

A large, semi-transparent water drop icon is centered on the slide. It has a thick black outline and a blue gradient fill. The text is overlaid on this icon.

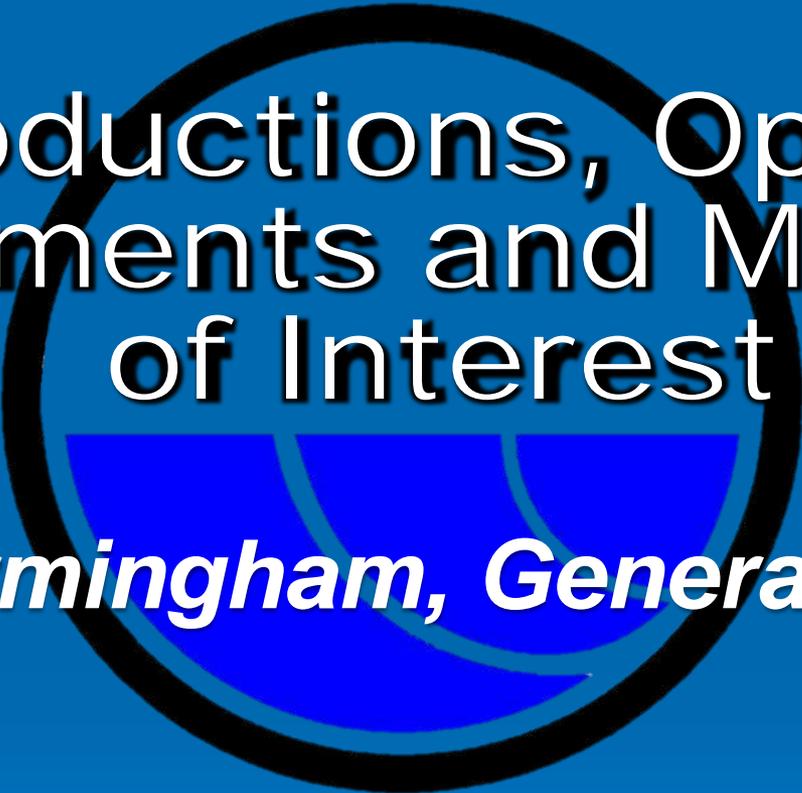
Westlands Water District Annual Water Users' Workshop

March 15, 2016

In the bottom right corner, there are several faint, concentric circles representing water ripples, rendered in a lighter shade of blue than the background.

Outline

- Introductions, Opening Comments and Matters of Interest
 - Water Supply Outlook for 2016-2017 CVP Allocation, Rescheduling & Transfers
 - 2016-2017 Adopted Budget, Water Rate, Charge & Assessments
 - Groundwater Conditions
 - Sustainable Groundwater Management Act
 - Questions & Answers
- 
- The background of the slide features several concentric, light blue circular ripples that resemble water droplets or raindrops, scattered across the lower half of the page.



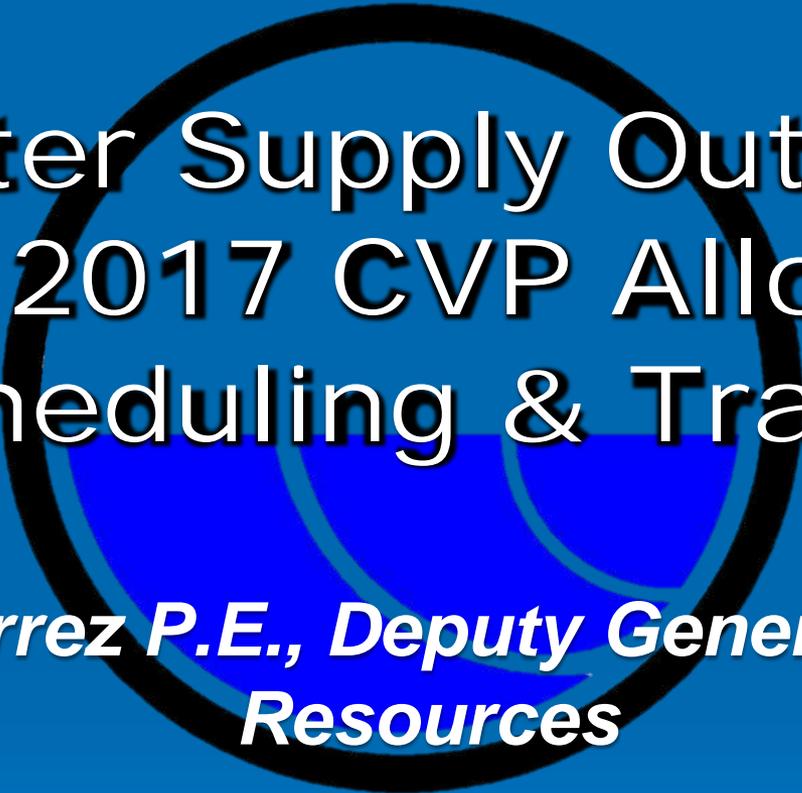
Introductions, Opening Comments and Matters of Interest

Tom Birmingham, General Manager



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Water Supply Outlook 2016 - 2017 CVP Allocation, Rescheduling & Transfers

*Jose Gutierrez P.E., Deputy General Manager -
Resources*



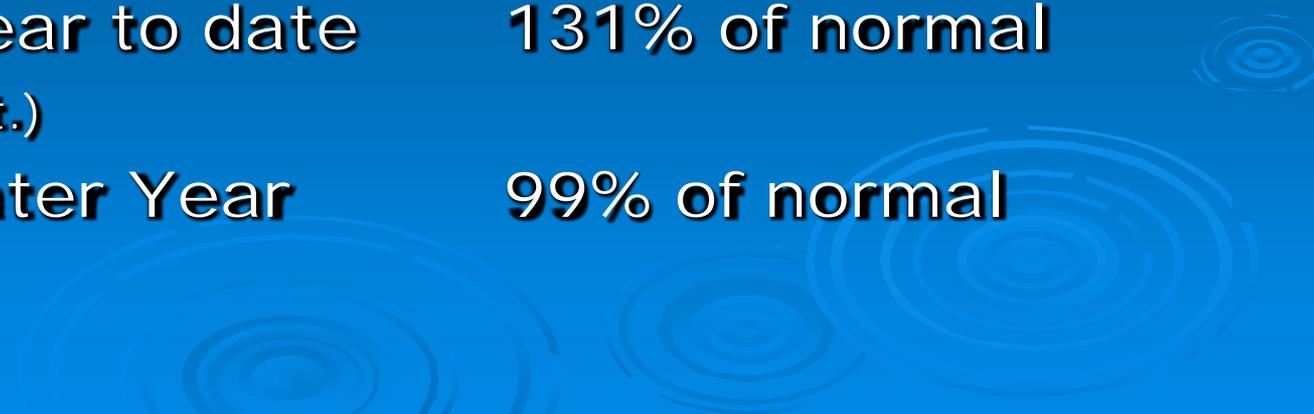


Northern Sierra Precipitation

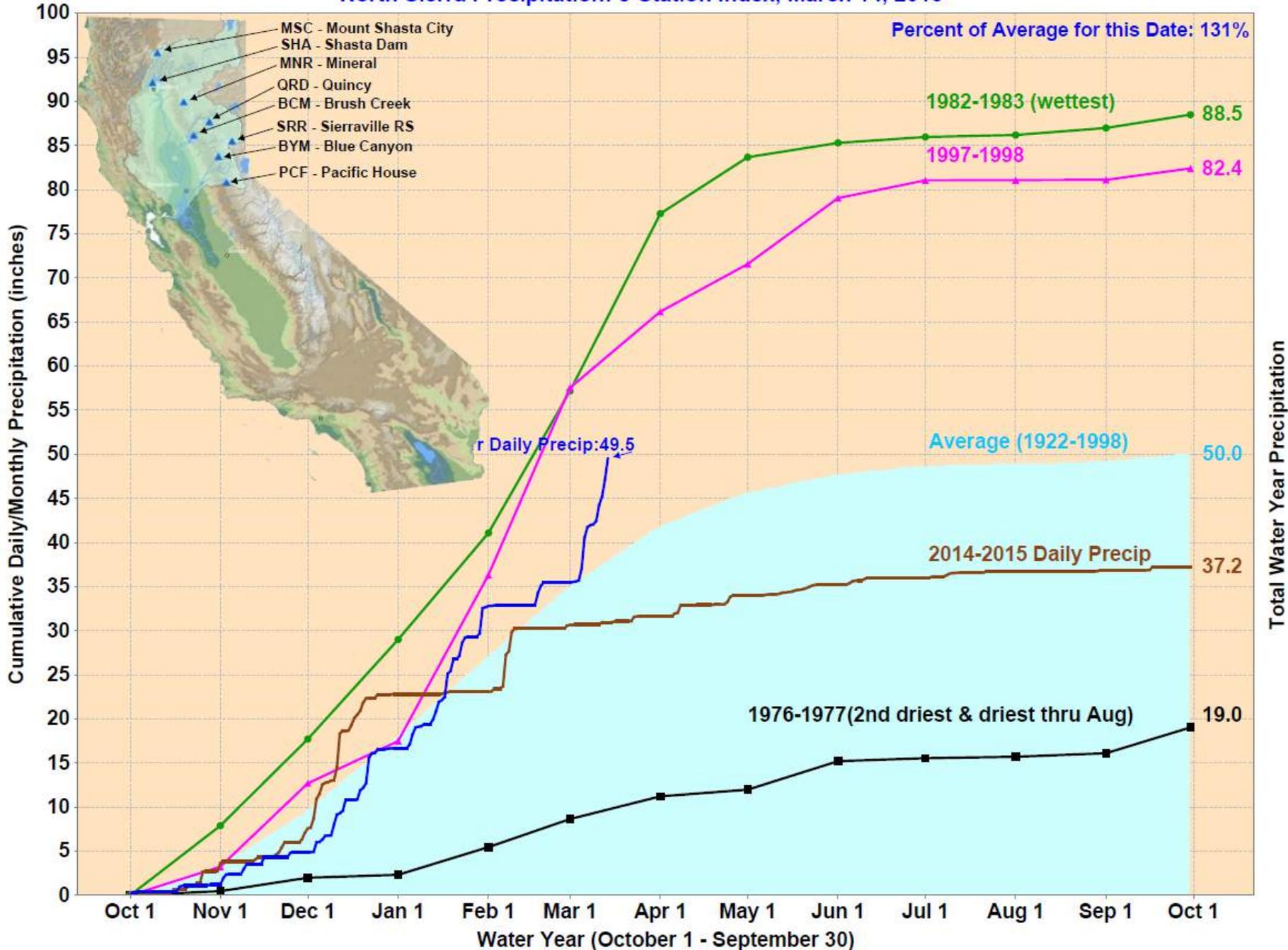
8 – Station Index

2016 - 2017

- November 59% of normal
 - December 140% of normal
 - January 179% of normal
 - February 34% of normal
 - March 203% of normal

