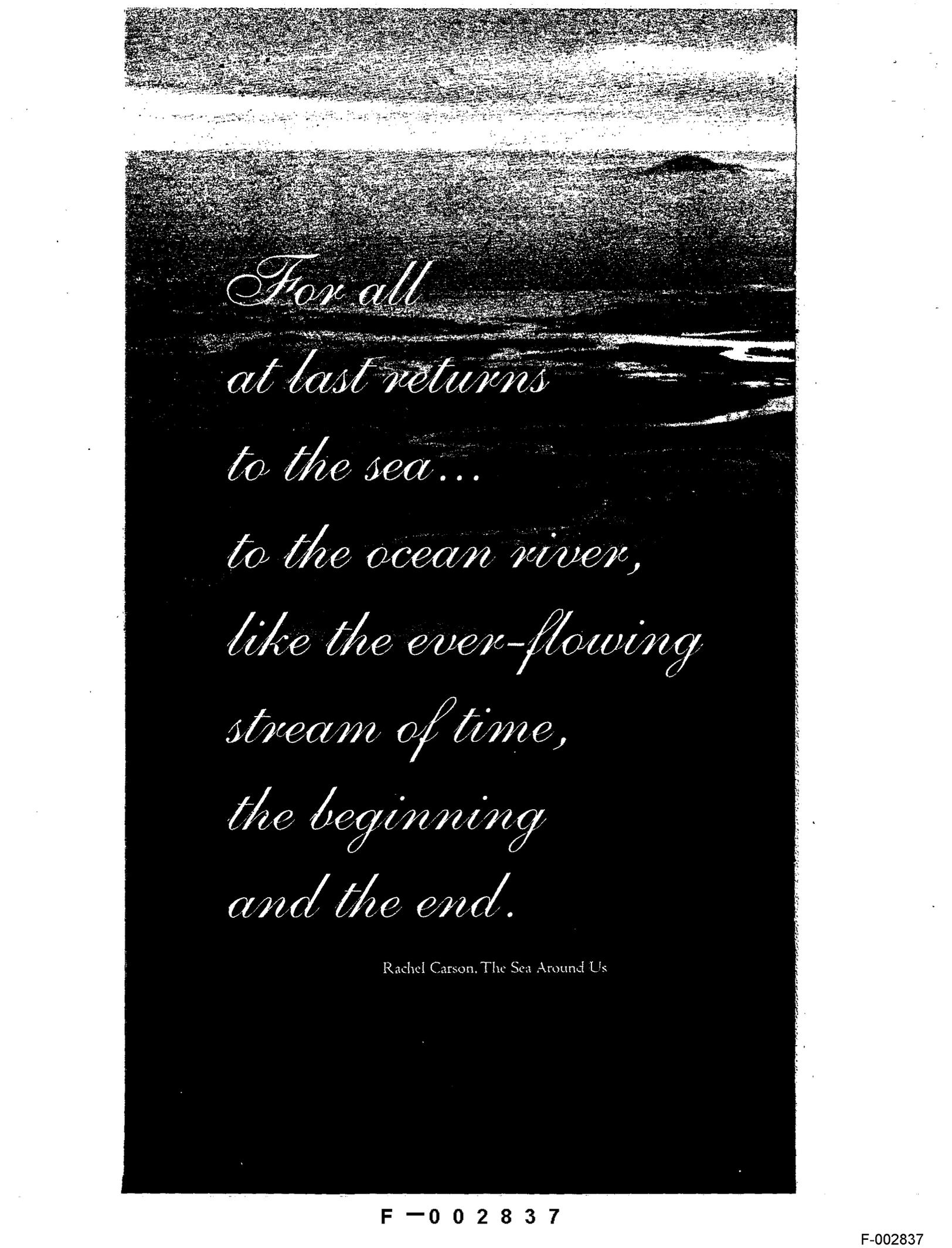




BAY  
DELTA  
PRIMER

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*For all  
at last returns  
to the sea...  
to the ocean river,  
like the ever-flowing  
stream of time,  
the beginning  
and the end.*

Rachel Carson, *The Sea Around Us*

## Preserving our natural assets.

### BAY DELTA PROGRAM GOALS:

#### ① WATER QUALITY

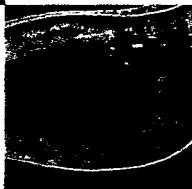
*CALFED intends to protect the quality of Bay-Delta water, which serves some of America's most populous cities, most productive farms and most precious environmental treasures.*

*G*randeur, abundance and a source of pride. These are just a few of the many gifts America receives from her natural resources.

