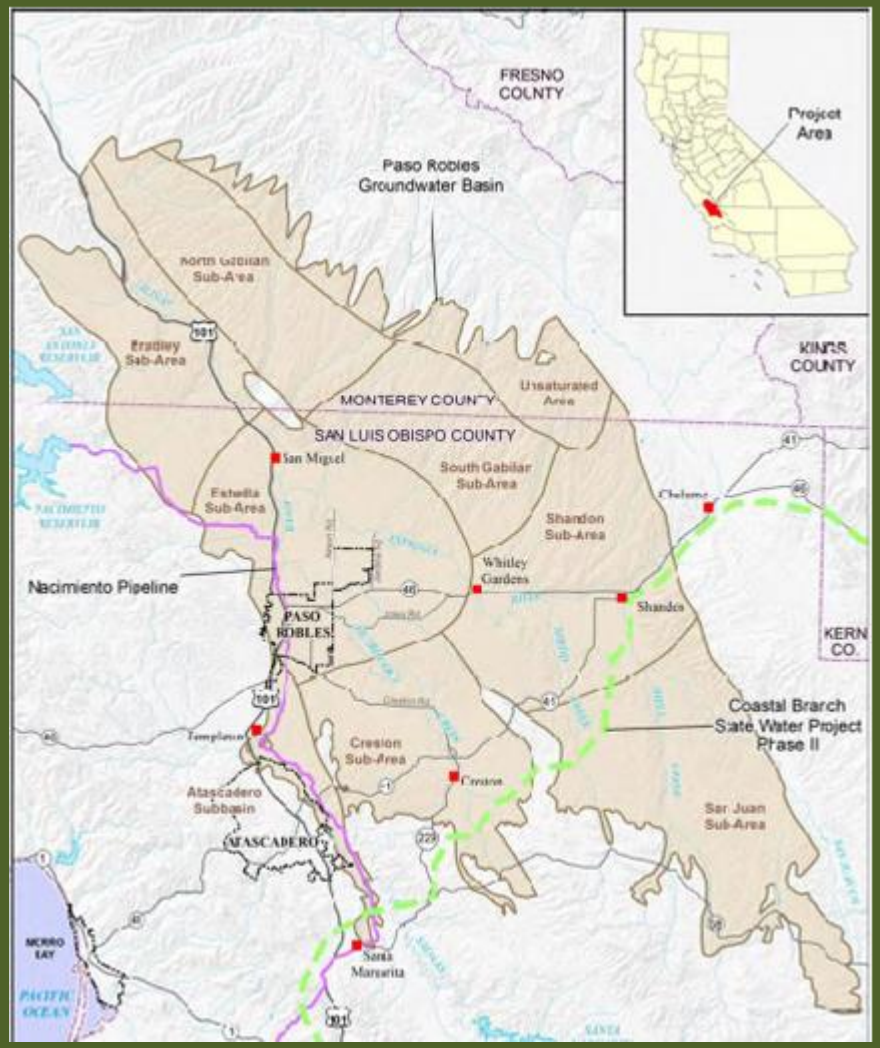
Appendix C.5

Public Works Department Presentation - Long Term Management Efforts for the Paso Robles Groundwater Basin, May 14, 2015



Long Term Management Efforts

Paso Robles Groundwater Basin

Mission Statement: *Public Works will be a valued community partner enhancing quality of life for our fellow county residents*

Presentation Overview

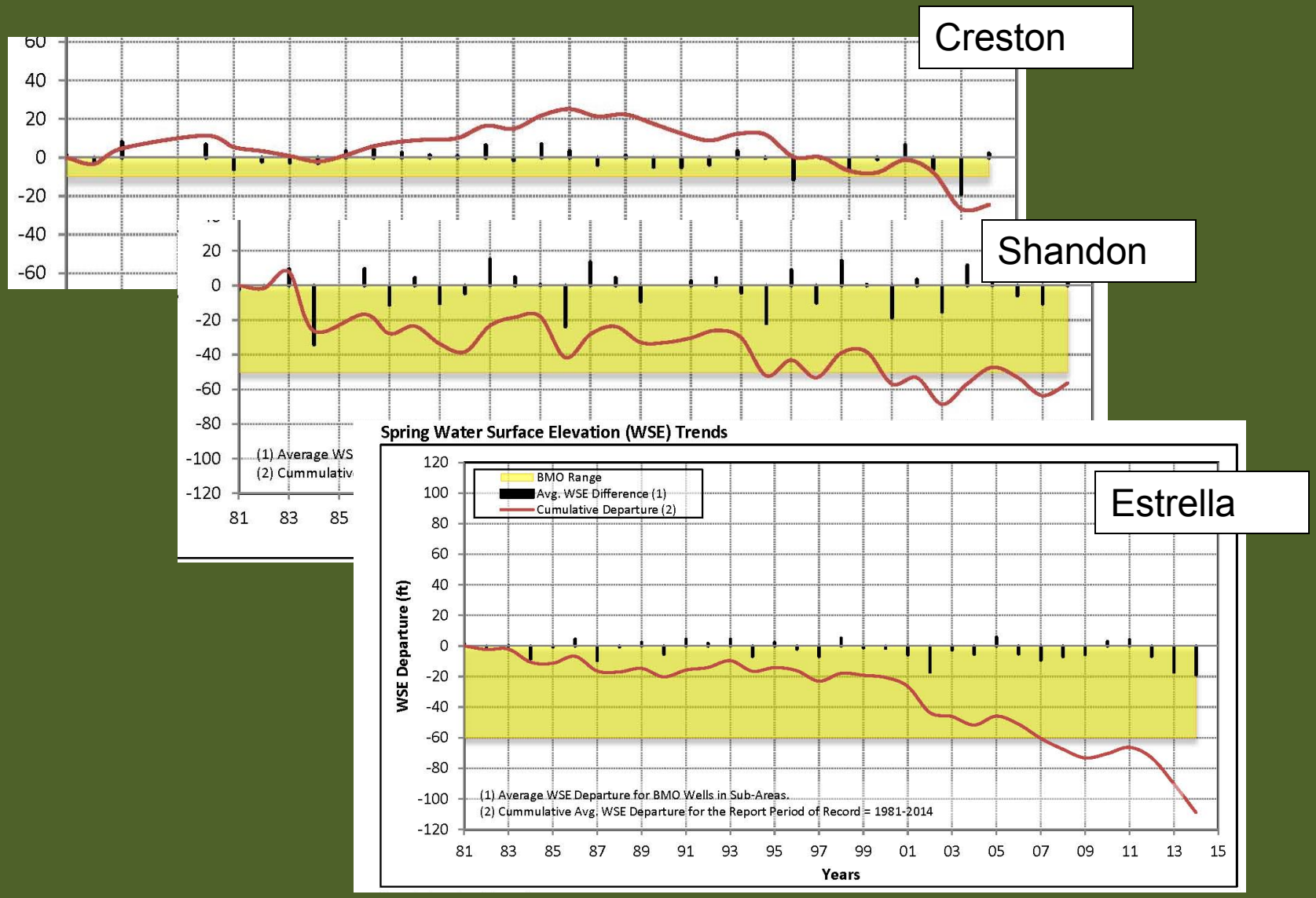
- Groundwater Management Setting
- Current Collaborative Management Efforts
- Integration with the Sustainable Groundwater Management Act

