



LODI CITY COUNCIL

Carnegie Forum
305 West Pine Street, Lodi

"SHIRTSLEEVE" SESSION

Date: April 8, 2014

Time: 7:00 a.m.

For information regarding this Agenda please contact:

Randi Johl-Olson

City Clerk

Telephone: (209) 333-6702

***NOTE:** All staff reports or other written documentation relating to each item of business referred to on the agenda are on file in the Office of the City Clerk, located at 221 W. Pine Street, Lodi, and are available for public inspection. If requested, the agenda shall be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof. To make a request for disability-related modification or accommodation contact the City Clerk's Office as soon as possible and at least 24 hours prior to the meeting date.*

Informal Informational Meeting

A. Roll Call by City Clerk

B. Topic(s)

B-1 Receive Information Regarding Surface Water Treatment Plant First Year Operation and the Drought Water Supply (PW)

C. Comments by Public on Non-Agenda Items

D. Adjournment

Pursuant to Section 54954.2(a) of the Government Code of the State of California, this agenda was posted at least 72 hours in advance of the scheduled meeting at a public place freely accessible to the public 24 hours a day.

Randi Johl-Olson
City Clerk



**CITY OF LODI
COUNCIL COMMUNICATION**

TM

AGENDA TITLE: Receive Information Regarding Surface Water Treatment Plant First Year Operation and the Drought Water Supply

MEETING DATE: April 8, 2104 (Shirtsleeve Session)

PREPARED BY: Public Works Director

RECOMMENDED ACTION: Receive information regarding Surface Water Treatment Plant first year operation and the drought water supply.

BACKGROUND INFORMATION: The City of Lodi Surface Water Treatment Plant (SWTP) completed the first full year of operation in 2013. Council will be presented a summary of the first year operation and performance. Additionally, a discussion of the current drought conditions and the expected short-term impacts to the City of Lodi's water supply and the SWTP operation will be discussed.

FISCAL IMPACT: Not applicable.

FUNDING AVAILABLE: Not applicable.

F. Wally Sandelin
Public Works Director

Prepared by Larry Parlin, Deputy Public Works Director – Utilities

FWS/LP/pmf

APPROVED: _____
Stephen Schwabauer, Interim City Manager



Surface Water Treatment Plant Operation Review and Water Supply During Drought



**Lodi City Council Shirtsleeve Meeting
April 8, 2014**



Plant Performance

- Full 6,000 AF allotment used to produce drinking water in 2013.
- 97 percent recovery of reclaimed treatment process raw water.
- Annual O&M Costs within budget.
- Plant staffing at levels approved by City Council.



Plant Performance

- Implemented Hach WIMS data management system.
- Plant complied with all CDPH regulations and reporting requirements.
- CDPH approved unmanned operation on February 19, 2014.
- Recent well data shows increase in static groundwater levels after first year of plant operation.



Plant Performance

- Plant shift operators have all obtained Grade T3 operator certification.
- Chief Plant Operator obtained Grade T4 operator certification.
- Implemented Cartegraph program for asset management of plant equipment.
- Plant recognized with engineering project awards from APWA and ACEC.



Project Budget

- Original Project Budget \$36.5M
- Approximately \$2.0M Under Budget
- Projected Year 1 O&M Budget \$1.4M
- Year 1 O&M Expenses \$1.35M



Major Challenges

- Public Acceptance of Surface Water
- Blending Water Supplies
- 24 Hour/day Staffing
- Minimum Membrane Experience
- Initial Batch Operation
- Implementing Unmanned Operation



Immediate Challenges

- Drought - Short Term Water Availability
- Blending Water Supplies
- Optimizing Unmanned Operation

Questions?

