

Groundwater Committee Meeting

May 21, 2019



Agenda Items 1 through 3

1. PUBLIC COMMENT
2. APPROVAL OF THE AGENDA
3. APPROVAL OF THE MINUTES

4. Fox Canyon Groundwater Management Agency (FCGMA) Agenda Review

Oxnard sub-basin (Oxnard Plain)

Priority: High – **Critically Overdrafted**

Reason: Seawater intrusion, overdraft

GSA: Fox Canyon GMA

Las Posas basin

Priority: High

Reason: Water quality, overdraft

GSA: Fox Cyn. GMA

Pleasant Valley basin

Priority: High – **Critically Overdrafted**

Reason: Saline intrusion, overdraft

GSA: Fox Canyon GMA

Recent activities:

- April 24—Regular BoD meeting
 - California DWR: Presentation on SGMA
 - Water quality, groundwater-level declines, seawater intrusion
 - FCGMA staff and Dudek: GSP progress update
- May 2—TAG meeting
 - FCGMA staff: GSP progress update
 - Dudek: Sustainable management criteria analysis for East Las Posas Valley basin
- May 15—FCGMA staff discussion with United staff about past deliveries of Supplemental M&I Program water

Future agenda items/upcoming activities:

May 22 BoD *special* meeting (1:00 pm) agenda:

1. Potential water purchase opportunity

May 22 BoD regular meeting agenda:

2. What to do with well 01N22W04K01S?
3. GSP update—focus on East Las Posas Valley basin MTs/MOs
4. Update on O-PV allocation ordinance

Well o1N22Wo4Ko1S (“Church well”)

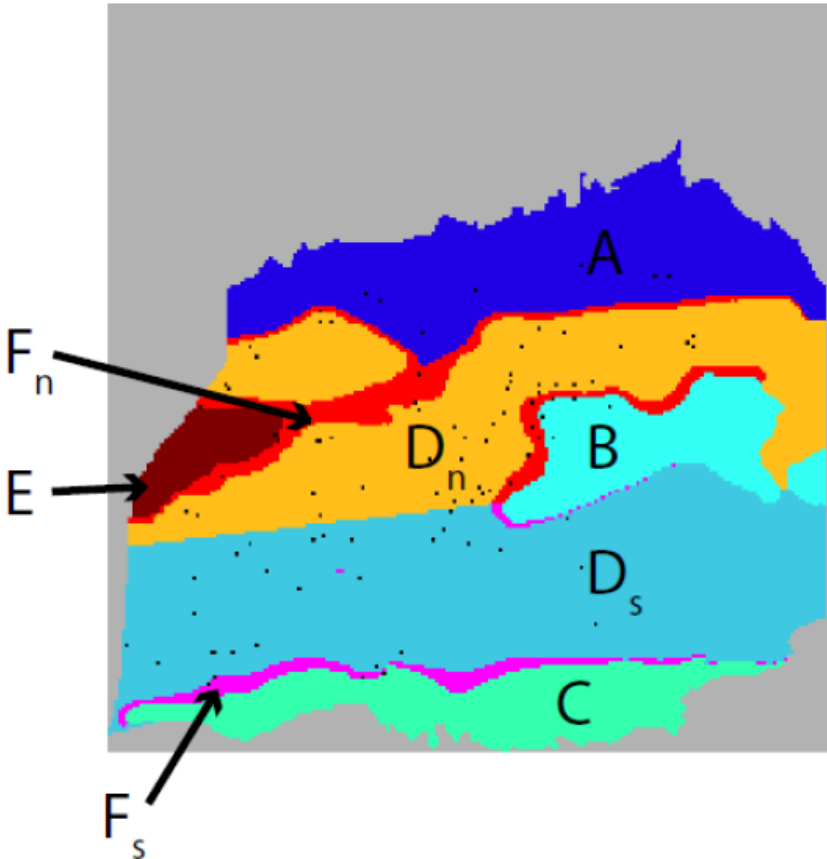


East Las Posas Valley Basin MTs/MOs

Table 3: Local Storage Losses across the FCA

Projected Impacts in the FCA by Dec 2069 under the Baseline Future Scenario Simulations (ignoring the Eastern portion of the model where there are no wells)

Zone	Fraction of the FCA	Average head decline [ft] (+/- 1 stdev)	Area of the FCA that is unconfined in this zone [Acres]	Loss of Confined Storage [AF]	Loss of Confined Storage [% of 2015]	Total Loss of Storage [AF]	Total Loss of Storage [% of 2015]
A	15%	83 +/- 41	4242 (4620 cells)	–	–	17623	36%
B	7%	44 +/- 45	1814 (1975 cells)	–	–	8715	32%
C	8%	51 +/- 35	2266 (2468 cells)	–	–	16256	33%
Dn	20%	78 +/- 39	–	8120	29%	8120	3%
Ds	29%	57 +/- 37	–	7618	19%	7618	2%
E	2%	90 +/- 12	602 (656 cells)	–	–	7792	25%
Fn	4%	94 +/- 26	1228 (1337 cells)	1178	100%	9097	12%
Fs	2%	77 +/- 27	492 (536 cells)	309	100%	3756	13%
TOTAL			10644 (11592 Cells)	17225	24%	78977	8%



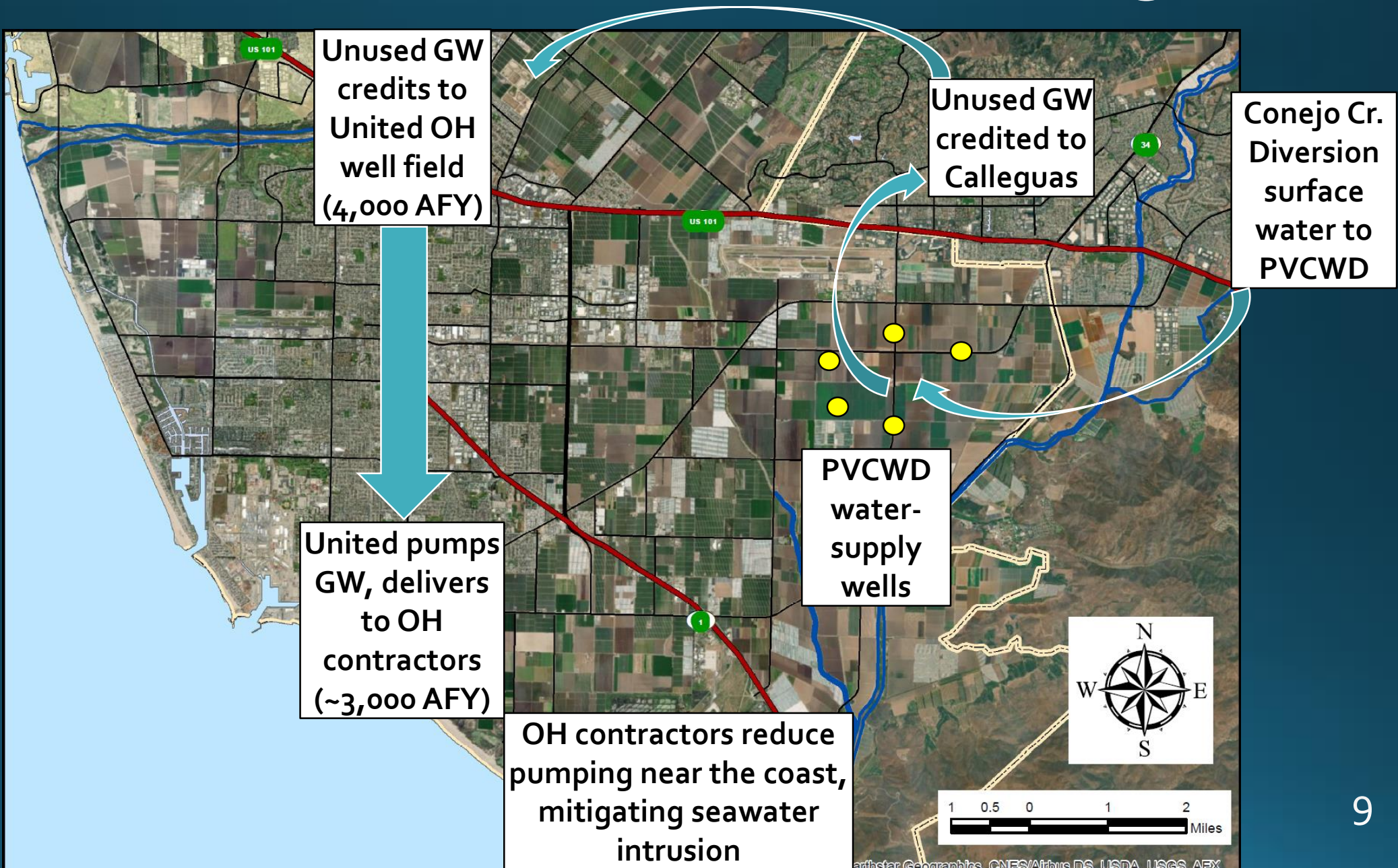
Allocation ordinance revisions proposed by FCGMA staff:

“PVCWD Extraction Allocation”