Previous Management Setting

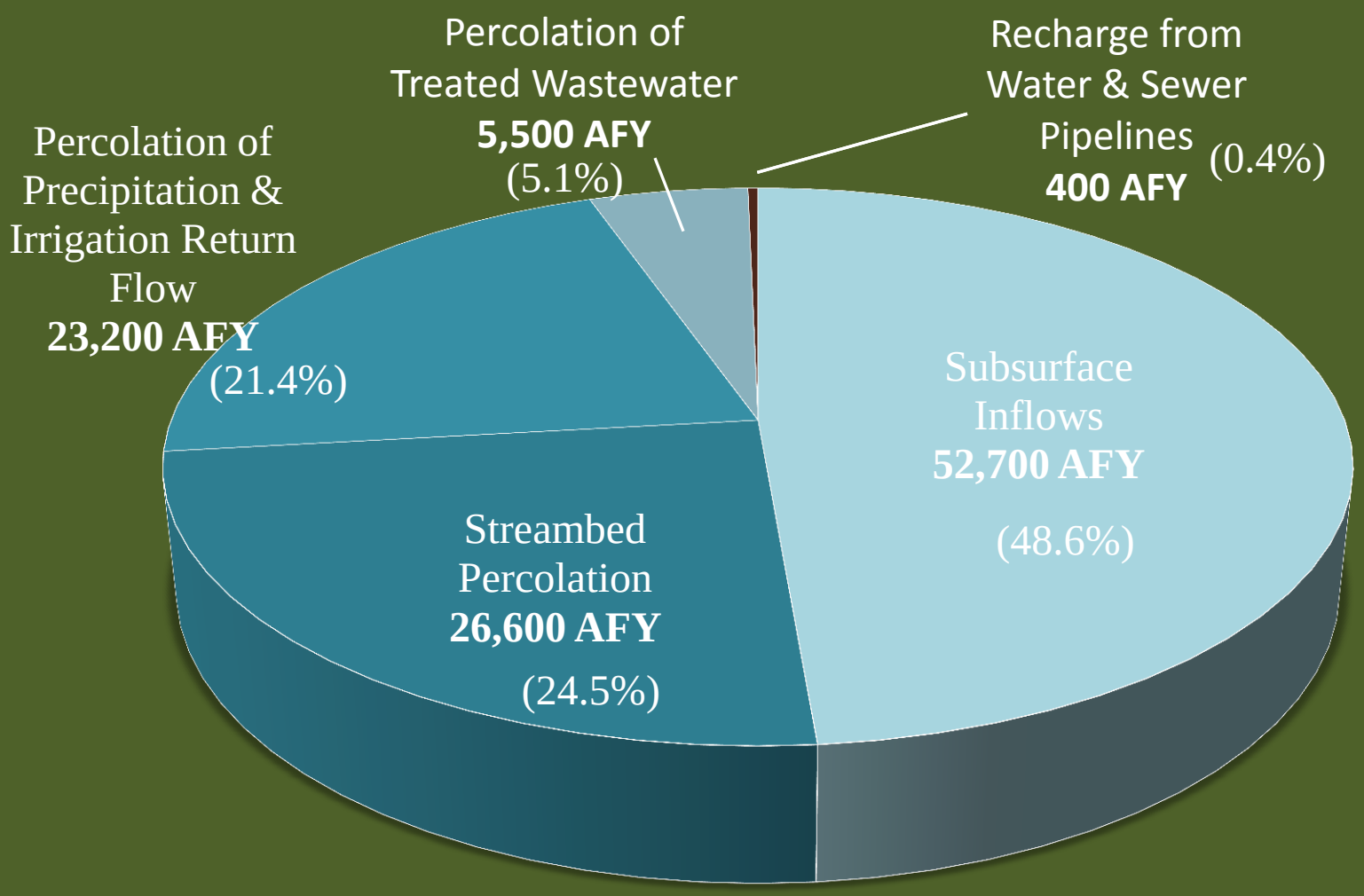
County Efforts

Public Works Department	Planning Department
2002 Basin Study	Resource Capacity Study
2005 Basin Model	LOS III
Basin Agreement – Technical Consultant	Urgency Ordinance
Banking Study	Water Conservation Programs
Water Balance/Pumping Updates	
Voluntary Groundwater Management Plan	
Supply Options Study	
Model Update	

