

Ranch Tracts, and the Franklin Pond area. The potential for flooding also threatens important public facilities and institutions in the North Delta area, including Interstate 5, the Union Pacific Railroad line, and the Rio Cosumnes Correctional Center.

The North Delta is also susceptible to levee failure during peak flows. Levees on McCormack-Williamson Tract and Dead Horse Island frequently have been overtopped or have failed during large storm events, and many other levees have been subject to structural failure during past storm events. Failure of Bay-Delta levees could:

- (1) Result in flooding of Delta communities, farmland, habitat, key roads and highways;
- (2) Expose adjacent islands to increased wave action, increased seepage, and risk of levee erosion;
- (3) Affect water supply distribution systems; or
- (4) Affect flow patterns, potentially resulting in adverse impacts on water quality if the levee breach is not repaired.

Ecosystem Quality—Degradation and the loss of habitats that support various life stages of aquatic and terrestrial biota are a primary concern in the North Delta. These habitat changes have many causes, including sedimentation from hydraulic mining, habitat conversion, dredging and water diversions. Thirty years of hydraulic mining (in the 19th century) in the river drainages along the eastern edge of the Central Valley have increased sedimentation levels in downstream watercourses, degrading valuable aquatic habitat. In addition, many of the seasonally-inundated lands in the Bay-Delta system that historically provided habitat to a variety of bird and animal species have been converted to agricultural, industrial, and urban uses. Levees constructed to protect lands in the Delta from inundation eliminated fish access to shallow overflow areas. Dredging to construct levees eliminated the tule bed habitat along the river channels. Upstream water development and use, depletion of natural flows by local diverters, and the export of water from the Bay-Delta system have altered hydrodynamic processes. This alteration has resulted in changed seasonal patterns of inflow, reduced Delta outflow, and diminished natural variability of flows into and through the Bay-Delta system. Facilities constructed to support water diversions may contribute to straying or direct losses of fish and can increase exposure of juvenile fish to predation.

5. Purpose of the Project

The purpose of the NDIP is to implement flood control improvements in a manner that benefits aquatic and terrestrial habitats.

To be consistent with the overall goals of CALFED, the NDIP would also be compatible with and supportive of the other programmatic elements outlined in the PEIS/EIR. Therefore, to the extent that meeting other goals is consistent with the primary purpose of the NDIP, the Corps and DWR will incorporate project elements that support the following CALFED objectives:

- (a) Improve conveyance to improve water supply reliability at the South Delta export pumps.
- (b) Improve conveyance to facilitate reductions in salinity levels in the San Joaquin River and improve the quality of the water at the South Delta export pumps.
- (c) Recommend ecosystem restoration and science actions in the project area consistent with the CALFED Ecosystem Restoration Program's strategic goals and objectives.
- (d) Improve levee stability and integrity in the NDIP project area.
- (e) Minimize the conversion of prime, statewide-important, and unique farmlands to NDIP uses.
- (f) Minimize impacts to recreational use in the NDIP project area.

6. Project Area

The NDIP project area is approximately 197 square miles. The project area defines the area within which DWR is considering alternatives for flood control and restoration actions. Direct (on-the-ground) impacts of constructing the alternatives will be evaluated within the project area. However, this area does not represent the limits of the area considered during impact analysis.

7. Alternatives

The NDIP is currently in the preliminary design phase, meaning that alternatives for project actions have not yet been fully defined. However, the team has a list of project design concepts that will be run through a hydraulic model to test their feasibility. The draft concepts include:

- (a) **Whole/Partial Island Flood Detention Areas**—Whole and partial island flood detention areas have been proposed for Staten Island, Dead Horse Island, and McCormack-Williamson Tract. This concept would entail strengthening the landward sides of an island's levees and installing weirs and pumps to allow flood control operators to divert water on and off the island

from swollen rivers during peak flood flows.

(b) **Parallel Levee Bypasses**—The parallel levee concept would create a controlled flood bypass by constructing a second levee inland from an existing levee and installing weirs at either end of the new bypass area, allowing flood control operators to divert water into the bypass to alleviate peak flood flows. This concept could include the placement of pumps at the downstream end of the bypass in order to return floodflows to the main channel.

(c) **Steback Levees**—Under this concept, a second levee, or setback levee, would be built inland from the existing levee, and the existing levee would be removed or breached in order to permanently widen the existing floodplain and create more capacity in the river corridor.

(d) **Bridge Replacement**—Historically, many bridges in the Delta have constricted channels as a result of their large concrete abutments and pilings. In addition, floating debris often gets entangled on the low bridges during flood events and continues to collect, forming a dam, which restricts flow and can cause upstream flooding. Bridge replacement in the North Delta area would include redesigning bridges with smaller abutments and pilings. Such bridge redesign would place less concrete in the channel, increasing channel capacity. Redesigned bridges would span rivers at a higher elevation, facilitating debris passage, and avoiding or minimizing debris buildup during flood events.

(e) **Maintenance Dredging**—Maintenance dredging has been proposed on the north and south forks of the Mokelumne River to increase channel capacity.

8. Scoping Process

(a) The Corps and DWR invites comments from State and Federal agencies with respect to the scope and content of the environmental information in the proposed EIS/EIR that are within each agency's statutory responsibilities in connection with the proposed NDIP. In addition, written comments from interested parties regarding the scope and content of the environmental documents are invited to ensure that the full range of alternatives and issues related to the proposed project are identified. All comments received, including names and addresses, will become part of the official administrative record and may be made available to the public. Comments should be submitted to the previously mentioned Corps or DWR