

# **An Overview of Walker River and Walker Lake**

**Legislative Committee on Public Lands**

**Allen Biaggi**

**Director, Department of Conservation and  
Natural Resources**

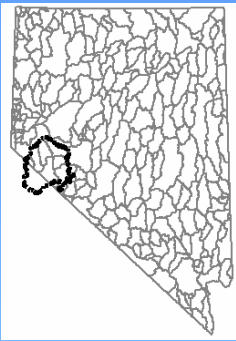
**March 24  
, 2006**

**EXHIBIT J - LANDS**

**Document consists of 28 slides.**

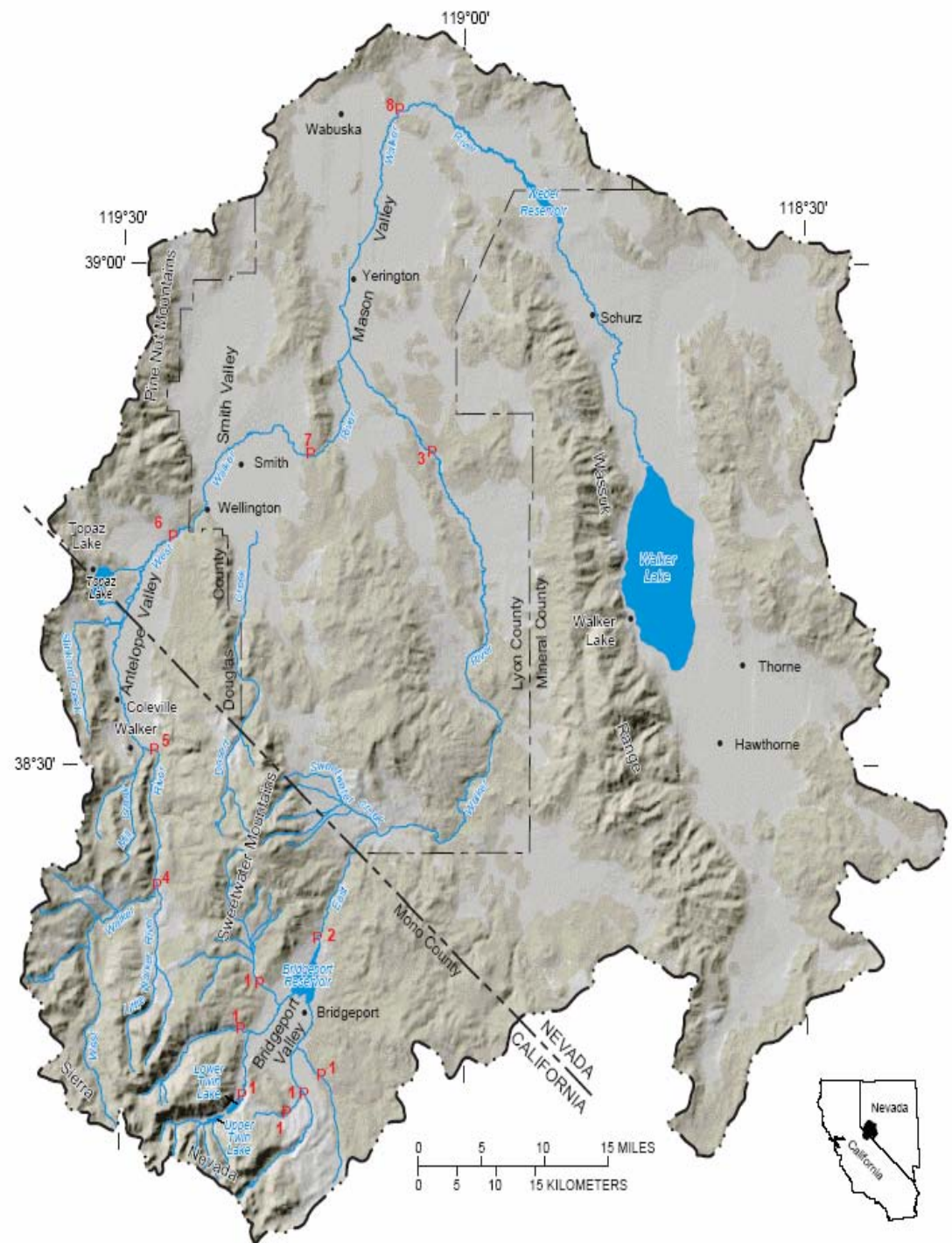
**Entire Exhibit Provided**

**Meeting Date: 03-24-06**



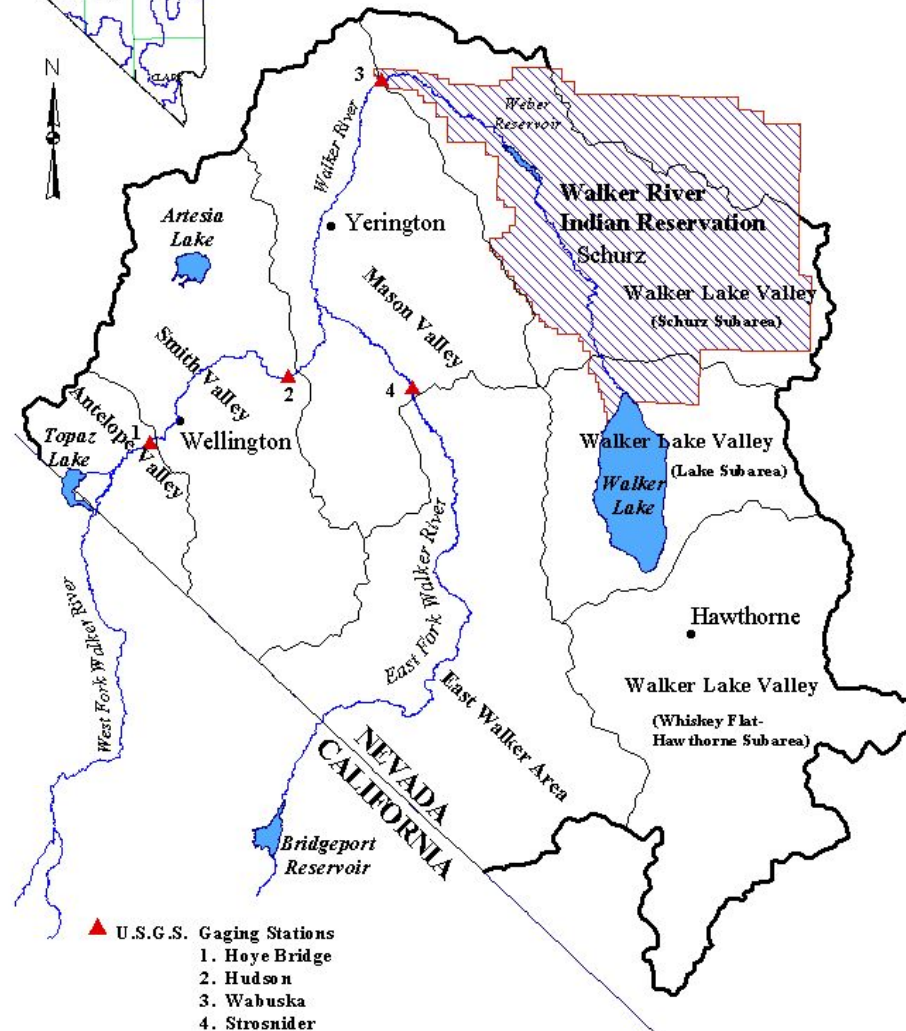
## Discussion Items:

- Walker River system and water resources
- Walker lake water quality (TDS)
- Ongoing litigation and mediation



# WALKER RIVER WATERSHED IN NEVADA

Study  
Area



- ▲ U.S.G.S. Gaging Stations  
1. Hoyer Bridge  
2. Hudson  
3. Wabuska  
4. Strosnider

— Walker River Basin Region  
— Interior Basins

6 0 6 12 Miles

Scale 1:500,000

Office of the State Engineer of Nevada  
Division of Water Resources  
123 W. Nye Lane  
Carson City, Nevada 89706  
September 2003

# Surface Water Law in the West

## Prior Appropriation Doctrine

- ✓ **First in time, first in right,**
- ✓ **Beneficial use is the limit of the water right,**
- ✓ **Use it or lose it**

vs.