Basin Management Objectives

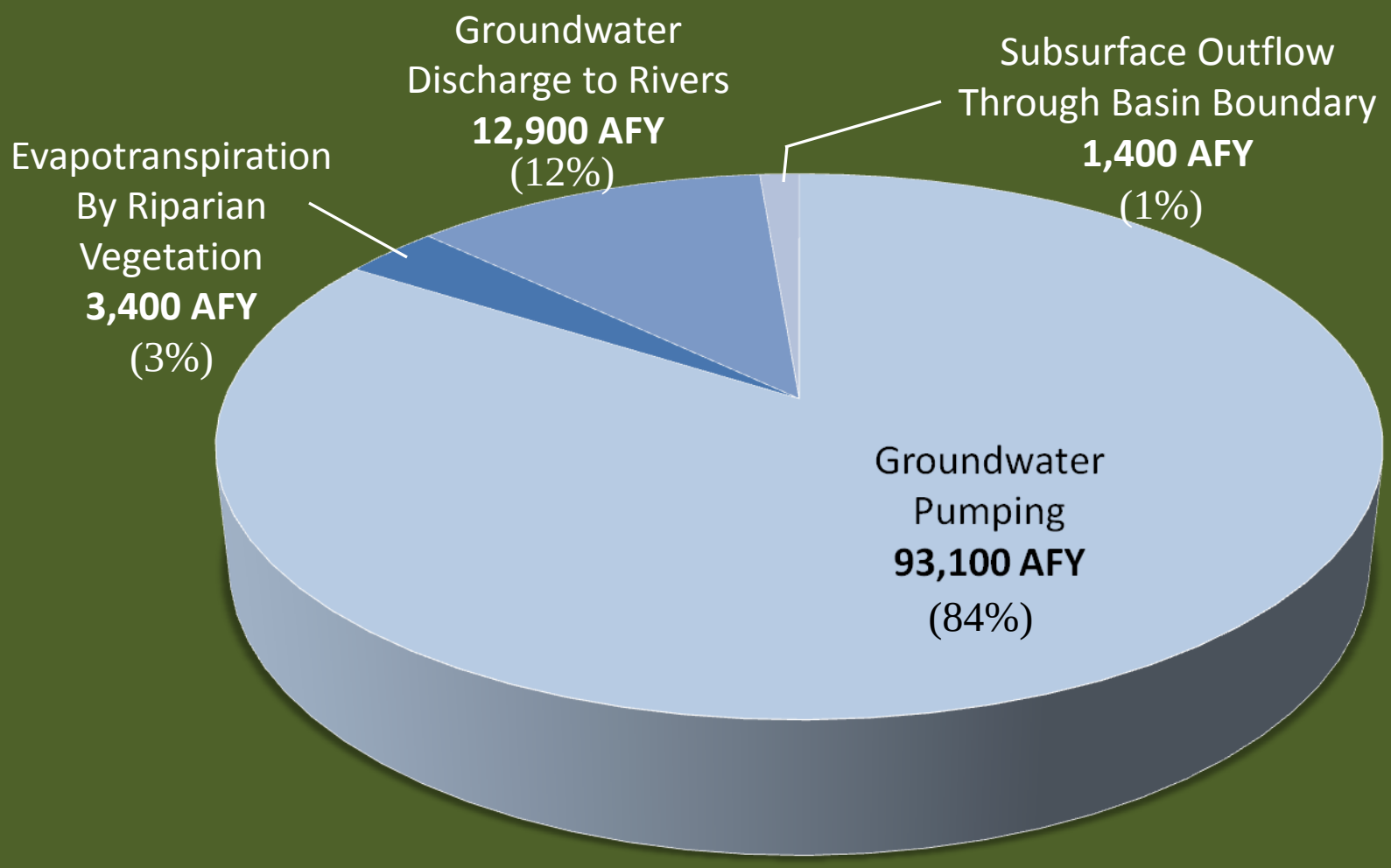


Average Annual Inflows (1981-2011)



TOTAL AVERAGE ANNUAL INFLOW = 108,400 AFY

Average Annual Outflows (1981-2011)



TOTAL AVERAGE ANNUAL OUTFLOW = 110,800 AFY

Water Balance for Recalibrated Basin Model

Total Inflow – Total Outflow = Change in Groundwater Storage

Water Balance of Paso Robles Groundwater Basin Average of 1981 – 2011 [AFY]

