



To promote the economic, social and environmental viability of Northern California by enhancing and preserving the water rights, supplies and water quality of our members.

MANDATING AGRICULTURAL WATER CONSERVATION IN THE SACRAMENTO VALLEY WILL NOT PRODUCE MORE WATER FOR THE STATE

One response to the Delta's problems has been to propose that all water users in the State simply reduce their use of water. Such one-size-fits-all mandates will not produce more water from the Sacramento Valley because water users there already reuse water many times. In order to reduce Sacramento Valley water usage, such mandates would force productive farm ground to be fallowed, causing significant economic impacts and harming the Pacific Flyway.

- Sacramento Valley farms maximize water reuse. Sacramento Valley agricultural water users use the same molecules of water up to nine times before water flows from the Valley into the Delta. Many Sacramento Valley water districts are plumbed so that water not used on one farm flows to the next farm in the district. Many districts release water into drains from which other districts divert and reuse that water.
- Sacramento Valley water use supports the Pacific Flyway. The flooding of rice fields in the fall to decompose rice straw supports extensive habitat for migrating bird species in the Pacific Flyway. Reducing rice acreage and the water diverted for rice production and decomposition would reduce avian habitat.
- Sacramento Valley water uses add water to the state's supplies in dry years. In the California Water Plan Update 2005, the Department of Water Resources found that, in the aggregate in dry years, more water exits the Sacramento River hydrologic region than enters it (36,595,000 acre-feet enter, 40,155,000 acre-feet exit). This occurs because: (1) Sacramento Valley surface reservoirs release water from storage in dry years; and (2) Sacramento Valley water users pump groundwater, some of which eventually reaches surface streams. (See California Water Plan Update 2005, p. 6-6 (reverse side, highlighting).)
- Water conservation mandates would cause fallowing and severe economic impacts. Each crop demands, in a particular climate, a set amount of water. The Sacramento Valley's clayey soils constrain the crops that can be grown. Because of these constraints, rice is the main crop in the Valley. Prices for rice currently are increasing, despite the severe economic downturn. Fallowing productive ground would be the primary way to achieve water conservation mandates in the Valley and negatively affect the Valley's main economic activity.

Table 6-2 Sacramento River Hydrologic Region Water Balance Summary - TAF

Water Entering the Region – Water Leaving the Region = Storage Changes in Region

	Water Year (Percent of Normal Precipitation)		
	1998 (168%)	2000 (105%)	2001 (67%)
Water Entering the Region			
Precipitation	89,500	57,106	35,895
Inflow from Oregon/Mexico	0	0	0
Inflow from Colorado River	0	0	0
Imports from Other Regions***	901	1,150	700
Total	90,401	58,256	36,595
Water Leaving the Region			
Consumptive Use of Applied Water * (Ag, M&I, Wetlands)	4,119	5,532	5,456
Outflow to Oregon/Novada/Mexico	0	0	0
Exports to Other Regions***	5,194	6,251	4,657
Statutory Required Outflow to Salt Sink	11,039	8,879	5,663
Additional Outflow to Salt Sink	35,112	12,328	3,940
Evaporation, Evapotranspiration of Native Vegetation, Groundwater Subsurface Outflows, Natural and Incidental Runoff, Ag Effective Precipitation & Other Outflows	31,445	26,518	20,439
Total	86,909	59,508	40,155
Storage Changes in the Region			
[+] Water added to storage			
[-] Water removed from storage			
Change in Surface Reservoir Storage	2,752	-1,101	-2,412
Change in Groundwater Storage **	740	-151	-1,148
Total	3,492	-1,252	-3,560
Applied Water * (compare with Consumptive Use)	6,957	9,208	9,096

***Footnote for applied water**

Consumptive use is the amount of applied water used and no longer available as a source of supply. Applied water is greater than consumptive use because it includes consumptive use, reuse, and outflows.

****Footnote for change in Groundwater Storage**

Change in Groundwater Storage is based upon best available information. Basins in the north part of the state (North Coast, San Francisco, Sacramento River and North Lahontan regions and parts of Central Coast and San Joaquin River regions) have been modeled – spring 1997 to spring 1998 for the 1998 water year and spring 1999 to spring 2000 for the 2000 water year. All other regions and year 2001 were calculated using the following equation:

$$\text{GW change in storage} = \text{intentional recharge} + \text{deep percolation of applied water} + \text{conveyance deep percolation} - \text{withdrawals}$$

This equation does not include the unknown factors such as natural recharge and subsurface inflow and outflow.