

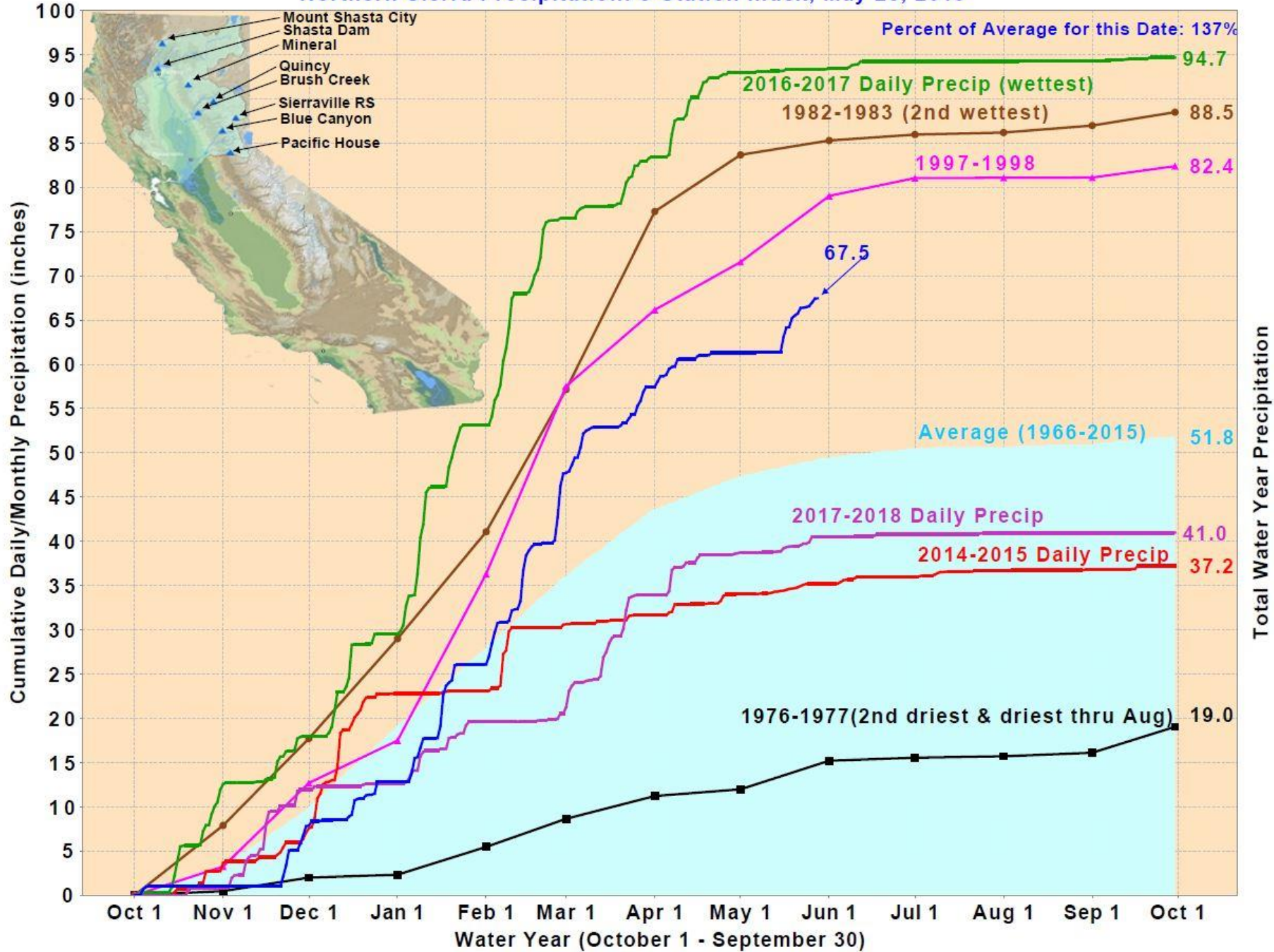
Stanislaus County Water Advisory Committee

May 29, 2019

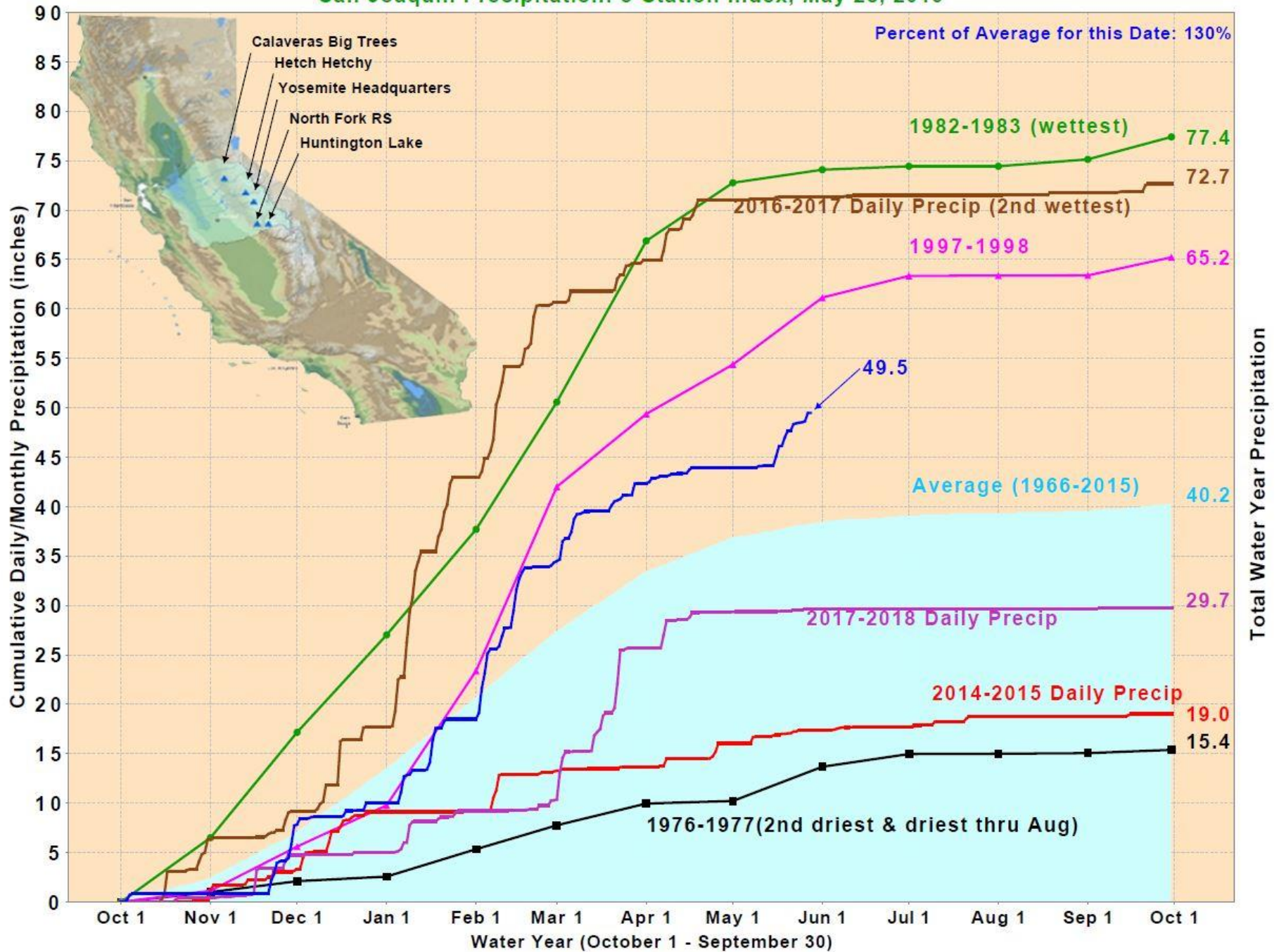
Item VIII: 2019 Hydrologic Conditions and Water Supply Outlook



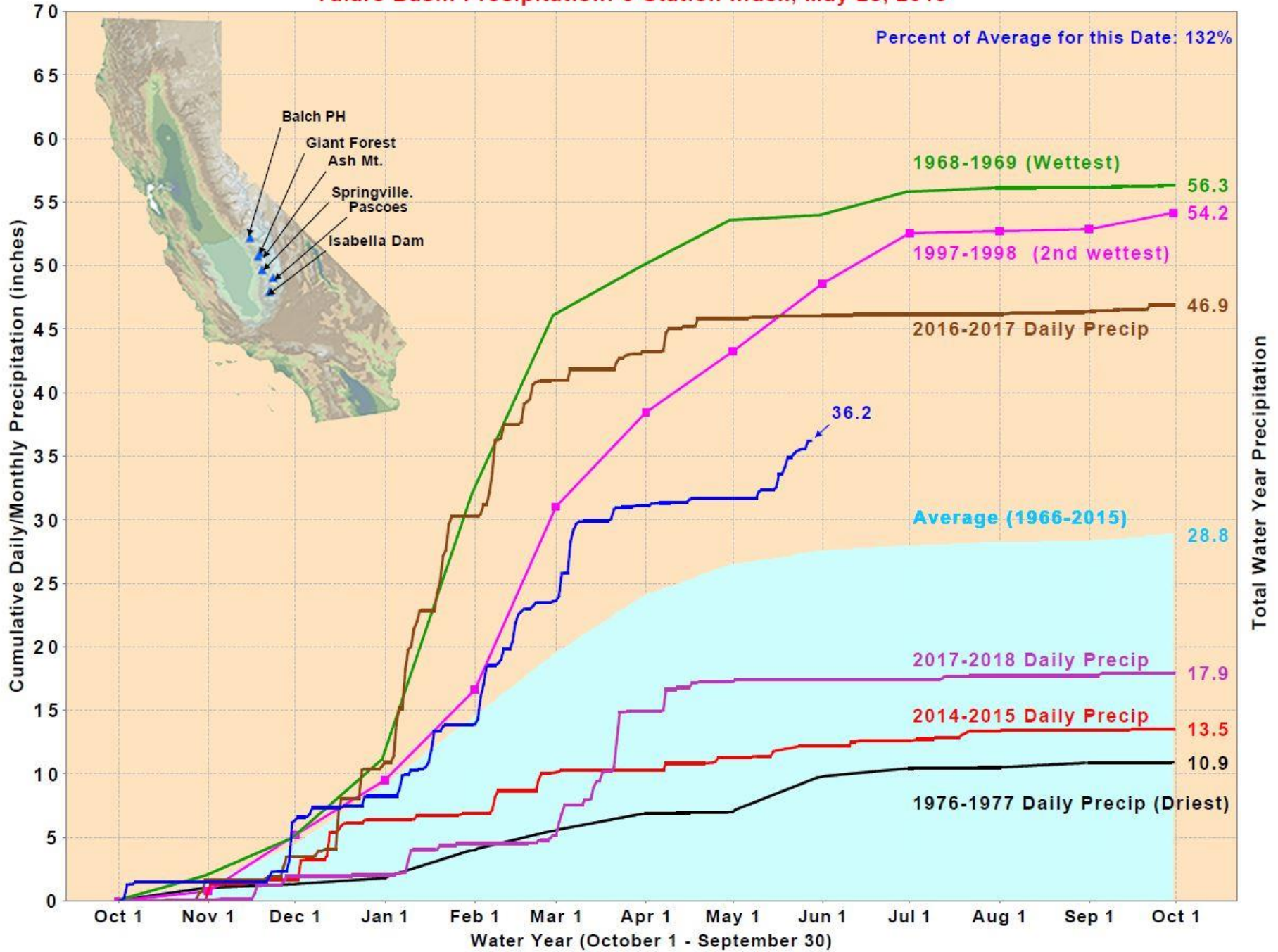
Northern Sierra Precipitation: 8-Station Index, May 28, 2019



