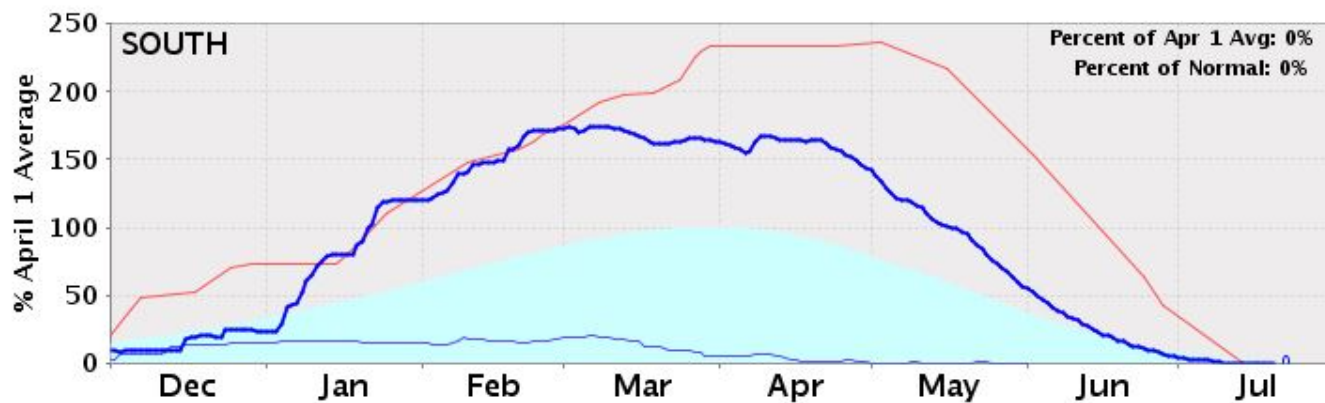
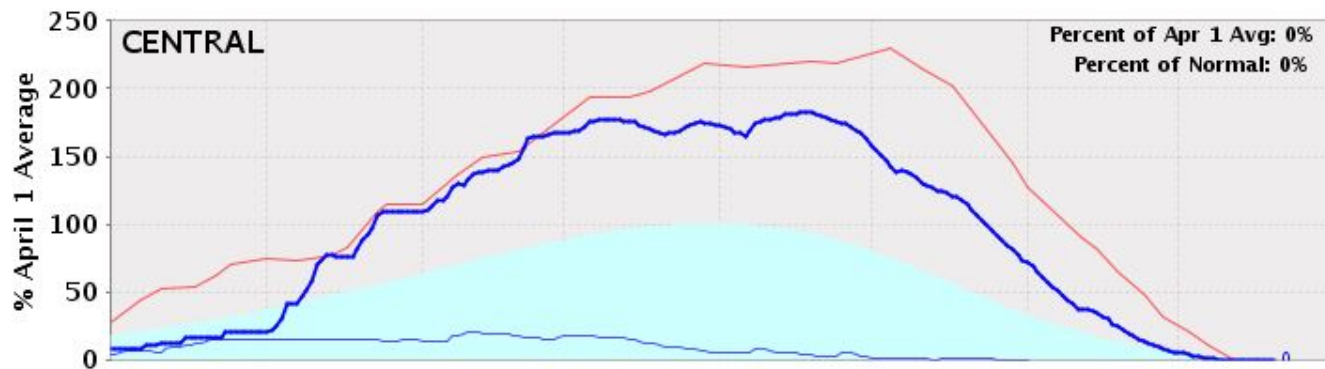
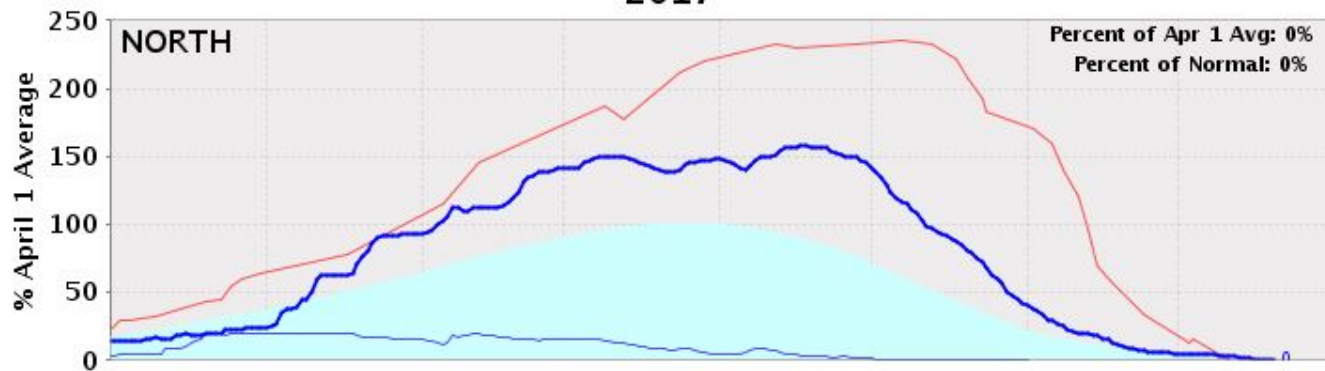


# **Stanislaus County Water Advisory Committee**

**September 27, 2017**

# **Snowpack and Selected Reservoir Storage Conditions**

# California Snow Water Content - Percent of April 1 Average For: 20-Jul-2017

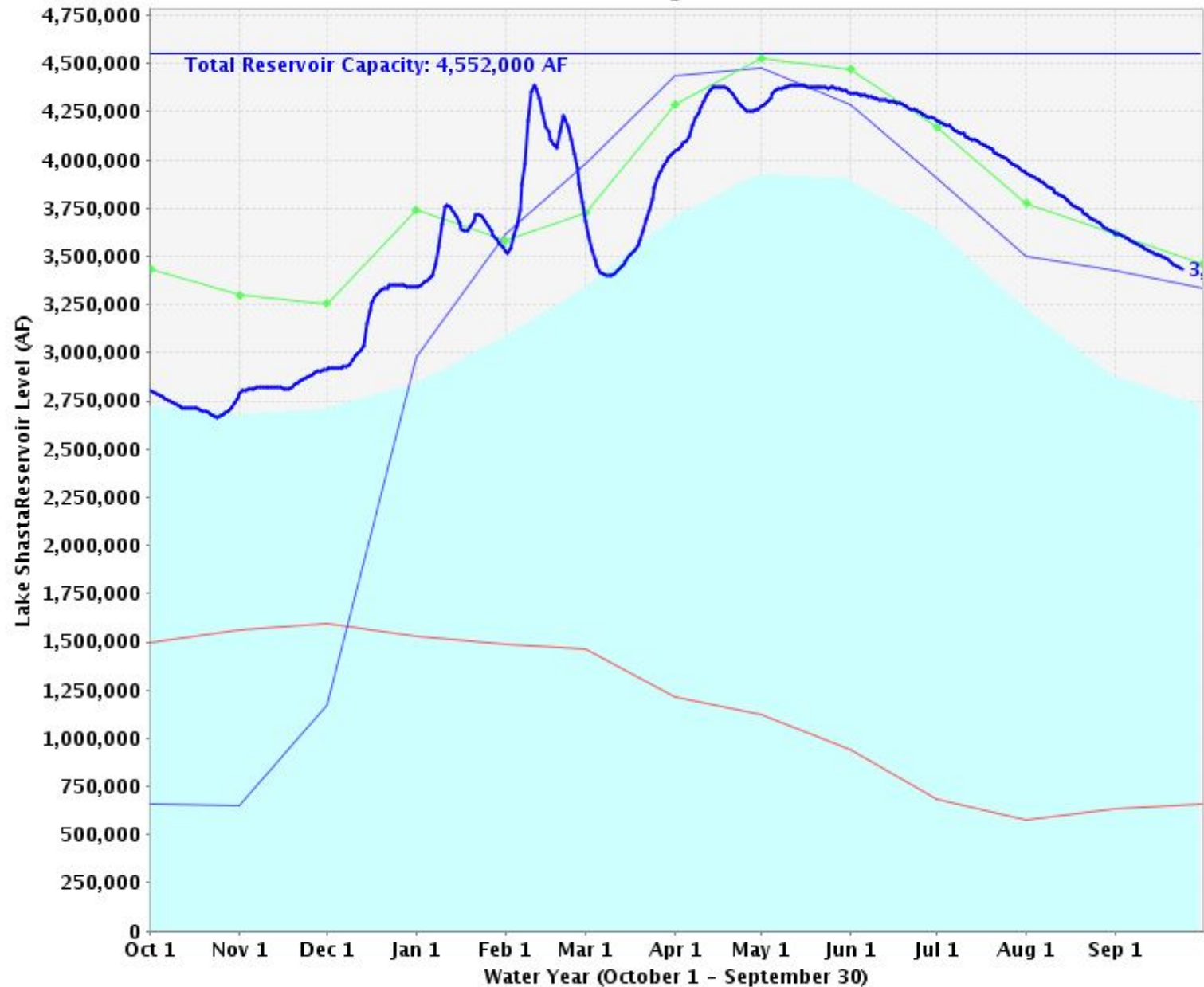


Average — 1982-1983 (max) — 2014-2015 (min) — 2016-2017 (current)