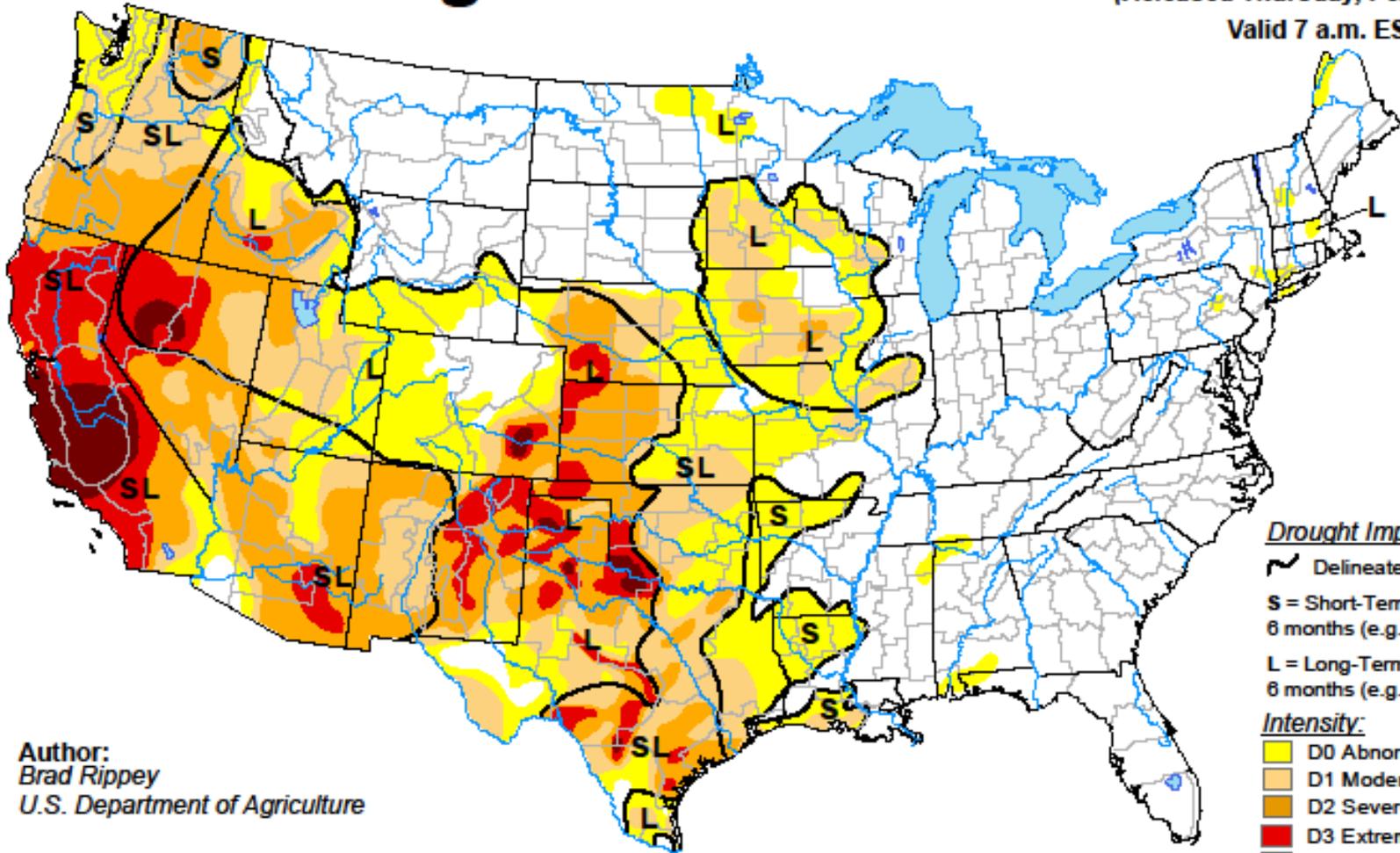




The Current Drought

U.S. Drought Monitor

February 25, 2014
(Released Thursday, Feb. 27, 2014)
Valid 7 a.m. EST



- Drought Impact Types:**
- ~ Delineates dominant impacts
 - S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
 - L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
- Intensity:**
- Yellow: D0 Abnormally Dry
 - Light Orange: D1 Moderate Drought
 - Orange: D2 Severe Drought
 - Red: D3 Extreme Drought
 - Dark Red: D4 Exceptional Drought