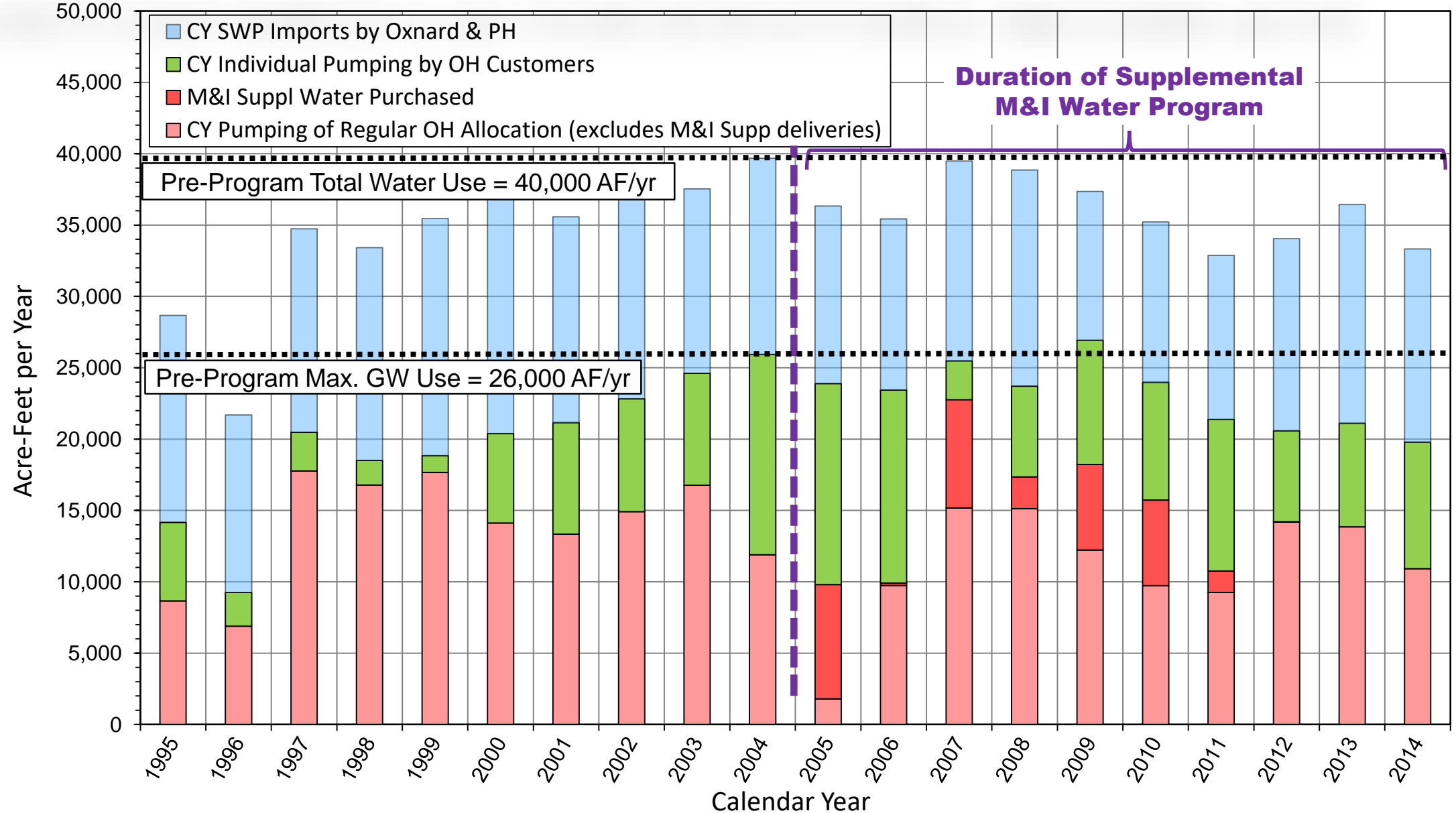
(focusing on Conejo Creek/Supplemental M&I Water Program):

- FCGMA Board concerned about possible “double-counting” of 2005-14 groundwater extractions by PVCWD and United WCD.
- “An evaluation of extractions by UWCD and O-H contractors including Supplemental M&I Water Program credits...will be presented at the Board meeting.”

Conejo Creek / Supplemental M&I Water Program



Water Use by O-H Contractors, by Calendar Year

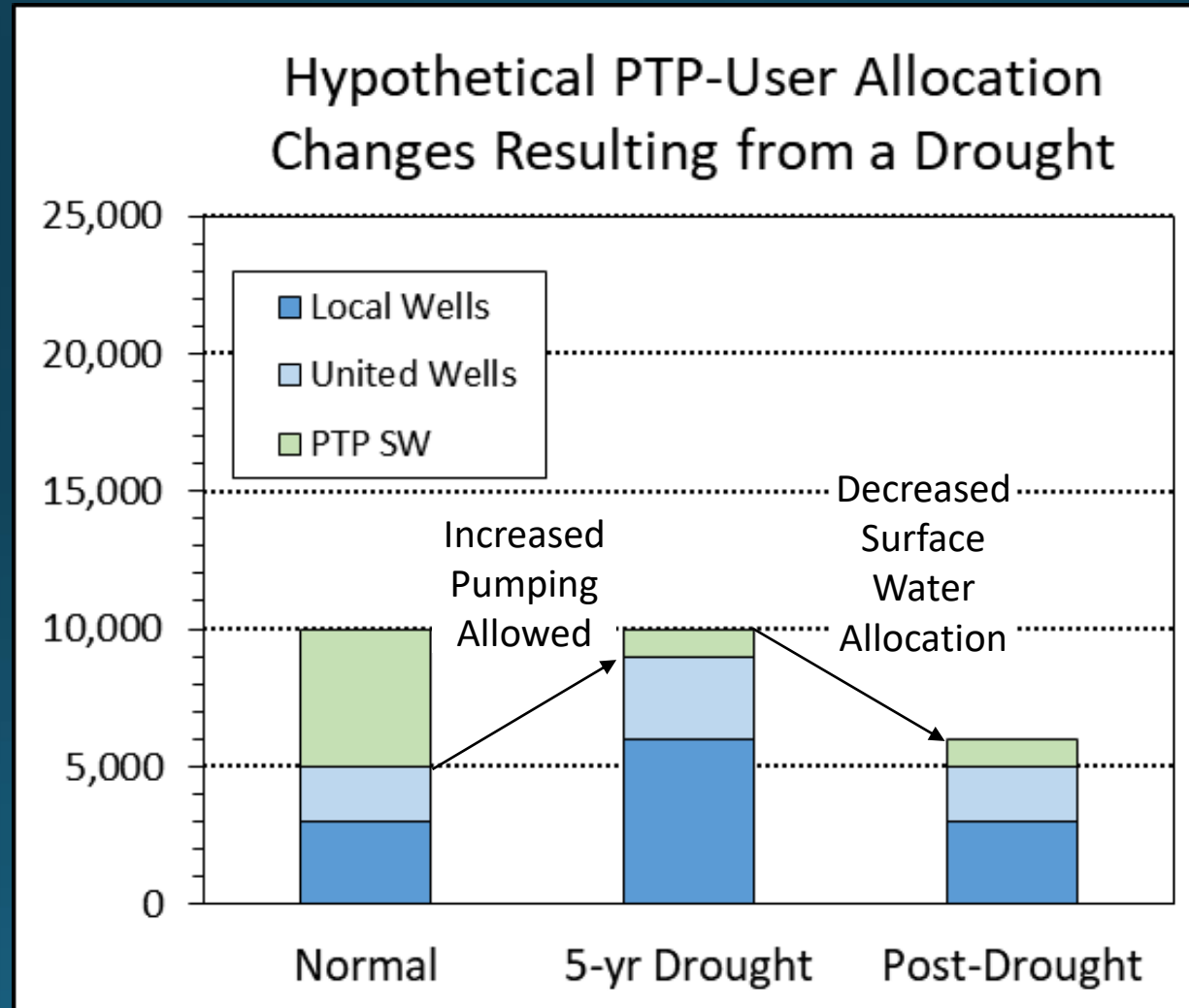


Emergency (water-supply) situations:

- “...ordinance should not contain an automatic emergency response provision.”
- “...Board would consider the need for Agency response to a... declaration of emergency with potential to affect water supplies...”

Santa Clara River “allocation” terminology:

- Rename this as “Santa Clara River Water Flex Allocation”



- Allocation carryover among commonly owned facilities:
 - Previous draft prohibited transfer of unused allocation carryover among commonly owned extraction facilities (wells).
 - “Staff is developing language which would allow an owner to *file for* a transfer with the Agency.”
- O-H Pipeline language (sub-allocations):
 - FCGMA staff “see progress toward agreement”

Carryover of unused Santa Clara River surface water “flex allocation:”

- FCGMA staff are developing language to include flexibility in unused Santa Clara River allocation
 - Similar to unused extraction allocations

Other upcoming activities:

- June (and July) TAG meetings
 - FCGMA consultant (Dudek) not likely to attend
 - Uncertain that TAG meetings will occur
- GSP schedule update (as of April 24):
 - Revised draft GSPs released to Board and public: July 24
 - GSPs adopted by FCGMA: December 13
 - GSPs submitted to DWR: December 16

United Presentation at GRAC Conference in September, Based on the Oxnard Plain and PV Basins

"Not Thrilled About Asking Your Customers for an Additional \$500 Million to Maintain Their Existing Water Supply?"

An Example of the Benefits of Thoroughly Evaluating Future Water Demand under SGMA and Ranking Water-Supply Projects to Optimize Cost Efficiency"

5. Mound Basin GSA Agenda Review

Mound basin

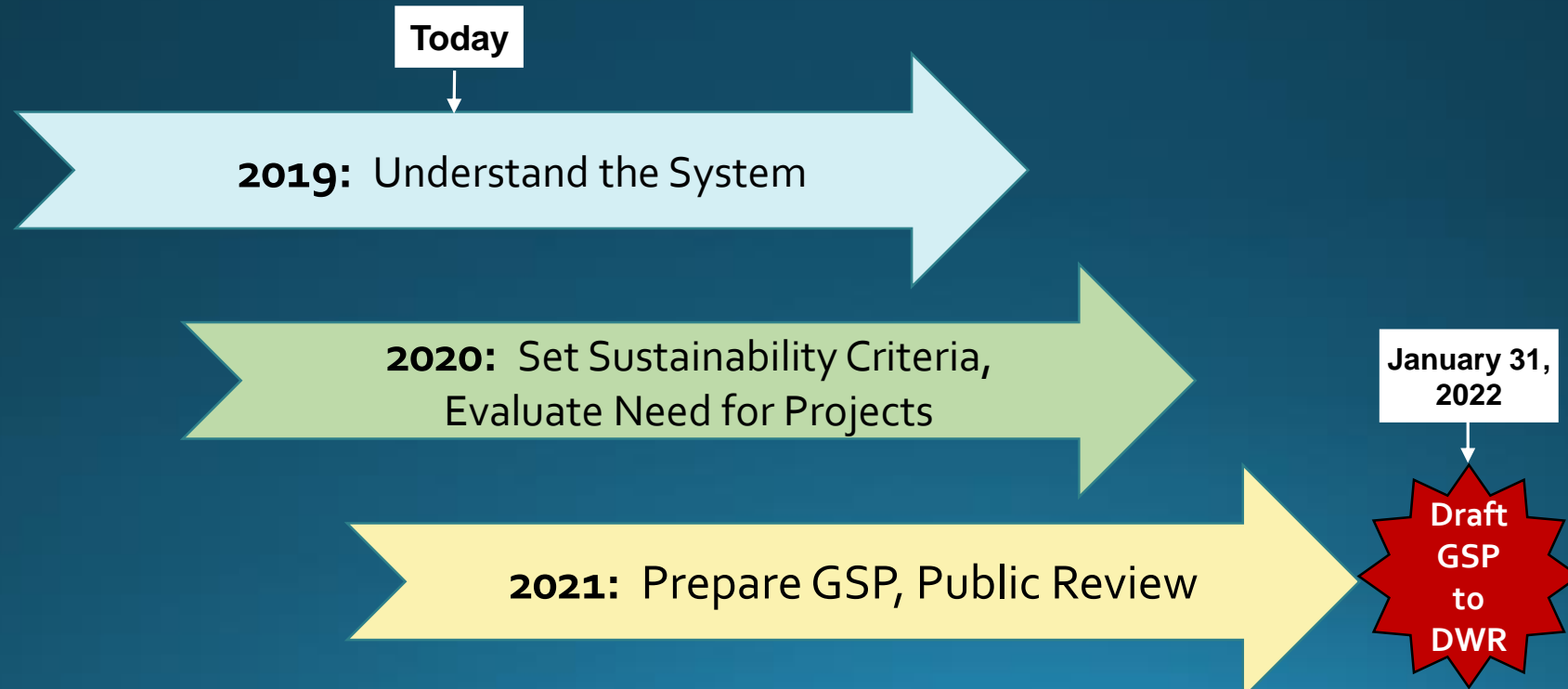
Priority: Medium => High

Reason: Water quality, dependence on groundwater, forecasted population growth

GSA type: JPA

Recent activities:

