

**California Water Plan**  
**Regional Outreach workshop:**  
***Sacramento River Hydrologic Region***

***Presenter: Glen Pearson***  
***Northern District Chief***

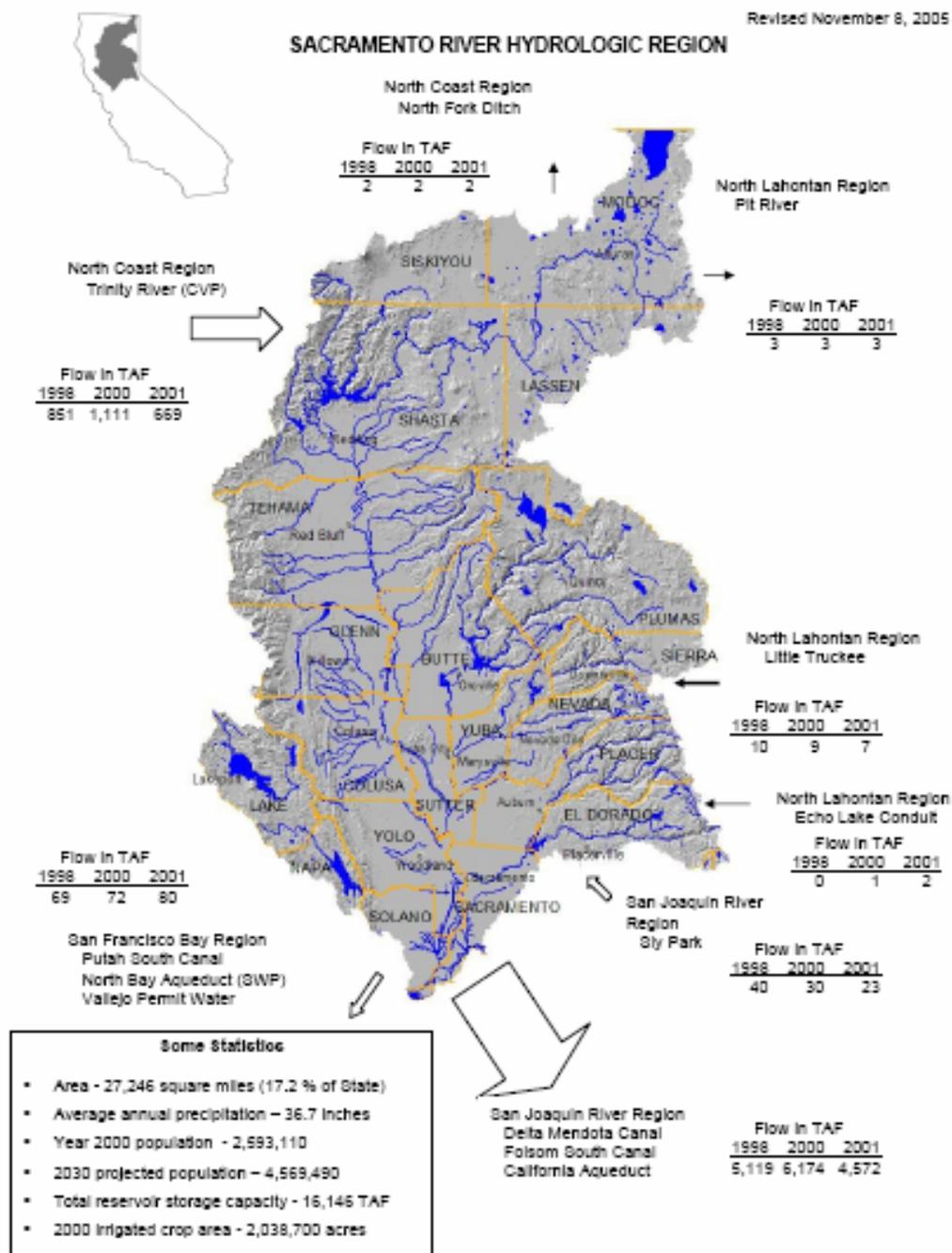