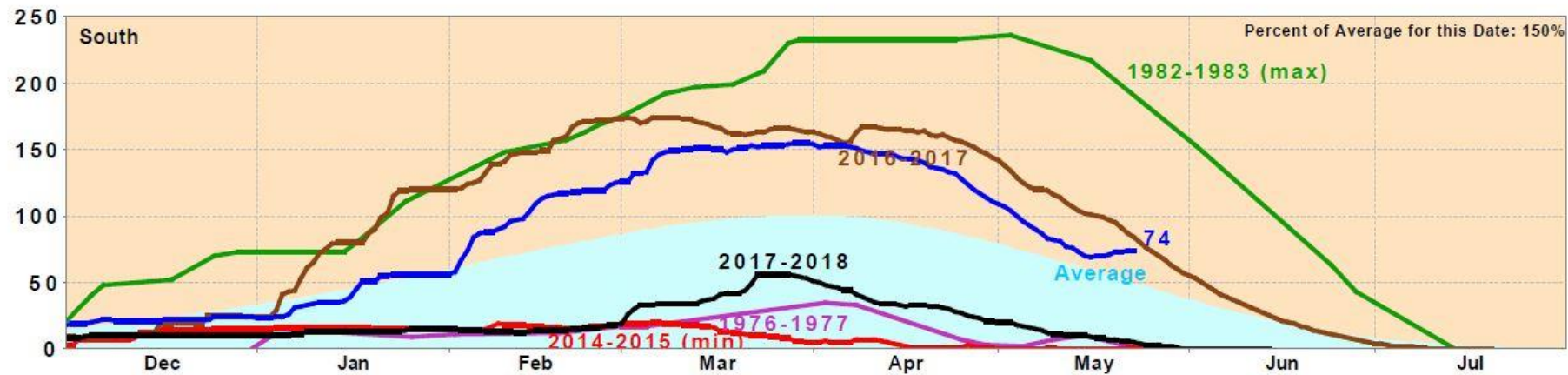
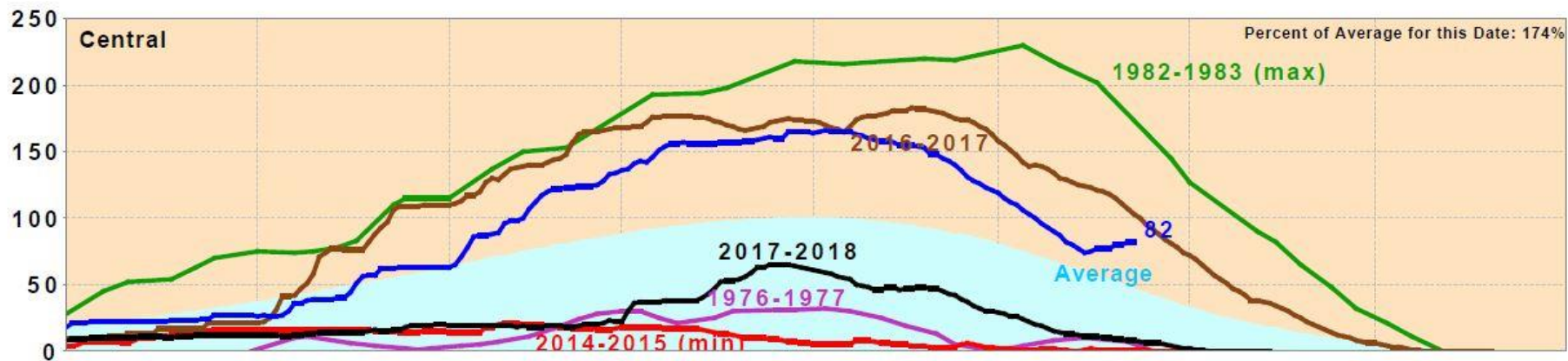
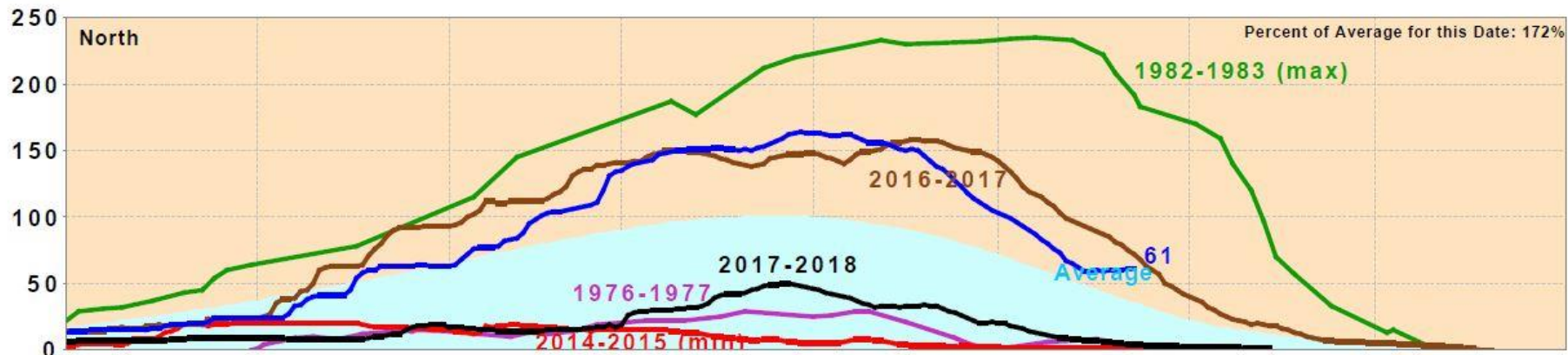
San Joaquin Precipitation: 5-Station Index, May 28, 2019



Tulare Basin Precipitation: 6-Station Index, May 28, 2019



California Snow Water Content, May 23, 2019, Percent of April 1 Average



Statewide Percent of April 1: 73%

Statewide Percent of Average for Date: 164%

The snowpack as of the morning of May 16, 2019 stands at the following (based on snow sensors):

Region	Snow Water Content (inches)	% of Average (Apr 1)	% of Average (May 16)
Northern	17.1	59	127
Central	20.7	75	129
Southern	16.9	69	117
Statewide	18.6	68	123

The snowpack as of the morning of May 23, 2019 stands at the following (based on snow sensors):

Region	Snow Water Content (inches)	% of Average (Apr 1)	% of Average (May 23)
Northern	17.6	61	172
Central	22.9	82	174
Southern	18.2	74	150
Statewide	20.0	73	164

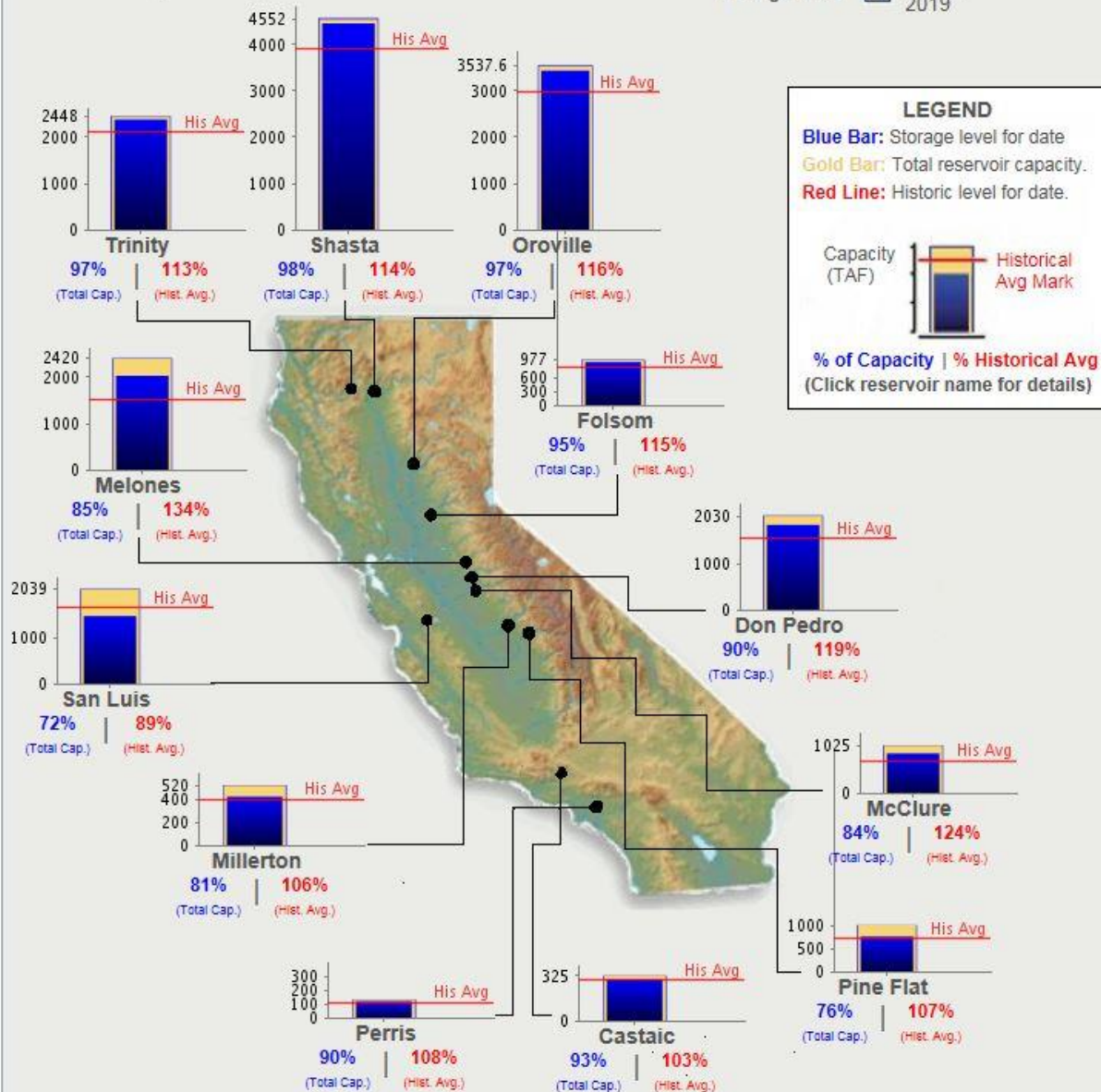
River Basin May 15, 2019	Percent of Historic Average
Trinity	138
Shasta Inflow	111
Sacramento at Bend Bridge	120
Feather	154
Yuba	149
American	144
Cosumnes	169
Mokelumne	151
Stanislaus	158
Tuolumne	147
Merced	169
San Joaquin	150
Kings	154
Kaweah	158
Tule	162
Kern	186

River Basin May 23, 2019	Percent of Historic Average
Trinity	148
Shasta Inflow	129
Sacramento at Bend Bridge	140
Feather	158
Yuba	140
American	142
Cosumnes	205
Mokelumne	143
Stanislaus	150
Tuolumne	138
Merced	153
San Joaquin	138
Kings	142
Kaweah	150
Tule	175
Kern	177

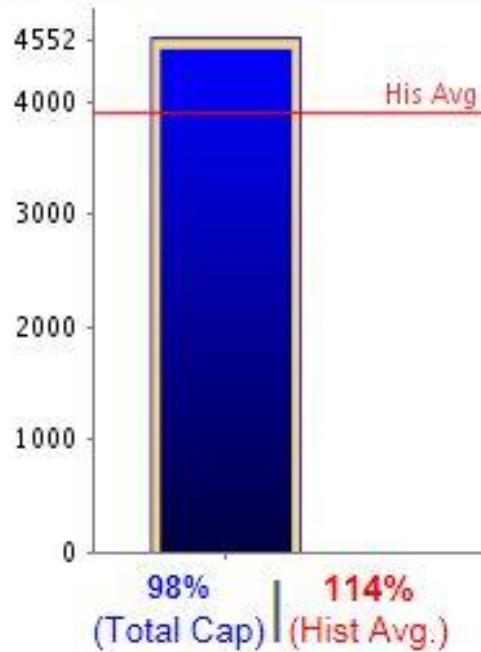
CURRENT CONDITIONS FOR MAJOR RESERVOIRS: 27-MAY-2019