- GSP-support contractor selected (Intera)
 - United providing much technical support
- Basin boundary modifications approved by DWR



Future agenda items/upcoming activities:

- June 20 BoD meeting agenda (probable):
 - Budget
 - Administrative issues
 - Meeting frequency may be reduced for the remainder of this year
- Monitoring well installation by DWR uncertain
- Natural isotope sampling by United this month

6. Fillmore and Piru Basins GSA Agenda Review

Fillmore basin

Priority: Medium => High

Reason: Water quality, dependence on groundwater, forecasted population growth

GSA type: JPA (Fillmore + Piru)

Piru basin

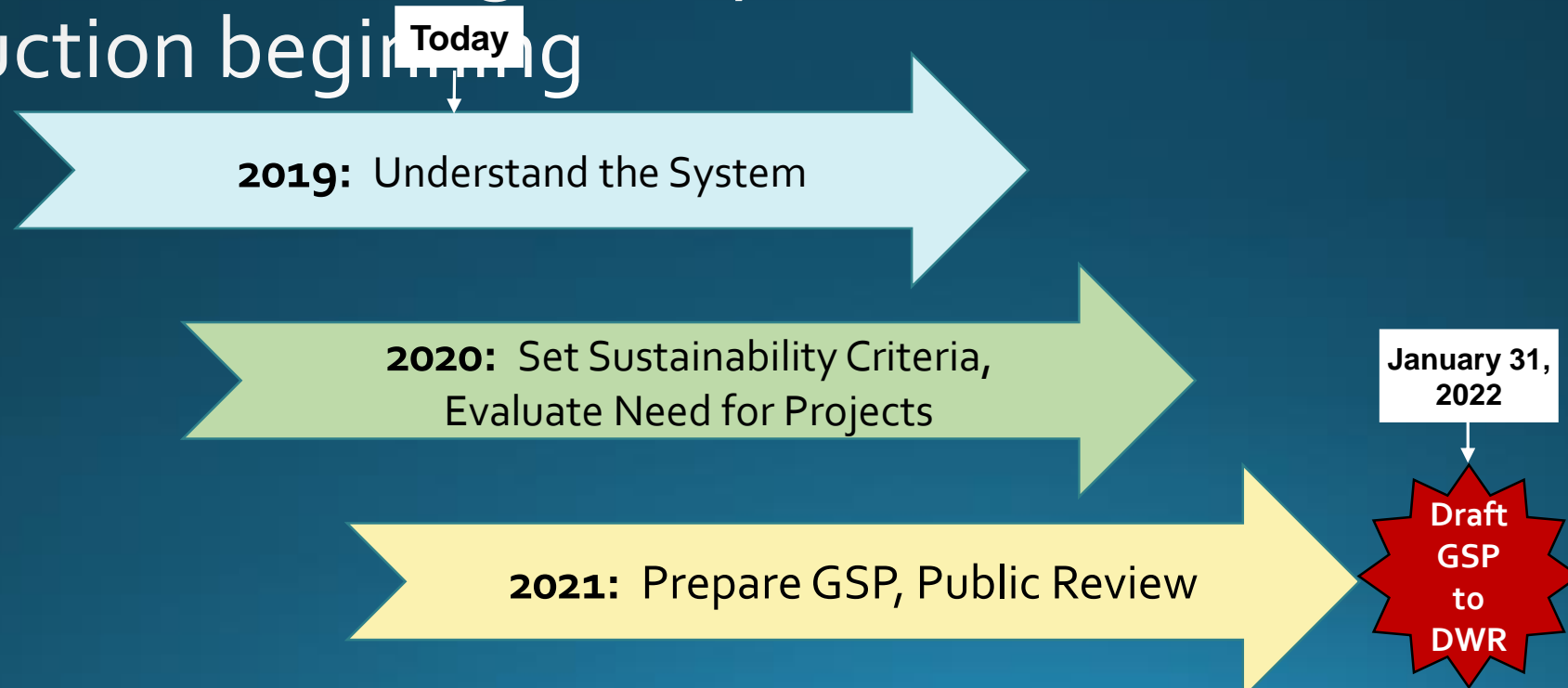
Priority: High

Reason: Water quality, dependence on groundwater

GSA type: JPA (Fillmore + Piru)

Recent activities:

- Basin boundary modifications approved by DWR
- Presentation on stakeholder engagement and GSA-Board-member duties/responsibilities
- Conceptual modeling nearly done, numerical model construction beginning



Future agenda items/upcoming activities:

- June 20 BoD meeting agenda (probable):
 - Budget
 - Administrative issues
- United developing preliminary water balance

