Why Just the State of Jefferson?

Let's Break California Up into 19 States...

We want out, again...

State of Jefferson

The United States of California

State of Potwinetub
State of Fabulous!
State of Thirst
State of Reagan
State of Glitz
State of Freeway
State of Surfing

State of Water
State of Drive-Thru
State of Ag
State of Parks

State of Fun
State of Nuthin'
State of Golf
State of Dry

I'm outta here!
Sacramento Valley –
A truly unique and exceptional place
Sacramento Valley Hydrologic Region – Land Uses

- **Urban**
- **Agriculture** — By crop type
- **Wetlands**
Water Resources Management Entities
Sacramento Valley Sustainability Initiative

Provide a sustainable water supply for the unique mosaic of farm lands, wildlife refuges, managed wetlands and high quality rivers and streams that support waterfowl habitat and spawning grounds for numerous fish species and the cities and rural communities that make up this special region.
Sacramento Valley

Several million acres of family farms that provide the economic engine for the region through the production of rice, trees, and various row crops that serve as a working landscape and pastoral setting and provide valuable habitat for waterfowl along the Pacific Flyway.
Sacramento Valley

Habitat for 50% of the threatened and endangered species in California, including the winter-run and spring-run salmon, steelhead and many other fish species.
Sacramento Valley

Six National Wildlife Refuges, more than fifty state Wildlife Areas and other privately managed wetlands that support the annual migration of waterfowl, geese and shore birds in the Pacific Flyway. These seasonal and permanent wetlands provide 65% of the North American Waterfowl Management Plan objectives.
Sacramento Valley

The **small towns and rural communities** that form the backbone of the region, as well as the **State Capital** that serves as the center of government for the State of California.
Sacramento Valley
The forests, meadows and canyons in the watersheds of the Sierra Nevada and Coast Range.
Cornerstone for Central Valley/State Water Projects
The Context for Water Management in the Sacramento Valley

Final Draft

Efficient Water Management for Regional Sustainability in the Sacramento Valley

Prepared for Northern California Water Association

July 2011
Sacramento River Hydrologic Region Water Use

- Required Delta Outflow: 25%
- Instream Flow: 17%
- Wild & Scenic Rivers: 14%
- Urban: 4%
- Managed Wetlands: 3%
- Irrigated Agriculture: 37%

DWR, Bull. 160
Figure SR-2  Sacramento River Hydrologic Region water balance summary, 1998-2005

A Region in Balance?

Comparison of 2005 total water use
- North Coast
- San Francisco
- Central Coast
- South Coast
- Sacramento River
- San Joaquin River
- Tulare Lake
- North Lahontan
- South Lahontan
- Colorado River
- Mountain Counties (overlay area)
Stable Sacramento Basin Water Use


Revised Figure 7b - "Historic Diversion from the Delta"

Hydrology is the biggest variable

Sacramento Basin use has been essentially constant since the mid-1970's
The Context for Water Resources Management Decisions

• Hydrology of the Sacramento Valley – a "flow through" system

• Goal is sustainability

• Better understand trade-offs among beneficial uses

• Only water lost is through consumption

• Timing opportunities - contribute to fish passage, habitat and water quality improvements
Accounting for every drop.

Water management in the Sacramento Valley.

In the Sacramento Valley, a highly efficient “flow-through” system allows water to move from mountains to ocean. Water resources managers work with the Valley’s unique topography, geology and hydrology to gather, use and reuse this precious resource.

This system is the heart of the Valley’s healthy ecosystem, diverse economy and rich recreational opportunities.

Rice is grown on dense clay soil which prevents seepage and ensures water is available for re-use downstream.

This flow-through system works well. Natural vegetation, birds, fish, crops and people require a portion. The rest flows to the delta.

The water not used in one district is a source of water for others downstream.

All water not used by crops and wetlands returns to the river or percolates down to groundwater, recharging Valley aquifers.

The Sacramento River and its tributaries are the prime sources for this system. They also gather water from irrigation and wetlands to reuse downstream.

Active management of the Sacramento Valley’s flow-through system ensures that the water we need and the benefits we enjoy will continue to be available.

Information compiled by Northern California Water Association and California Rice Commission.

facebook.com/SacValleyCA
Restoring the Salmon Runs

Sacramento Valley water resources managers are partnering with federal and state agencies and conservation organizations to improve migratory corridors and habitat for salmon. The measures taken and the money spent—more than $1 billion over the past two decades—have been helpful but there is still more work ahead to restore the salmon runs.

Fish screens
More than 80 percent of the water diverted from the Sacramento River system for wildlife refuges, farms, cities and rural communities is pumped through state-of-the-art fish screens, while the fish stay safe, healthy and in the river.

Spawning gravel
Is reintroduced to rivers and streams to improve spawning habitat. Over 200,000 tons of gravel has been added to the Sacramento River since 1997.

Flow agreements
To benefit salmon and other fish are on every major watercourse in the Sacramento Valley. Get the details at www.norcalwater.org/efficient-water-management/instream-flows/

Migration corridors
Are important to help young salmon (smolts) avoid predators in their migration from the valley to the ocean. Water managers in the Sacramento Valley are currently building a Salmon Smolt Encapment Plan to time pulses of water with fish releases.

Our thanks to California Fisheries Biologist Dave Vegli, who made these recommendations as part of his report, Insights into the Problems, Progress and Potential Solutions for Sacramento River Basin Native Anadromous Fish Restoration www.norcalwater.org/efficient-water-management/fisheries-enhancements
Re-Managing the Flow

The major rivers and streams of the Sacramento Valley provide essential pathways for spawning salmon and steelhead. Flow agreements to benefit these fish are on every major watercourse in the Sacramento Valley.