Total Inflow	Total Outflow	Change in Storage
108,400	110,800	-2,400

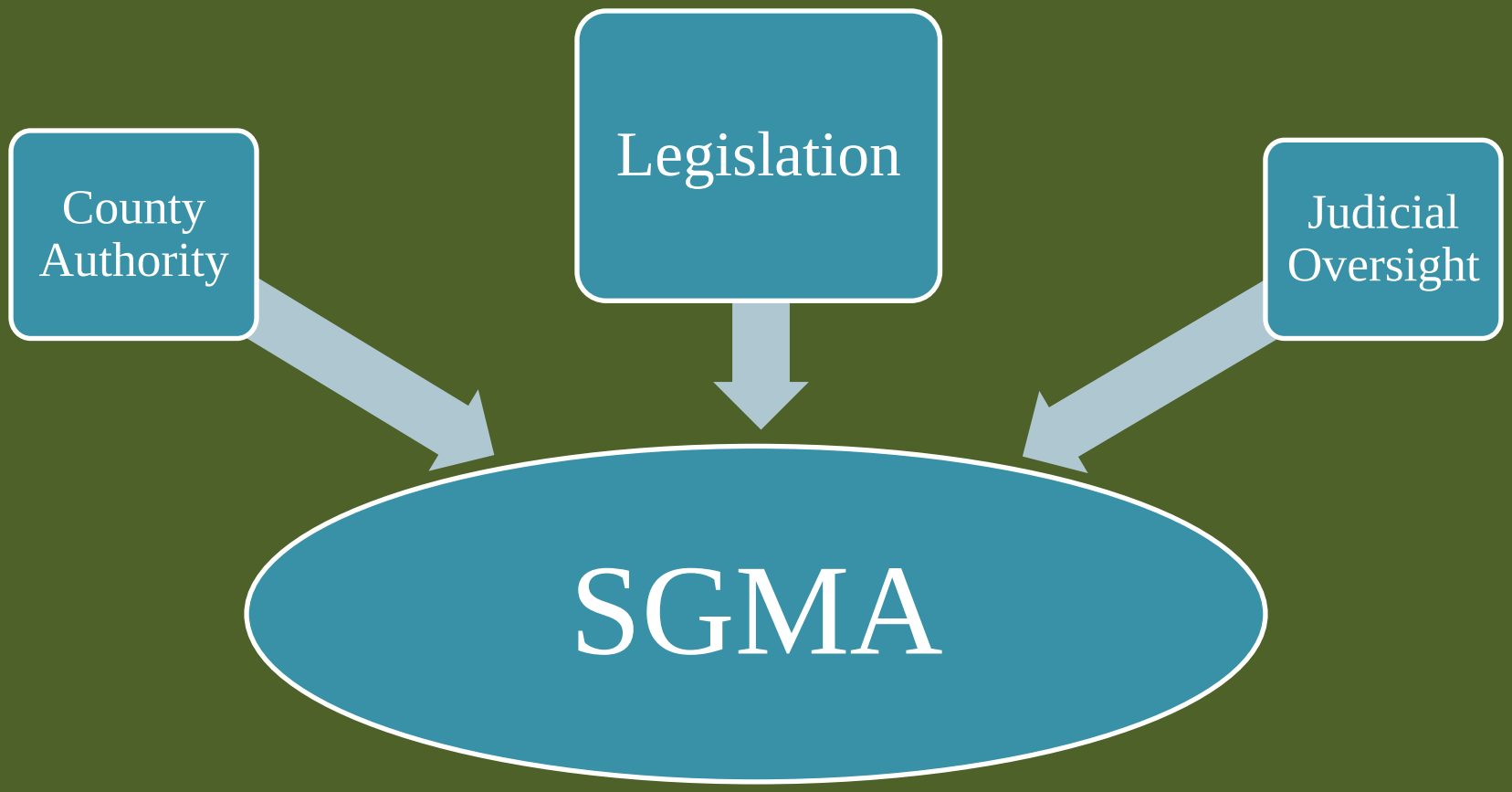
Perennial Yield Estimate

Hydrologic Base Period = Covers Wet, Dry and Average Hydrologic Cycles

Average of Base Period 1982 – 2010 [AFY]

Total Pumping	Change in Storage	Perennial Yield
92,600	-2,900	89,600

Current Management Setting



Legislation

- Transitioning to a new governance structure
- Transitioning from an AB 3030 Groundwater Management Plan to a Groundwater Sustainability Plan

Water, water everywhere . . .

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

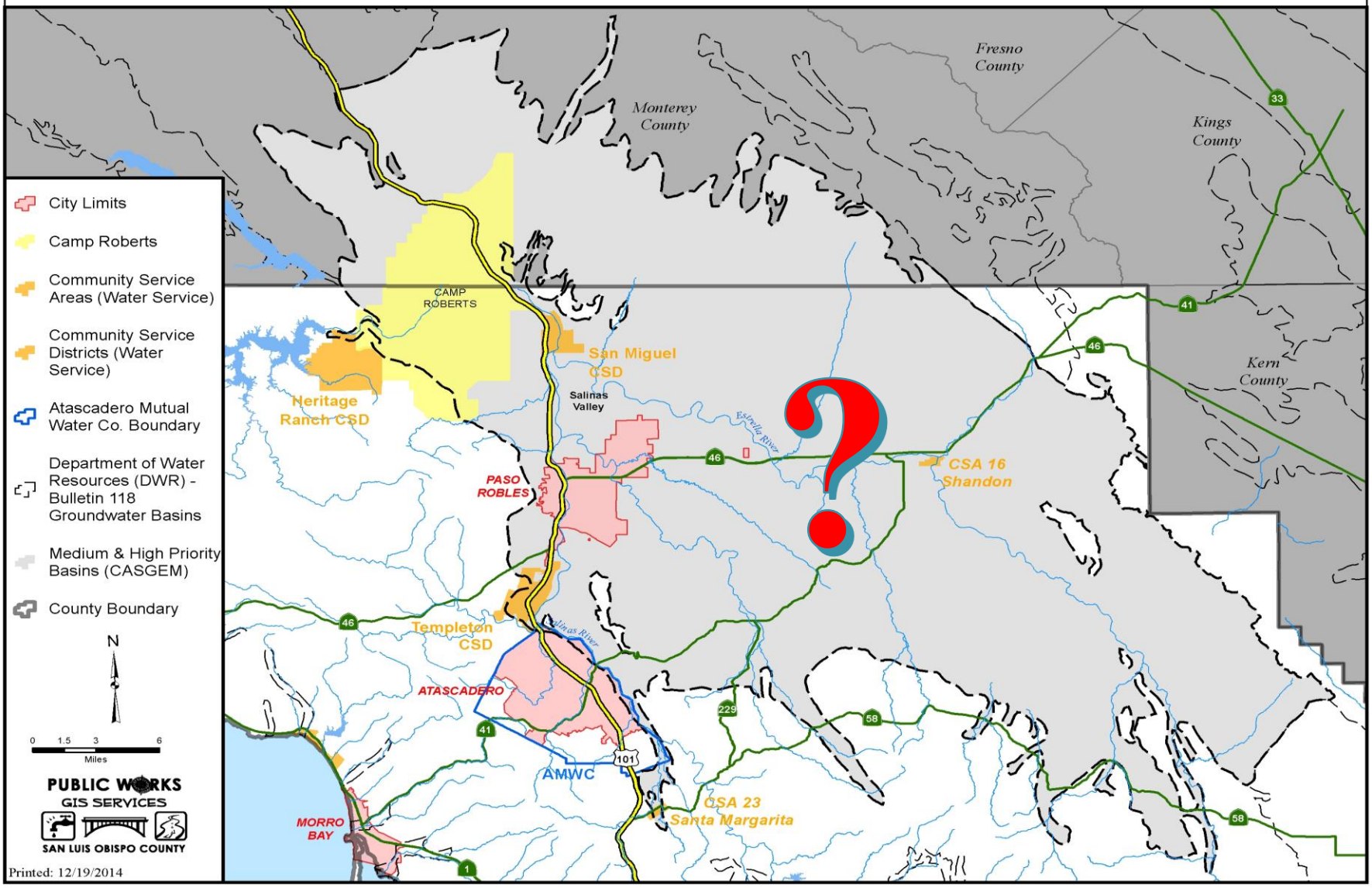
. . . water is for fighting(?)

- Diversity
- Cost
- Fairness

- Understanding and accepting how our demands and climate change affect water resources and management efforts

Who decides how sustainability will be achieved given limited resources and diverse economic circumstances?