7. Santa Paula Basin TAC Update

Santa Paula basin

Priority: Medium => Very Low

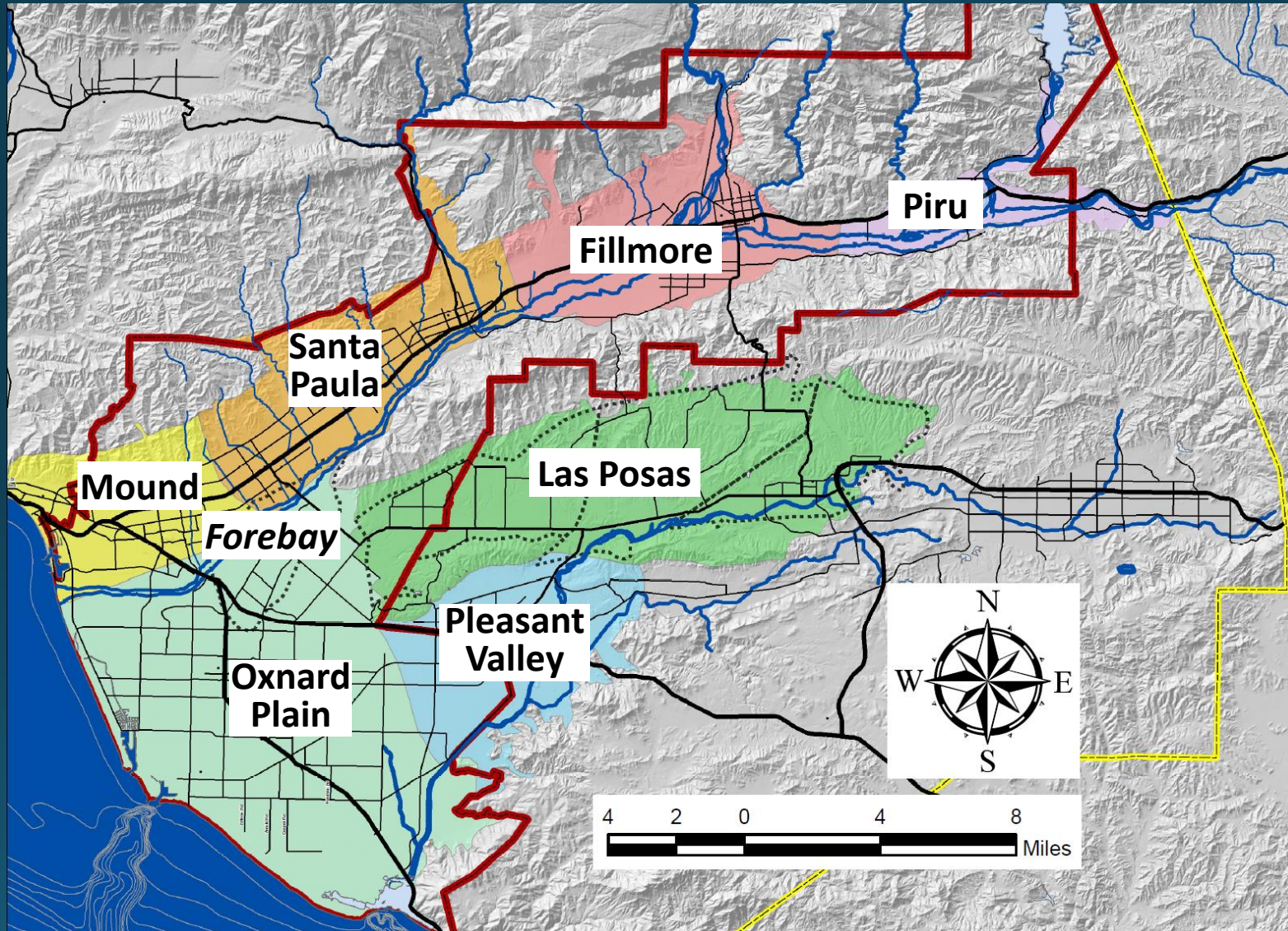
Reason: Adjudicated

GSA type: Technical Advisory Committee

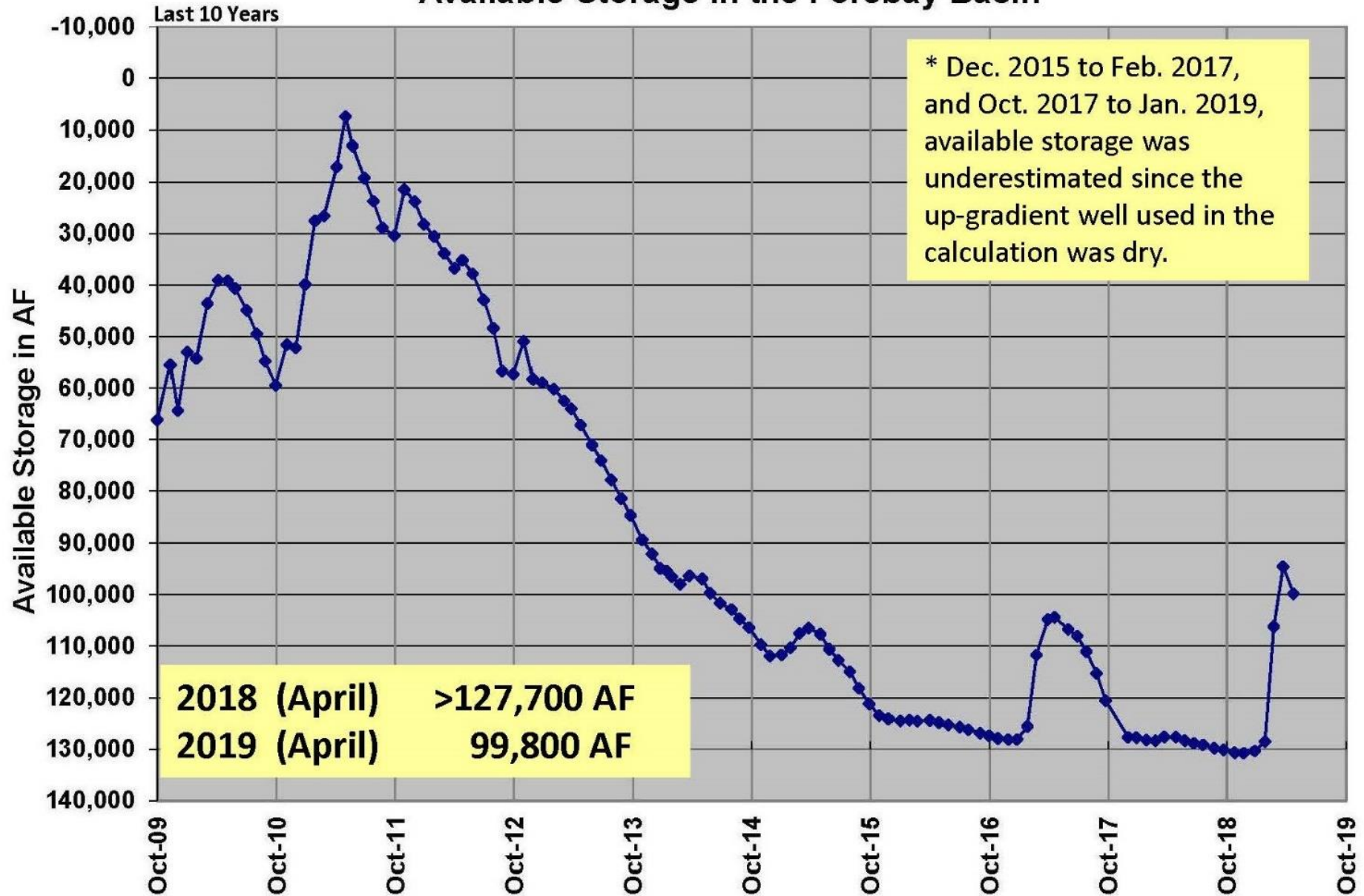
Upcoming Activities

- Next TAC meeting: Sept. 5 (not a public meeting)
- Upcoming activities:
 - Consider effects of Ventura SWP-Interconnection project on potential Santa-Paula-basin “yield enhancement” projects
 - Progress regarding “triggers” document and funding for yield-enhancement projects
 - Evaluate existing index wells, need for more pressure transducers?