Statewide Percent of average to date

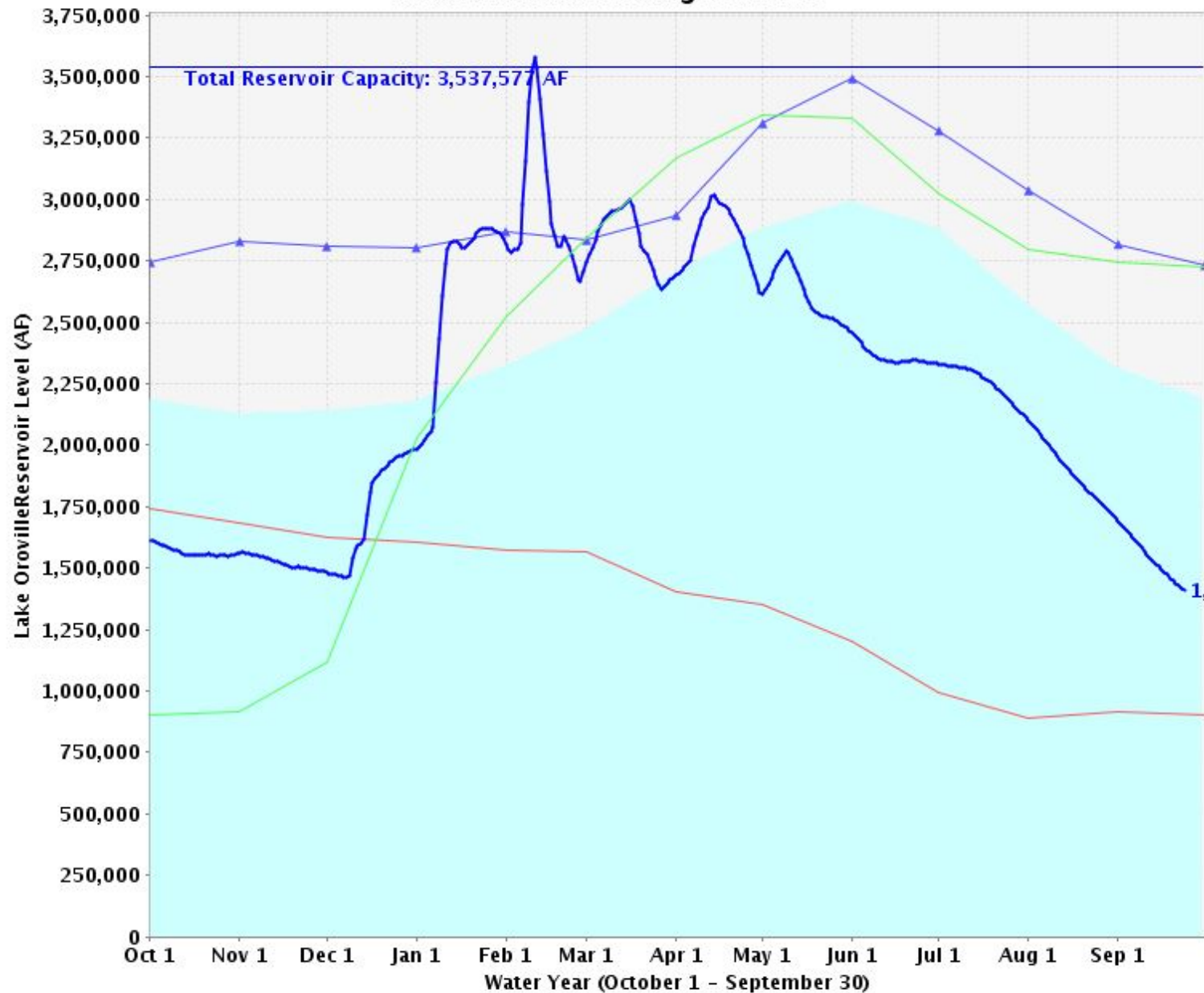
0.0%

## Lake Shasta Storage Levels



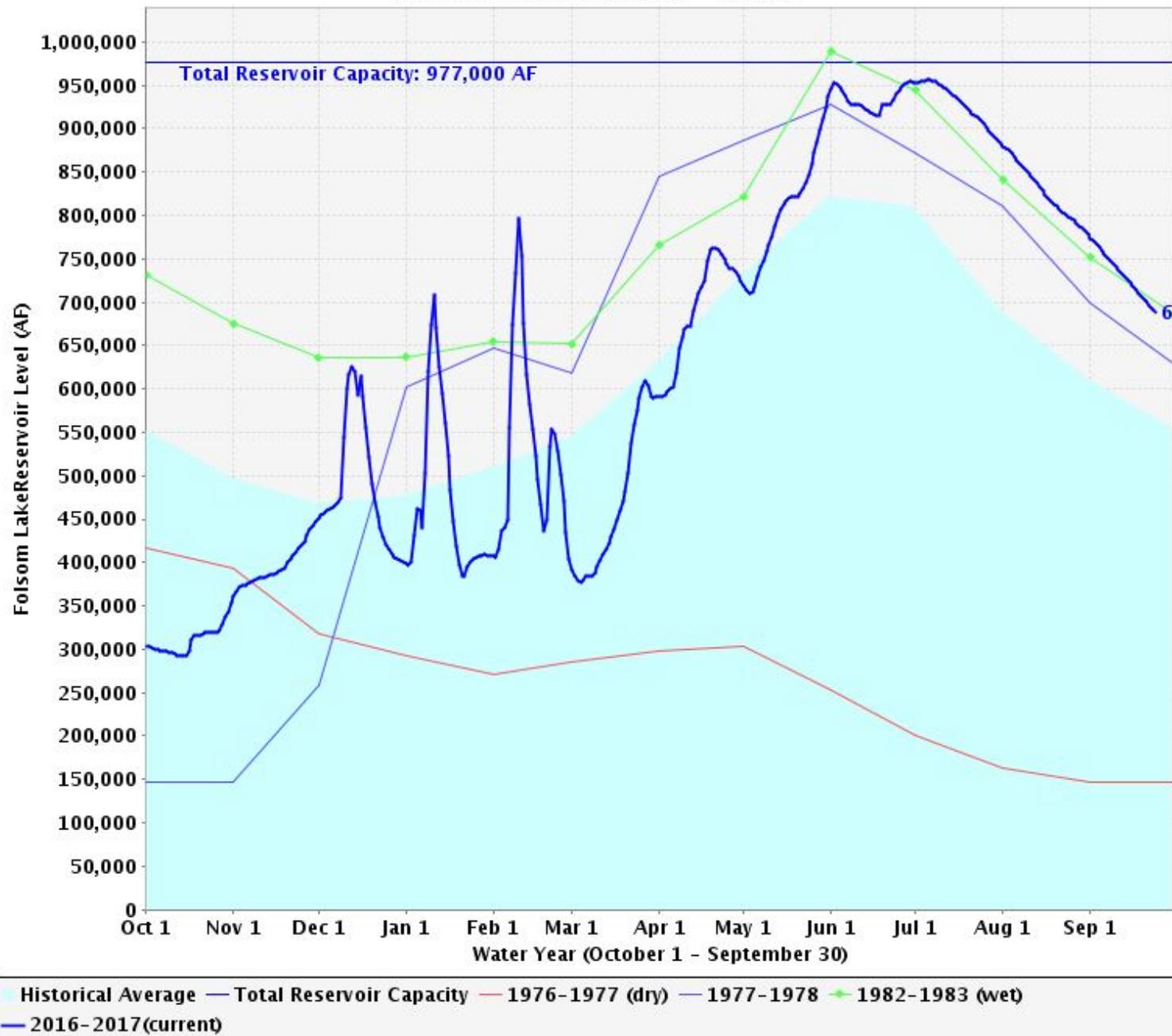
■ Historical Average 
 — Total Reservoir Capacity 
 — 1976-1977 (dry) 
 — 1977-1978 
 ◆ 1982-1983 (wet) 
 — 2016-2017(current)

# Lake Oroville Storage Levels



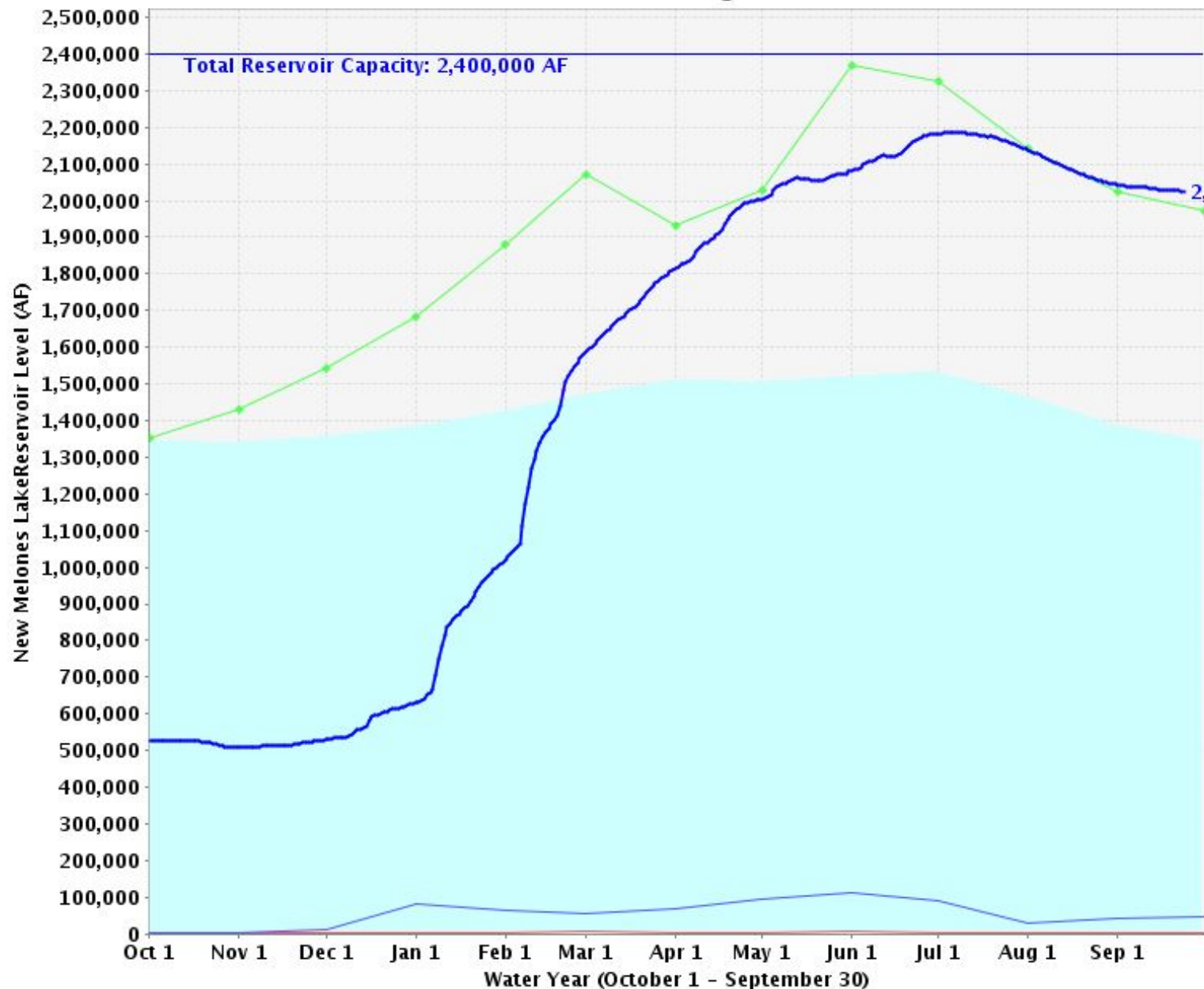
■ Historical Average 
 — Total Reservoir Capacity 
 — 1976-1977 (dry) 
 ▲ 1982-1983 (wet) 
 — 2016-2017 (current) 
 — 1977-1978

## Folsom Lake Storage Levels



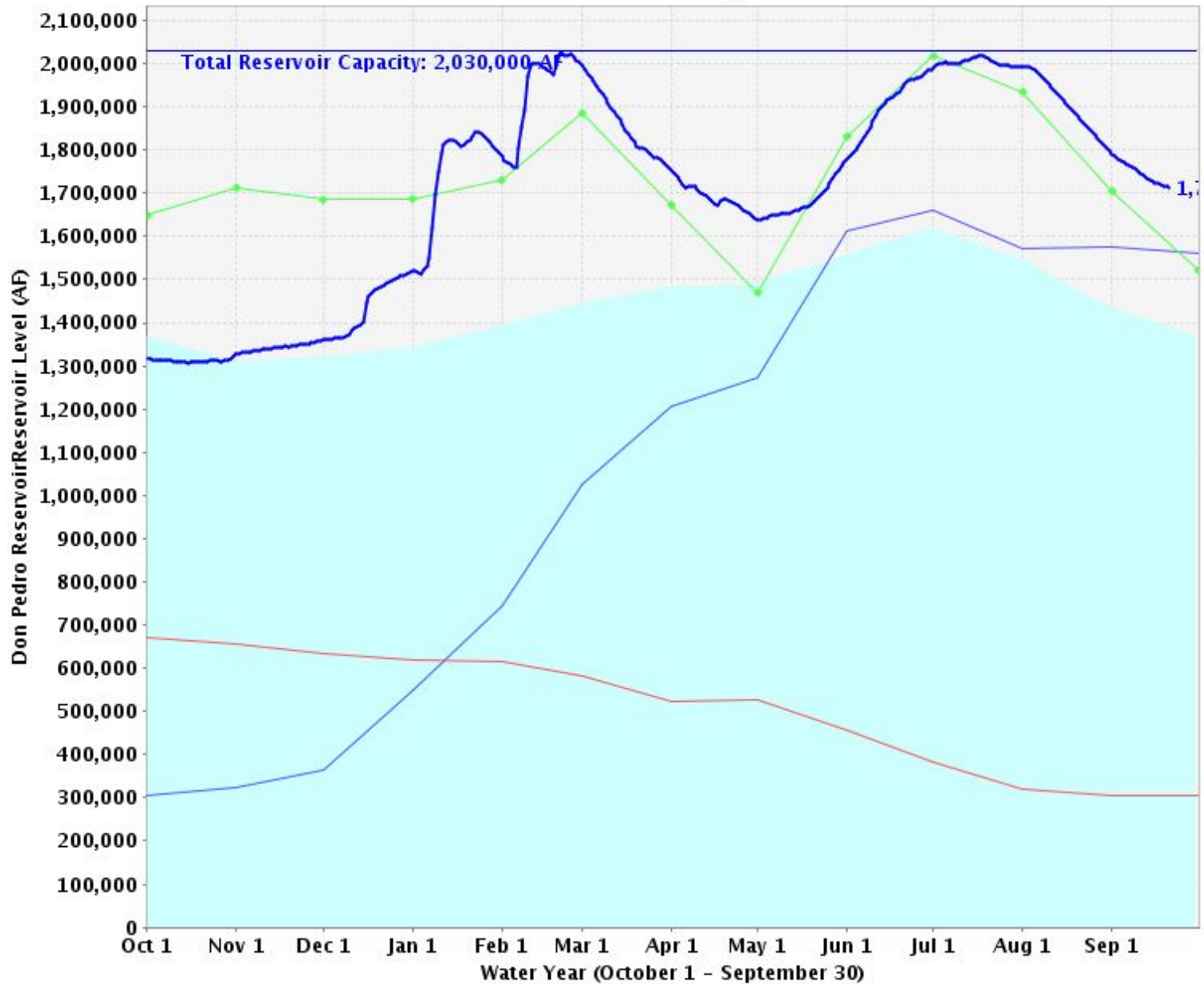


## New Melones Lake Storage Levels



■ Historical Average 
 — Total Reservoir Capacity 
 — 1976-1977 (dry) 
 — 1977-1978 
 — 1982-1983 (wet) 
 — 2016-2017 (current)

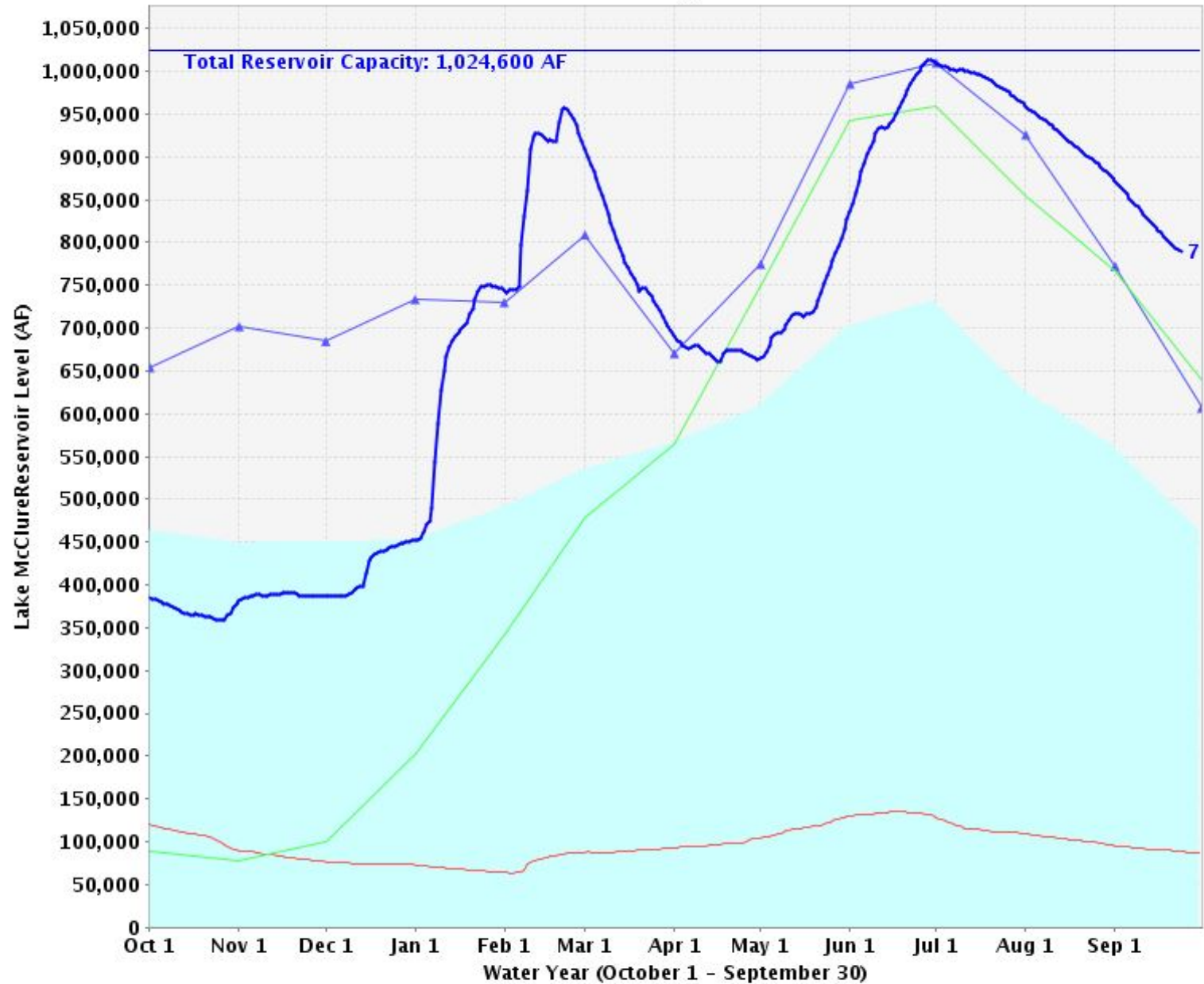
## Don Pedro Reservoir Storage Levels



■ Historical Average 
 — Total Reservoir Capacity 
 — 1976-1977 (dry) 
 — 1977-1978 
 — 1982-1983 (wet) 
 — 2016-2017(current)