Governance Structure



AB2453

Paso Robles Basin Water District

- Provides for the formation of a new water district
- 9 member board
- Authorizes the district to develop, adopt, and implement a groundwater management plan
  - Collect data
  - Require conservation
  - Impose extraction charges
  - Establish extraction allocations
  - Implement SGMA

Paso Robles Basin Water District

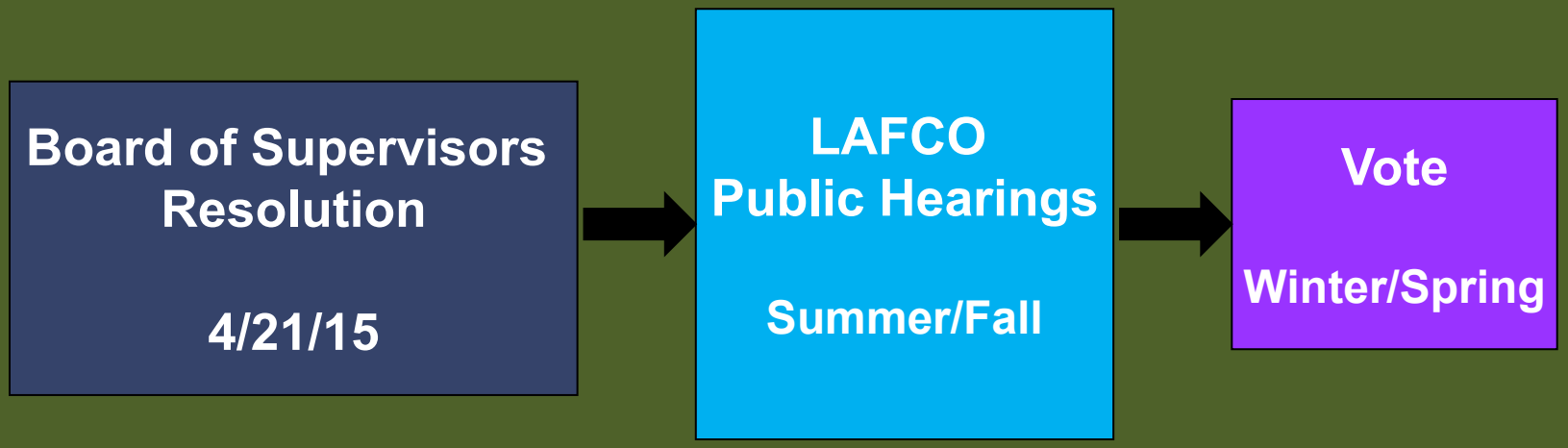
9 Member Board of Directors Election Process

	Registered Voters Seats	*Landowner Seats*
BOARD OF DIRECTORS SEATS	3	6
ELIGIBLE POOL OF BOARD OF DIRECTORS CANDIDATES	Registered Voters within the Water District boundary	Any Landowner (resides within two miles of the Water District boundary, or within the boundaries of various surrounding agencies) can run for any land-size category
WHO CAN VOTE?	Registered Voters within Water District Boundary	SMALL **LANDOWNERS**: Owning less than 40 acres MEDIUM **LANDOWNERS**: Owning 40 acres or more but less than 400 acres LARGE **LANDOWNERS**: Owning 400 acres or more
HOW MANY VOTES?	1 Per Registered Voter within the Water District boundary	**Acreage Owned** Landowners can only vote within their ownership category, and weighted by acreage owned.

Draft 1/13/15

AB2453

Formation Process



AB2453

The Decisions

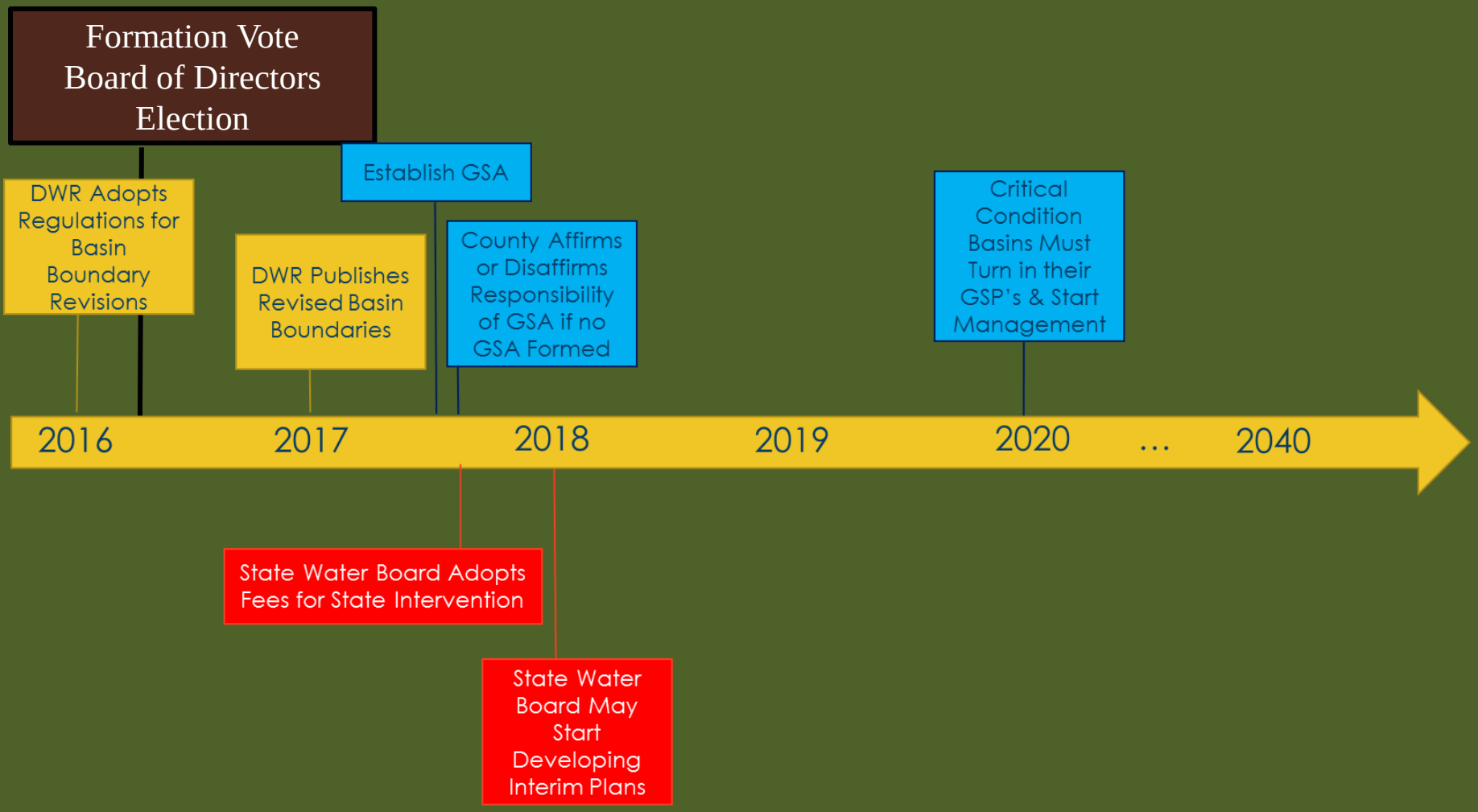
- Form the District?
  - One landowner, one vote
- Elect Nine Board Members
- Fund the District?