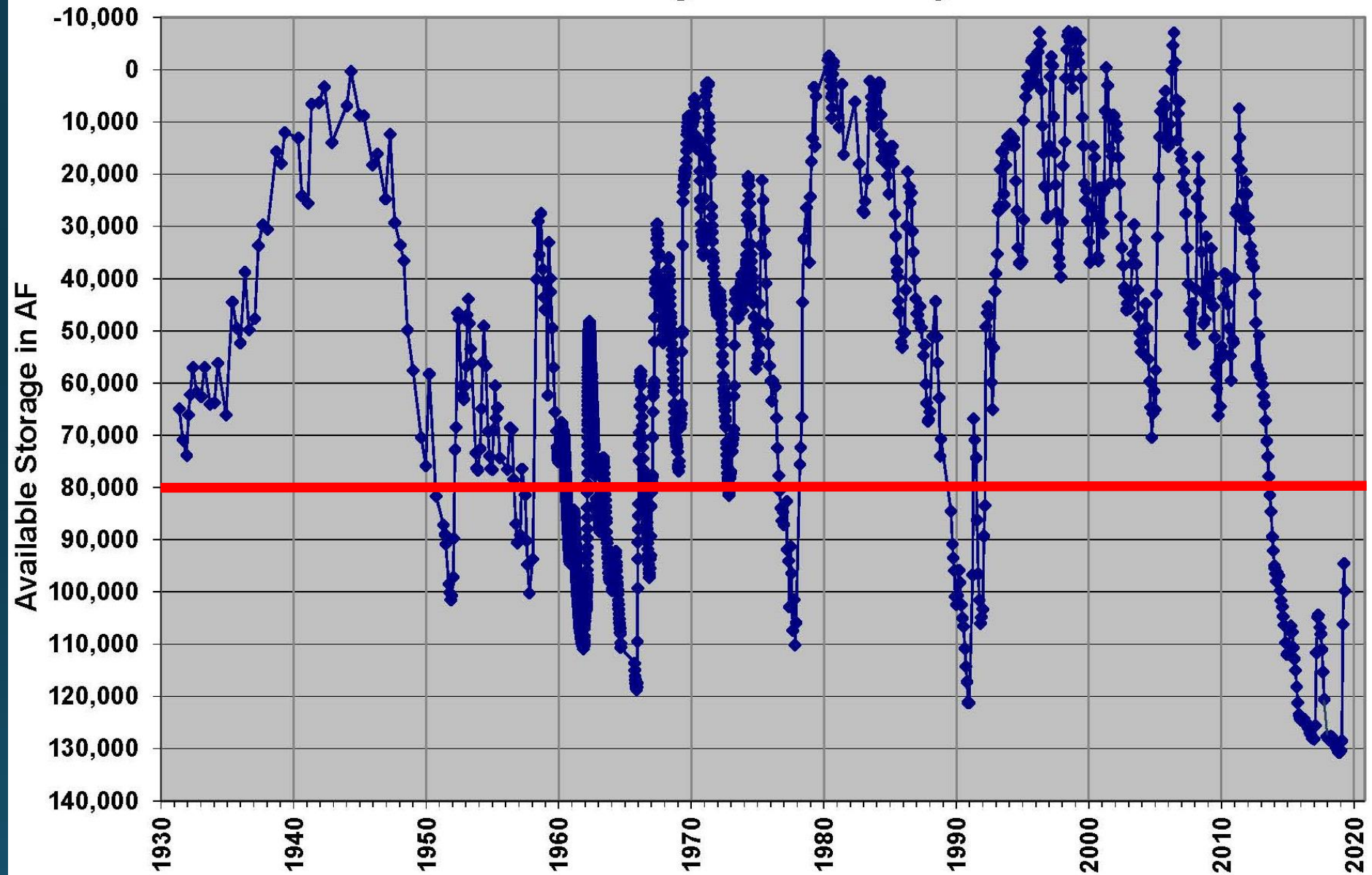
8. Groundwater Conditions Update



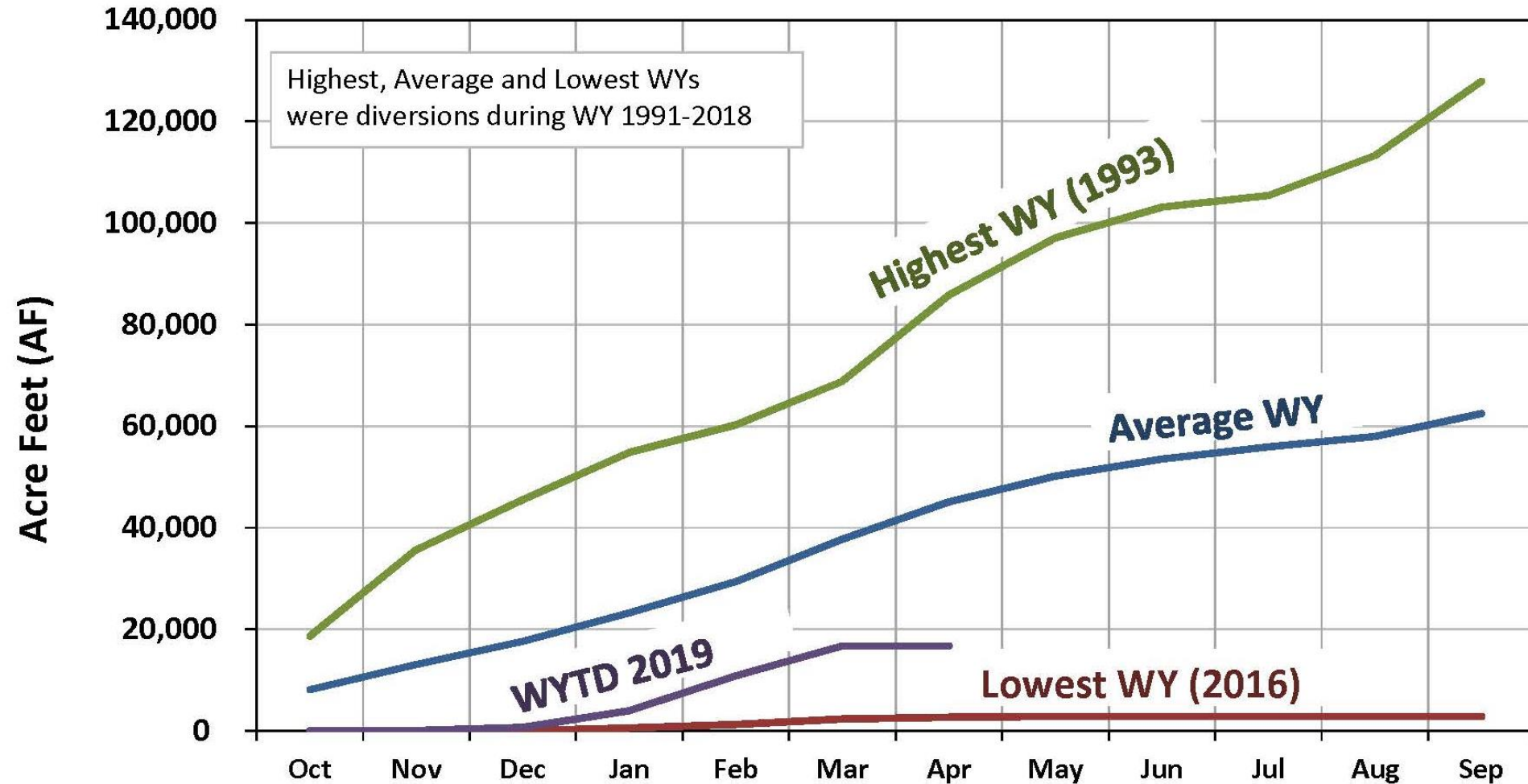
Available Storage in the Forebay Basin



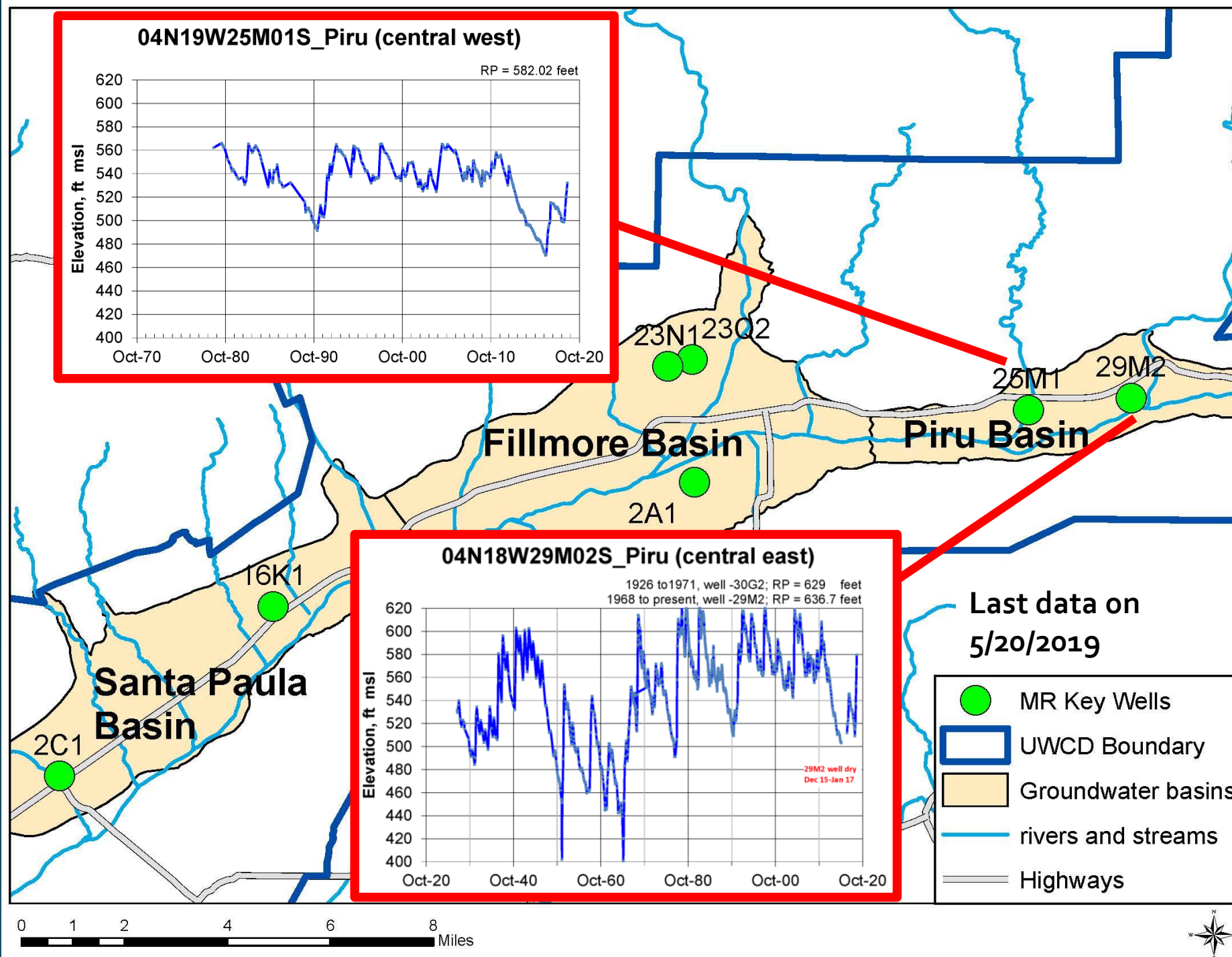
Available Storage in the Forebay Basin

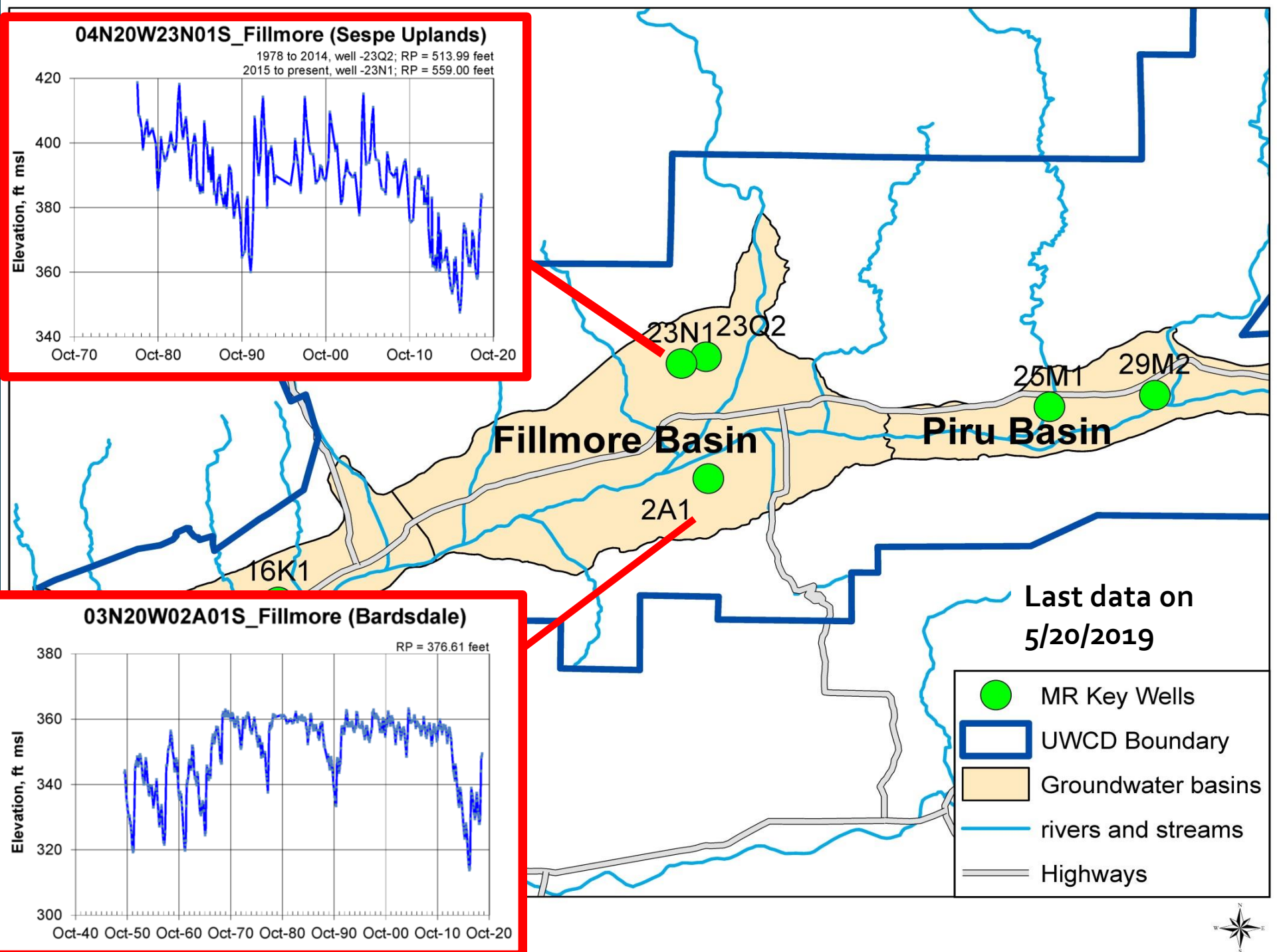
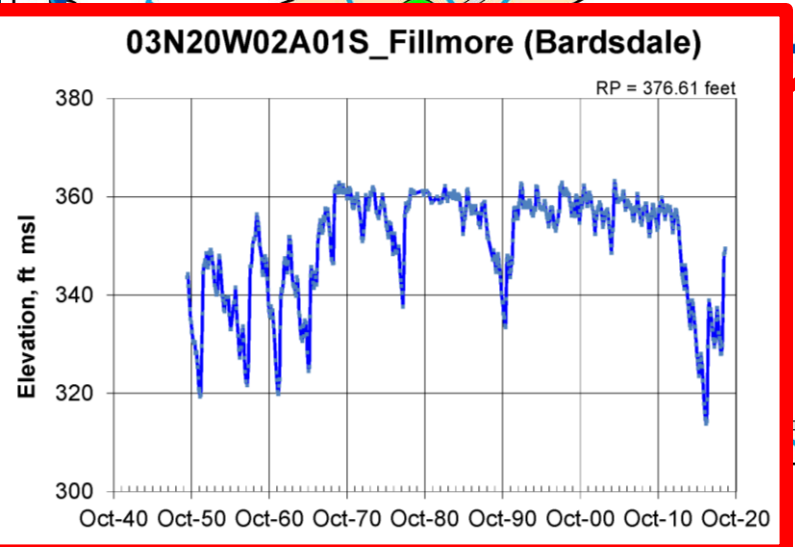
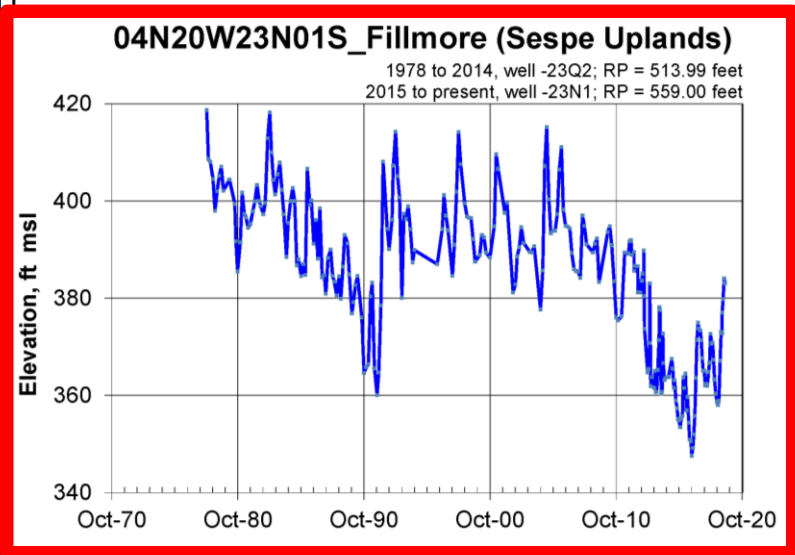