Data as of Midnight: 27-May-2019

Change Date:  27-May-2019



SHASTA - STORAGE CONDITIONS AS OF MAY 27, 2019



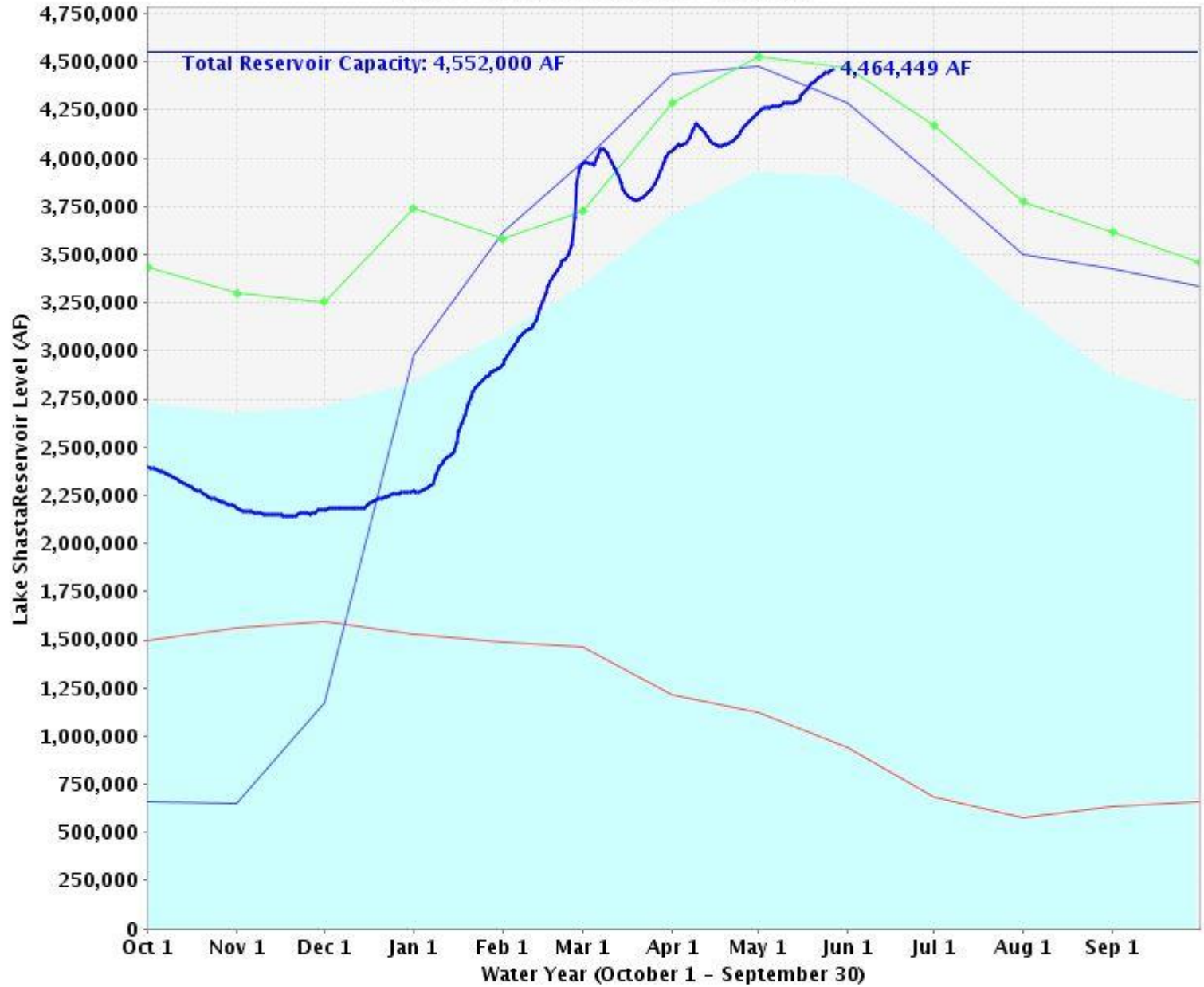
Data as of Midnight: May 27, 2019

- Current Storage: 446449 AF
- 98% of Total Capacity
- 114% of Historical Avg. For This Date
- (Total Capacity: 4552000.0 AF)
- (Avg. Storage for May 27: 3903788.0 AF)

Change Date:

[Printable Version of Current Data](#)

Lake Shasta Storage Levels

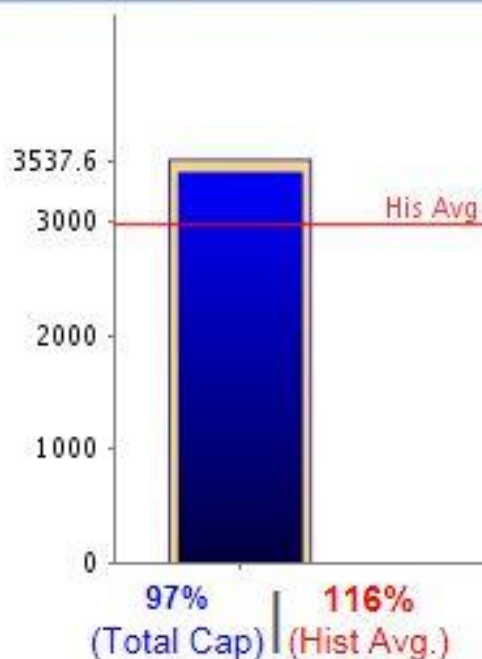


■ Historical Average
 — Total Reservoir Capacity
 — 1976-1977 (dry)
 — 1977-1978
 —●— 1982-1983 (wet)
 —●— 2018-2019(current)

OROVILLE - STORAGE CONDITIONS AS OF MAY 27, 2019



Lake
Oroville

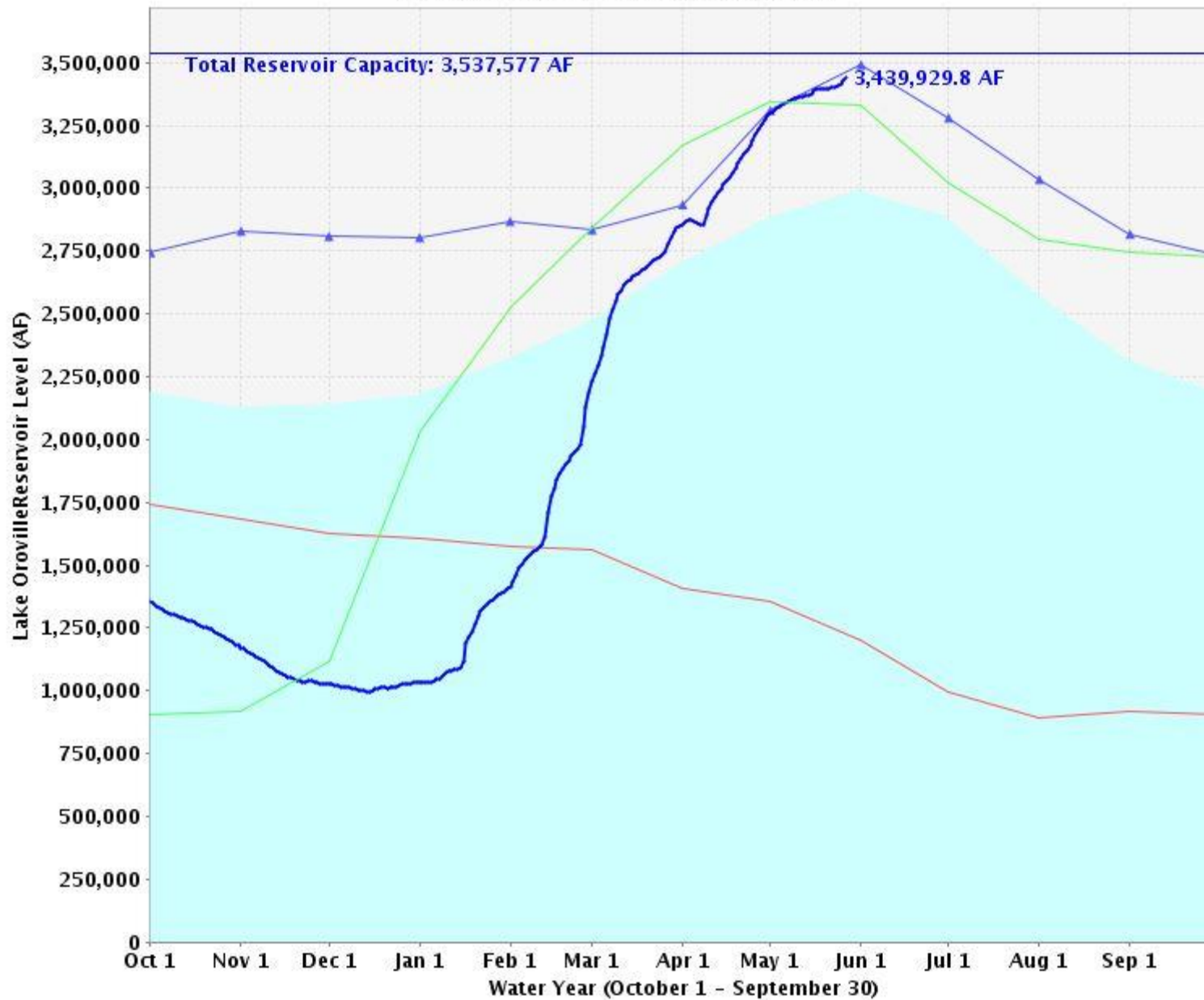


Data as of Midnight: May 27, 2019

- Current Storage: 3439929 AF
- 97% of Total Capacity
- **116% of Historical Avg. For This Date**
- (Total Capacity: 3537577.0 AF)
- (Avg. Storage for May 27: 2975360.0 AF)

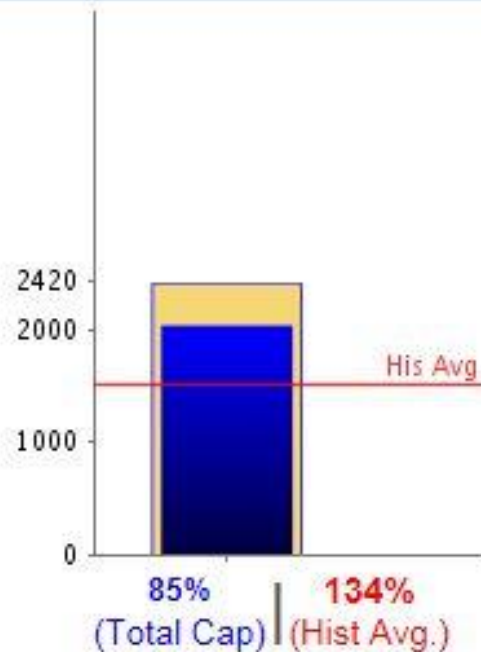
Change Date:  27-May-2019

Lake Oroville Storage Levels



Historical Average — Total Reservoir Capacity — 1976-1977 (dry) — 1977-1978 — 1982-1983 (wet) — 2018-2019 (current)

MELONES - STORAGE CONDITIONS AS OF MAY 27, 2019

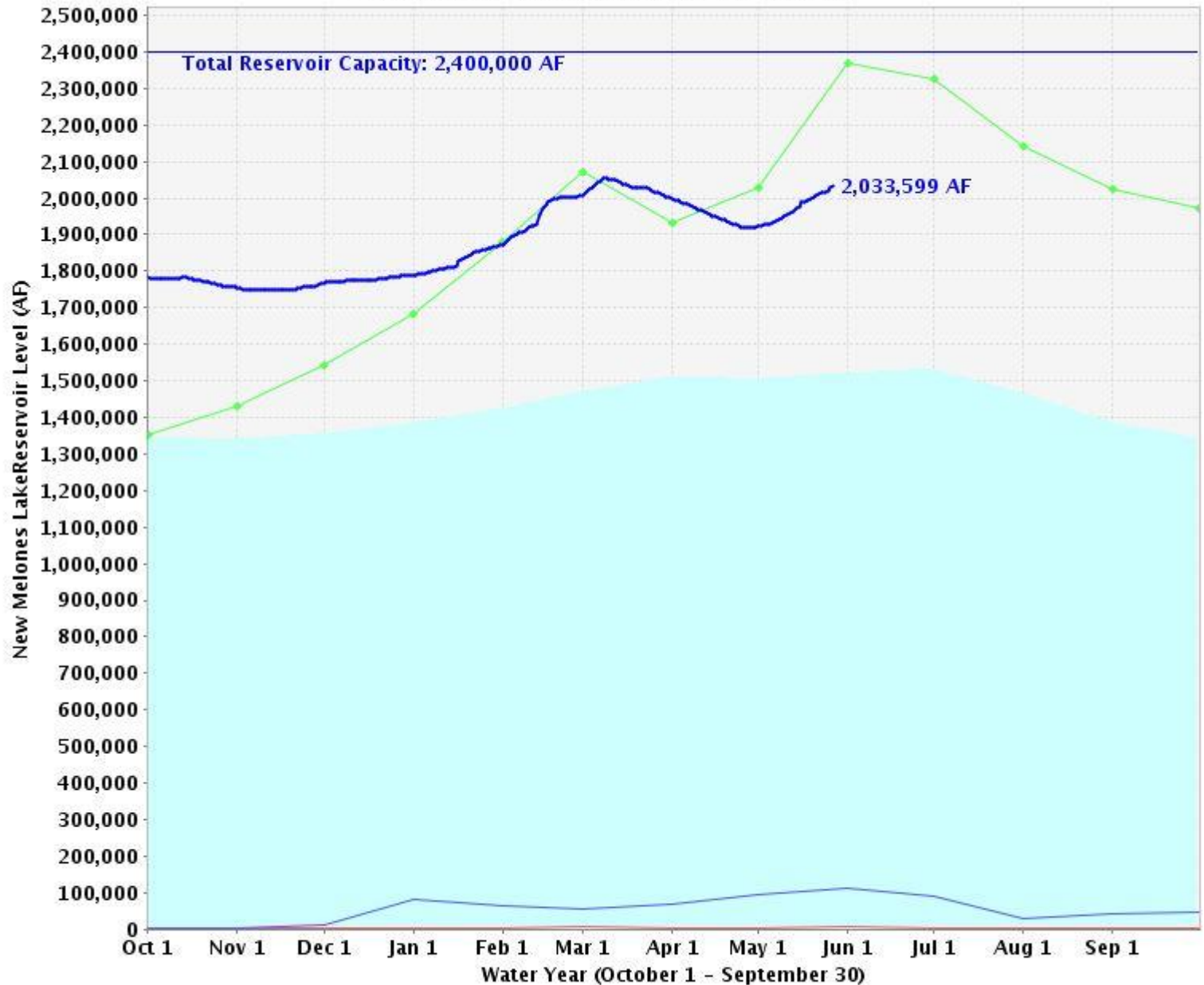


Data as of Midnight: May 27, 2019

- Current Storage: 2033599 AF
- 85% of Total Capacity
- 134% of Historical Avg. For This Date
- (Total Capacity: 2400000.0 AF)
- (Avg. Storage for May 27: 1517581.0 AF)

