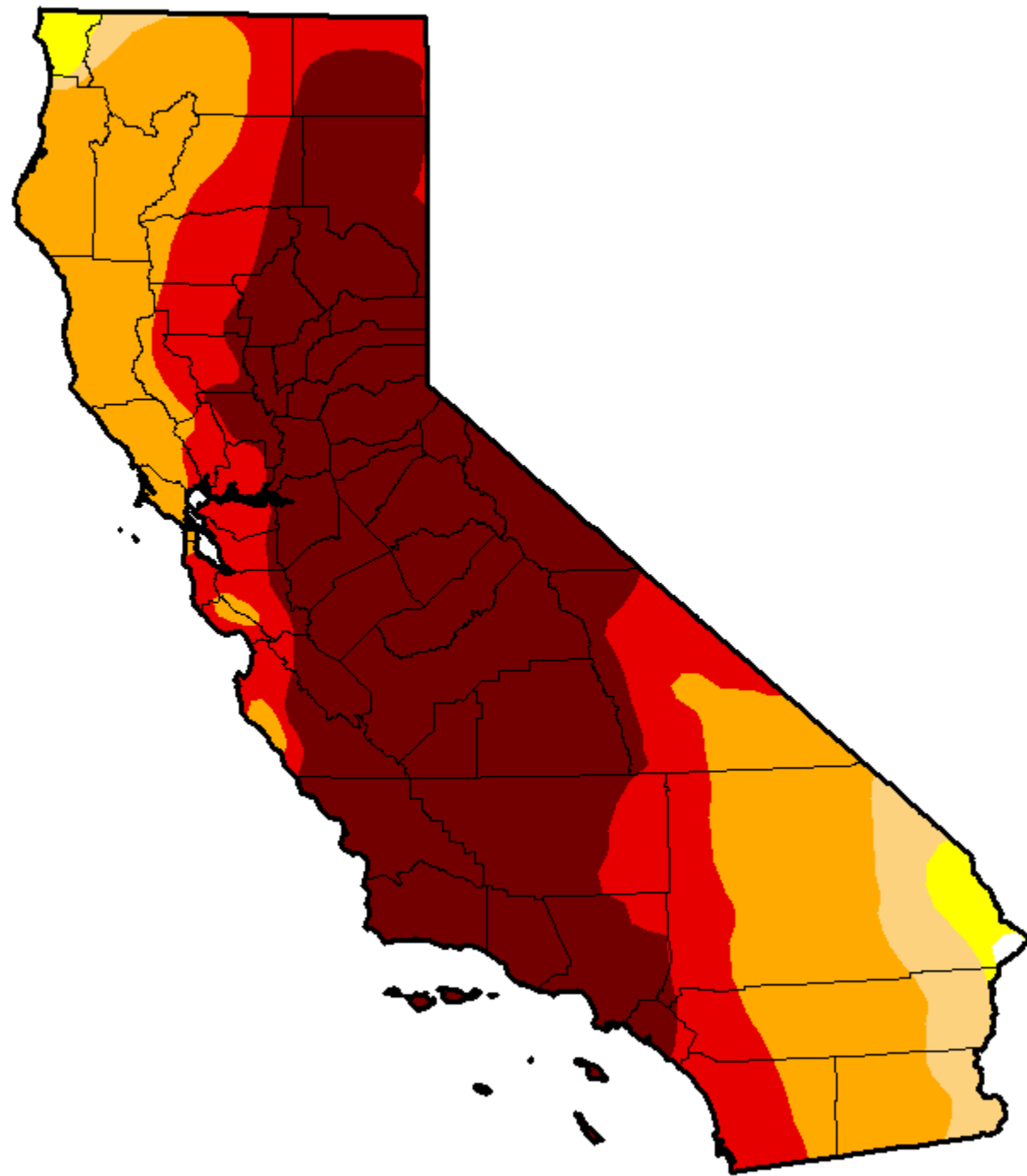




# THE CONQUEST FOR AND HISTORY OF “CALIFORNIA WATER” PAST-PRESENT-FUTURE

Ara Azhderian  
Water Policy Administrator  
May 18, 2016









# NOAA

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2015-2016](#)

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## Strong El Niño sets the stage for 2015-2016 winter weather

October 15, 2015

Forecasters at [NOAA's Climate Prediction Center](#) issued the [U.S. Winter Outlook](#) today favoring cooler and wetter weather in Southern Tier states with above-average temperatures most likely in the West and across the Northern Tier. This year's El Niño, among the strongest on record, is expected to influence weather and climate patterns this winter by impacting the position of the Pacific jet stream.

"A strong El Niño is in place and should exert a strong influence over our weather this winter," said Mike Halpert, deputy director, NOAA's Climate Prediction Center. "While temperature and



A wide-angle photograph of a city skyline at night, with numerous skyscrapers and city lights. The sky is dark and dramatic, with several bright, jagged lightning bolts striking down from the clouds. The overall mood is one of a powerful storm.

# EL NIÑO PREPAREDNESS CHECKLIST

Are you ready for a potentially wet and stormy winter? The time to prepare for heavy El Niño rainfall is now. Homeowners should take the necessary precautions to minimize property damage, and Mercury Insurance has compiled a checklist to help ensure you've got everything covered. Remember, while you can't control the weather, you can prepare for it.





