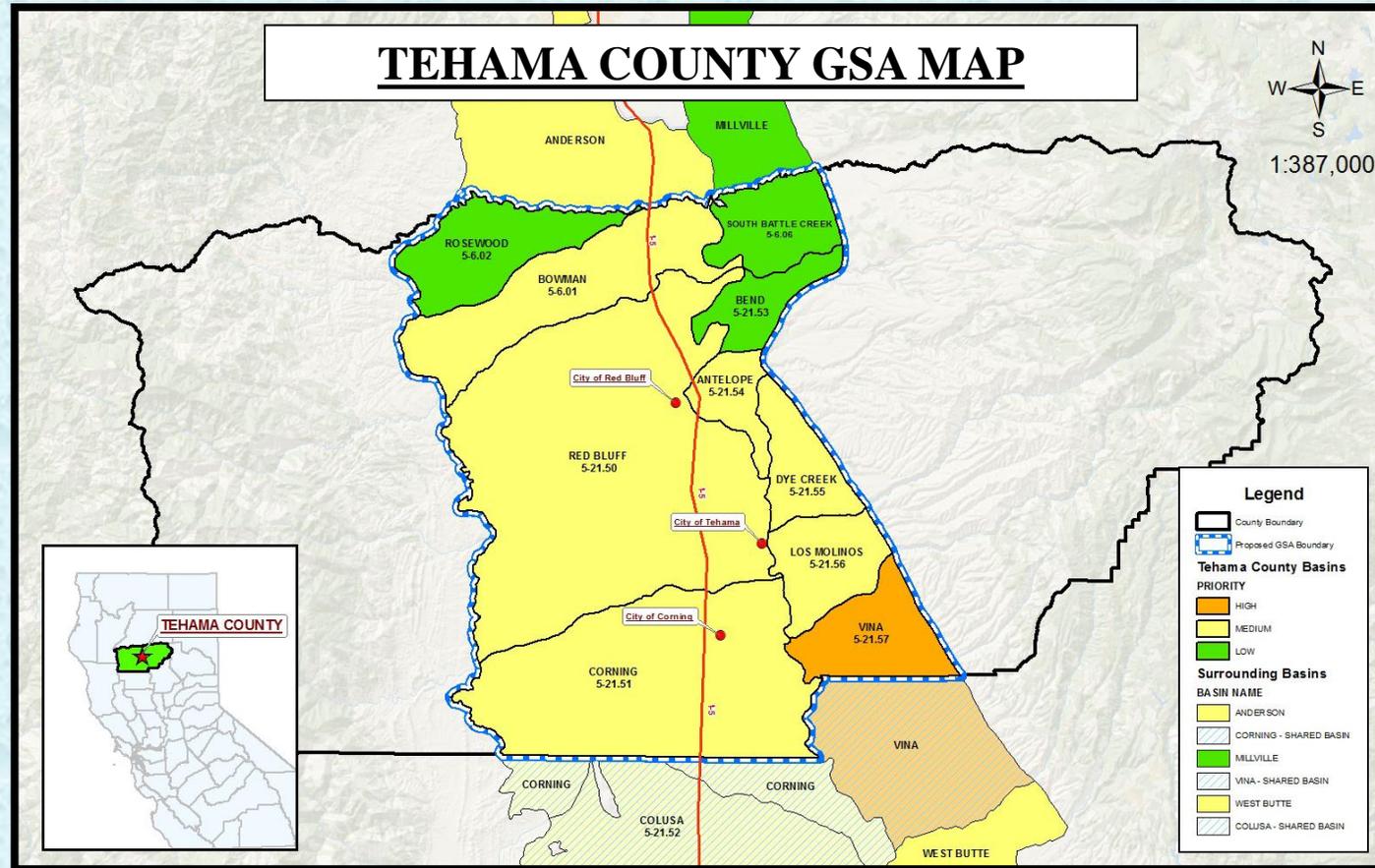


TEHAMA COUNTY GROUNDWATER SUSTAINABILITY AGENCY



Tehama County Flood Control and Water Conservation District
Ryan Teubert

- State Water Board Fees and Well Meters
- Current Drought Conditions and Groundwater Levels
- Brief SGMA Overview
- Tehama County GSA Governance Structure and History
- Groundwater Commission Roles and Responsibilities





State Water Resources Control Board

April 20, 2017

The Honorable Board of Supervisors
c/o Jennifer Vise
Clerk of the Board
Tehama County
633 Washington St., Rm. 12
Red Bluff, CA 96080

R.E.: GROUNDWATER SUSTAINABILITY AGENCY (GSA) FORMATION DEADLINE

Dear Supervisors:

This is a reminder that the deadline to form groundwater sustainability agencies (GSAs) is fast approaching. Beginning July 1, 2017, the State Water Resources Control Board (State Water Board or Board) can intervene in groundwater basins that contain unmanaged areas.

As of April 6, 2017, there were no basins in Tehama County that contained unmanaged areas. To prevent state intervention, the Sustainable Groundwater Management Act (SGMA) requires that high- or medium-priority basins be managed, in their entirety, by a GSA or a collection of coordinated GSAs by June 30, 2017.

If management conditions change, there are several options Tehama County can take to eliminate unmanaged areas and prevent state intervention. The County can choose to become a GSA for unmanaged areas by accepting its presumptive role described by Water Code section 10724.

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

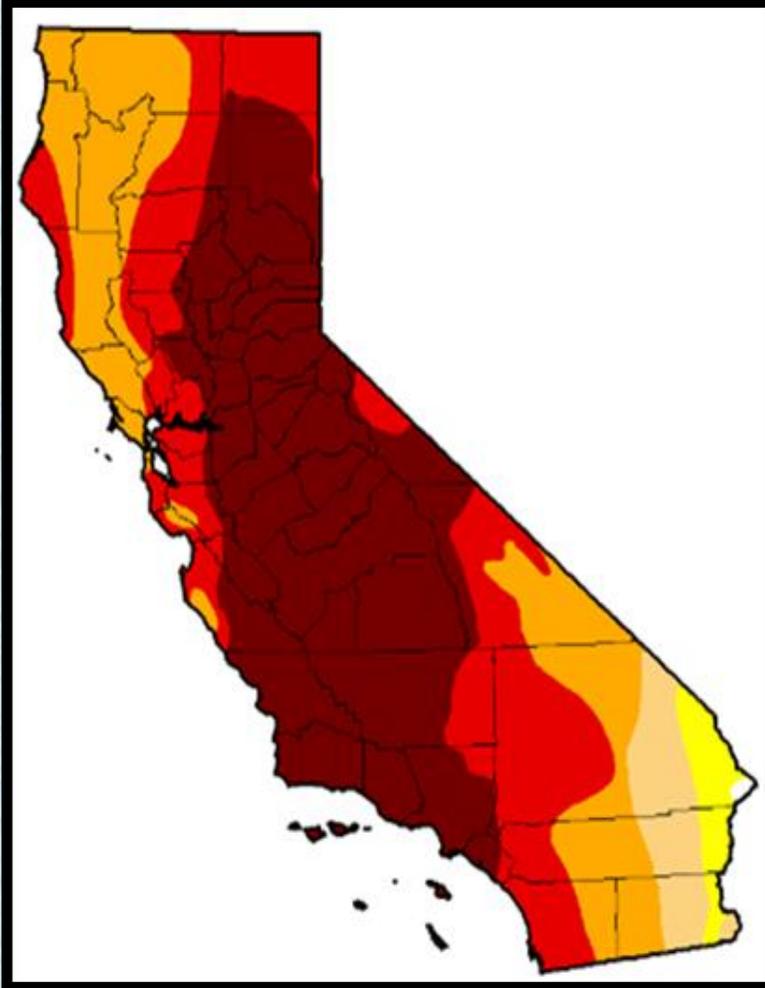
1001 I Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, CA 95812-0100 | www.waterboards.ca.gov



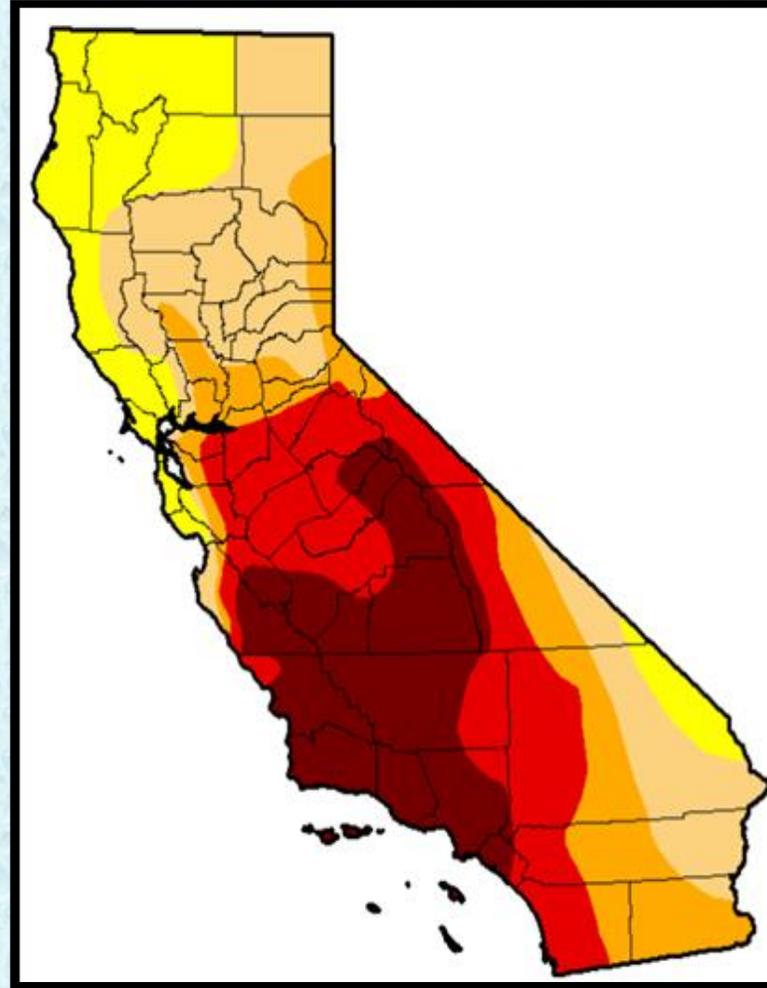
Table with 2 columns: Date, Trigger. Rows include dates like July 1, 2017, January 31, 2020, January 31, 2022, and January 31, 2025, with corresponding triggers such as 'Failure to form a GSA' and 'There are significant depletions of interconnected surface waters...'.

As of April 6, 2017, there were no basins in Tehama County that contained unmanaged areas.

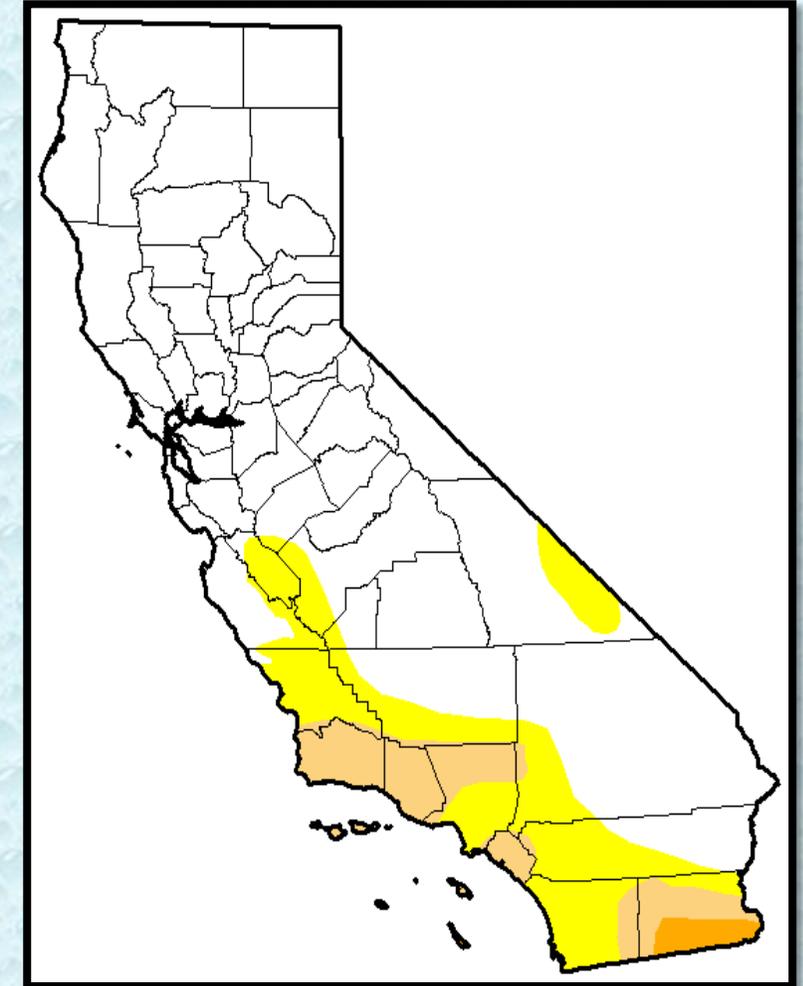
11/03/2015



06/21/2016



05/16/2017

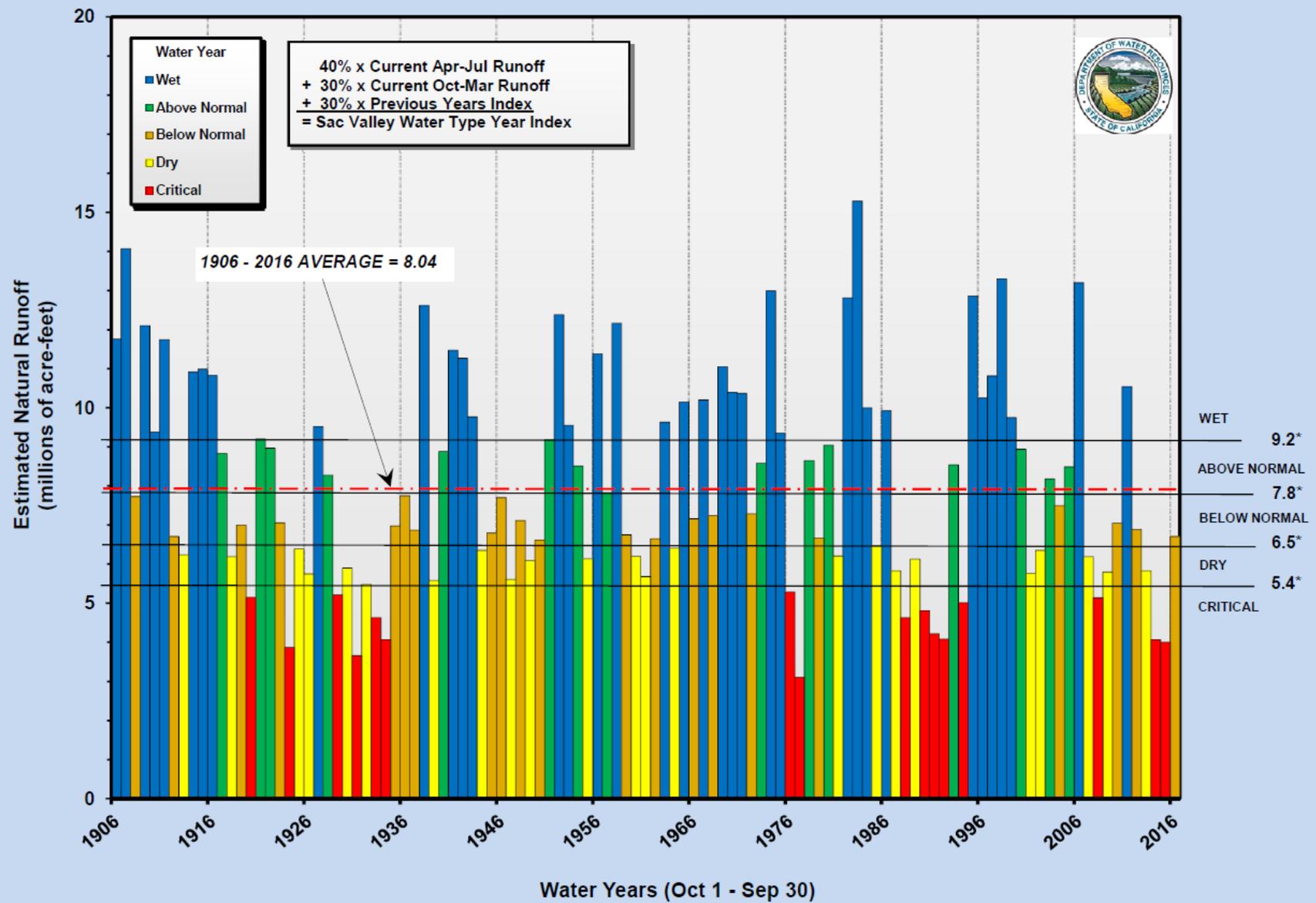


Intensity:



http://droughtmonitor.unl.edu/data/pngs/current/current_ca_cat.png

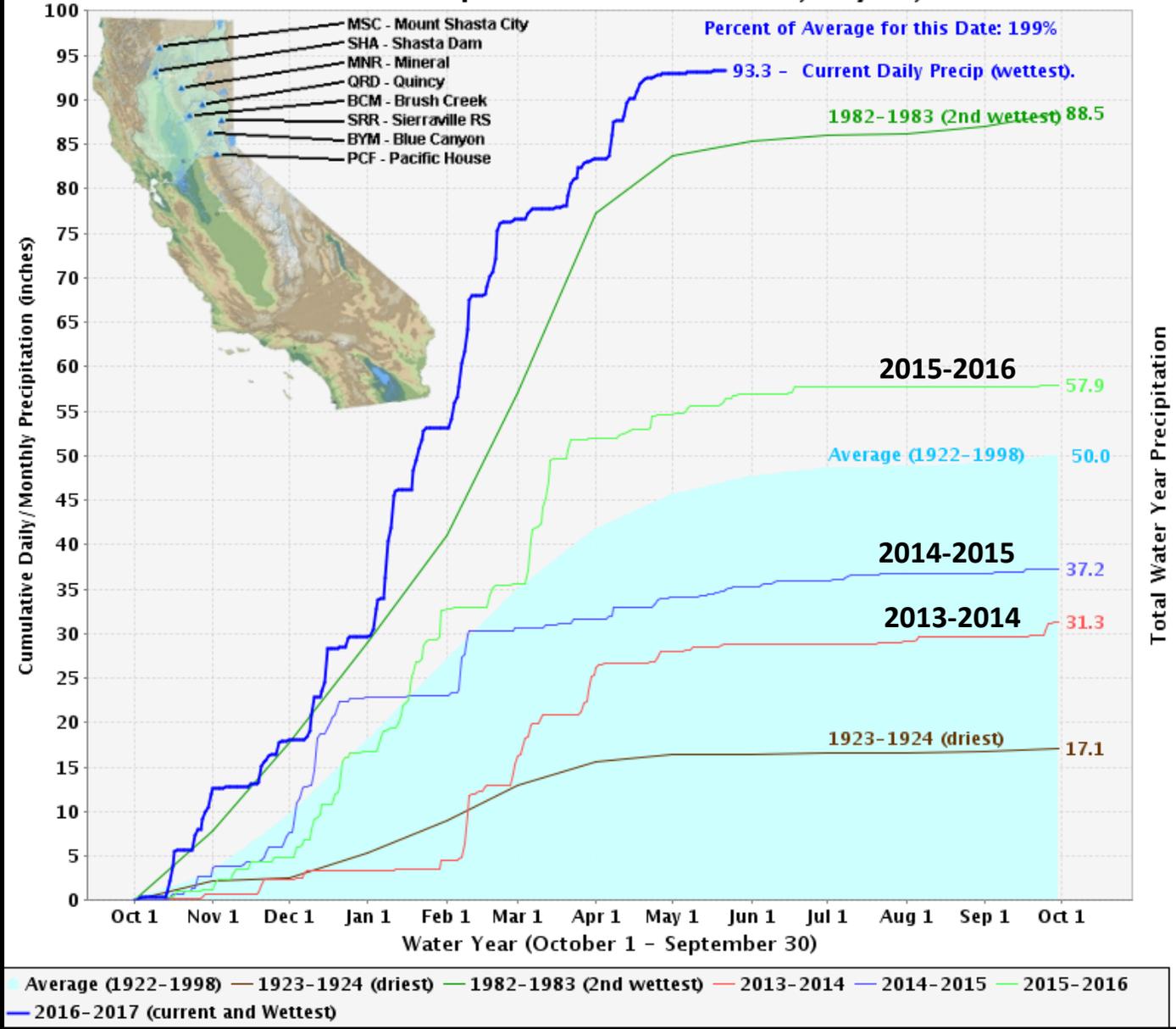
SACRAMENTO VALLEY WATER YEAR TYPE INDEX 1906 - 2016



