

# RECLAMATION

*Managing Water in the West*

**Bureau of Reclamation**

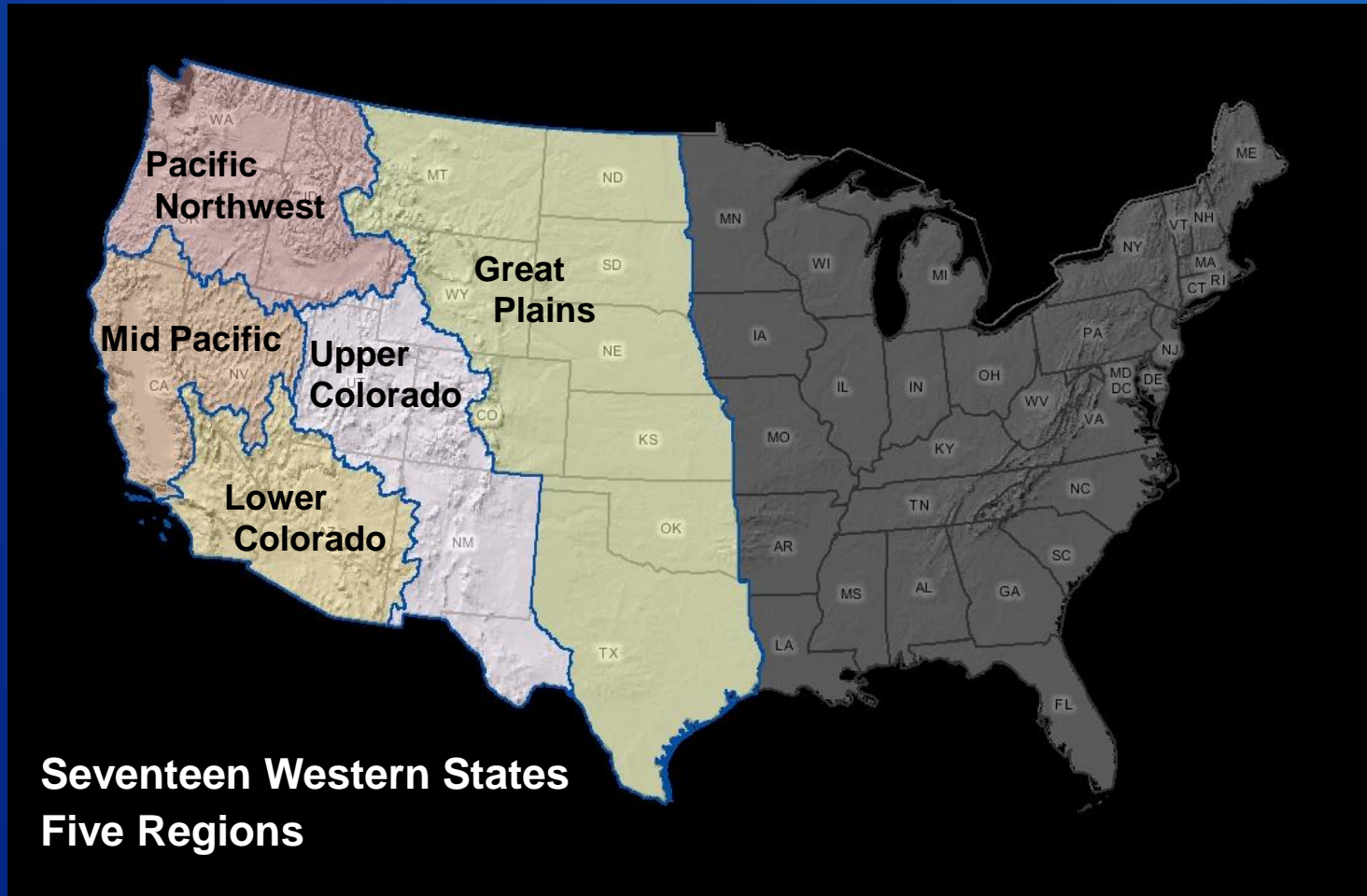
**NCSL Drought Presentation**

**December 2012**



U.S. Department of the Interior  
Bureau of Reclamation

# RECLAMATION'S JURISDICTION



# Largest Wholesale Water Supplier

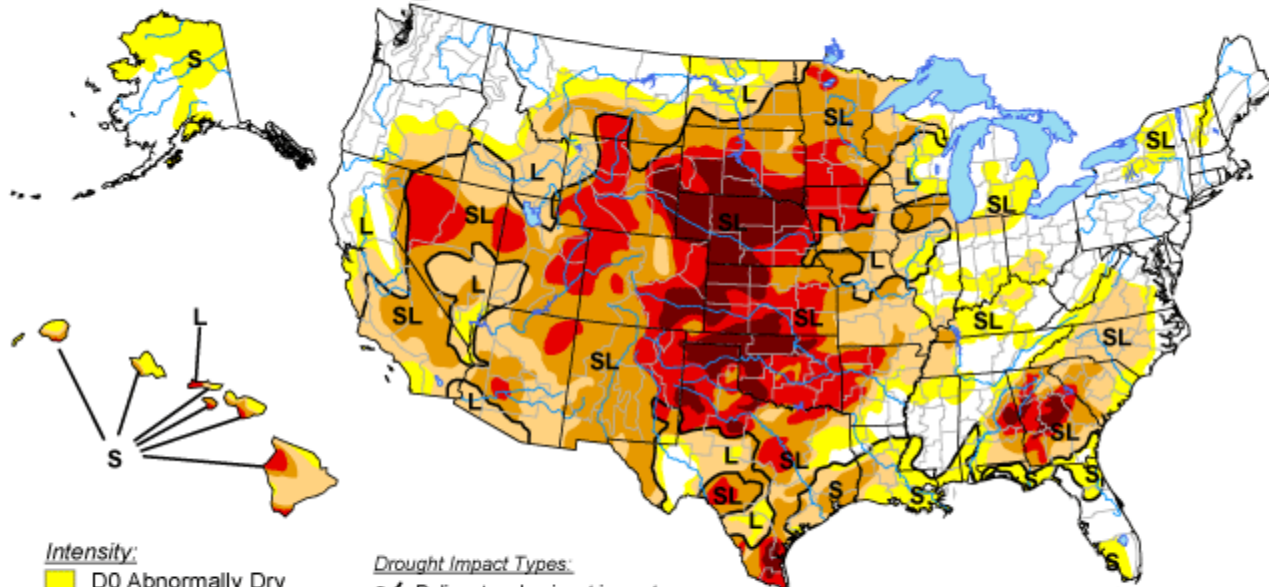
## 2<sup>nd</sup> largest generator of electricity

- 348 reservoirs, 476 dams
- 30 million acre-feet delivered annually
- Serve water to:
  - *One-third* of the West's irrigated agriculture
  - More than 31 million people
- Generates almost 15 gigawatts of electricity serving 36 million customers
- “ We are trying to manage a changing climate, its impact on water supplies and our ability to generate power, all at once.”  
-*Commissioner Connor*






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# U.S. Drought Monitor


December 4, 2012  
Valid 7 a.m. EST



## Intensity:

-  D0 Abnormally Dry
-  D1 Drought - Moderate
-  D2 Drought - Severe
-  D3 Drought - Extreme
-  D4 Drought - Exceptional

## Drought Impact Types:

-  Delineates dominant impacts
- S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months (e.g. hydrology, ecology)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu/>