AB2453

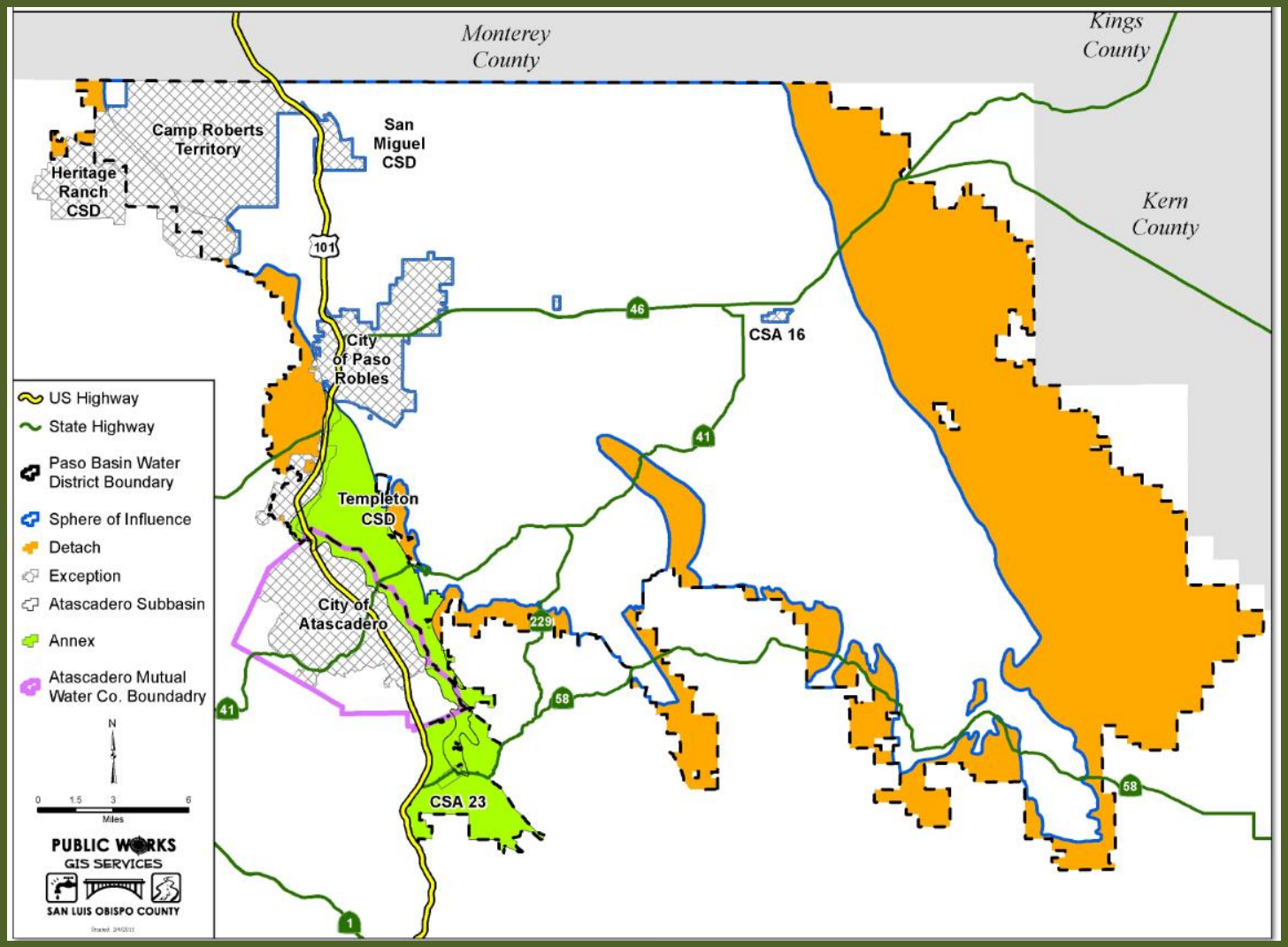
Funding the District

- Subject to prop 218 public decision process
- Board of Supervisors directs type of process
- Summer/Fall - Board deliberations

Timing Considerations



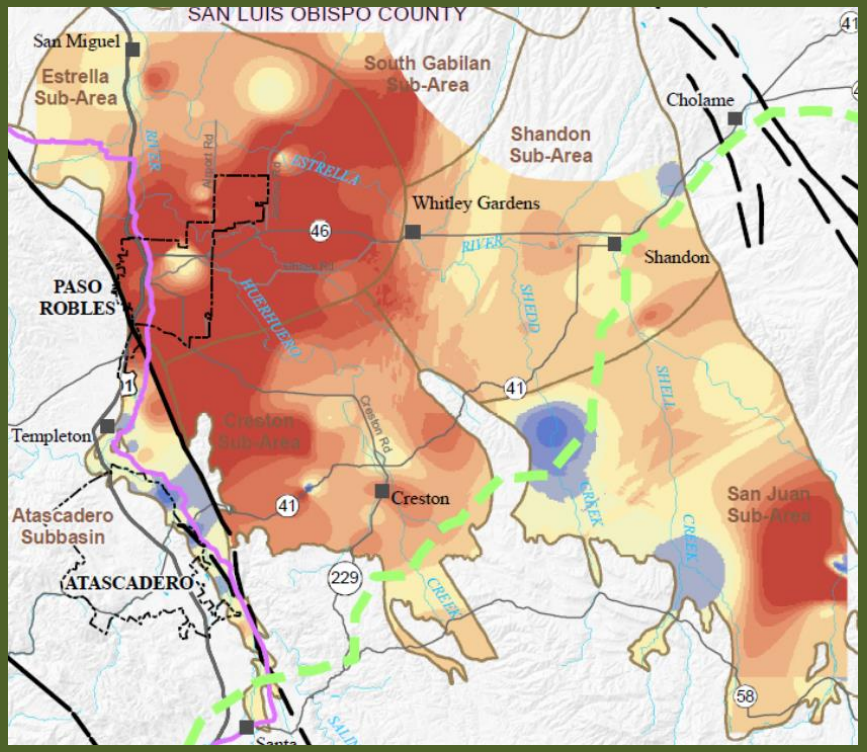
Groundwater Sustainability Agency(ies?)