## Riparian Doctrine

- ✓ **Use from lake/stream next to property**
- ✓ **Can only use on land that is riparian**



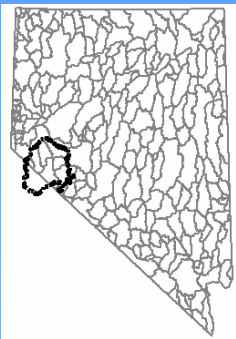
# **Different approaches in California and Nevada water regulation**

## **Nevada**

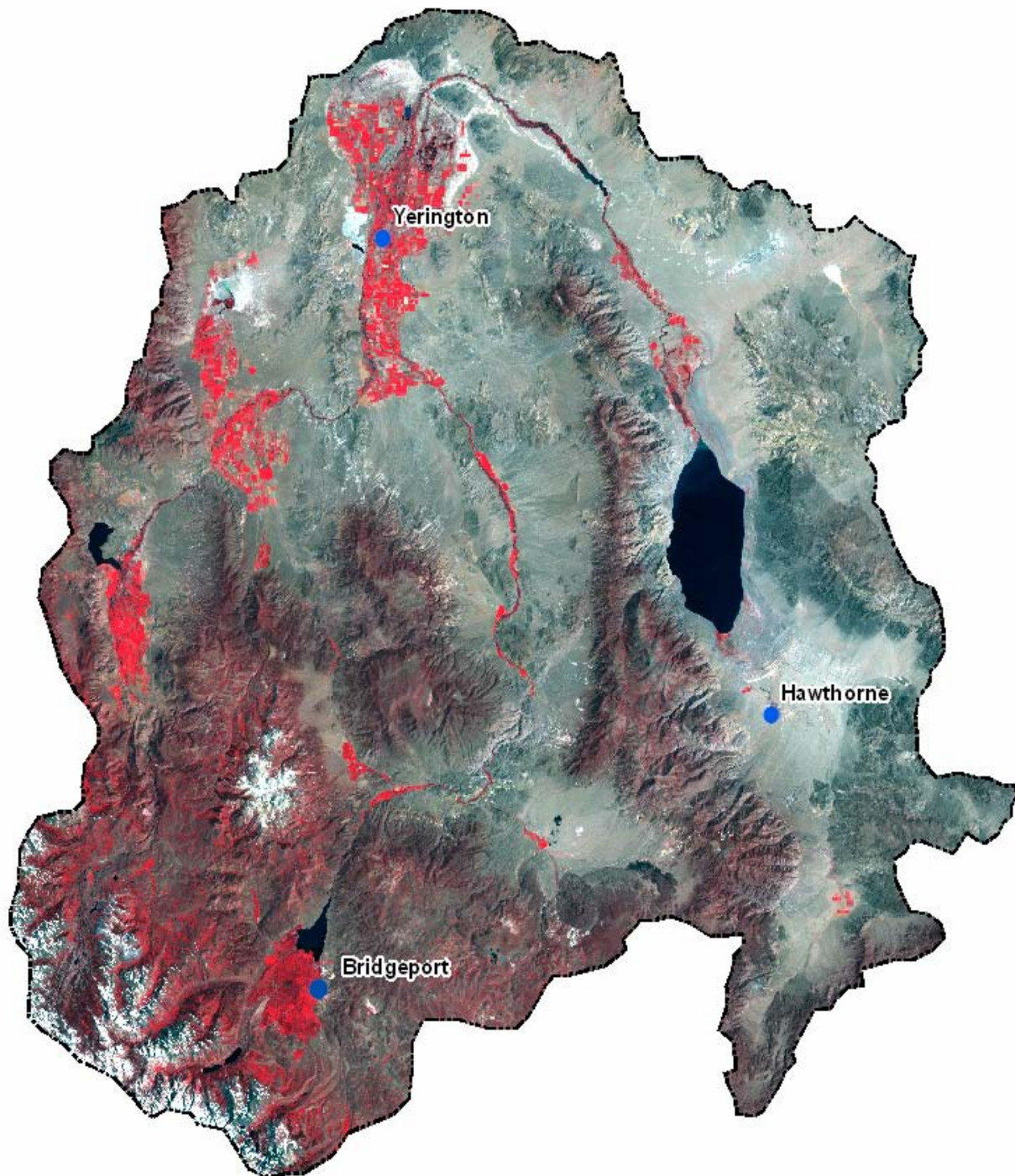
- **Prior Appropriation State**
- **Comprehensive groundwater law**

