



Bay-Delta Resources

3/24/2026 Subcommittee on Imported Water Meeting

3b

Subject

Vulnerabilities and Risks to the Bay-Delta Impacting Water Supply Reliability

Executive Summary

Risks and vulnerabilities impacting water supplies conveyed through the Bay-Delta include climate change (changes to hydrology, sea level rise, wildfire potential), levee failures, increasing regulation, invasive species, and aqueduct subsidence. These risks and vulnerabilities are currently studied and managed by a diverse set of State and local agencies which direct funding, perform infrastructure repairs, and develop long-term strategies. Metropolitan is also taking action today to reduce these risks through collaboration and innovative approaches.

Details and Background

Formed by the confluence of the Sacramento and San-Joaquin rivers, the Bay-Delta is a critical nexus point for California water. Multiple water users, including the State Water Project, divert water and snowmelt from the upper watershed through the Bay-Delta. Water supplies conveyed through the Bay-Delta are managed to meet the needs of urban, agricultural, industrial, ecosystem, recreational, and tribal uses.

Reliability of these supplies has continued to decrease and are projected to decline further over time. Continuing changes to historic hydrology patterns may reduce snowpack and runoff patterns, sea level rise may increase salinity in the Delta as well as increase the risk for levee failure in the Bay-Delta, increasing regulations may reduce export flexibility, and State Water Project (SWP) aqueduct subsidence may limit delivery capability. State and local agencies have developed long-range strategies to plan for and manage these risks and vulnerabilities. Examples include the Delta Stewardship Council's (DSC) Delta Adapts initiative and more near-term implementation, such as the Department of Water Resources' (DWR) Delta Levees Maintenance Subventions program.

Metropolitan is also taking multiple actions today to address these risks and vulnerabilities, including those listed below. This Board item will be the first in a series of items that discuss the risks and vulnerabilities to the continued reliability of water deliveries through the Bay-Delta.

- Improved emergency preparedness including localized material stockpiles to repair the emergency freshwater pathway in the event of a levee failure.
- Pilot projects in the upper watershed to reduce wildfire risk and improve forest management and water supply.
- Multiple projects on our Delta islands including subsidence-reversing agricultural leases, habitat restoration, and potential development of habitat mitigation credits, carbon storage, and carbon credits.
- Evaluation of major infrastructure projects such as Sites Reservoir and the Delta Conveyance Project.
- Lobbying and legislation to fund Delta levee improvements and subsidence repairs on the California Aqueduct.

- Advancement of the best available science to inform permit conditions and regulations that impact water management statewide.

Key State Programs and Strategies

[State Water Project Climate Adaptation Strategy \(DWR\)](#)

[Delta Levees Maintenance Subvention Program \(DWR\)](#)

[Delta Adapts \(DSC\)](#)

[Delta Levees Investment Strategy \(DSC\)](#)