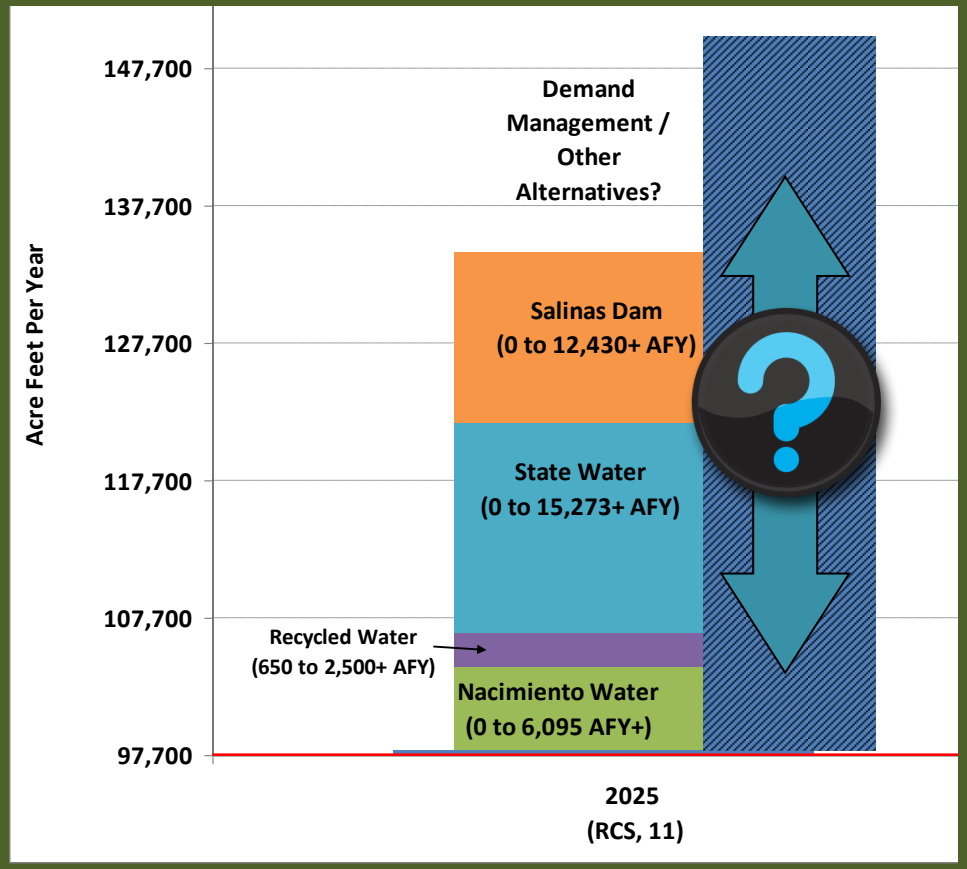


Groundwater Sustainability Plan(s?)

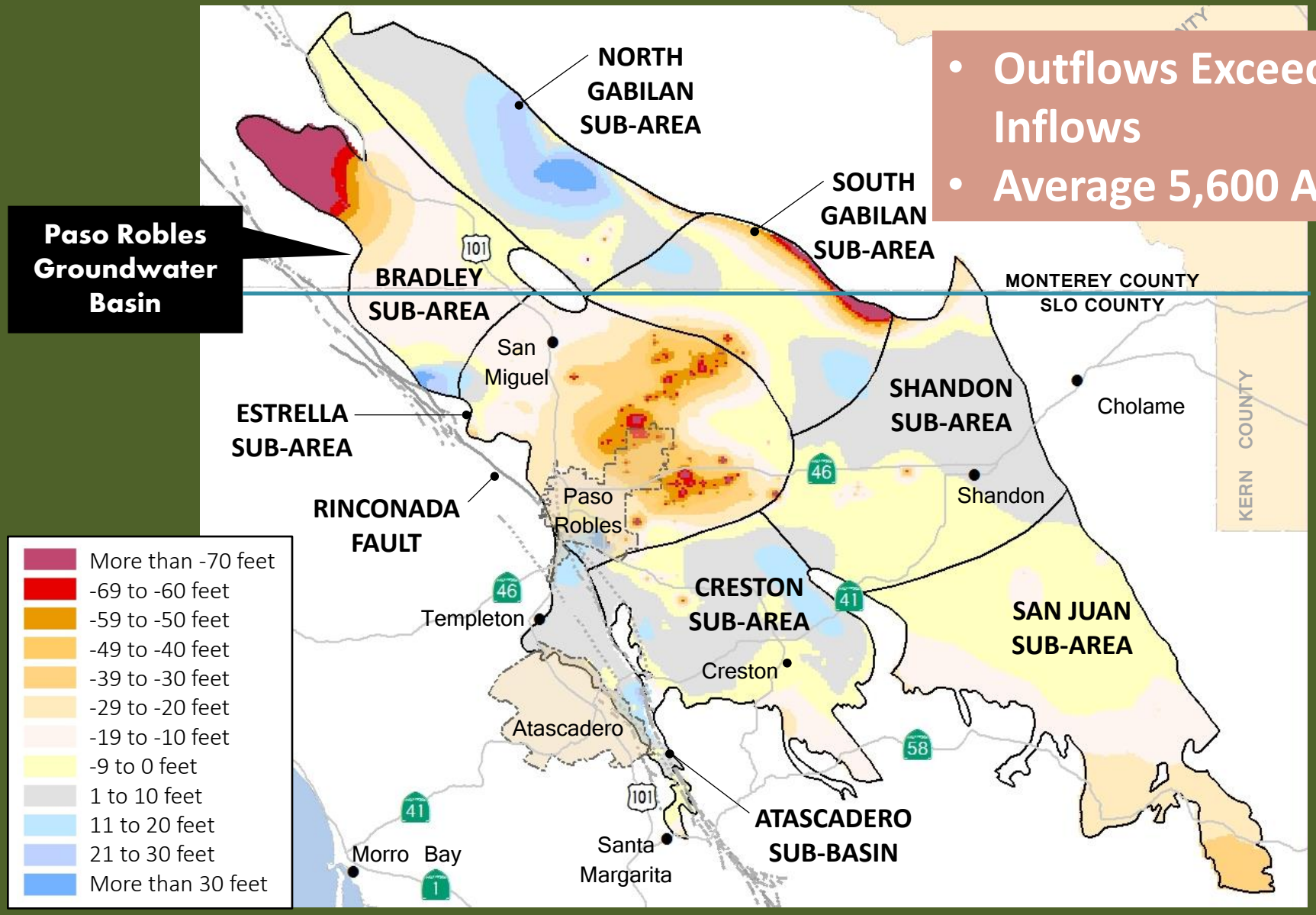
- AB 3030 Groundwater Management Plan
  - Monitoring Improvements
  - Computer Modeling
  - Supplemental Water Supply Options Study
  - Conservation Programs
  - Active Advisory Committee
- Integrated Regional Water Management Program
  - Salt and Nutrient Management Plan
  - Percolation Areas Study
  - Funding Opportunities
- US Bureau of Reclamation Basin Study Program
  - Salinas River Basin Study (potential)