Source: California Department of Water Resources

* Index based on flow in the million acre-feet

Northern Sierra Precipitation: 8-Station Index, May 22, 2017

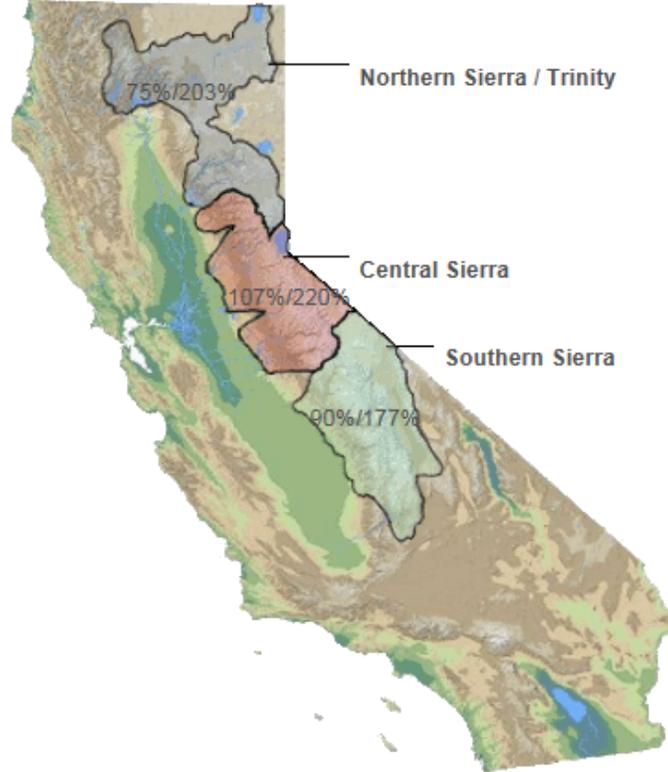


Snow Water Equivalents (inches)

Provided by the California Cooperative Snow Surveys

Data For: 22-May-2017

% Apr 1 Avg. / % Normal for this Date



Change Date :  22-May-2017

NORTH

Data For: 22-May-2017

Number of Stations Reporting	25
Average snow water equivalent	21.2"
Percent of April 1 Average	75%
Percent of normal for this date	203%

CENTRAL

Data For: 22-May-2017

Number of Stations Reporting	39
Average snow water equivalent	31.4"
Percent of April 1 Average	107%
Percent of normal for this date	220%

SOUTH

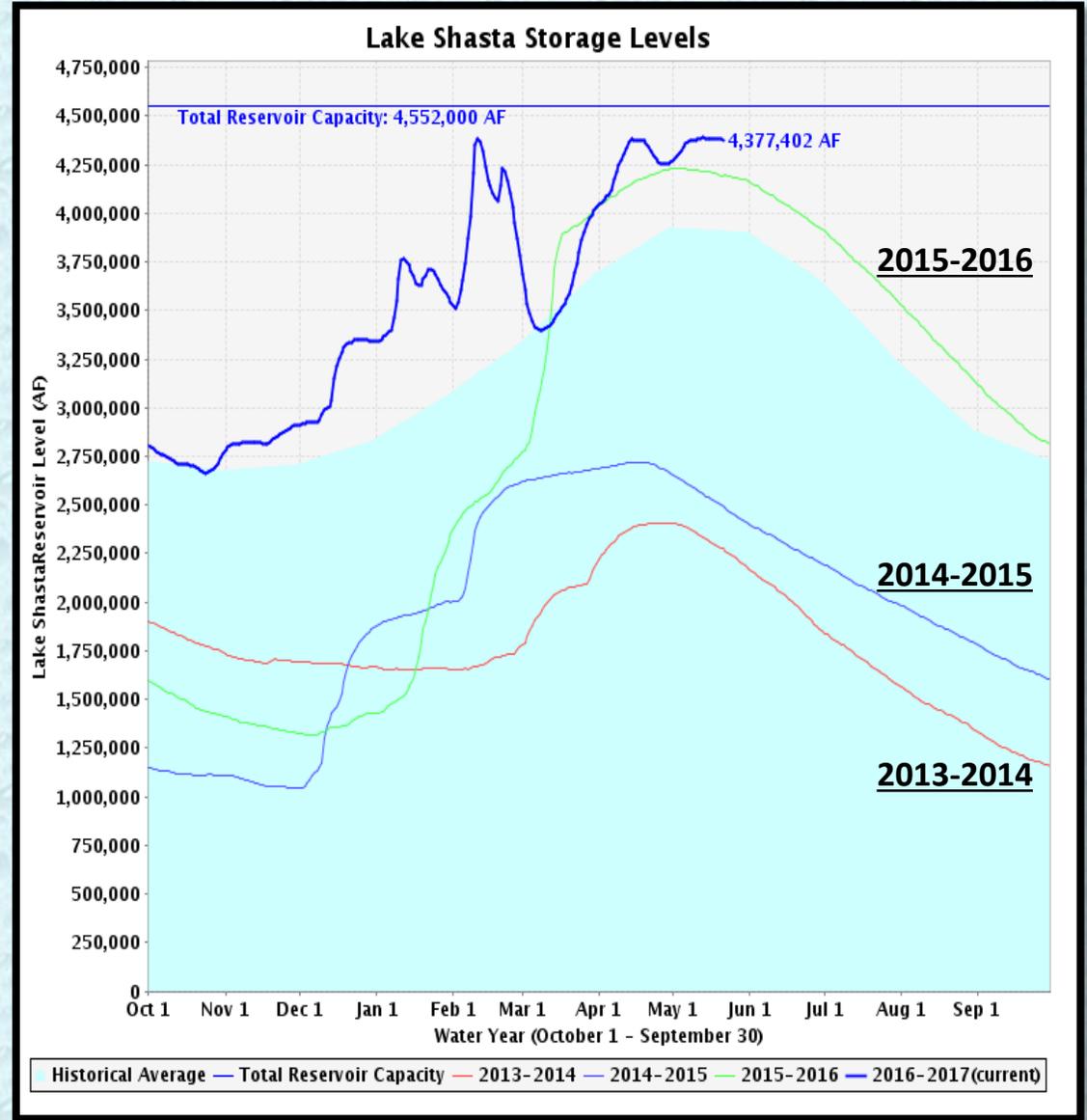
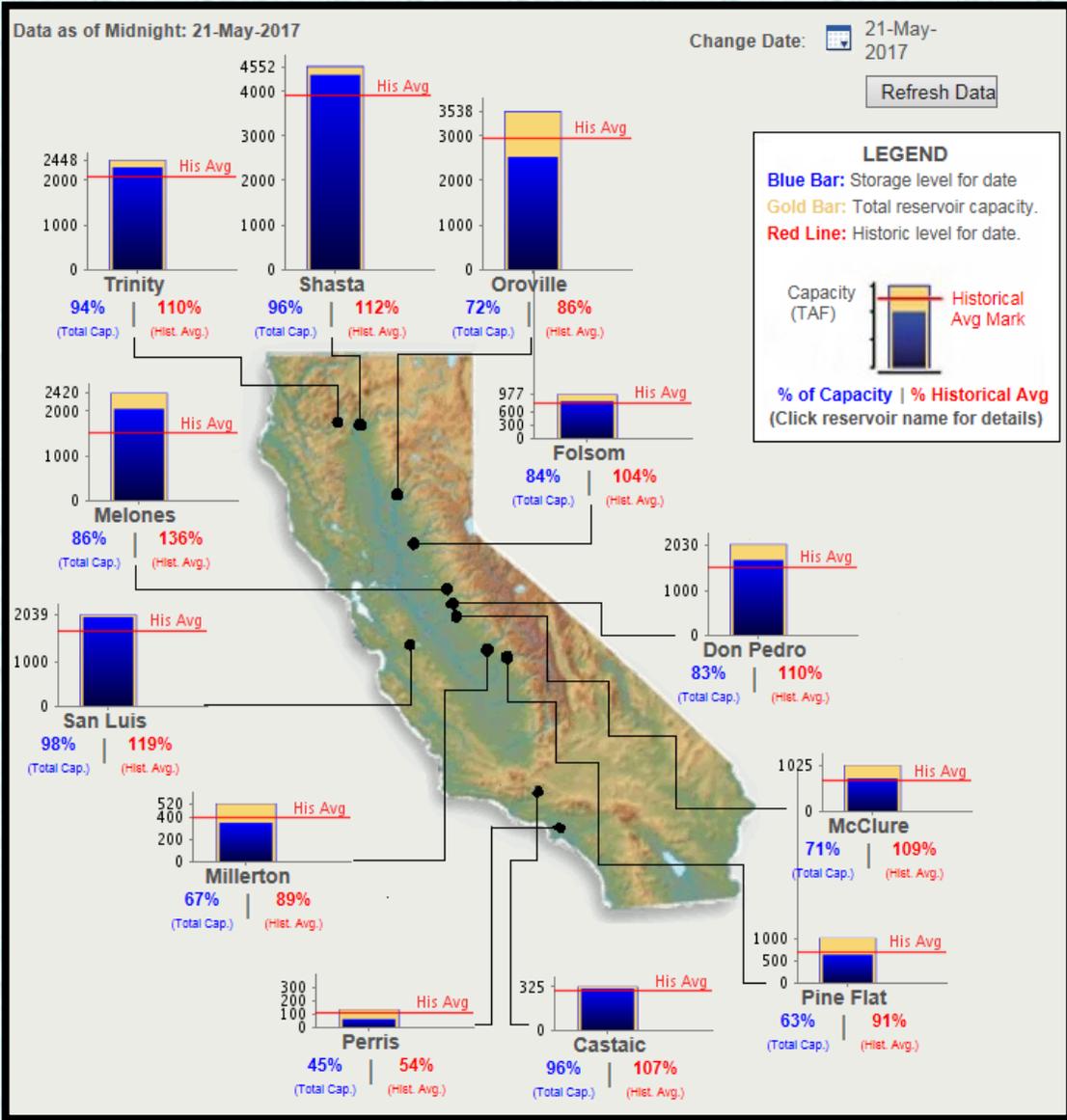
Data For: 22-May-2017

Number of Stations Reporting	24
Average snow water equivalent	23.8"
Percent of April 1 Average	90%
Percent of normal for this date	177%

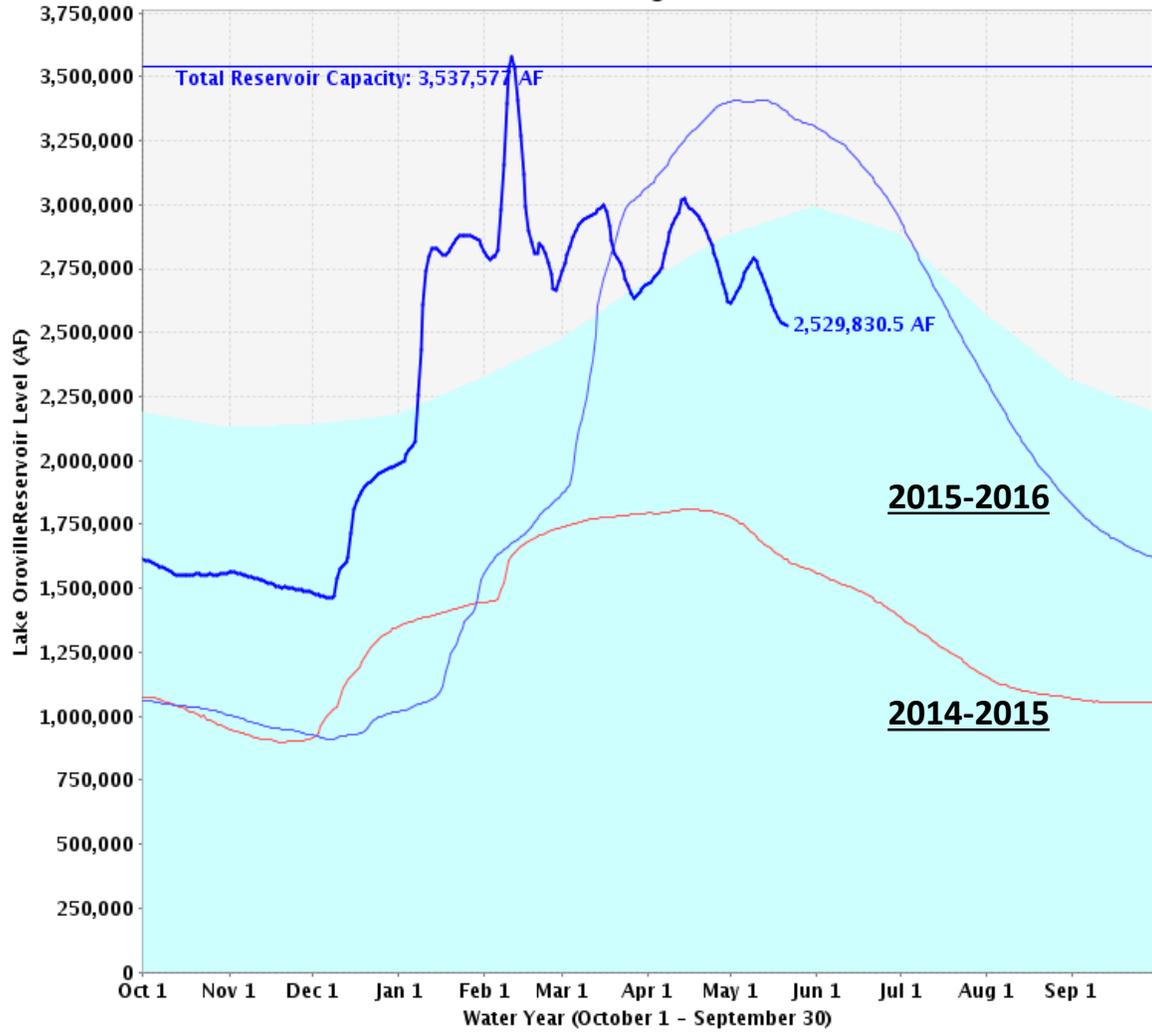
STATEWIDE SUMMARY

Data For: 22-May-2017

Number of Stations Reporting	88
Average snow water equivalent	26.4"
Percent of April 1 Average	94%
Percent of normal for this date	204%