**Red Bluff**  
**August 23, 2007**

**Area: 27,000 sq. miles  
( 17.2 % of State)**

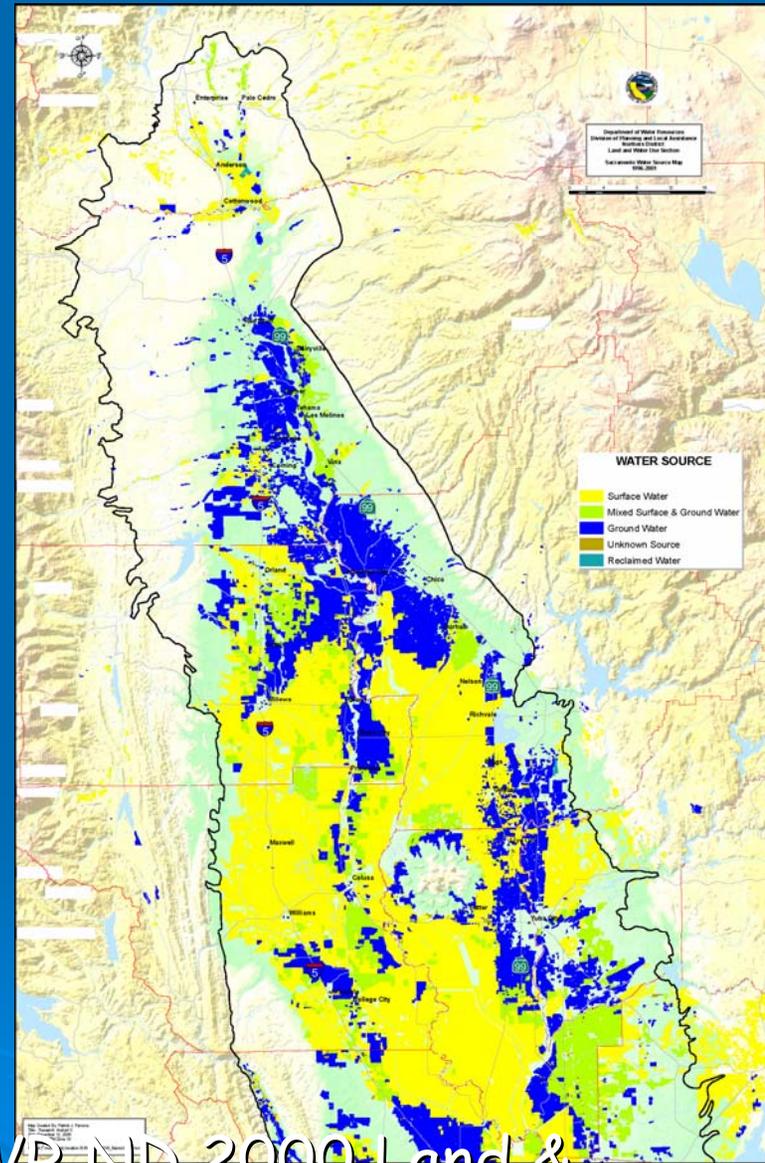
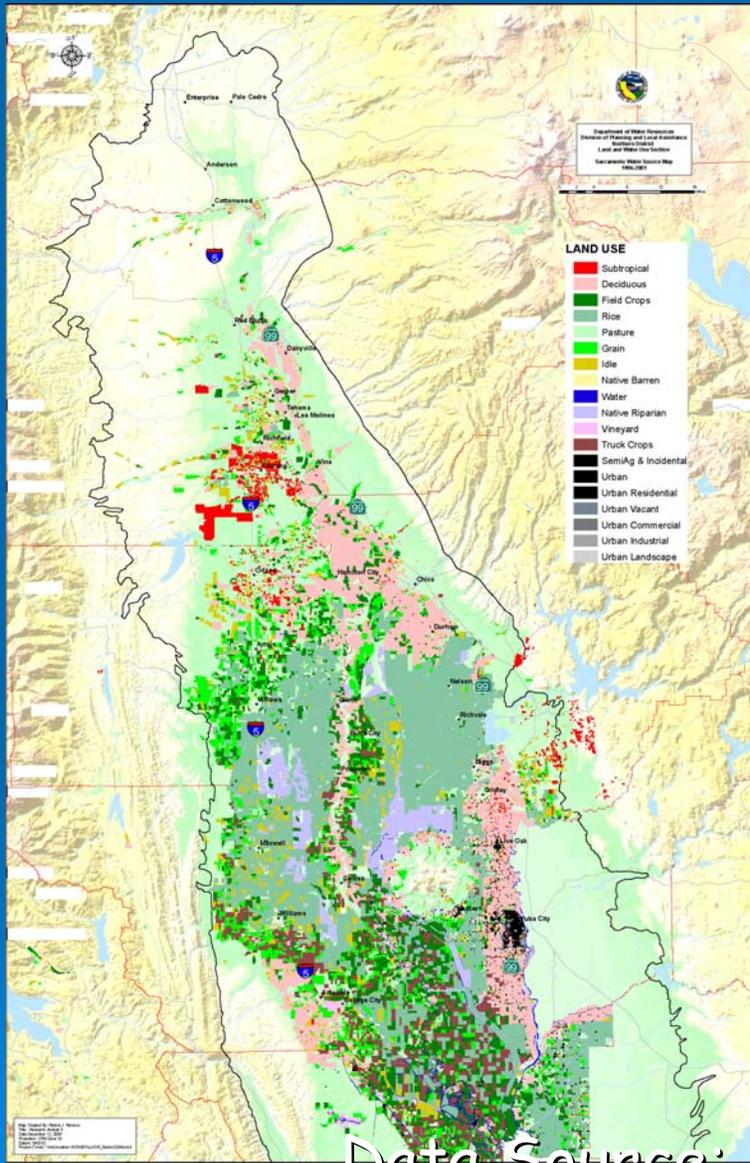
**Avg. Annual Precipitation:  
36.7 inches  
(State Avg. 23 inches)**