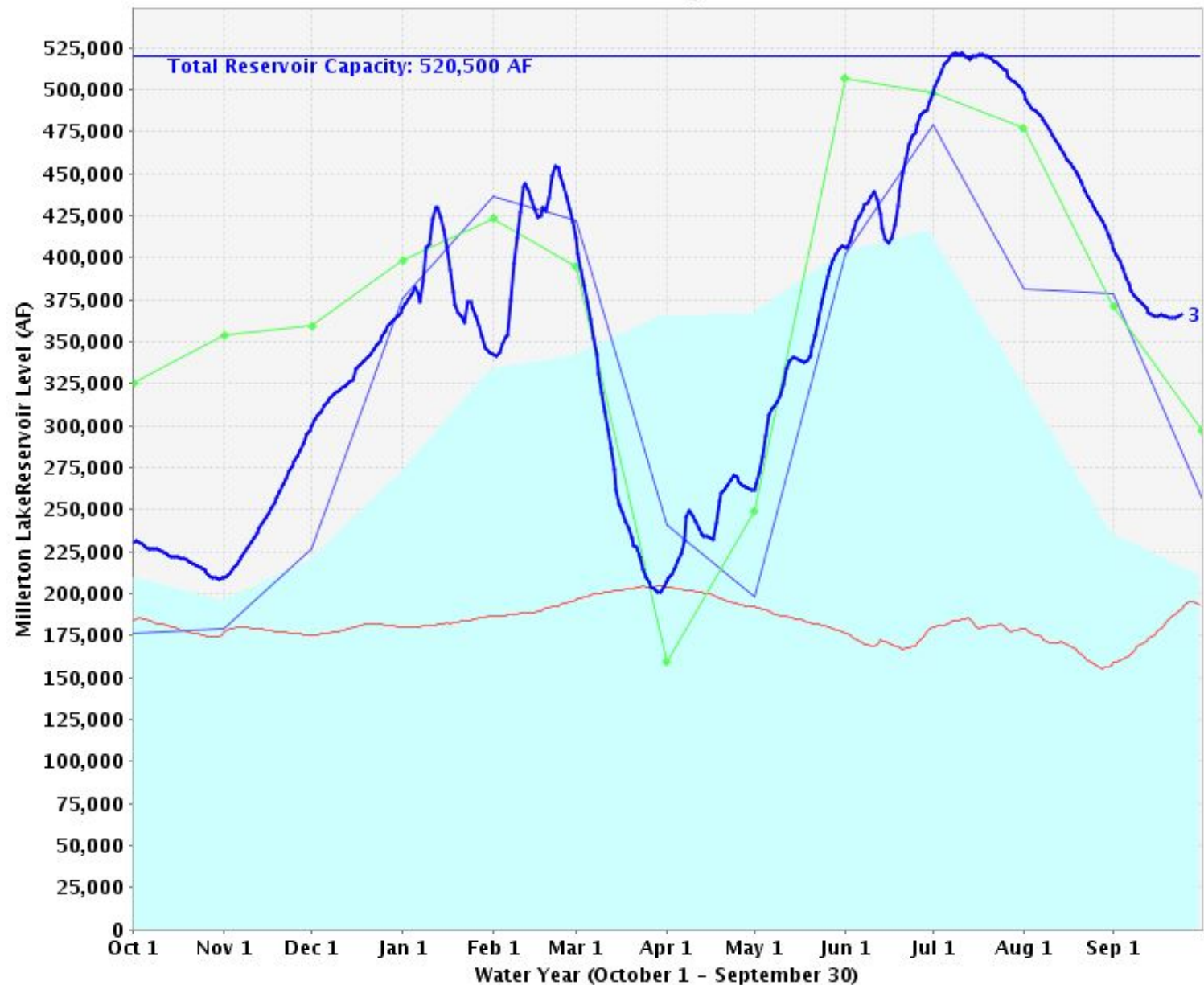


## Lake McClure Storage Levels



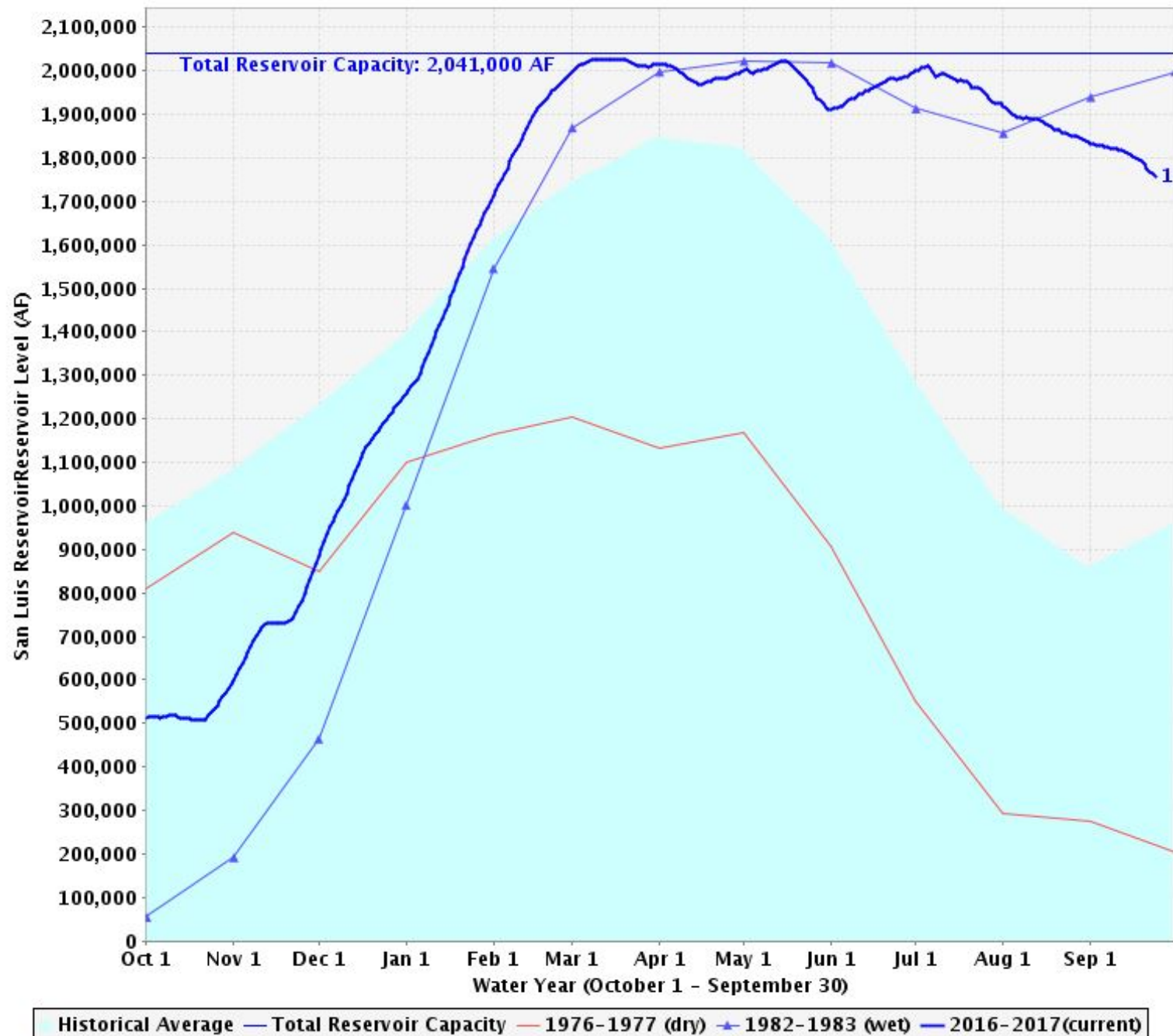
Historical Average — Total Reservoir Capacity — 2014-2015 — 1982-1983 (wet) — 1977-1978  
— 2016-2017(current)

## Millerton Lake Storage Levels



■ Historical Average 
 — Total Reservoir Capacity 
 — 2014-2015 
 — 1977-1978 
 — 1982-1983 (wet) 
 — 2016-2017(current)

## San Luis Reservoir Storage Levels



# 2017/2018 Winter Weather Outlook



# 2017 Predictions

## ***...According to CPC...***

*La Niña Watch Issued 9/14/2017*

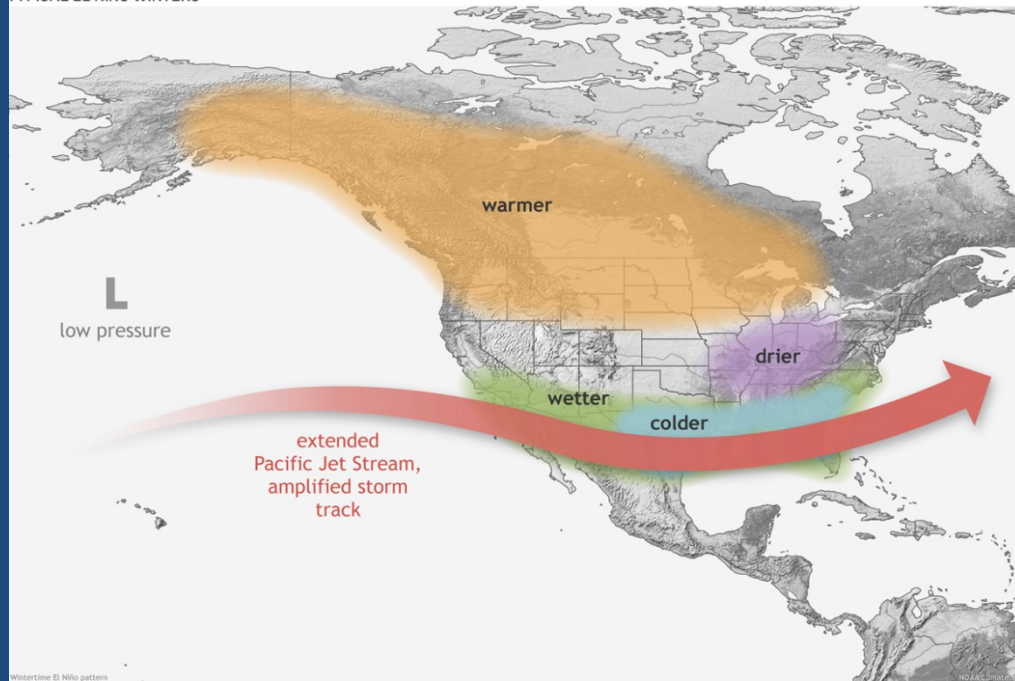
“There is an increasing chance (~55-60%) of La Niña during the Northern Hemisphere fall and winter 2017-18.”

### ***Highlights:***

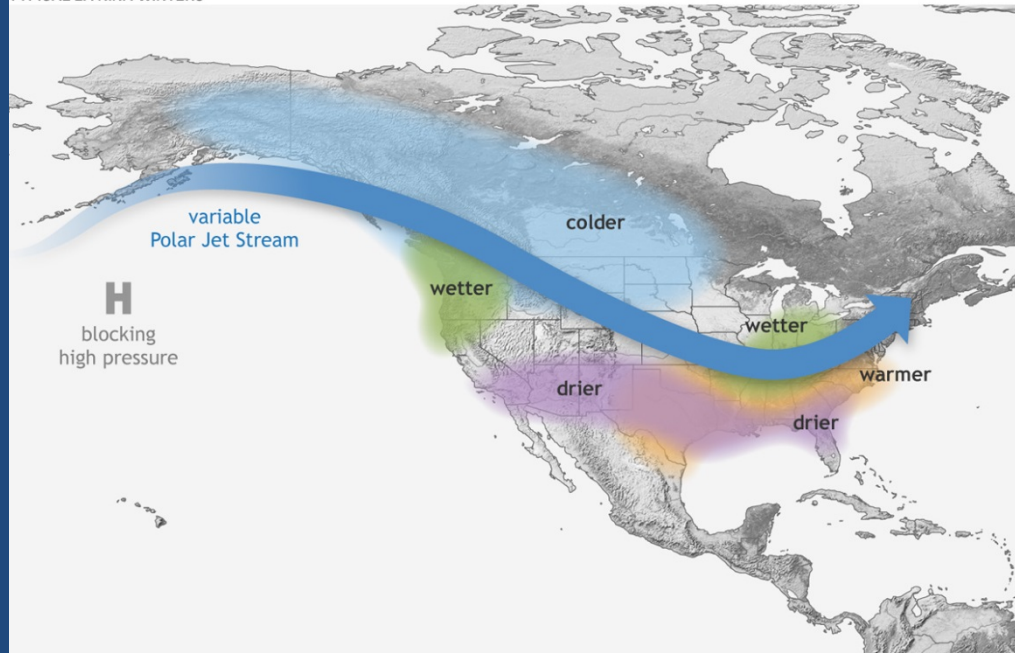
- Past La Niña and Neutral years have resulted in a wide distribution of outcomes from very dry to normal to very wet for Northern California
  - Meaning no strong signal – anything goes



TYPICAL EL NIÑO WINTERS



TYPICAL LA NIÑA WINTERS



Storm Track  
set up during  
Neutral  
Conditions is  
variable

Our future water supply  
will be dependent upon  
the individual storms.



