 - -10
- -10 - 0
- 0 - 10
- 10 - 20
- 20 - 30
- > 30

Project Approach
for Groundwater Management Plan



Basin Management Objectives (BMOs)

- Establish local groundwater management goals
- Locally-developed guidelines for groundwater management in response to well-monitoring data
- Provides flexibility to modify objectives as additional knowledge of the basin increases

Results of BMO Workshops –

Groundwater Level BMO by Subarea

Subarea/Subbasin	Basin Management Objective (BMO)
Atascadero	Stabilize groundwater levels at 2009 levels
Bradley	Maintain groundwater levels
Creston	Stop decline and stabilize levels at 2009 levels
Estrella	Stabilize groundwater levels
North Gabilan	Maintain high groundwater levels
San Juan	Maintain groundwater levels
Shandon	Stabilize groundwater levels
South Gabilan	Maintain groundwater levels

BMO Workshop No. 1 – April 11, 2010: *Atascadero, Creston, Estrella Subareas*

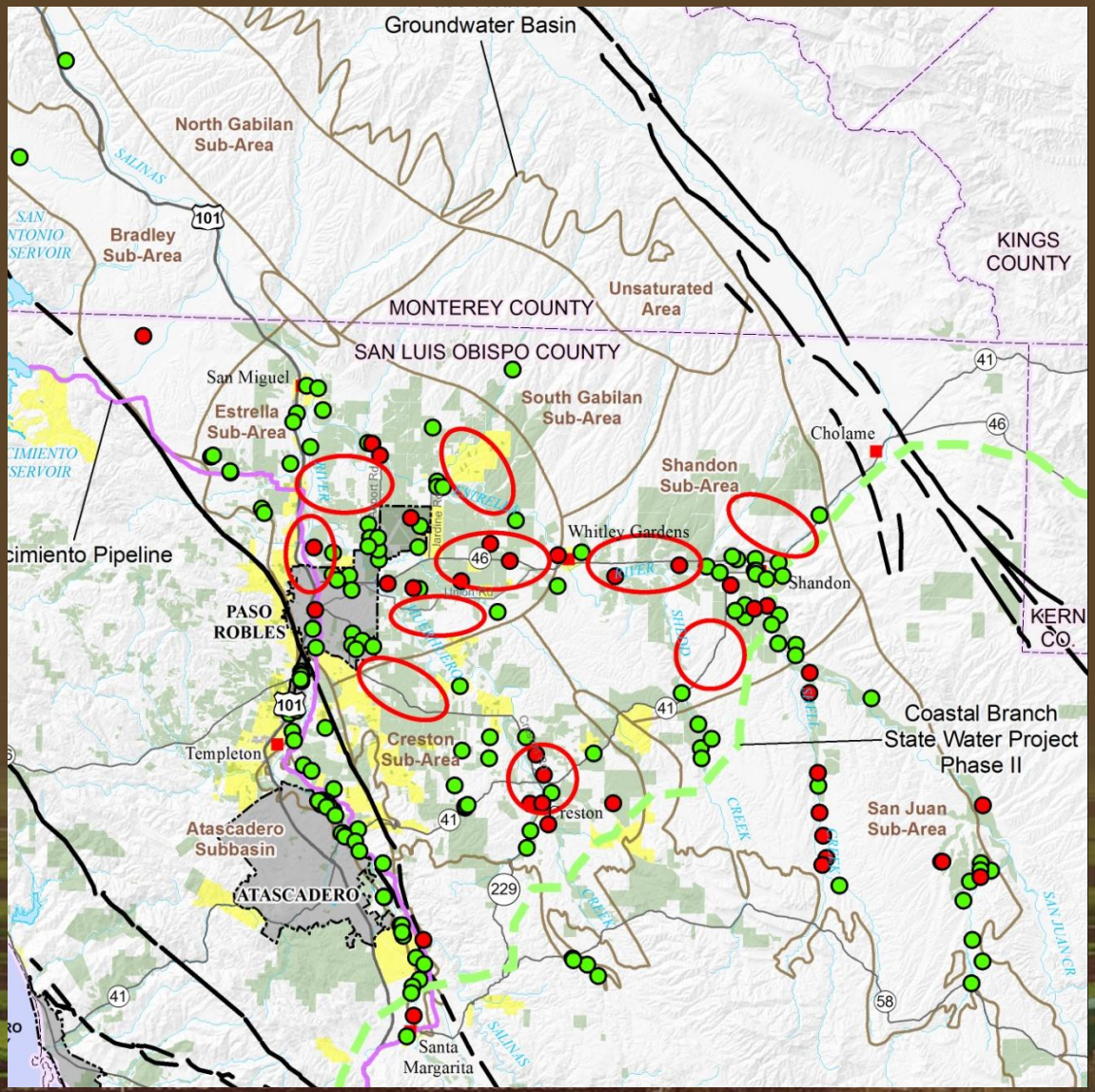
BMO Workshop No. 2 – May 10, 2010: *Bradley, North Gabilan Subareas*