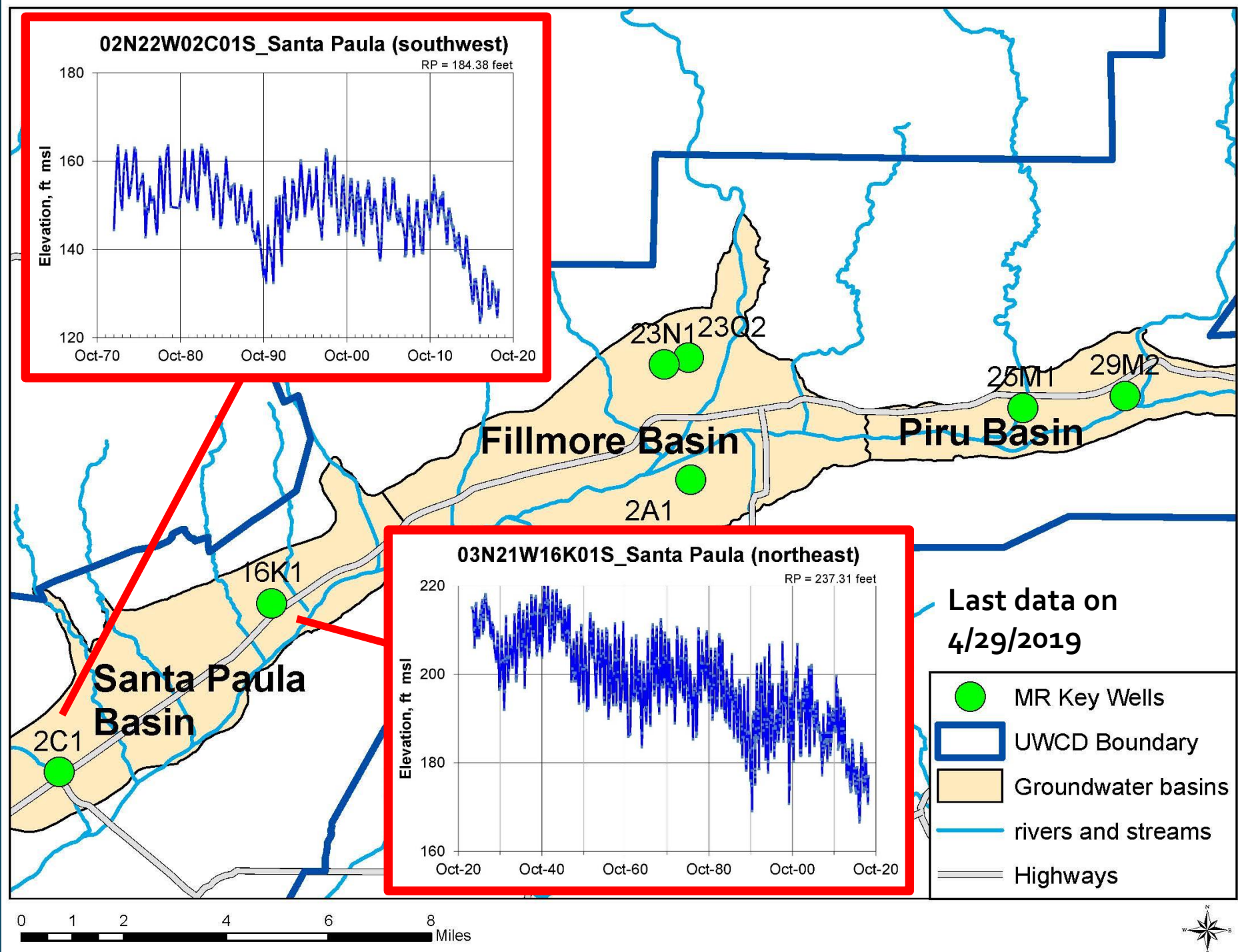
Cumulative Freeman Diversions



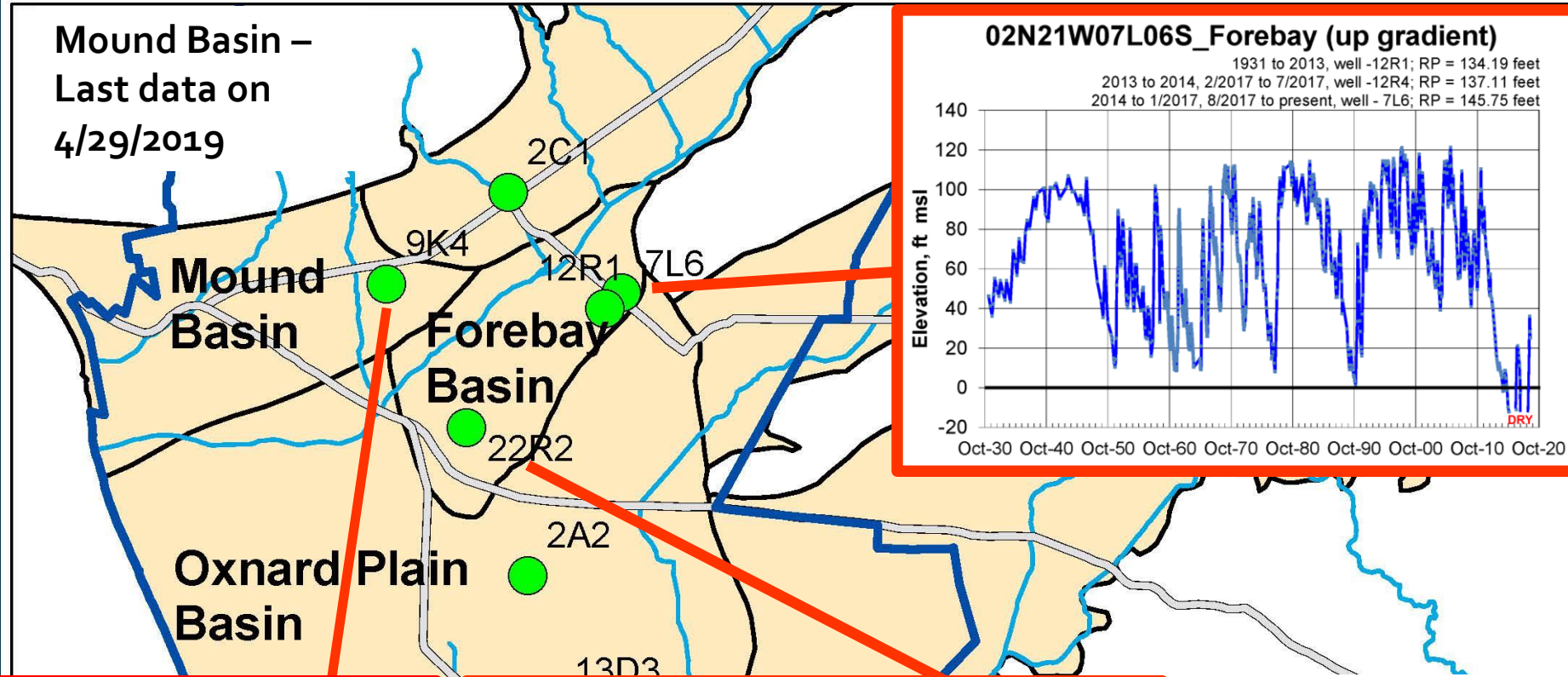
Water Year (WY) = October 1 to September 30; WYTD = Water Year To Date



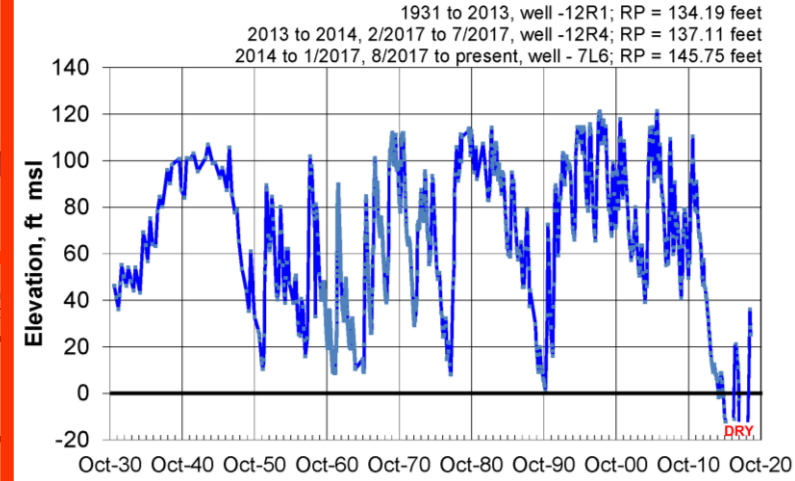




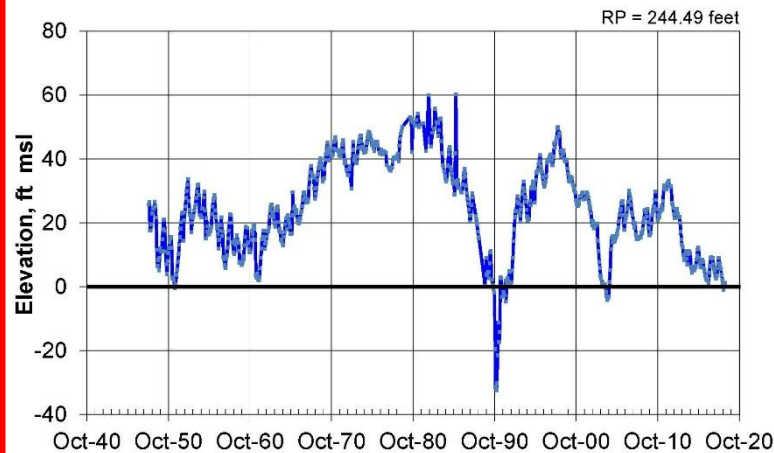
**Mound Basin –
Last data on
4/29/2019**



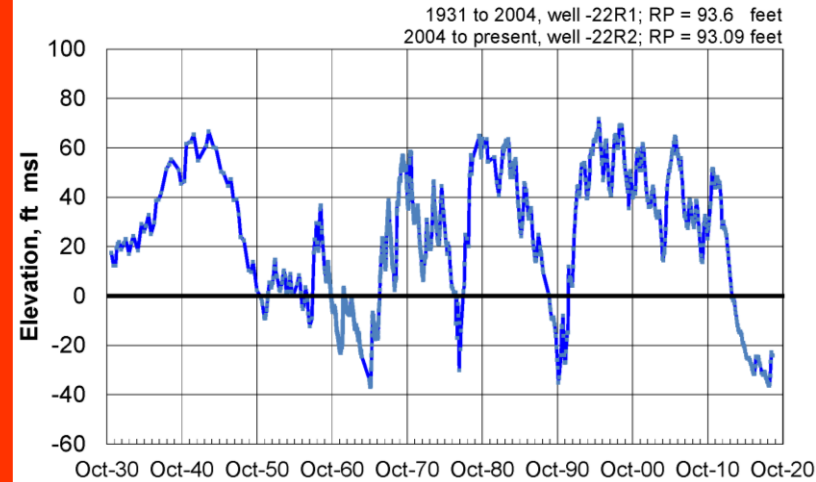
02N21W07L06S_Forebay (up gradient)



02N22W09K04S_Mound



02N22W22R02S_Forebay (down gradient)



**Forebay Basin –
Last data on
5/20/2019**

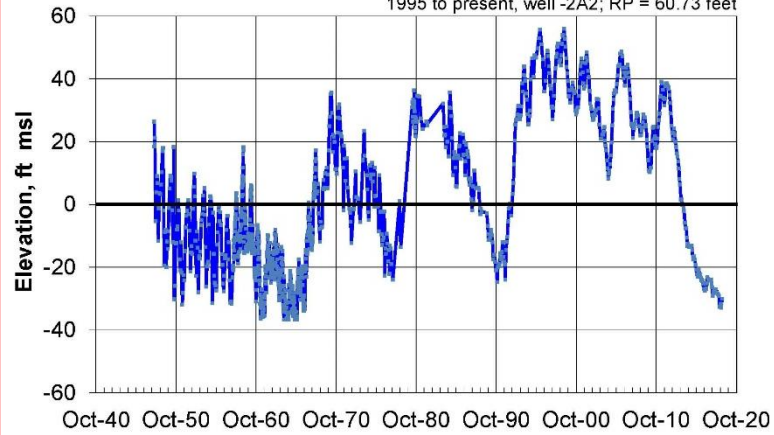
- MR Key Wells
- UWCD Boundary
- Groundwater basins
- rivers and streams
- Highways