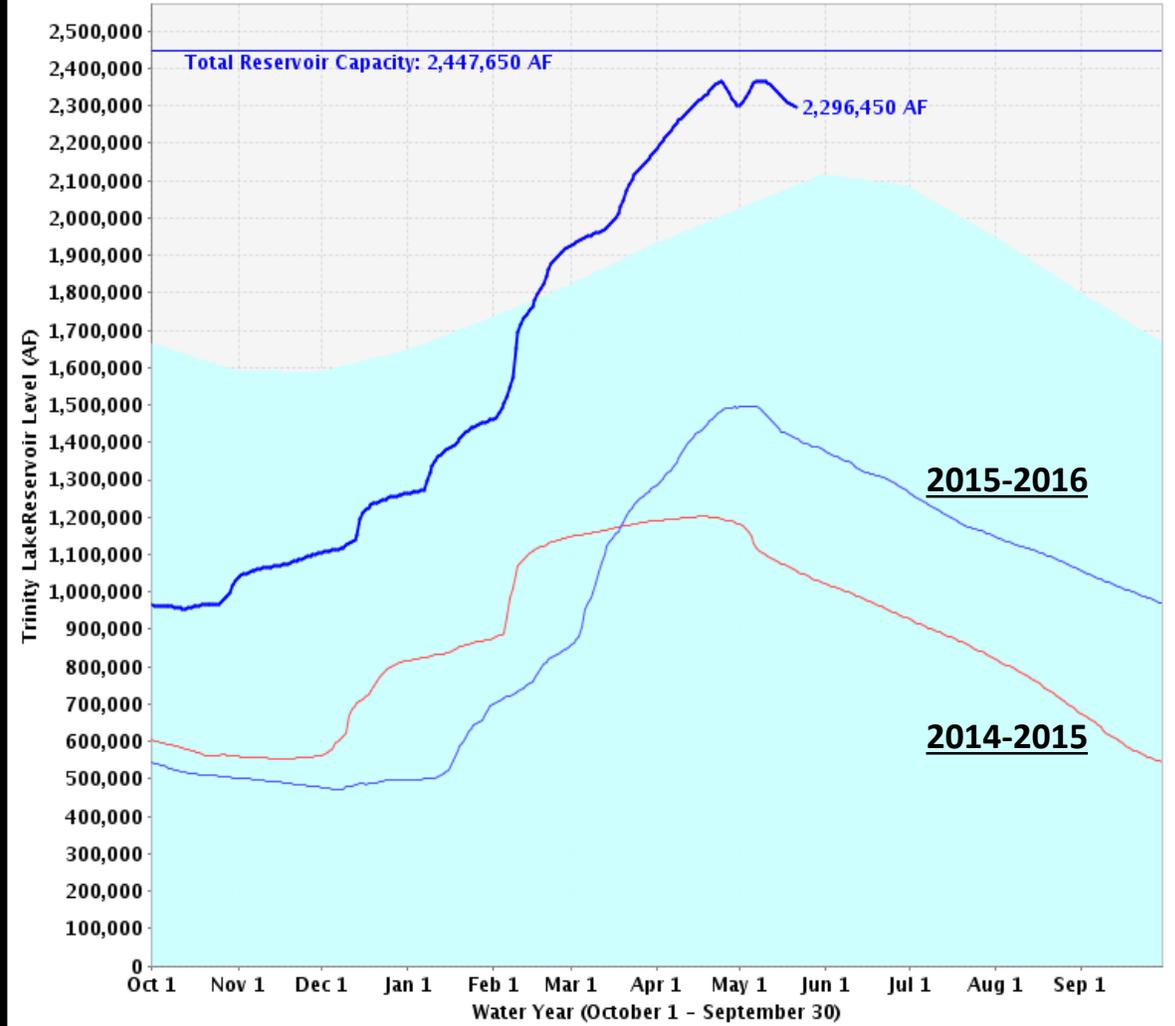


Lake Oroville Storage Levels



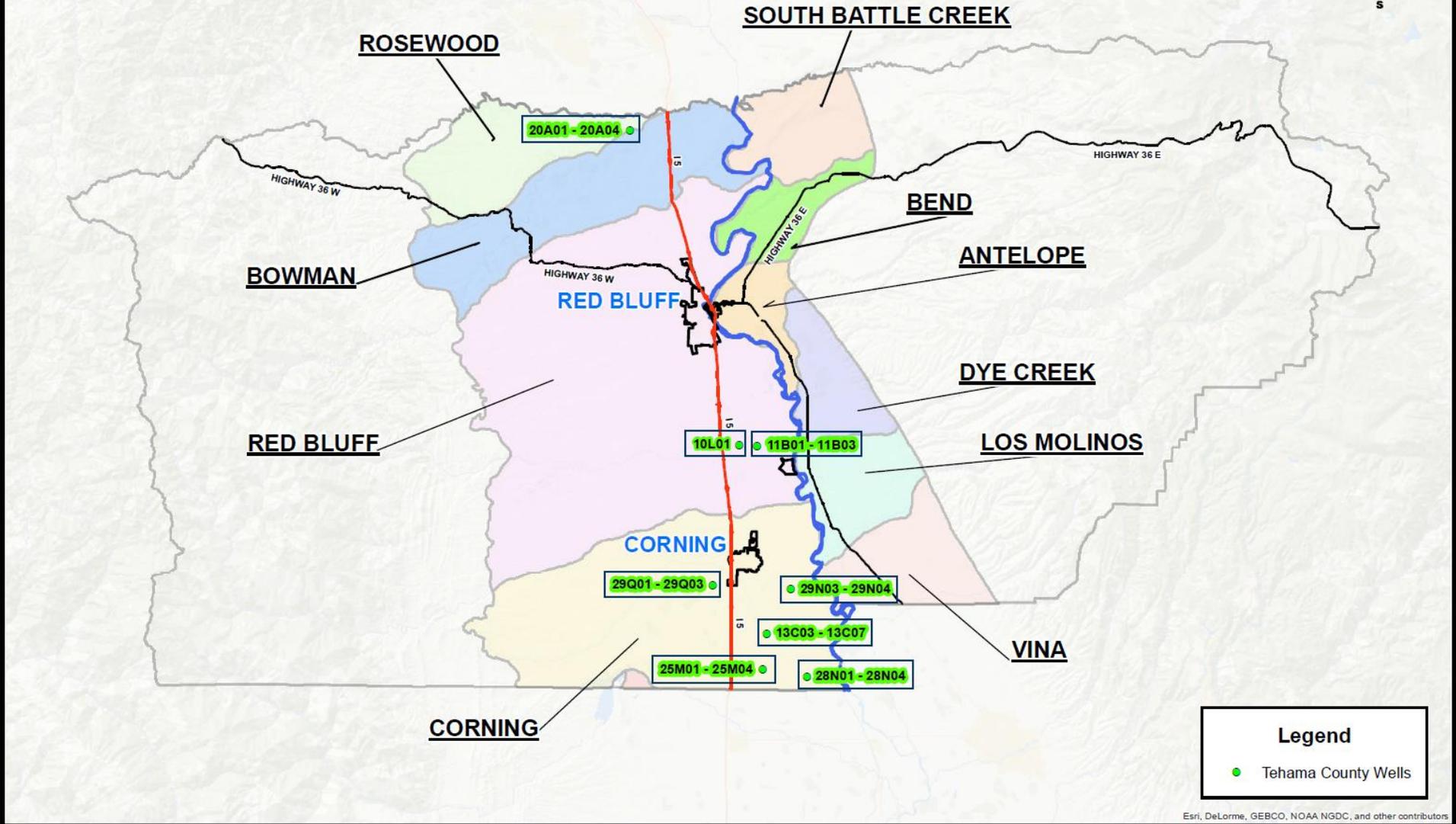
Historical Average — Total Reservoir Capacity — 2014-2015 — 2015-2016 — 2016-2017(current)

Trinity Lake Storage Levels



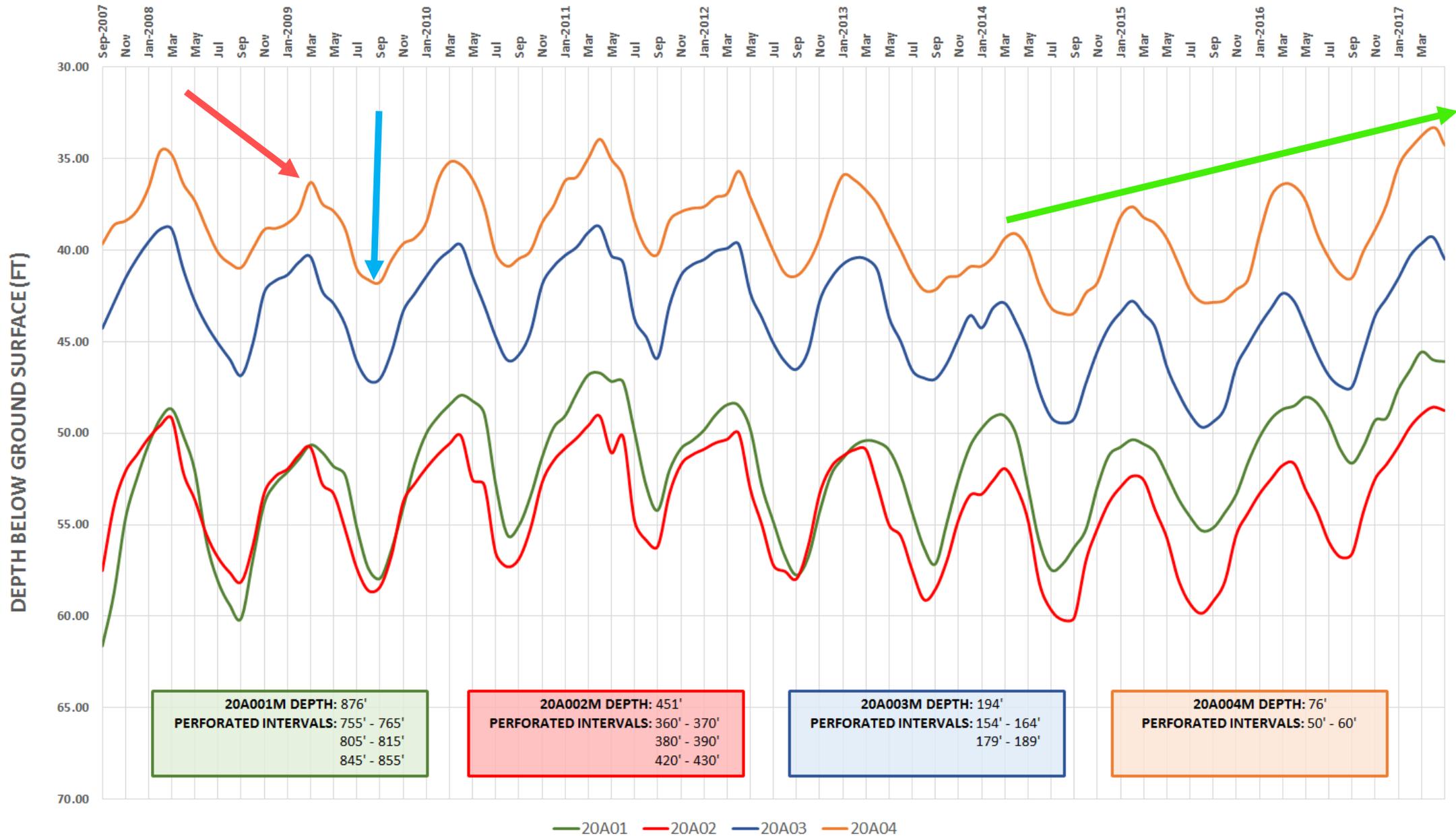
Historical Average — Total Reservoir Capacity — 2014-2015 — 2015-2016 — 2016-2017(current)