BMO Workshop No. 3 – May 10, 2010: *San Juan, Shandon, South Gabilan Subareas*

Key Project Deliverables

- Groundwater Level Monitoring Network Plan for the Paso Robles Groundwater Basin
  - Document existing monitoring network and identify potential improvements
- Annual Monitoring Report for Calendar Year 2009
  - Annual report to support future decision making
- Groundwater Management Plan
  - Identify Groundwater Management Activities
  - Implementation Plan to direct future actions

Additional Monitoring Well Locations



- Well in Monitoring Network
- Well to Add to Monitoring Network
- Fault
- Areas Where Wells Need to Be Added
- Agriculture - Irrigated
- Urban
- Residential

County is currently working with several individuals who have stepped forward in specific areas to add wells to the network

BMO Hydrograph – Estrella Subarea

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

Sub-Area Well Records	
Period of Record	1967-2009
Num. BMO Wells	6

Report Information	
Report Start Year	1981
Period of Record	1981-2009

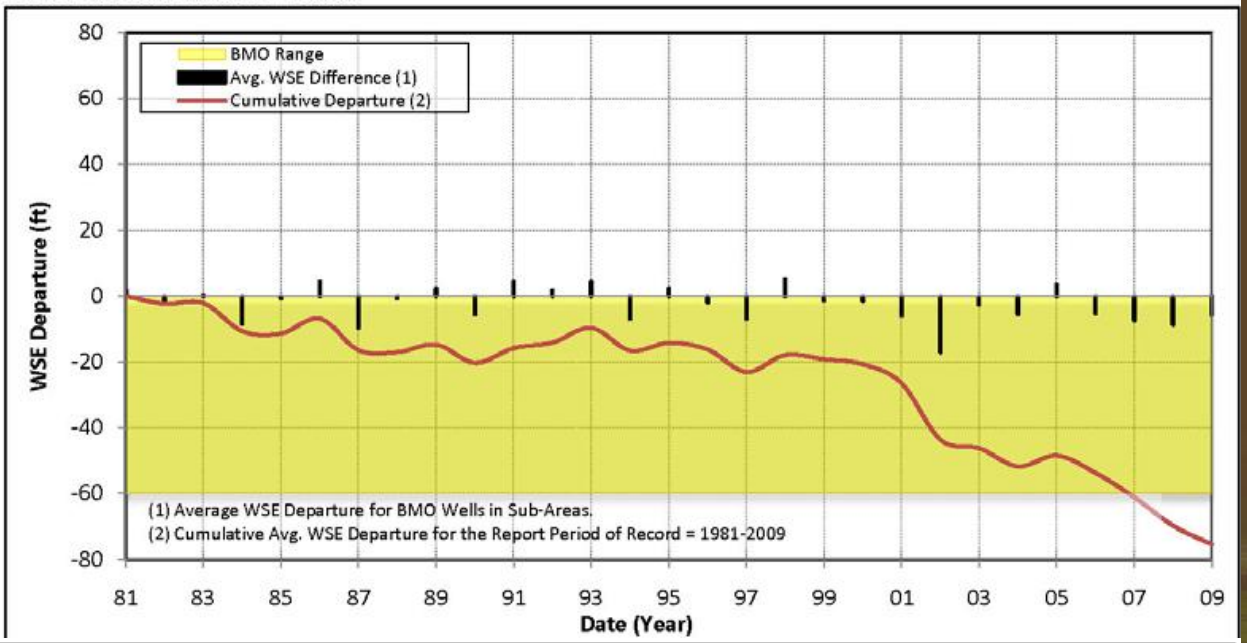
Raingage Information	
Raingage Name	Atas. Mutual Water # 34
Raingage Elev.	835.00 ft

