



## **INFORMATION ITEM**

### Delta Levees Investment Strategy Annual Report

#### Summary

At today's meeting, the Delta Stewardship Council (Council) will hear a presentation from the Department of Water Resources (DWR) addressing their discretionary investments in levee operations, maintenance, and improvement in accordance with the Council's regulations. (Cal. Code Regs., tit. 23, § 5012.) The Council's Delta Levees Investment Strategy (DLIS) establishes funding priorities for DWR's investments in Delta levees by targeting areas where the risk to people, property, and critical state interests is the greatest. DLIS represents the culmination of 10 years of analysis and interagency collaboration, including over 100 public meetings.

DWR's presentation will cover funding decisions from fiscal year 2024-2025. In addition, Council staff will present a retrospective overview of key lessons learned from seven years of collaboration with DWR.

#### Background

##### Delta and Suisun Marsh Levees

The Sacramento-San Joaquin Delta (Delta) is home to more than 500,000 people and comprises approximately 1,300 square miles of low-lying, flood-prone lands bound by 1,100 miles of levees. The Suisun Marsh, located immediately downstream from the Delta and north of Grizzly Bay, includes about 230 miles of levees that reduce flood risk and help manage flows for wetlands. About 80 miles of these levees protect Delta water quality and terrestrial and aquatic habitats of statewide importance.

Levees in the Delta and Suisun Marsh help protect people, property, water supply, ecosystem, and infrastructure of statewide importance. If a levee fails, it can lead to catastrophic flooding, injury or loss of life, interruptions to local and state water

supply, and significant damage to property, infrastructure, and valuable environmental resources.

### [Delta Reform Act Requirements and Authority](#)

Pursuant to the Sacramento-San Joaquin Delta Reform Act of 2009 (Wat. Code, § 85000 et seq.; Delta Reform Act), the Council developed an enforceable, comprehensive, long-term management plan for the Delta. (Wat. Code, § 85300.) The Delta Plan contains regulatory policies, codified in California Code of Regulations, title 23, section 5001 et seq. The Delta Reform Act requires that the Delta Plan attempt to reduce risks to people, property, and State interests in the Delta by promoting effective emergency preparedness, appropriate land uses, and strategic levee investments, (Wat. Code, § 85305, subd. (a).). As well as recommend priorities for State investment in levee operation, maintenance, and improvements in the Delta, including both project levees, which are a part of the State Plan of Flood Control, and nonproject levees, which are not a part of the State Plan of Flood Control. (Wat. Code, § 85306.)

### [Levee Funding](#)

DWR has several flood risk reduction programs that fund levee operations, maintenance and improvements in the Delta. These are described in detail in the *Annual Report for the Delta Stewardship Council Investments in Delta Levees FY 24-25* (Attachment 1). DWR along with the Central Valley Flood Protection Board (CVFPB), administers the Delta Levees Maintenance Subventions and Delta Levees Special Flood Control Projects programs to cost-share Delta levee maintenance and levee improvements with local maintaining levee agencies, such as reclamation districts. DWR and CVFPB also participate with local agencies and the United States Army Corps of Engineers (USACE) to fund flood risk reduction projects in urban communities, as well as administering and funding a program to help small communities achieve a higher level of flood protection.

### [Regulatory Background: Delta Levees Investment Strategy \(DLIS\)](#)

DLIS is a risk analysis methodology that the Council uses to establish a three-tiered priority list of islands and tracts—**Very-High Priority**, **High Priority**, and **Other Priority**—to guide all discretionary State investments in levee improvements for the Delta. The priorities generally address the relationship between the flood risk of

each island or tract and State interests. The priorities were adopted by the Council and codified through the State's rulemaking process as part of California Code of Regulations, title 23, section 5012.

Delta Plan Risk Reduction regulatory policy **RR P1** (Cal. Delta Plan Risk Reduction regulatory policy **RR P1**, (Cal. Code Regs., tit. 23, § 5012.) which includes and is informed by DLIS, directs DWR to first fund levee improvements on the Very-High Priority islands or tracts before State investments in High or Other Priority islands or tracts; after those projects have been fully funded, projects at High Priority islands or tracts may be funded. Once risk has been reduced on Very-High and High Priority islands and tracts, projects on Other Priority islands and tracts may be funded.

Only levee **improvement projects** use the Very-High, High, and Other prioritization categories.

RR P1 states that levee operations and maintenance are priorities for all Delta islands and tracts and should occur as needed and as funds are available.

### Reporting Requirements

The purpose of RR P1 is to ensure that limited State funding has the greatest impact in reducing risk to people, property and state interests. RR P1 is also designed to provide greater transparency for discretionary State funding decisions for Delta levees. Accordingly, RR P1 requires DWR to document its levee funding decisions with a written report (Cal. Code Regs., § 5012, subd. (c.)) that includes all of the following:

- 1) A description of all discretionary State funding for levees awarded by DWR during the reporting year, including both of the following:
  - a. Levee improvement
  - b. Levee operation and maintenance
- 2) A list of each levee improvement project proposal submitted to DWR for funding, regardless of whether DWR awarded funding to the project.

- 3) A list of the improvement projects awarded funding, the funding level awarded, the local cost share, and the applicable priority of the island or tract.
- 4) A description for each awarded project of resulting changes, when completed, to levee geometry, the specific locations of those changes, and expected changes in the level of flood protection provided or standard achieved.
- 5) A justification for awarded funds that deviate from the DLIS prioritization.
- 6) A summary of DWR's rationale for levee improvement project proposals submitted but not awarded funding during the reporting year.
- 7) A summary of all previous DWR-funded levee improvement project activities completed during the reporting year and location of those activities.

