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DWR’s Delta Levees Special Projects Investment Priorities

California Water Commission Briefing

Image: Tyler island emergency levee repairs (Feb. 2017) to protect the town of Walnut Grove.

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Delta Stewardship Council
State’s Public Interests

Levees are critical to protecting:

- People
- Property / Infrastructure
- Water Supply Reliability
- Ecosystem
- Delta as a Place

Discover the Delta water tower near Rio Vista
Homes near Stockton
Sail surfing off Sherman Island
Sandhill Crane near the Consumes River Preserve
The World of Delta Levees

- Sustaining Delta levees is an ongoing struggle that is both a State and Local responsibility.
- Delta levees sit at ground zero regarding flood risk management, agriculture, water conveyance, and ecosystem issues.
- Historically some levees have been constructed or rebuilt through federal congressional authorization- these are called “Project Levees”.
- All other Delta levees are referred to as “Non-Project Levees”.
- Considering the importance of maintaining and improving Delta levees, the State has several programs dedicated to providing Funding, Technical, Project, and Emergency Response Assistance to agencies in the Delta.
Many Forms of Local Flood Assistance DWR provides in Delta

- Urban Flood Risk Reduction (UFRR) Program
- Small Communities Flood Risk Reduction Program
- Flood Emergency Response Projects Grants
- Flood Corridor Program
- Delta Levees Maintenance Subventions Program
- Delta Levees Special Flood Control Projects
- Other
Overview of DWR’s Delta Levees Special Flood Control Projects Program

Program Goals:
- Flood Risk Reduction
- Water Quality / Water Supply Reliability
- Habitat / Ecosystem Sustainability
- Drought Relief
- Emergency Levee Repairs

Program History:
- Established by Senate Bill 34 (1988)
  - Limited geographic focus to 8 western Delta Islands and Thornton & Walnut Grove
- Expanded by Assembly Bill 360 (1996)
  - Included ecosystem uplift
  - Geographic boundaries expanded to entire Delta & parts of Suisun Marsh
Brief Recap of DWR’s Delta Levee Investment Priorities & Reporting

- SB 34 (1988) identified priorities when the Delta Levees Special Projects program was created
  - Focus on 8 Western Delta Islands and towns of Thornton & Walnut Grove

- Initial “fast track” actions described in a series of periodic public reports first released in 1989
  - Example of one report (1997) is shown to right

- AB 360 (1996) broadened the program to include ecosystem improvements & expanded the geographic scope to cover the entire Delta

- CALFED established (2000)
  - DWR Delta levee investments coordinated through CALFED activities and plans

- Delta Reform Act (SBX7-1 / 2010) established the Delta Stewardship Council to create The Delta Plan

Delta Levees Investment Strategy

BACKGROUND
Plans and Programs that Informed the DLIS

- California Water Action Plan
- Central Valley Flood Protection Plan
- Delta Plan
- DPC Economic Sustainability Plan
- Delta Levees Special Projects & Subventions Programs
85305. (a) The Delta Plan...reduce risks to people, property, and state interests...by promoting...strategic levee investments.

85306. The council, in consultation with the Central Valley Flood Protection Board, shall recommend...priorities for state investments in levee operation, maintenance, and improvements.
Delta Levees Investment Strategy and Levee Priorities

Delta Levees Investment Strategy

Goals & Objectives
- Identify State Interests
  - People
  - Property
  - Water Supply
  - Environment

Principles
- Identify Vulnerabilities
  - What is the Chance of Flooding?
- Risk Analysis
  - Risk = Probability of Flooding x What is the System Protecting

Priorities
- Levee Prioritization
  - Ranking of Islands and Tracts in Order of Greatest Risk to State Interests

Strategy & Policies
- Implementation
  - Update Delta Plan
  - Update Regulations

Delta Levee Investment Priorities

We Are Here
Delta Levee Investment Strategy

Priority for State Investment

- Very High Priority
- High Priority
- Other Priority
- Unleveed/Flooded
Snapshot of DWR’s Expenditures in Delta Levees Special Flood Control Projects Program (1997-2014)

- Focus of program has changed over the years, with projects incorporating more ecosystem features
- Funding represents a mix of levee improvements and emergency repairs

Image: Map prepared by DWR for DSC in 2015, representing actual on-going and completed projects at the time.
Delta Levees Special Projects Program: Project Examples

Images:
(a) Levee on San Joaquin River with waterside vegetation planted for habitat and wave runup protection on Sherman Island near State Hwy 160.

(b) Damage to Bradford Island levee (along San Joaquin River) due to cargo ship hitting the levee in Oct. 2009. Emergency repairs relied on Delta Levees Special Project funds to protect the island and Delta.
Participants include: CNRA, DWR, DFW, DPC, DSC, CVFPB, OES, local engineers, local reclamation district managers, members of the public
On Going Investment Efforts

• Next funding round of Delta Levees Special Projects program is due late 2018 / mid 2019
  • Public draft of the program solicitation package is scheduled to be released Fall of 2018

• DWR is currently funding Delta local maintaining agencies to update their 5-year investment plans
  • These highlight where and when each local agency hopes to improve specific levee segments
DWR’s Delta Levees Special Flood Control Projects Program

https://water.ca.gov/Programs/Flood-Management/Delta-Conveyance-And-Flood-Protection
https://water.ca.gov/Work-With-Us/Grants-And-Loans/Delta-Levees-Special-Flood-Control-Projects

DSC’s Delta Levees Investment Strategy

http://deltacouncil.ca.gov/delta-levees-investment-strategy
http://deltacouncil.ca.gov/dlis-decision-support-tool

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