TEHAMA COUNTY GROUNDWATER MONITORING WELLS

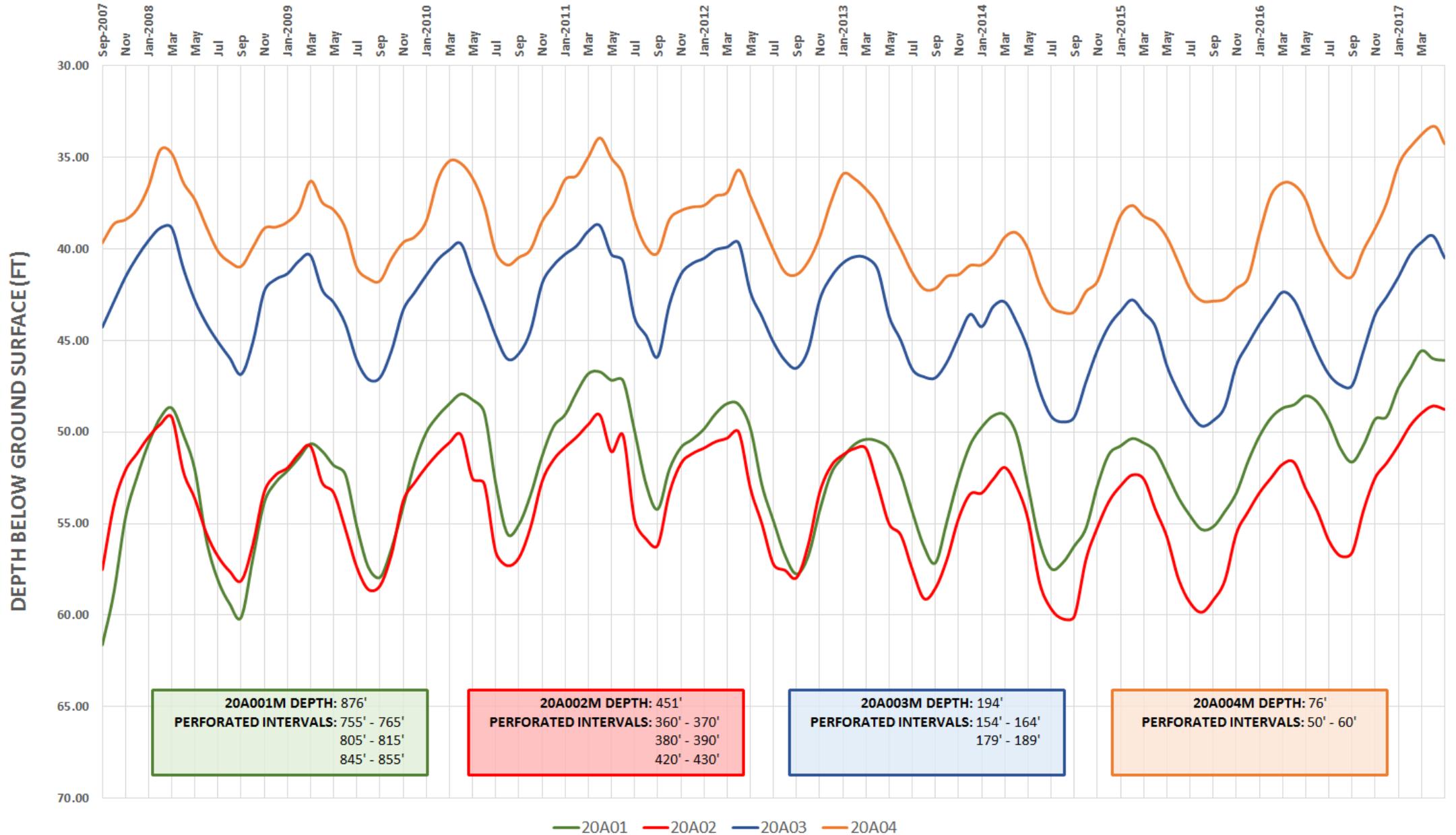


Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

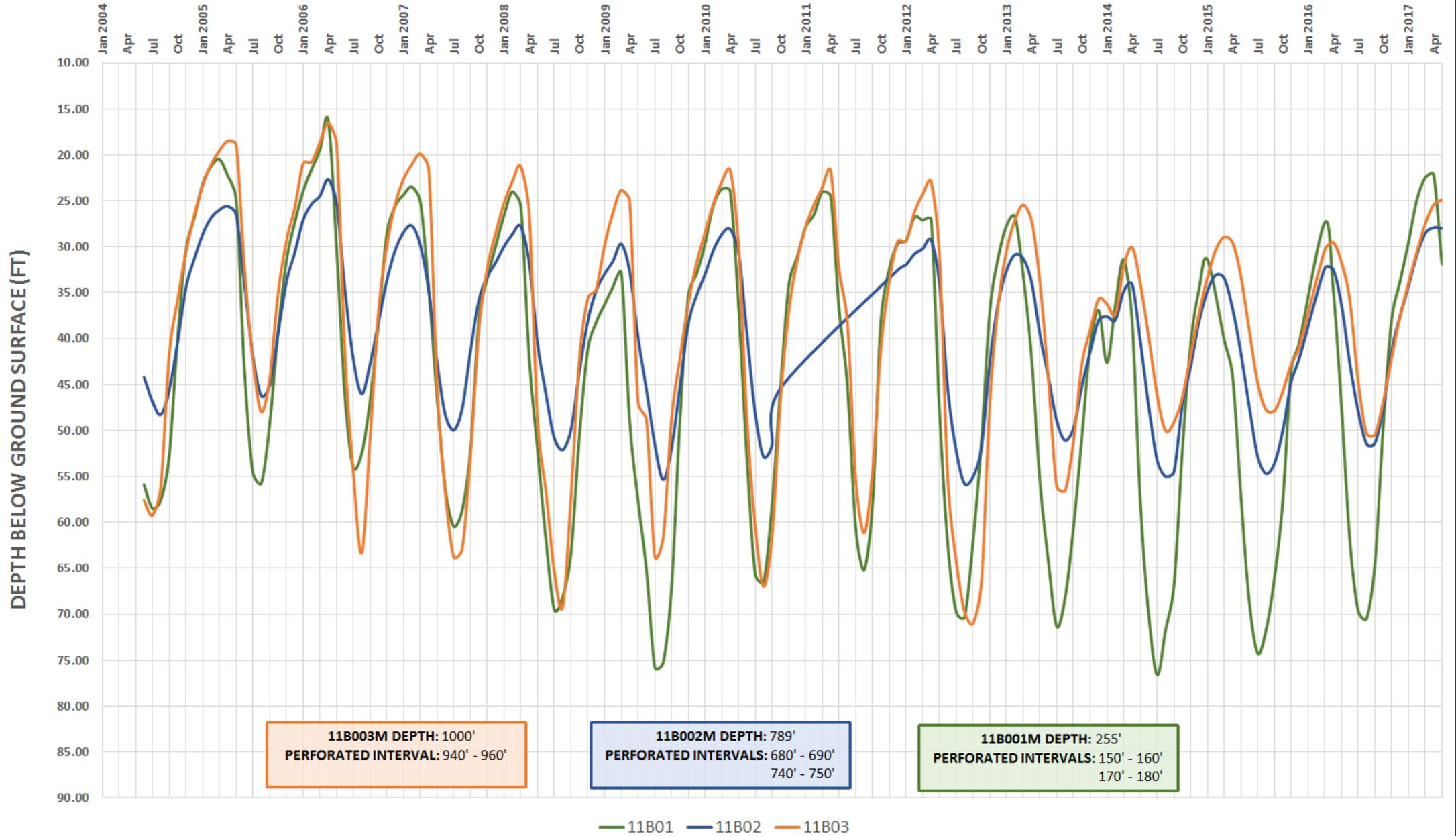
BOWMAN ROAD @ EVERGREEN SCHOOL



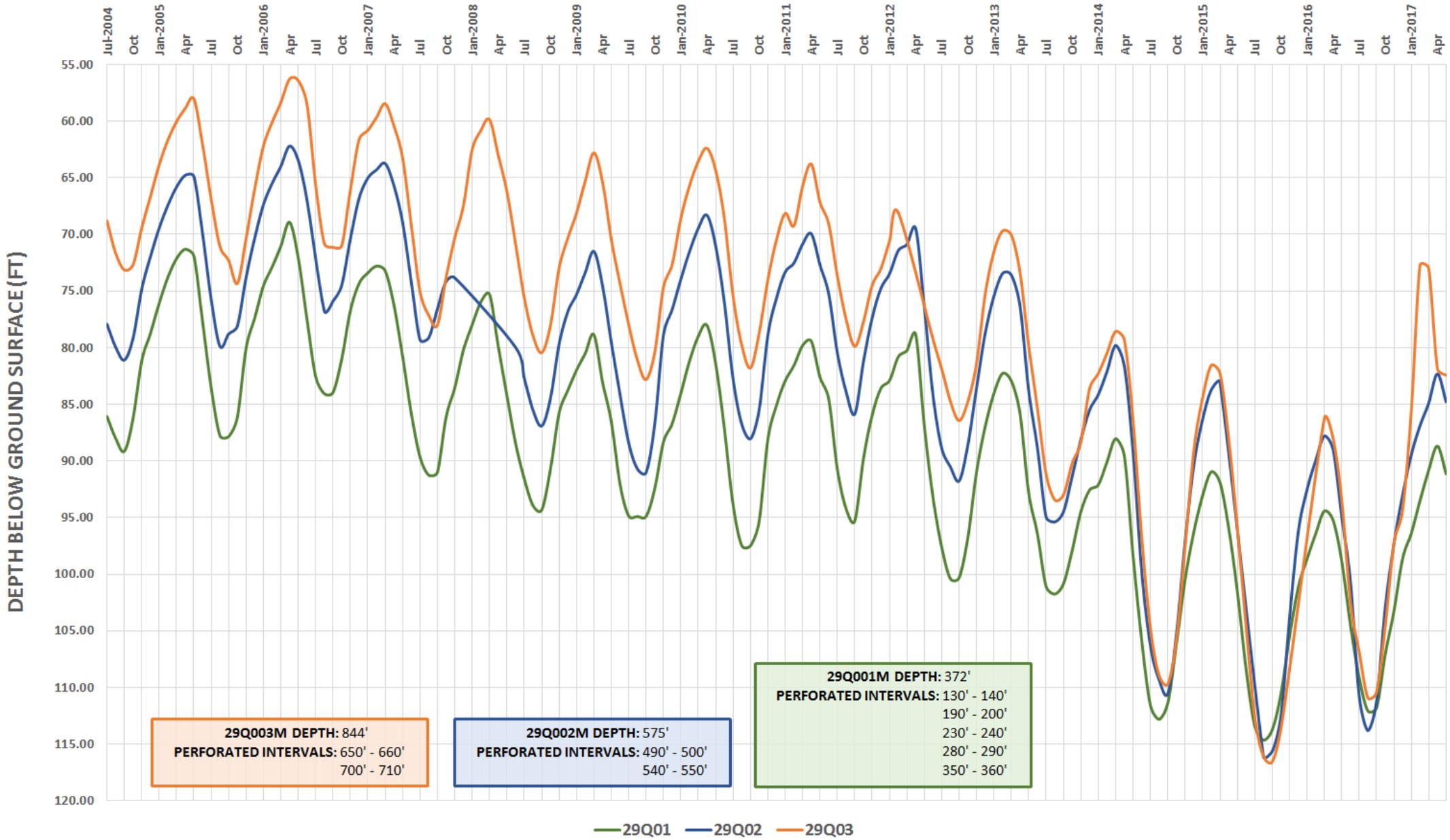
BOWMAN ROAD @ EVERGREEN SCHOOL



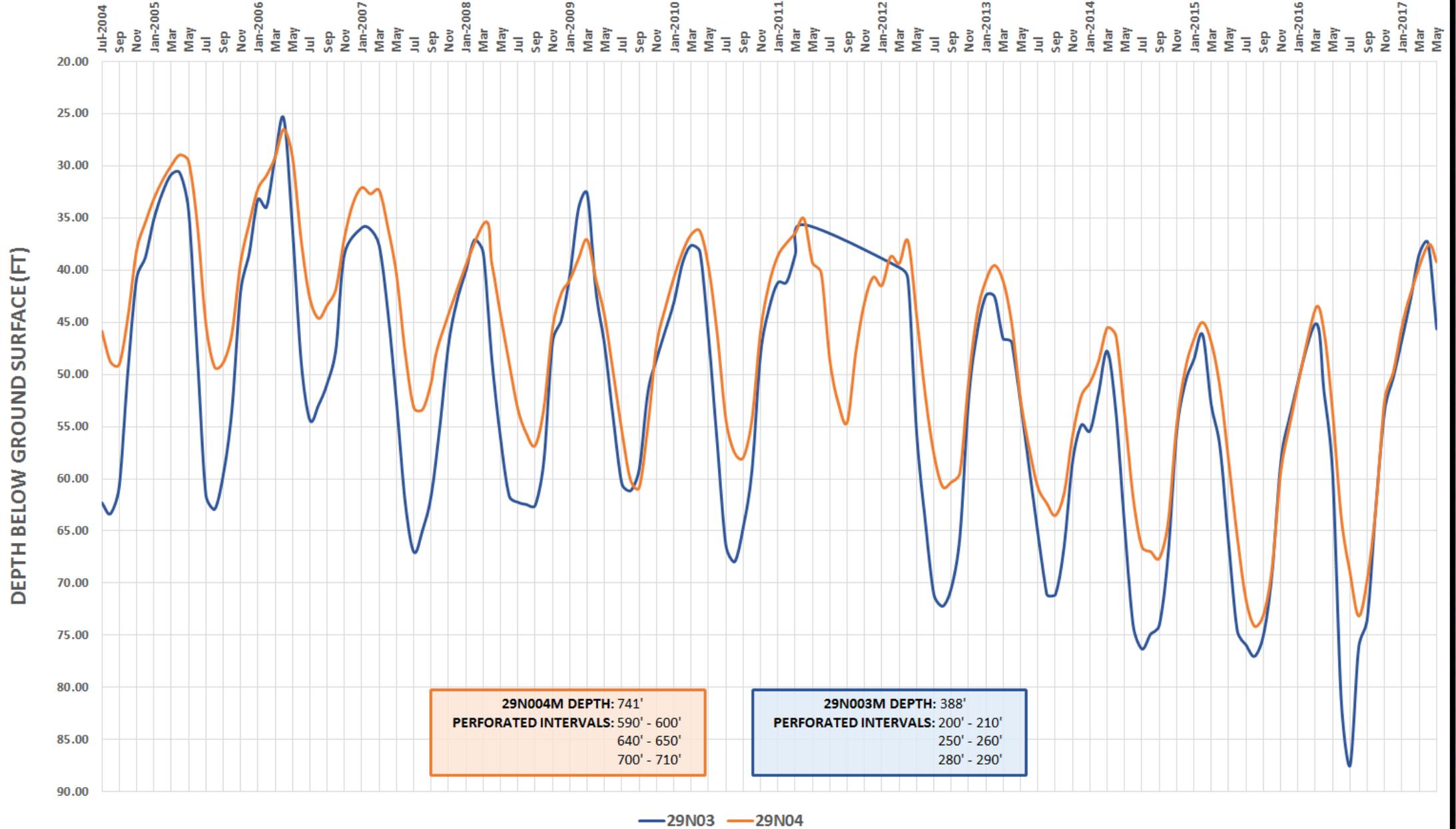
GERBER ROAD - EAST OF HIGHWAY 99W



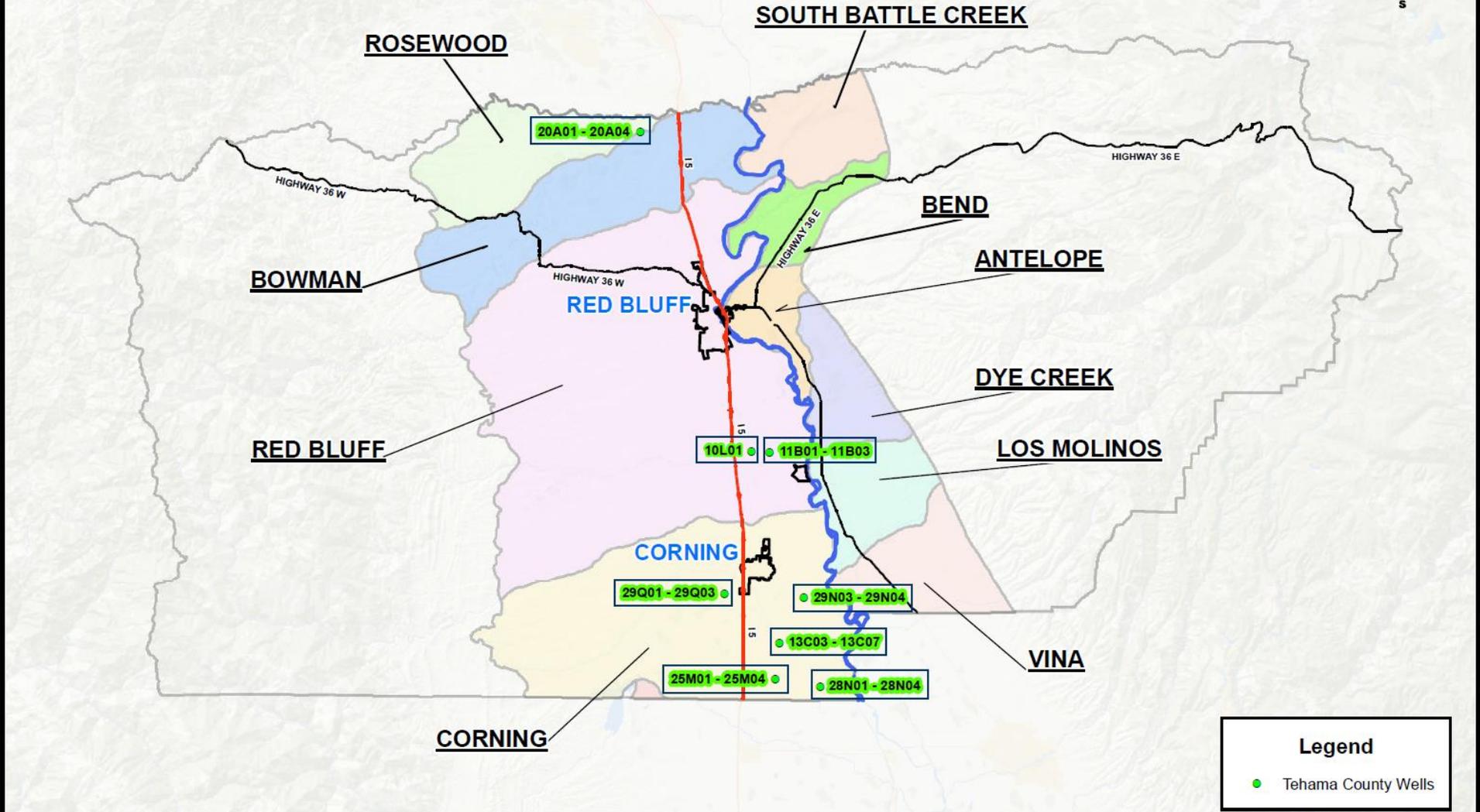
MT. SHASTA AVE - SOUTH OF CHITTENDEN AVE



