

# Sonoma County Water Agency

## Building Climate Resiliency in the Russian River



California Drought Forum

May 15, 2014

SONOMA  
C O U N T Y  
W A T E R



A G E N C Y

# About the Sonoma County Water Agency



Lake Mendocino



Lake Sonoma



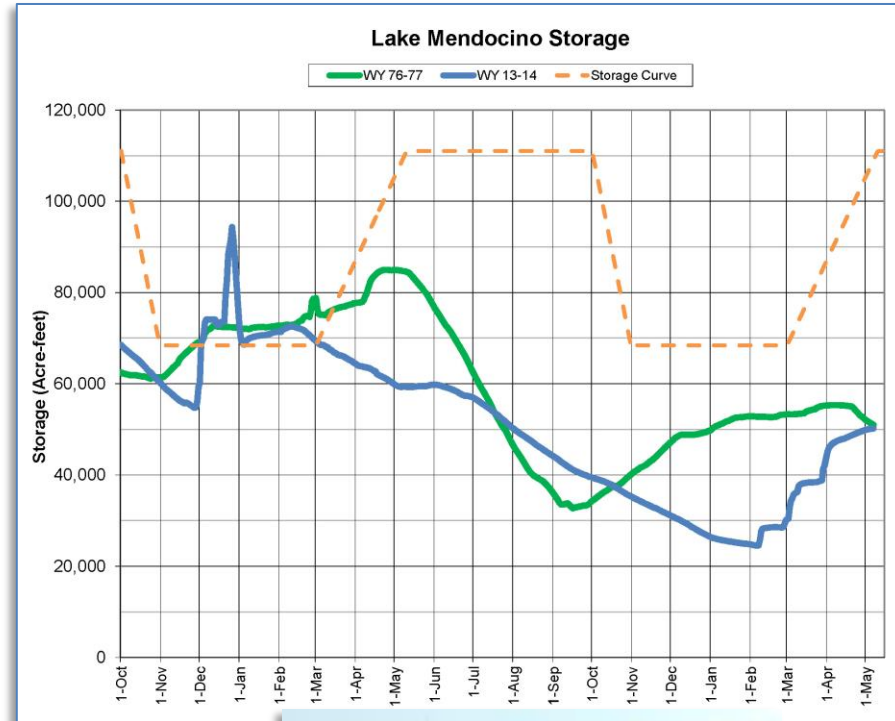
# 2014 Drought Impacts

## ❖ Historic low reservoir levels

- Lake Mendocino at 1977 levels
- 2 TUCP's in 12 Months

## ❖ Basin wide water conservation

## ❖ Impacts to region economy

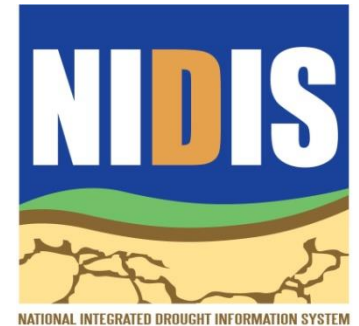




# Working with Federal Agencies in the Russian River Watershed

## ❖ Pilot Projects for Federal Programs

- Integrated Water Resources Science and Services
- National Integrated Drought Information System
- NOAA Habitat Blueprint



## ❖ Solving Local Resource Issues

- Russian River Instream Flow and Restoration
  - Collaboration with NOAA and Cal Fish & Wildlife
  - Development and Implementation of 2008 Biological Opinion



# NIDIS in the Russian River Watershed

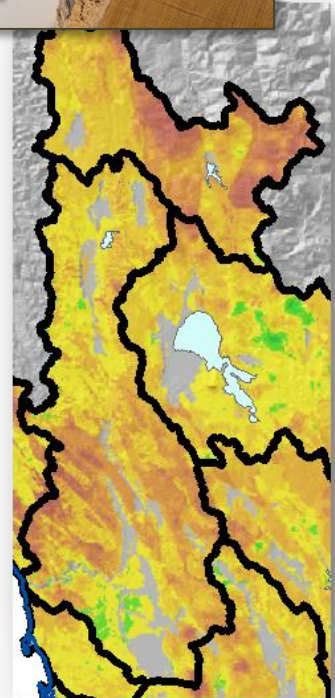
## ❖ Coping with Drought in California's Russian River Watershed