# Weak La Niña Conditions

Past La Niña events have historically favored near normal or dry winter months, but past conditions do not guarantee a future outcome

**Northern California**



**Central California**



**Southern California**



**Sierra Nevada**



Based on 10 historical Weak La Niña Seasons  
Data: PRISM, Oregon State University

# ENSO Neutral Conditions

When neither El Niño nor La Niña conditions are in place, everything is on the table for California. Past neutral years have yielded more dry winter seasons than normal or wet ones, but past conditions do not guarantee a future outcome

## Northern California



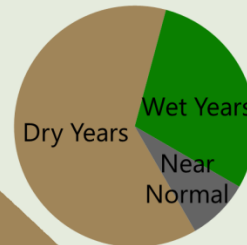
## Central California



## Southern California



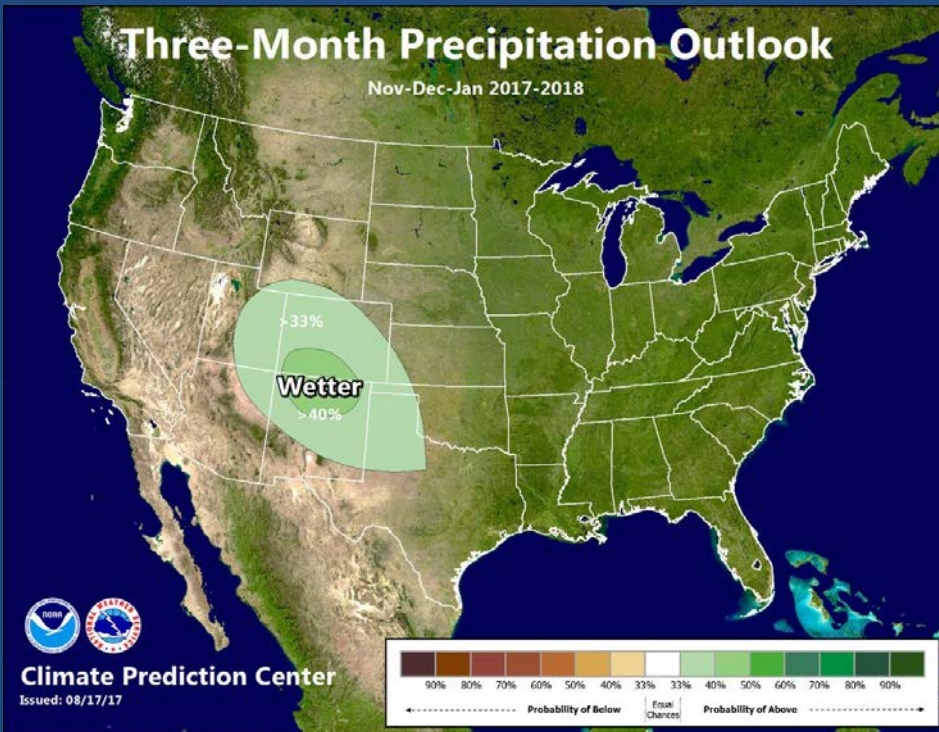
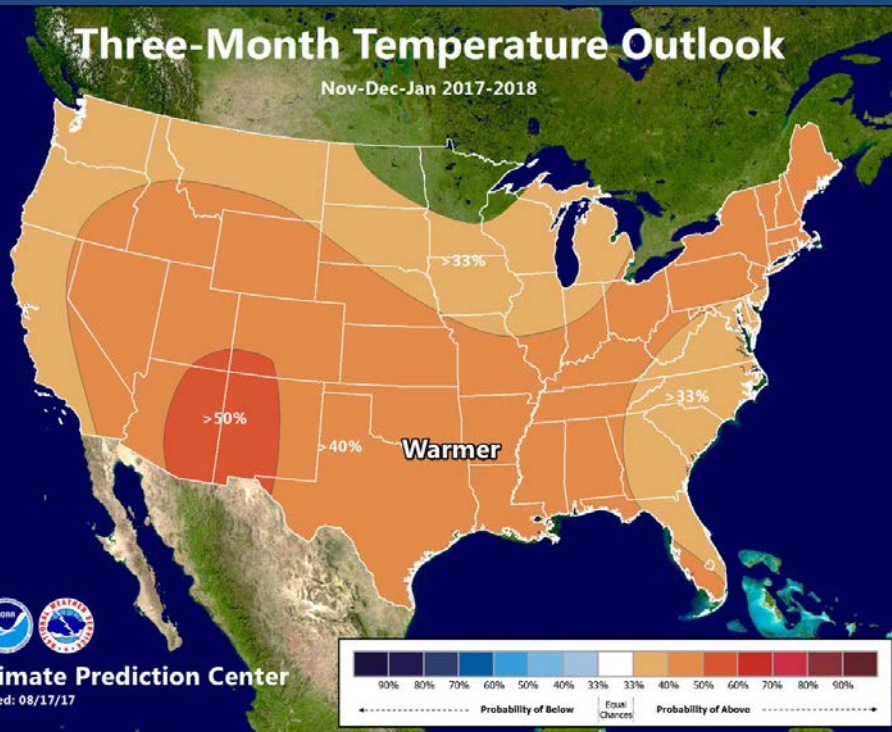
## Sierra Nevada



Based on 24 historical ENSO Neutral Seasons  
Data: PRISM, Oregon State University

# 3 Month Outlooks

## Nov/Dec/Jan

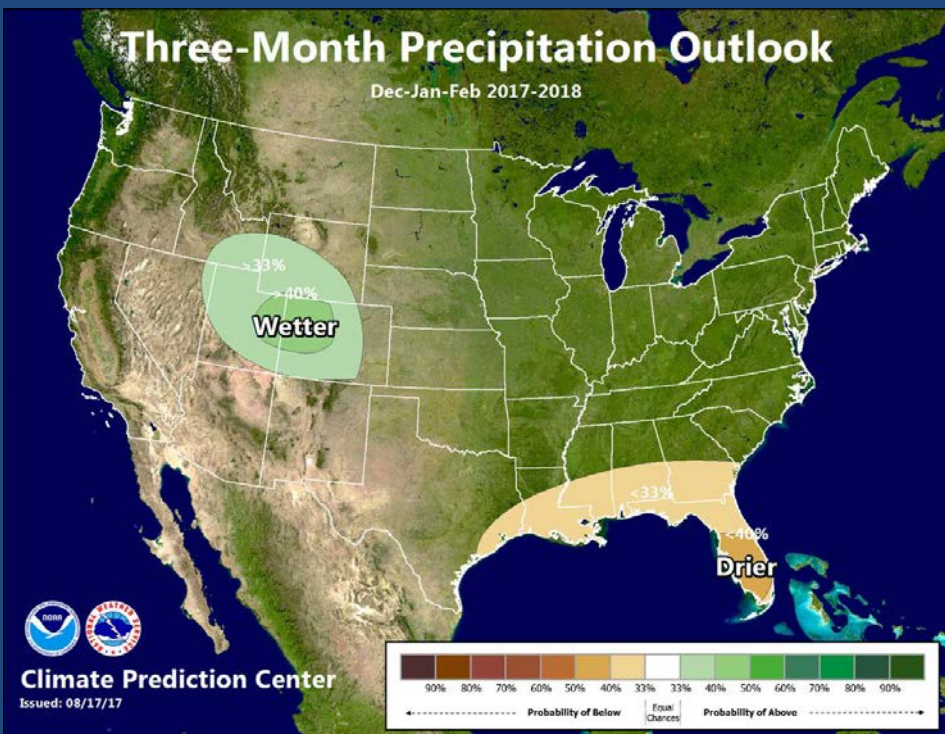
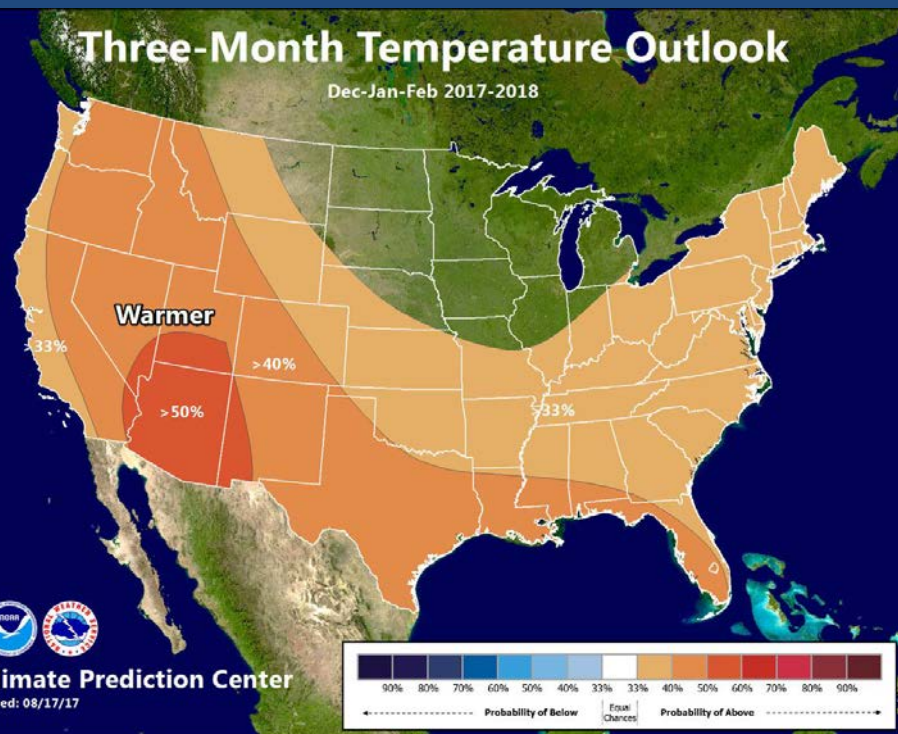


Unshaded areas = Equal Chances, No Strong Indicators

Issued 8/17/2017 Next: 9/21/17

# 3 Month Outlooks

## Dec/Jan/Feb



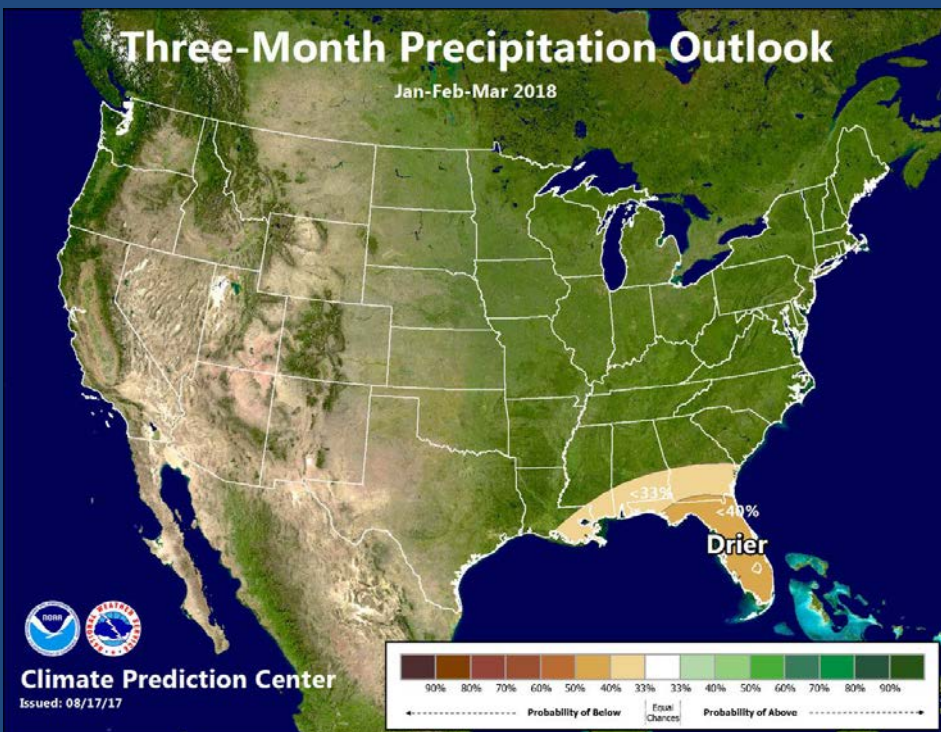
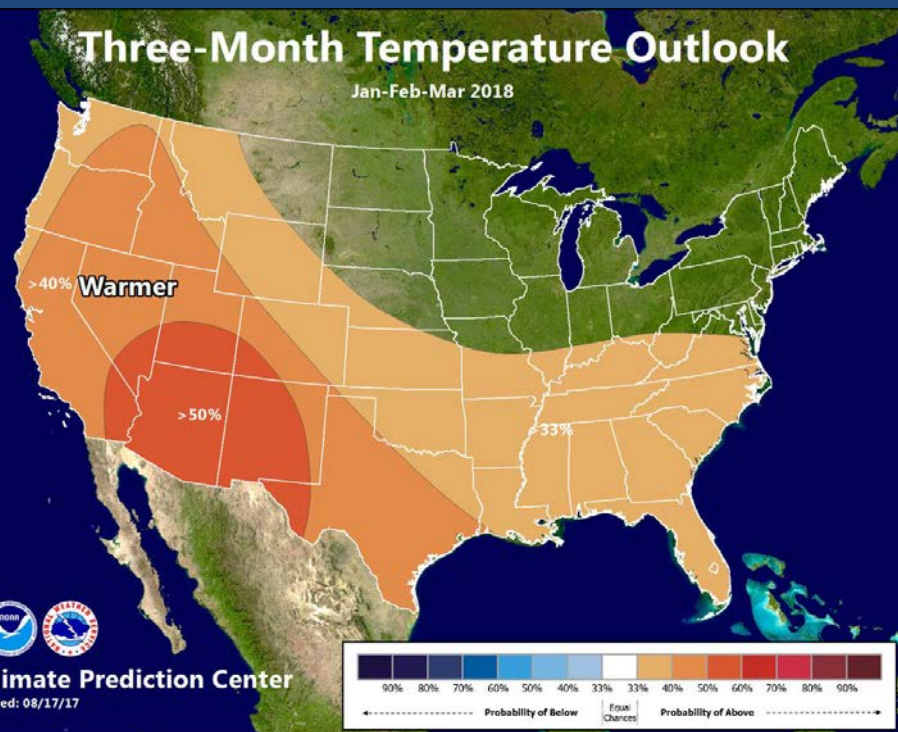
Unshaded areas = Equal Chances, No Strong Indicators