HALL ROAD - SOUTH OF SOUTH AVENUE

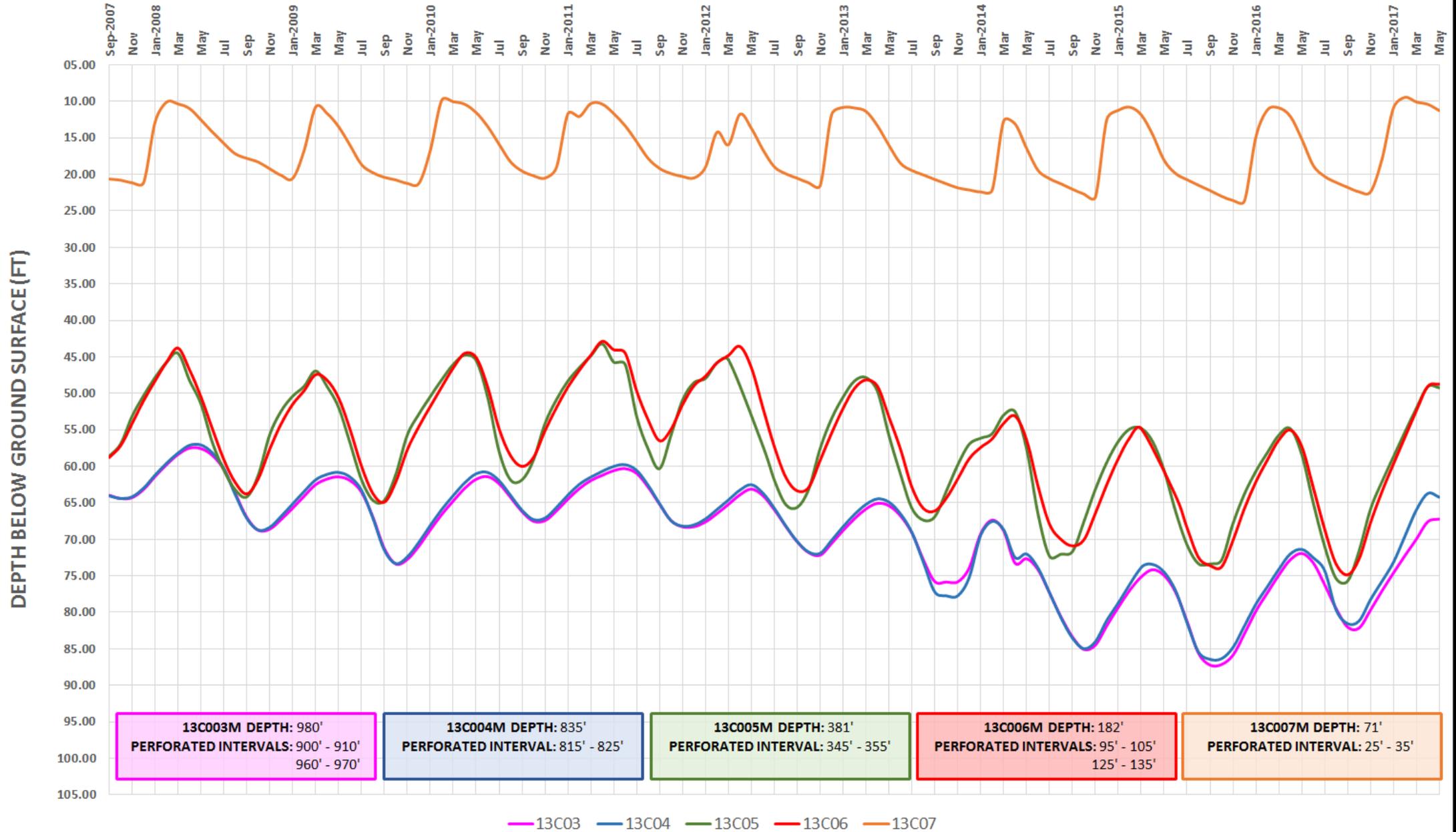


TEHAMA COUNTY GROUNDWATER MONITORING WELLS

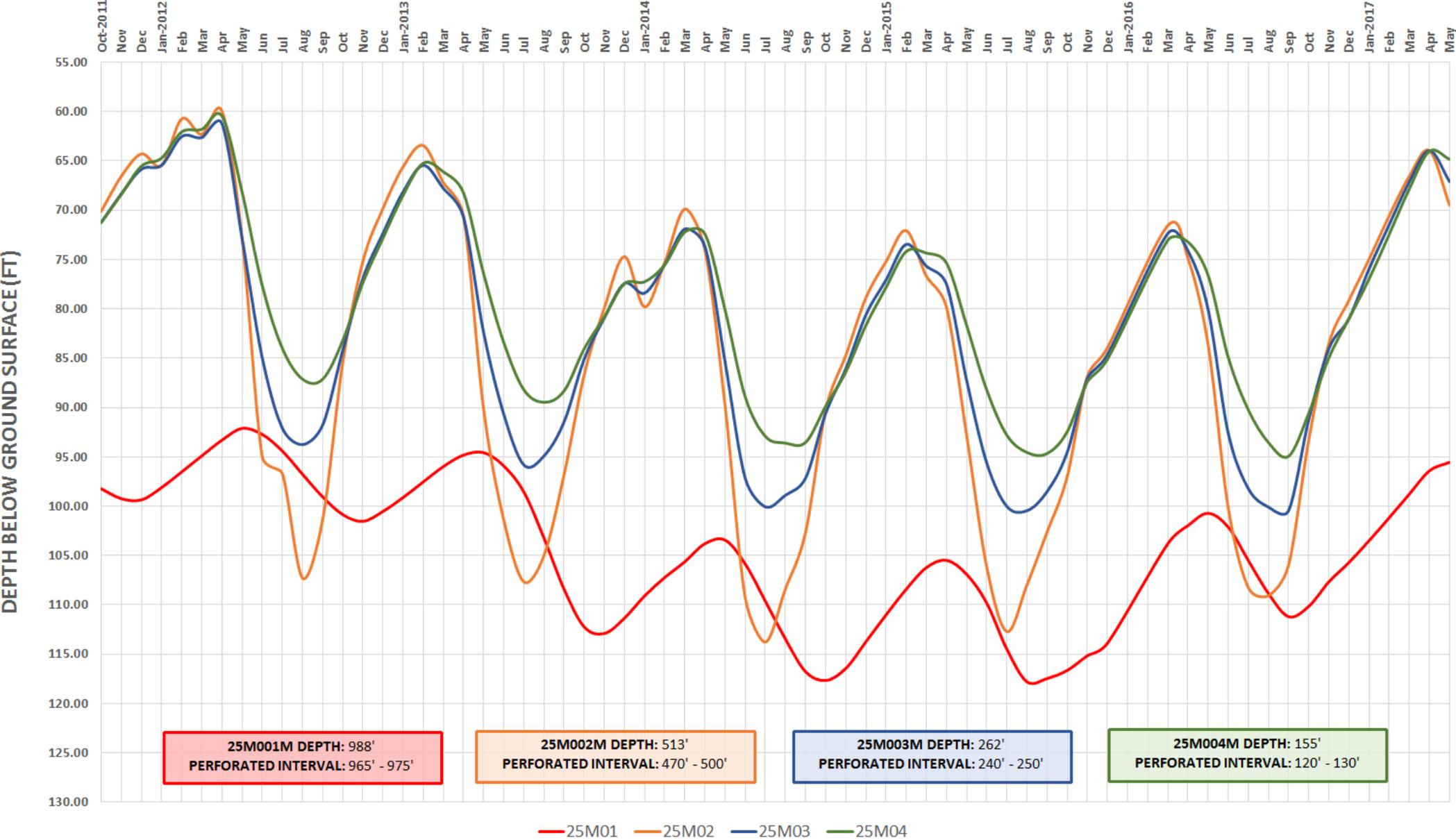


Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

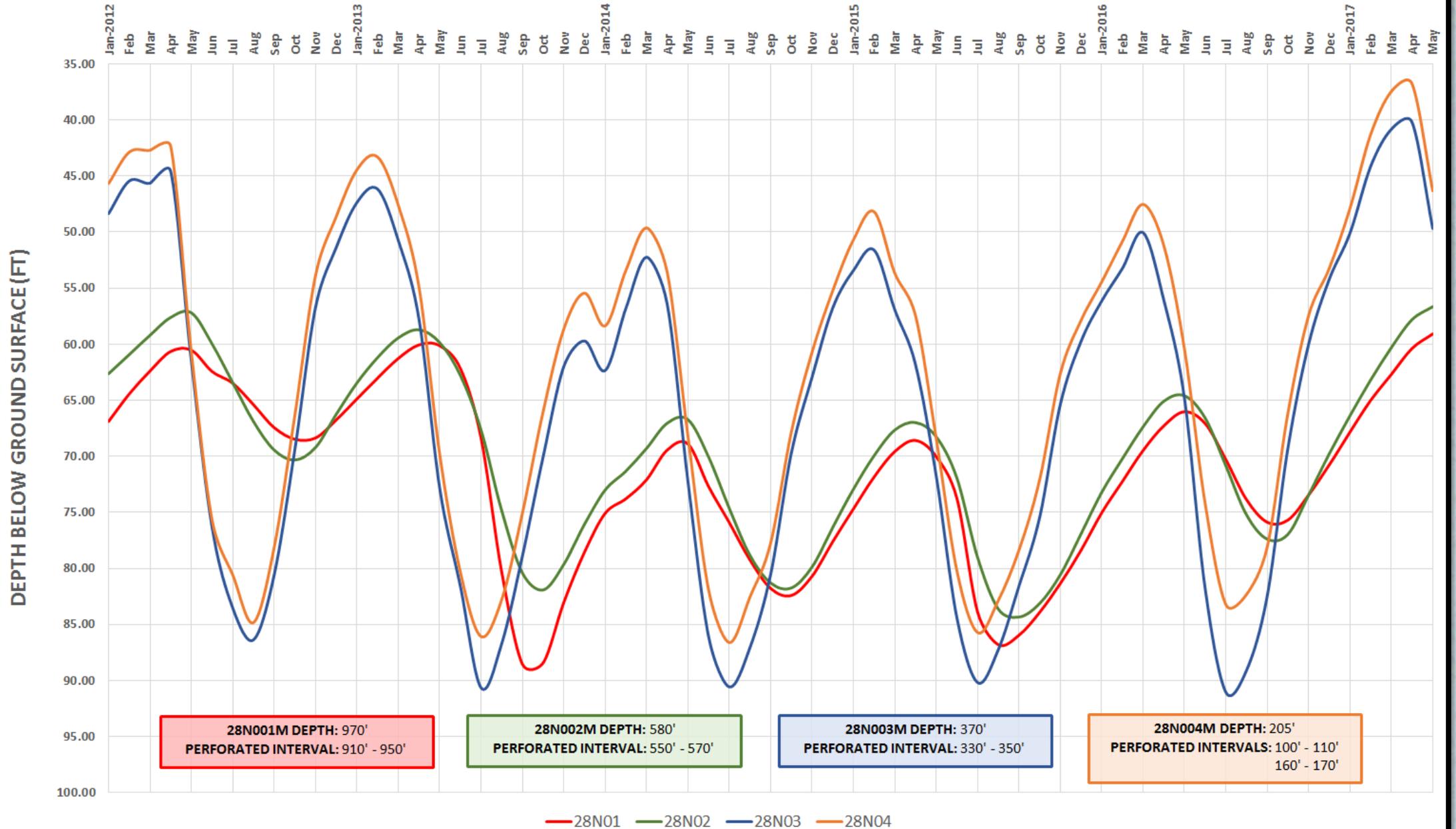
CAPAY ROAD @ HALL ROAD



INGHRAM ROAD @ TEHAMA-COLUSA CANAL



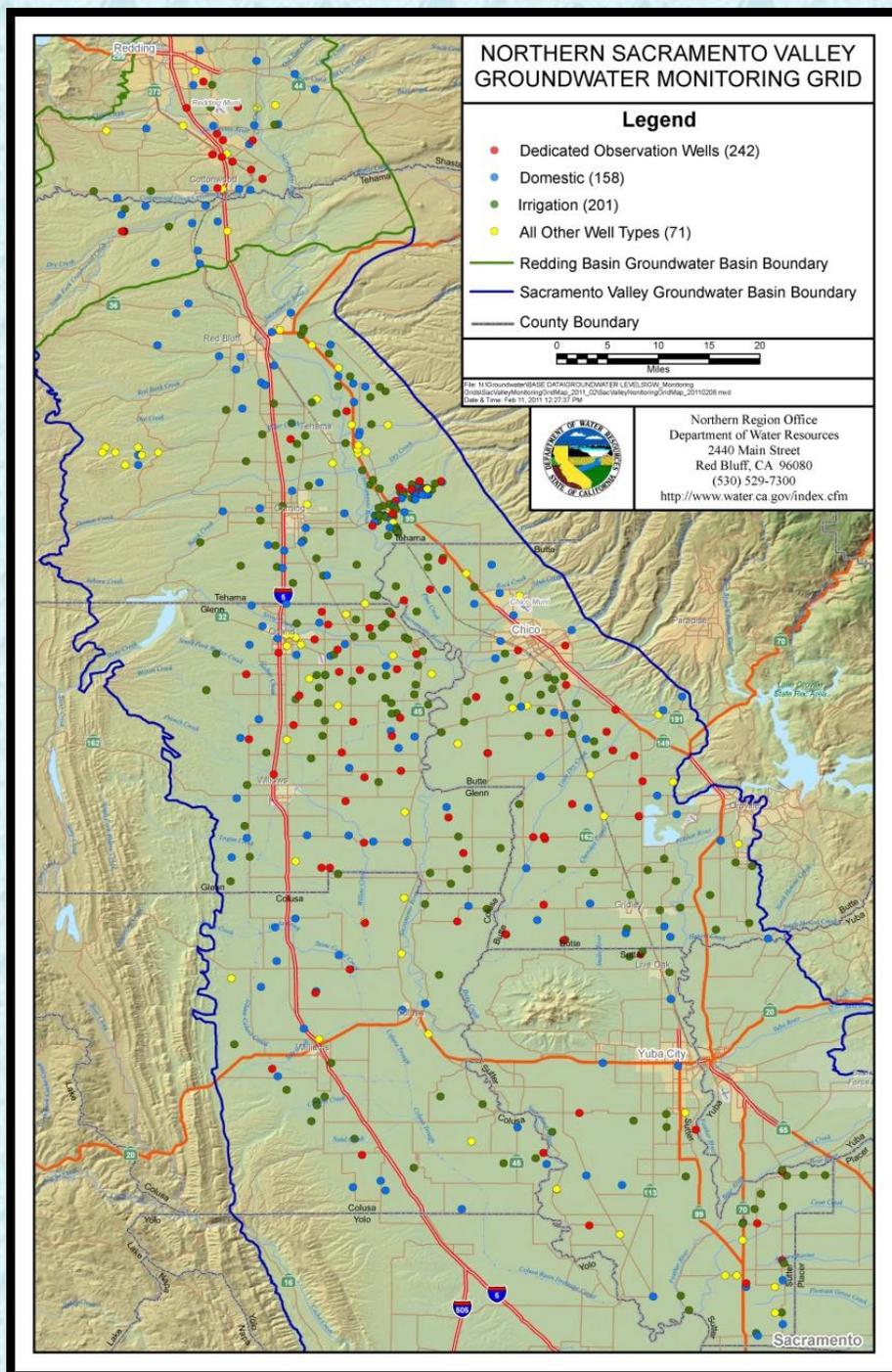
MOLLER AVENUE @ 5TH AVENUE



Sacramento Valley Spring 2017 Groundwater Level Update

DRAFT

Department of Water Resources
Northern Region Office



Sacramento Valley Groundwater Level Monitoring Grid

Groundwater Change Maps

100 - 450 ft Deep Wells

(~80% of all wells)

Comparison

- 2017-2016

- 2017-2011

Between:

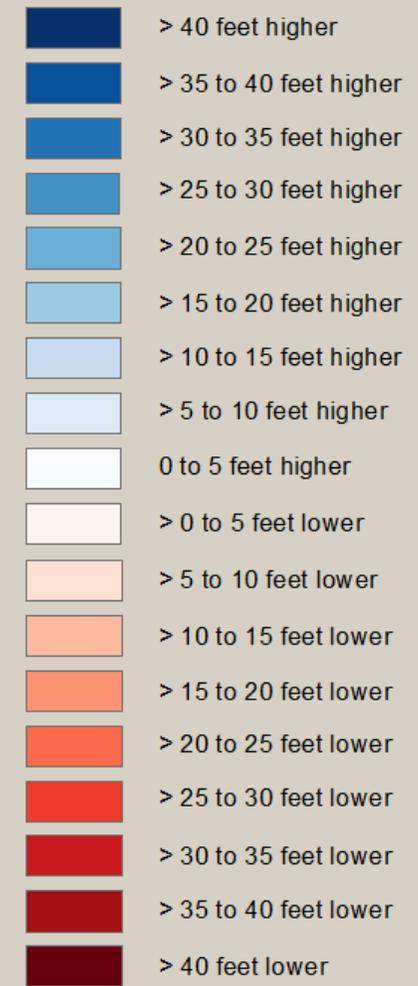
- 2017-2004

Shasta County - Redding GW Basin	
Maximum Increase GWE (ft)	20.5
Maximum Decrease GWE (ft)	-11.9
Average Change GWE (ft)	2.0
Average Well Depth (ft)	224
Number of Wells Monitored	20

Tehama County - Redding GW Basin	
Maximum Increase GWE (ft)	7.4
Maximum Decrease GWE (ft)	-6.9
Average Change GWE (ft)	2.0
Average Well Depth (ft)	229
Number of Wells Monitored	9

Tehama County - Sacramento Valley GW Basin	
Maximum Increase GWE (ft)	11.3
Maximum Decrease GWE (ft)	-15.4
Average Change GWE (ft)	3.8
Average Well Depth (ft)	251
Number of Wells Monitored	69

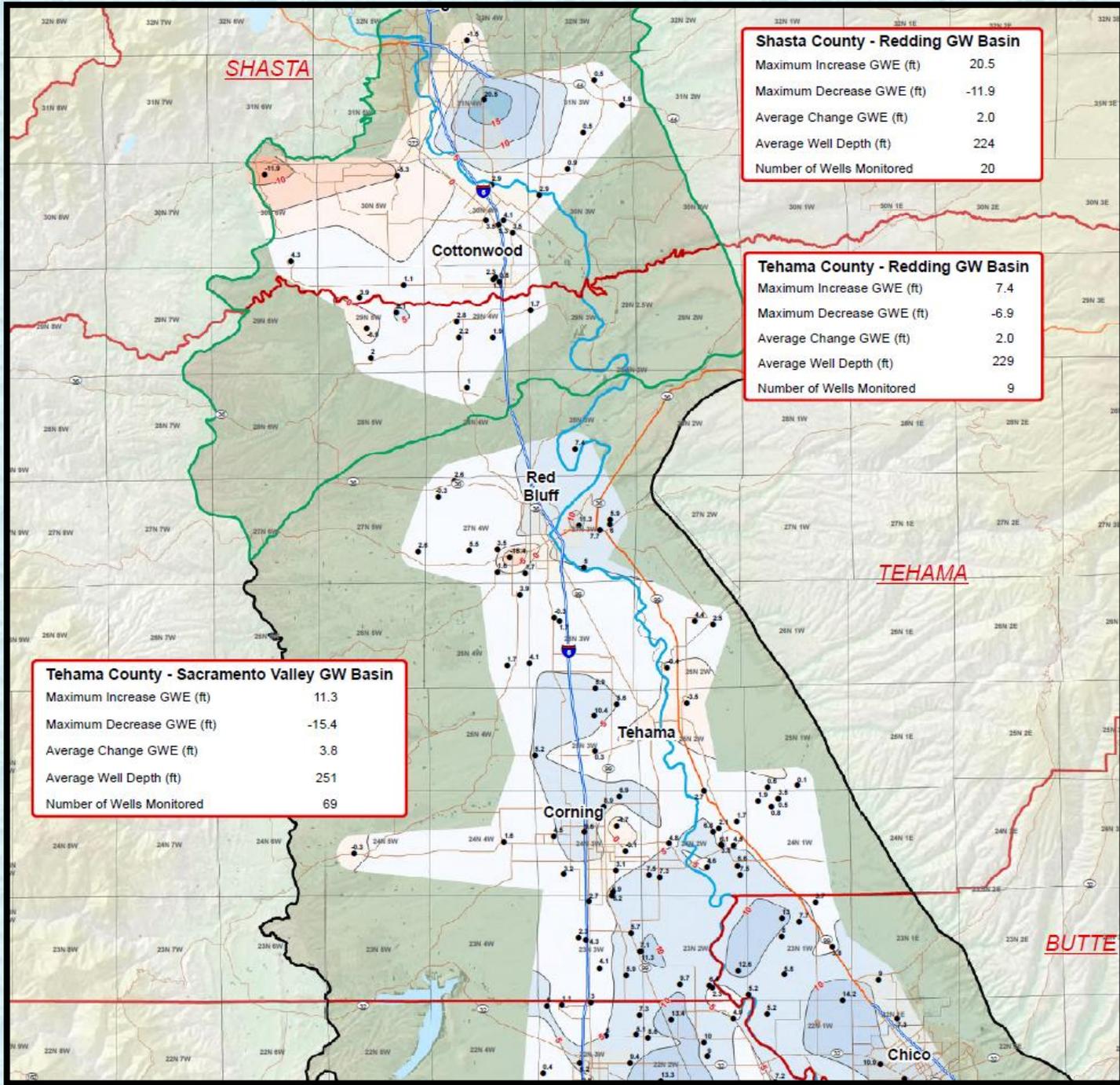
Groundwater Elevation Change

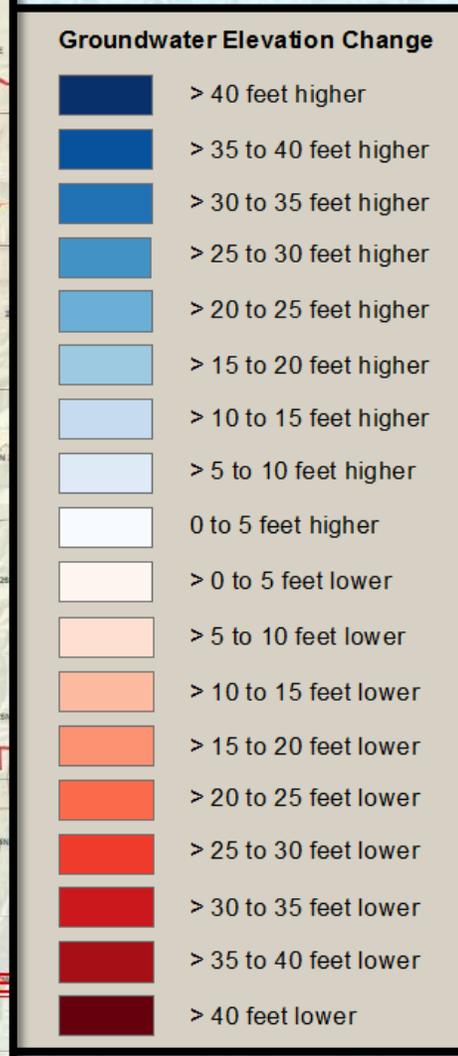
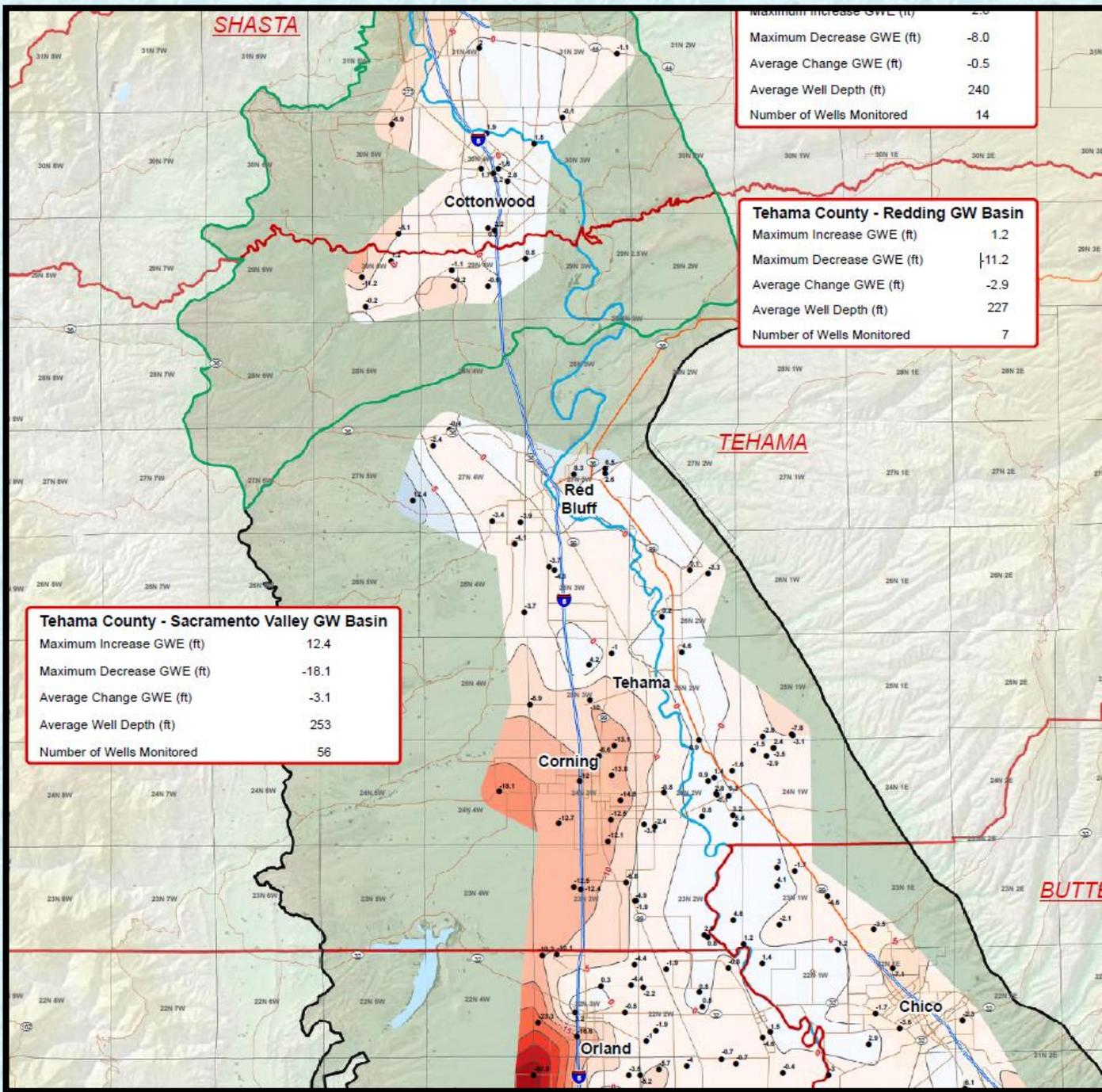


Groundwater Change Map

100-450 ft deep wells

2017-2016

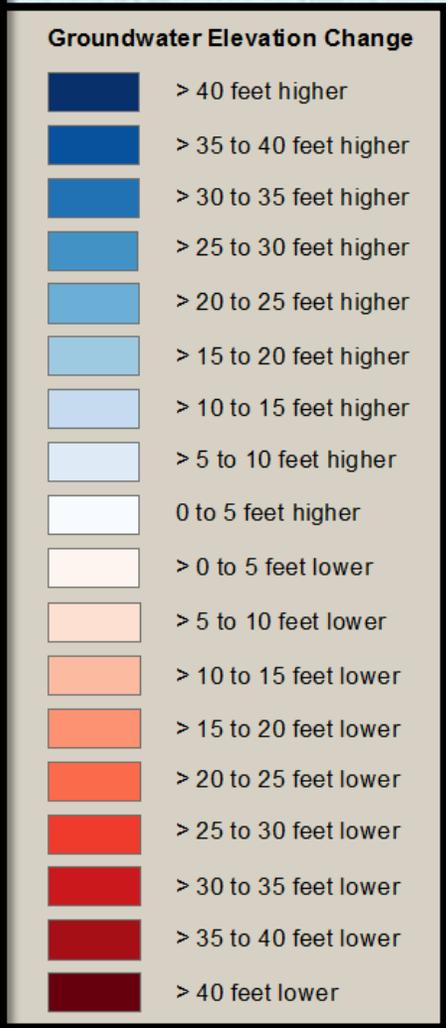
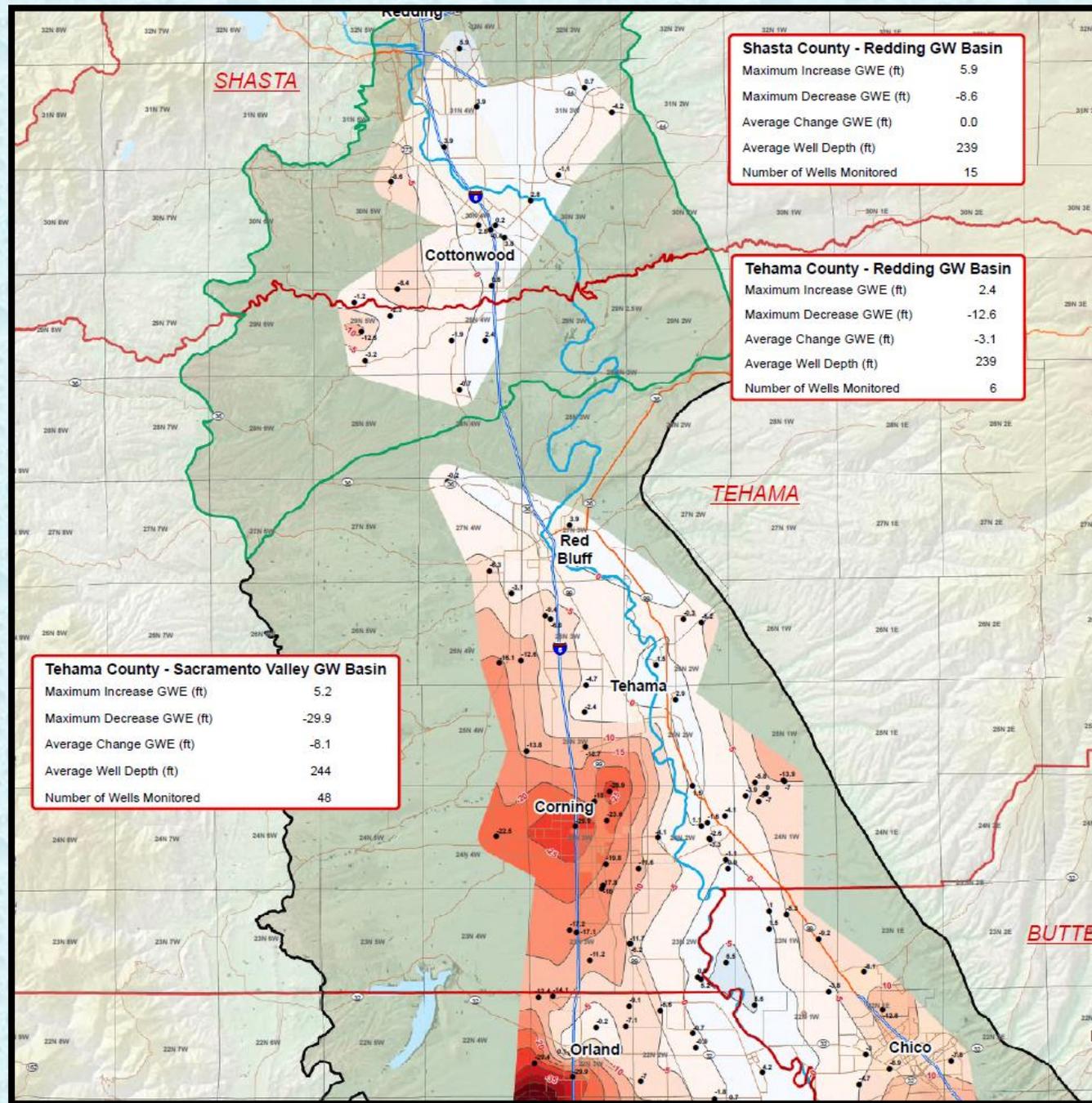