0 1 2 4 6 8 Miles



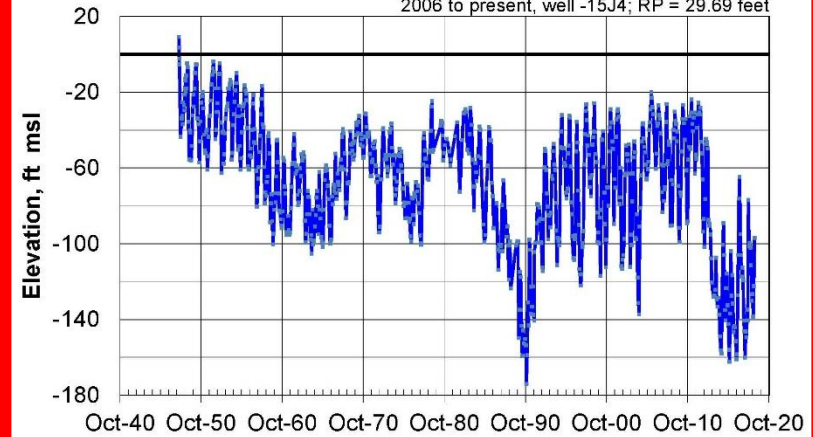
01N22W02A02S_Oxnard Plain (UAS)

1948 to 1994, well -1P1; RP = 51.7 feet
1995 to present, well -2A2; RP = 60.73 feet



01N21W15J04S_Pleasant Valley (LAS)

1948 to 2006, well -15Q2; RP = 21.47 feet
2006 to present, well -15J4; RP = 29.69 feet



Oxnard Plain
Basin

Pleasant Valley
Basin

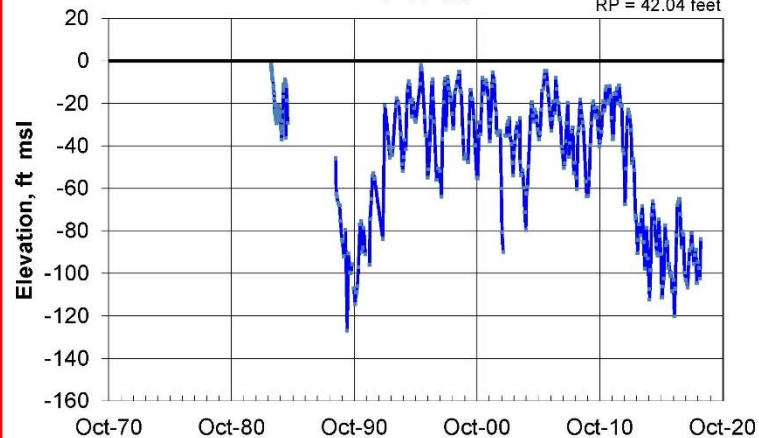
2A2

13D3

15J4

01N22W13D03S_Oxnard Plain (LAS) PTP#5

RP = 42.04 feet

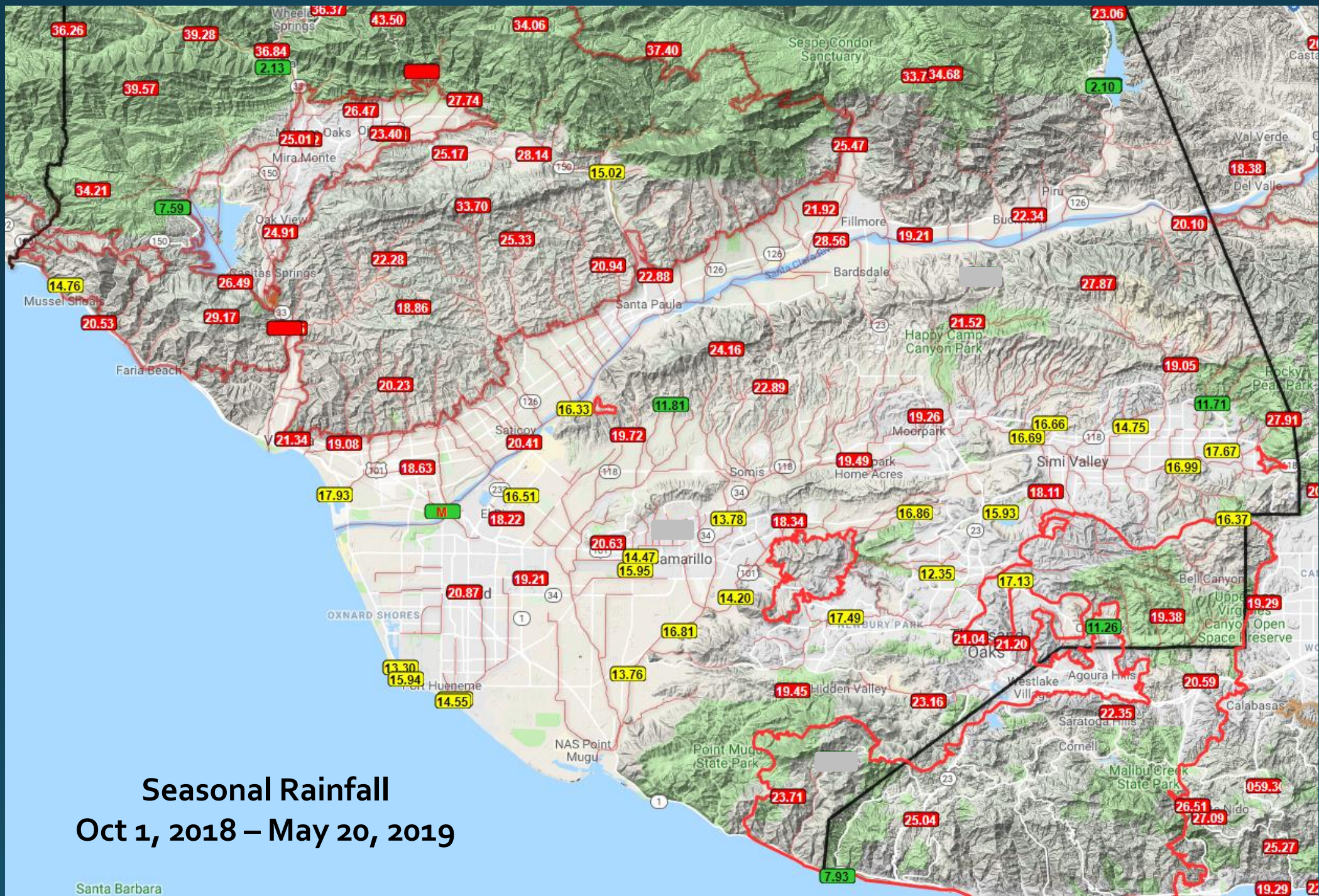


Last data from 4/29/2019

- MR Key Wells
- UWCD Boundary
- Groundwater basins
- rivers and streams
- Highways

0 1 2 4 6 8 Miles





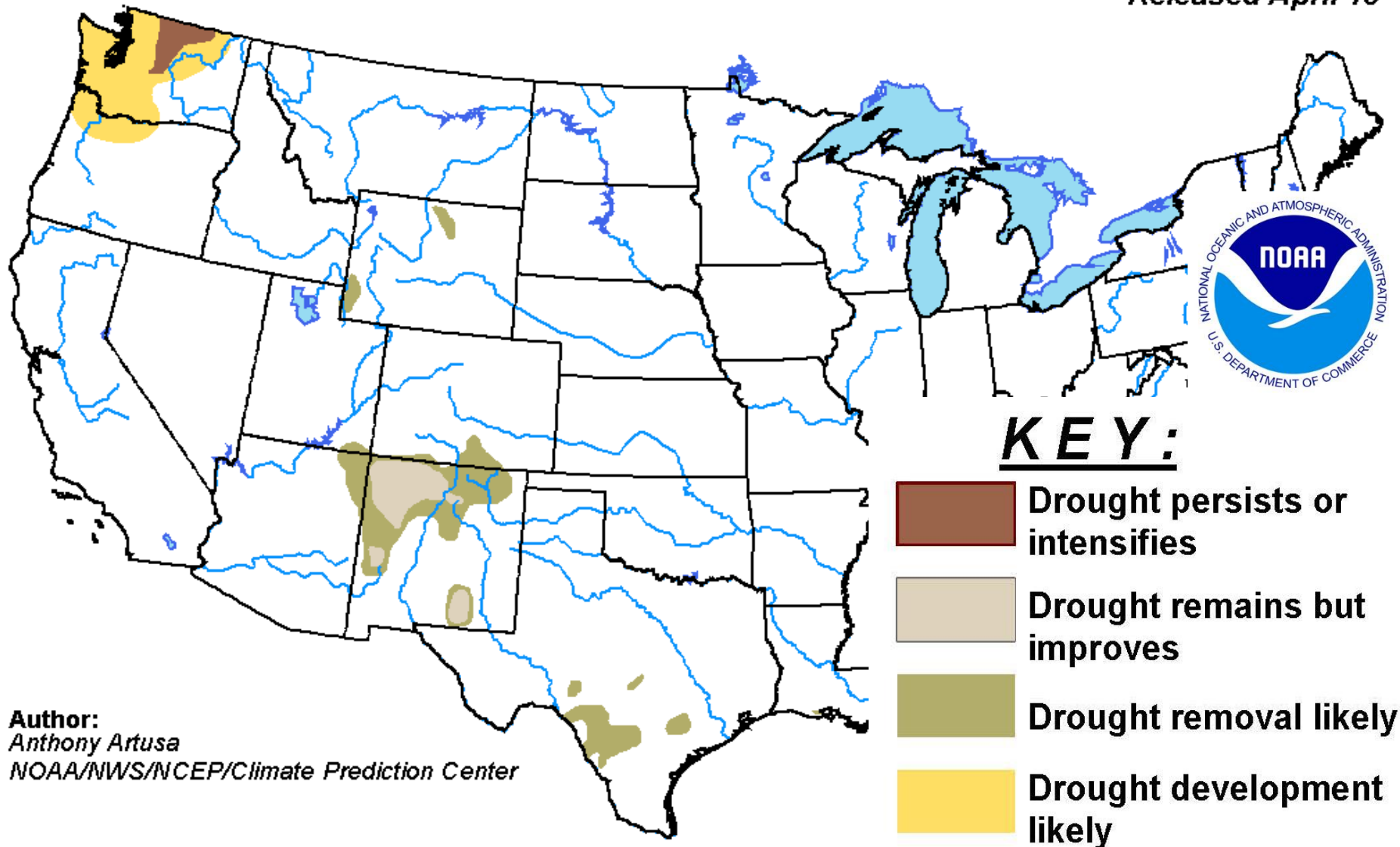
Seasonal Rainfall
Oct 1, 2018 – May 20, 2019