## **California**

- **Riparian Rights**
- **Very limited groundwater law or enforcement of groundwater use at state level**



## Surface water use



# Valleys of the Walker River System

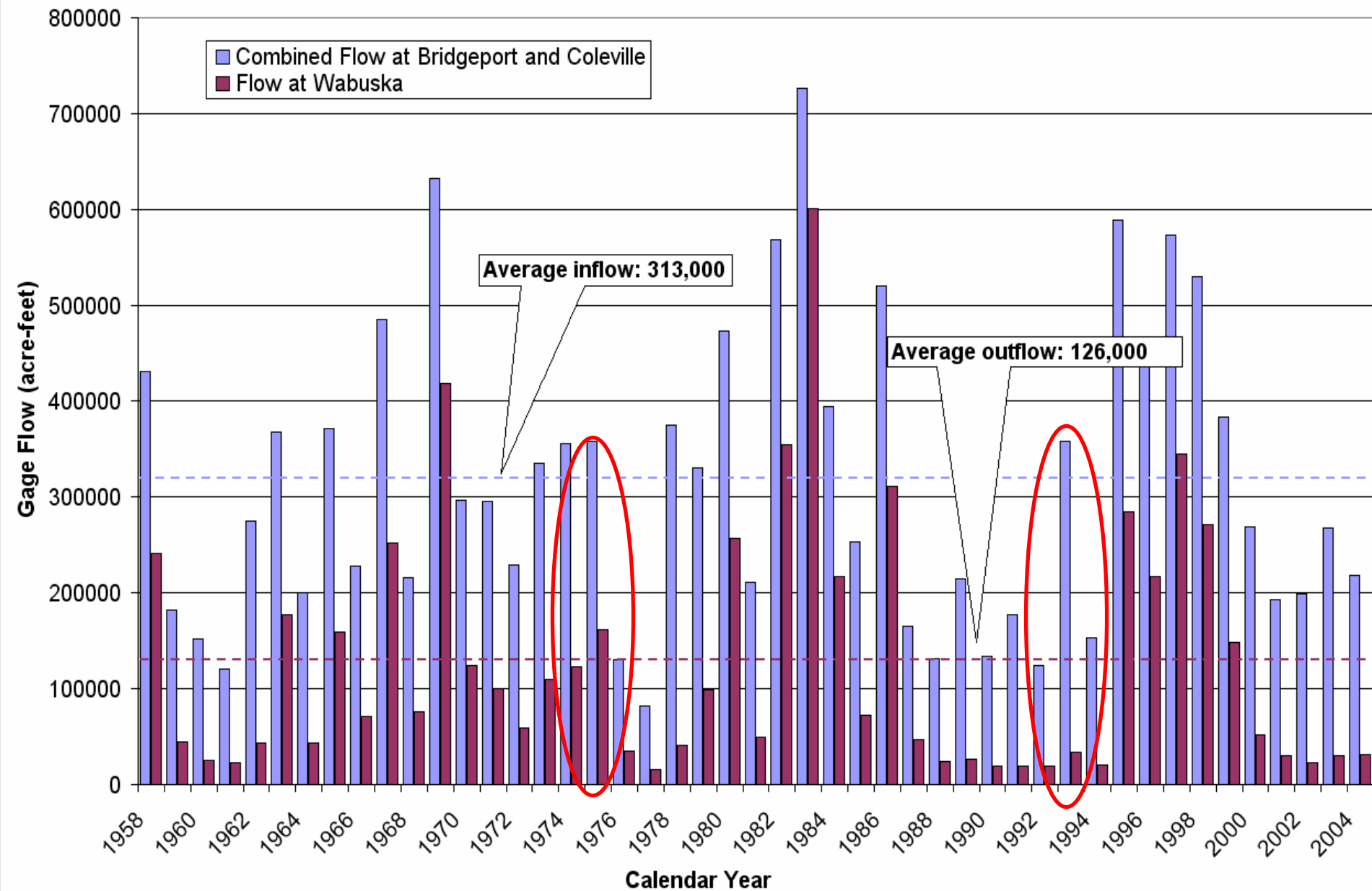
- **Bridgeport Valley (California)**
  - Headwaters of the East Fork
  - 26,277 irrigated acres
- **Antelope Valley (California and Nevada)**
  - 14,600 irrigated acres
- **Walker River Indian Reservation (Nevada)**
  - 2100 irrigated acres
  - Weber Reservoir