One of these important resources is an intricate web of waterways created by the blending of the San Francisco Bay with the confluence of California's two largest rivers, the Sacramento and the San Joaquin.

Here, land and sea merge into a diverse ecosystem, a maze of tributaries, sloughs and islands. This estuary, the largest in the West, is called The San Francisco Bay/Sacramento-San Joaquin River Delta.

At one time, the Bay-Delta's 738,000 acres of lush and beautiful land was a safe haven where plants and wildlife flourished. It can be once again with proper care.



## For our families. For our future.

### ② ECOSYSTEM QUALITY

*To support Bay-Delta fish and wildlife, CALFED is seeking to improve and increase aquatic and terrestrial habitats as well as ecological functions.*

Some 20 million people—urban and rural alike—rely on the Bay-Delta for much of their water and indirectly for their livelihood. Thousands of birds migrate and live in the Bay-Delta, as do more than 53 species of fish. Clearly, the quantity and quality of the Bay-Delta's water must be protected for nature, as well as for those who live and work here and throughout California.

Even people with opposing views and interests—some having a long history of conflict—recognize the Bay-Delta's immense value. With the help of CALFED, they're coming together for the sake of the Bay-Delta and our future.

They know that keeping the Bay-Delta viable and healthy is important for all the people of California and of America. They know that it's our civic and national duty to take care of this natural treasure. And they know that with the right plans in place and the proper resources for support the Bay-Delta will thrive well into the next century.

## Ecology and economics. Abundance and quality. Preparedness and protection.

The economy of California—the seventh largest economic power of the world—succeeds thanks in part to Bay-Delta water. Such key industries as canning and computers require a plentiful supply of water to prosper, as does California's agricultural sector, which grows more than 45 percent of America's produce.

But abundant water alone isn't beneficial. The environment, the economy and all citizens need water that is consistently of good quality.

Another concern is the stability of the Delta system's levees. For generations, families have lived on and worked the land behind the now-weakening dikes.

To help protect our past, our present and our future, enhancing the levees is a top priority.



# CALFED. Planning. Resolution. Action.

## ③ WATER SUPPLY

*CALFED intends to create opportunities for water users to obtain the water they need so that supply better matches demand.*

The CALFED Bay-Delta Program gathers state and federal agencies, farmers and fishermen, consumers and corporations, and economists and environmentalists. It addresses simultaneously the many problems affecting the Bay-Delta by developing balanced, comprehensive and lasting solutions that win the support of all concerned.

Participants share the view that with the spirit of cooperation solutions can be attained. Our guidelines direct us to help reduce conflict and to develop and implement equitable solutions that are durable, feasible and don't shift problems from one area to another.

The CALFED Bay-Delta Program focuses on resolving both long-term and more immediate needs. While the full CALFED solution will be implemented over many years, we expect to start taking action as soon as we complete the environmental review process and the state and federal governments approve the Bay-Delta solution in late 1998. In the meantime, some actions can be taken to begin improving conditions in the Bay Delta.



# Keeping you informed. Winning your support.

## ④ LEVEE SYSTEM INTEGRITY

*CALFED will reduce the risk from catastrophic breaching or gradual deterioration of Delta levees for land use, water supply, infrastructure and the ecosystem.*