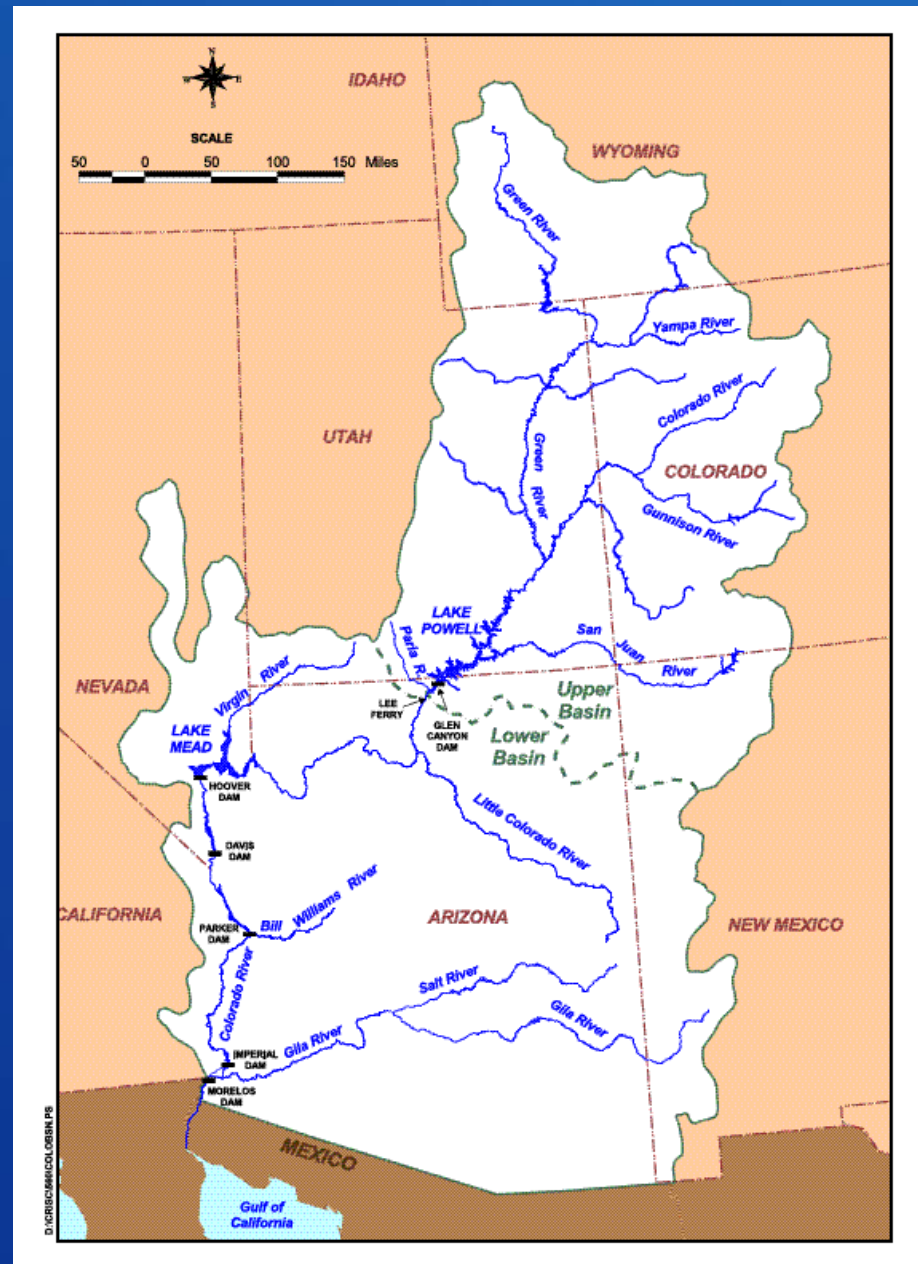


Released Thursday, December 6, 2012  
Author: Rich Tinker, NOAA/NWS/NCEP/CPC

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# Colorado River Basin



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# Glen Canyon Dam / Lake Powell



## Glen Canyon Dam

- 710 feet tall
- 8 generating units
- Provides power to more than 1.8 million people

## Lake Powell

- 186 miles long
- 1,960 miles of shoreline
- Long-term carryover storage for Upper Basin obligations
- Live storage capability of 24.3 million-acre-feet
- Provides water for more than 20 million people

# Hoover Dam / Lake Mead



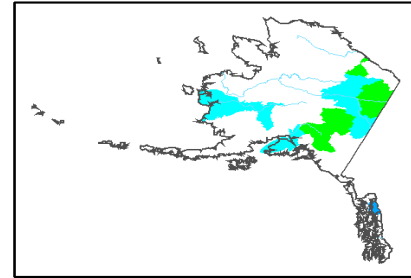
## Hoover Dam

- 726 feet tall
- 17 generating units
- Provides power to more than 1.3 million people