**Y2K Population: 2.6 million  
( 7.6% of State)**

**Y2K Irrigated Crop Area:  
2 million acres ( 21% of  
State)**



# Water Supply & Demand



Data Source: DWR ND 2000 Land & Water Use Data

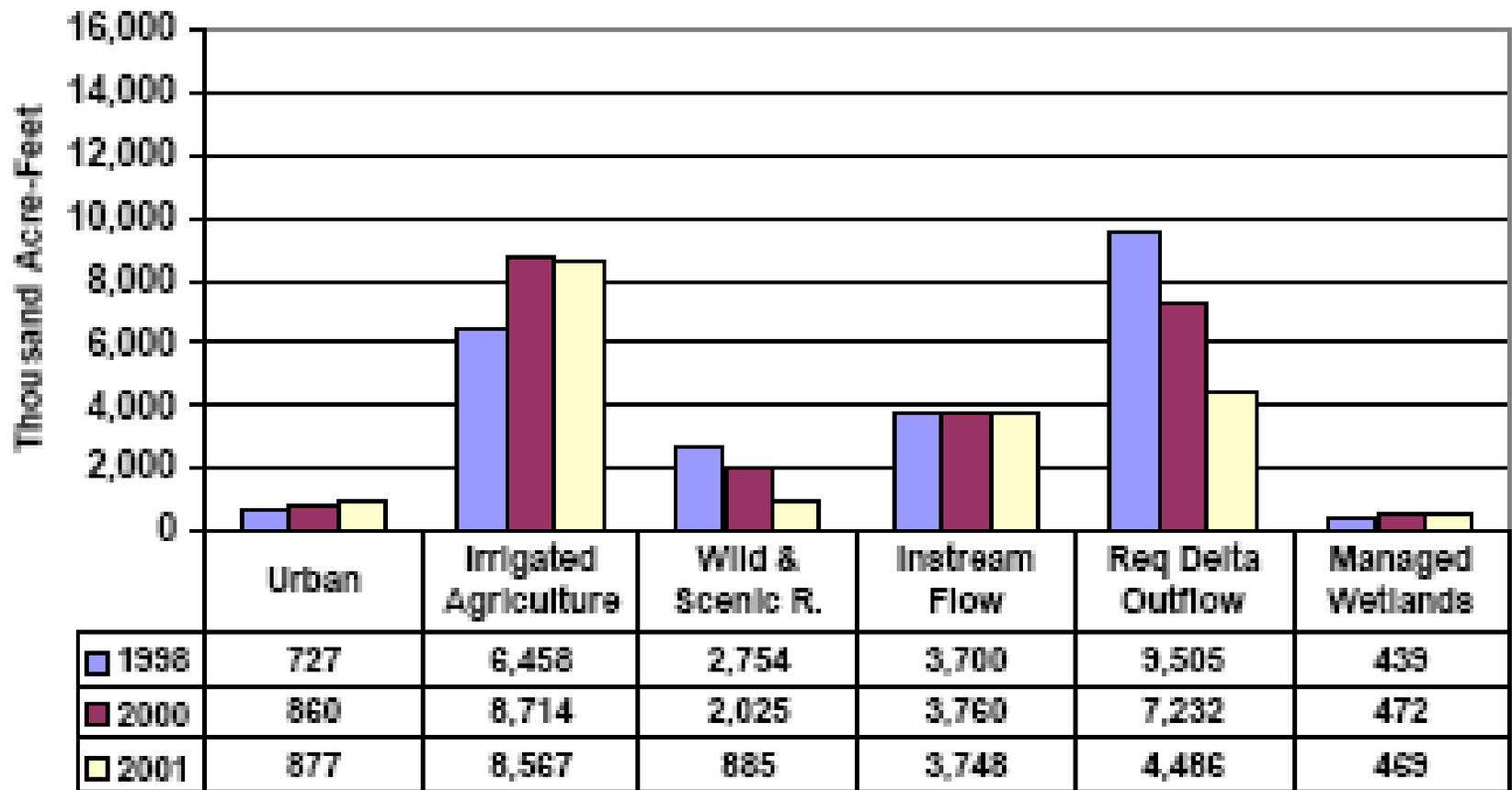


# Sacramento River Hydrologic Region

**Water Entering – Water Leaving = Change in Storage**

	<b>1998</b> <b>(168%)</b>	<b>2000</b> <b>(105%)</b>	<b>2001</b> <b>(67%)</b>
<b>Water Entering the Region</b>	<b>90 MAF</b>	<b>69 MAF</b>	<b>36 MAF</b>
<b>Water Leaving the Region</b>	<b>87 MAF</b>	<b>70 MAF</b>	<b>40 MAF</b>
<b>Storage Changes in the Region</b>	<b>3 MAF</b>	<b>-1 MAF</b>	<b>-4 MAF</b>