NADA

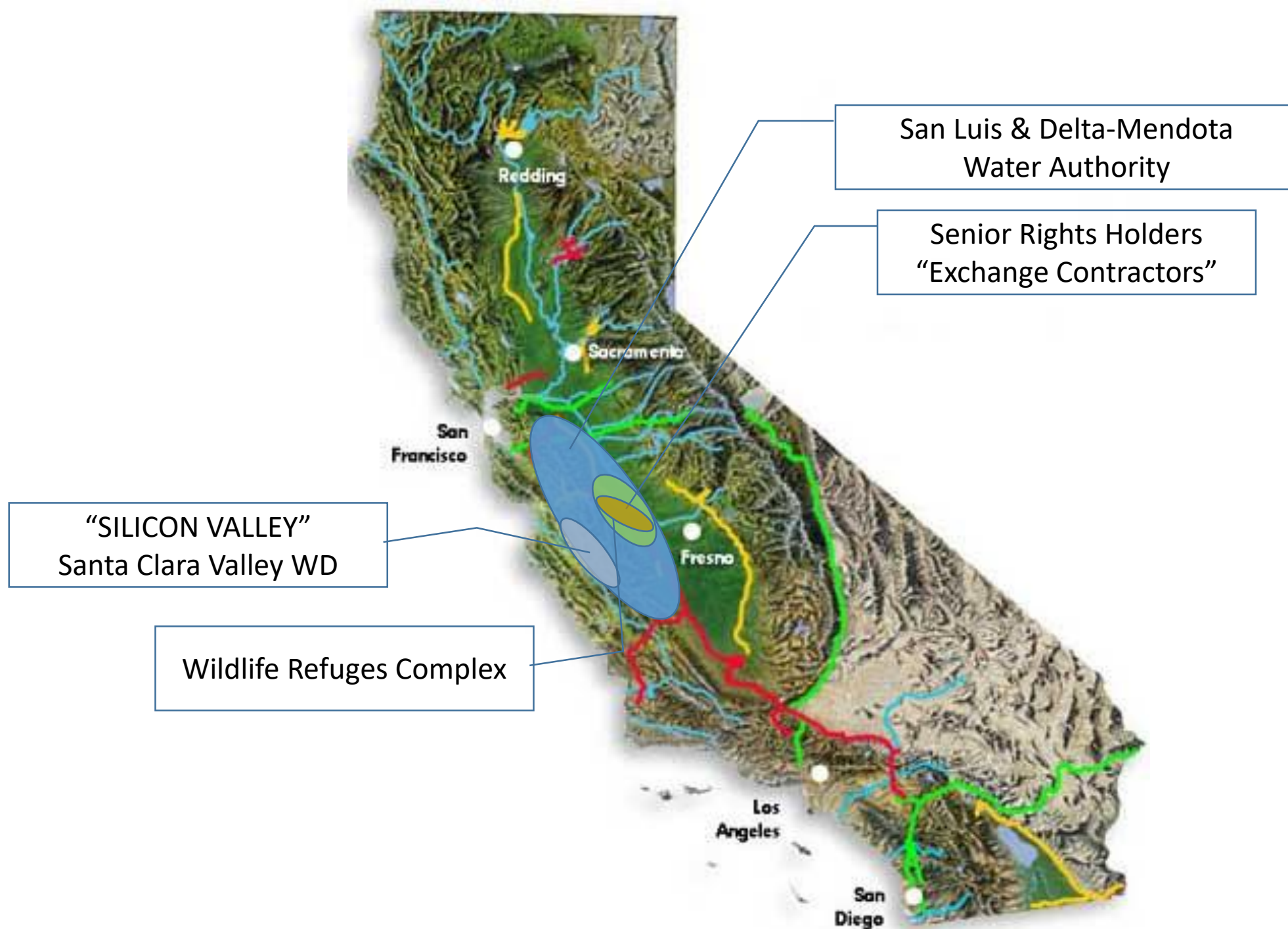


# Nunes Blog

## No April Fool's Day Joke: Westside Gets 5% Allocation

Washington, April 1, 2016 | 0 comments





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**SILICON VALLEY**

A man and a woman are walking on a paved path next to a grassy area. The woman, on the left, has long dark hair and is wearing a black zip-up jacket over a light blue top and dark pants. The man, on the right, is wearing a white button-down shirt, khaki pants, and a black messenger bag. He is holding a camera up to his eye. In the background, there is a modern building with large glass windows and some trees. A large white sign is in the foreground on the left.