 - Water Year to date 131% of normal
(Since Oct.)
 - Total Water Year 99% of normal
- 

North Sierra Precipitation: 8-Station Index, March 14, 2016





San Joaquin Precipitation 5 – Station Index

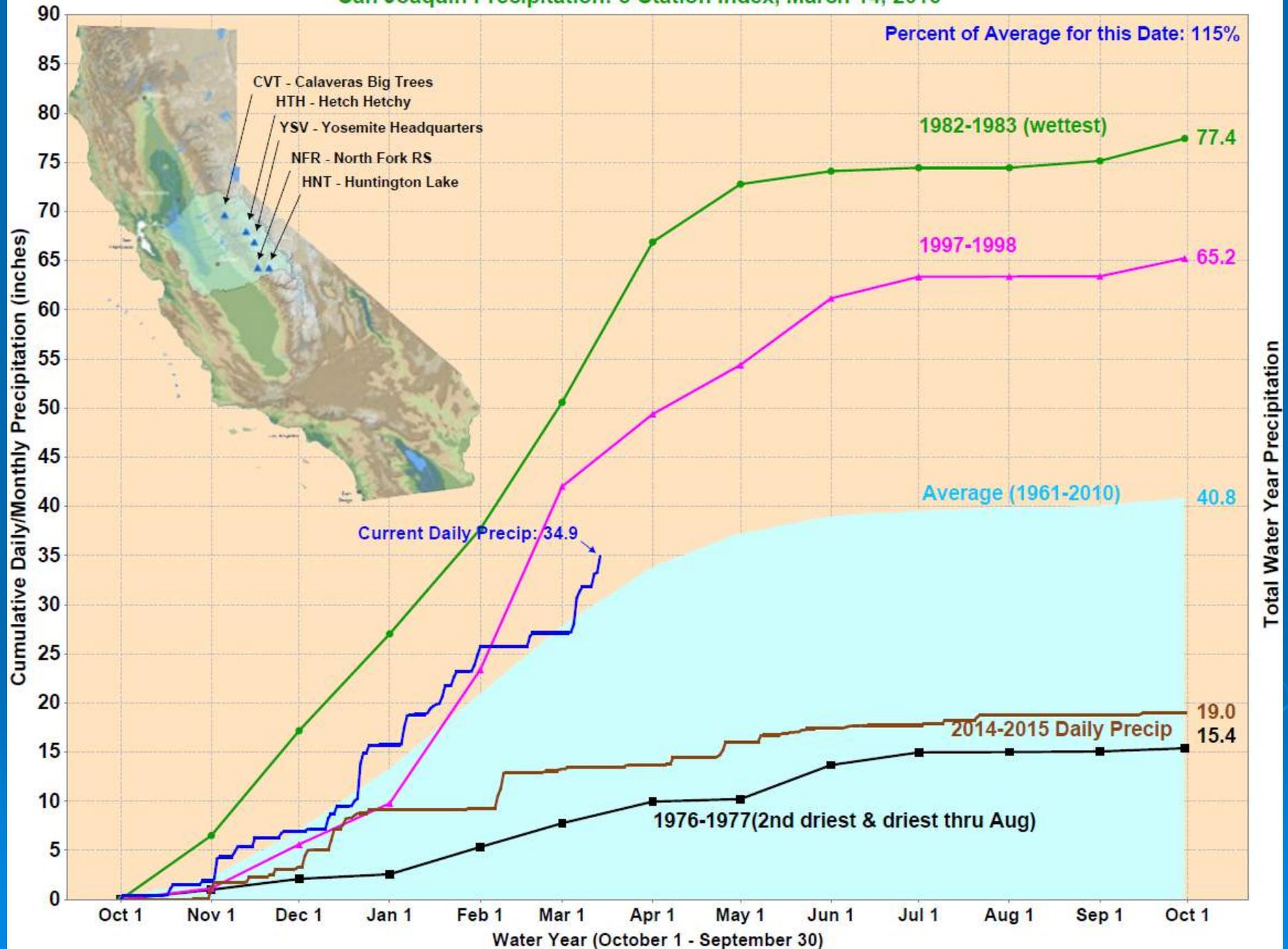
2016 - 2017

- November 109% of normal
 - December 142% of normal
 - January 133% of normal
 - February 20% of normal
 - March 128% of normal

 - Water Year to date 116% of normal
(since Oct.)
 - Total Water Year 86% of normal
- 

San Joaquin Precipitation: 5-Station Index, March 14, 2016

Percent of Average for this Date: 115%



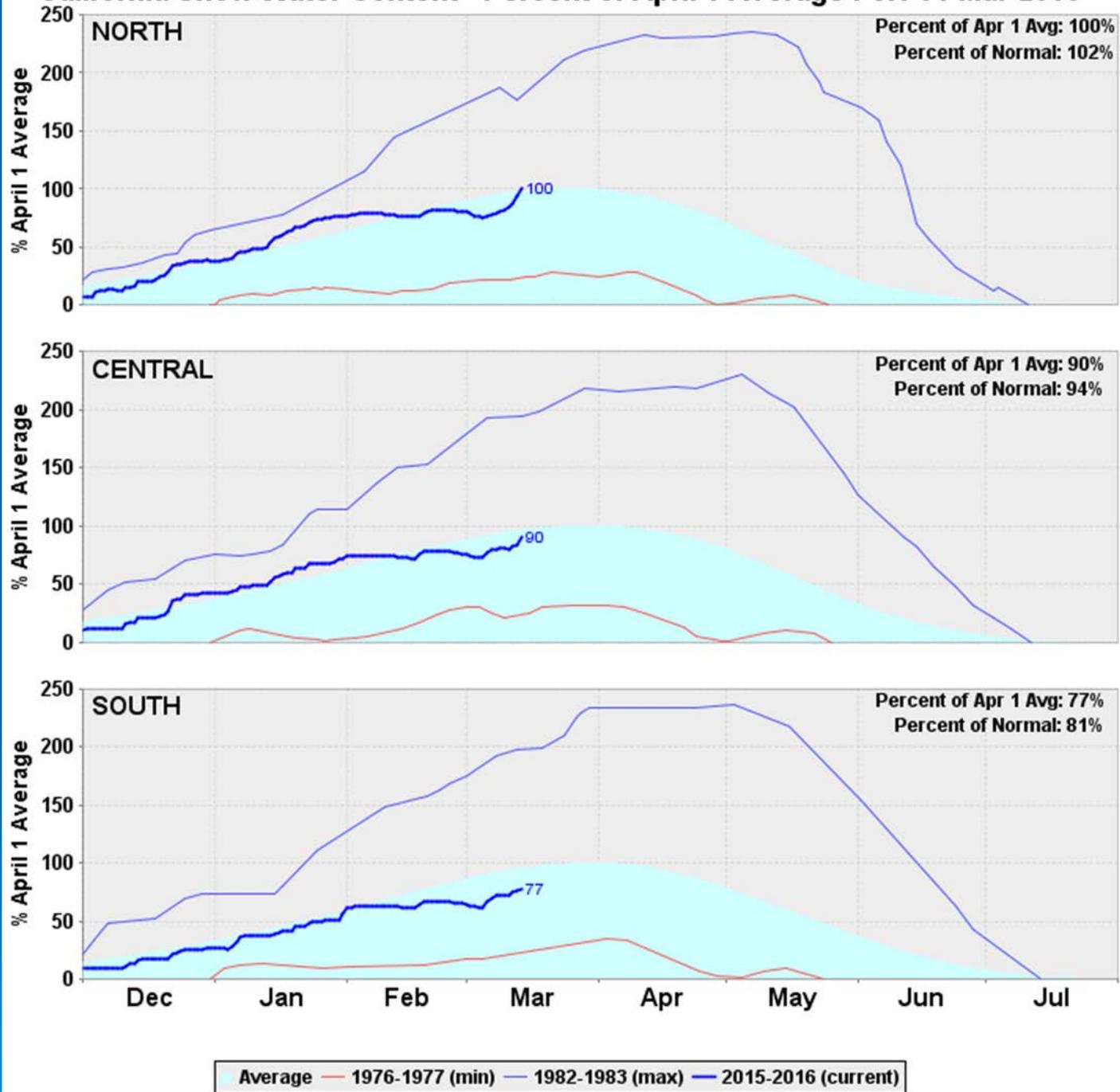
Total Water Year Precipitation



Sierra Snow Pack (Water Content % of April 1 Avg)

- Northern Sierra - 100% of Normal
 - Central Sierra - 90% of Normal
 - Southern Sierra - 77% of Normal
- 