# Valleys of the Walker River System

- **Walker River Irrigation District (79,906 total irrigated acres)**
  - **Smith Valley**
    - 20,563 irrigated acres
  - **Mason Valley**
    - 50,473 irrigated acres
  - **East Walker**
    - 8,870 irrigated acres



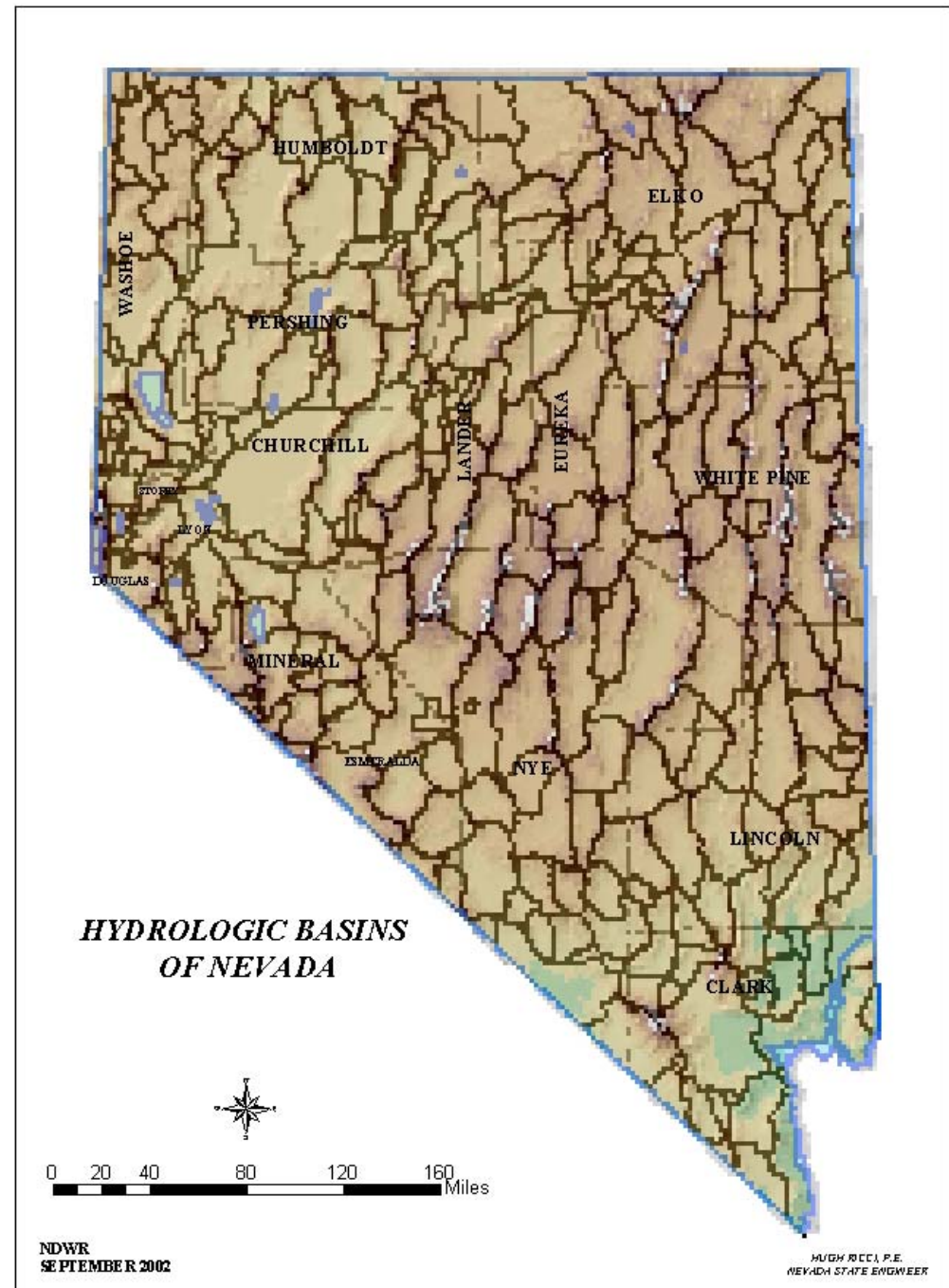
# CONSUMPTIVE USE IN THE ANTELOPE, SMITH, MASON AND EAST WALKER BASINS



# Ground Water Management

232

## Hydrographic Basins



# Perennial Yield

- Can be defined as the maximum amount of ground water that can be salvaged each year over the long term without depleting the groundwater reservoir.
- USGS Recon and Bulletin Reports calculated perennial yields starting in the 1940's. Ongoing update of these values

# Approving An Application

- **4 criteria**
  - Is water available from proposed source?
  - Does it conflict with existing rights?
  - Does the use prove detrimental to the public interest?
  - Does it impact the protectible interest in domestic wells?



# Supplemental Use

- Supplemental groundwater rights are **ONLY** to be pumped when there is not a full allocation of Walker River decreed water and/or storage rights;
- In a year that isn't a 'full allocation' year, any available surface water must be used **FIRST** before the supplemental groundwater can be pumped – and then only enough to meet the permitted acre-feet per acre duty.

# Water Use Inventories

- **Mason and Smith Valleys are the two largest agricultural areas in the Walker Basin.**
- **From 1994 to present, the water use from the wells in these two basins has been estimated by direct and indirect means.**
- **From 2000 to present, flow meters have been required on all non-domestic use wells.**

# Manner of Groundwater Use

- Over 87 percent of all underground water use is for crop irrigation.
- Approximately 90 percent of the agricultural groundwater use permitted is supplemental to decreed and storage rights from the Walker River.
- The non-supplemental agricultural rights are located in eastern Smith Valley and north of Artesia Lake, and in eastern Mason Valley.

