

Sonoma County Water Agency

Building Climate Resiliency in the Russian River



California Drought Forum

May 15, 2014



About the Sonoma County Water Agency



Lake Mendocino



Lake Sonoma



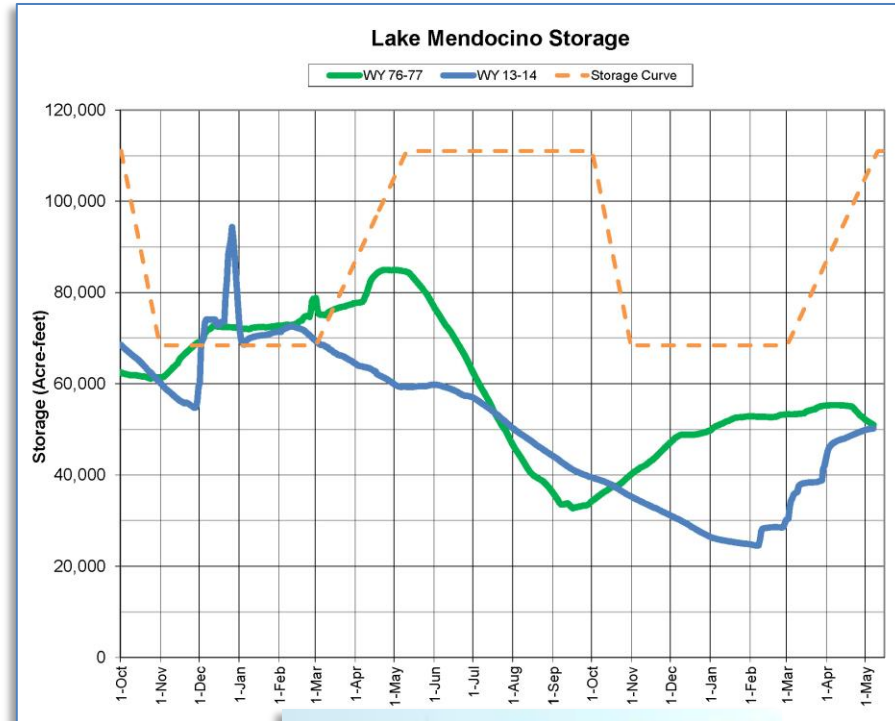
2014 Drought Impacts

❖ Historic low reservoir levels

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

❖ Basin wide water conservation

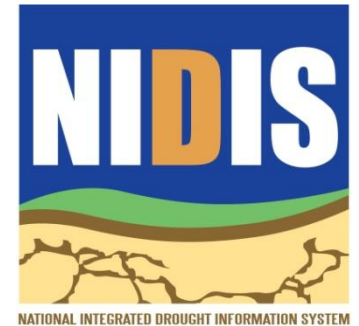
❖ Impacts to region economy



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

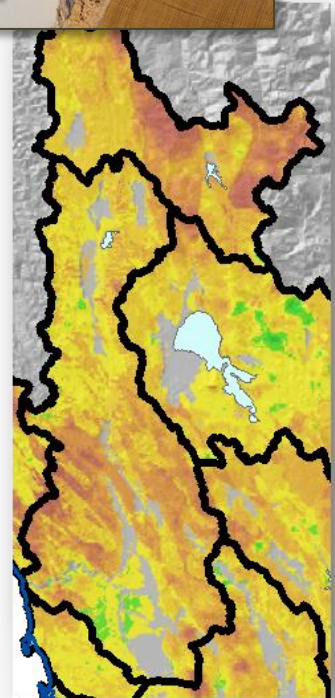
❖ Coping with Drought in California's Russian River Watershed

- Climate Past and Future
- Drought Preparedness
- Atmospheric Rivers



NIDIS in the Russian River Watershed

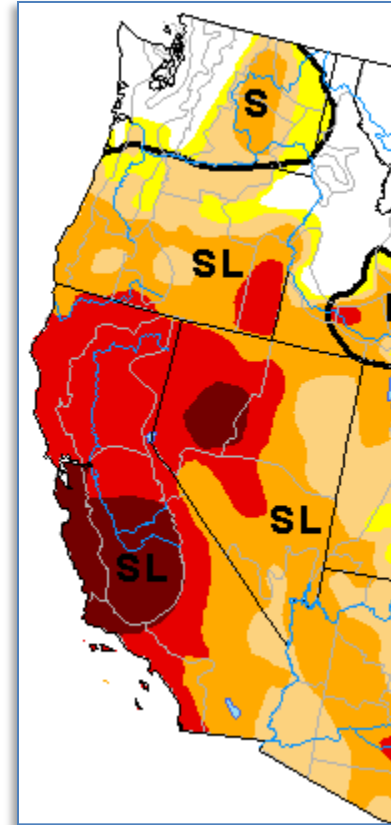
- ❖ Improved understanding of regional drought hydrology
 - Estimate historical climate through tree ring analysis
 - Analysis of climate change model results to better understand possible future extremes
 - Develop hypothetical extreme drought scenario for the Russian River to facilitate planning



