

# The Bay and Delta

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The Bay and Delta region includes San Francisco Bay, the Delta itself, and the watersheds of the American, Cosumnes, Calaveras, and Mokelumne Rivers. Parts of the region are intensely urbanized, including the San Francisco, Oakland, San Jose, Sacramento, and Stockton metropolitan areas. The Delta islands and areas of the Valley are used for irrigated agriculture. The region's population is expected to increase to more than 10 million by 2020, while agricultural acreage remains stable or declines. Water supply for the Sacramento and Stockton areas comes from local surface water and groundwater, whereas supply in the Delta and Bay Area is imported from the Sierra Nevada or is diverted from the Delta. Much of the water supply for the west side of the San Joaquin Valley and Southern California flows from the Sacramento Valley and is pumped from the Delta. The Delta is also the State's most important fishery habitat.

## Goals

The primary goals for water management in the Delta and Bay region include:

- ✓ Improve in-Delta water quality
- ✓ Increase export flexibility
- ✓ Enhance Bay Area urban water quality and reliability
- ✓ Maintain levee stability
- ✓ Preserve Delta agricultural water supply

## Strategy

Key measures in the Bay-Delta strategy include:

- ✓ Construct interties between Bay Area urban districts
- ✓ Provide storage and diversion capacity to capture and manage high-quality source water and to allow export/fishery protection flexibility

## Actions

### Statewide Programs

The EWA will be used as a tool in the Bay-Delta region to improve flows and to reduce the effects of export on fish at the state and federal diversion pumps. Biological monitoring and water releases from facilities will be coordinated with the operation of the state and federal diversion pumps to minimize the impacts on fish.

## Regional Actions

The following highlighted actions contribute to the overall management strategy and work together to accomplish the objectives of the region's specific goals as well as the success of the statewide programs. For example, completing the South Delta Improvements Program will provide increased flexibility and reliability, while reducing effects of export on fisheries. In addition, implementing Delta flood conveyance improvements and levee system integrity will provide habitat restoration, will protect in-Delta water quality, and will increase flood protection and conveyance.

Actions to achieve these goals and strategy include:

- ✓ The South Delta Improvements Program will be completed as an early package of actions to address multiple issues in the South Delta. The overall strategy in the South Delta includes increasing usable pumping capacity at the State Pumps to 10,300 cubic feet per second, thus enabling higher diversions at times when fish concerns are low, and curtailed diversions when fish concerns are high. Problems that will be addressed in moving to the higher capacity include:
  - A strategy to maintain and improve water quality in the South Delta will be completed for export drinking water quality and in-Delta uses.
  - A strategy will be completed to maintain adequate access to water supply by in-Delta users. This strategy will probably include a combination of barriers, dredging, and potential reconfiguration of in-Delta and export intake facilities in the South Delta.
  - An EWA will be developed with sufficient tools to reduce export pumping during biologically sensitive periods, while maintaining water supply reliability.
  - A strategy will be completed for appropriate fish screens on intakes in the South Delta.
- ✓ The Bay Area urban water quality strategy (Bay Area Blending/Exchange project) will be implemented.
- ✓ Projects will be executed for in-Delta water quality (Stockton dissolved oxygen improvements, Veale Tract discharges, etc.).
- ✓ Levee system integrity improvements (base protection, special projects, and emergency response) will be carried out.
- ✓ Delta flood conveyance improvements will be completed in conjunction with habitat restoration (Mokelumne River, Paradise Cut).
- ✓ Storage capability of in-Delta and the near-Delta region will be improved. An expanded Los Vaqueros Reservoir (300 TAF) and the Delta Wetlands Project (260 TAF) will be the subject of site-specific evaluations in Stage 1, as well as consideration of alternative intake locations in the Central Delta to provide flexibility in pumping operations.

- ✓ Large tracts (totaling 5,000 acres) in Suisun Marsh will be restored to tidal marsh, especially in the western and northern portions of the Marsh.
- ✓ The initial phase of the Bay Area Regional Water Recycling Program will be implemented.
- ✓ Watershed management plans will be developed and executed around intakes, conveyances, and local reservoirs for water quality.
- ✓ EWA will focus on reducing the effects of exports on fish at state and federal diversion pumps.
- ✓ A mosaic of seasonal and permanent wetlands and associated uplands will be restored adjacent to the lower Sacramento River, northern Delta sloughs, and in northern Yolo Bypass. In addition, shallow water habitat will be restored for Delta native fishes in the southern Yolo Bypass, adjacent areas, and McCormack-Williamson Tract.
- ✓ Between 3,000 and 5,000 acres of seasonal and tidal wetlands will be restored north of San Pablo Bay, between the Napa and Petaluma Rivers.
- ✓ Delta riparian habitat will be reestablished for listed riparian species, such as brush rabbit, while providing improved flood-control benefits (Paradise Cut Floodway, etc.).
- ✓ A demonstration-scale ultraviolet water treatment plant (50 to 70 mgd) will be built to address water-quality concerns.
- ✓ The North Bay Aqueduct intake will be relocated nearer to the Sacramento River to improve water quality.
- ✓ A program will be developed to control nonpoint-source pollution near Delta intakes to improve water quality.

### **Focused Policy Decisions**

- ✓ Delta Wetlands - Bureau of Reclamation to obtain feasibility study authority with the intent of purchasing Delta Wetlands for the EWA.
- ✓ Bay Area Drinking Water - DWR to perform feasibility study of 400,000 AF enlargement of Los Vaqueros for improvement of Bay Area drinking water quality in conjunction with new interconnections among Mokelumne Aqueduct, Los Vaqueros plumbing, South Bay Aqueduct, and Hetch Hetchy Aqueduct.
- ✓ Delta Conveyance: See Delta Conveyance paper
- ✓ EWA: See EWA paper