Raingage Records	
Period of Record	1967-2009
Average Precip.	17.64 in

Trend Analysis Results	
BMO Departure[1)]	(60.00 ft)
2009 Departure	(75.43 ft)

NOTES: 1) BMO Cumulative Departure Since 1981

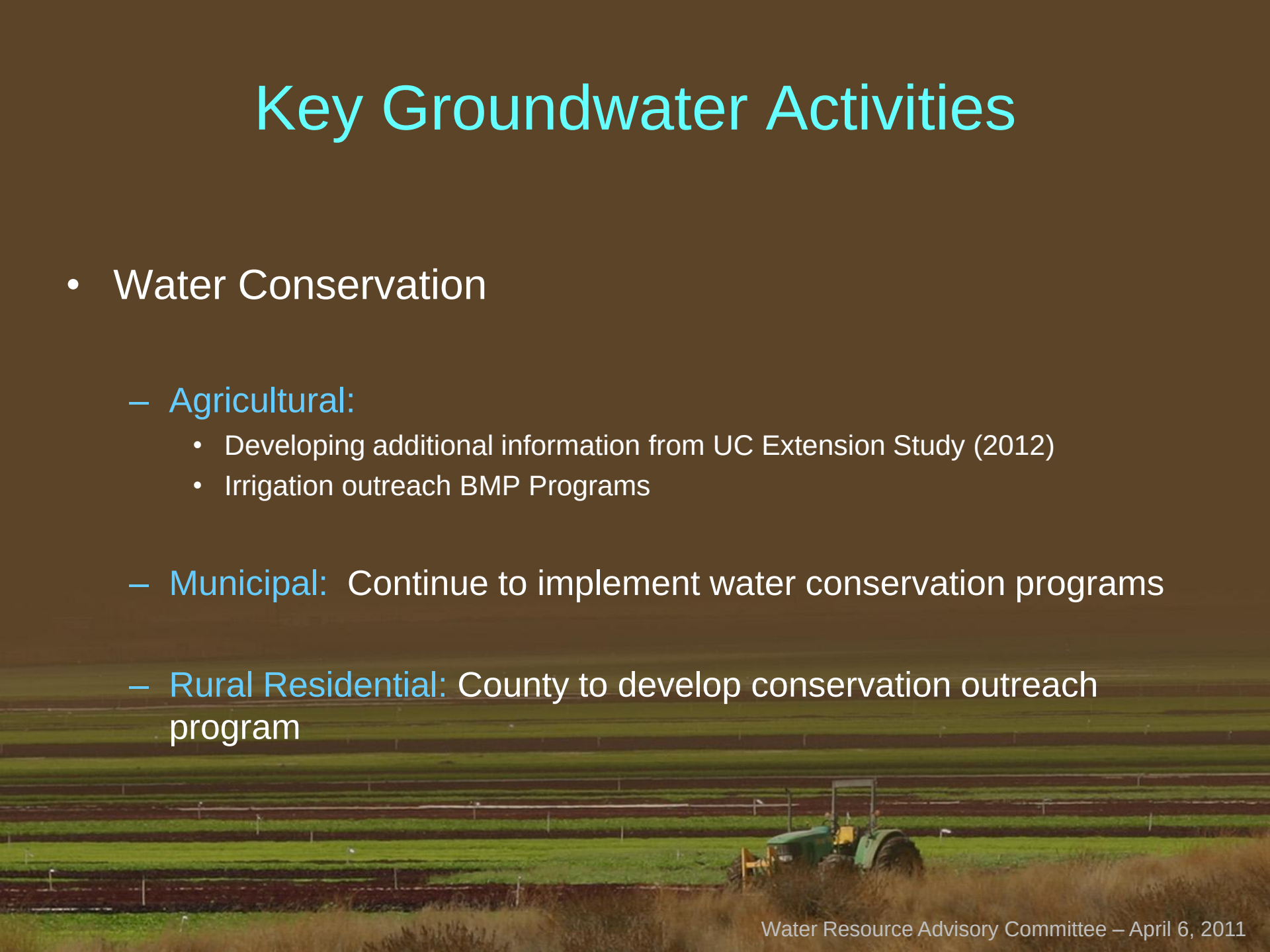
Water Surface Elevation Trends



Period	Annual Change (feet)	Cumulative Change Since 1981 (feet)	Comparison of Cumulative Change to BMO Level (feet)
BMO Groundwater Level			-60
2008 Observed Level	-8.6	-69.7	-9.7
2009 Observed Level	-5.7	-75.4	-15.4