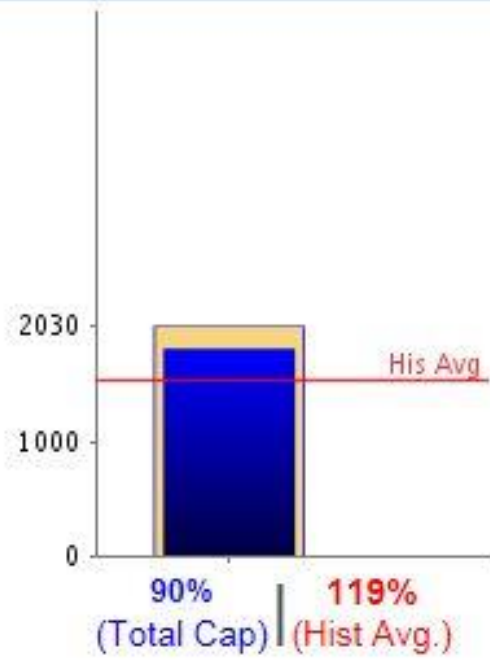
Change Date:

New Melones Lake Storage Levels



■ Historical Average
 — Total Reservoir Capacity
 — 1976-1977 (dry)
 — 1977-1978
 —● 1982-1983 (wet)
 —● 2018-2019(current)

DON PEDRO - STORAGE CONDITIONS AS OF MAY 27, 2019

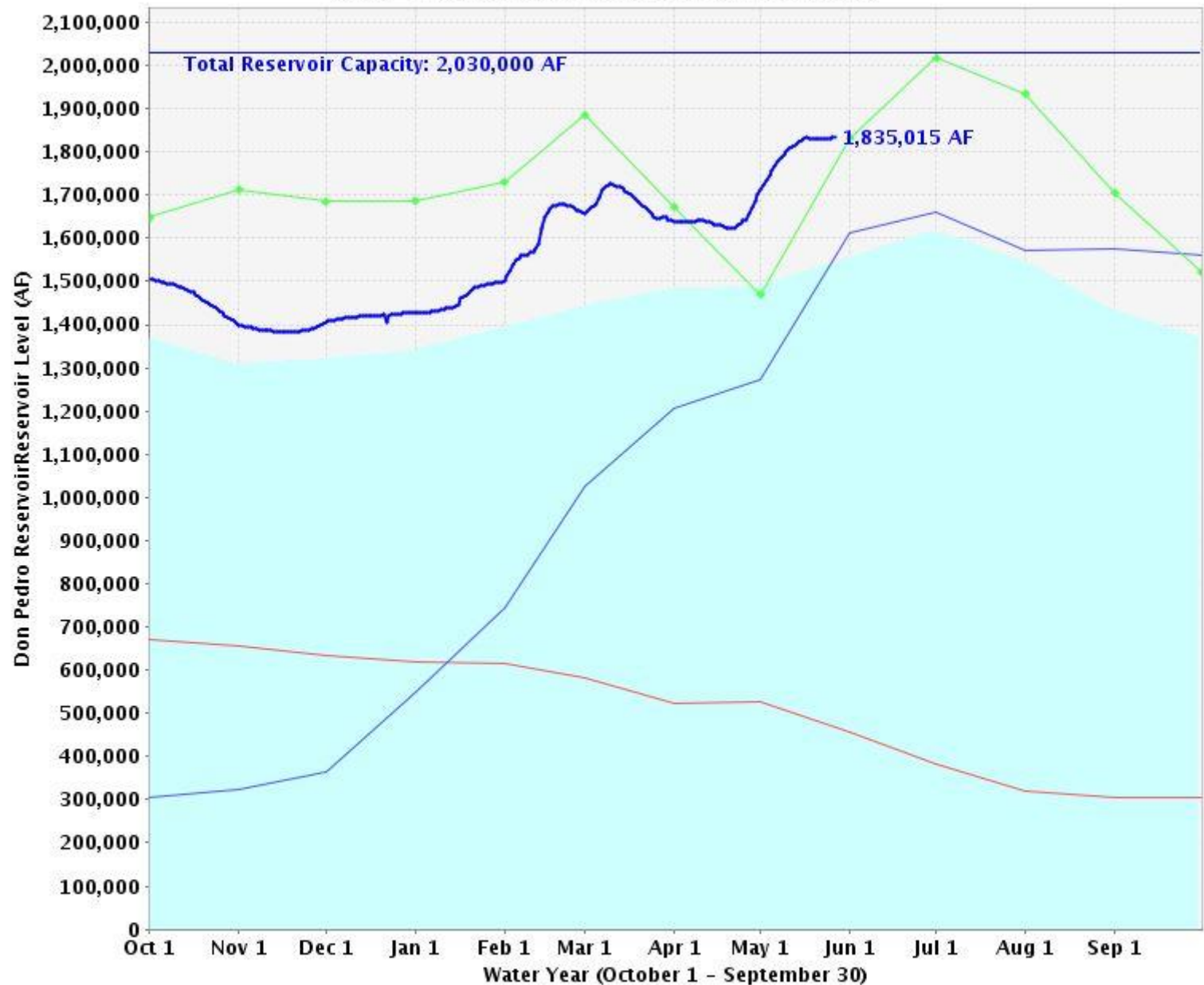


Data as of Midnight: May 27, 2019

- Current Storage: 1835015 AF
- 90% of Total Capacity
- 119% of Historical Avg. For This Date
- (Total Capacity: 2030000.0 AF)
- (Avg. Storage for May 27: 1544513.032 AF)

Change Date:  27-May-2019

Don Pedro Reservoir Storage Levels

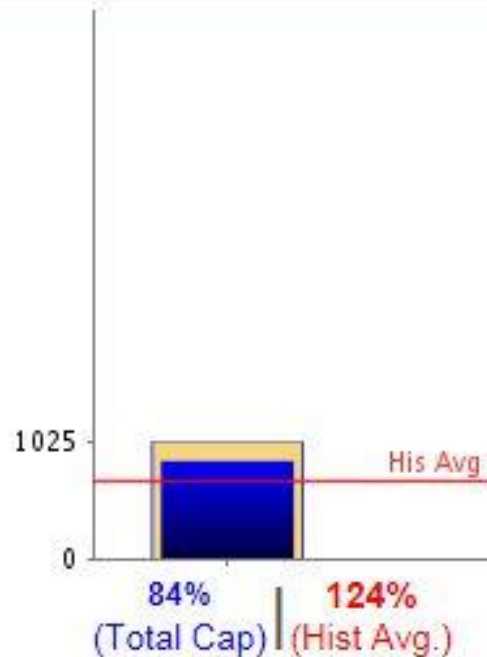


■ Historical Average
 — Total Reservoir Capacity
 — 1976-1977 (dry)
 — 1977-1978
 — 1982-1983 (wet)
 — 2018-2019 (current)

MCCLURE - STORAGE CONDITIONS AS OF MAY 27, 2019



Lake
McClure

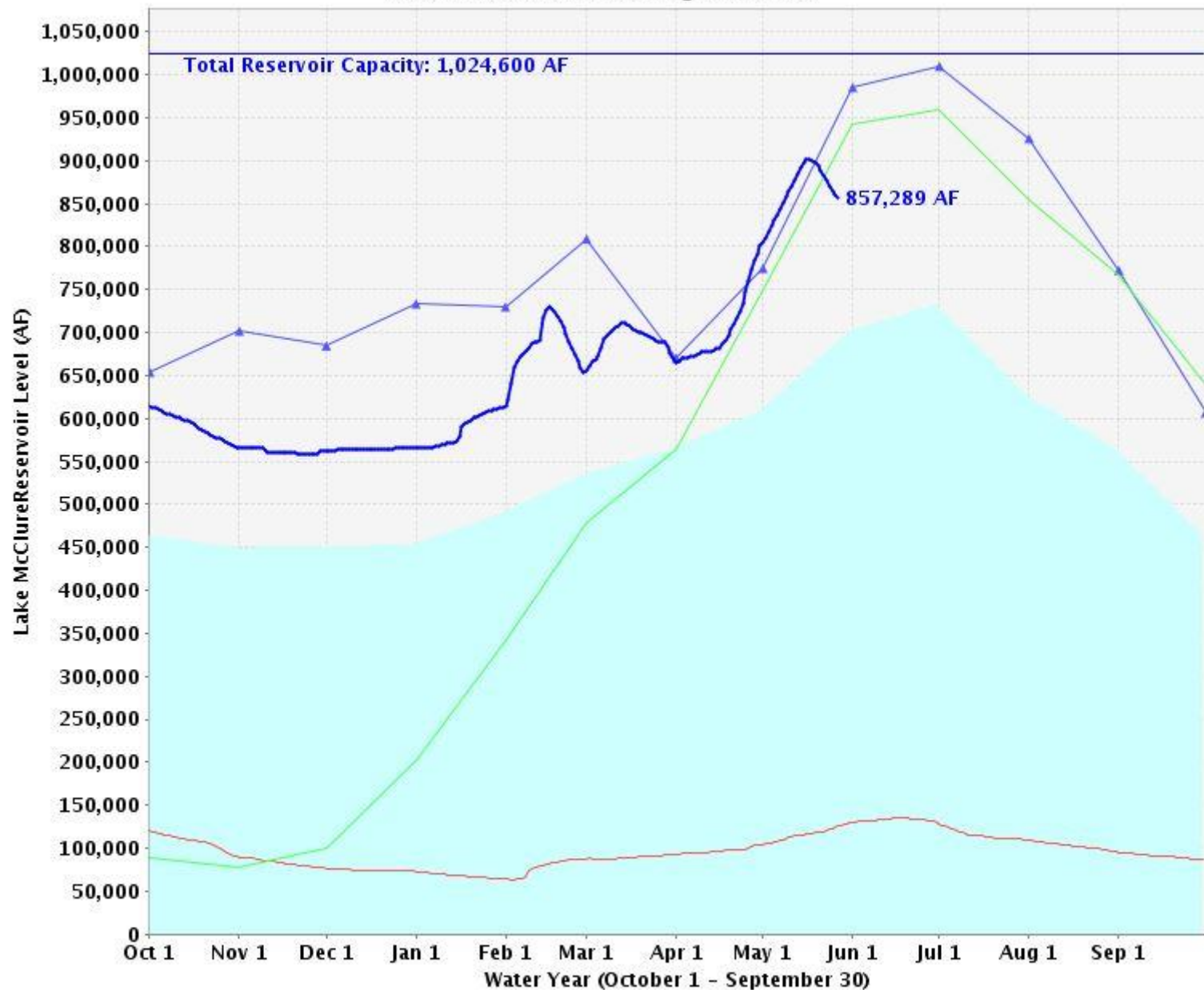


Data as of Midnight: May 27, 2019

- Current Storage: 857289 AF
- 84% of Total Capacity
- 124% of Historical Avg. For This Date
- (Total Capacity: 1024600.0 AF)
- (Avg. Storage for May 27: 688837.0 AF)

Change Date:  27-May-2019

Lake McClure Storage Levels

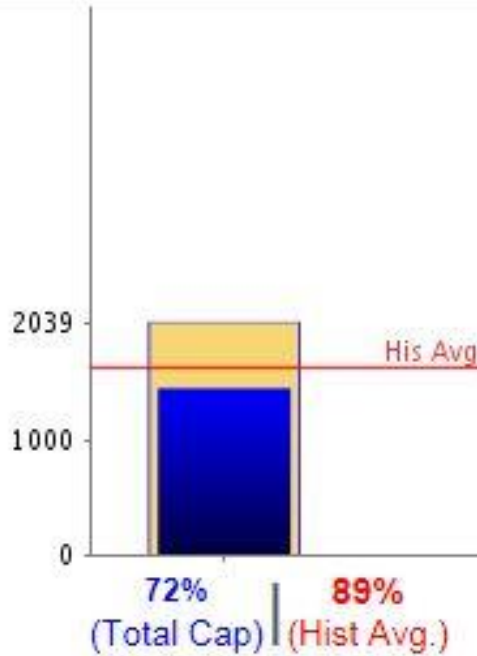


■ Historical Average
 — Total Reservoir Capacity
 — 2014-2015
 ▲ 1982-1983 (wet)
 — 1977-1978
 — 2018-2019 (current)