California Snow Water Content - Percent of April 1 Average For: 14-Mar-2016



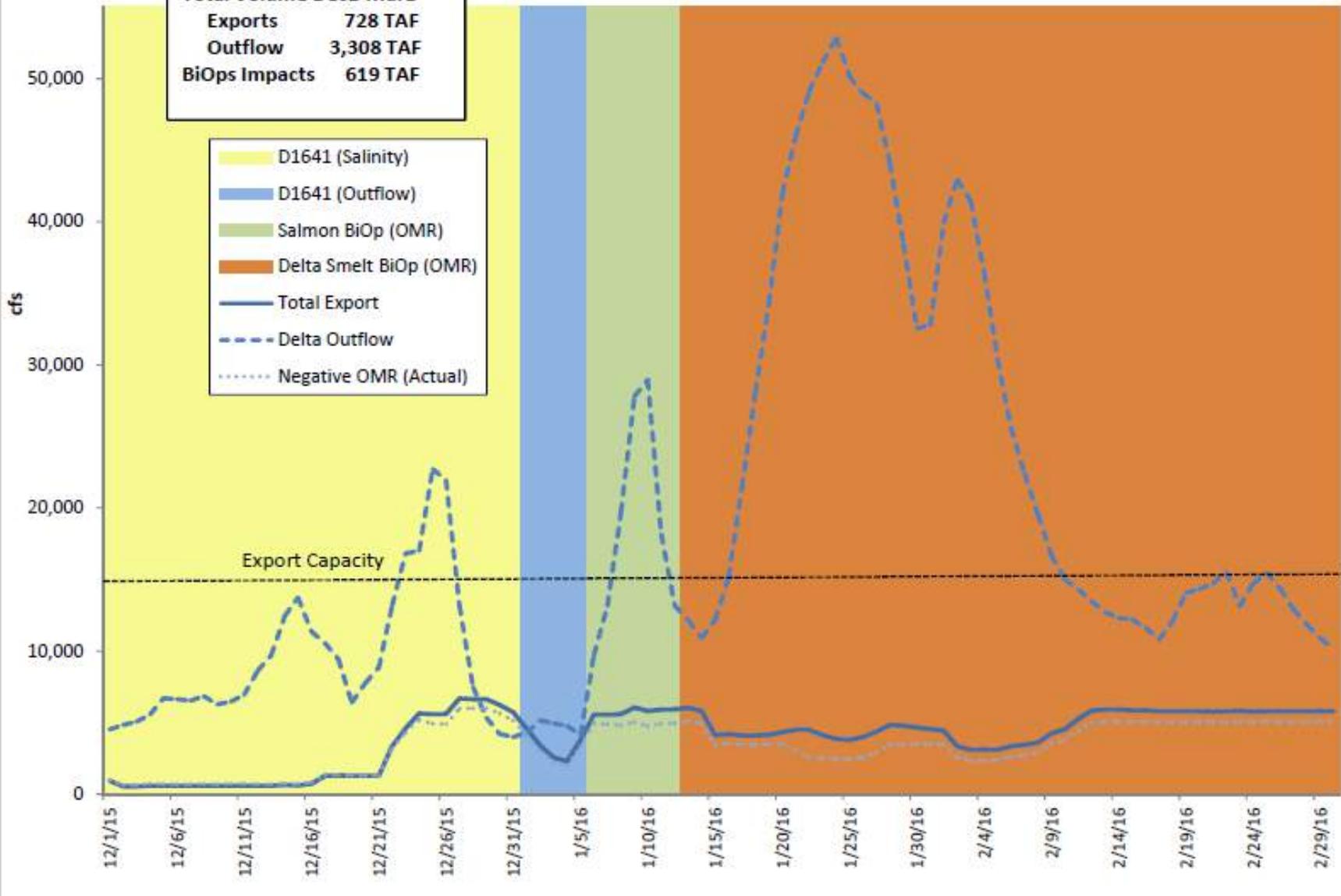
Reservoir Storage

(thousands of AF)

Reservoir	15 Yr. Avg. (TAF)	WY 2015 (TAF)	WY 2016 (TAF)	% Ave.
Trinity	1,661	1,164	1,100	65
Shasta	3,369	2,652	3,582	106
Folsom	570	574	673	118
New Melones	1,441	600	529	37
Fed. San Luis	741	389	367	50
Millerton	334	201	330	99
Total North CVP	7,781	5,379	6,251	80
Oroville (SWP)	2,290	1,744	2,492	109

2016 Export Constraints

Total Volume Dec1-Mar1	
Exports	728 TAF
Outflow	3,308 TAF
BiOps Impacts	619 TAF



2016 - 2017 Initial Water Supply Allocation

- Staff expects the District's initial CVP South of Delta agricultural allocation will be zero for the third consecutive year.

2015-2016 End of Year Totals (acre-feet)

CVP Contract (0%)	0
CVP M&I Shortage Allocation	3,444
Rescheduled (2013-14)	84,790
Transfers (Water Users)	161,578
Supplemental Water	110,166
Groundwater Canal Integration Program (CIP)	21,412
District Pumped GW Credit (DIP)	<u>1,727</u>
Total Surface Water Supply:	383,117
Total Use:	<u>-174,412</u>
*2015-2016 Rescheduled Water:	208,705
Non - GWMP Groundwater	461,000
Groundwater Management Program (GWMP)	<u>+198,898</u>
Total District Groundwater Pumping	= 659,898

*As of February 29, 2016

2016-2017 Water Supply Forecast (acre-feet)

CVP Contract (0%)	0
CVP M&I Shortage Allocation	5,805
2013 CVP Rescheduled Water	3,000
2015 Rescheduled Water	202,900
Transfers (Water Users)	40,000
2016 Supplemental Water	115,000
District Pumped GW Credit (DIP)	2,000
Groundwater CIP	<u>25,000</u>
Total Surface Water Supply:	393,705
Estimated Total Use:	<u>-183,705</u>
Estimated Rescheduled Water:	210,000
Non-GWMP Groundwater	460,000
Groundwater Management Program	<u>200,000</u>
Total District Groundwater Pumping	= 660,000

Rescheduled Water Supplies Stored in SLR

- 5,805 AF of the District's 2013-14 CVP allocation
- 88,445 AF of acquired 2014 Supplemental Water
- 99,455 AF of acquired 2015 Supplemental Water
- 15,000 AF of 2015 Canal Integration Program
- 208,705 AF Total 2015-16 Rescheduled Water
- Rescheduled water is available throughout the end of 2016-2017 water year
 - At this time, no anticipated restrictions



2016 – 2017

Supplemental Water Supply

- Applications are due March 31
 - 49,112 AF requested to date
 - Anticipated Price: \$900/AF - \$1,200/AF delivered
 - Advance payment requirement, at time of allocation
 - Delinquency may result in water not being made available
 - Submit an application for all entities
- 

2016-2017 Canal Integration Program (CIP)

- Up to 30 TAF allowed under Warren Act Contract (April- August)
- The District has a 5 year Warren Act Contract for CIP deliveries on the CVP side of the SLC
- Wells must meet water quality standards to participate in the program

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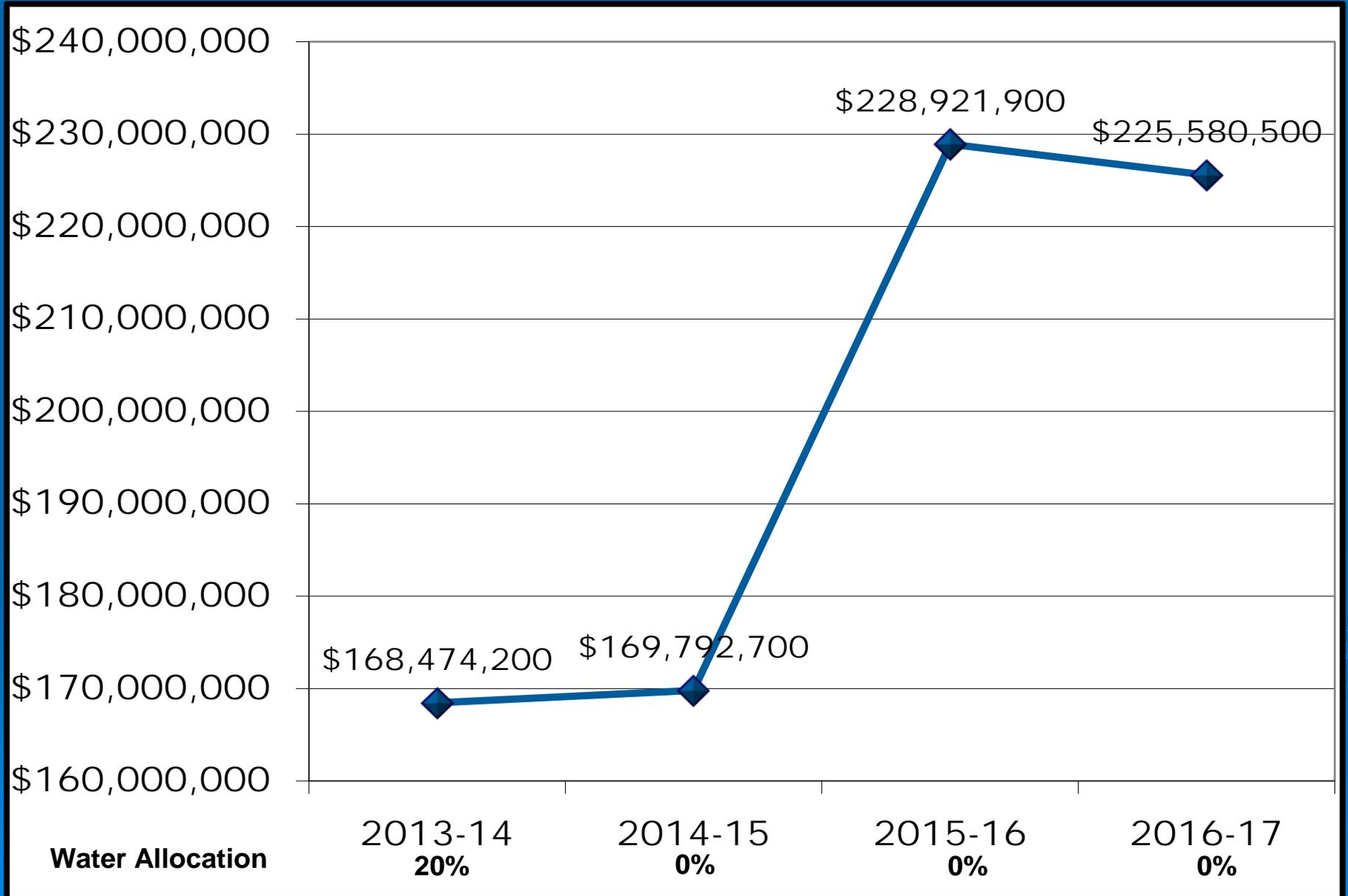