### Sacramento River Region Applied Water Uses For Water Years 1998, 2000, 2001



**1998**

**(168%)**

**17.5 MAF**

**2000**

**(105%)**

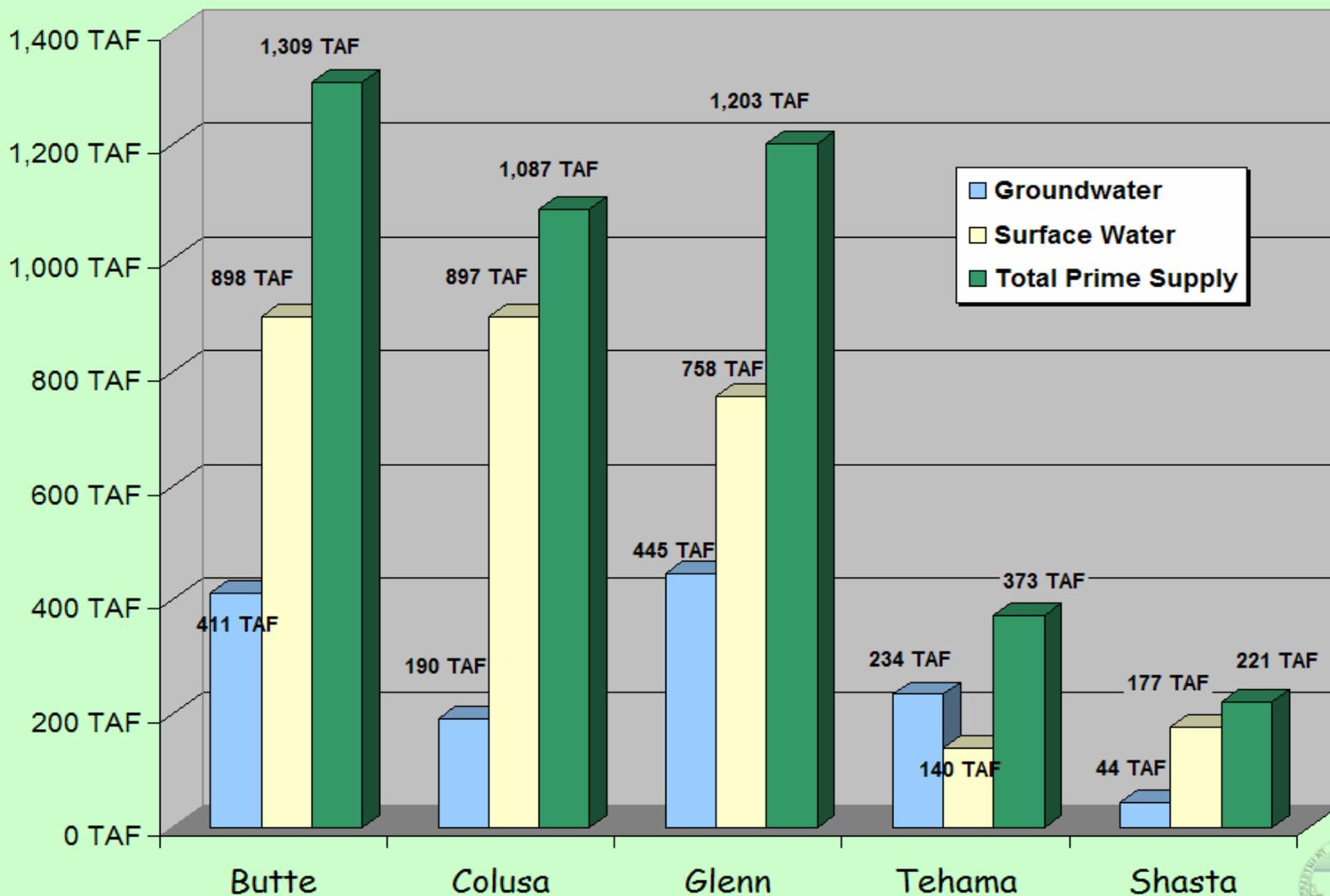
**23.0 MAF**

**2001**

**(67%)**

**19.0 MAF**

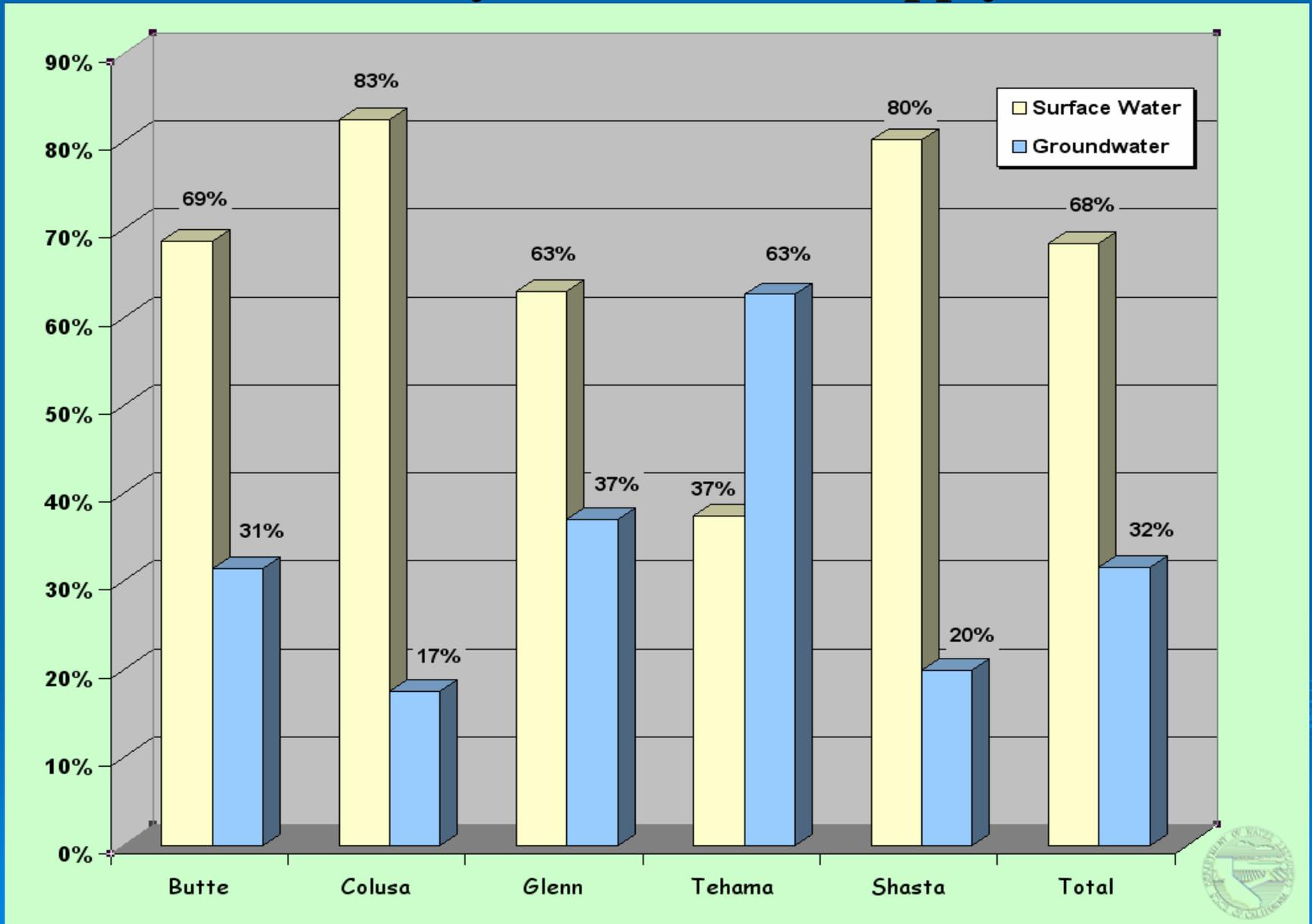
# Northern Sac Valley Prime Water Supply (TAF)