SAN LUIS - STORAGE CONDITIONS AS OF MAY 27, 2019

San Luis Reservoir

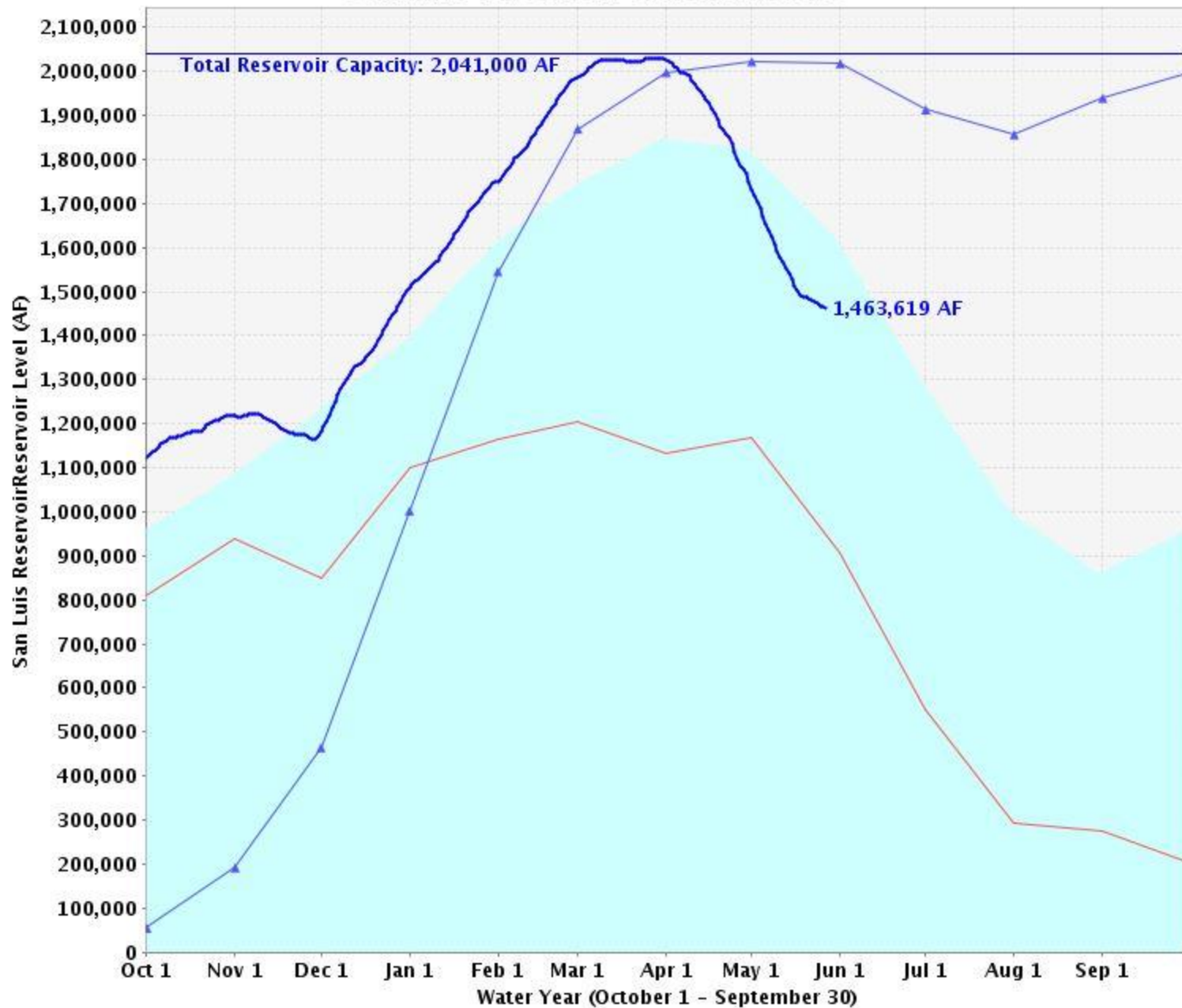
Data as of Midnight: May 27, 2019



- Current Storage: 1463619 AF
- 72% of Total Capacity
- 89% of Historical Avg. For This Date
- (Total Capacity: 2041000.0 AF)
- (Avg. Storage for May 27: 1643564.0 AF)

Change Date:

San Luis Reservoir Storage Levels



Historical Average — Total Reservoir Capacity — 1976-1977 (dry) — 1982-1983 (wet) — 2018-2019 (current)

2019 Water Allocations

WEST		EAST	
Federal	65%	SSJID	100%
	70%	OID	100%
State	70%	Mod ID	100%
CCID	100%	TID	100%
		Mer ID	100%

Questions & Discussion

Item IX: Status Update
Regarding Compliance with the
Sustainable Groundwater
Management Act (SGMA) in
Stanislaus County

May 29 , 2019

Sustainable Groundwater Management Act (2014)

- Agencies electing to become GSAs are given broad powers and authority regarding groundwater management, including:
 - Develop and Implement Groundwater Sustainability Plans (GSPs)
 - 50 Year Planning Horizon
 - 20 Year Implementation Period
 - 5 Year Updates
 - 1 Year Reporting
 - Investigate and determine the sustainable yield of a groundwater basin
 - Collect pertinent groundwater monitoring information
 - Enforcement

Important Milestones

- *GSA formation deadline June 30, 2017*
- GSP adoption deadline:
 - January 31, 2020 (critical condition of overdraft)
 - January 31, 2022 (high & medium priority basins)
- If those deadlines are missed, or if the DWR determines that a plan is not adequate to achieve the sustainability goal, the State Water Resources Control Board ("Board") will have the ability to step in and impose its own "interim" plan until an acceptable local plan is in place.



Critically Overdrafted Basins

Basin Number	Basin/Subbasin Name
North Central Region	
5-22.01	Eastern San Joaquin
South Central Region	
3-01	Soquel Valley
3-02	Pajaro Valley
3-04.01	180/400 Foot Aquifer
3-04.06	Paso Robles Area
3-08	Los Osos Valley
3-13	Cuyama Valley
5-22.04	Merced
5-22.05	Chowchilla
5-22.06	Madera
5-22.07	Delta-Mendota
5-22.08	Kings
5-22.09	Westside
5-22.11	Kaweah
5-22.12	Tulare Lake
5-22.13	Tule
5-22.14	Kern County

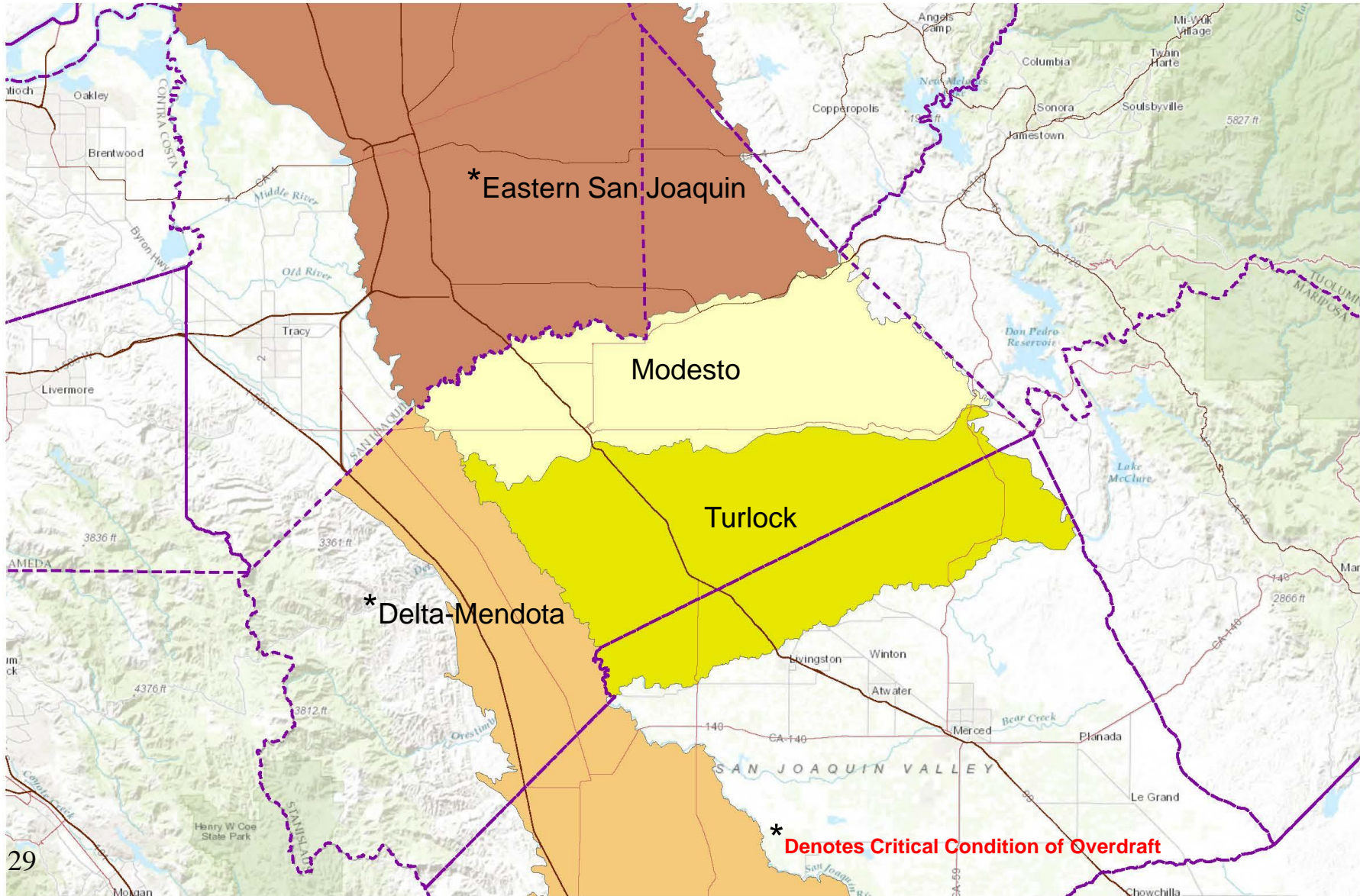
Total number of Basins/subbasins: 17
 January 1, 2016