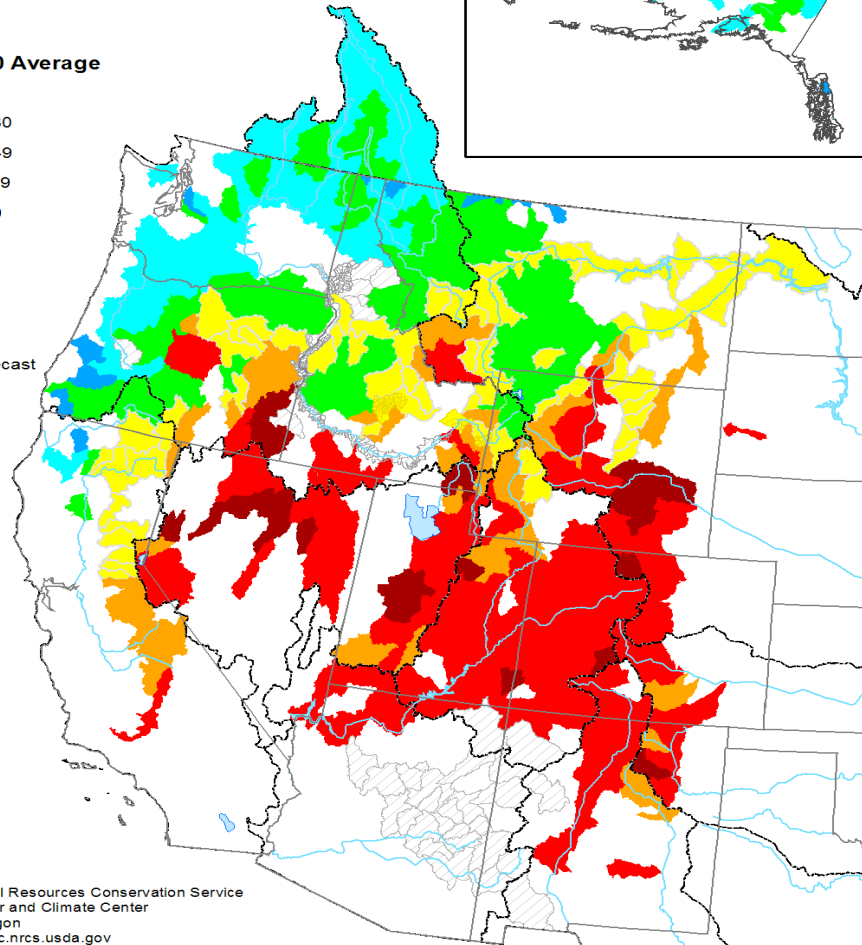
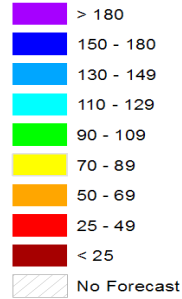
## Lake Mead

- 110 miles long
- Covers 248 square miles
- Long-term carryover storage for Lower Basin obligations
- Live storage capability of 28.9 million acre-feet
- Provides water for more than 23 million people

# Spring and Summer Streamflow Forecasts as of May 1, 2012



Percent  
1971 to 2000 Average

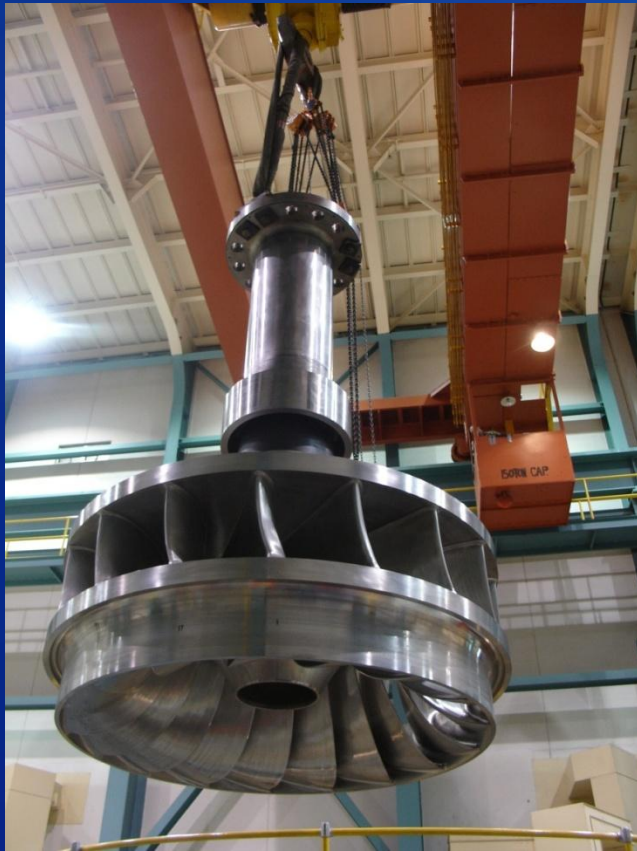


Prepared by  
USDA, Natural Resources Conservation Service  
National Water and Climate Center  
Portland, Oregon  
<http://www.wcc.nrcs.usda.gov>



# Challenges Posed By Drought

## Hydropower



## Water Supply



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# Challenges Posed By Drought

Environmental



Political



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# Tools

## 1. Conservation

WaterSMART Program (recycling, efficiency, planning)

## 2. Emergency Drought Relief Act

Wells and pipelines

Emergency Drought Decision Tool Under Development

## 3. Cooperation

Other agencies

Water release timing

## 4. Water Banking

Off stream opportunities

State (interstate) facilities

# River Basin Studies

- Colorado River
- Milk/St. Mary's
- Klamath River
- Niobrara
- Sacramento/San Joaquin
- Republican
- Yakima River
- Truckee
- Upper Washita
- Pecos