2016-2017 Adopted Budget, Water Rates, Charges & Assessments

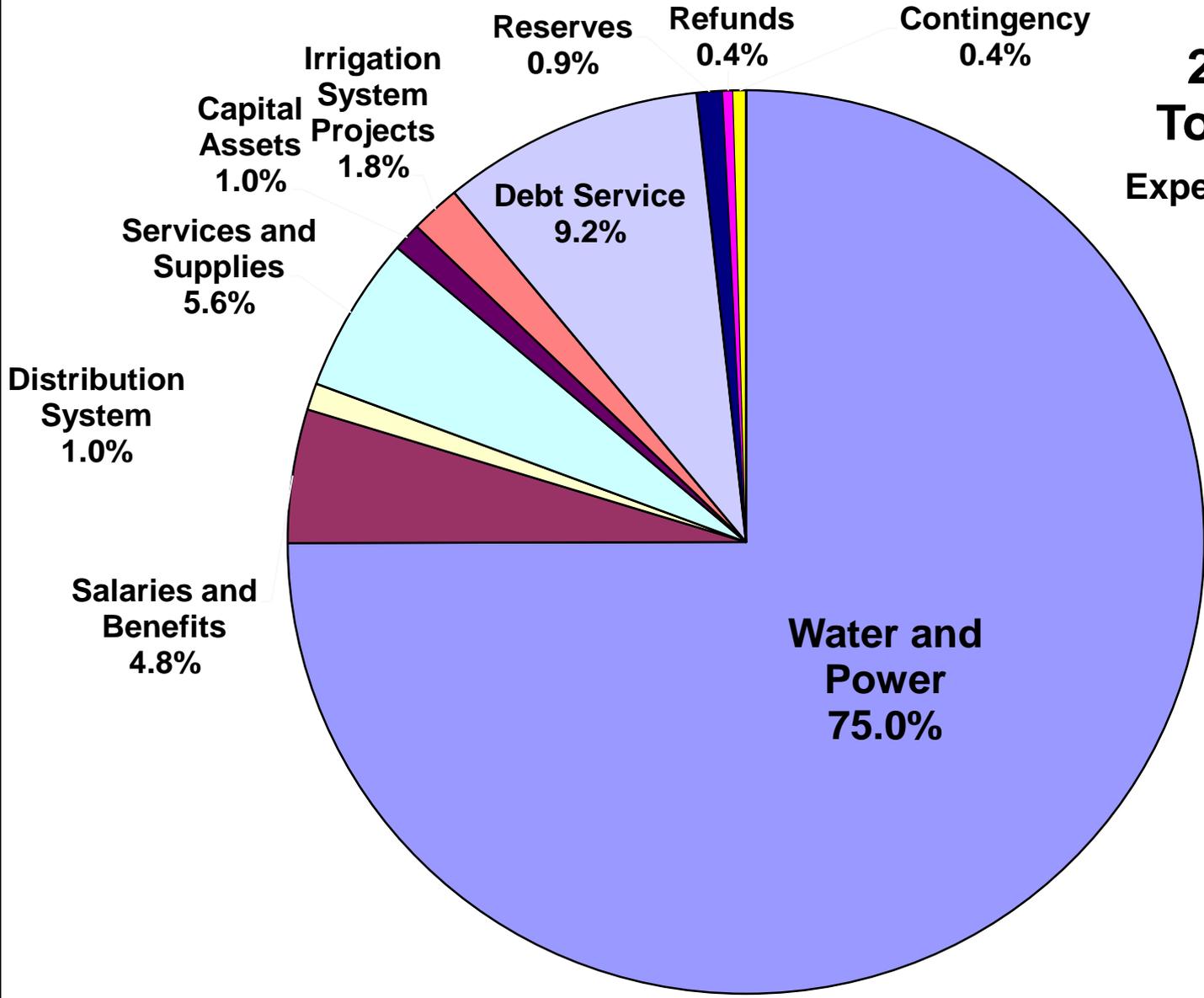
***Stephen Farmer, Supervisor of
Customer Accounting***



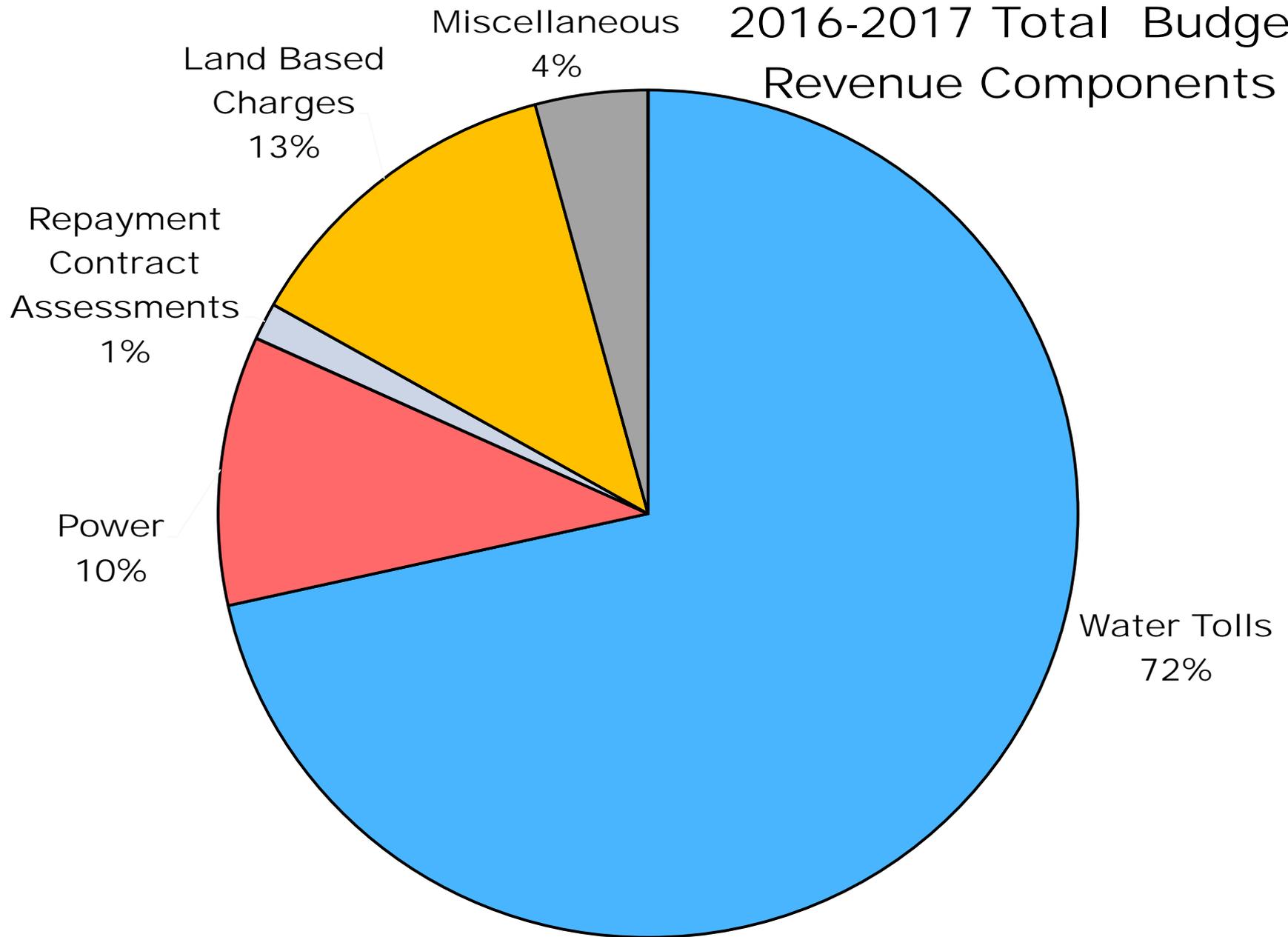
Total Budget



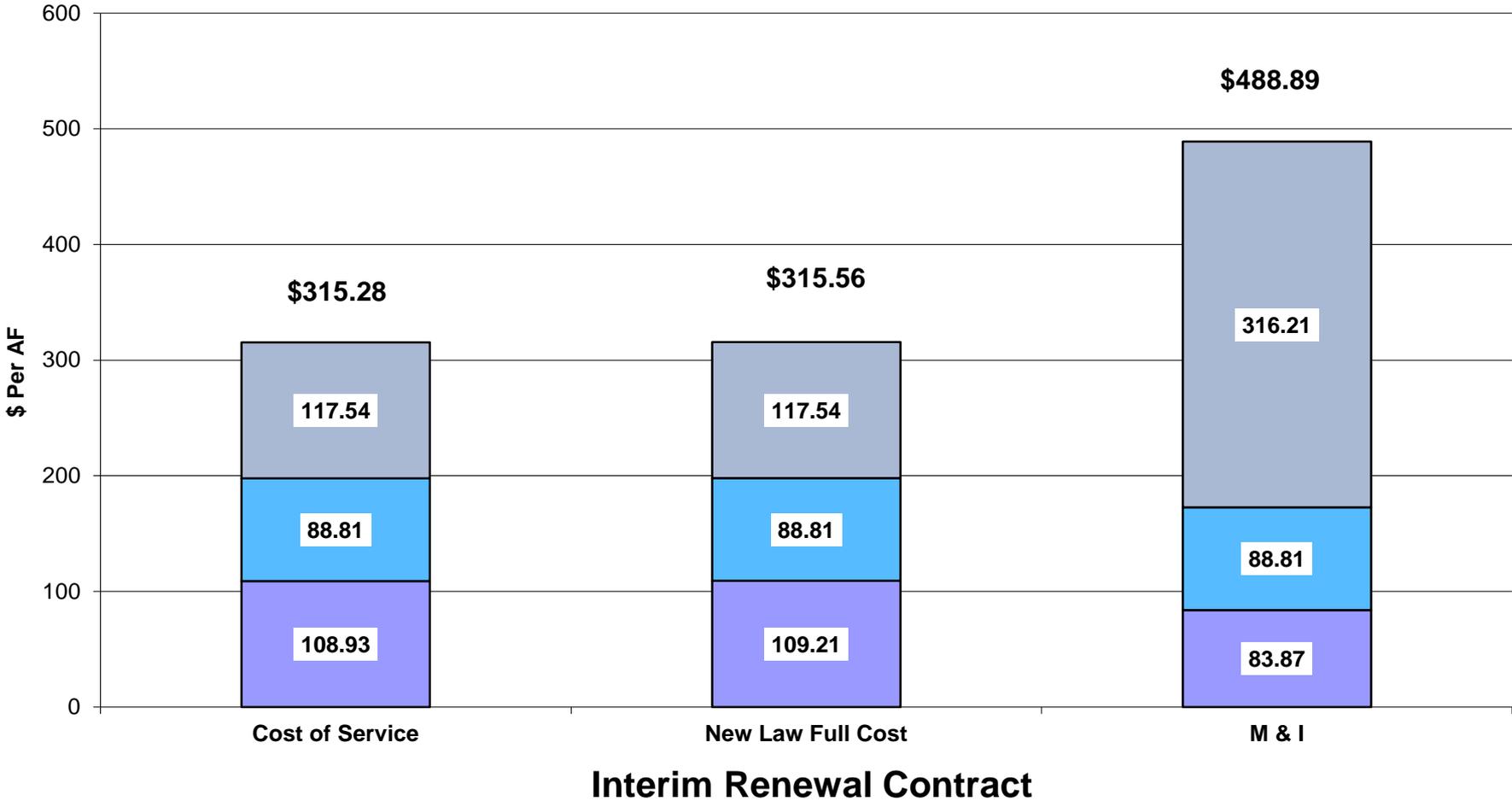
2016-2017 Total Budget Expense Components