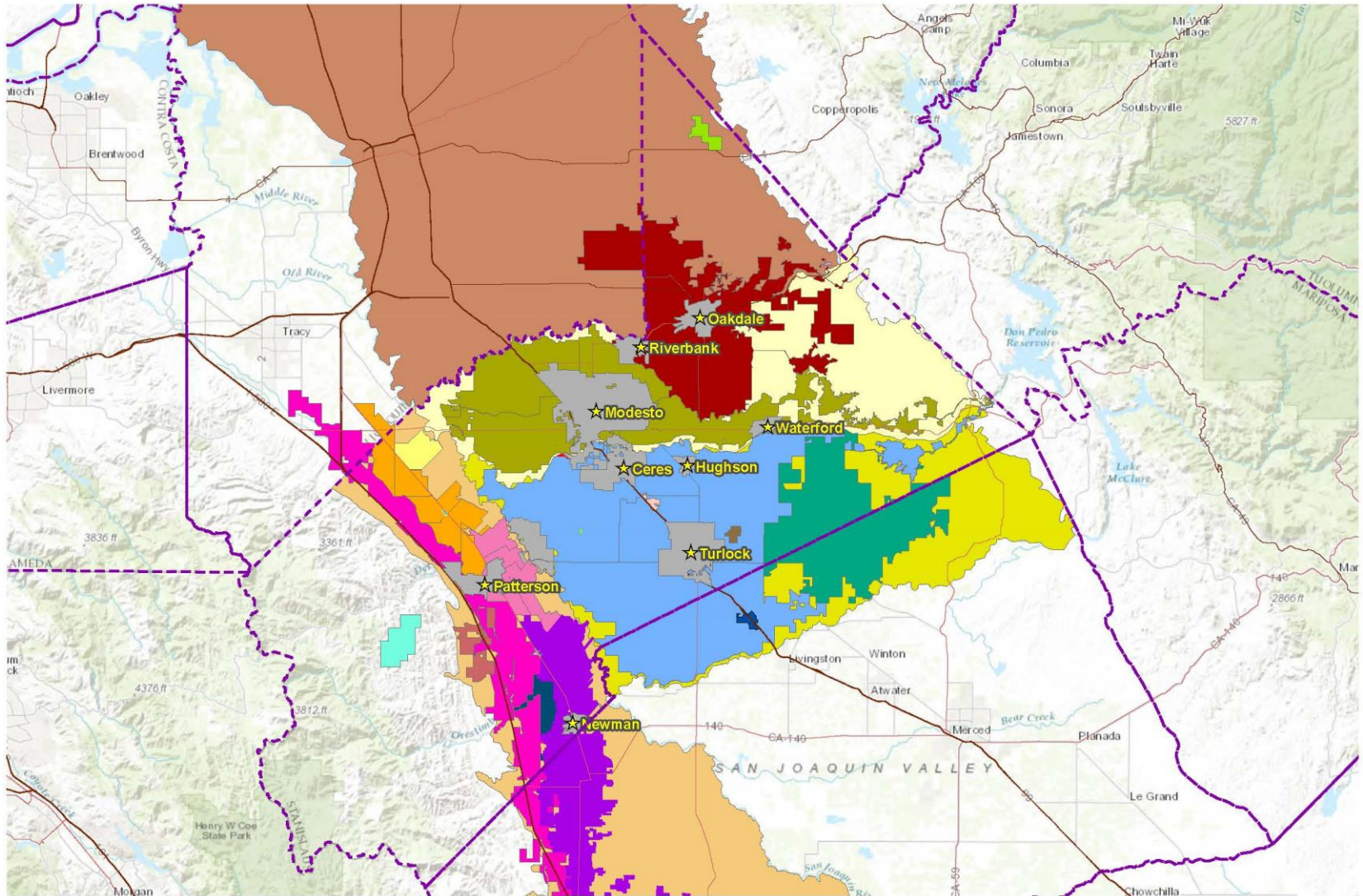
North
Central
Region
Office

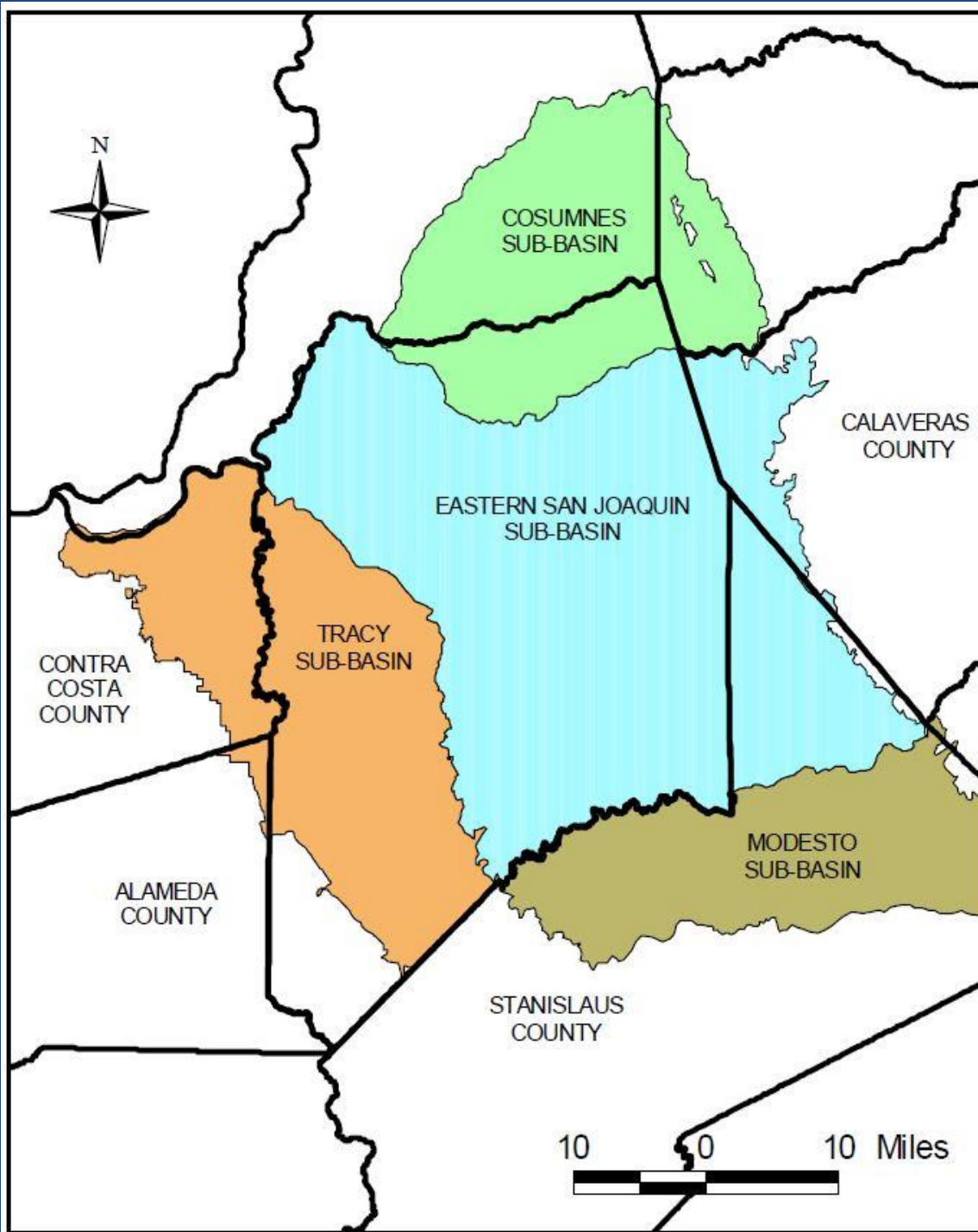
South
Central
Region
Office

Stanislaus County Groundwater Basins

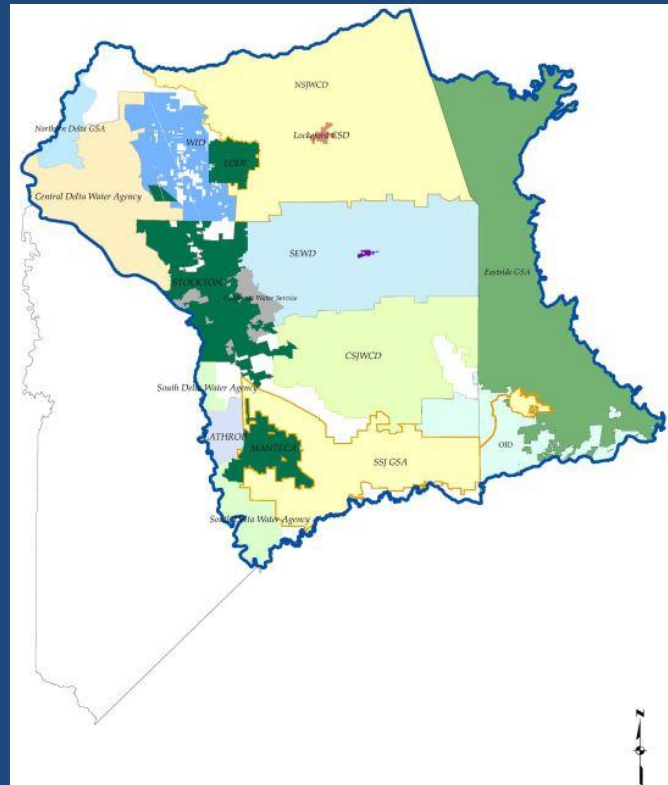


Stanislaus County Water Agencies





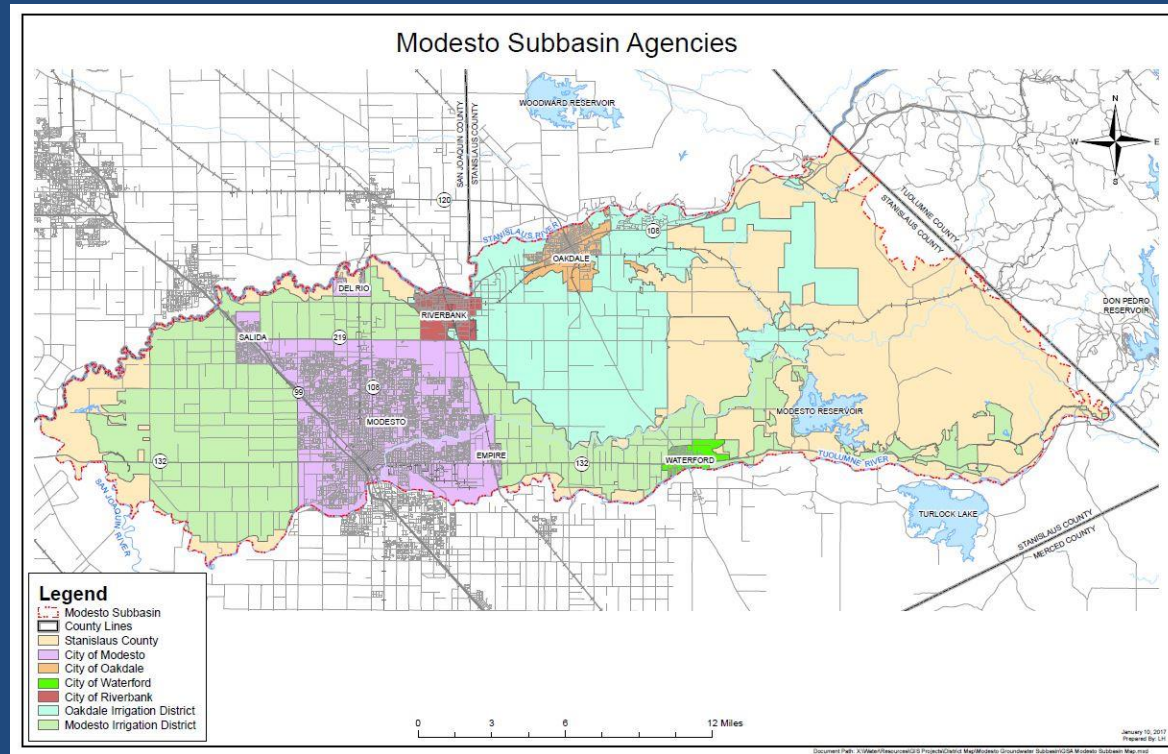
Eastern San Joaquin Groundwater Basin GSAs