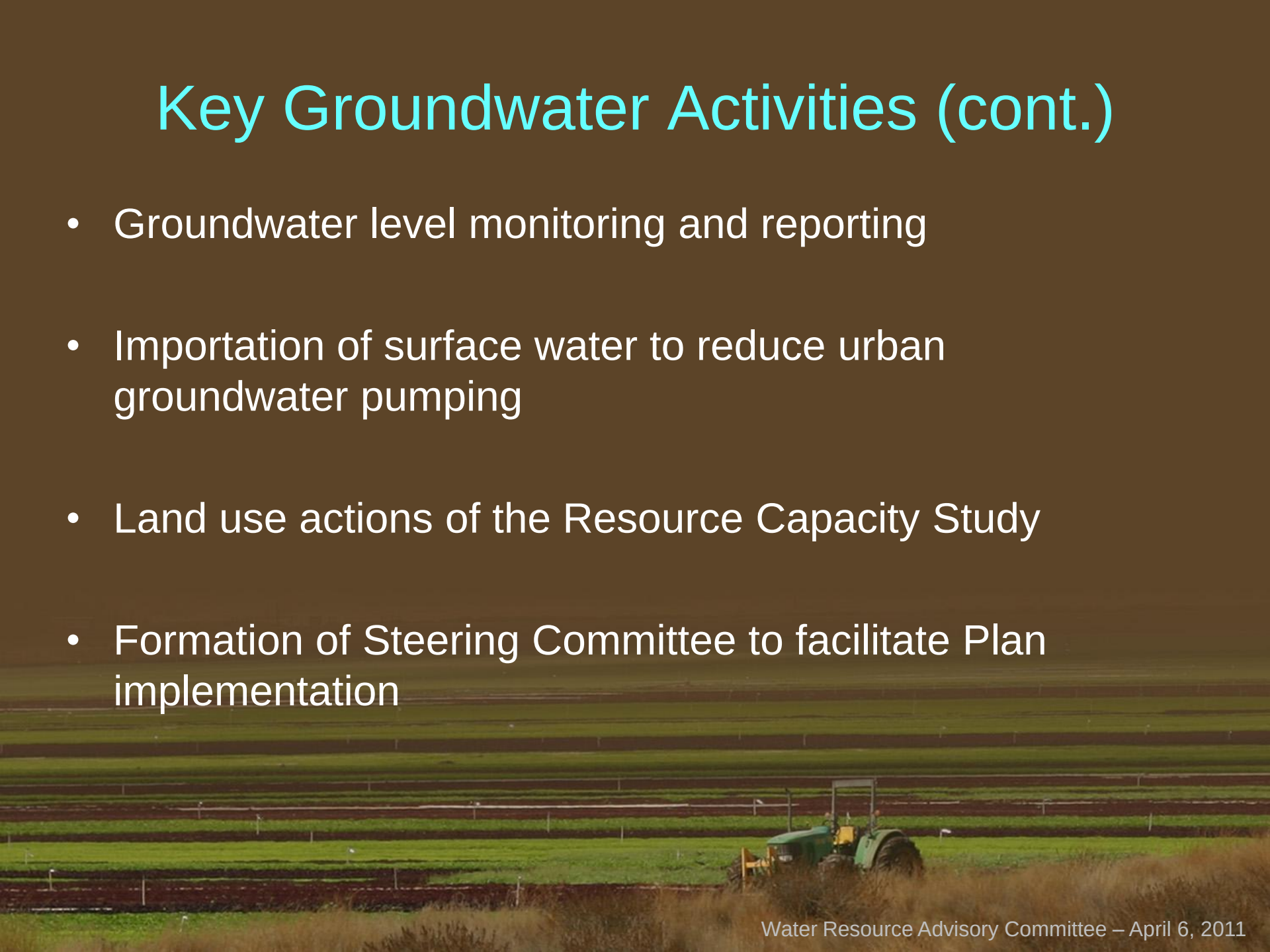
Key Groundwater Activities

- Water Conservation
  - Agricultural:
    - Developing additional information from UC Extension Study (2012)
    - Irrigation outreach BMP Programs
  - Municipal: Continue to implement water conservation programs
  - Rural Residential: County to develop conservation outreach program



Key Groundwater Activities (cont.)

- Groundwater level monitoring and reporting
- Importation of surface water to reduce urban groundwater pumping
- Land use actions of the Resource Capacity Study
- Formation of Steering Committee to facilitate Plan implementation



Purpose of Steering Committee

Facilitate implementation of the Groundwater Management Plan by:

- Coordinating water management activities with the Basin.
- Coordinate with County on Annual Reporting of state of Basin
- Working cooperatively with stakeholders and interested parties to achieve the agreed upon BMOs through implementation of the Groundwater Management Activities.
- Working with the GAC and others to develop an outreach and educational program to engage other water interests in management of the Paso Robles Basin.

Steering Committee (members)

- City of Atascadero
- City of Paso Robles
- Atascadero Mutual Water Company
- Templeton CSD
- San Miguel CSD
- San Luis Obispo County (Flood Control and Water Conservation District)
- Monterey County Water Resources Agency
- Paso Robles Wine Country Alliance
- Central Coast Vineyard Team
- San Luis Obispo County Farm Bureau
- San Luis Obispo Cattlemen's Association
- PRIOR
- Four general At-Large positions, trying to balance vineyards, other agriculture, and rural residential

This is the Beginning

- The Plan provides a framework for future groundwater management in the Basin
- It's implementation is largely voluntary
- The implementation by stakeholders will determine its effectiveness in stabilizing groundwater levels

Next Steps