NIDIS in the Russian River Watershed

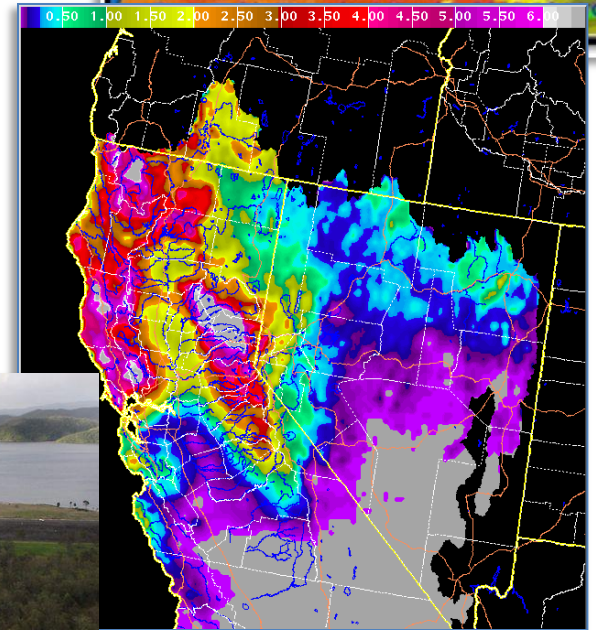
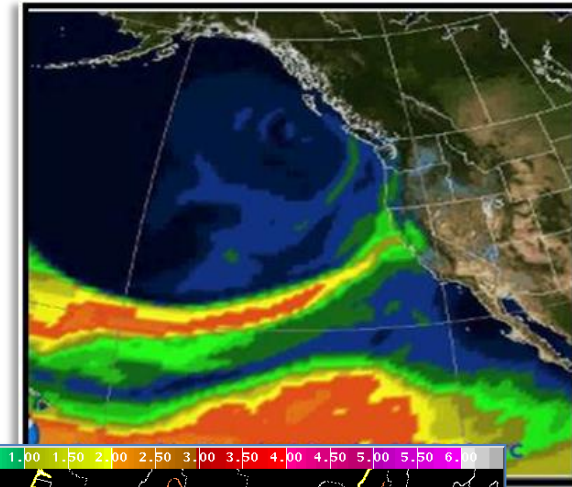
❖ Drought Readiness Report

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



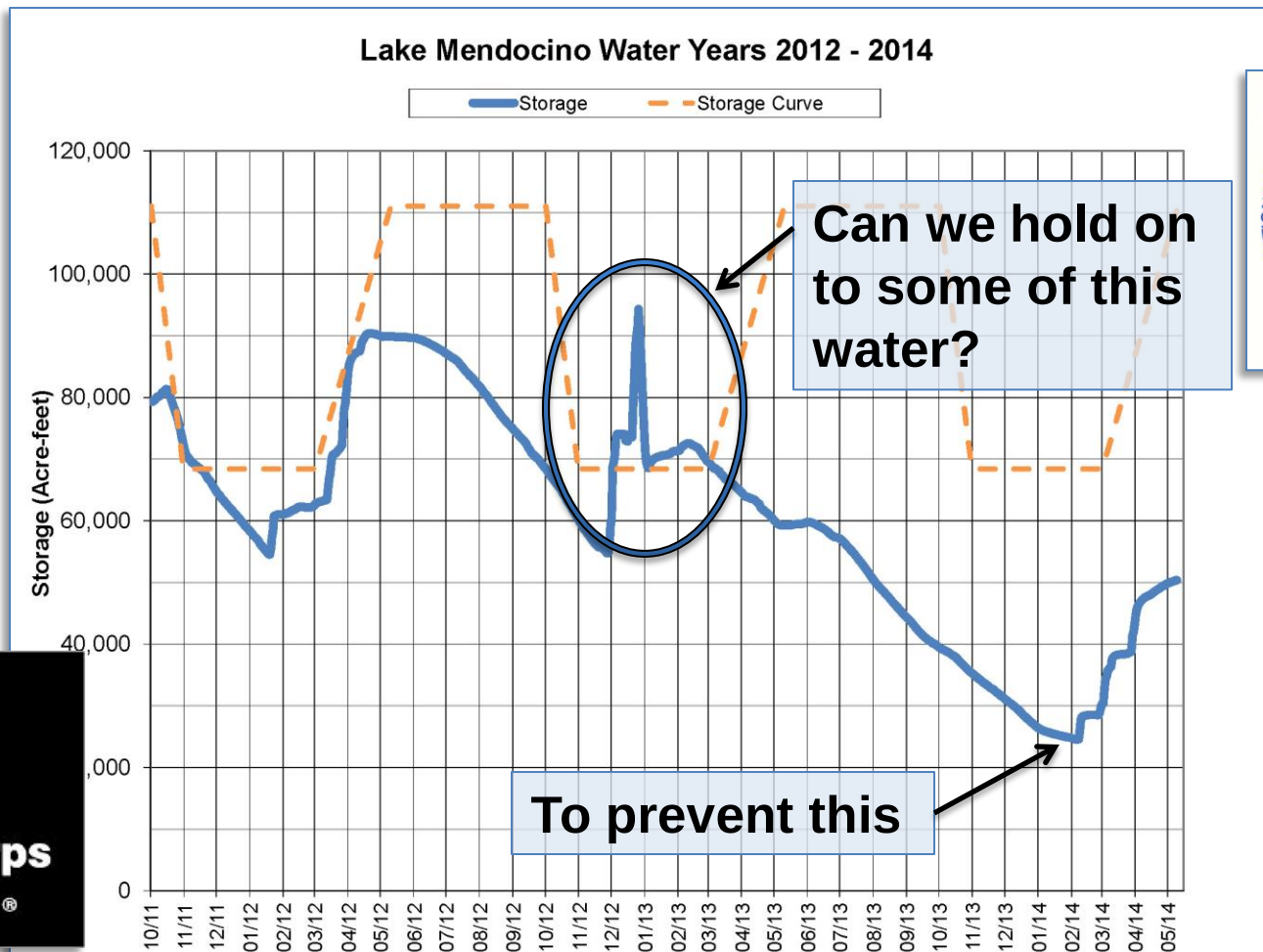
NIDIS in the Russian River Watershed

- ❖ 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



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