Issued 8/17/2017 Next: 9/21/17



# 3 Month Outlooks

## Jan/Feb/Mar

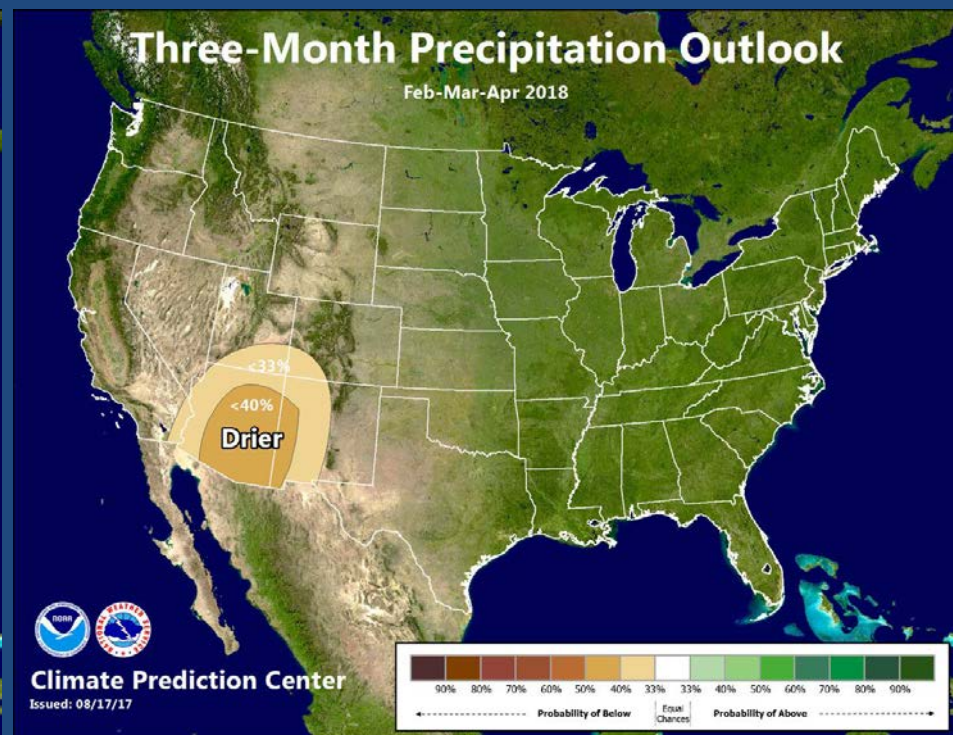
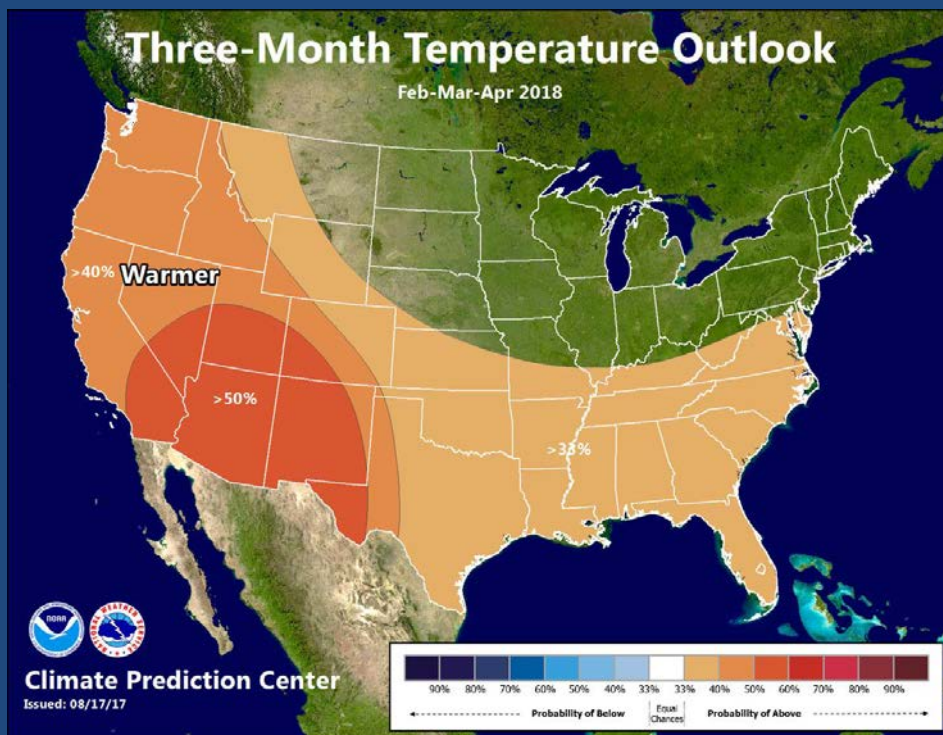


Unshaded areas = Equal Chances, No Strong Indicators

Issued 8/17/2017 Next: 9/21/17

# 3 Month Outlooks

## Feb/Mar/Apr



Unshaded areas = Equal Chances, No Strong Indicators

Issued 8/17/2017 Next: 9/21/17



# Winter 2017-2018 Outlook Summary

## Reminders

- 8 previous of 10 years have been dry<sub>(2011 and 2017 exception)</sub>
- 2017 was good in the north and central California but not in the far southland
- Reservoirs are higher than any year since 2011
- Any large storm runoff could cause moderate flood control releases

# STAY TUNED.....

## Climate Prediction Center:

Long range outlooks are updated every month

Update Schedule: **Third Thursday** of the month. Next update : September 21, 2017

[www.cpc.ncep.noaa.gov/](http://www.cpc.ncep.noaa.gov/)

## NOAA El Nino Web Page

[www.cpc.noaa.gov/products/precip/CWlink/MJO/enso.shtml](http://www.cpc.noaa.gov/products/precip/CWlink/MJO/enso.shtml)

## CPC IRI ENSO Forecasts

Update Schedule: Approximately **first and third Thursday**. Next update : September 21, 2017

<http://iri.columbia.edu/our-expertise/climate/forecasts/enso/>

## Local NWS Sacramento Links

[www.weather.gov/sacramento](http://www.weather.gov/sacramento)

[www.facebook.com/nws.sacramento](https://www.facebook.com/nws.sacramento)

[Twitter.com/NWSSacramento](https://twitter.com/NWSSacramento)

# Questions & Discussion

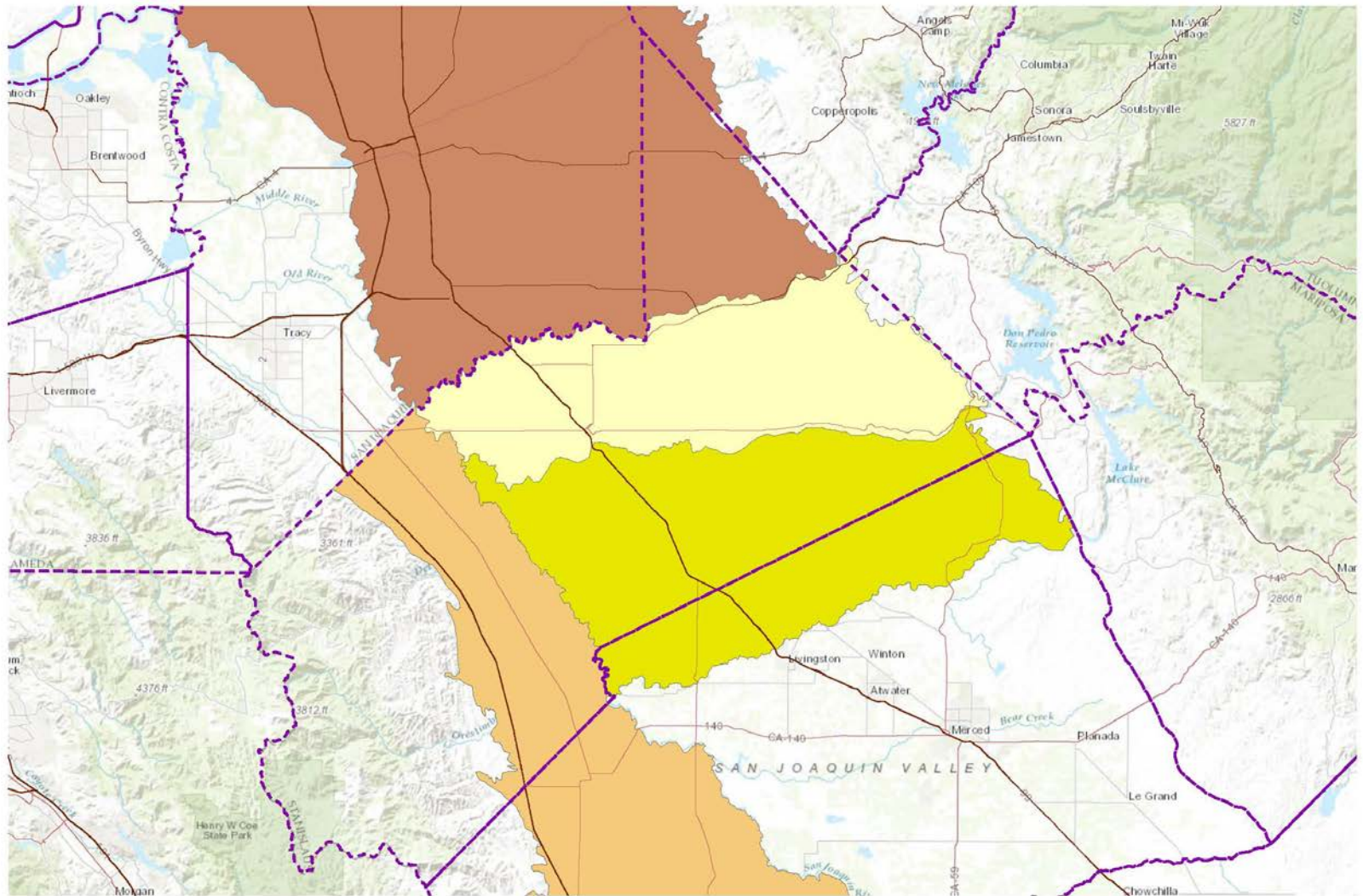
# **Sustainable Groundwater Management Act**