- Submit completed Plan to DWR to comply with grant funding requirements
- Plan available for agencies and stakeholders to adopt/support
- District to hold study session to refine role in GMP implementation
- County Planning Dept to be participating in the GAC/ Steering Committee for input and assistance on implementation of the RCS recommendations

Documents Available

– City of Paso Robles:
www.prcity.org/government/

– San Luis Obispo County:
www.SLOCountyWater.org/site/Water Resources/Water Forum

Questions ?

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Paso Robles Groundwater Basin Management Plan

Groundwater Management Activity	Accomplishments during Development of Groundwater Management Plan	Anticipated Activities for Calendar Year 2011
1.2 - Formation of Implementation GAC	Formed Steering Committee to direct implementation of Groundwater Management Plan	Develop Steering Committee Meeting schedule for 2011 and Plan implementation
1.3 – Coordinate with Resource Capacity Study	Resource Capacity Study for Paso Robles Basin Certified by San Luis Obispo County Board of Supervisors in February 2011	• The San Luis Obispo County Planning Department is expected to develop schedule for implementing the land use actions identified in RCS
2.1 – Groundwater Elevation Monitoring	• San Luis Obispo County Flood Control and Water Conservation District was identified as monitoring entity for groundwater basins in County for the California Statewide Groundwater Elevation (CASGEMs) Program • Groundwater level data through 2009 used to support development of the Plan and the Basin Management Objectives	• Report 2011 groundwater levels to DWR as part of CASGEMs Program • Prepare Annual Monitoring Report for Calendar Year 2010 • Identify opportunities to expand groundwater level monitoring network • Identify opportunities to begin development of a dedicated groundwater level monitoring network • Identify new wells to become part of groundwater level monitoring program (as needed)