

Draft

## **Vulnerability of Bay-Delta Systems Functions**

### **Objective Statements**

Manage the risk to land use and associated economic activities, infrastructure, water supply, water quality and the ecosystem from gradual deterioration of Delta conveyance and flood control facilities and catastrophic inundation of Delta islands through risk assessment and planning measures which reduce physical damages and loss of productivity.

- A. **Manage the risk to existing land use associated economic activities and infrastructure from gradual deterioration of Delta conveyance and flood control facilities and catastrophic inundation of Delta islands.**
  - 1. Manage the reduction of agricultural productivity and damage to infrastructure from seepage and overtopping of the levees. Manage subsidence of the Delta island peat soils and foundations which places additional pressure on surrounding levees and increases the risk of failure.
  - 2. Manage the risk of long-term loss of agricultural productivity and infrastructure which can result from sudden catastrophic inundation.
  
- B. **Manage the risk to water supply facilities and operations in the Delta from catastrophic inundation of Delta islands.**
  - 1. Manage the risk of interruption of In-Delta water supply which can result from sudden catastrophic island inundation and the resultant salinity intrusion. (See Water Supply Objective Statement).
  - 2. Manage the risk of interruption of Export water supply which can result from sudden catastrophic island inundation and the resultant salinity intrusion. (See Water Supply Objective Statement).
  
- C. **Manage the risk to water quality in the Delta from catastrophic inundation of Delta islands.**
  - 1. Manage the risk of degradation of In-Delta water quality which can result from sudden catastrophic island inundation and the resultant salinity intrusion. (See Water Quality Objective Statement).
  - 2. Manage the risk of degradation of Export water supply which can result from sudden catastrophic island inundation and the resultant salinity intrusion. (See Water Quality Objective Statement).
  
- D. **Manage the risk to existing Delta ecosystem from gradual deterioration of Delta conveyance and flood control facilities and catastrophic inundation of Delta islands.**

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1. Manage the risk of reduction of Ecosystem Productivity and damage to valuable habitat which can result from seepage, erosion, and overtopping of levees. Manage subsidence of the Delta island peat soils and foundations providing this ecosystem productivity which places additional pressure on surrounding levees and increases the risk of failure.
2. Manage the risk of long-term loss of valuable Aquatic and Terrestrial habitat which can result from sudden catastrophic inundation and the resultant salinity intrusion.