## About the CALFED Bay-Delta Program

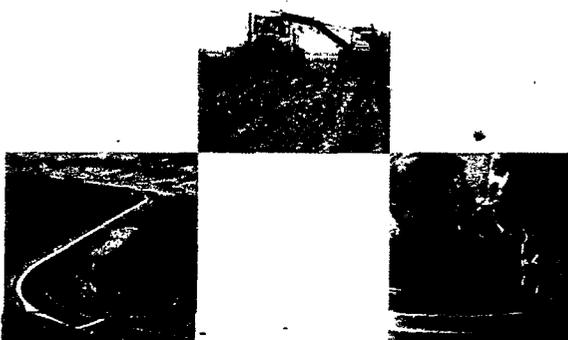
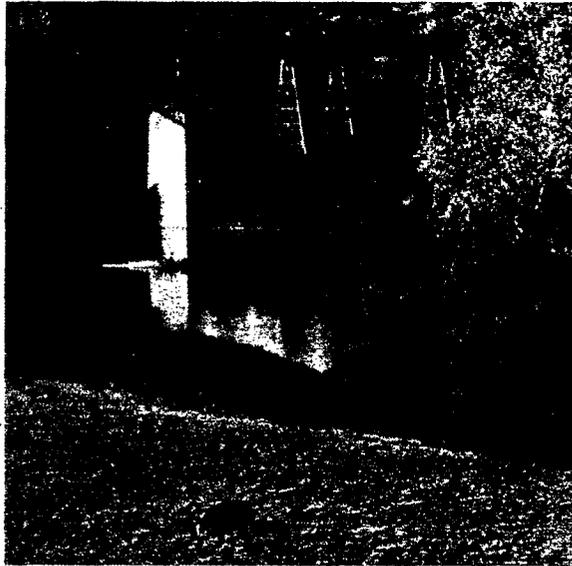
*Established in 1995, CALFED is a partnership of state and federal agencies having managerial and regulatory responsibilities in the San Francisco Bay/Sacramento-San Joaquin River Delta.*

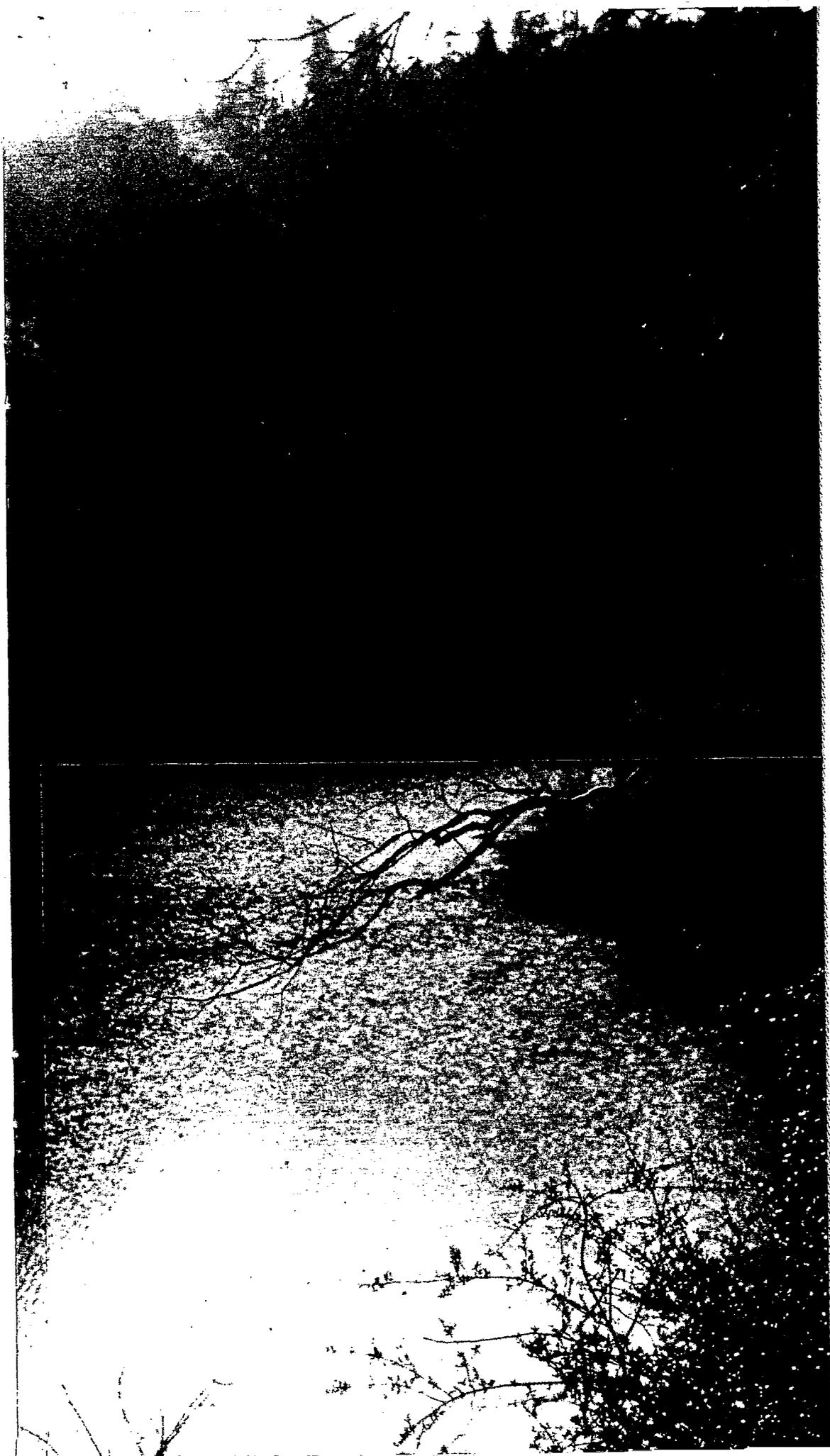
*To keep everyone well informed about the issues surrounding the Delta system, we regularly conduct public workshops to ensure that the public and stakeholders are involved every step of the way.*