2016-2017 Total Budget Revenue Components



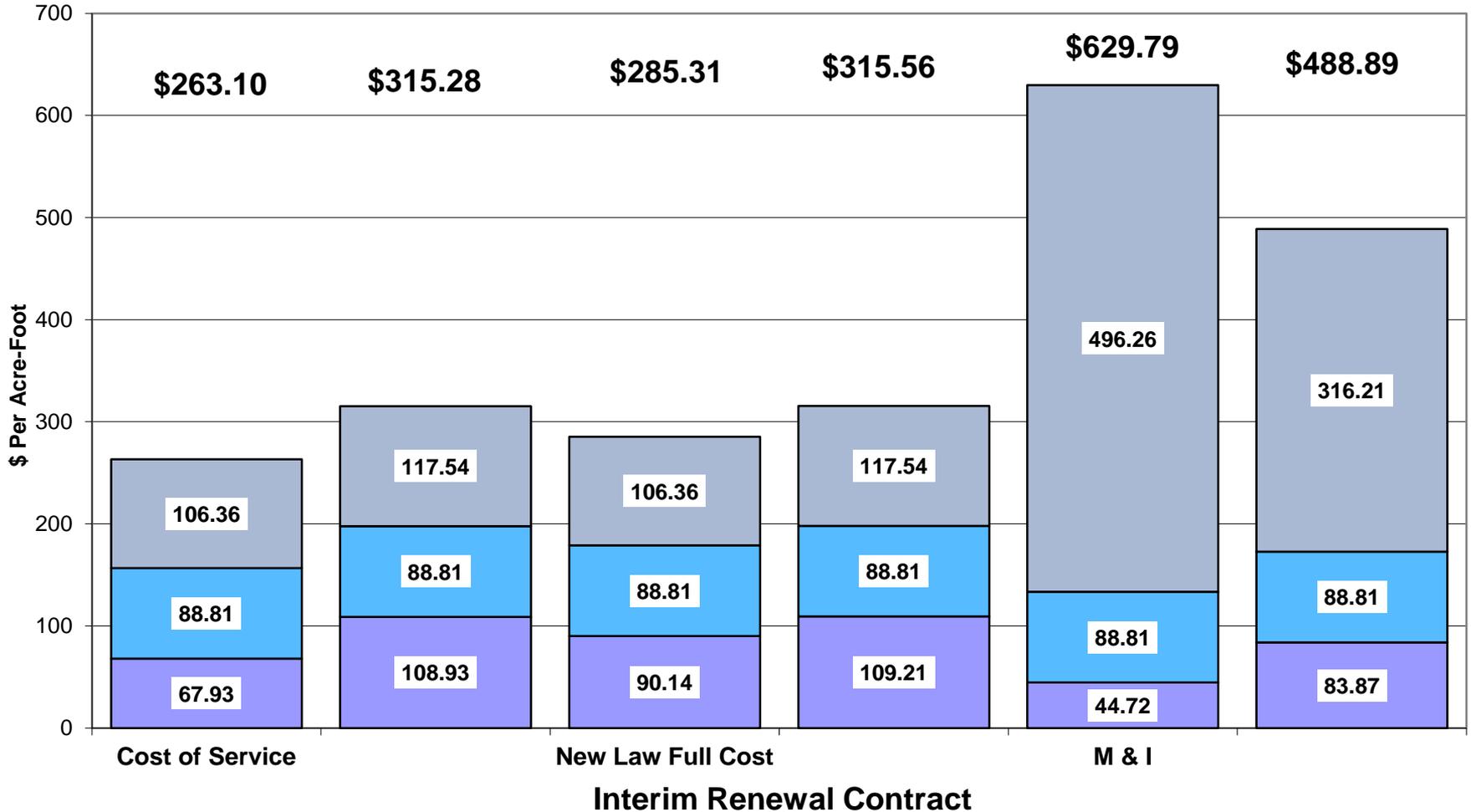
2016-2017 Water Rates



Water Rates Comparison

2015-2016 and 2016-2017

■ Bureau of Reclamation
 ■ Authority O&M
 ■ Westlands Water District



Additional Items

- Reclamation Law forms were due February 29, 2016
- 1st installment of Land-based charges is due March 25, 2016.

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Groundwater Conditions

Jose Gutierrez P.E., Deputy General Manager

- Resources





Groundwater Monitoring/ Management Plan

- Meter readings, water level measurements, well construction information and EC data for all wells
 - Annual Report of Groundwater Conditions
- 