# Summary of Estimated Annual Groundwater Pumpage, Mason & Smith Valleys, Nevada

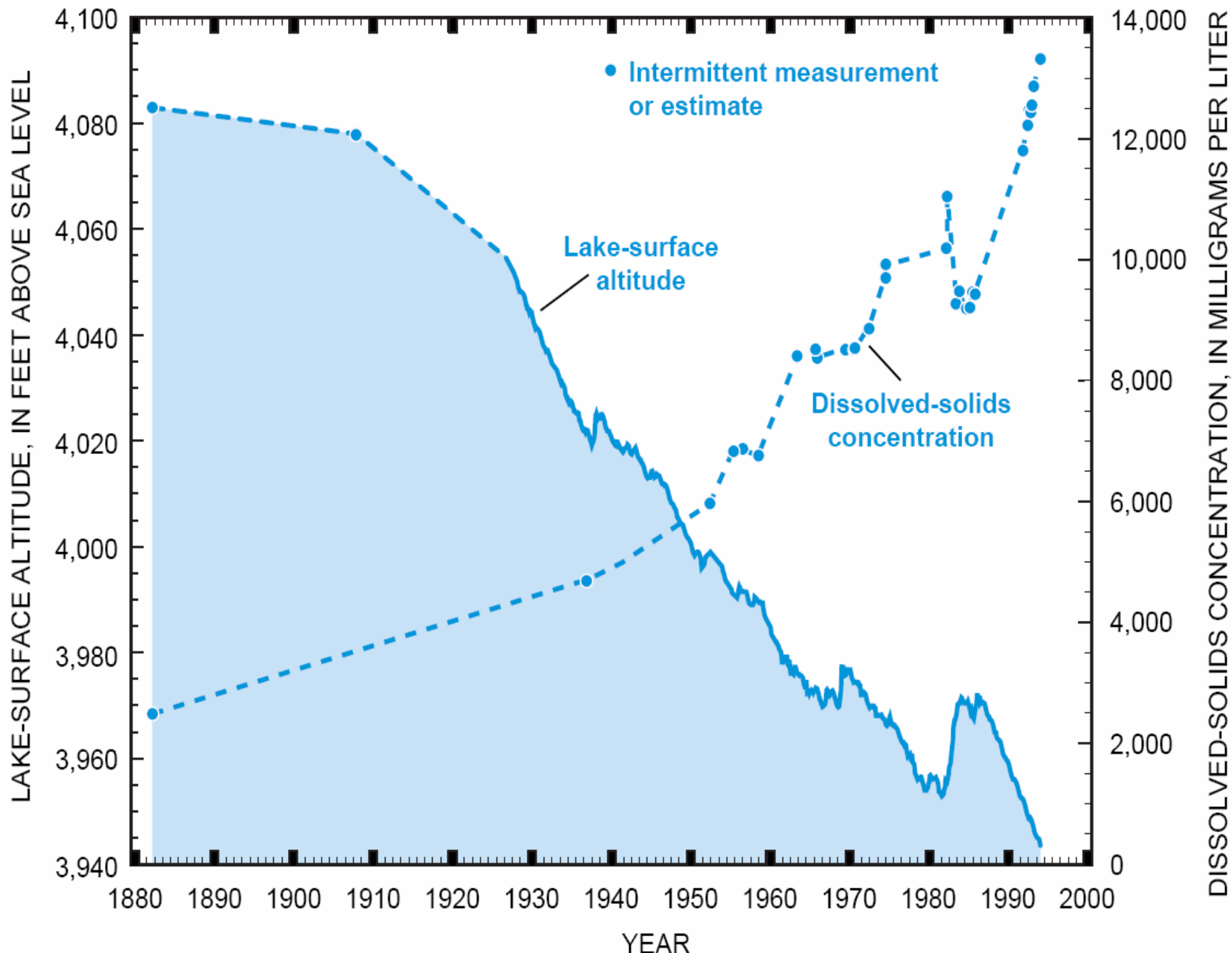
(All Values in Acre-feet)

	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Smith Valley	33,223	10,351	17,207	15,915	13,404	17,705	29,579	31,674	32,634
Mason Valley	123,409	41,374	50,841	44,607	41,587	49,013	84,964	118,254	116,342
Totals	156,632	51,725	68,048	60,523	54,991	66,718	114,544	149,928	148,976



# Walker Lake







# Litigation





# Litigation

- **Walker River Decree**
  - 1936
  - Adjudicated Walker River system in Nevada and California including reserved rights of the United States and Walker River Indian Reservation; however, did not include a water right for Weber Reservoir.

# Litigation

- **United States, Walker River Paiute Tribe v. Walker River Irrigation District**
  - Tribe seeks the right to store water in Weber Reservoir .
  - And an additional water right for up to 167,460 acres of land added to the Reservation in 1936.

# Litigation

- **United States counter claim**
  - **Federal Reserved water right for use of groundwater on the reservation**
  - **Reserved rights for the benefit**
    - **Yerington Paiute Tribe (acquired land)**
    - **Bridgeport Paiute Indian Colony**
    - **Individual allotments**
    - **Hawthorne Army Ammunition Plant**
    - **BLM**
    - **Toiyabe National Forest**
    - **United States Marine Corps**

# Litigation

- **Intervention by Mineral County and Walker Lake Working Group**
  - Seeks reallocation of Walker River to preserve minimum levels in Walker lake.
    - 127,000 acre-feet additional annual flows
    - Injunction sought 240,000 acre-feet until litigation is concluded
- **Petition filed in Nevada Supreme Court**
  - Public Trust obligations and prevent granting of additional surface and GW rights
  - Nevada Supreme Court denied petition because similar litigation is pending in proper court.



# Litigation

- January 2003 the parties agreed to a mediation process.
- Have an extension from court to complete mediation at a future date.

# Parties represented at the Settlement Negotiations

- Walker River Irrigation District
- United States
- State of Nevada
- State of California
- Mono County, California
- Lyon County, Nevada
- Mineral County, Nevada
- Walker River Paiute Indian Tribe
- Walker Lake Working Group

# Questions?