## **Regional Compliance Update**

# Groundwater Sustainability Agency Formation

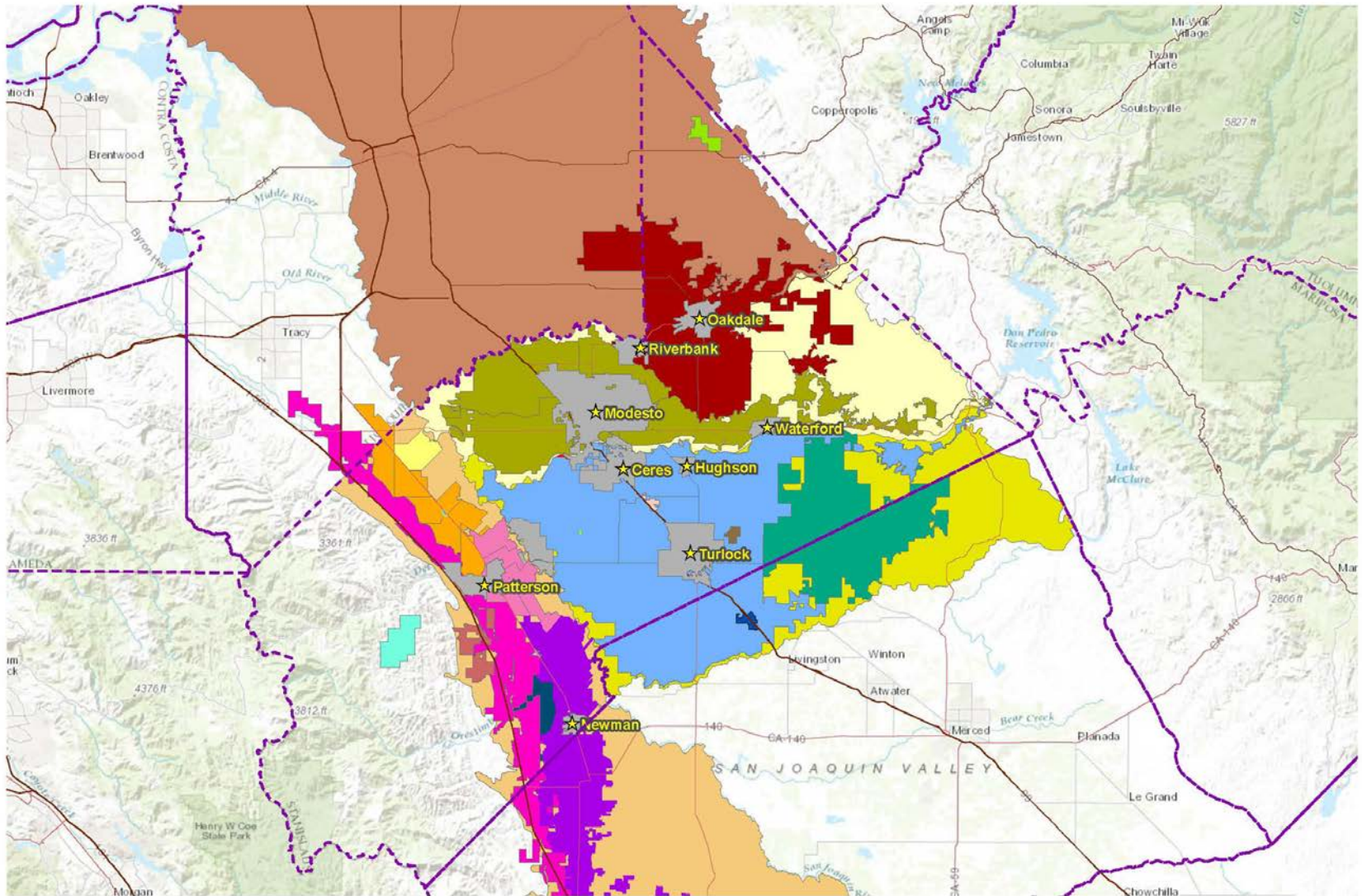
June 30, 2017 Deadline

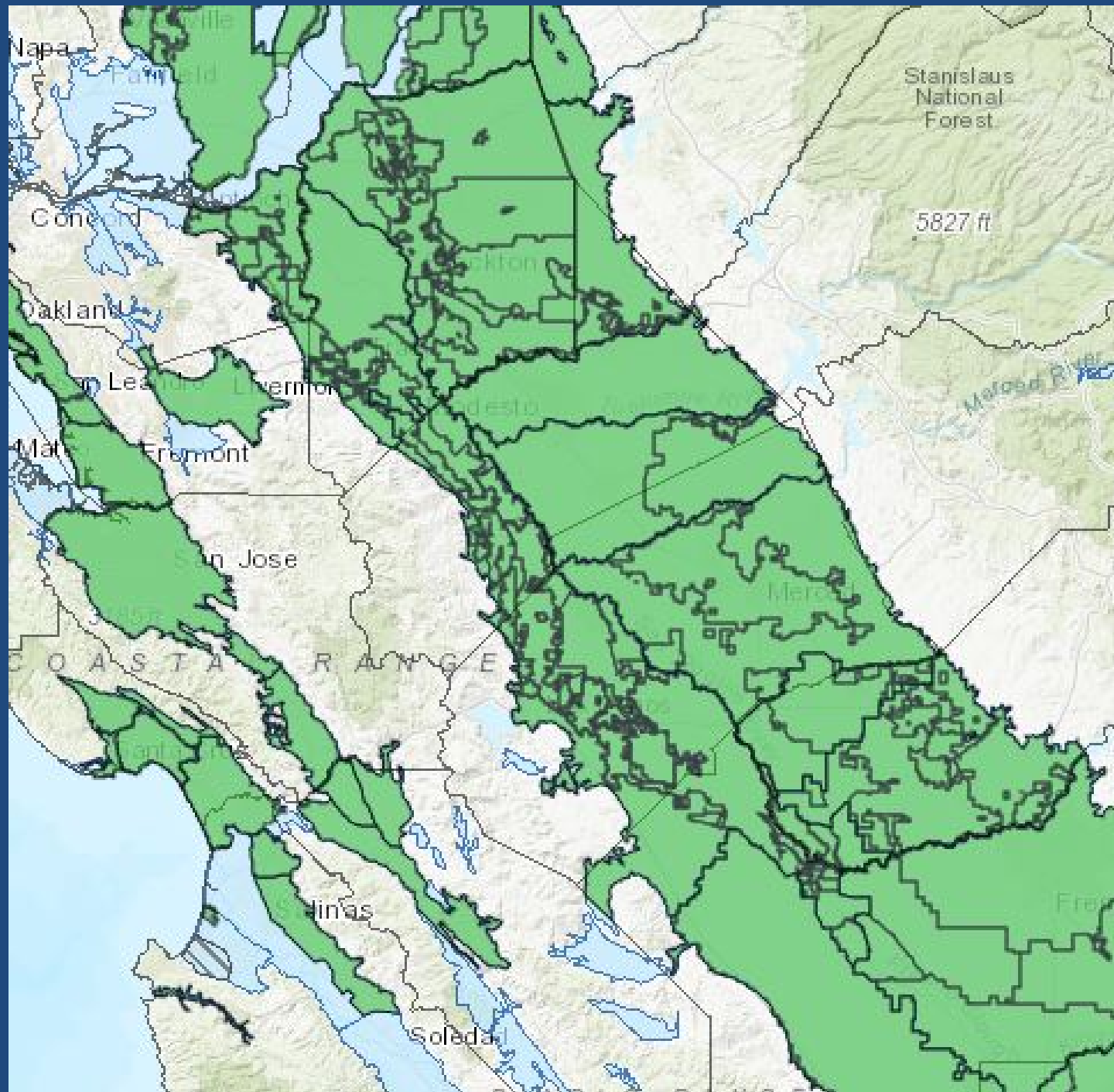
# Stanislaus County Groundwater Basins





# Stanislaus County Water Agencies



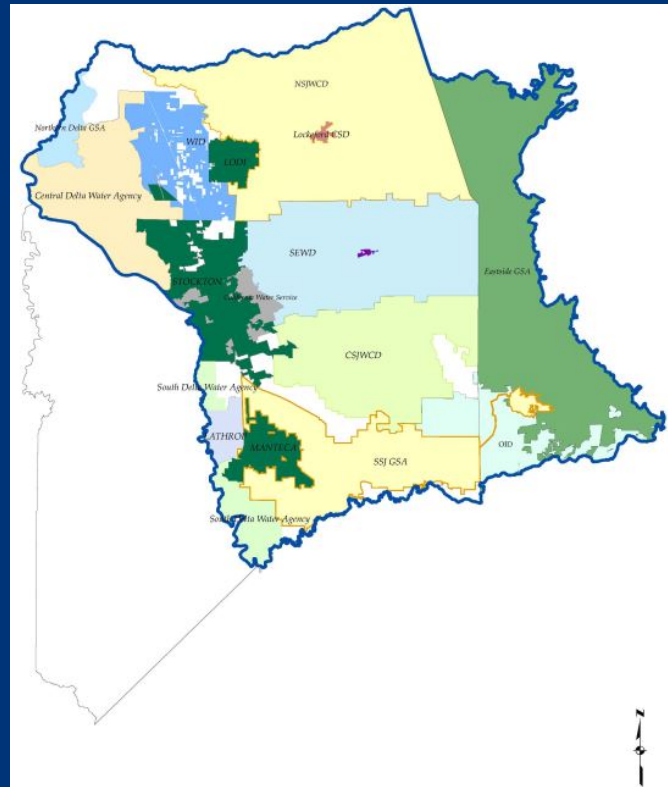


Layers

Downloads Clear all

- ☒ Exclusive GSAs
- ☐ GSA Notice Submitted
- ☒ GSA Service Area
- ☐ Alternatives Submitted
- ☐ Exclusive Local Agencies (Water\_Code\_510723)
- ☒ Adjudicated Areas
- ☐ Counties
- ☒ Bulletin 118 Groundwater Basins (2016)
- ☐ Bulletin 118 Groundwater Basins
- ☐ CASGEM Basin Priorities High/Medium Only