Groundwater Change Map

100-450 ft deep wells

2017-2011



Groundwater Change Map

100-450 ft deep wells

2017-2004

Groundwater Change Maps

> 600 ft Deep Wells

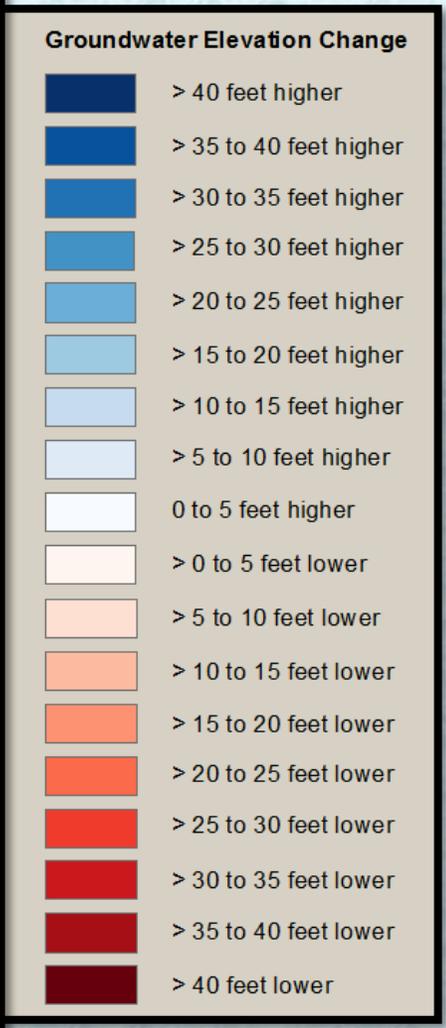
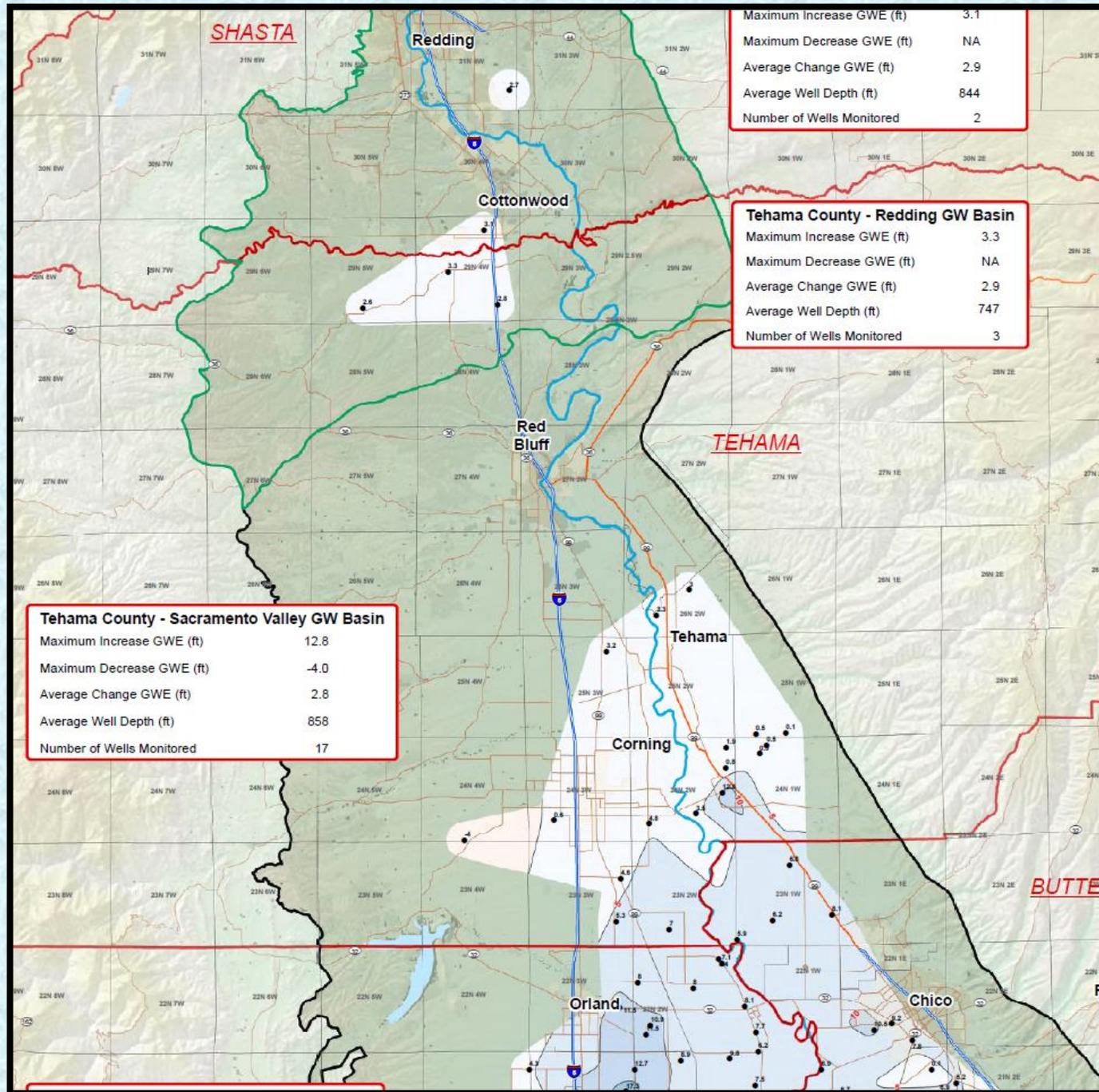
Comparison

- 2017-2016

- 2017-2011

Between:

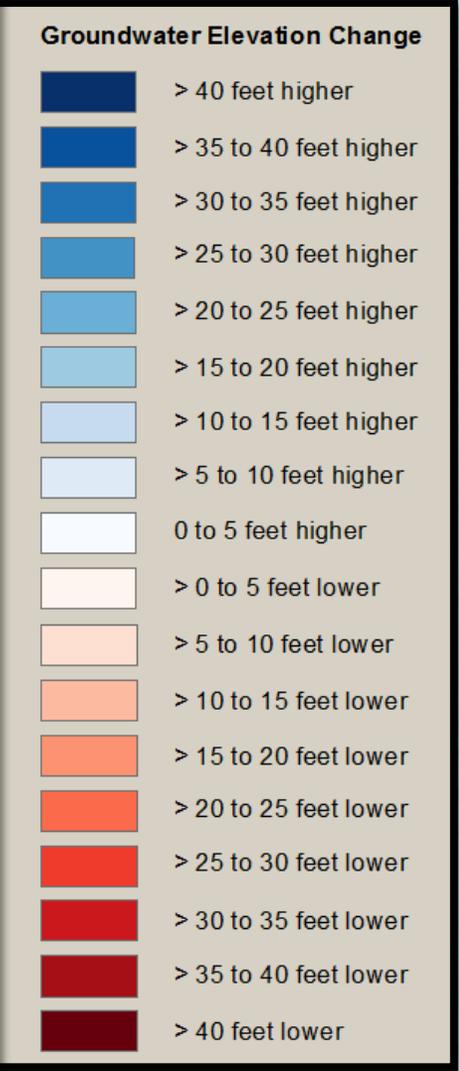
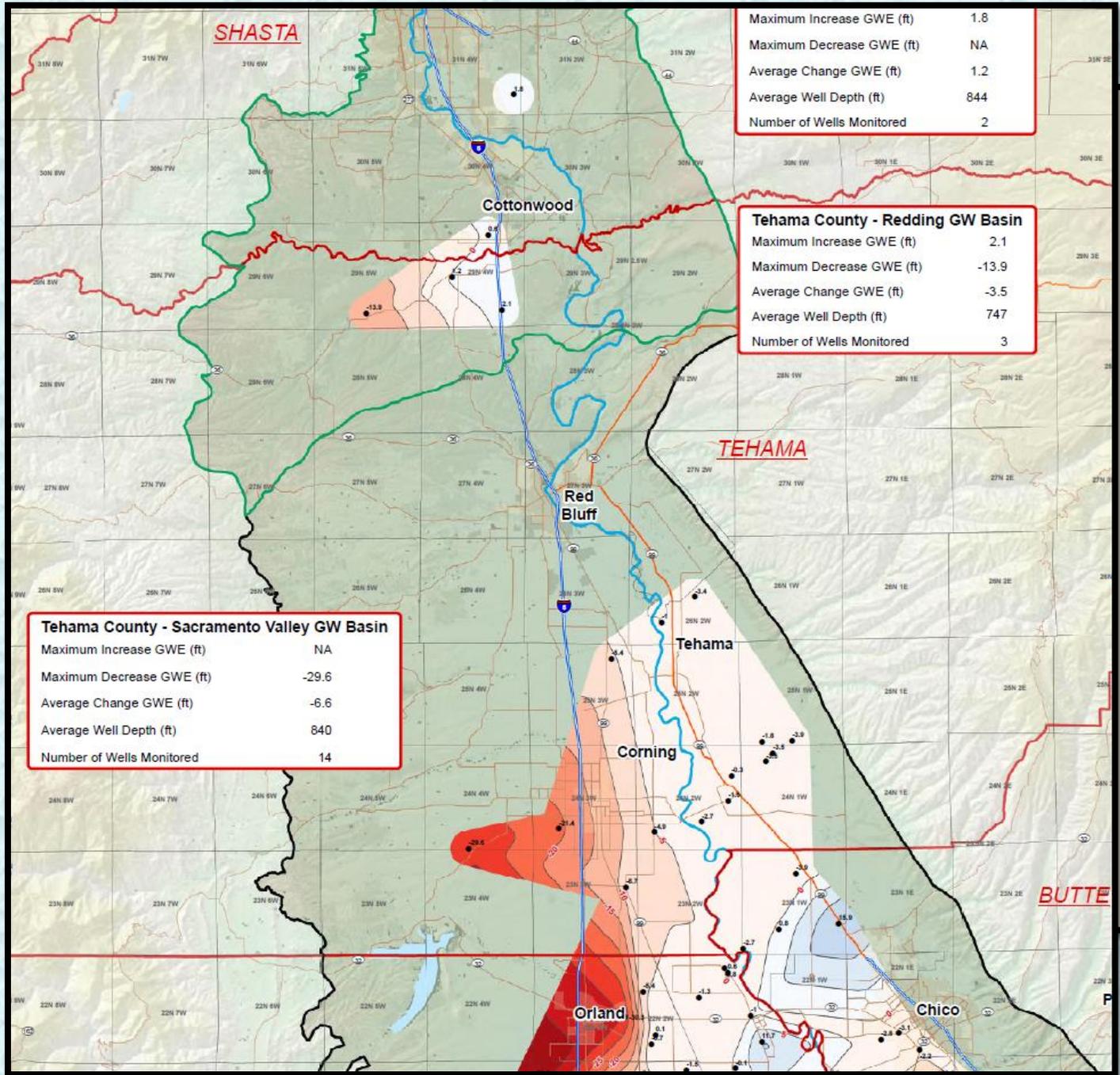
- 2017-2004



Groundwater Change Map

> 600 ft deep wells

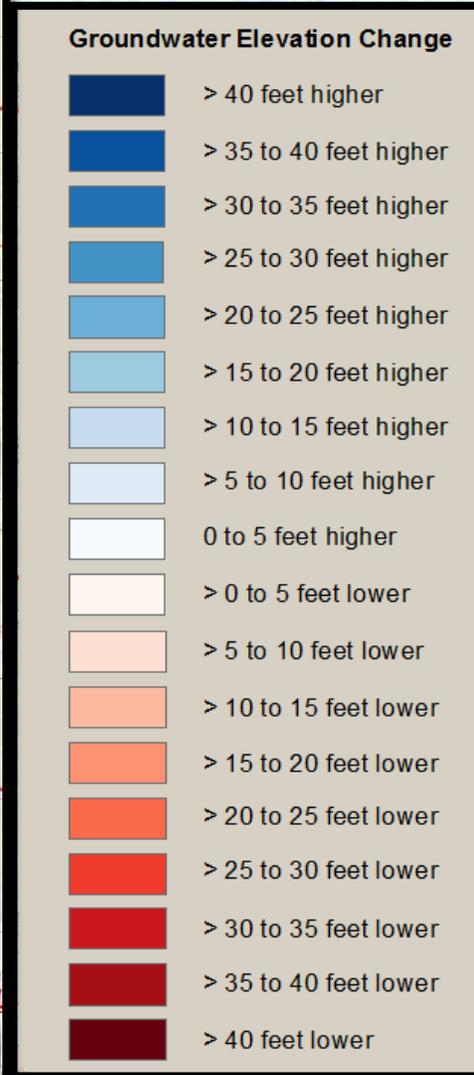
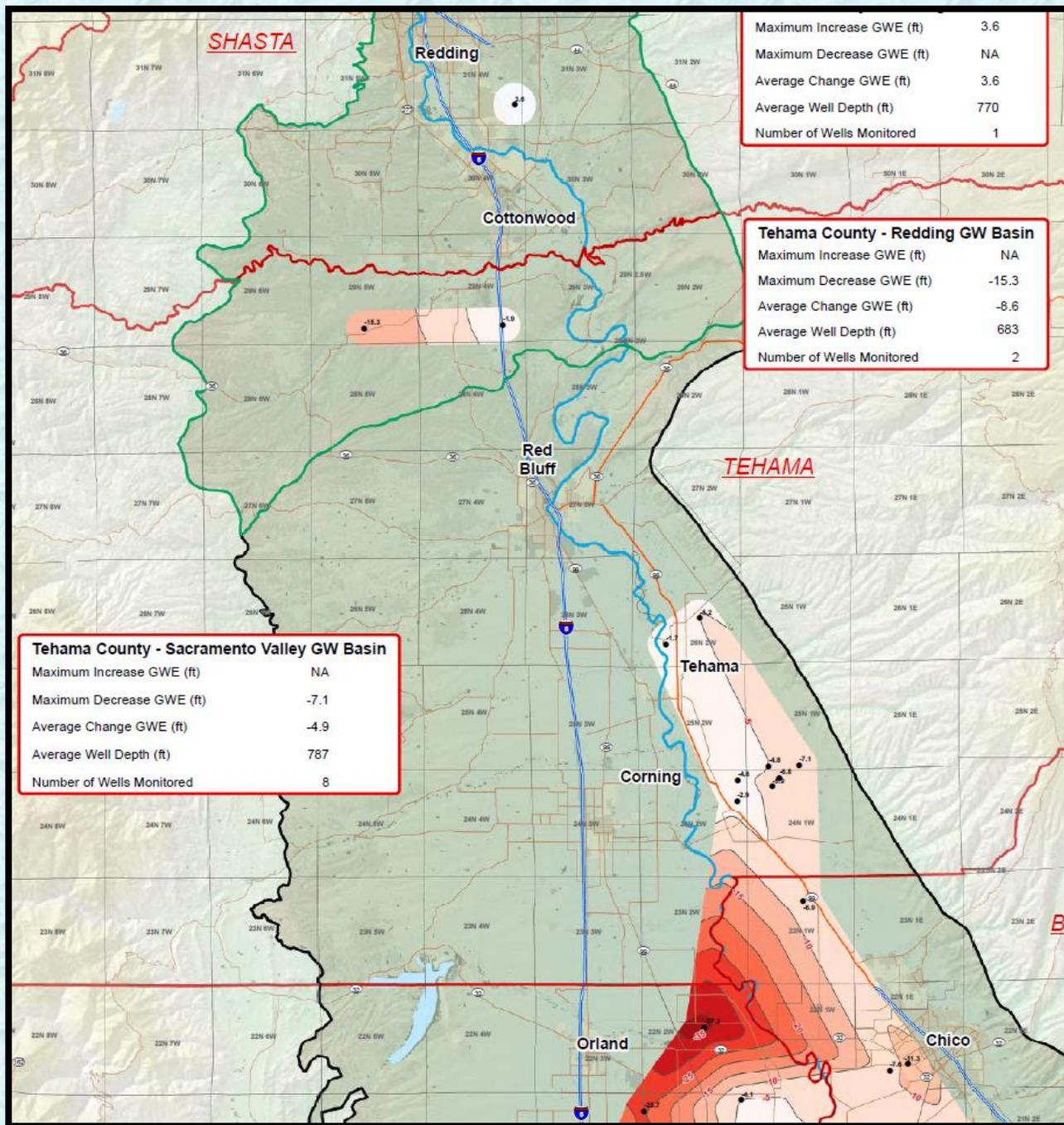
2017-2016