Eastern San Joaquin Subbasin GSAs

- 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

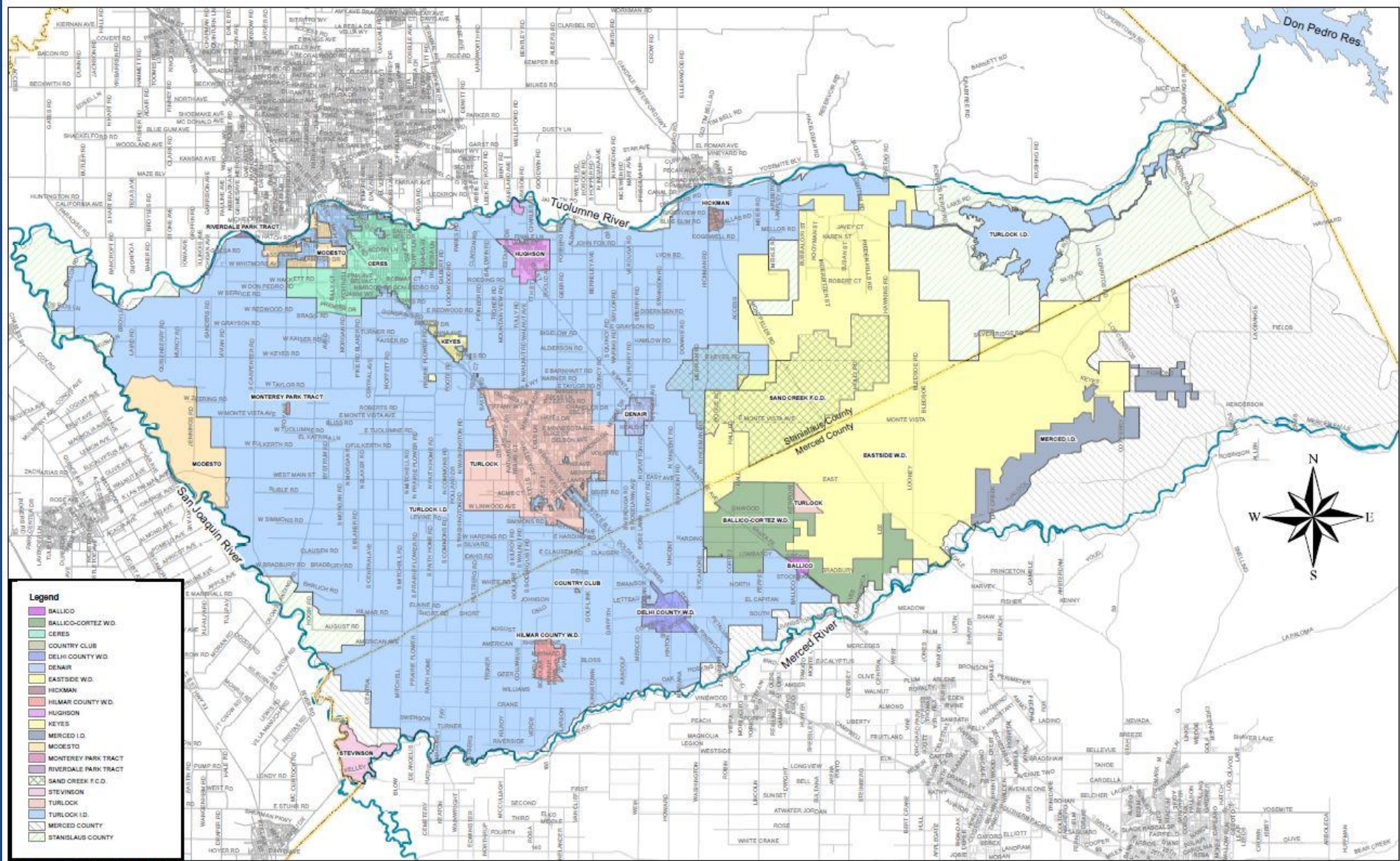
Oakdale ID

Modesto ID

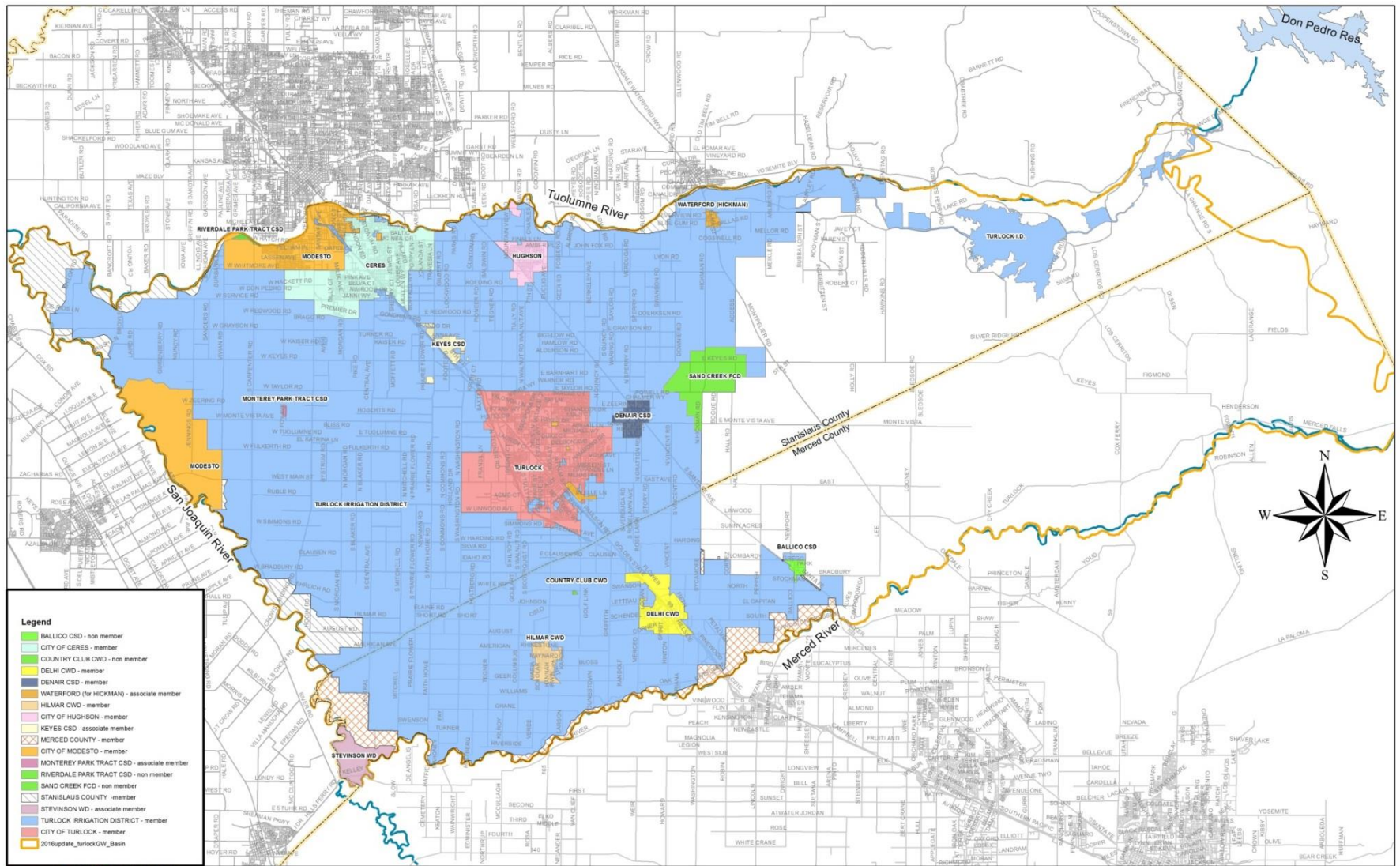
Stanislaus County

*Tuolumne County**

*Formed separate GSA and “linked”
to STRGBA via separate Cooperation
Agreement with Stanislaus County



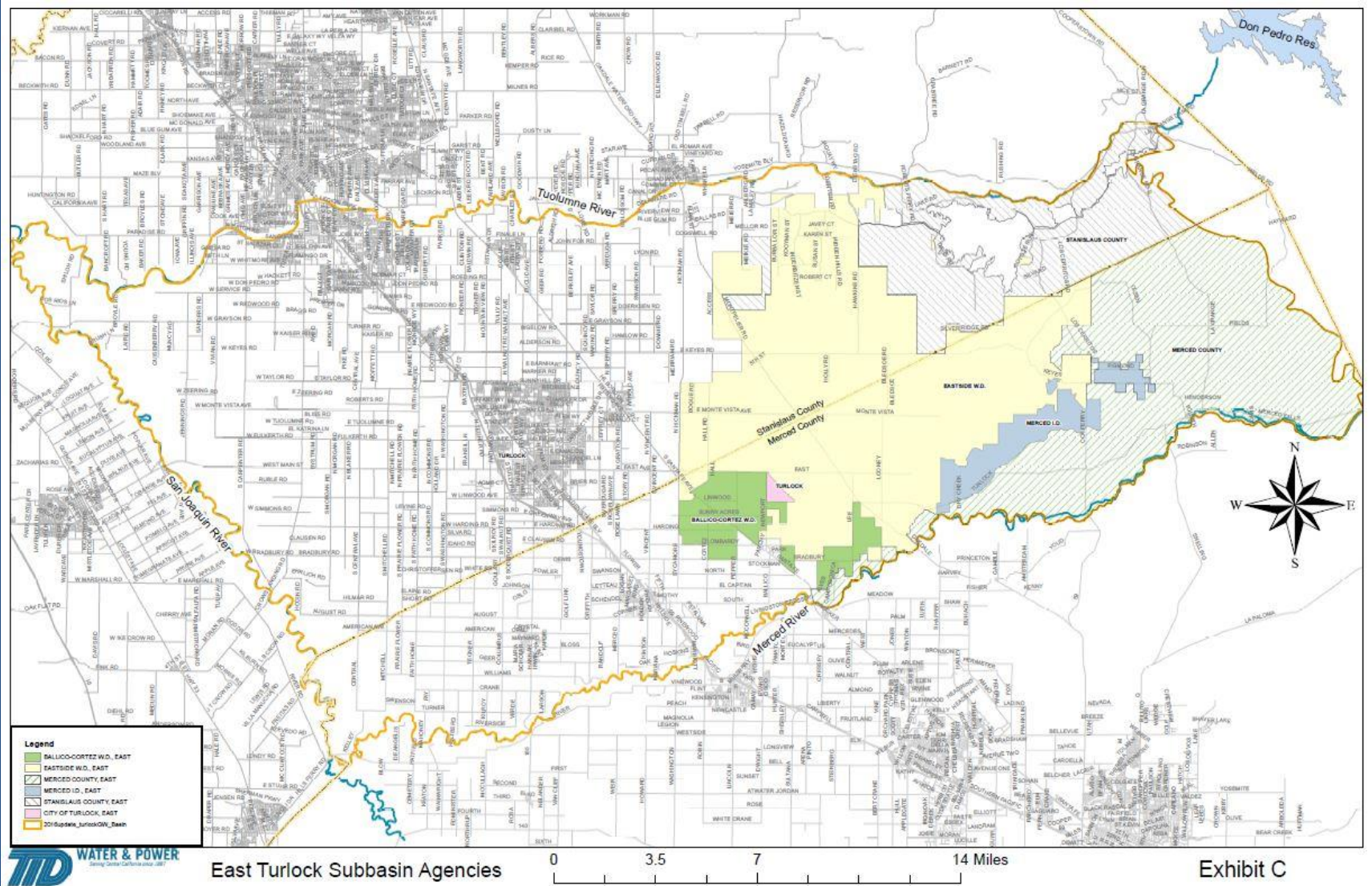
West Turlock Subbasin GSA



West Turlock Subbasin GSA

- City of Ceres
 - City of Hughson
 - City of Modesto
 - City of Turlock
 - Denair CSD
 - Associate Members:
 - Keyes CSD
 - City of Waterford
- Turlock Irrigation District
Merced County
Stanislaus County
Delhi County Water District
Hilmar County Water District

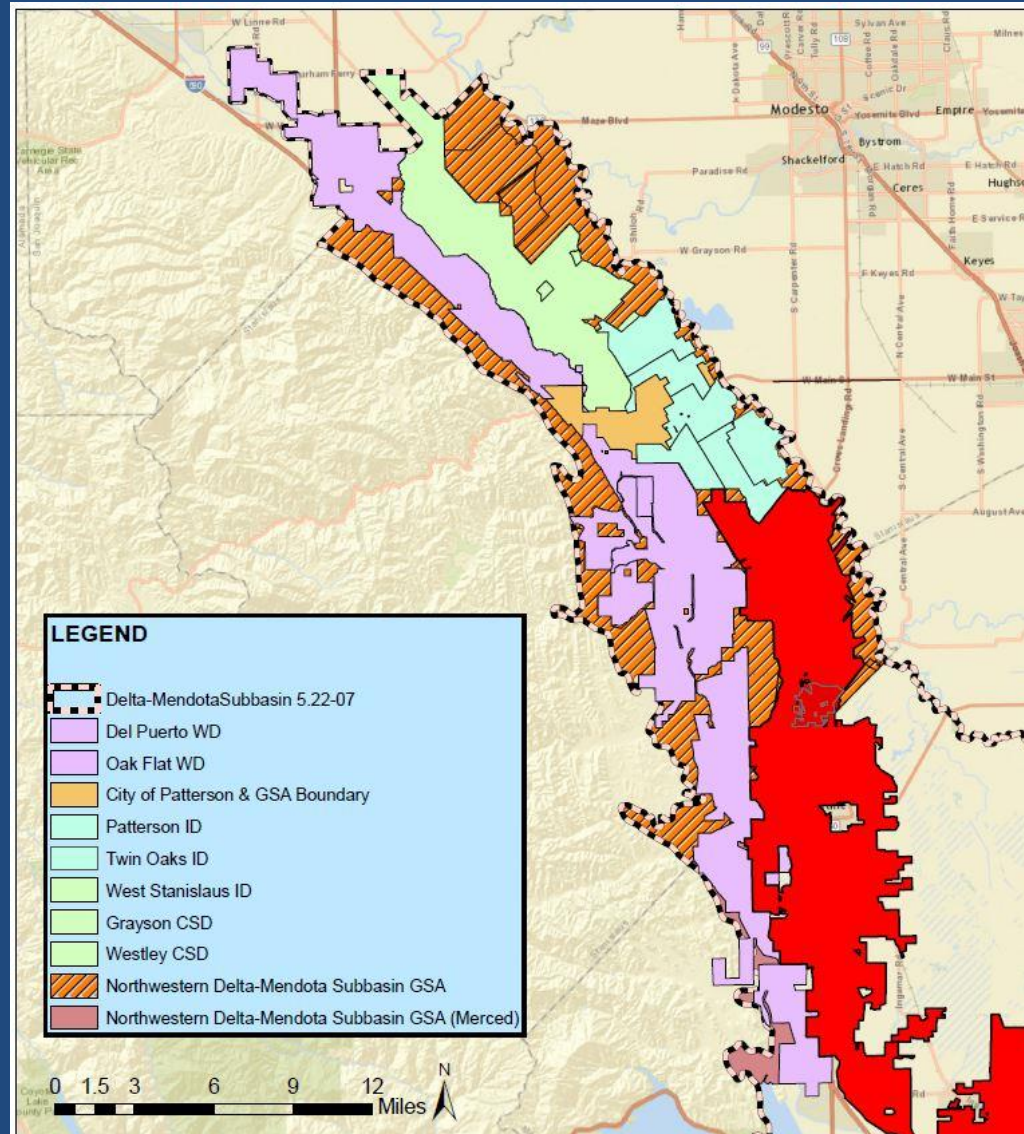
East Turlock Subbasin GSA



East Turlock Subbasin GSA

- Eastside WD
 - Ballico-Cortez WD
 - Merced Irrigation District
 - Merced County
 - Stanislaus County
 - City of Turlock *
-
- * Associate Member

Delta-Mendota Subbasin –Northern Group



Delta-Mendota Groundwater Basin – Northern Group GSAs

City of Patterson

Del Puerto WD

West Stanislaus ID

Patterson ID

Northwestern Delta-Mendota GSA

Merced & Stanislaus Counties

Summary of GSA Formation and GSP Preparation

Delta-Mendota Subbasin

Multiple-GSAs/Multiple GSPs (Formal “Coordination Agreement”)
Northwestern Delta-Mendota GSA (MOU)