Google

Drive Safely



2200 Mission College Blvd.





invent







Photos by Gary Zahm



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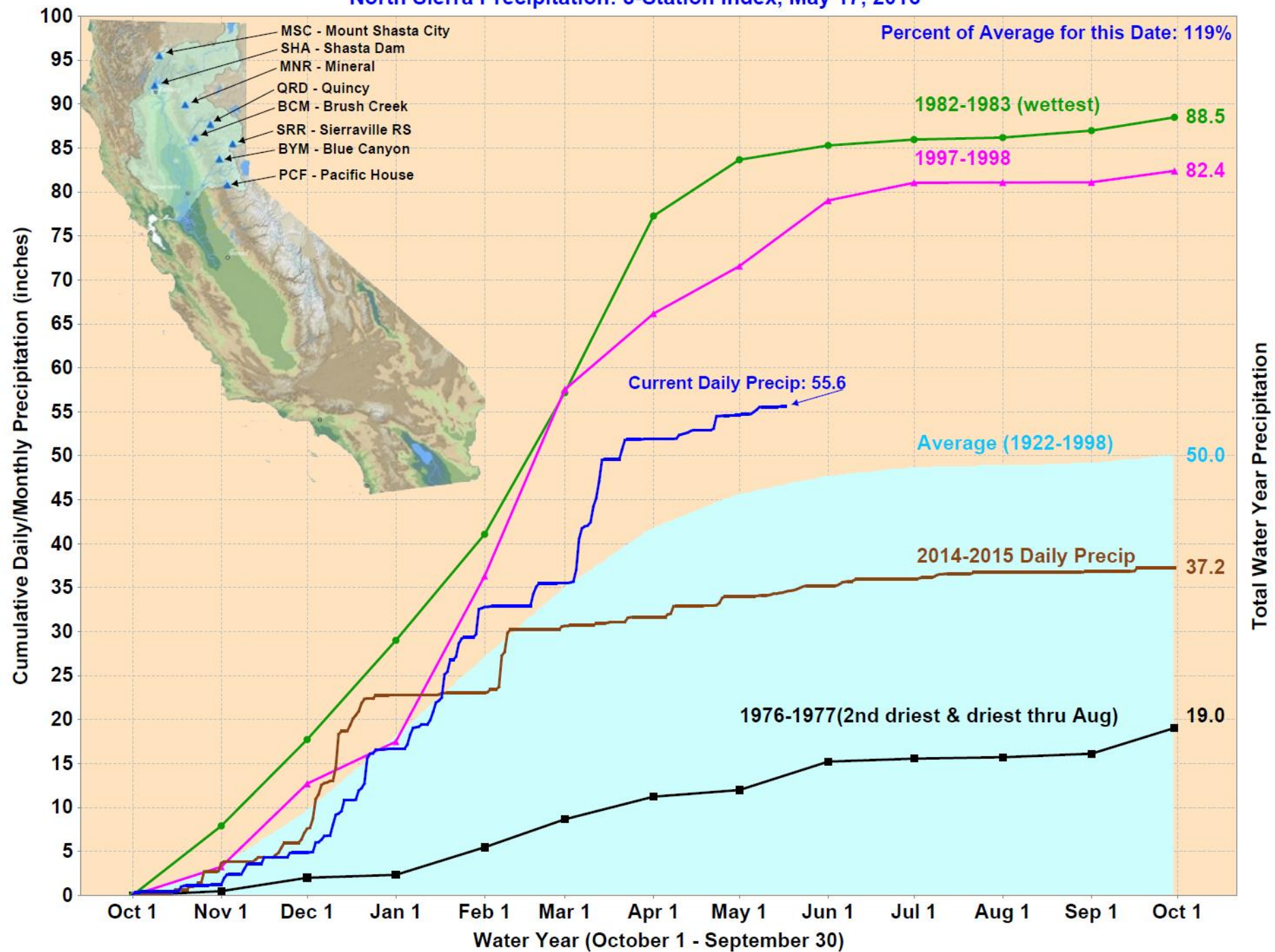