## Fiscal Year 2024-2025 Report

DWR submitted its annual report to the Council in February 2026. For the past two decades, Delta levee programs have relied on bonds funding for their activities. This has led to uneven revenue streams for levee improvement and maintenance work. Given limited funding, the Fiscal Year 24-25 report identified only one funded improvement project. DWR does not anticipate issuing any program solicitations or making awards during the 2025-26 funding year.

DWR expects its Delta levee and flood risk reduction programs to receive Proposition 4 funding soon. During fiscal year 2025-26, DWR will focus on planning activities, including the development of program solicitations, guidelines and regulations associated with these bond funds. Specifically, the Delta Levees Special Flood Control Projects and the Small Communities Flood Risk Reduction Program are anticipated to receive Proposition 4 funding in fiscal year 2026-27.

## Key Findings and Perspective - Trends Identified Across Seven Years of Collaboration (Fiscal Years 2018-2025)

RR P1 became law on January 1, 2024. However, DWR has provided reports to the Council on its activities beginning in fiscal year 2018-2019. **Council staff's review of these annual reports reveals that out of the 33 DLIS Very-High Priority islands, 16 have received funding for levee improvement work during the**

**review period.** While not all Very-High Priority islands and tracts have received funding, this data reflects meaningful alignment between funding allocations and the priority needs set forth by the Council.

### Scope of DWR Investments

Over the past seven fiscal years, DWR has made substantial investments in Delta levees and related flood risk reduction activities. These investments include:

- Direct levee improvements, operational and maintenance support via the Delta Levees Maintenance Subventions Program
- Large urban flood projects, such as the levee setback project in West Sacramento
- Habitat-oriented multi-benefit projects, including Lookout Slough, and
- Enhancements for maintenance and operational access

Some projects directly improve levee geometry and structural reliability, while others focus on access improvements, operational support, habitat creation, or broader flood-management goals.

### Delta Investment Totals

Investments in levees that are part of the state-federal flood control system, (Project Levees), are cost-shared with the federal government and must comply with higher standards than non-project, rural levees. Upgrades to Project Levees typically range from \$15–30 million per mile, whereas rural Delta levee improvement projects generally cost between \$1–3 million per mile. Given the significant disparity in construction costs, investments in Project Levees for urban flood risk reduction should be evaluated separately from overall reported totals. When these figures are excluded, State investments specifically related to the agricultural levees in the Delta are smaller and more variable than annual headline numbers suggest. Apart from the Fiscal Year 2018–19 Lookout Slough anomaly (\$119 million), awards for Delta levee expenditures usually fall within an annual range of approximately \$32–63 million. DWR reported only one levee improvement project award in Fiscal Year 2024–25 – the Lindsey Slough Levee Remediation Project, for \$1.5 million.

## Project Completion Record and Program-Level Improvements

### **The project completion record is modest but important.**

Annual reports submitted by DWR show:

- Three completed direct levee improvement projects
- One completed access/emergency-resilience project
- One completed multi-benefit restoration project
- Patrol road repairs

The limited amount of completed projects over the analysis period does not imply program ineffectiveness; the Delta levee-failure record demonstrates significant improvements, with failures decreasing in frequency with investment over the life of the programs. **The Delta hasn't had a major levee failure since 2004<sup>1</sup>; the long-term trend supports a robust return on investment for the State when investing in Delta levee programs and the DWR-Council partnership fostered by DLIS is helping us track investments, understand their impact, and provide the public with transparent accountability of state spending.**

## Ongoing Tracking and Future Analysis

A detailed accounting of the 7-year, retrospective analysis can be found in the report *Delta Levees Investment Strategy Retrospective FY 2018-2025*, available on the Council's website. Over time, DWR's annual reports will enable both the Council and the public to monitor how investments in Delta levees reduce risk to State interests.

## Overall Conclusions

The State spent approximately **\$93.6 million** on discretionary levee improvement projects over the 7 years considered in this report. However, the investments and

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<sup>1</sup> A levee failure is defined as a breach resulting in flooding. There have been near-failures in the Delta that were mitigated or avoided with emergency response and flood fighting.

the risk reductions achieved represent a small portion of the estimated \$1.3 billion levee improvement needs<sup>2</sup>.

Consistent Delta levee funding remains critical for improving and maintaining the risk-reduction gains that have been made in the Delta. Yet, the funding future is uncertain and past funding has been intermittent. It remains important for the Council to continue to advocate for strategic funding of Delta levee operations, maintenance, and improvements in a manner that reduces risk and protects State interests.

### Today's Meeting

DWR will present on prior fiscal year discretionary State levee expenditures. This is DWR's fourth report to the Council, and the second since RR P1 regulation took effect on January 1, 2024.

In addition, Council staff will present a retrospective overview of key lessons learned from seven years of collaboration with DWR. Council staff will discuss the importance of the DLIS prioritization, where investments have been made to date, and what can be learned from the established reporting process.

### Fiscal Information

Not applicable.

### List of Attachments

*Attachment 1: Annual Report for the Delta Stewardship Council Investments in Delta Levees FY 24-25*

*Attachment 2: Levee Guidance*

### Contact

Erin Mullin, P.E.

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<sup>2</sup> This estimate includes getting all Delta levees up to a minimum standard for today's hydrology. It does not include the cost of climate adaptation.

Lead Engineer, Delta Stewardship Council

Phone: (916) 902-6482

*A recording of the presentation will be available on the Delta Council's YouTube page at <https://www.youtube.com/@DeltaCouncil>.*