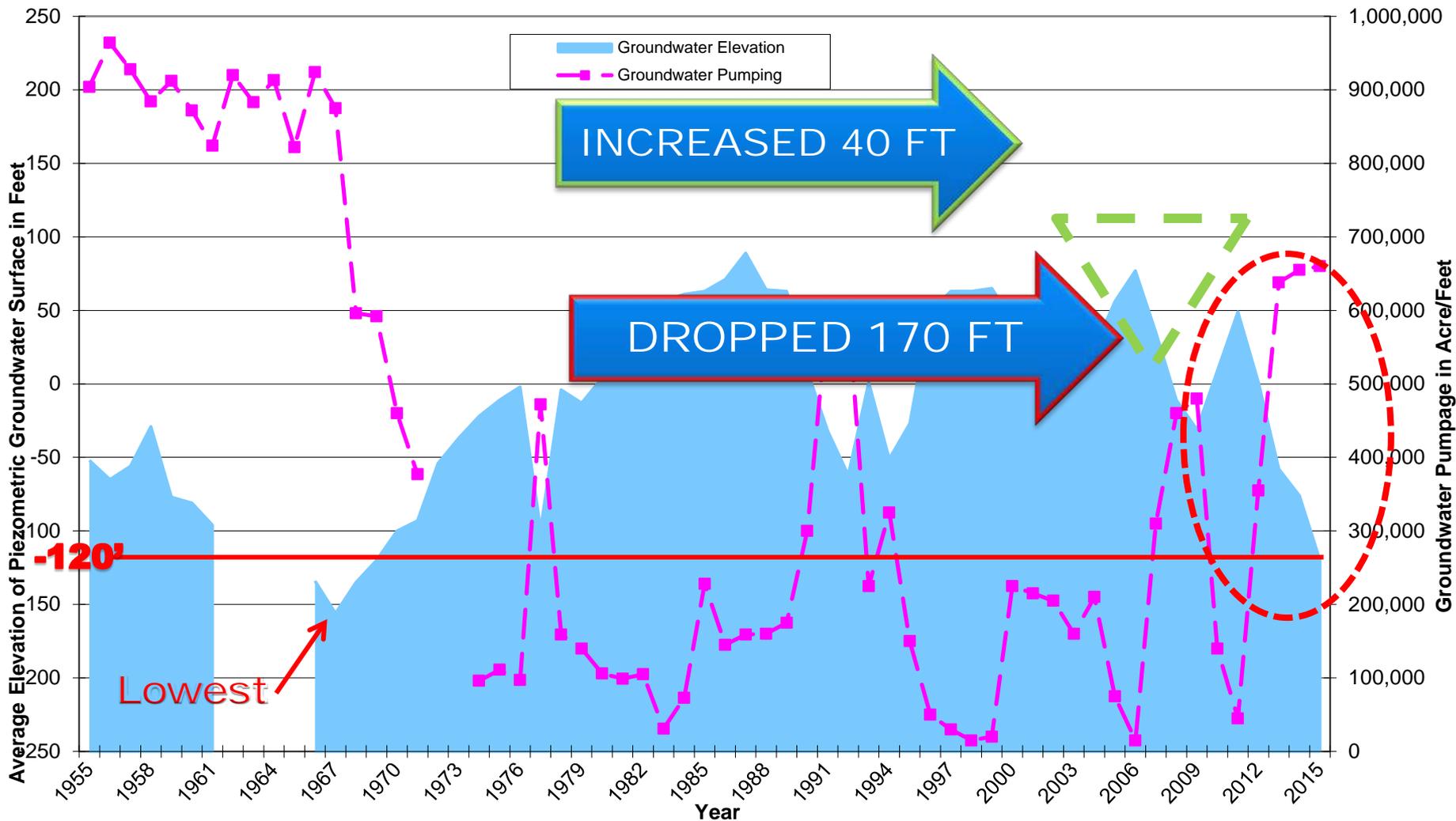
Tulare Lake Basin



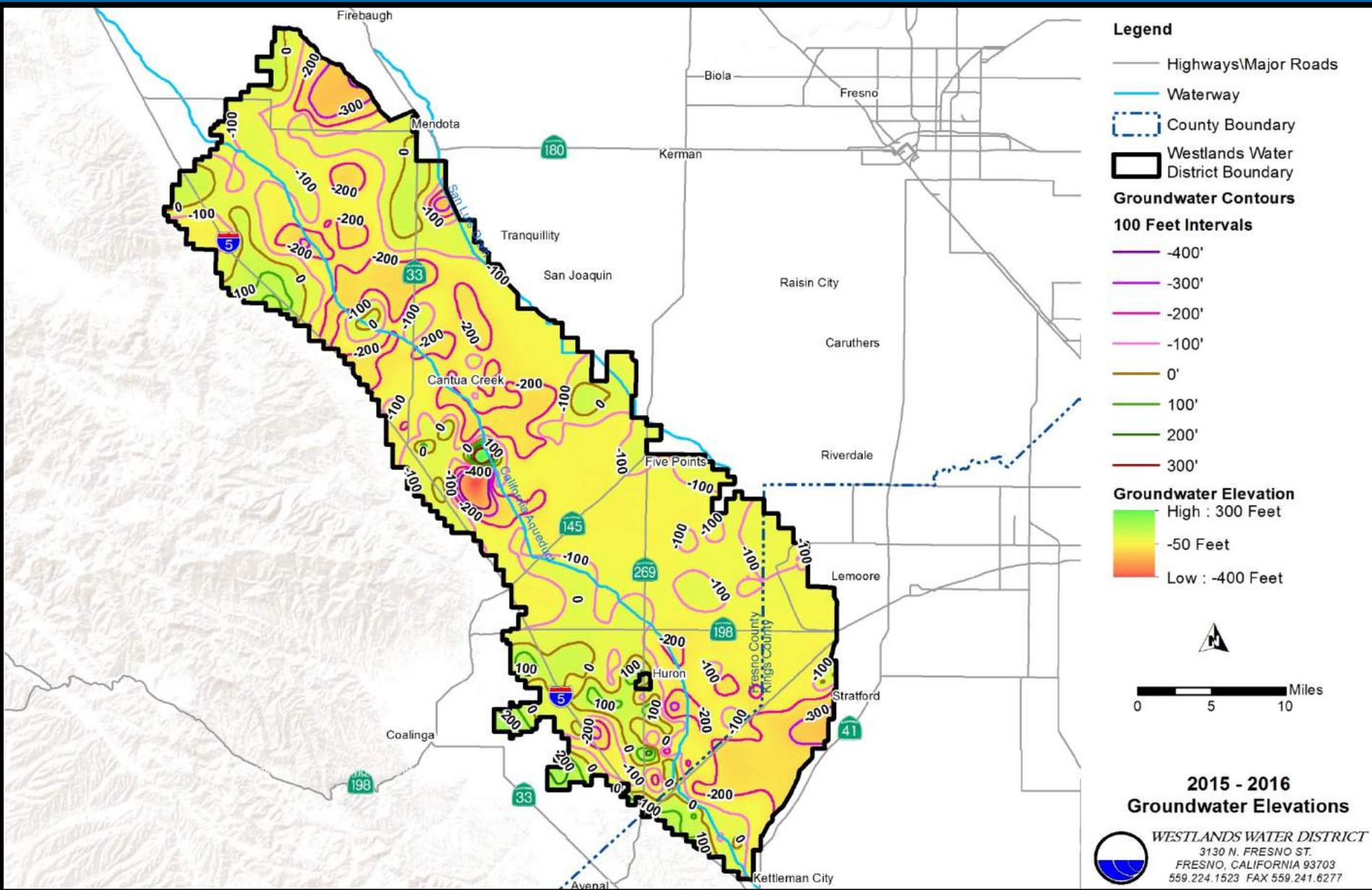
Groundwater Conditions

- Total 2015-2016 groundwater pumping is approximately 660,000 AF
 - Increase of 5,000 AF compared to 2014-2015
- GWMP pumped 198,898 AF
 - Decrease of 22,261 AF compared to 2014-2015
- Average groundwater elevation decreased 44 feet to 120 feet below MSL
- In 2006, average groundwater elevation was 44 feet above MSL

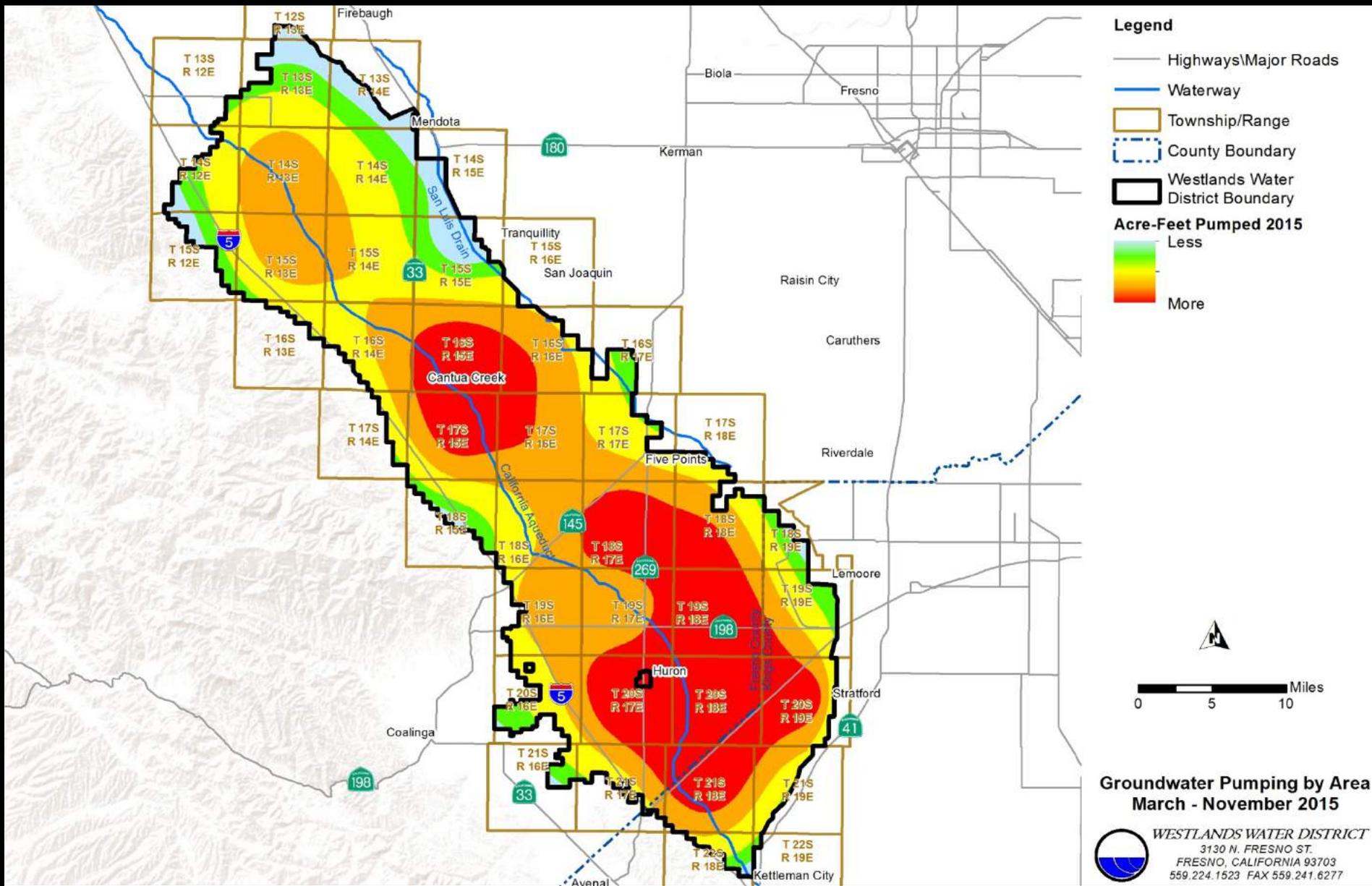
Groundwater Conditions since 1955



Groundwater Elevation 2015-2016



Groundwater Pumping by Area



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Sustainable Groundwater Management Act

(SGMA)

*Jose Gutierrez P.E., Deputy General Manager
- Resources*

SGMA's Objectives

- Local Management of the Groundwater Basin
- Requires subbasins to be sustainably managed by 2040
 - Without causing undesirable results:



Surface Water
Depletion



Reduction
of Storage



Degraded
Quality



Seawater
Intrusion



Land
Subsidence



Lowering
GW Levels

SGMA Involvement

➤ Groundwater Sustainability Agency (GSA)

- Westlands Board has the authority to establish a GSA

➤ Counties

- Counties are the alternative GSA option

➤ DWR

- Implements GSP & Subbasin boundary regulations
- Provides technical assistance to GSAs
- Assess the GSPs developed by the GSAs