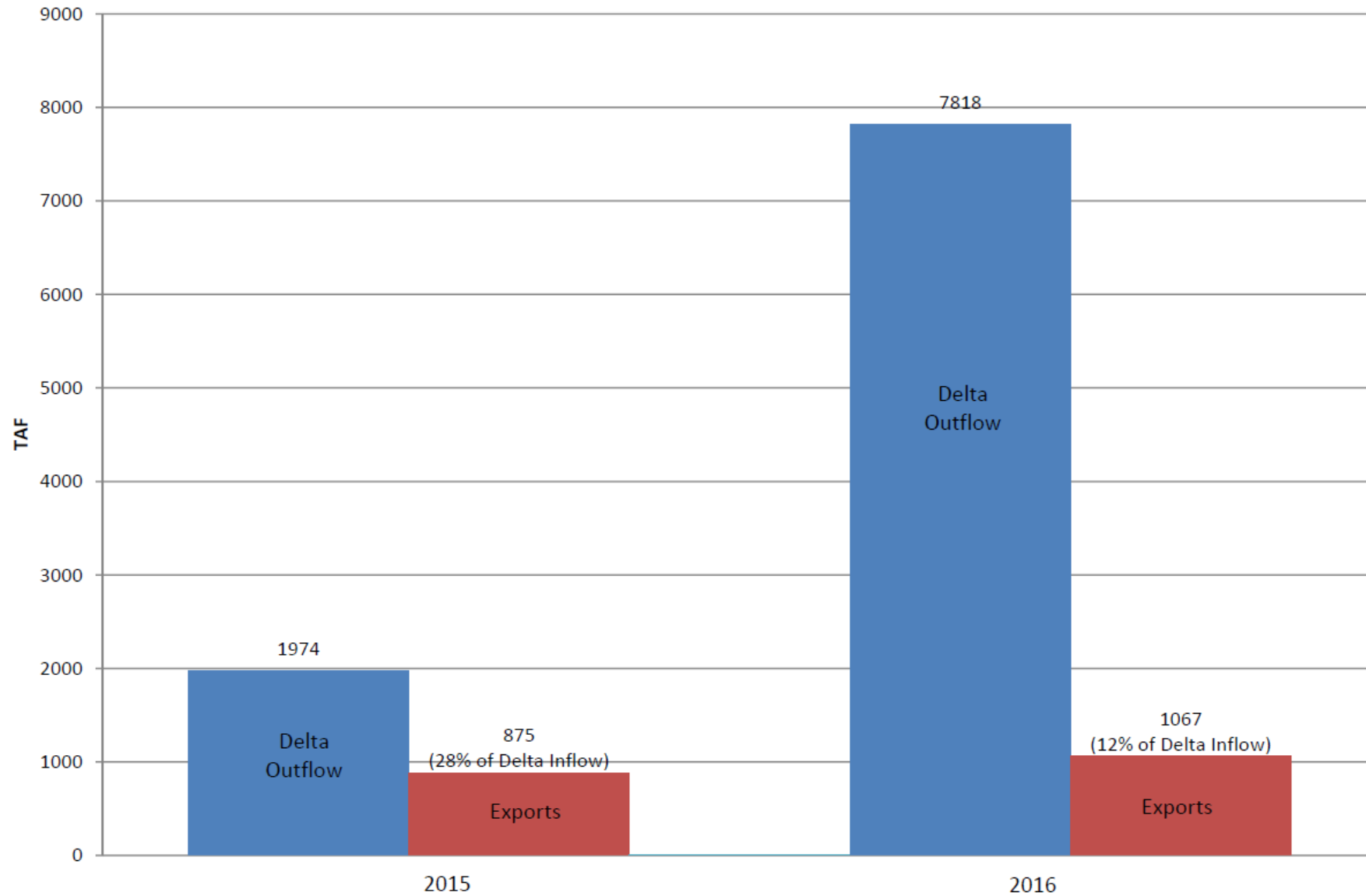




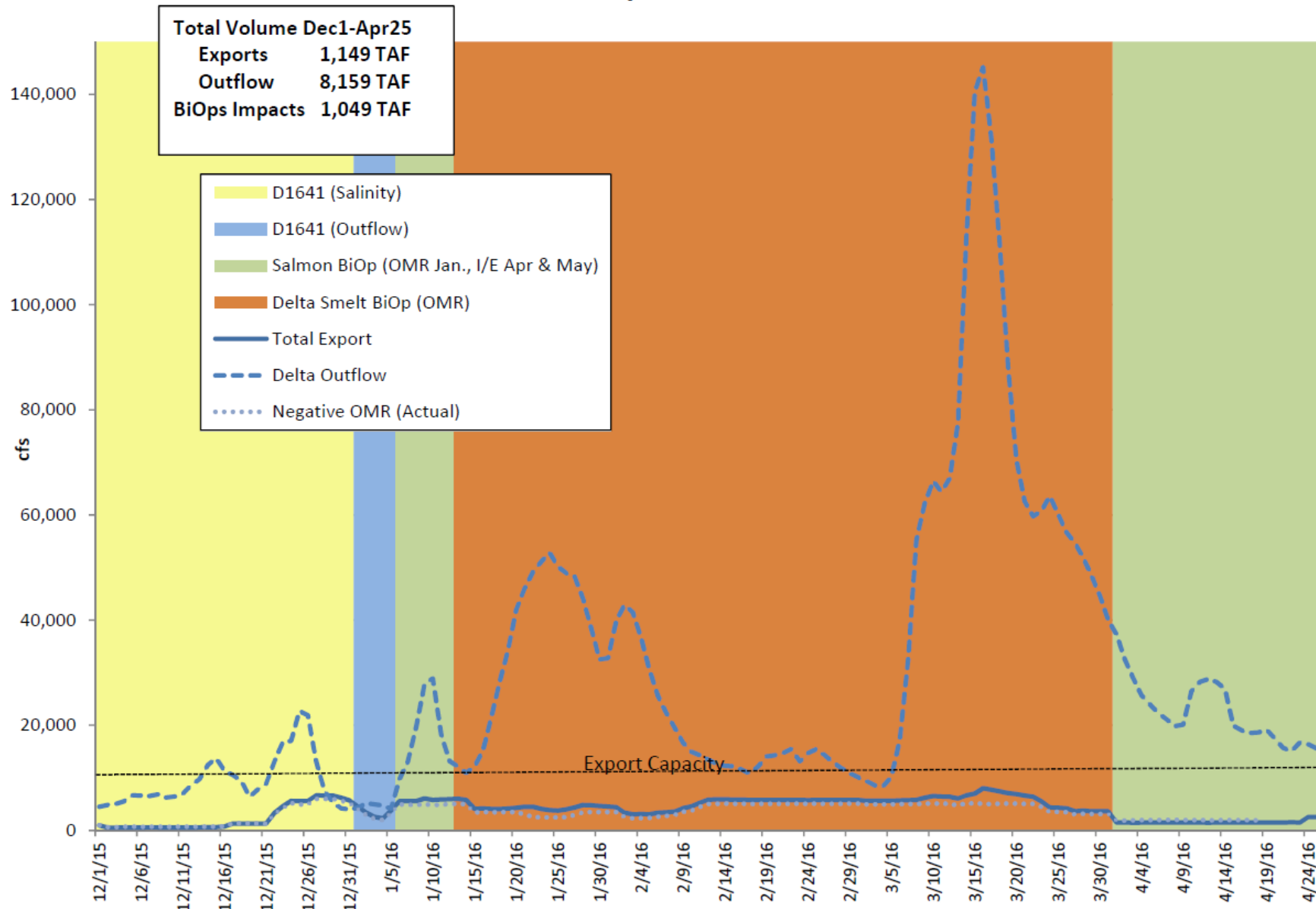
# North Sierra Precipitation: 8-Station Index, May 17, 2016