Groundwater Change Map

> 600 ft deep wells

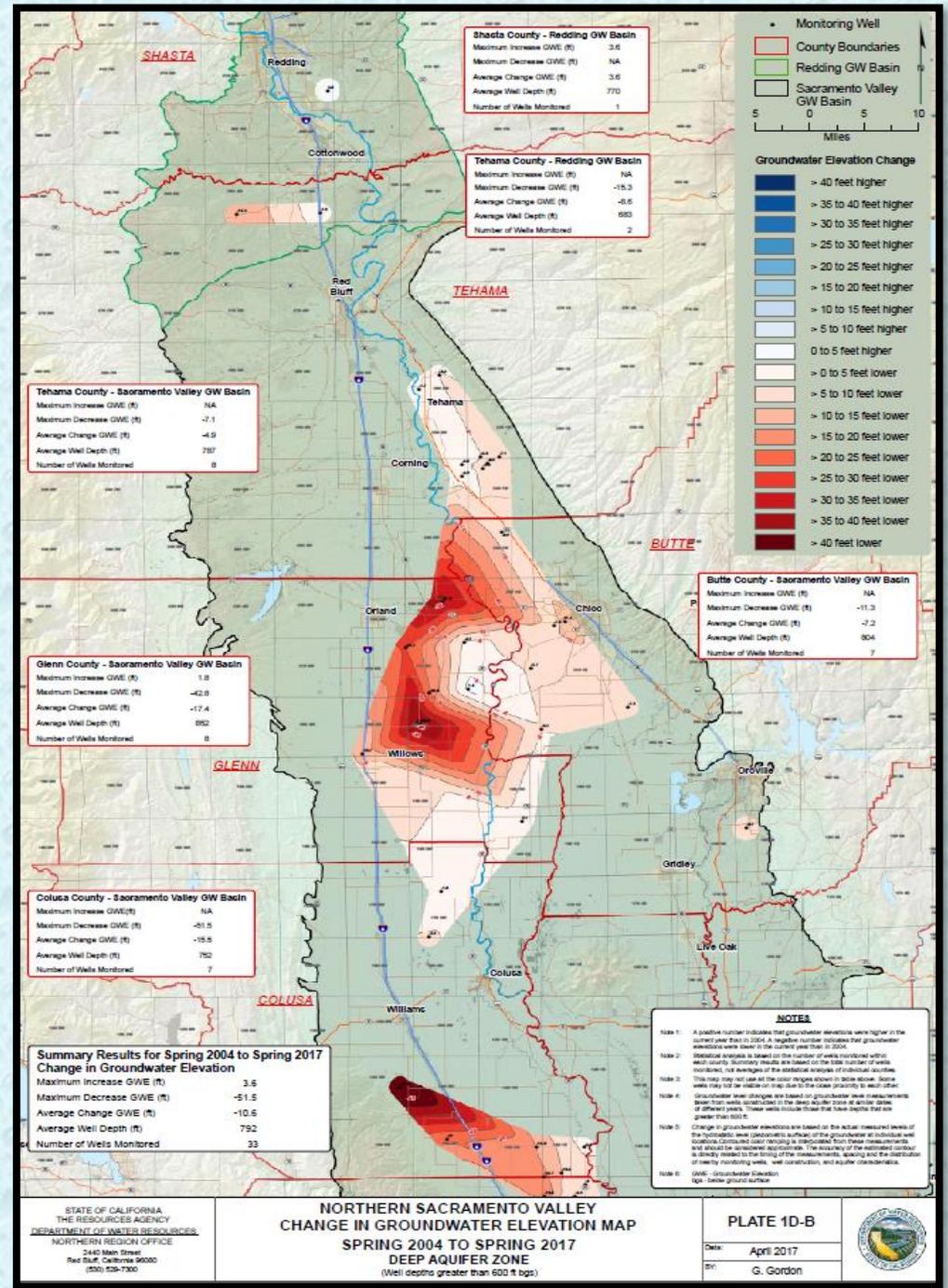
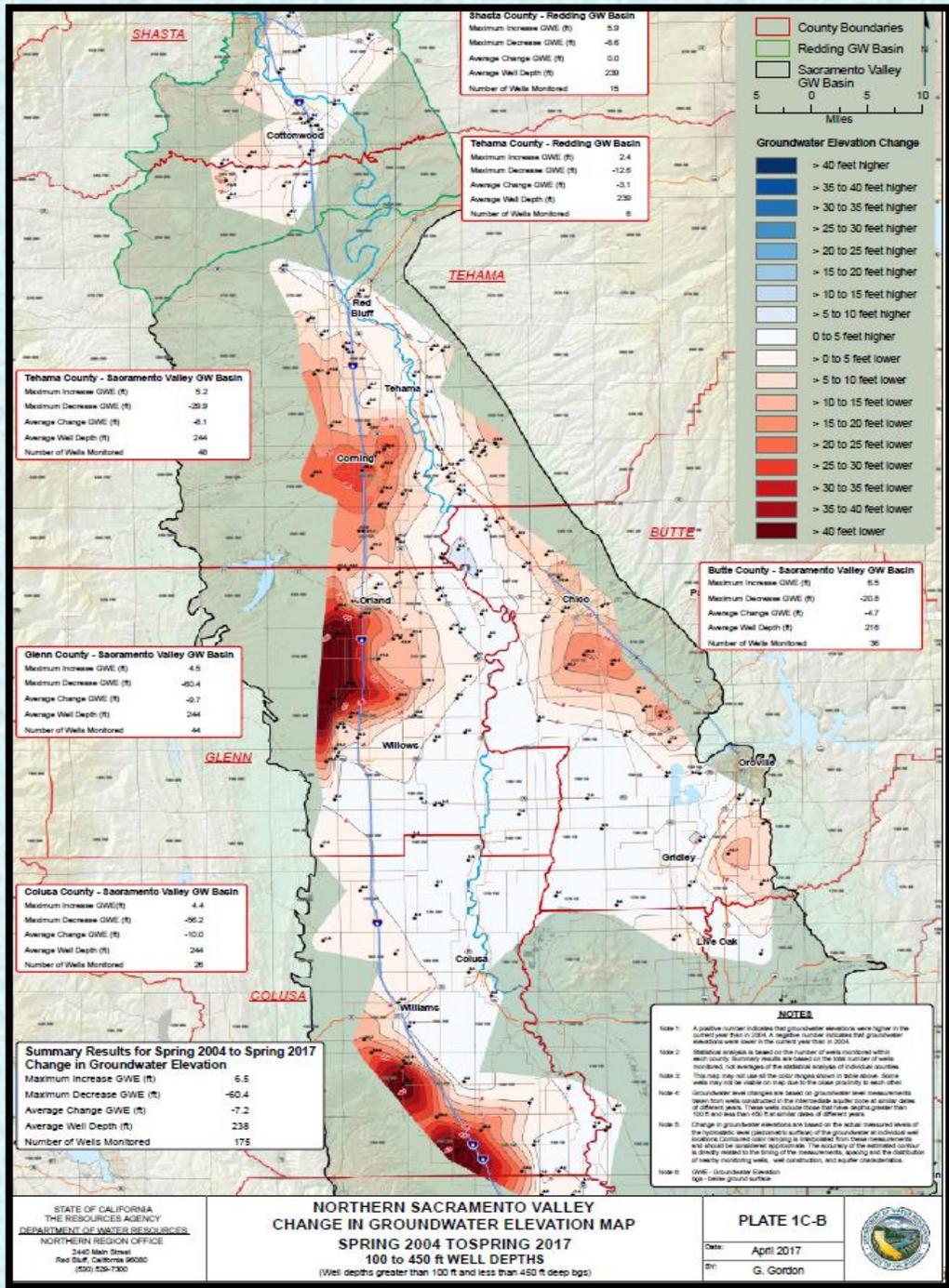
2017-2011



Groundwater Change Map

> 600 ft deep wells

2017-2004



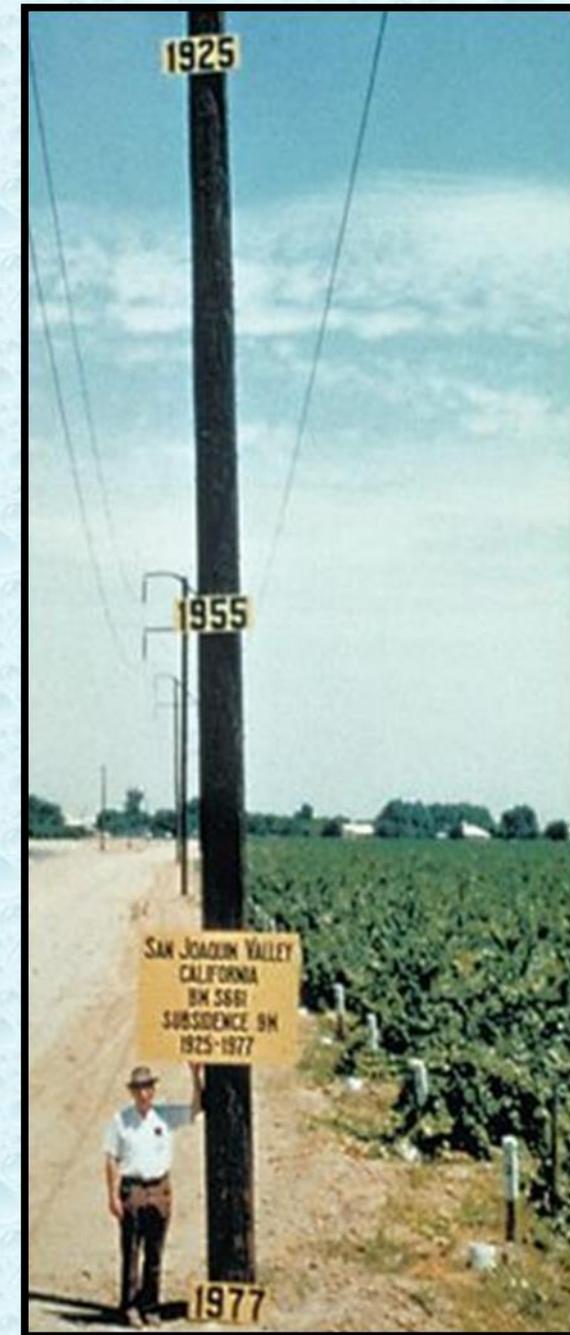
Sustainable Groundwater Management Act

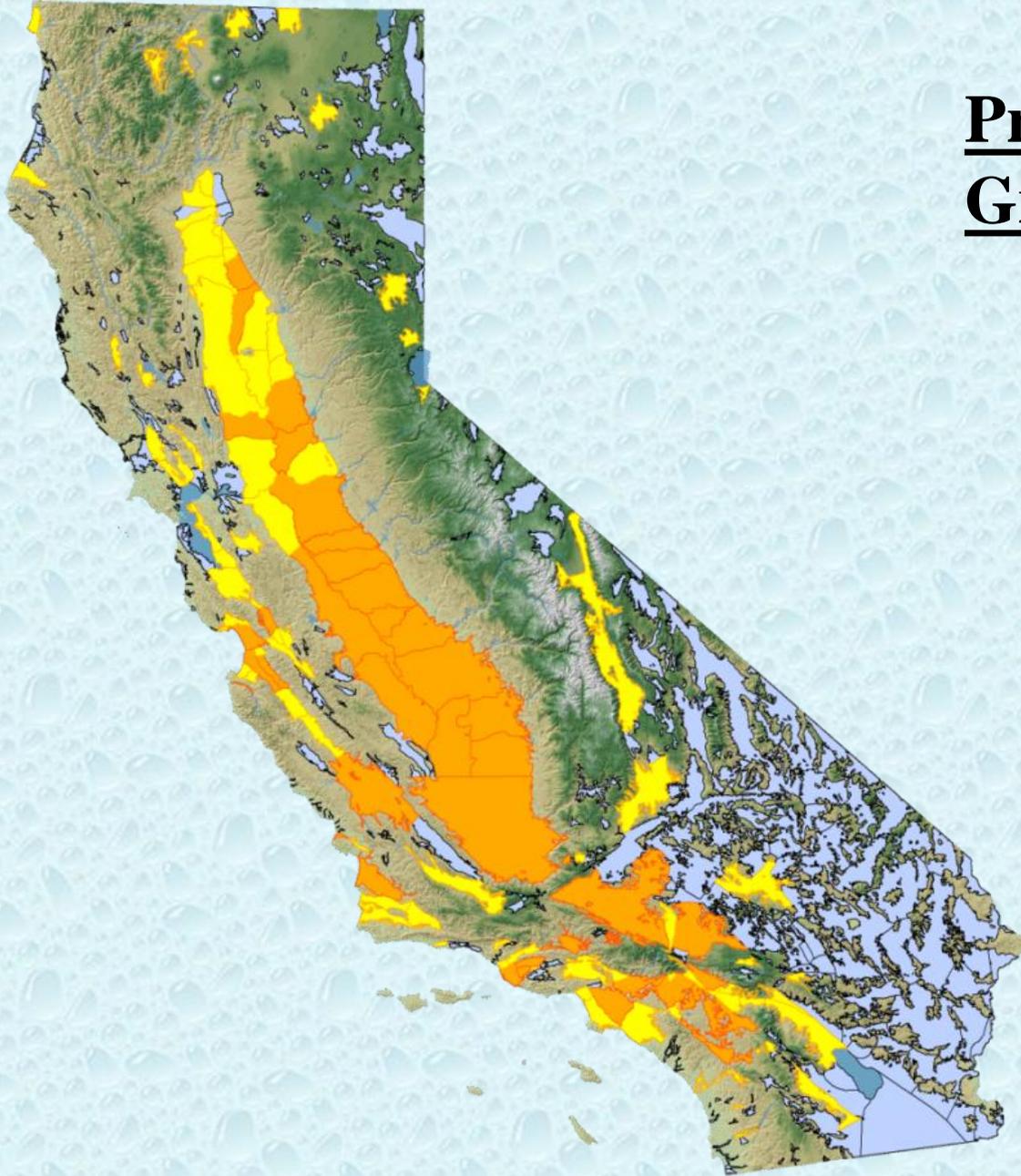
- On September 16, 2014, Governor Brown signed SB1168, AB1739, and SB1319 into law, enacting SGMA
- SGMA became effective on January 1, 2015



What is SGMAs purpose?

- Promote sustainable management of groundwater basins
- Enhance local management of groundwater, state to step in if necessary
- Improve data collection and understanding of groundwater resources and management
- Avoid or minimize impacts for land subsidence





Promote Sustainable Management Of Groundwater Basins

- **California currently has 43 High Priority and 84 Medium Priority Basins**

- **Increase in demand from:**
 - **Population**
 - **Agricultural Production**
 - **Environmental Uses**

Sustainable Groundwater Management Act Timeline

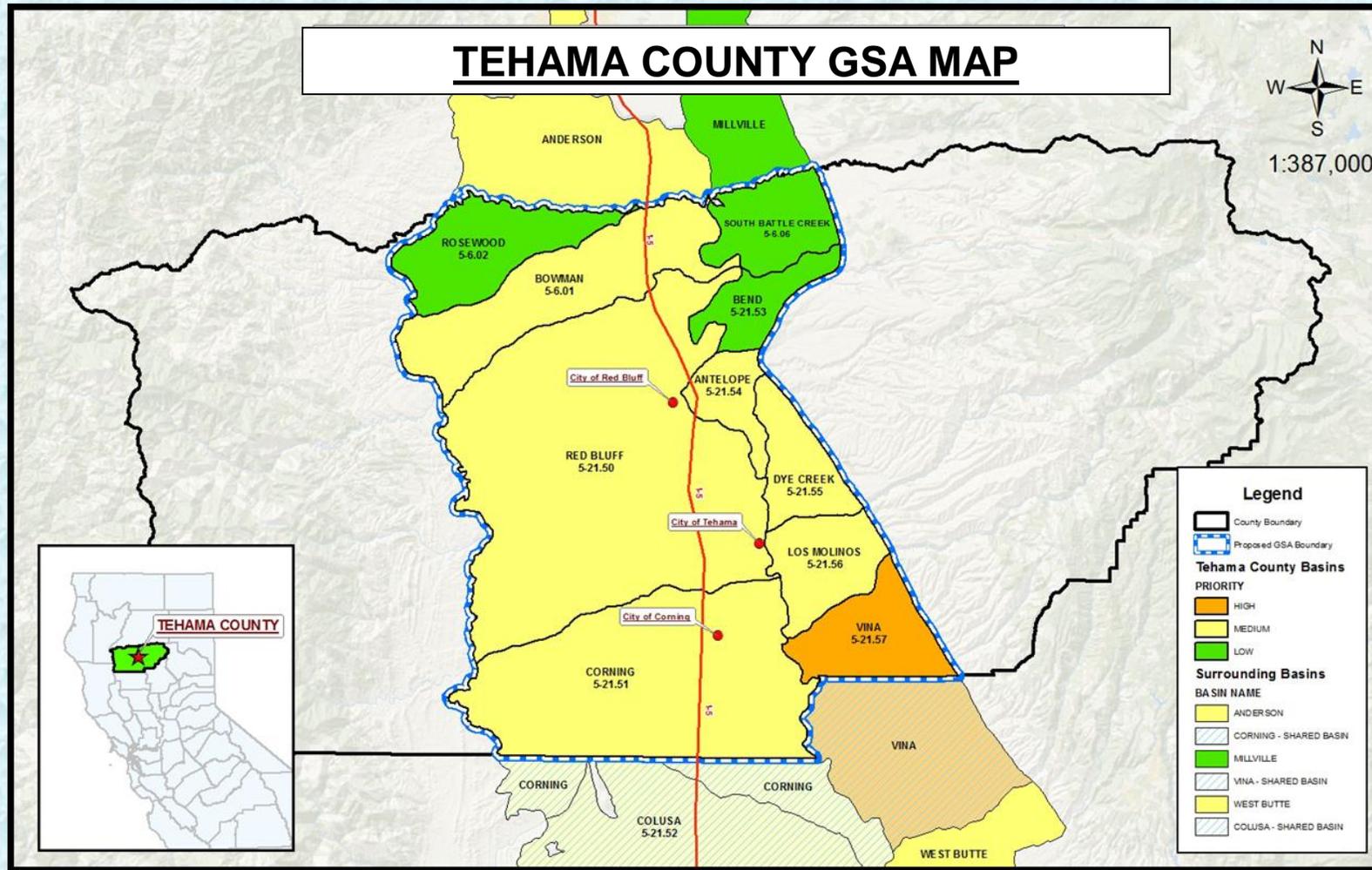
- ✓ **June 30, 2017**: Deadline to form a Groundwater Sustainability Agency
- **January 31, 2022**: Groundwater Sustainability Plans required for all high and medium priority groundwater basins
- **January 31, 2042**: Basins must achieve sustainability



State Water Resources Proposed Fee Schedule

Proposed Schedule of Fees		
Fee Category	Annual Fee Amount	Applicable Parties
Base Filing Fee	\$300 per well	All extractors required to report
Unmanaged Area Rate	\$10 per acre-foot, if metered	Extractors in unmanaged areas
	\$25 per acre-foot, if unmetered	
Probationary Basin Rate	\$40 per acre-foot	Extractors in probationary basins
Interim Plan Rate	\$55 per acre-foot	Extractors in probationary basins where the Board determines an interim plan is required.
De minimis Fee	\$100 per well	Parties that extract, for domestic purposes, two acre-feet or less per year from a probationary basin, If the Board decides the extractions will likely be significant.
Late Fee	25% of total fee amount per month late	Extractors that do not file reports by the due date.