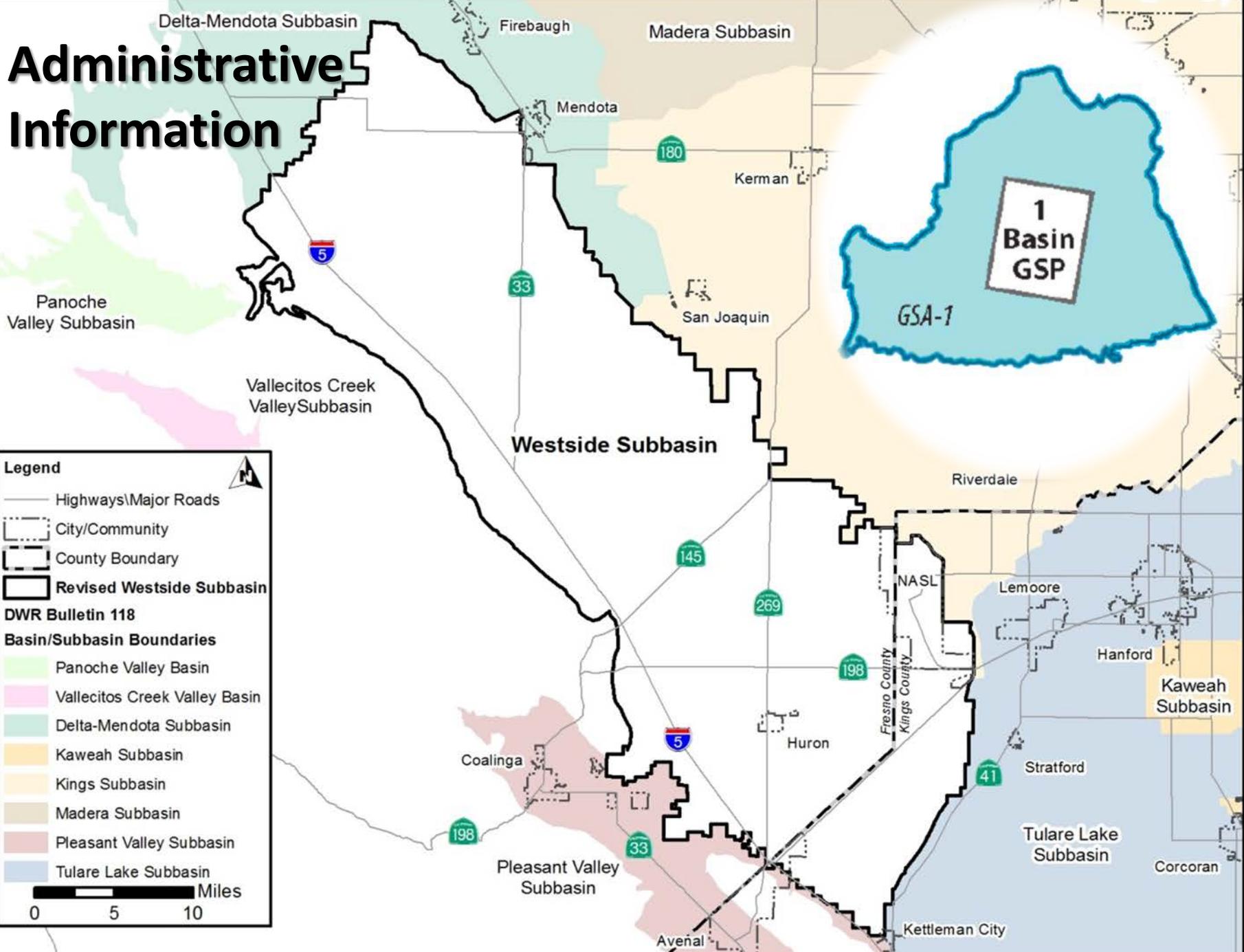
➤ SWRCB

- Intervention if a GSA is not formed or if basin not managed sustainably

GSA Responsibility

- **Develop a Groundwater Sustainability Plan (GSP)**
 - **Achieve sustainability by 2040**
 - **Adopt rules, regulations, monitor network and report to the State**
 - **Develop a water budget**
 - **Develop a groundwater model**
 - **Coordinate with adjacent subbasins**

Administrative Information



Legend

- Highways/Major Roads
- City/Community
- County Boundary
- Revised Westside Subbasin

DWR Bulletin 118

Basin/Subbasin Boundaries

- Panoche Valley Basin
- Vallecitos Creek Valley Basin
- Delta-Mendota Subbasin
- Kaweah Subbasin
- Kings Subbasin
- Madera Subbasin
- Pleasant Valley Subbasin
- Tulare Lake Subbasin

Miles
0 5 10

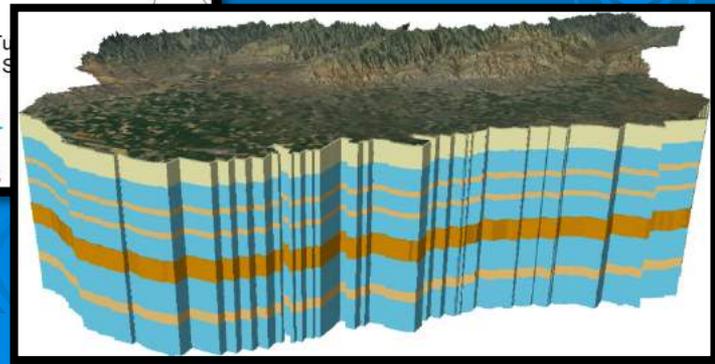
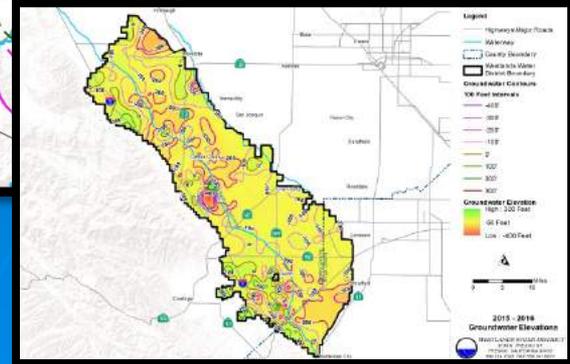
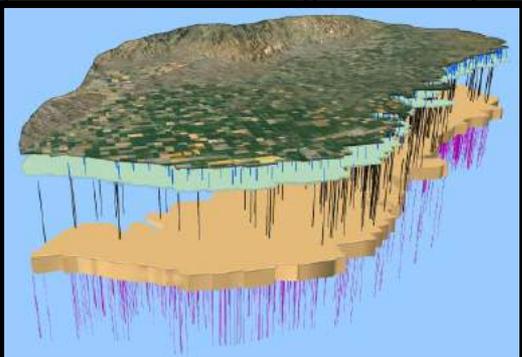
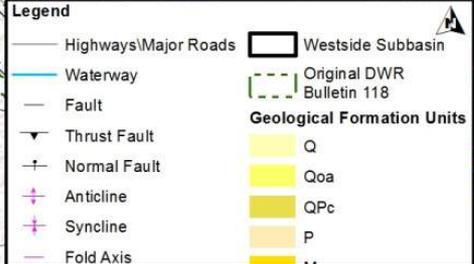
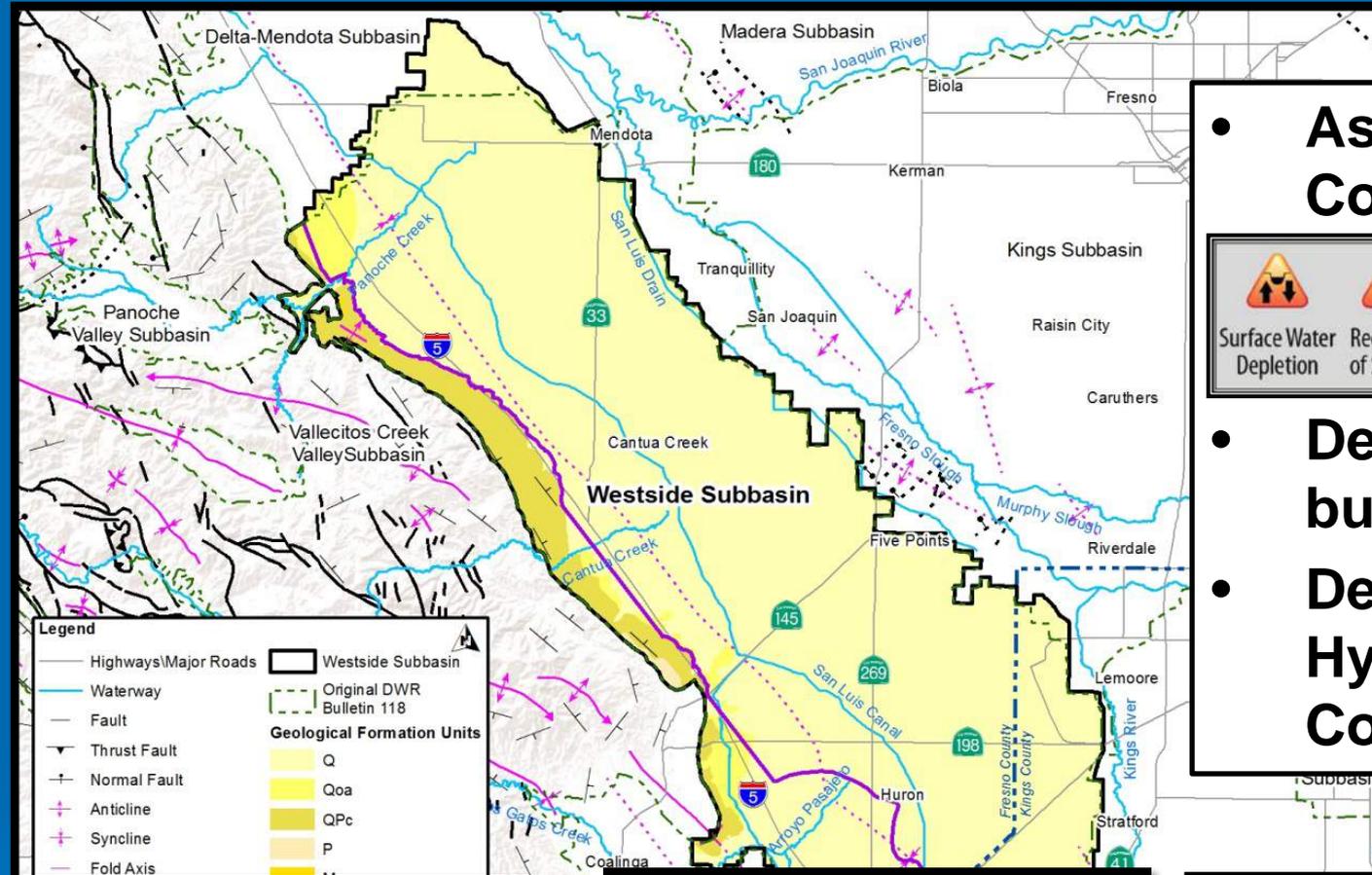
Basin Settings

Assess Basin Conditions



Surface Water Depletion Reduction of Storage Degraded Quality Seawater Intrusion Land Subsidence Lowering GW Levels