## Delta Outflow and Export 2015 vs 2016 (Jan1-May9)

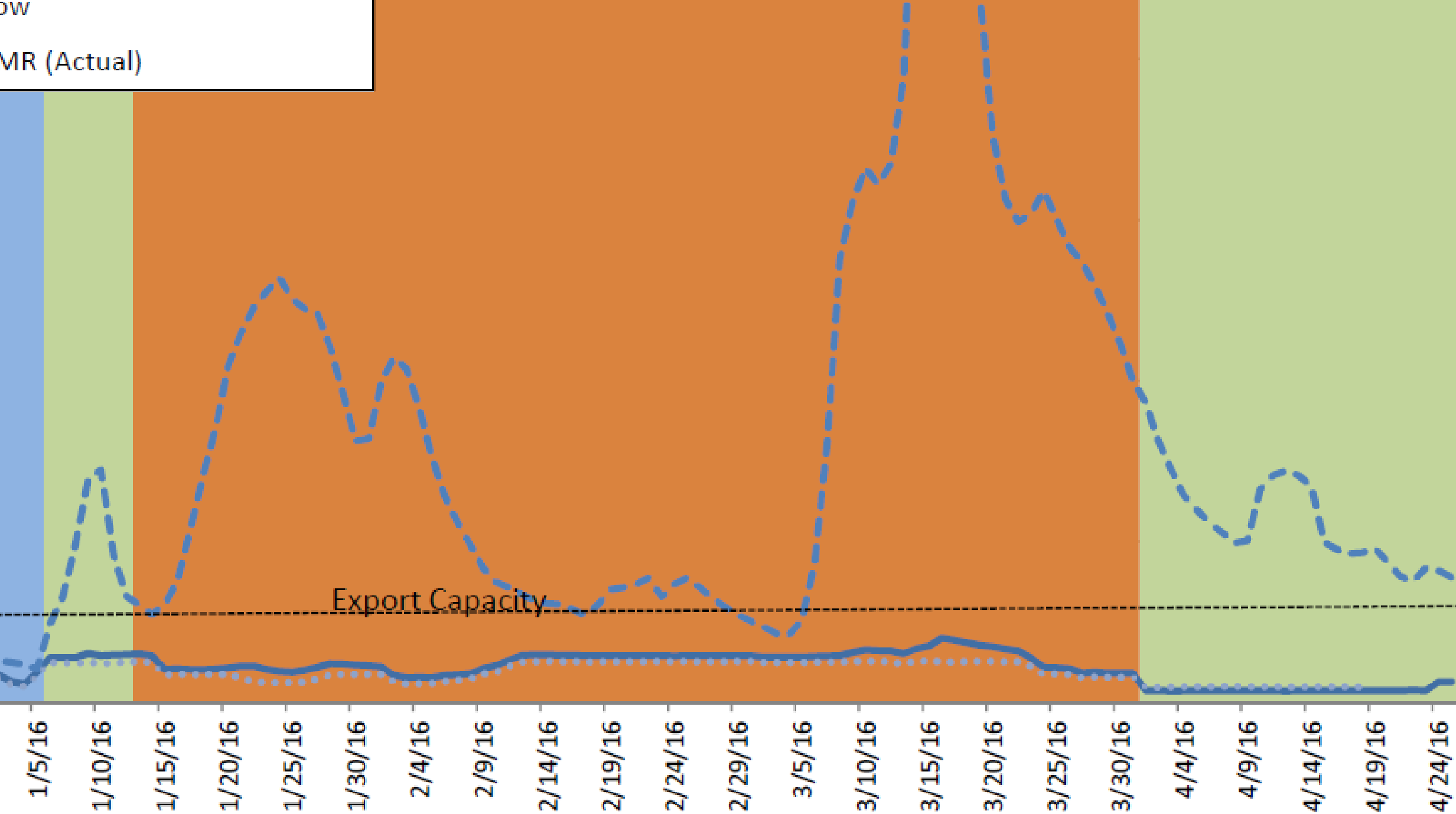


## 2016 Export Constraints

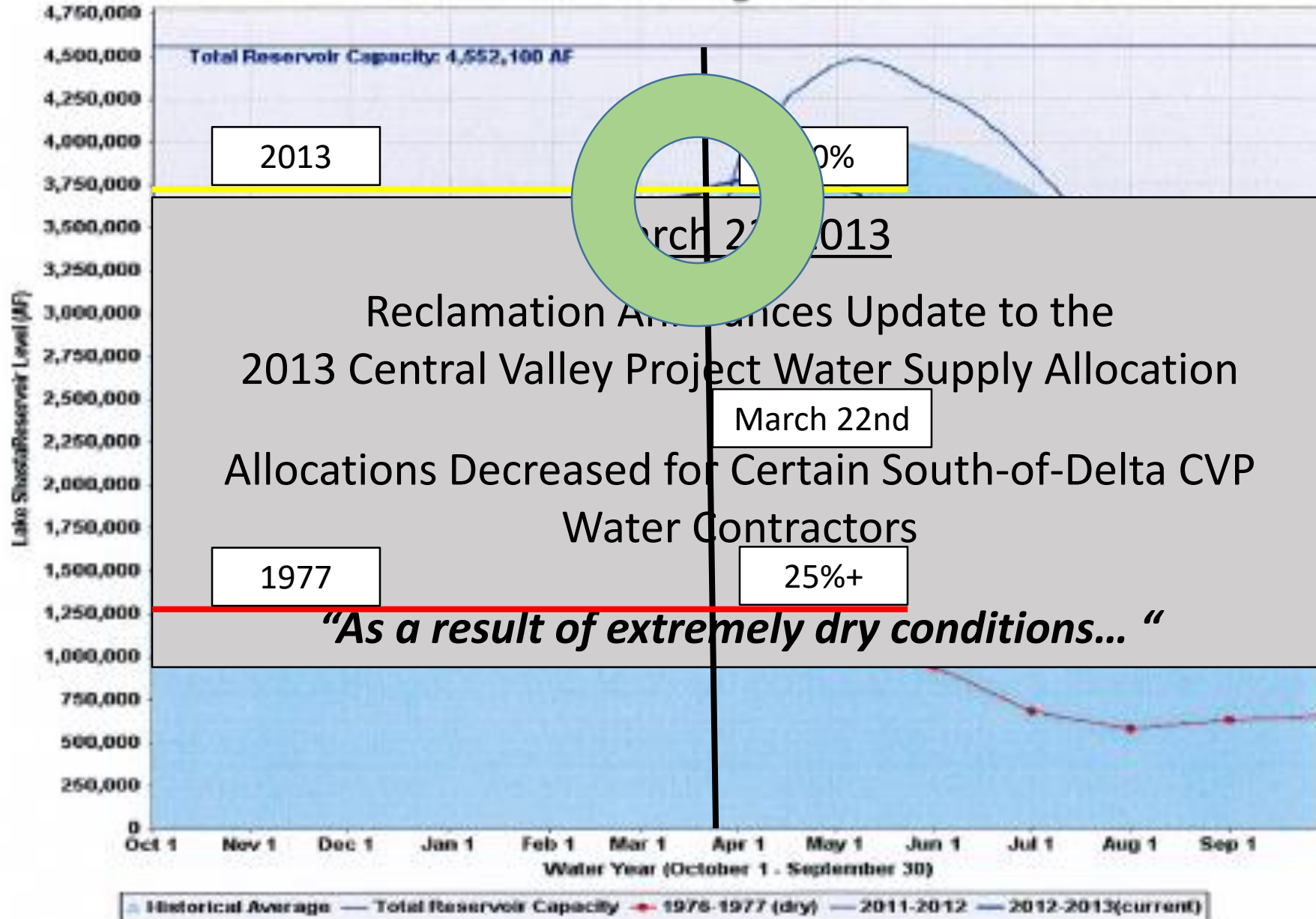


OW

MR (Actual)



## Lake Shasta Storage Levels





DESERT-RANCH  
H.J. MERSDORF PROP  
• HAVE FAITH IN GOD  
AND U.S. RECLAMATION



# Delta Ecosystem Management

Control Panel 1970-to date



The Real Control Panel

# The Real Control Panel



2016 - Dr. Cliff Dahm reporting “take home messages” from the Delta ISB’s “Flows and Fishes in the Sacramento-San Joaquin Delta” report before the State Water Board:

“The first one is that moving forward, we really need to focus more on cause and effect relationships, not just correlations, because correlations can sometimes be spurious,”

## 2006 - Review Panel Report: San Francisco Estuary Sacramento-San Joaquin Delta Interagency Ecological Program on Pelagic Organism Decline:

“More generally, in using historical data to infer the effect of an environmental variable on a biological population, it is important to go beyond simply attempting to establish a correlation between the environmental variable and abundance. Instead, inference should be based on an understanding of the direct effect of the environmental variable on population dynamics (e.g., on one or more vital rates) and how this direct effect would be reflected in abundance.

## 1996 – The Interagency Ecological Program (IEP) and U.S. Geological Service regarding the “so-called fish-X2 relationships”:

- IEP: “However, the salinity standard [X2] is a rather crude management tool. More precise influence on these species in terms of quantity or timing of outflow would be desirable for efficient management. In addition, the potential influence of alternative or complementary management actions is difficult to determine from these relationships”
- USGS: “Significant scientific uncertainty remains, however, about the specific linkages between salinity and fish species abundance and about how the aquatic ecosystem within the Delta and Suisun Bay might respond to changes in water flow management. Information is also needed about the relationships between river flow and ,...,the effects of contaminants both in the water, and associated with suspended and bottom sediments.”

# 2009 Delta Reform Act and Plan

- Calls for “comprehensive planning”:
  - Restore “large” areas of interconnected habitats;
  - Establish migratory corridors;
  - Reduce harm by invasive species;
  - Restore Delta flows and channels;
  - Improve water quality.

- Water Code 85302(e)

“

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**FAILURE IS SIMPLY  
THE OPPORTUNITY  
TO BEGIN AGAIN,  
THIS TIME MORE INTELLIGENTLY.**