Data Source: DWR ND 2000 Land & Water Use Data



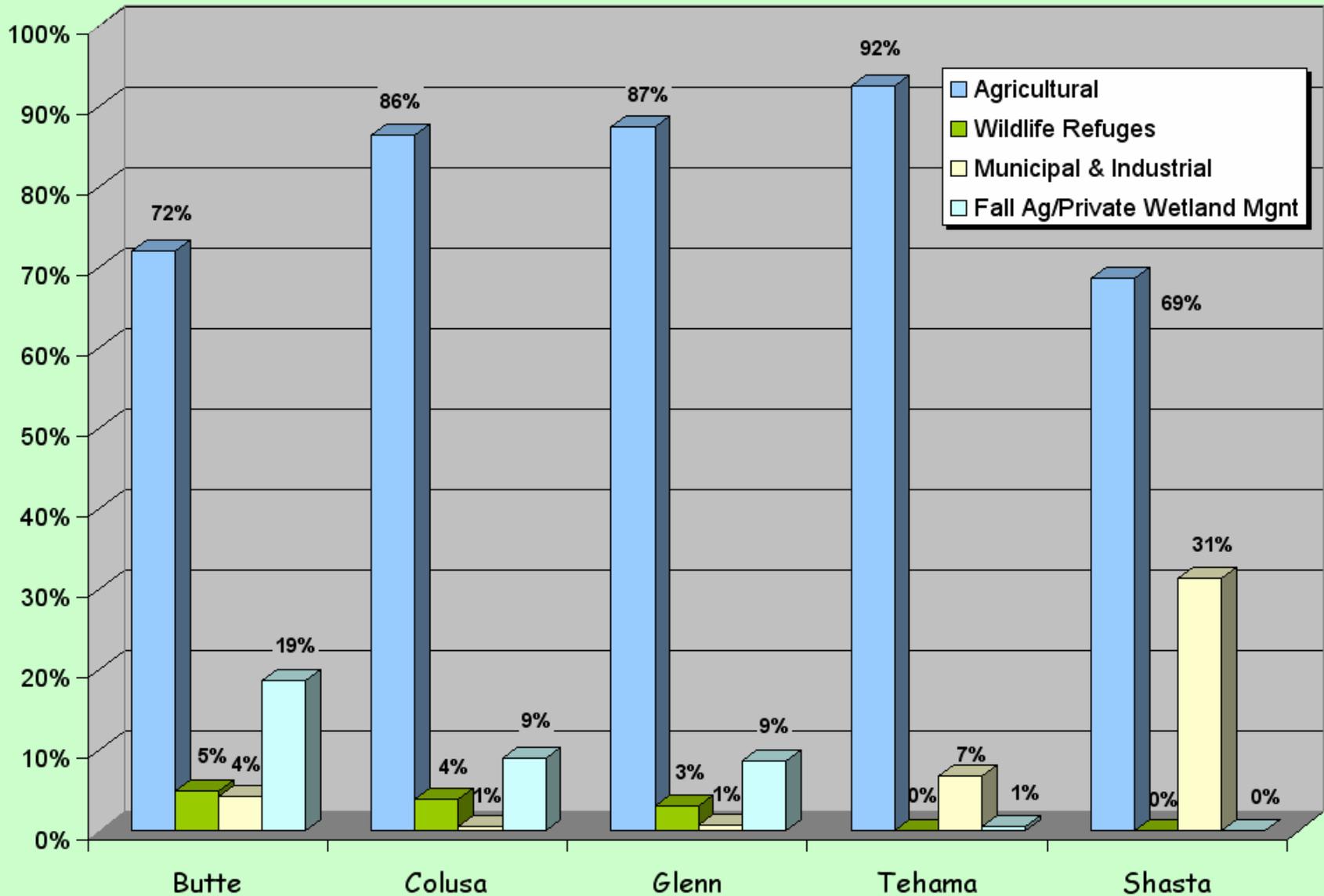
# Northern Sac Valley Prime Water Supply (% SW/GW)