*CALFED welcomes support from those interested in enriching the Delta system for generations to come.*

## Mission of CALFED Bay-Delta Program

*The mission of the CALFED Bay-Delta program is to develop a long-term comprehensive plan that will restore ecological health and improve water management for beneficial use of the Bay-Delta system.*





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**California Agencies of CALFED**

California Resources Agency  
Department of Fish and Game  
Department of Water Resources  
California Environmental Protection Agency  
State Water Resources Control Board

**Federal Agencies of CALFED**

U.S. Environmental Protection Agency  
U.S. Department of the Interior  
U.S. Fish and Wildlife Service  
U.S. Bureau of Reclamation  
U.S. Department of Commerce  
National Marine Fisheries Service



CALFED Bay-Delta Program 1416 Ninth Street, Suite 1155 Sacramento, CA 95814  
ph: (916) 657-2666 fx: (916) 654-9780 Web Site: <http://calfed.ca.gov/>



## Central California's Stake in the CALFED Bay-Delta Program



Two trends define central California in the late 1990's: the continued strength of farming (45% of America's produce grows in California) and the expansion of central valley towns and cities. Both of these trends, critical to the region's economy and social structure, depend upon water.

Because a significant proportion of central California's water comes from the Bay-Delta, communities there have much to gain from the CALFED Bay-Delta Program.

**Better Water Quality.** Agricultural productivity drops when salt water intrudes too far into the freshwater Delta. The Bay-Delta solution will address salt intrusion and other water quality challenges facing Central Valley farmers.

**A More Reliable Water Supply.** All of CALFED's alternative solutions include a range of options to increase water storage capacity. The range includes offstream storage along the San Joaquin River system and greater capacity to store Delta export water.

Also, whichever alternative solution is chosen, the CALFED Bay-Delta Program will improve the way water moves through the Delta to the export pumps.

Equally important, the Program will restore the Bay-Delta ecosystem, reducing constraints on the export of water to farms and towns. (Currently, when too many endangered-species fish approach the south Delta pumps, pumping temporarily shuts down to protect them. When the ecosystem returns to health, these unpredictable curtailments are expected to decline.)

While the CALFED Bay-Delta Program will not solve all of California's water supply problems, it will help close the projected water supply gap.

## Southern California's Stake in the CALFED Bay-Delta Program.



For southern California, fixing the Bay-Delta means better drinking water quality and a more secure economy. How can that be?

How can a region that makes up just 1% of California's land mass, that is nearly 300 miles north of the Tehachapi Mountains, affect water quality in Escondido, job growth in Gardena, or property values in Pomona?

It can because the Bay-Delta supplies most of the water consumed by 16 million southern Californians and their \$450 billion economy. What precisely will the CALFED Bay-Delta Program do for southlanders?