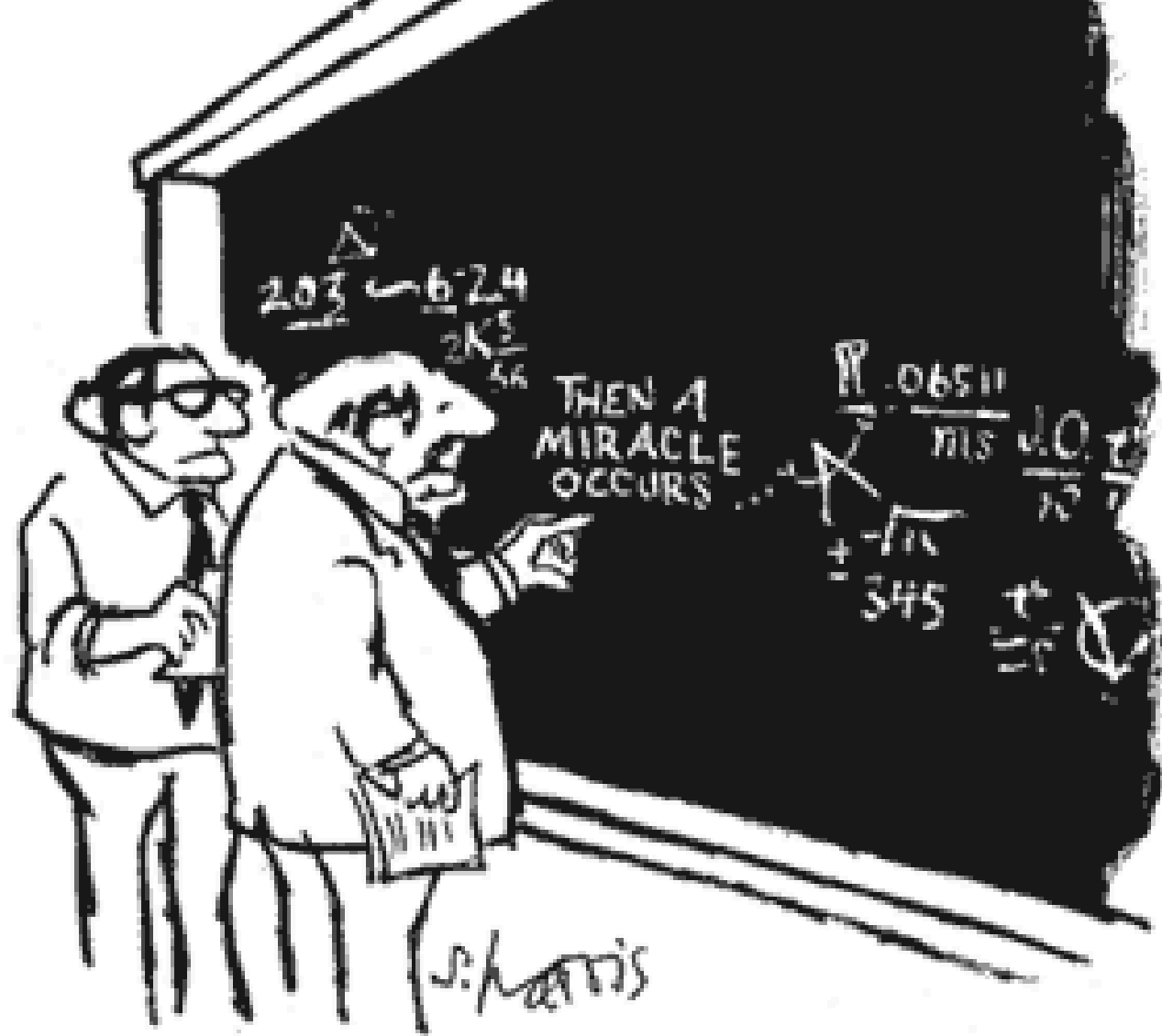
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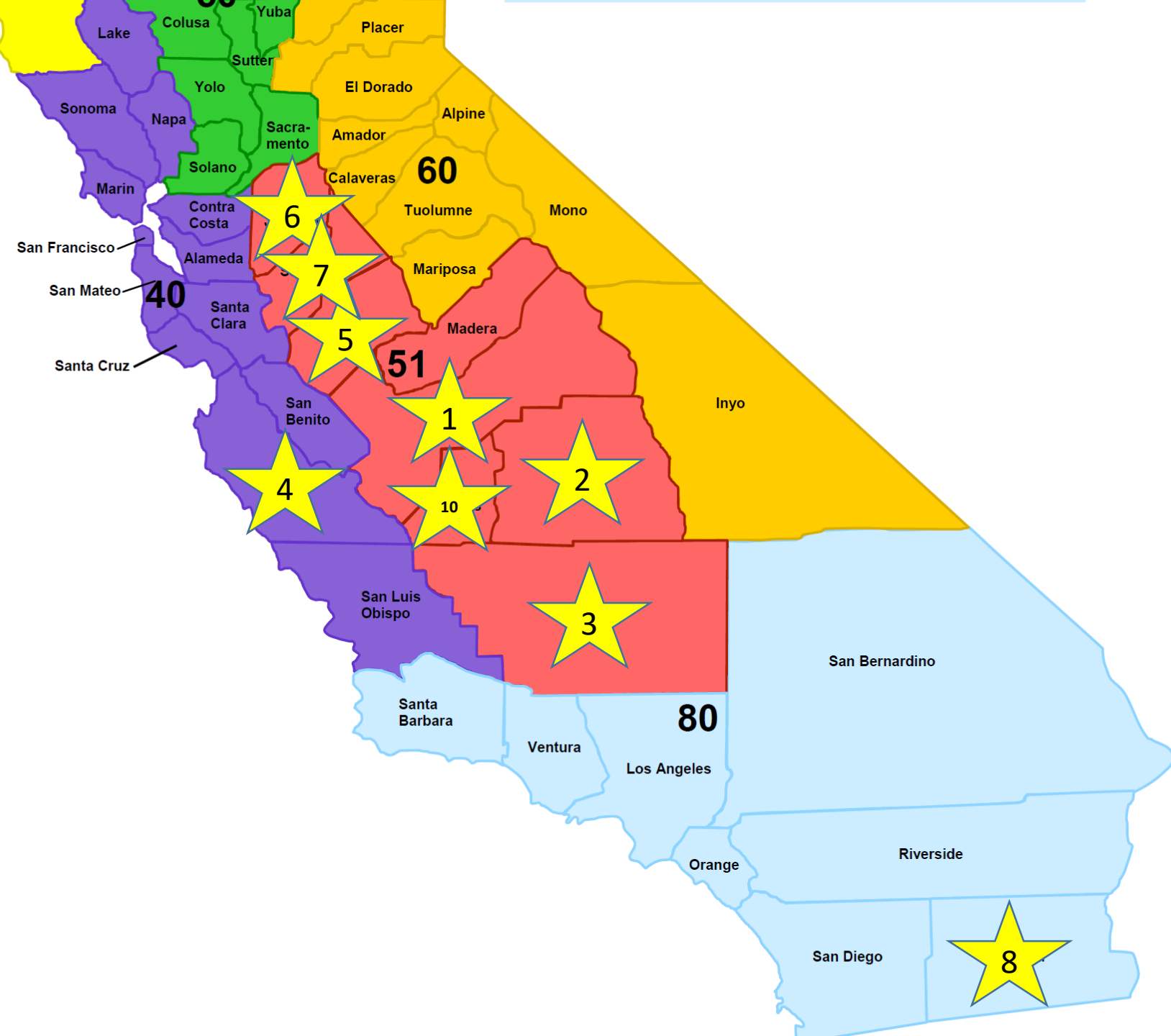


# Key Improvements Going Forward:

- Evaluate the current regulatory regime;
- Integrate scientific efforts;
- Enhance science connections;
- Improve monitoring, timely analysis of data, and synthesis of research;
- TRY SOMETHING DIFFERENT!