Data Source: DWR ND 2000 Land & Water Use Data



# Prime Water Supply by Type of Use (SW & GW)

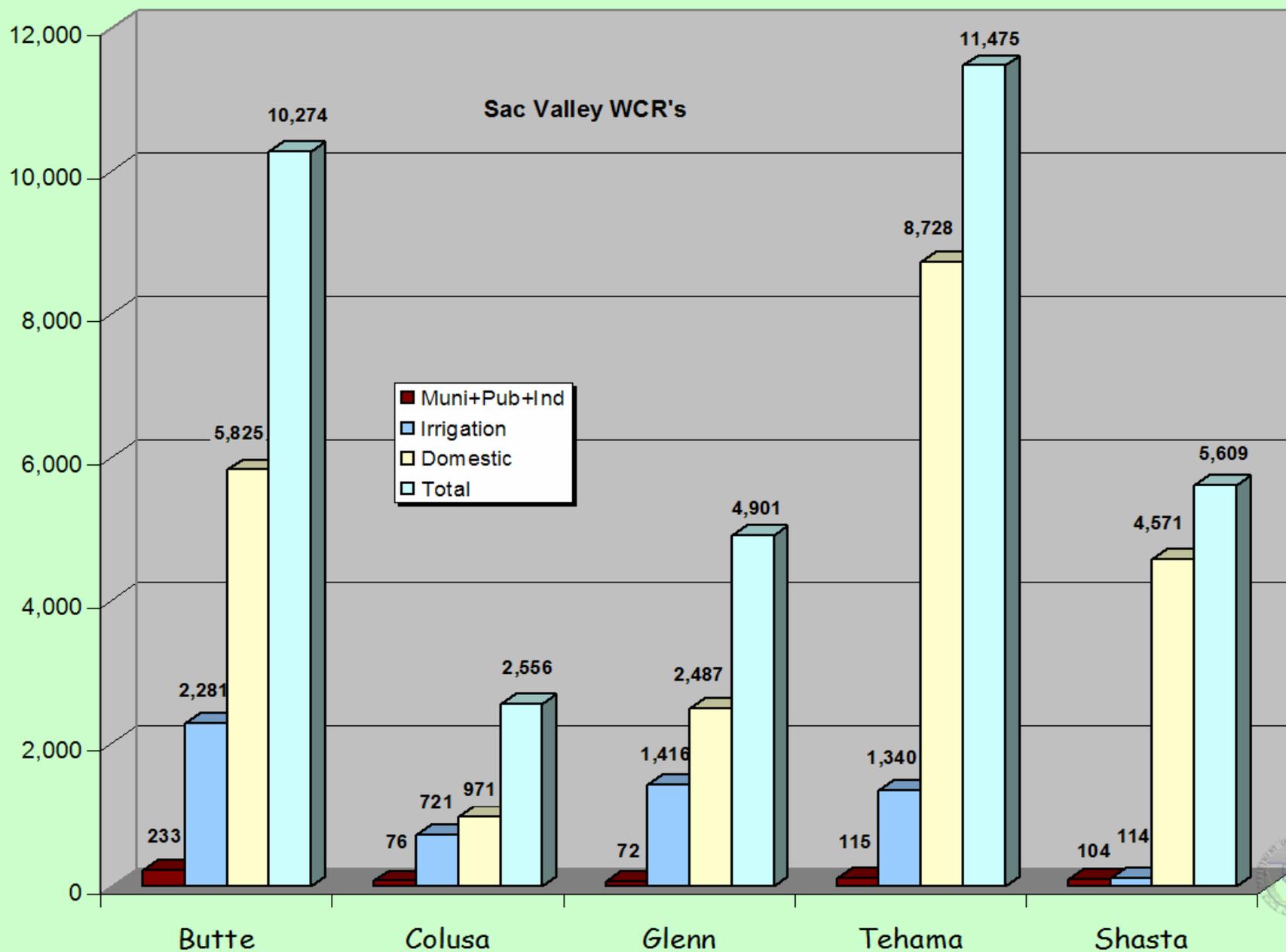


Data Source: DWR ND 2000 Land & Water Use Data

# Groundwater Development Statistics

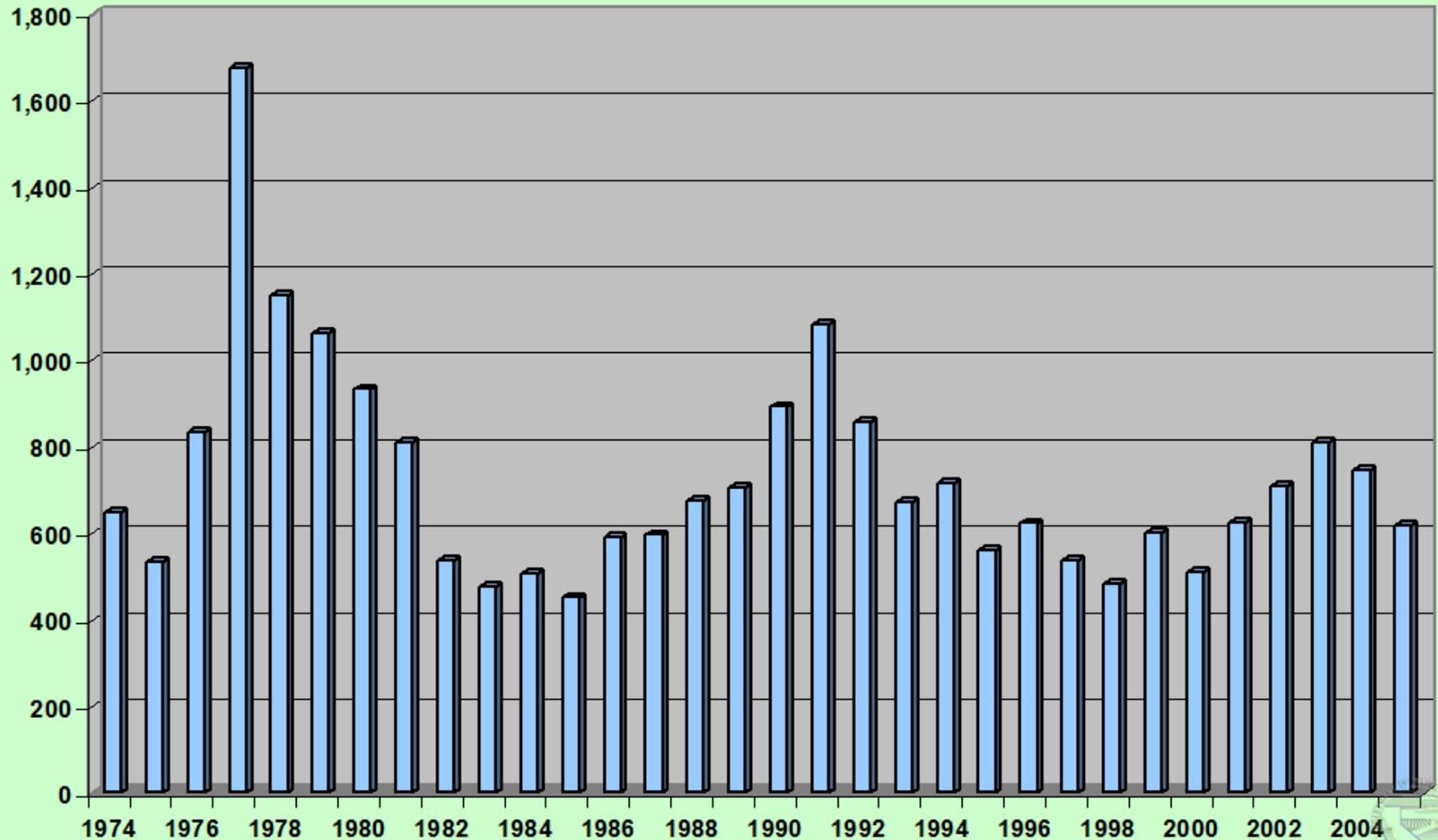


# Well Completion Report Data (Driller's Logs)

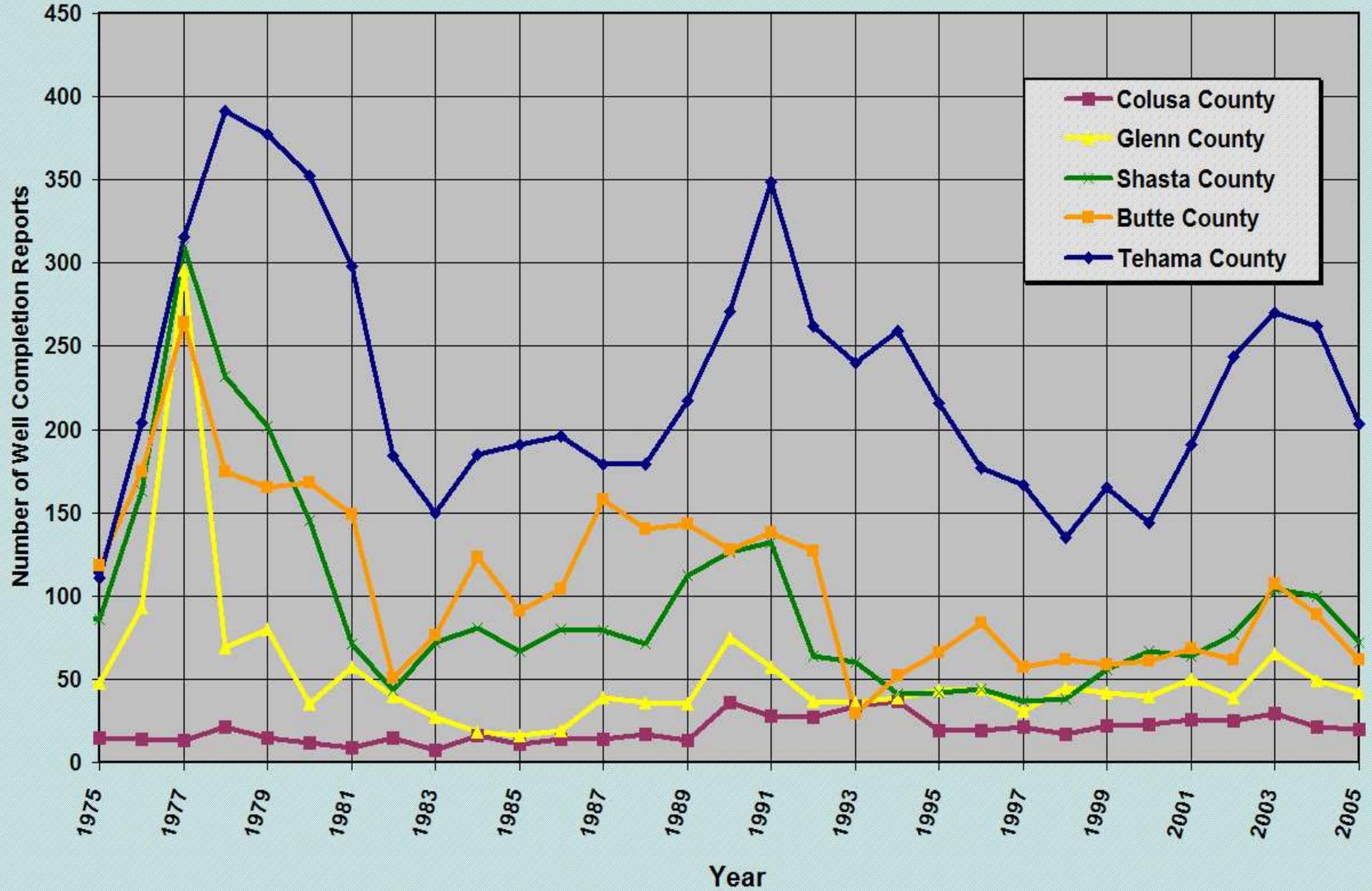


# Total WCR's Filed Per Year

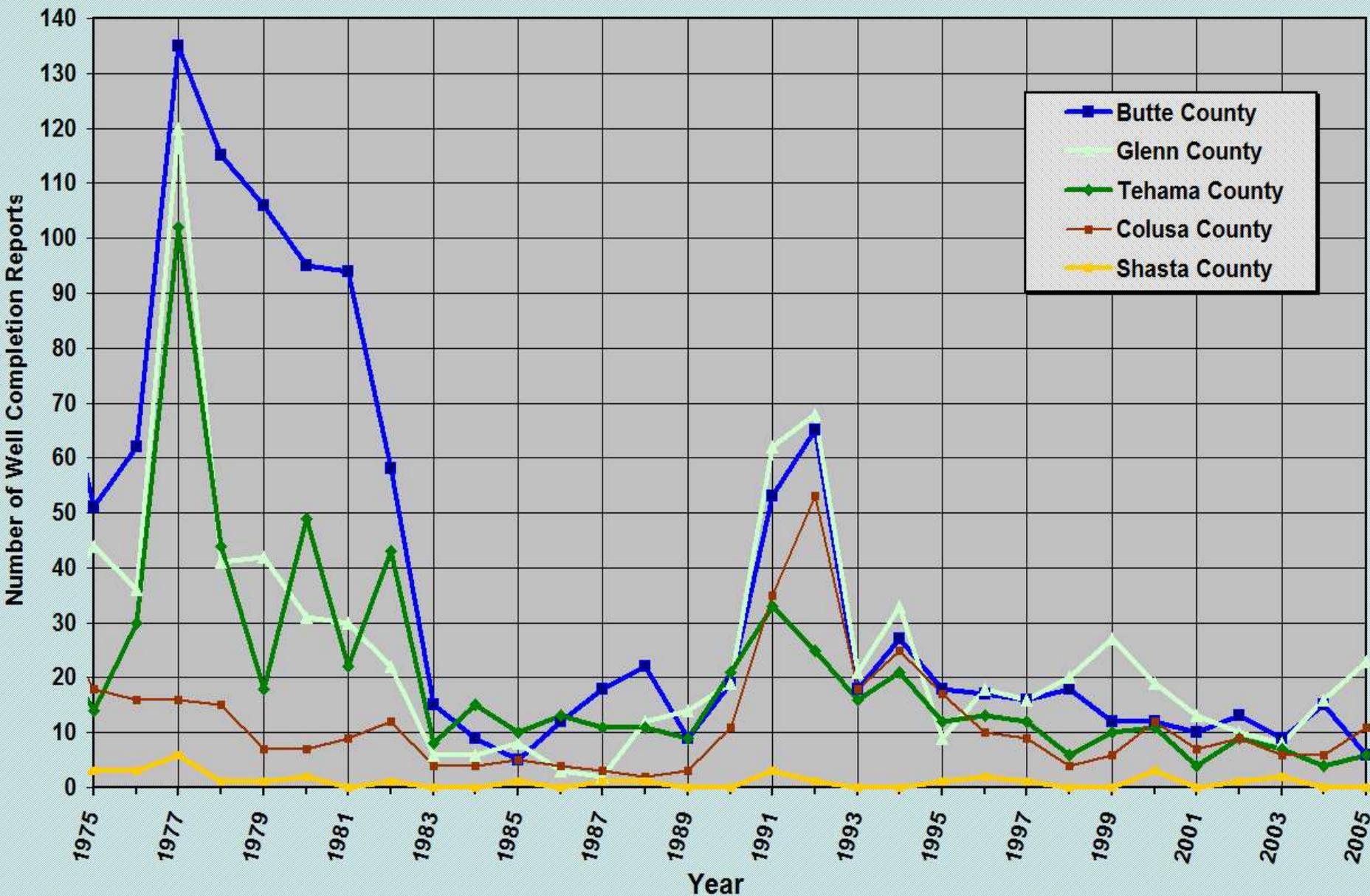
## Sac Valley portion of 5-County Area



## Domestic Well Completion Reports Filed Per Year for Shasta, Tehama, Glenn, Butte & Colusa as of Dec. 2006



# Irrigation Well Completion Reports Filed Per Year for Shasta, Tehama, Glenn, Butte & Colusa as of Dec. 2006



# Water Supply Issues

- New General Plans – Sufficient water for proposed development ??