# Eastern San Joaquin Groundwater Basin



# Eastern San Joaquin Subbasin GSAs

City of Lathrop

City of Lodi

City of Manteca

City of Stockton

Linden CWD

Stockton East WD

Central Delta Water Agency

South Delta Water Agency

Central San Joaquin Water Conservation District

North San Joaquin Water Conservation District

*Eastside San Joaquin GSA*

Oakdale ID

South San Joaquin ID

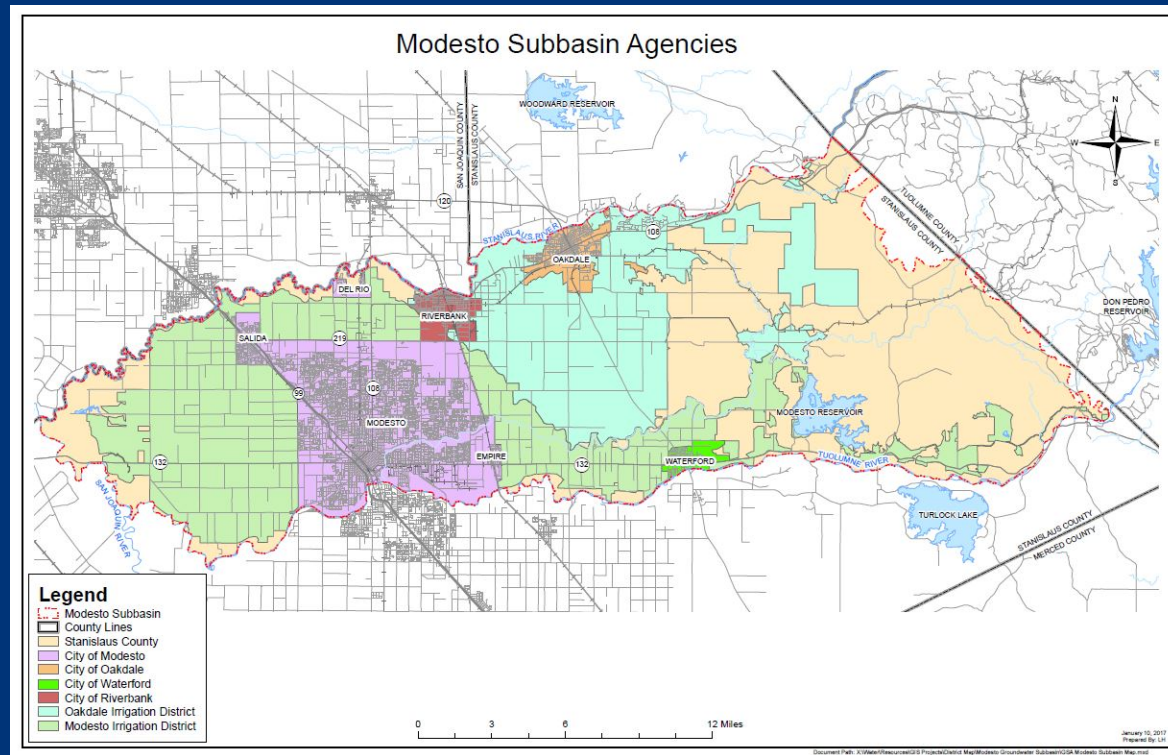
Woodbridge ID

Central Delta WD

Linden CWD



# Modesto Groundwater Basin



# Stanislaus & Tuolumne Rivers Groundwater Basin Association GSA

City of Modesto

City of Oakdale

City of Riverbank

City of Waterford

Oakdale ID

Modesto ID

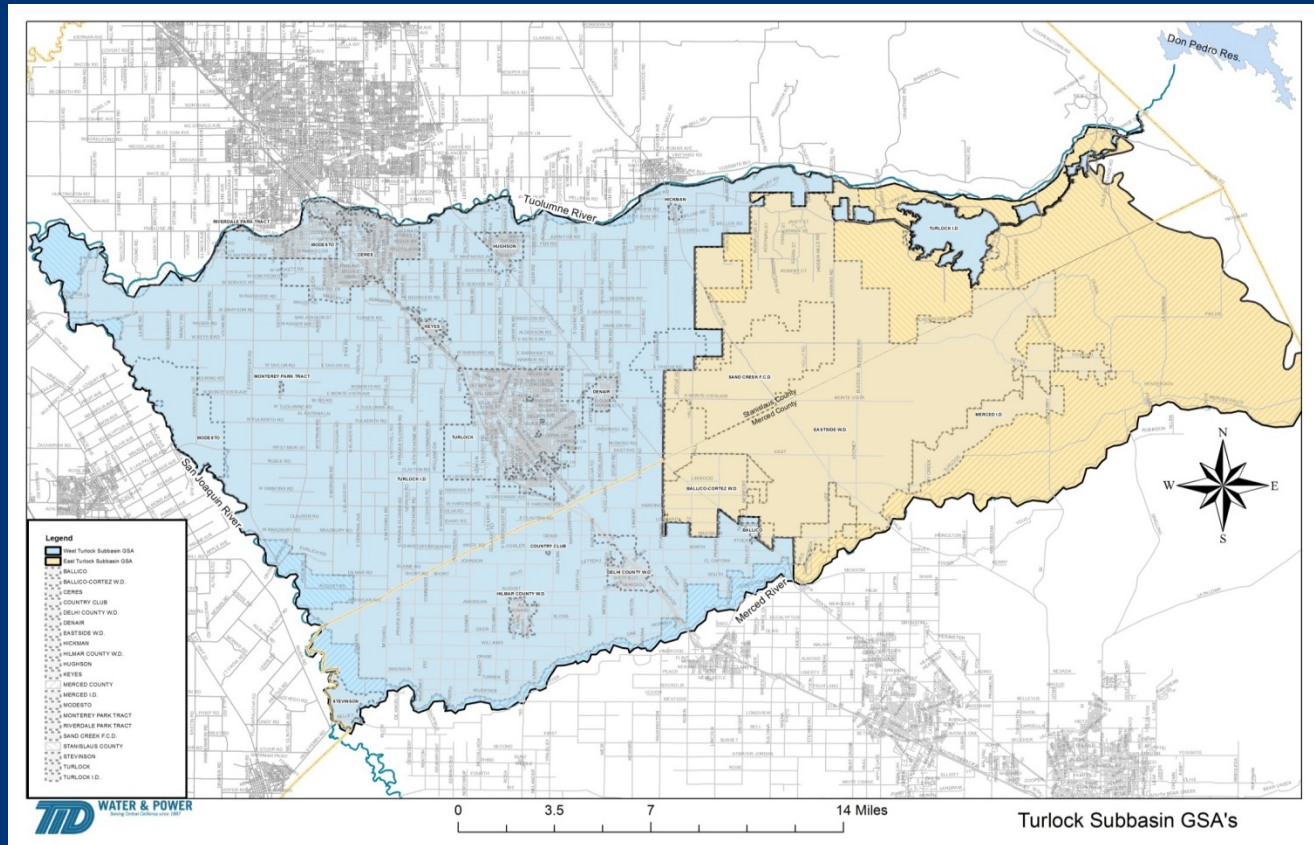
Stanislaus County

*Tuolumne County\**

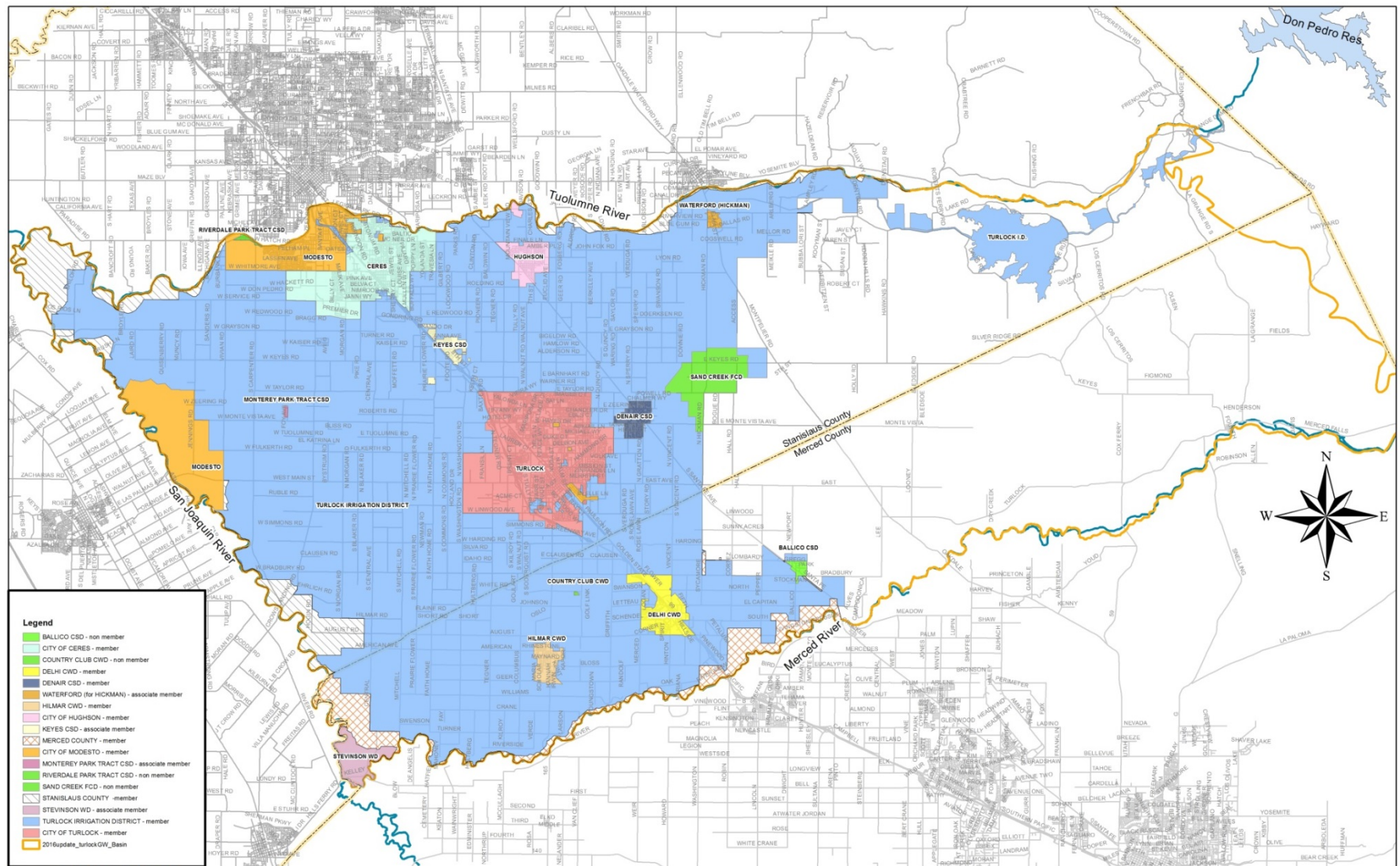
\*Formed separate GSA



# Turlock Groundwater Basin



# West Turlock Subbasin GSA



# West Turlock Subbasin GSA

City of Ceres

City of Hughson

City of Modesto

City of Turlock

Denair CSD

Turlock Irrigation District

Merced County

Stanislaus County

Delhi County Water District

Hilmar County Water District

Associate Members:

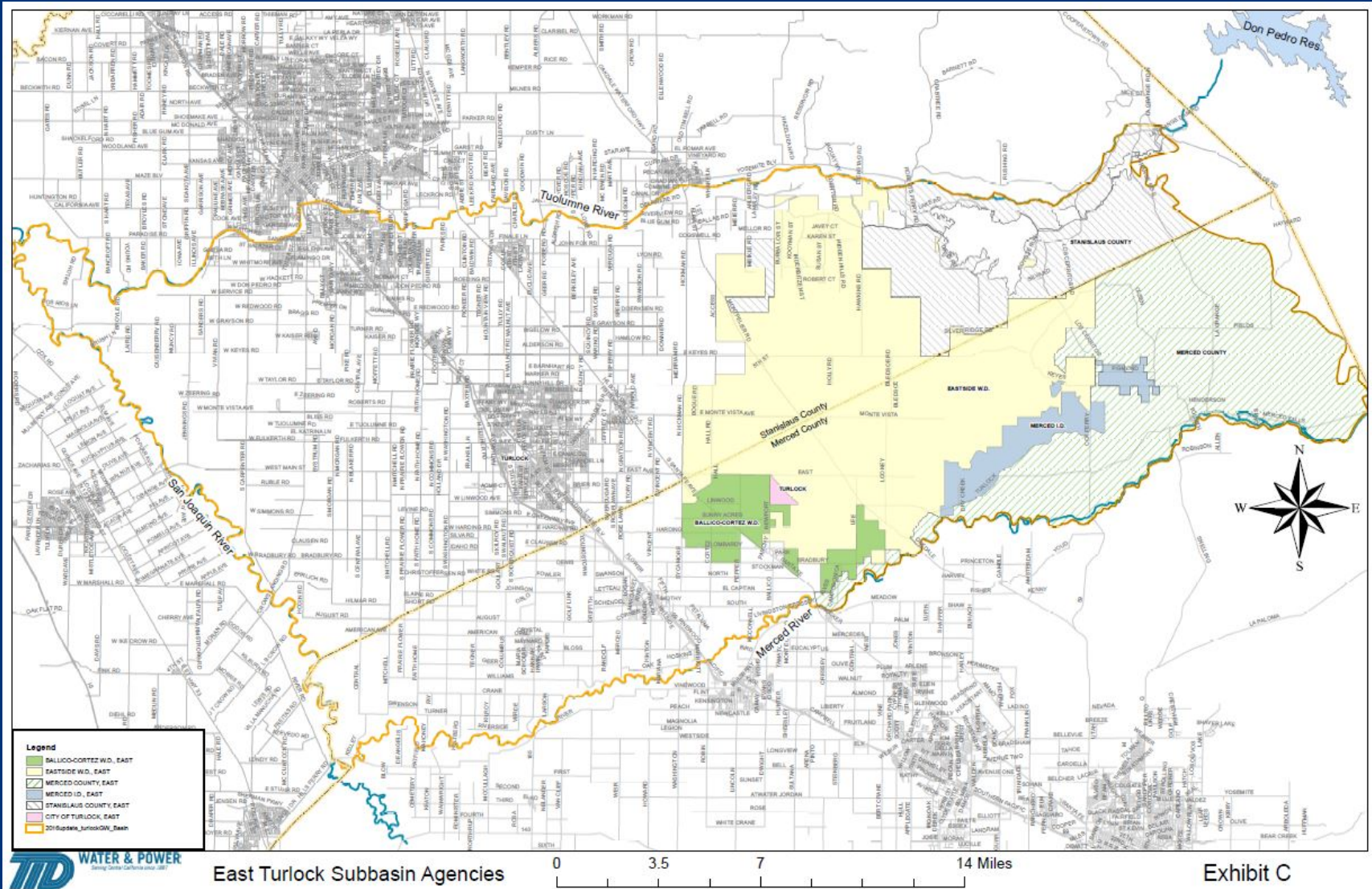
Keyes CSD

Stevinson WD

City of Waterford



# East Turlock Subbasin GSA



# East Turlock Subbasin GSA

Eastside WD

Ballico-Cortez WD

Merced Irrigation District

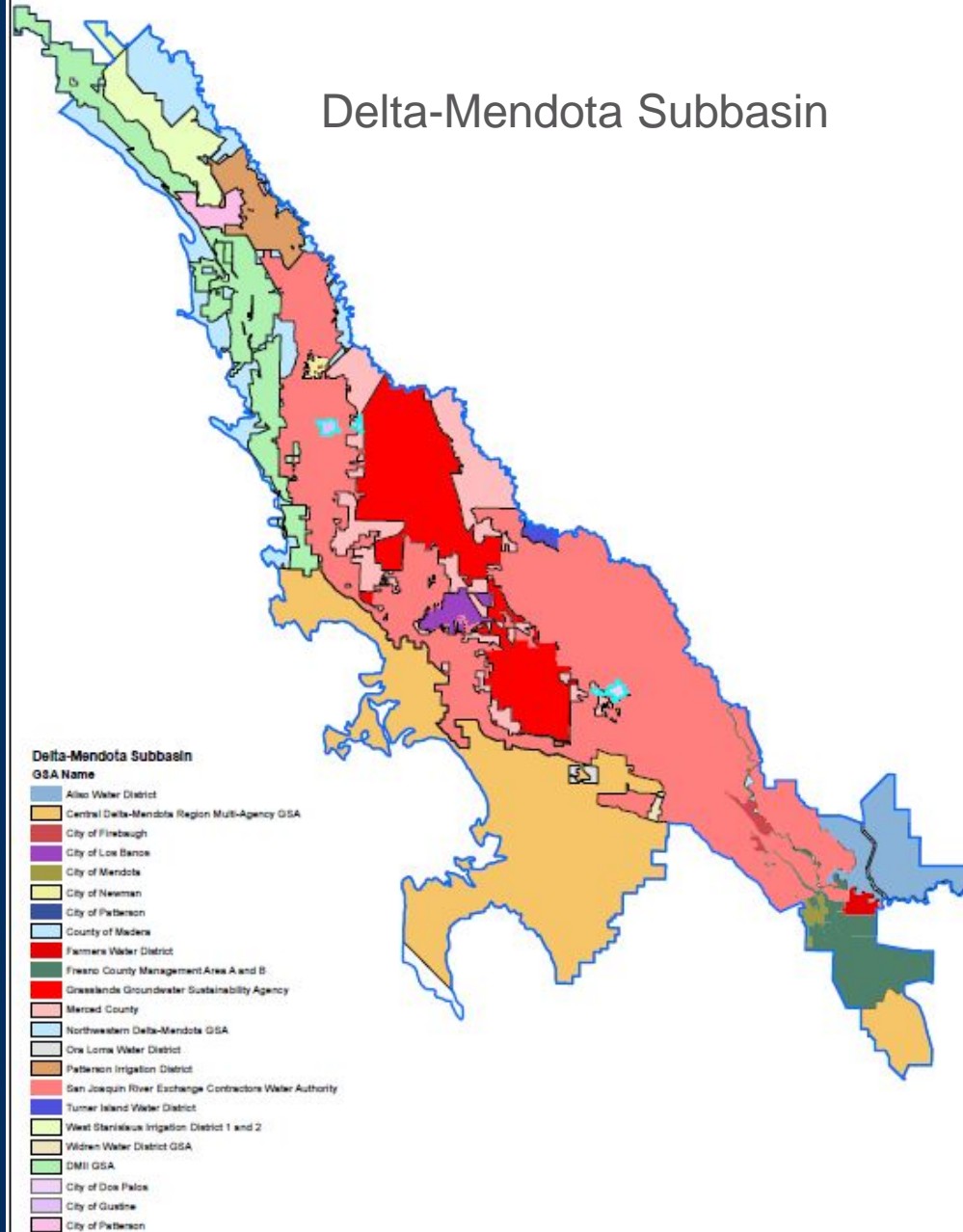
Merced County

Stanislaus County

City of Turlock \*

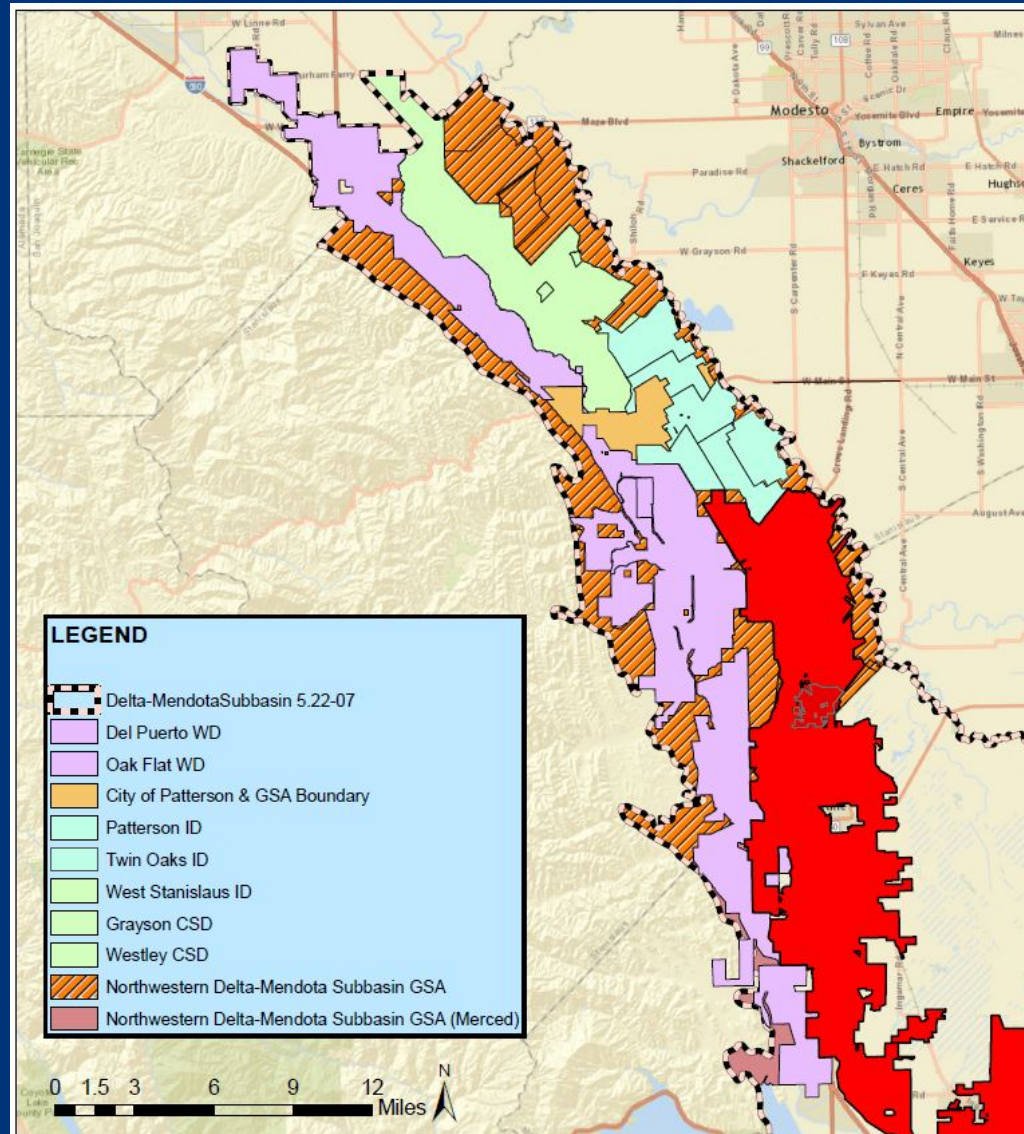
\* Associate Member

# Delta-Mendota Subbasin





# Delta-Mendota Subbasin –Northern Group





# Delta-Mendota Groundwater Basin – Northern Group GSAs

City of Patterson

Del Puerto WD

West Stanislaus ID

Patterson ID

*Northwestern Delta-Mendota GSA*

# Groundwater Sustainability Plans

## 50 Year Planning Horizon

- Land Use & Water Demand Nexus

## Basins in Critical Condition of Overdraft

- January 31, 2020
- 20 Year Implementation Period (January 2040)

## High & Medium Priority Basins

- January 31, 2022
- 20 Year Implementation Period (January 2042)

# Groundwater Sustainability Plans – Grant Funding

Basins in Critical Condition of Overdraft (\$1.5 M cap)

High & Medium Priority Basins (\$1 M cap)

Require 50% Local Cost Share

- Cost offsets may include Disadvantaged Communities
- Local relevant SGMA activities (since January 1, 2015)
  - Water Well Facilities Mapping & Groundwater Database (\$72k)
  - Groundwater Ordinance Hydrologic Services (\$50k)
    - Programmatic EIR does not qualify (tied to other State Grant)

# Proposition 1 Grant Funding

Program Solicitation Package (PSP) has been finalized

- One application (GSA applicant) per Basin
- Applications are currently being prepared with professional consultant support
- Filing window is open:
  - September 8<sup>th</sup> through November 13<sup>th</sup>
- Contract award expected early 2018



# Groundwater Sustainability Plans – DWR Support

## GSP Preparation Guidance Documents

- GSP Checklist
- Annotated GSP Outline (tied to regulations)

## Best Management Practices (BMPs) Documents

- Monitoring Networks
- Data Gaps
- Hydrogeologic Model/Water Budget
- Climate Change
- Sustainable Management Criteria (Locally Defined)
  - Significant & Unreasonable
  - Triggers and Thresholds
  - Management Objectives



# Proposition 1 GSP Grant Funding

- ❑ GSP Preparation Guidance Documents:
  - GSP checklist
  - Annotated GSP outline
- ❑ Best Management Practices (BMPs) Documents
  - ✓ Monitoring Protocols, Standards & Sites
  - ✓ Monitoring Networks and Data Gaps
  - ✓ Modeling
  - ✓ Hydrogeologic Conceptual Model
  - ✓ Water Budget
  - ✓ Sustainable Management Criteria
  - ✓ Climate Change

# Communication/Coordination

Regional Coordinators & Primary Points of Contact



Stakeholder Communication and Engagement

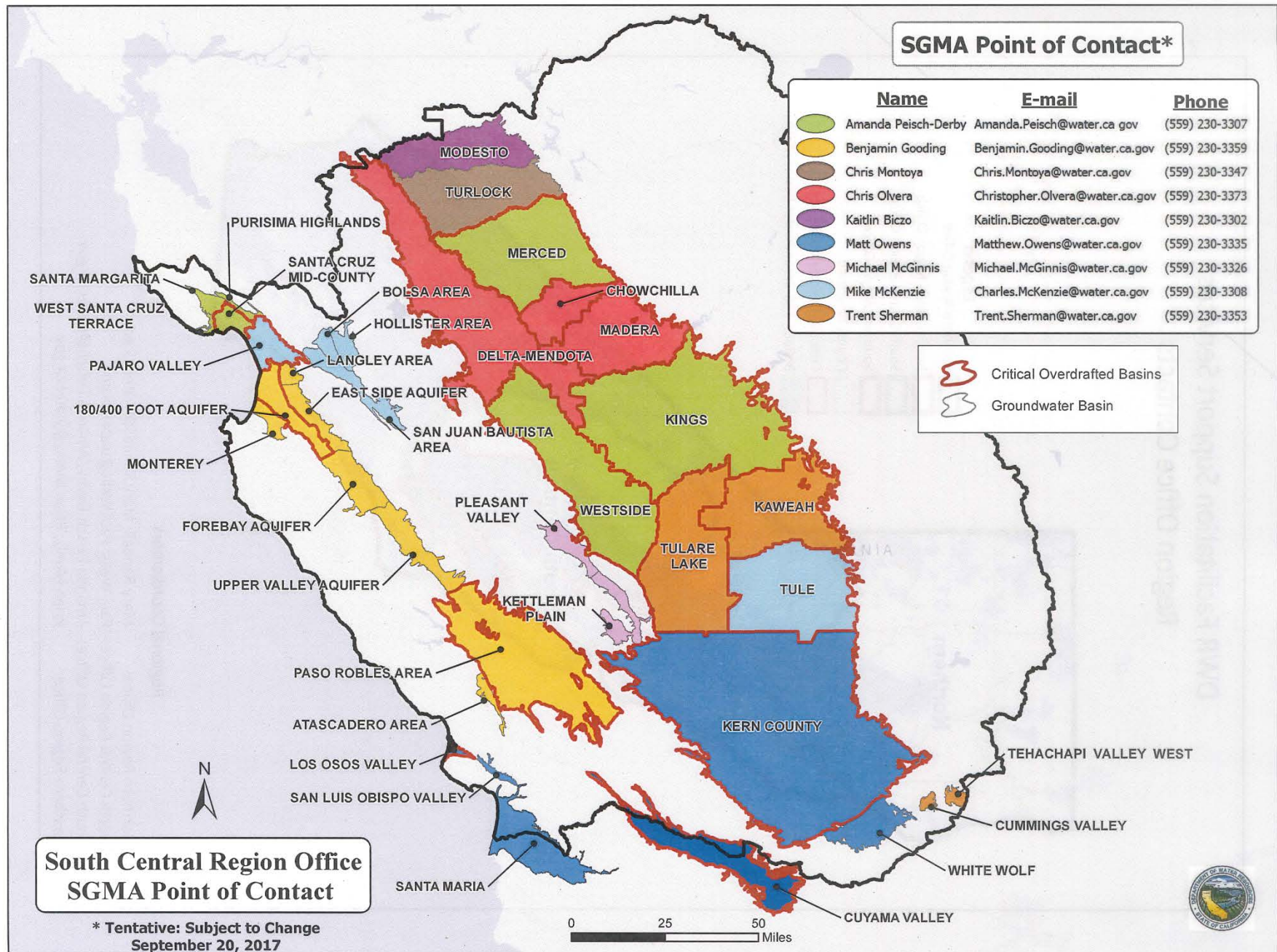
Technical Assistance

- ❖ Well Completion Report maps will be available in October
- ❖ Field activities assistance:
  - ❖ GW level measurement training
  - ❖ Well video logging
  - ❖ Geophysical logging
  - ❖ Monitoring well design and installation
- ❖ Tools and models “Fact Sheet” in development
- ❖ DWR will update State datasets with information provided by GSAs, including use of such data in CA Water Plan updates

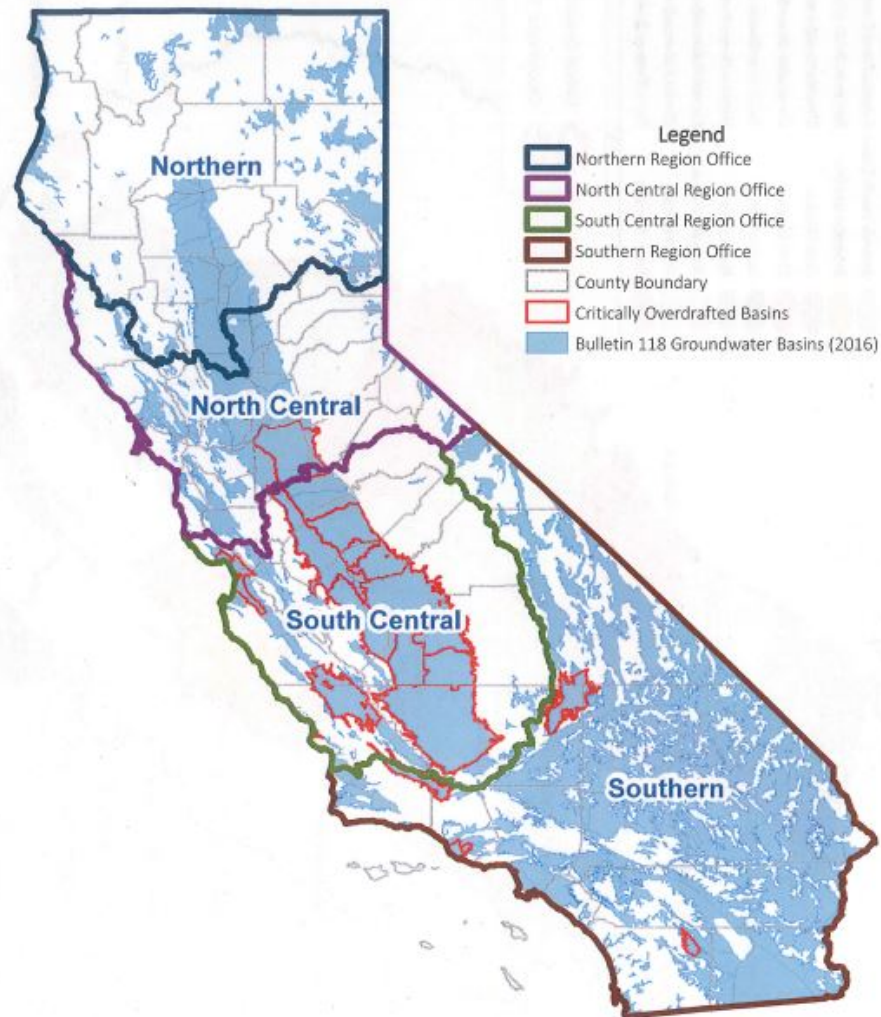
## SGMA Point of Contact\*

Name	E-mail	Phone
Amanda Peisch-Derby	Amanda.Peisch@water.ca.gov	(559) 230-3307
Benjamin Gooding	Benjamin.Gooding@water.ca.gov	(559) 230-3359
Chris Montoya	Chris.Montoya@water.ca.gov	(559) 230-3347
Chris Olvera	Christopher.Olvera@water.ca.gov	(559) 230-3373
Kaitlin Bicz	Kaitlin.Bicz@water.ca.gov	(559) 230-3302
Matt Owens	Matthew.Owens@water.ca.gov	(559) 230-3335
Michael McGinnis	Michael.McGinnis@water.ca.gov	(559) 230-3326
Mike McKenzie	Charles.McKenzie@water.ca.gov	(559) 230-3308
Trent Sherman	Trent.Sherman@water.ca.gov	(559) 230-3353

-  Critical Overdrafted Basins
-  Groundwater Basin



## DWR Facilitation Support Services Region Office Contacts



### Regional Coordinators

Northern Region Office:	Mary Randall; Mary.Randall@water.ca.gov
North Central Region Office:	Paul Wells; Paul.Wells@water.ca.gov
South Central Region Office:	Amanda Peisch-Derby; Amanda.Peisch@water.ca.gov
Southern Region Office:	Brian Moniz; Brian.Moniz@water.ca.gov



# GSP Review and Approval

DWR emphasized that all GSPs must demonstrate that all required elements have been addressed

DO NOT spend all time /money concentrating on any single element (e.g., groundwater model) at the expense of other planning elements

Concept of “substantial compliance” will be used for initial submittals, recognizing 20 year implementation period and 5 year GSP updates will occur

# Proposition 1 GSP Grant Funding

[http://www.water.ca.gov/groundwater/  
sgm/data\\_tools\\_reports.cfm](http://www.water.ca.gov/groundwater/sgm/data_tools_reports.cfm)



*REGIONAL COORDINATION  
IS*

*THE KEY TO SUCCESS  
FOR*

*ALL !!*