"I THINK YOU SHOULD BE MORE EXPLICIT HERE IN STEP TWO."



# 4 IN 5 AMERICANS

SUPPORT RAISING THE FEDERAL MINIMUM WAGE

# TO \$10.10 AN HOUR



NOW IT'S TIME FOR CONGRESS TO ACT.

[illegible]



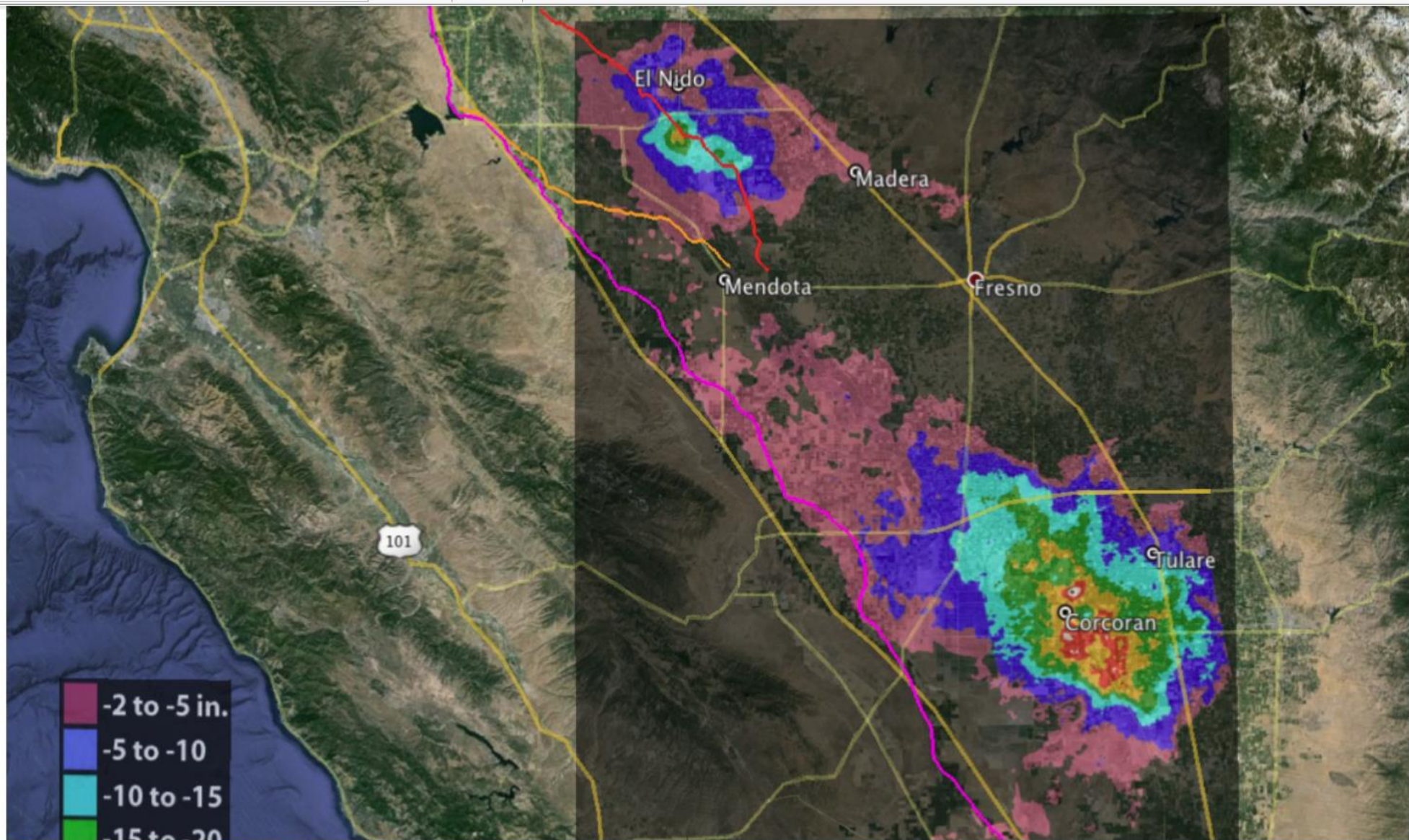
# Food Safety











# Thank you for this opportunity

## Contact Information

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## Delta Smelt

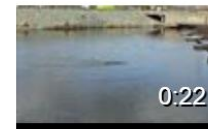
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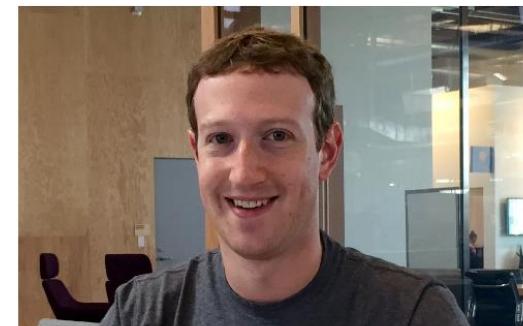
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