- **Trinity and Shasta Lakes**: Important sources of cold water storage. Timing the release of this cold water into the rivers is vital if spawning fish are to thrive.
- **Sacramento River Tributaries**: Various flow agreements benefit spring run salmon.
- **Clear Creek**: In May and June, water is pulsed into Clear Creek to attract spring run salmon from the Sacramento River. From June through October, water released from Fishrocky residence keeps water temperature cool.
- **Sutter Buttes River**: Various flow agreements benefit spring run salmon.
- **Sacramento River below Keswick Dam**: In 1990, flow objectives were established for the protection of fish and wildlife. In 1990 and 1991 this policy was modified requiring more cold water when warmer temperatures would be harmful to fish.
- **Sacramento River at Wilkins Slough**: The Rivers and Harbors Act of 1935 mandated a specific flow rate at Wilkins Slough be maintained. The primary goals at that time were navigation and flood control. In 1997, Congress made protection of fish and wildlife a secondary goal and this requirement was updated in 2009.
- **American River below Nimbus Dam**: In 2009, the Flow Management Standard was developed, which established minimum flow standards to improve the conditions for fall-run Chinook salmon and steelhead. Additional releases are adjusted to maintain sufficiently low water temperatures for steelhead rearing in summer and Chinook spawning in the fall.

For more details visit [www.nocalwater.org](http://www.nocalwater.org) - Efficient Water Management/Instream Flows.
'I do too know something about water! I drink Perrier!'
Pacific Flyway Habitat

Considerable progress has been made to enhance habitat for migratory waterfowl, wintering shorebirds, raptors, riparian songbirds and other wetland dependent species in the Sacramento Valley.

During the winter, reliable water supplies in the Sacramento Valley flooded harvested rice fields, provide habitat, irrigate managed wetlands and deliver water to refuges and wildlife areas.

Flooded rice fields, National Wildlife Refuges and State Wildlife Management Areas and intensively managed private wetlands help compensate for the 95% of Central Valley wetlands lost over the years.

Up to 350,000 acres of rice are flooded each winter to provide bird habitat. An additional 43,000 acres of Sacramento Valley wetlands rely on the water drained off rice fields for fall flooding.

The amazing array of bird habitat in the Sacramento Valley receives surface water directly from irrigation water suppliers or indirectly from the return flow of surface water.

Nearly seven million waterfowl and 300,000 shorebirds rely on the Sacramento Valley for food and habitat. Other species which benefit include raptors, riparian songbirds and additional wetland dependent species.

Active management of the Sacramento Valley’s flow-through system ensures that the water needed for birds and their habitats will continue to be available.
Sacramento River Conservation Area

• Established 1986 (SB1086)

• Management plan to protect, restore and enhance the fisheries and riparian habitat along the Sacramento River from Keswick Dam down river to Verona. This effort is cooperative in nature and works to ensure that habitat restoration and management addresses not only the dynamics of riparian ecosystems, but also the realities of local agricultural and recreational issues associated with land use changes occurring along the river.
Improving Water Quality
Local Groundwater Management

CA Department of Water Resources
Groundwater Management Plans
Sacramento River HR Plan

Sacramento River Hydrologic Region
- SB-1938 GWMP
- Pre SB-1938 GWMP
- Multi-HR GWMP

http://www.water.ca.gov/groundwater/groundwater_management/GWM_Plans_inCA.cfm
http://www.water.ca.gov/groundwater/docs/GWMP/HR_SacramentoRiver_GWMP.pdf
Sites Reservoir

Building the Sites Reservoir
WATER FOR OUR CITIES, FARMS AND WILDLIFE

The ongoing drought has cost our state billions of dollars of farm production, diminished wildlife habitat and reduced urban water supplies. For our future prosperity, we need to capture water in rainy years through offstream storage to help the state survive future dry years. Every Californian will benefit from the increased water storage and flexible water management that will come from Sites Reservoir.

Benefits:
- More reliable water supplies for millions of households, farms, birds and migrating salmon
- Greater flexibility to save water during surplus conditions for use during dry periods
- Stores water during the winter to generate clean and renewable power for peak summer demands
- Helps recharge groundwater supplies
- Recreational opportunities including boating, camping, fishing and hiking

Location of Proposed Sites Reservoir

Water would be pumped into reservoir from existing canals
California Water Security

Vote YES on Prop. 1

Paid for by Sac Valley Water & Rice for Prop 1
ENTERING CALIFORNIA

BRING YOUR OWN WATER
Surface Water Allocations
Water Serving Triple Duty in the Sacramento Valley
Current Reservoir Conditions
Sacramento Valley Sustainability Initiative

Provide a sustainable water supply for the unique mosaic of farm lands, wildlife refuges, managed wetlands and high quality rivers and streams that support waterfowl habitat and spawning grounds for numerous fish species and the cities and rural communities that make up this special region.
Voices from the Valley

www.norcalwater.org

**Blogs from the Valley**

**NCWA Honors**
At NCWA’s 20th Annual Meeting Joe Scalmamani and George Basye were honored with the Innovative Water Management Water Award and the Will S. Green Award.

**Featured Items**

- **Water Conservation & Efficiency in the Sac Valley: Active Water Resources Management in a Flow-Through System.**
- **Water in California's North State**
  For more information please visit northstatewater.org

**David Guy’s Blog**

This blog explores the intersection between water, food and the environment — with a focus on the increasing challenges facing California and our efforts to manage and preserve our natural resources for present and future generations.

**MORE »**

**AQUAFORNIA**
The California Water News Blog by the Water Education Foundation
Think about...

- Special nature of the region
- Highly managed system
- Integrated nature of system
- Operation of CVP/SWP
- Are we in balance?
- Partnerships
- Creativity within legal framework
- Passion for the region
What’s at Stake?
The importance of protecting water resources in the Sacramento Valley