  - Foothill & Mountain Hardrock areas; assessing the water supply is difficult.
- Impacts of water transfers on neighbors and environment; policies of State and Federal Government can be a hindrance.
- Bottle water companies vs. available supply
- Water exports to Bay Area and So Cal.
- Phase 8 Settlement and impacts on neighbors

# Water Quality Issues

- Land Use and Develop increase on WQ impacts on water supply – Red Bluff Nitrate and Chico toxic issues.
- Mercury Contamination and bioaccumulation in fish.
- Alga Blooms in Lakes and Reservoirs, Oroville and Clear Lake.
- Protection of Water Supplies from Transportation Corridor (remember Cantara)

# Environmental Water Issues

- Endangered Species Act impacts on water supply; Operation, maintaining existing, and development of new water supplies.
- Riverine restoration and potential impacts on ag land and private property – rivers naturally want to migrate.
- Lake Davis – Northern Pike Eradication
- Red Bluff Diversion Dam – Water delivery method (ESA induced) vs. local economy.

# Flood Protection Issues

- Floodplain construction w/ general public picking up the tab.
- Development of Levee system for the 21<sup>st</sup> century could remove land from tax rolls.
- Need for Safe Harbor agreements
- Living with hydrologic uncertainty vs. concrete and rebar control; or somewhere in between?

# Water Management Issues

- **Water Users opting out of State Watermaster Service**
- **Disadvantaged areas' fiscal inability to manage system resources.**
- **Federal vs. State vs. County vs. District vs. NGO vs. no control.**
- **Like Rest of State; AG/ M&I / Environ confrontations reign in the region.**