Tehama County Groundwater Sustainability Agency

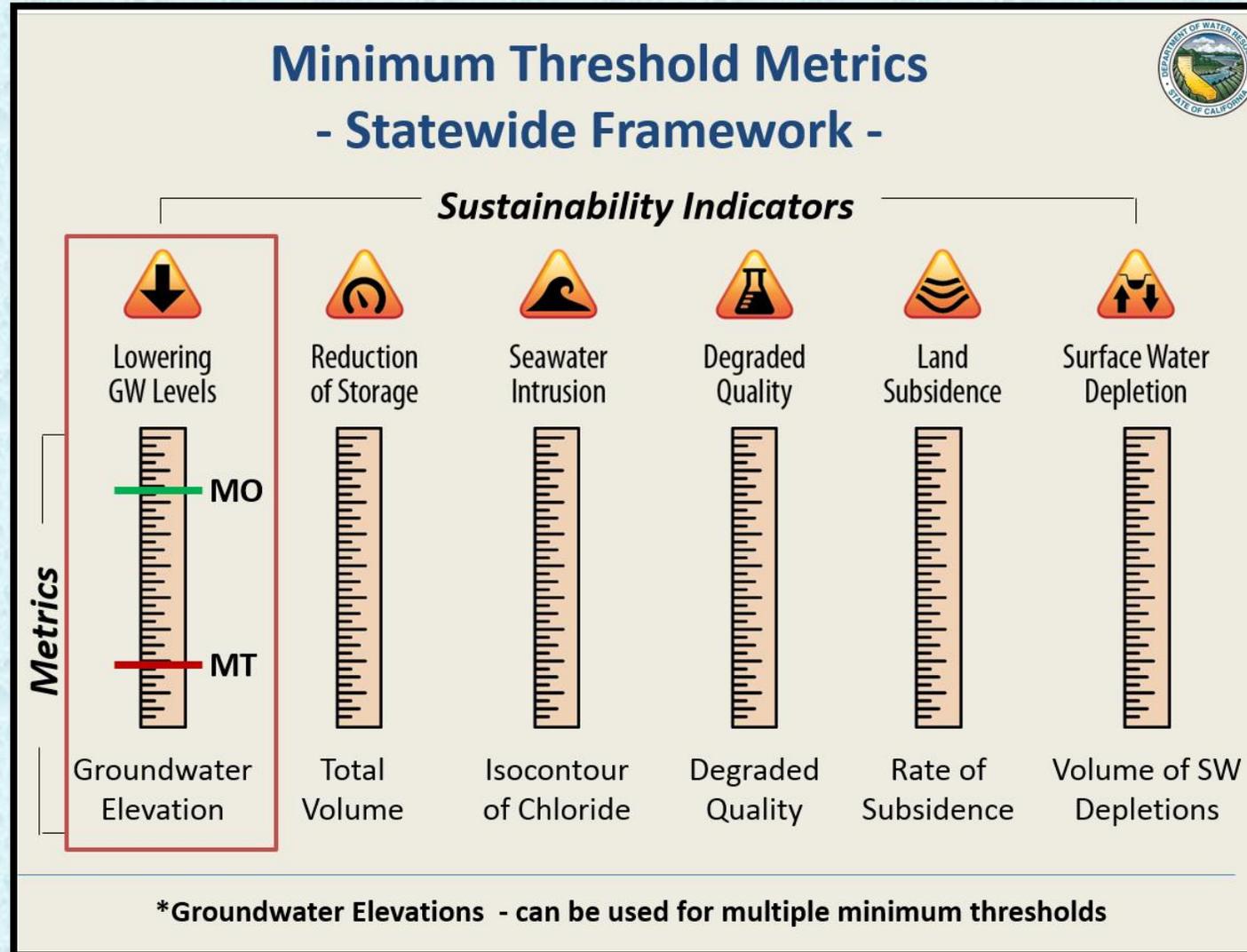


**The Tehama County
GSA must have a
Groundwater
Sustainability Plan in
place by January 31,
2022**

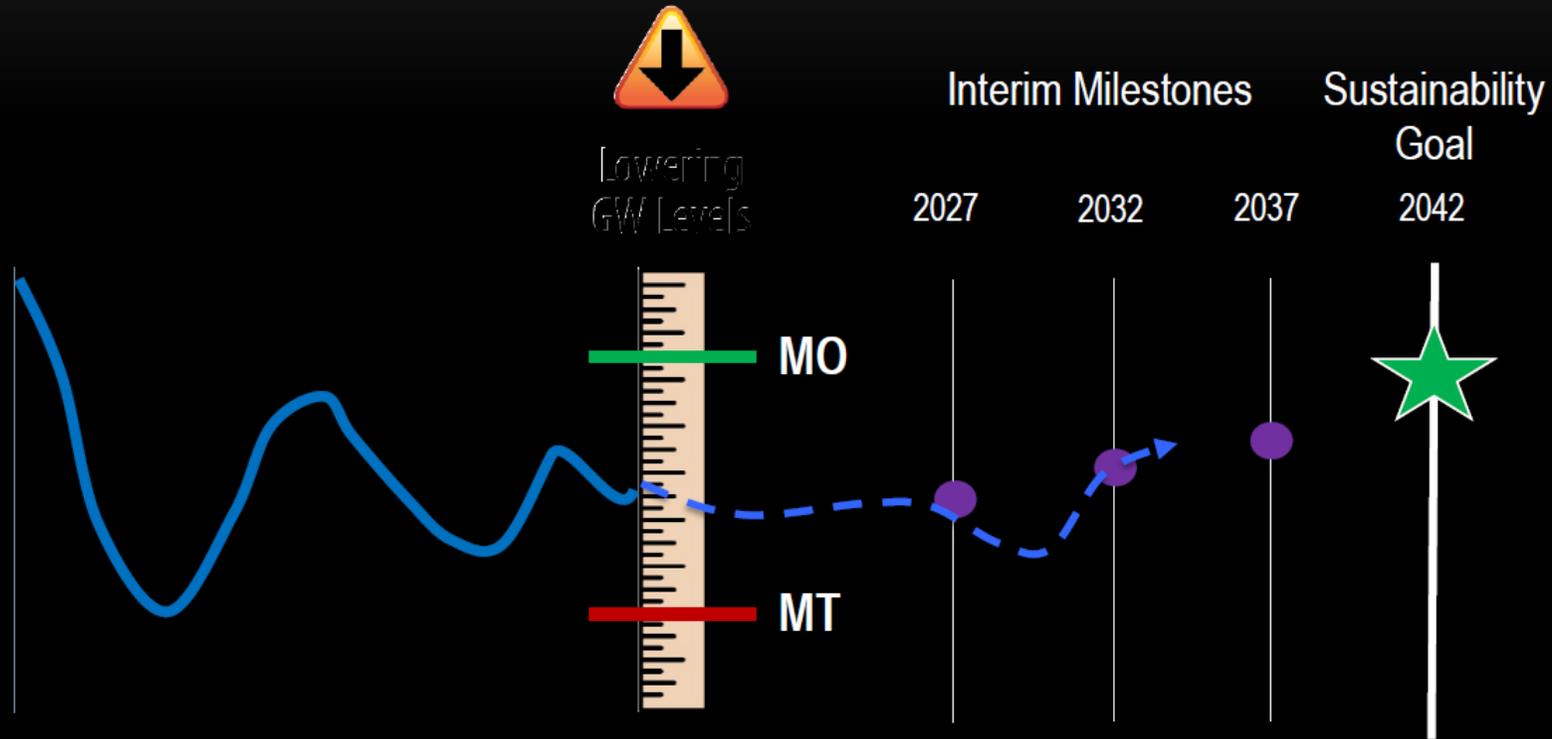
Recognized as Exclusive GSA on February 11, 2016

Groundwater Sustainability Plan Regulations

Defining 6 Undesirable Results



MINIMUM THRESHOLD METRICS - STATEWIDE FRAMEWORK -



Step 1 – Existing Data

- Admin. Info
- Basin Setting

Step 2 - Set Criteria

- Sustainable Management Criteria

Step 3 – Implement Plan

- Projects and Management Actions
- Monitoring

Initial GSP

GSP Implementation

Tehama County GSA History

- Staff started researching SGMA in Fall of 2014
- Board directed staff to start the process for the District to become the GSA for all portions of the subbasins within the County in April 2015.



ORDINANCE NO. 1617

AN ORDINANCE REPEALING, ENACTING AND REENACTING
THE SUBSTANTIVE PROVISIONS OF ORDINANCES 1552 AND 1553
OF THE COUNTY OF TEHAMA



Tehama County Flood Control
And Water Conservation
District

Coordinated AB 3030 Groundwater
Management Plan 2012

Prepared for
Tehama County Flood Control & Water Conservation District Board of Directors

By
Gary Antone, Executive Director, Tehama County Flood Control and Water Conservation District

Tehama County Flood Control and Water Conservation District Staff
Linda Madala, Nichole Beithurem, Judy Brown

University of California Cooperative Extension
Allan Fulton

California Department of Water Resources, Northern Region
Seth Lawrence, Kelly Staton, Debbie Spangler, Bill Ehorn, Dan McManus, and Roy Hull,

The AB 3030 Technical Advisory Committee Members
Chuck Crain, Water Districts
Bill Richardson, Agricultural Pumpers
Ryan Sale, Agriculture Pumpers
Dean Sherrill, Small Districts
Stan Wangberg, Water Districts
Walt Mansell, Natural Resources
Bruce Hens, City of Red Bluff
Carolyn Steffen, City of Tehama
John Stouffer, City of Corning



in association with the
California Department of Water Resources, Northern District



Tehama County Flood Control
and Water Conservation District



Water Inventory and Analysis

September 2003



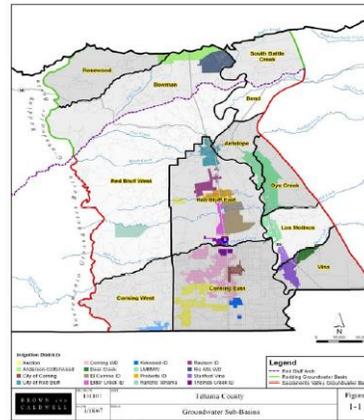
Report

Tehama County AB-3030
Groundwater Management Plan



Background Document

Proposing Groundwater Trigger Levels and Awareness Actions
for Tehama County



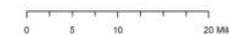
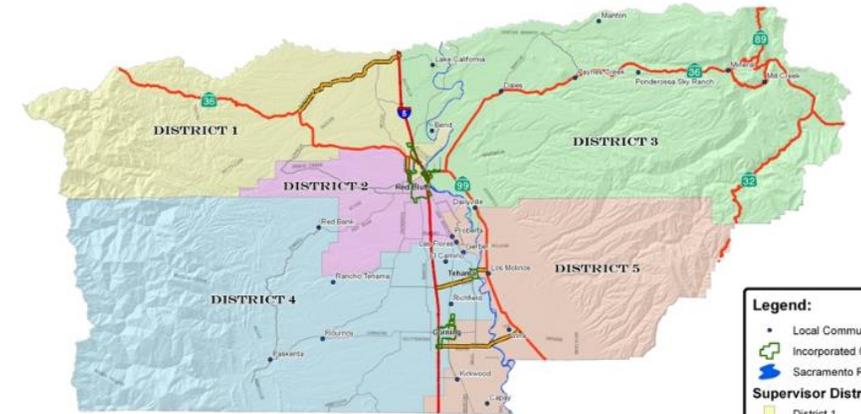
July 1, 2008

Tehama County Flood Control and Water Conservation District
9380 San Benito Avenue
Gerber, CA 96035-9701

(530)-385-1462



TEHAMA COUNTY SUPERVISORIAL DISTRICTS



Tehama County GSA History

- First public meeting was held on June 2, 2015.
- Second public meeting was held on November 3, 2016.
- Tehama County GSA recognized as Exclusive GSA by DWR on February 11, 2016.



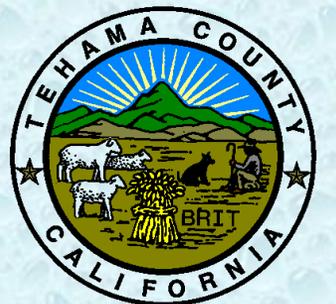
Governance Structure

- Governing Board – Tehama County Flood Control & Water Conservation District Board of Directors (County Board of Supervisors)
- Groundwater Commission (similar to Planning Commission) with both decision-making and advisory responsibilities
- Technical Advisory Committee



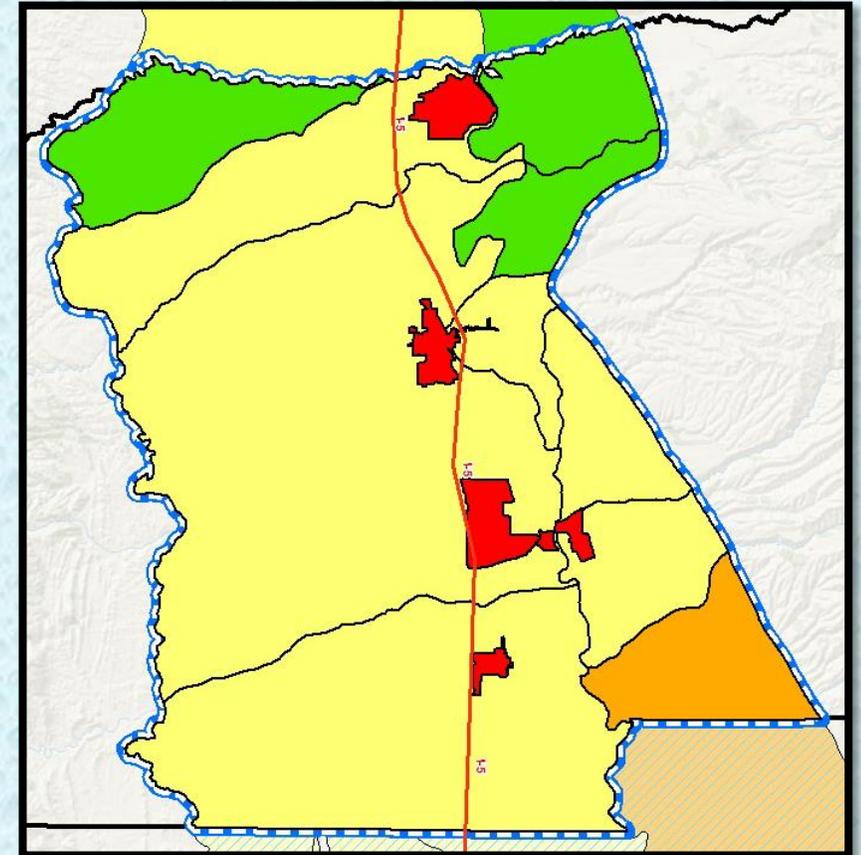
Tehama County GSA History

- 6 Designated Agencies elect GC representatives by July 2016.
- Board of Directors approves remaining 5 GC members on September 26, 2016.
- First Groundwater Commission meeting held on November 9, 2016.



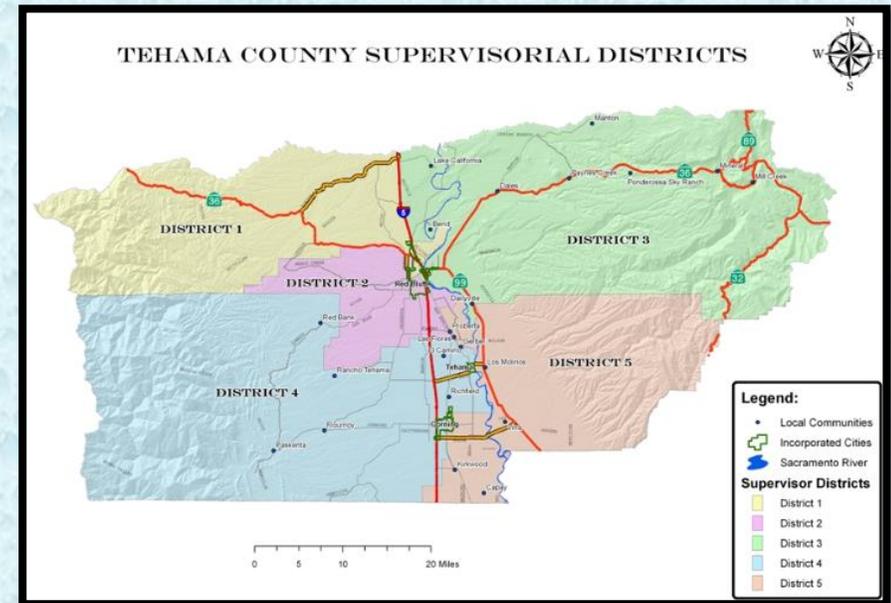
Groundwater Commission

- **The Commission will be made up of 11 members**
- **6 agencies will have designated seats on the commission and appoint their own members.**
 - 1 – City of Corning – 773 million gallons per year (GPY)
 - 1 – City of Red Bluff – 1.18 billion GPY
 - 1 – City of Tehama – 35 million GPY
 - 1 – El Camino Irrigation District – 2.28 billion GPY
 - 1 – Los Molinos Community Services District – 70 million GPY
 - 1 – Rio Alto Water District – 241 million GPY



- **Five additional members will be made up of one representative from each County Supervisor District**

- Recommendations to be made by the seated Groundwater Commission members and confirmed by the FCWCD Board of Directors;
- Members should be a resident, property owner, or groundwater user within Tehama County;
- Appointees will be expected to meet certain qualifications:
 - ✓ 2 members should represent surface water agencies/districts;
 - ✓ 2 members should represent private pumpers;
 - ✓ 1 member will be an “at large” representative;
 - ✓ No Agency or district shall be represented by more than 1 member on the Groundwater Commission.



Groundwater Commission Members

- City of Corning – Dawn Grine
- City of Red Bluff – Clay Parker
- City of Tehama – Bill Borrer
- El Camino Irrigation District – Kris Lamkin
- Los Molinos Community Services District – Todd Hamer
- Rio Alto Water District – Martha Slack
- District 1 – Harley North, private pumper
- District 2 – Gib Bonner, general public
- District 3 – Bart Fleharty, surface water agency/district
- District 4 – Hal Crain, surface water agency/district
- District 5 – David Lester, private pumper

Groundwater Commission Duties

- Develop GSP and all GSA ordinances, rules, and regulations, making final recommendations to the Board of Directors.
- Conduct investigations to determine the need for groundwater management, monitor compliance and enforcement, and propose fee increases.
- Review all proposed grant applications
- Decision-making authority for permits or similar entitlements
- Make quasi-judicial decisions in GSA enforcement matters



Next Steps

- Develop a timeline for completing the Groundwater Sustainability Plan
- Submit a grant for Plan development
- Start developing the Plan



- Flood Control & Water Resources**
- Drought Information
- Floodplain Management
- Levee Systems
- ± Emergency Flood Information
- ± Groundwater Information
- CASGEM
- Groundwater Management
- Groundwater Well Monitoring
- ± Meetings
- ± Surface Water
- ± Sustainable Groundwater Management
- Sustainable Groundwater Mgmt. Act
- Groundwater Sustainability Agency
- Basin Boundary Adjustments
- Groundwater Sustainability Plan
- SGMA Presentations
- ± Water & Environmental Agencies

Sustainability Agency (G members shall be appoint Conservation District, upo appointed and serving.

All Commission members residents, property owners County Ordinance NO. 2 Economic Interests - For Nichole Bethurem at 530 September 2, 2016 to the Click to view and print the

Statewide Emergency W The State Water Resour emergency water conser differing water supply con the Water Board shall als potable urban water usag Order B-29-15 and lessor

Sustainable Groundwater On September 16, 2014, SB1319) collectively calle

Tehama County FCWCD: <http://www.tehamacountywater.ca.gov>

DWR: <http://www.water.ca.gov/groundwater/sgm/index.cfm>

**The 2014
Sustainable Groundwater Management Act:
A Handbook to Understanding
and Implementing the Law**

Published by Water Education Foundation

Table of Contents

The Sustainable Groundwater Management Act: An Overview	Chapter 1
Approach and Options for New Governance	Chapter 2
Timeline	Chapter 3
Frequently Asked Questions (FAQ)	Chapter 4
SGMA Fees	Chapter 5
Case Studies	Chapter 6
The Sustainable Groundwater Management Act of 2014	Chapter 7

The mission of the Water Education Foundation, an impartial, nonprofit organization, is to create a better understanding of water resources and foster public understanding and resolution of water resource issues through facilitation, education and outreach.

Published 2015



WATER EDUCATION
FOUNDATION

1401 21st Street, Suite 200 • Sacramento, CA 95811
www.watereducation.org



California Department of Water Resources
Sustainable Groundwater Management Program

Sustainable Groundwater
Management Program

**Groundwater
Sustainability
Plan (GSP)
Emergency
Regulations
Guide**

July 2016

LAYERPERSON'S GUIDE TO

Groundwater

Prepared by the Water Education Foundation



1. Link to the Water Education Foundation SGMA guidebook:
<http://www.watereducation.org/publication/2014-sustainable-groundwater-management-act>
2. Link to the DWR GSP regulations guide book.
http://www.water.ca.gov/groundwater/sgm/pdfs/GSP_Final_Regs_Guidebook.pdf

Questions

Ryan Teubert

Tehama County Flood Control and
Water Conservation District

530-385-1462

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Tehama County FCWCD: <http://www.tehamacountywater.ca.gov>

DWR: <http://www.water.ca.gov/groundwater/sgm/index.cfm>