- Climate Past and Future
- Drought Preparedness
- Atmospheric Rivers



# NIDIS in the Russian River Watershed

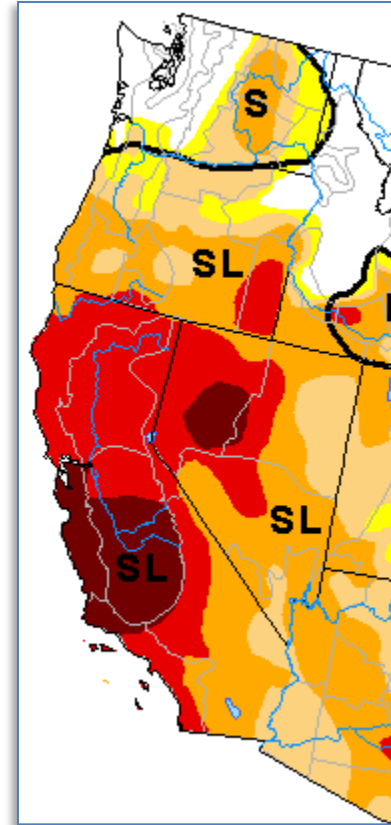
- ❖ Improved understanding of regional drought hydrology
  - Estimate historical climate through tree ring analysis
  - Analysis of climate change model results to better understand possible future extremes
  - Develop hypothetical extreme drought scenario for the Russian River to facilitate planning



# NIDIS in the Russian River Watershed

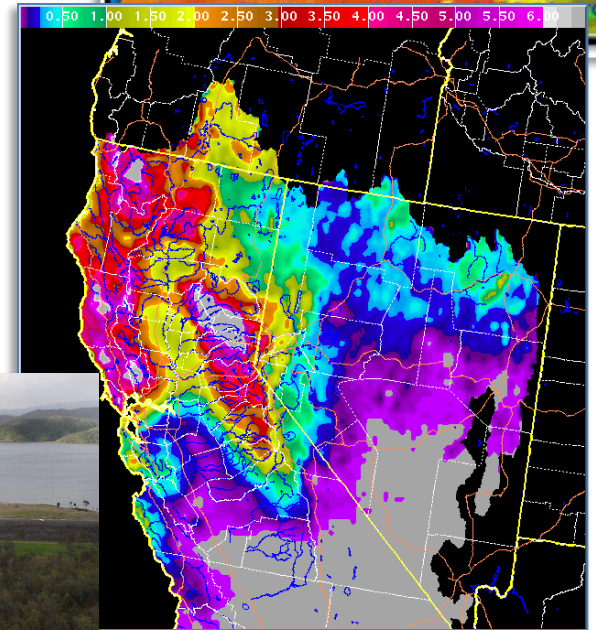
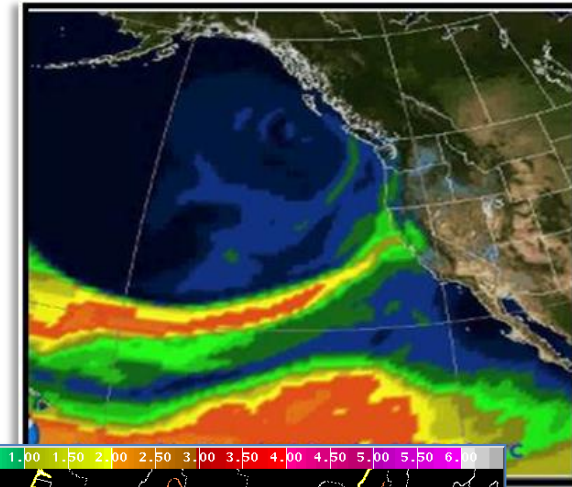
## ❖ Drought Readiness Report

- Develop regionally appropriate drought indicators
- Trigger early response to drought development
- Develop actionable measures to respond to drought conditions