**Improve Water Supply Reliability.** Whichever alternative solution is chosen, the CALFED Bay-Delta Program will improve the way water moves through the Delta, the hub of California's water distribution system. Equally important, the Program will restore the Bay-Delta ecosystem, reducing constraints on the export of water to agricultural and urban areas. (Currently, when too many endangered-species fish approach the south Delta pumps, pumping temporarily shuts down to protect them. When the ecosystem returns to health, these unpredictable curtailments are expected to decline.) While the CALFED Bay-Delta Program will not solve all of the California's water supply problems, it will help close the water supply gap, which is projected to be as high as 9 million acre feet in critically dry years by 2020. (An acre foot is 325,851 gallons.)

**Protect Water Quality.** The Program will reduce the release of pollutants into the Bay-Delta system, giving you cleaner, healthier water and helping communities to manage water treatment costs.

**Protect California's Natural Resources.** A lush, beautiful network of marshes, waterways, farms, and historic hamlets, the Bay-Delta is a critical environment for thousands of fish and wildlife, as well as for boaters, campers, fishermen, and others. Like Mount Shasta, the southern California beaches, and Yosemite, it is part of the rich natural heritage all Californians enjoy.

# Northern California's Stake in the CALFED Bay-Delta Program



Unlike much of California, the northern third of the state supplies water to -- rather than diverting water from -- the Delta.

Northerners have an important stake in that water, requiring plentiful groundwater and adequate river flows to support their homes, farms, and industries. Time and again, they have urged CALFED to recognize their interests in designing the Bay-Delta solution.

And CALFED has listened. Just a few of the ways the north could benefit from a Bay-Delta solution ...

**Watershed Management** is included in each of the three alternative Bay-Delta solutions as a means of improving water quality. Watershed management will also be investigated for the potential to improve overall ecosystem health and increase water yield.

**Ecosystem Restoration** along the northern Sacramento River appears in all three alternatives. Restoration could include set-back levees from Verona to Collinsville and meander belts north of Colusa, among many other activities.

**Upstream Storage** opportunities are being investigated in every solution alternative.

**Balance between Delta Water Supply and Demand** is one aim of this Program. While CALFED will not solve California's water supply problem, the Program seeks a balanced, fair way to reduce the mismatch between what water users need from the Delta and what the Delta can provide. The Program is also expected to increase opportunities for regions to meet their own water supply needs. Through equitable, thoughtful long-range planning, the Bay-Delta solution should reduce the possibility of future water supply crises and ad hoc efforts to redistribute water, clearly a benefit for the communities where water originates.

**The State's Economic Future** will be strengthened by solving the critical water problems involving the Bay-Delta. From northern farms to southern cities, every sector of the state will benefit from a strong and stable economy.

# Facts about the Bay-Delta



**Total Size:** 738,000 acres

**Current Wetlands:** 70,000 acres

**Average Annual Outflow:** 18.4 million acre-feet\*

**Diversions from the Delta:** 2,000

**Total Diversions from the Delta and its Tributaries:** 7,000

**Bay-Delta Water Diverted to the CVP\*\* and SWP\*\*\* (the largest diverters):** 6 million acre-feet/year

**Percent of Inflow Diverted:** 37% in 1993-94, 11% in 1994-95

**Highest Percent of Inflow Diverted Annually Since 1980:** 53% in 1989-90

**Lowest Percent of Inflow Diverted Annually Since 1980:** 6% in 1982-83

**Fish and Wildlife Species:** 120+

**Species Designated by the State or Federal Governments as Threatened or Endangered:** 9

**Species with Special Status:** 40+

**Extent of Delta Farmland:** 527,309 acres

**Extent of Delta Levees:** 1,100 miles

**Islands Converted since 1850 from Marshland to Agriculture and Other Uses:** 57

**Level to Which Some Islands Have Sunk Due to Soils Subsidence:** 25 feet below the level of adjoining waterways

**Bay-Delta Recreational Activities:** camping, hiking, sightseeing, bicycling, horseback riding, boating, waterskiing, fishing, etc.

\* An acre foot of water -- 325,851 gallons -- would cover one acre to a depth of one foot and would supply about 2 households for one year.

\*\* CVP: Central Valley Project

\*\*\* SWP: State Water Project