Author:
Brad Rippey
U.S. Department of Agriculture

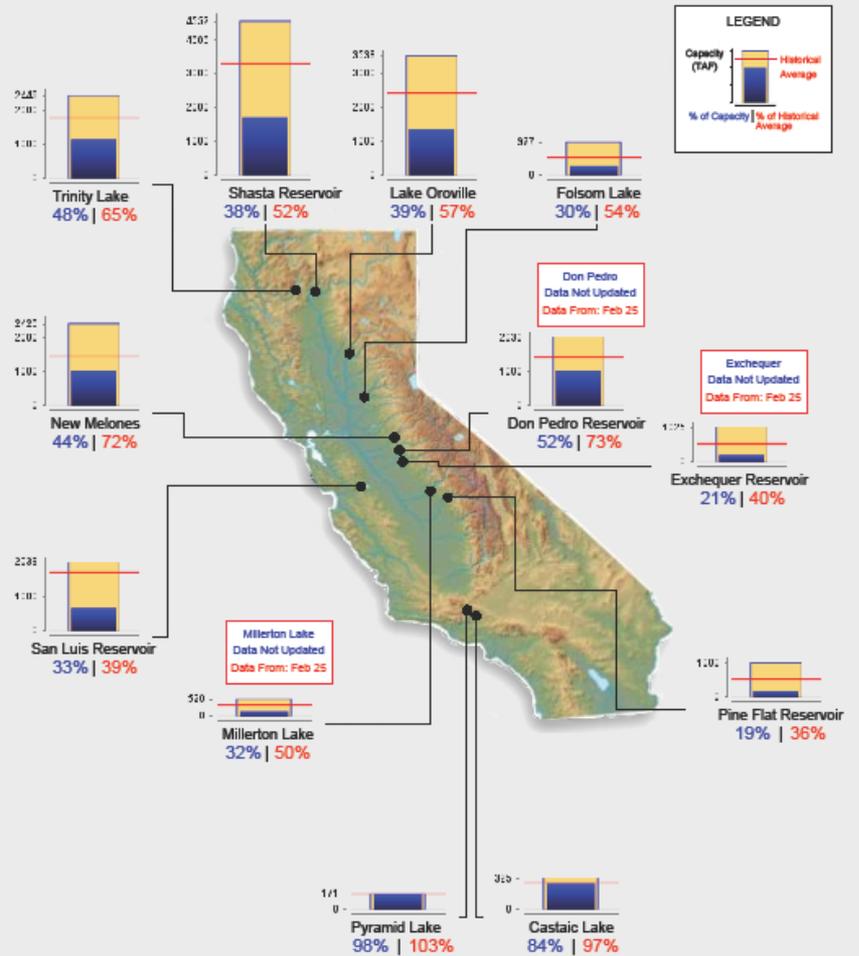


The Current Drought

Reservoir Conditions

Ending At Midnight - February 26, 2014

CURRENT RESERVOIR CONDITIONS





San Joaquin County Data

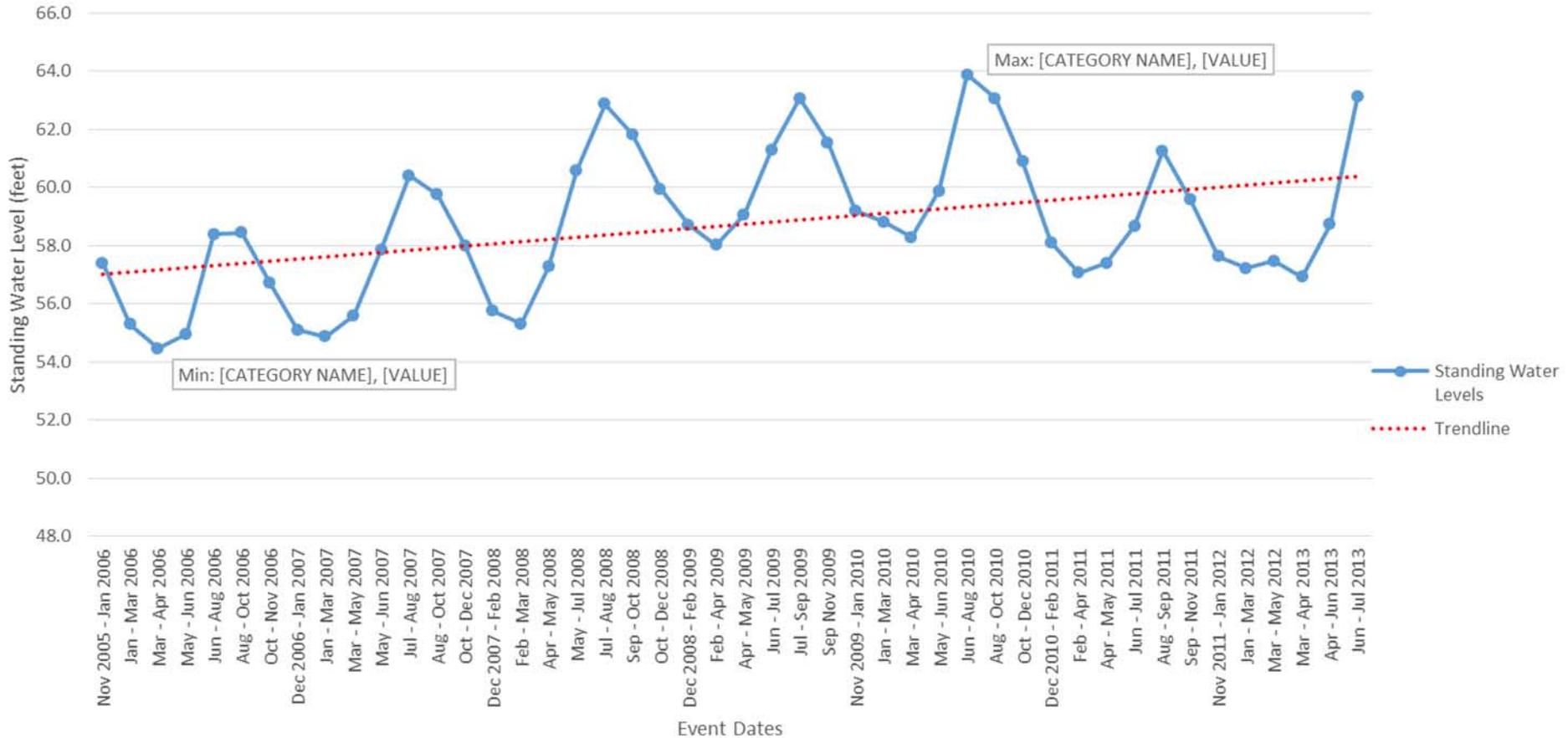
San Joaquin County Historical and Projected Water Demand

<u>Year</u>	Estimated Demand (af)		Estimated Demand (af)	
	(A)	% of Avg	(B)	% of Avg.
1976	2,544,298			
1982	1,953,869			
1988	3,440,611			
1996	2,345,626			
Avg. 1976-1996	2,571,101		2,571,101	
2005	2,138,438	83%	1,946,853	76%
2010	1,821,179	71%	1,654,105	64%
2035	1,817,669	71%	1,656,830	64%



Lodi Groundwater Supply

City of Lodi Ground Water Levels





Mokelumne Watershed

MOKELUMNE BASIN PRECIPITATION 4-STATION AVERAGE

- Season To-date 19.64 (inches)
- Average To-date 39.45 (inches)
- % of Average 50%

3/24/14



Drought Impact on Lodi

- WID has pre-1914, senior water rights.
- WID has reduced the surface water allocation for Lodi from 5,000 AF to 3,000 AF for the period March 1 through October 15, 2014.
- Winter water allocation of 1,000 AF will be delivered.



Drought Impact on Lodi

- Annual Lodi water use is approximately 15,000 AF.
- Existing 28 wells have adequate capacity to satisfy all water demands.
- Lodi is well positioned to survive a prolonged dry period.
- Water conservation should become a way of life for everyone in California.

Questions
&
Comments?