- Determine water budget
- Develop a Hydrogeologic Conceptual Model



Sustainable Management Criteria

Sustainability Goal

- Ensure the Subbasin operates within its sustainable yield

Sustainable Groundwater Management

- Implement a GSP that achieves Sustainability by 2040

Minimum Thresholds

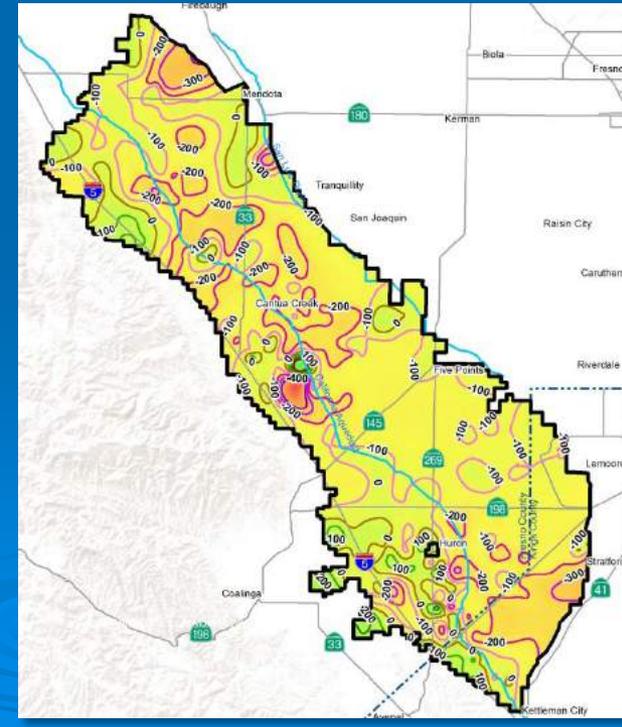
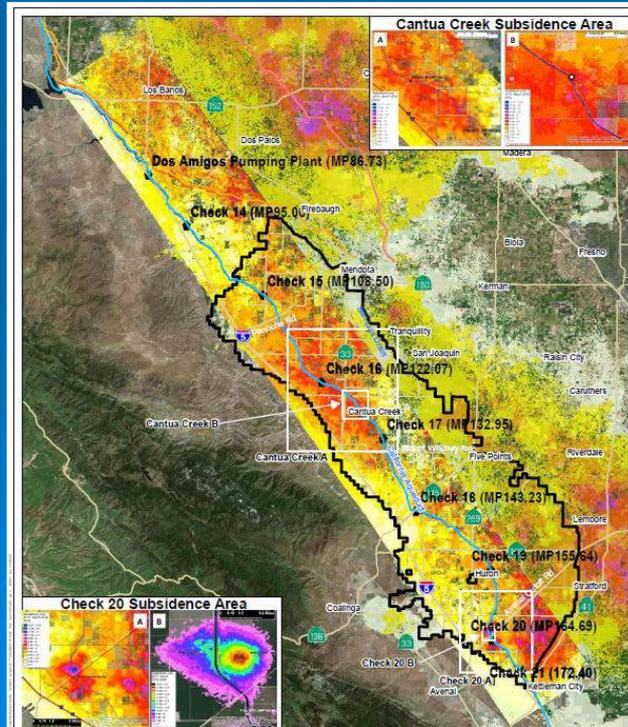
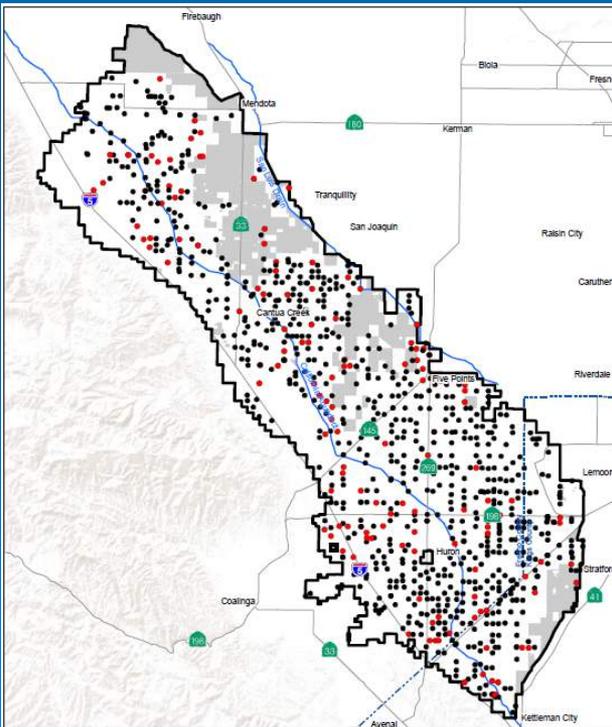
- Based on DWR's BMPs
- Monitoring Network Location
- Avoids adverse affects on adjacent basins

Measureable Objectives

- GSA determines measurable objectives
- 5 year milestone objectives

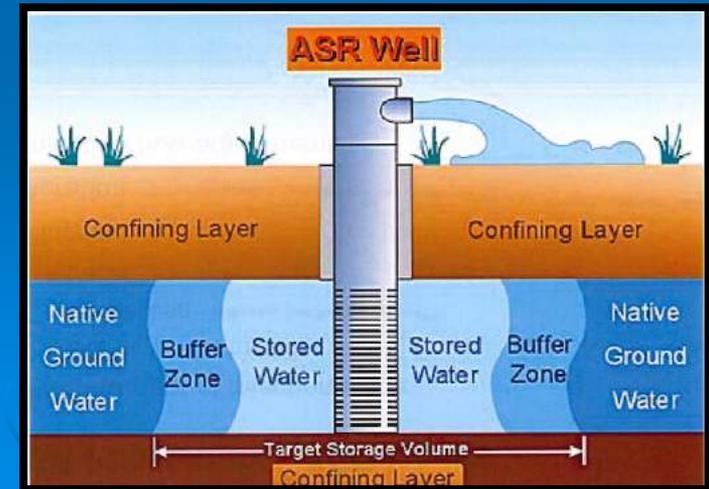
Monitoring Network

- Demonstrate the Seasonal & Long Term Trends
- Locations established based on aquifer characteristics & critical parameters

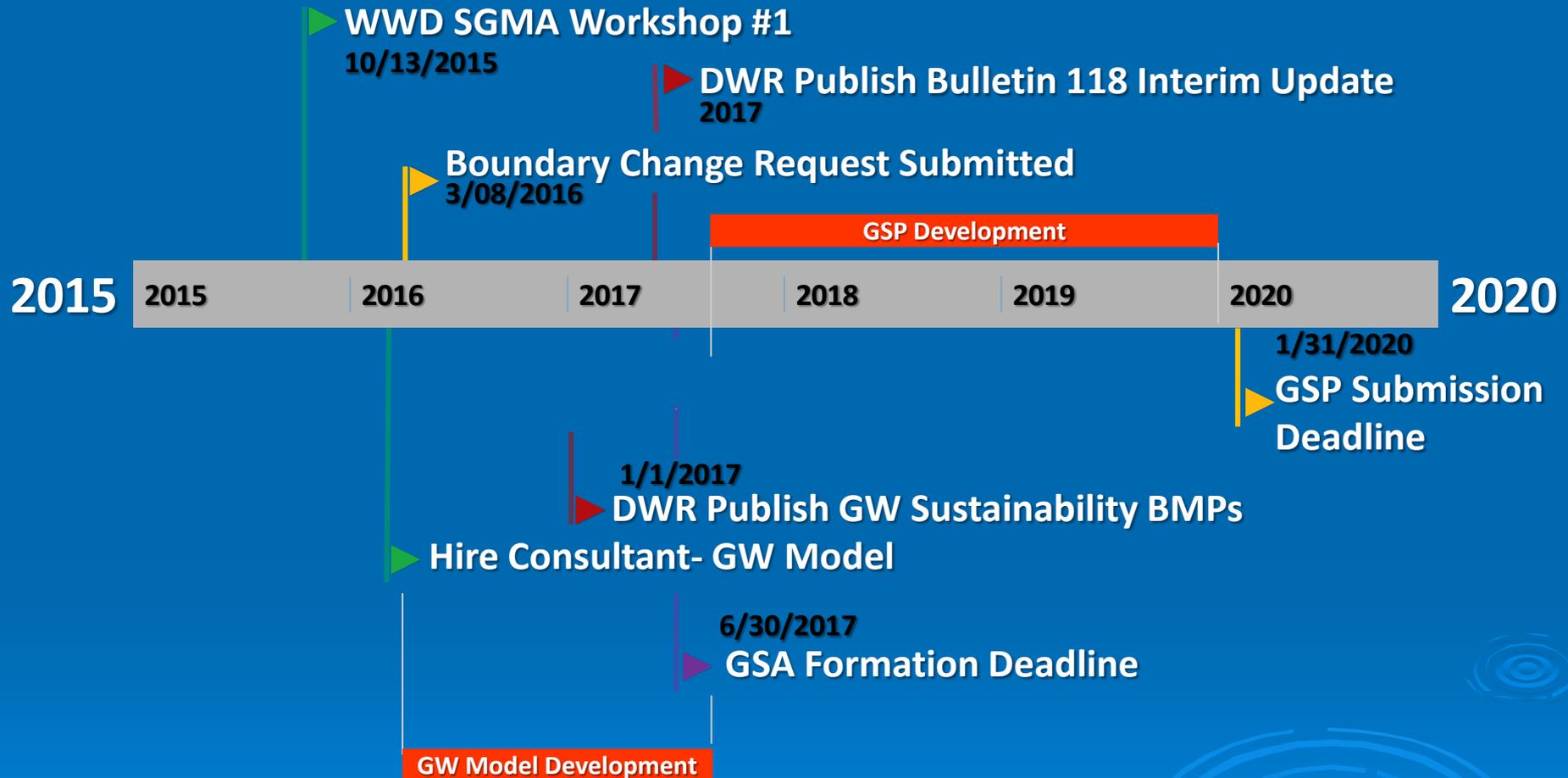


Projects & Management Actions

- Implement groundwater replenishment projects to meet measurable objectives and prevent undesirable results
- Projects Westlands is pursuing:
 - Aquifer Storage and Recovery (ASR)
 - Capturing High Diversion Flows for Recharge Basins



SGMA Schedule- Major Milestones



Legend

- WWD Staff
- SGMA Deadlines
- DWR
- Board Action Required



Questions & Answers