U.S. Seasonal Drought Outlook

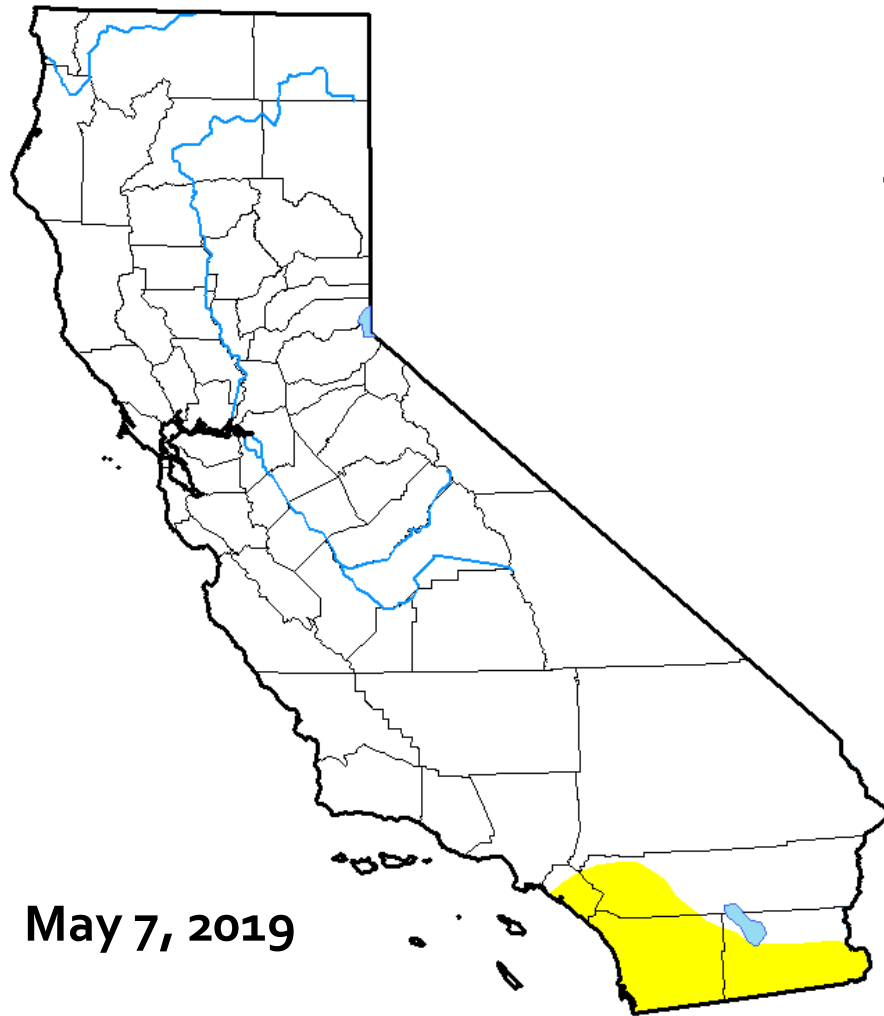
Drought Tendency During the Valid Period

Valid for April 18 - July 31, 2019

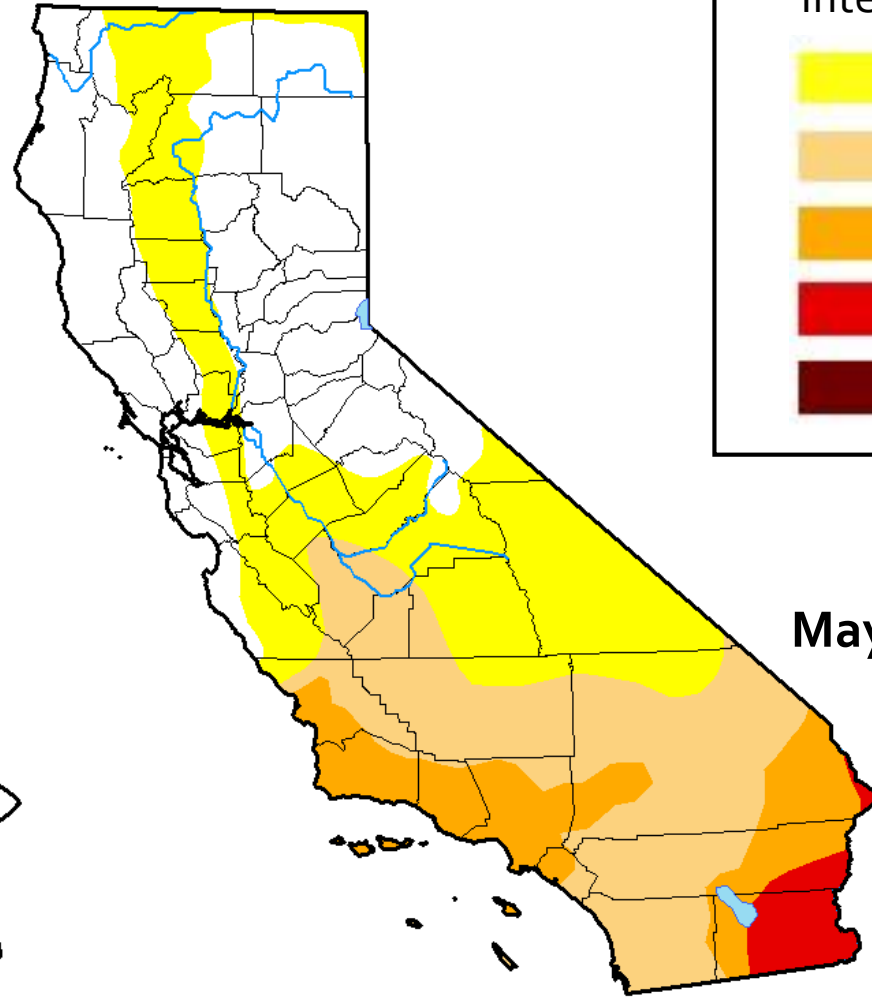
Released April 18



Author:
Anthony Artusa
NOAA/NWS/NCEP/Climate Prediction Center



May 7, 2019



May 8, 2018

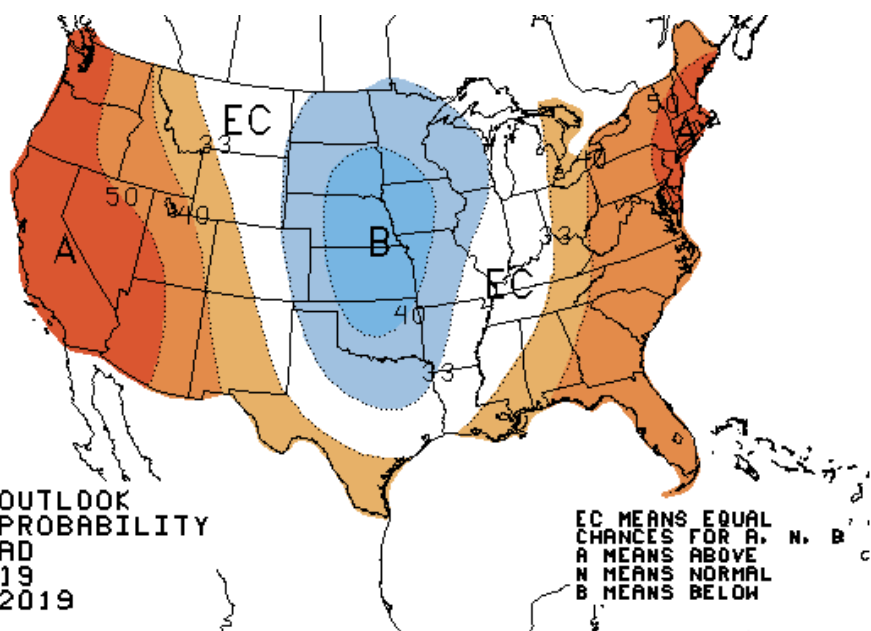


Map Source: The National Drought Mitigation Center

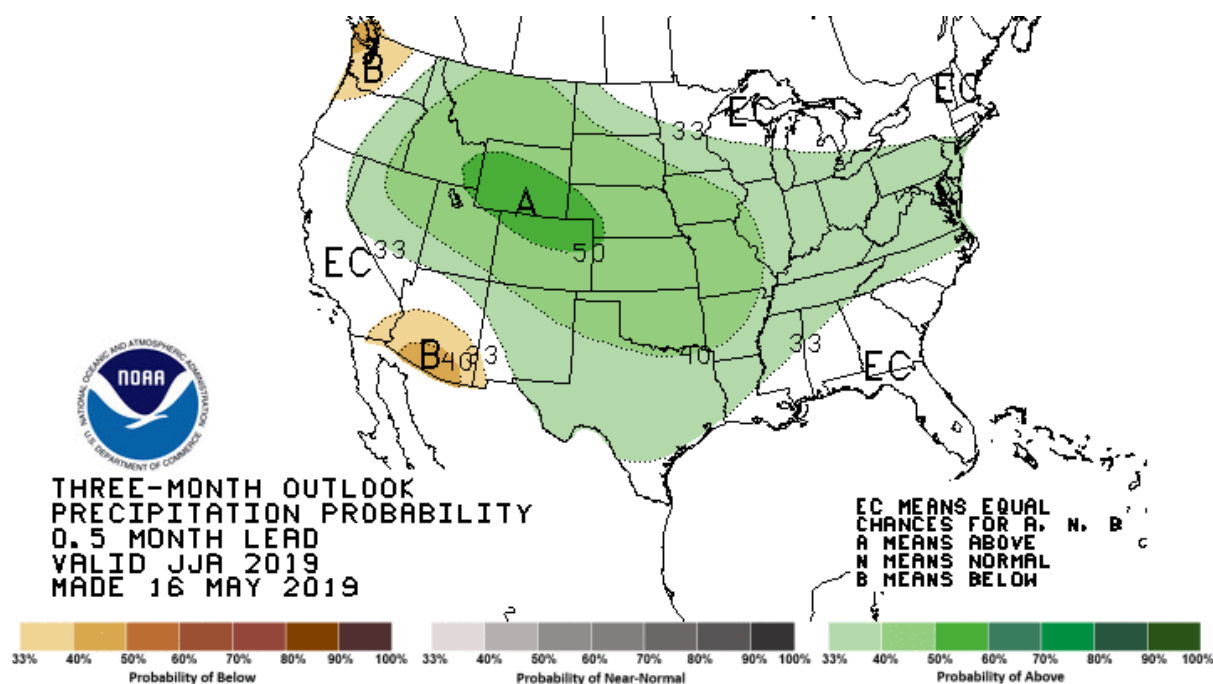
Maps are an assessment of drought conditions based on precipitation amounts and does not consider groundwater storage depletion.

June – August 2019

Temperature



Precipitation



9. FUTURE AGENDA ITEMS

- “Imagining A Year Without United--Hydrogeological, Economic, and Environmental Impacts”
- “Decreasing Freeman Diversion Rates as a Result of Changing ESA Interpretations: How United Intends to Stop the Downhill Slide”
- “Can We Build a Sustainable and Abundant Water Future? Concepts, Costs, and Challenges”



10. ADJOURNMENT

"In the long run, men hit only what they aim at."

Henry David Thoreau