Supplemental Supply Options





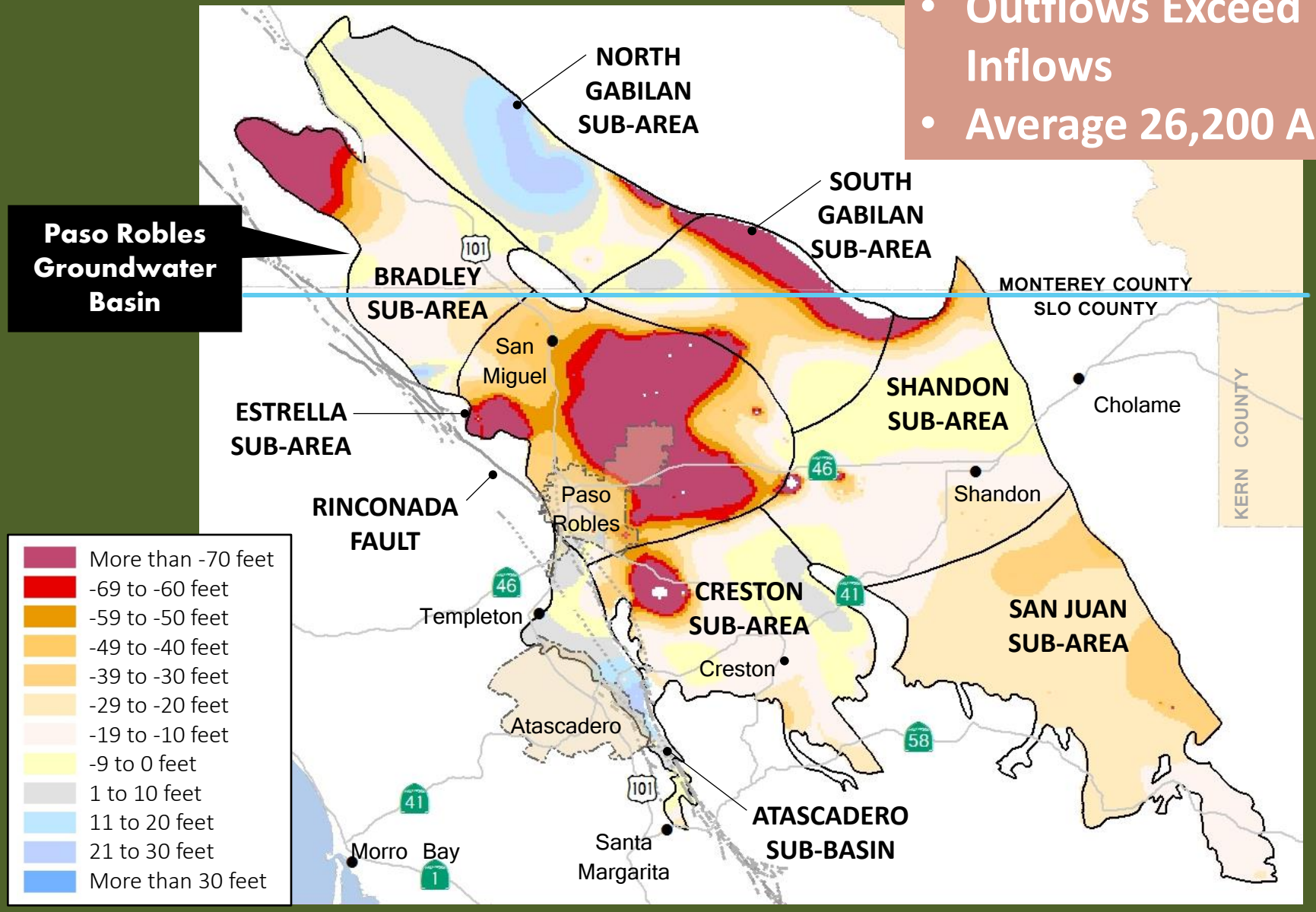
Change in Layer 4 Groundwater Elevations (2012-2040)
Model Run 1 – Baseline with No Growth



- Outflows Exceed Inflows
- Average 5,600 AFY

Change in Layer 4 Groundwater Elevations (2012-2040)
Model Run 2 – Baseline with Growth

- Outflows Exceed Inflows
- Average 26,200 AFY



Additional Model Runs

- Analysis 1 – Demand Reduction Scenario
- Analysis 2 – Salinas River Recharge
- Analysis 3 – Offset Basin Pumping with Recycled Water
- Analysis 4 – Offset Water Demand in Estrella Sub-Area
- Analysis 5 – Additional Releases to Huer Huero Creek
- Analysis 6 – Additional Releases to Estrella River
- Analysis 7 – Offset Pumping in Creston Sub-Area
- Analysis 8 – Offset Pumping in Shandon Sub-Area

San Luis Obispo County Department of Public Works

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Save Our WATER

Californians Don't Waste

www.pasobasin.org