# NIDIS in the Russian River Watershed

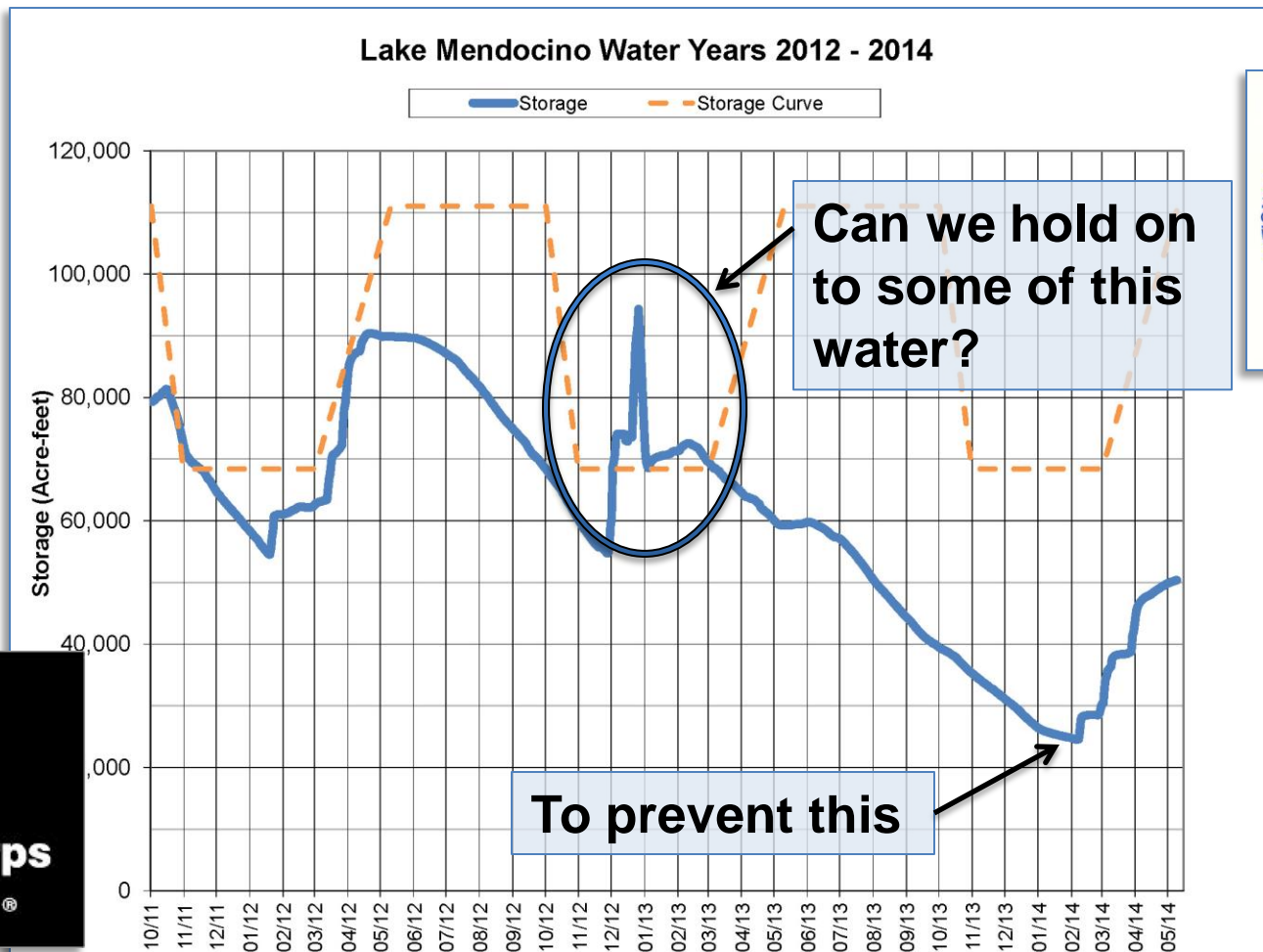
- ❖ Better Prediction of Atmospheric Rivers
  - Drought Busters
  - 35-45% of Annual Precipitation
- ❖ Scientific foundation for informed water management





# NIDIS in the Russian River Watershed

- ❖ Facilitate Coordination of Federal Agencies
  - Reservoir operations informed by forecasts



**US Army Corps  
of Engineers®**

