

# Crossroads: ENVISIONING A FUTURE FOR THE DELTA



## A SYSTEM IN CRISIS

**T**he Sacramento-San Joaquin Delta is a crossroads—the place where California’s two largest rivers meet before flowing into San Francisco Bay. It is home, nursery, and migration route for over 700 native plants and animals, including many found nowhere else on earth. The Delta is also a key shipping and transportation corridor, major agricultural area, popular recreational destination, site of burgeoning development, and source of drinking water for 2 out of 3 Californians—more than 23 million people.

Before the mid-1800s, the Delta was a vast and ecologically abundant maze of wetlands and waterways bordered by woodlands on natural levees and sand mounds. Today, wetlands and adjacent riparian habitat have been reduced by 95% and replaced by diked levees, narrow channels, farmed islands, and—increasingly—suburban development.

Alarm bells are sounding in the Delta. Native fish populations have plummeted as much as 90% over the past two decades. The most recent numbers for the delta smelt—considered the Delta’s “canary in the coal mine”—were the



Photo: U.S. Fish & Wildlife Service

lowest ever recorded and down 90% from just a year ago. Scientists fear that longfin smelt, salmon, sturgeon, and steelhead are headed down the same path.

## THE DELTA:

- Is the largest estuary on the west coast of the Americas
- Is home to over 700 native plants and animals
- Serves as a highway for migrating salmon and steelhead and a key stop for millions of birds on the Pacific Flyway
- Provides drinking water for 23 million people
- Includes 500,000 acres of cultivated land and provides irrigation water for an additional 3 million acres of agriculture
- Supports a \$400 billion annual economy

Massive water diversions—including huge upstream dams and pumps so powerful they cause rivers to run backwards—have disrupted the Delta’s natural ebb and flow and altered the very chemical composition of the system. Compounding the problem, Delta waters are polluted with toxic pesticides, fertilizers, and other contaminants from agricultural and urban runoff. Degraded water quality threatens agricultural productivity and ecosystem viability, and poses a public health concern for the millions of Californians who rely on the Delta for drinking water, fishing, and recreation.

On top of the ecological crisis, the stage is set for a Hurricane Katrina-like disaster. Parts of the Delta have subsided as much as 20 feet or more below sea level behind aging levee systems—some more than a century old. Further, scientists estimate there is a very high chance the Delta will experience catastrophic levee failure from an earthquake within the next century, placing farms, homes, drinking water supplies, and human lives at risk. Rising sea levels and increased flood runoff due to global climate change will only exacerbate the problem.

Most experts agree that current management of the Delta is unsustainable, and federal, state, and local planners are struggling to envision a path forward for this vital region.

# A VISION FOR THE FUTURE

It is not too late to protect the Delta's beneficial uses for ourselves and future generations. With growing alarm over levee failures, crashing fish populations, and polluted waters, the attention of decision makers and the public is focused as never before on the need to change "business as usual" in the Delta. Now is the time to adopt policies that address the current crisis and anticipate future challenges.

## KEY ACTIONS TO SAVE THE DELTA

- Protect the Delta as a new Ecosystem Park or Preserve, with restored habitat and flow conditions
- Put a moratorium on new land and water development in the Delta
- Replace Delta exports with alternative water sources and make other regions of California more self-reliant on local water supplies

In response to the Delta crisis, The Bay Institute has developed a *Long Term Vision for the Sacramento-San Joaquin Delta* that would help ensure the viability of the region over the next century and beyond.

Our recommendations (prepared in collaboration with the Natural Heritage Institute, Natural Resources Defense Council, The Nature Conservancy, Planning and Conservation League, California Water Impact Network, and Environmental Defense) describe a comprehensive approach to managing the Delta to provide ecosystem, flood management, water supply, water quality, and other services. Among the plan's essential components are:

- ✿ Restoring a mosaic of habitats and habitat corridors throughout the Delta to offset historic and future habitat loss.
- ✿ Restoring more natural flow conditions and reducing total diversions in and upstream of the Delta to provide adequate habitat for flow-dependent native species and communities.
- ✿ Creating flood bypasses and floodplain corridors to reduce risk of island failure and expand habitat acreage.
- ✿ Managing and reversing subsidence on central and western Delta islands to reduce the risk and effects of levee failure.
- ✿ Securing reliable alternative water supplies for communities that currently export Delta water to promote local self-sufficiency and reduce Delta exports.



Photo: Ann Dickinson

- ✿ Eliminating water quality degradation from in-Delta and upstream sources.
- ✿ Taking aggressive near-term actions to protect public safety and prevent species extinctions.
- ✿ Adopting a phased, experimental approach to evaluate alternative Delta conveyance options on the basis of reversibility and ecological compatibility, focused on the least intrusive and more reversible actions first.
- ✿ Protecting the Delta as a state and/or federal "preserve" and strengthening institutional oversight of Delta land use and water operations.
- ✿ Implementing a realistic, "beneficiary pays" financing plan to implement the Delta Vision plan.

For the full *Vision* report please visit:

[www.bay.org](http://www.bay.org)

Or contact us at



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The Bay Institute protects and restores the ecosystems of San Francisco Bay, the Sacramento-San Joaquin Delta, and the rivers, streams, and watersheds tributary to the Estuary . . . from the Sierra to the sea.