Turlock Subbasin

2 GSAs/1 GSP
East Turlock & West Turlock GSA (JPAs)

Modesto Subbasin

1 GSA/1 GSP
Stanislaus & Tuolumne Rivers Groundwater Basin Association GSA (MOU)

Eastern San Joaquin Subbasin

Multiple-GSAs/1 GSP
Eastside San Joaquin Groundwater Authority (JPA)

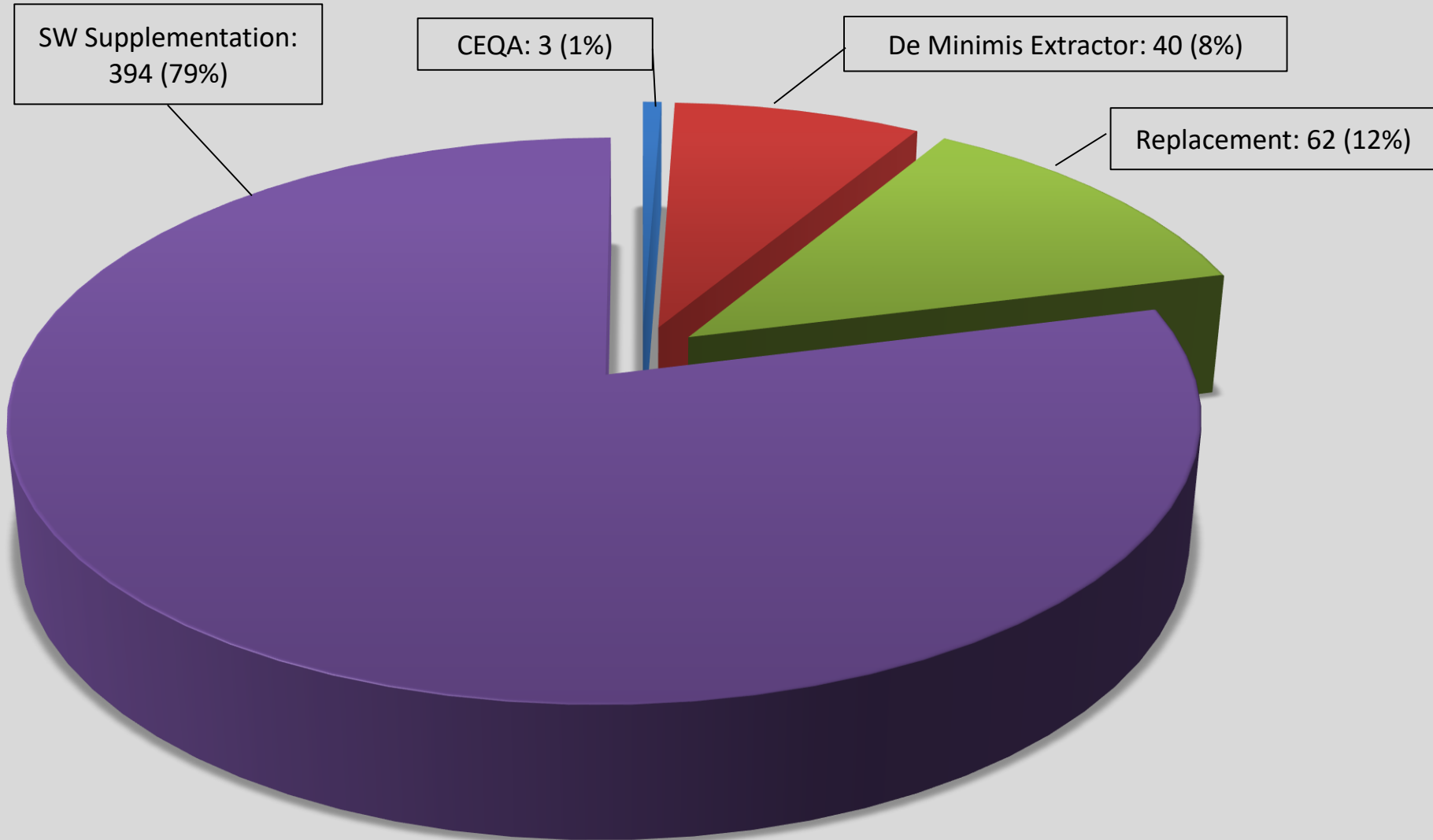
Current Activities

- All GSAs made June 30, 2017 deadline
- Each of the four basins gained approval for State grants
 - Eastern San Joaquin & Delta-Mendota = \$1.5 million
 - Modesto & Turlock = \$ 1.0 million
 - GSPs are under preparation (**Substantial Compliance**)
 - Land Use/ Water Use data collection (baseline, existing and forecasted)
 - Basin Hydrologic Conceptual Model (HCM) and cross-sections
 - Various groundwater models being used for Water Budget
 - Project List (managed recharge) and Potential Funding
- Public Draft released mid-summer 2019 for ESJ and D-M basins
- Individual agency review and approval targeted for Fall 2019
- Meet January 2020 filing deadline with DWR (Mod/Tur => 2 years later)

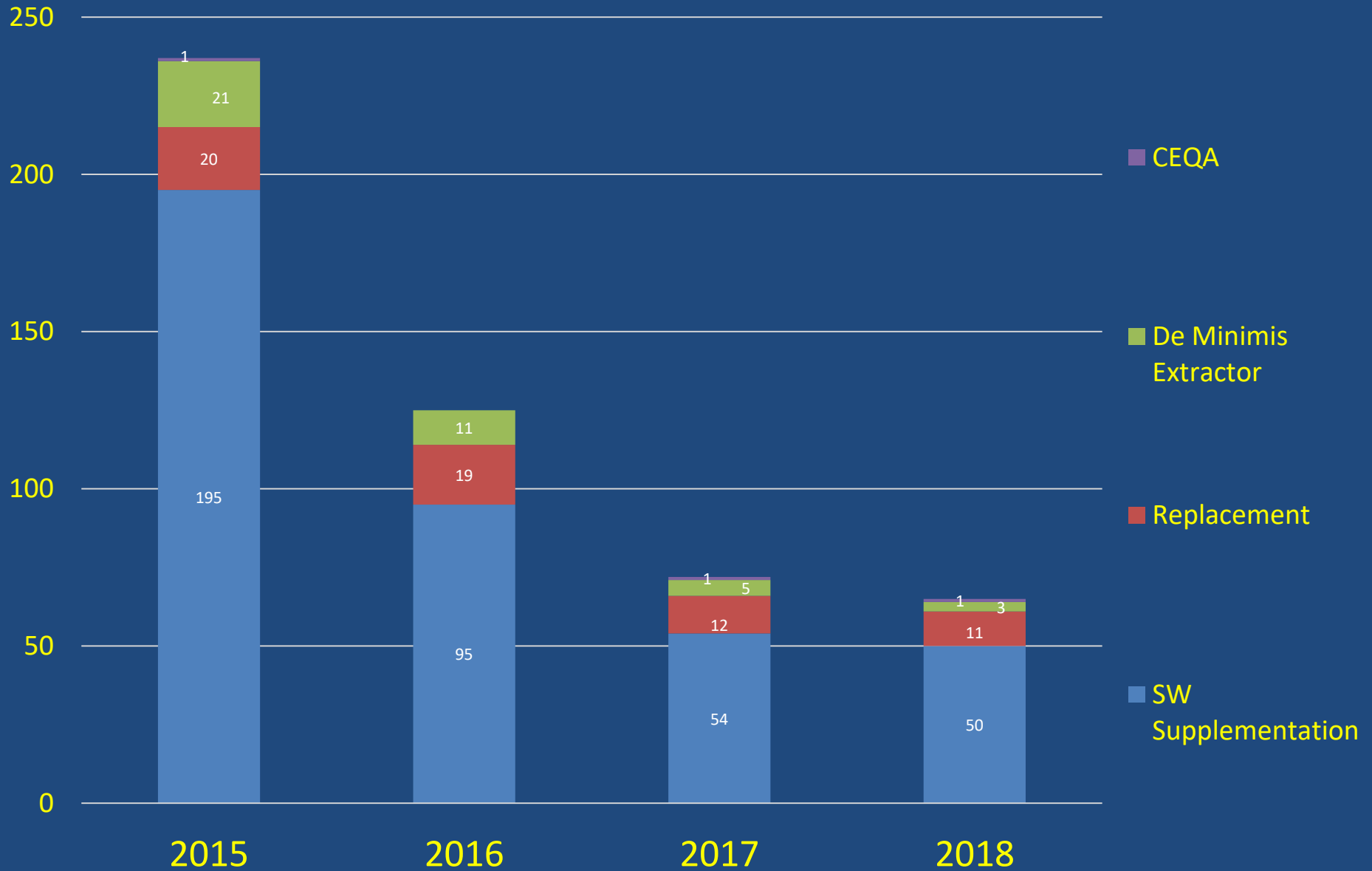
Questions & Discussion

Item X: Stanislaus County Well Permitting Program Activity Status

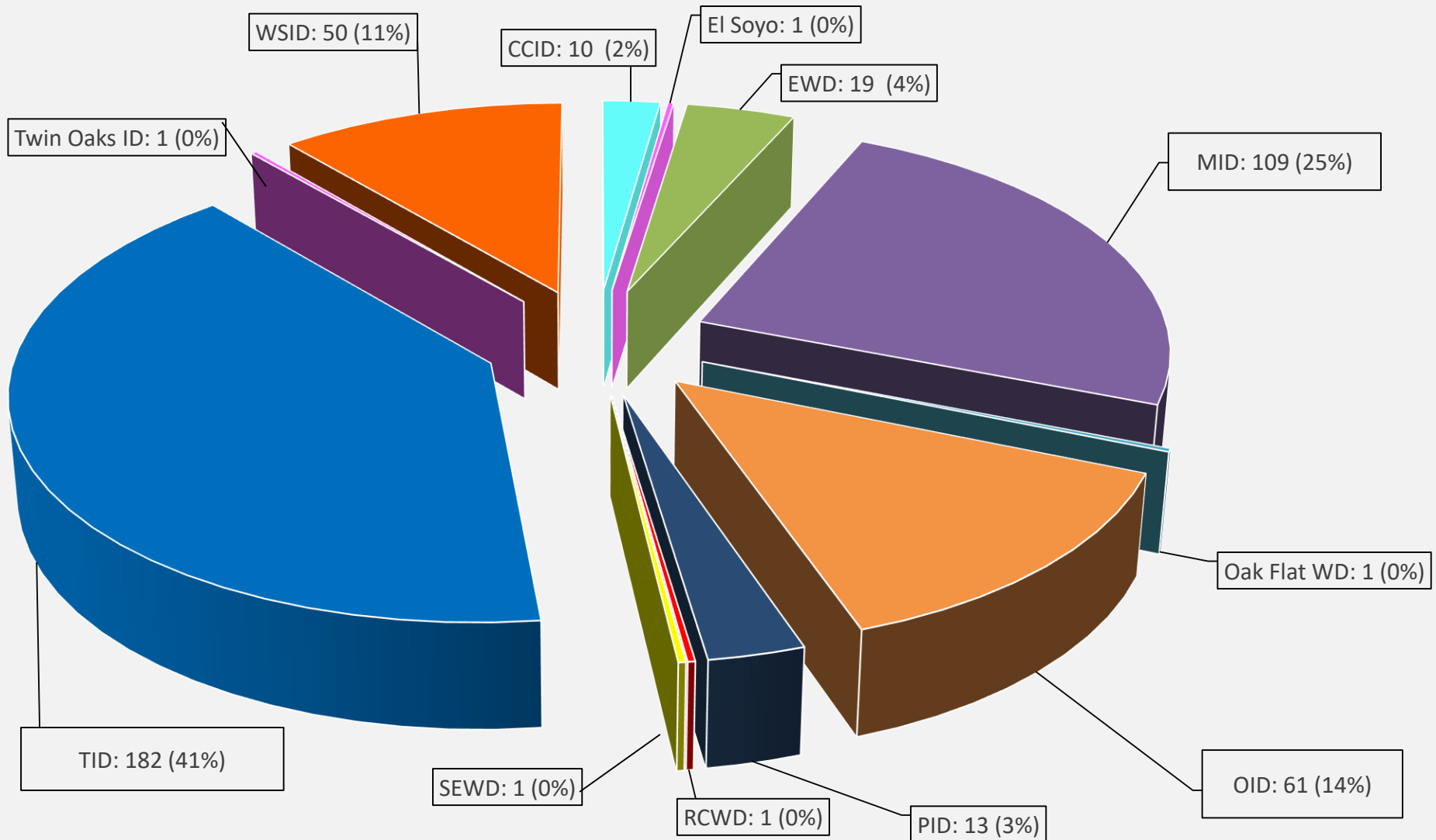
**Stanislaus County
Agricultural-Irrigation Water Well Permits Issued
by Category
January 2015 - December 2018**



Breakdown by Year



Public Water Agencies 2015 - 2018



**Rain &
Snow**



Apathy

**The
Hydro-
Illogical
Cycle**



Drought



Panic
&

Concern



Awareness



Questions & Discussion