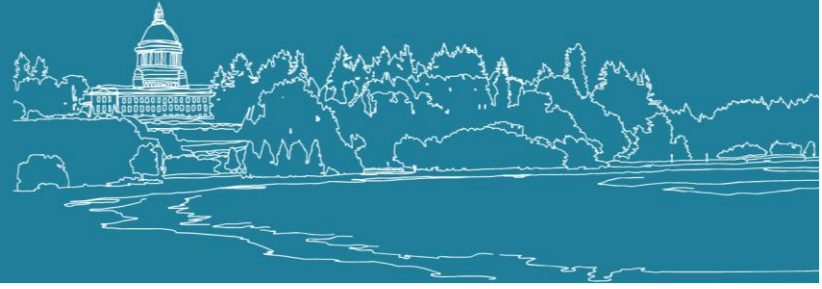




Project FAQs

Deschutes Estuary Restoration Project



The Department of Enterprise Services (DES) is undertaking a monumental estuary restoration project in the heart of the Washington State capitol. The Deschutes Estuary Restoration Project will restore 260 acres of estuarine and salt marsh habitat at the mouth of the Deschutes River.

1. What are the ecological functions addressed through restoration of the estuary?

Restoration of the Deschutes Estuary will reestablish over 200 acres of estuarine habitat including 100 acres of salt marsh, habitat that has been greatly diminished and degraded because of historical development patterns. In addition to supporting key ecological processes, reintroducing estuarine conditions will provide productive habitat for shellfish, salmon, other anadromous fish species (fish that migrate upriver from the sea to spawn), and marine fish in the area. Shallow water habitats with salt marsh vegetation along the shoreline will provide preferred forage and rearing habitat for juvenile salmon. The freshwater aquatic plants that dominate the basin today will not persist and most of the aquatic invasive plant and animal species that exist in the freshwater system will be eradicated. Climate resiliency will be increased across the City of Olympia by reducing maximum flood elevations by up to approximately 1 foot compared to with the dam in place. The project also provides an opportunity for carbon sequestration, as salt marsh habitat sequesters more carbon than the existing freshwater lake. Learn more about shoreline habitat [here](#).

2. How will this project improve water quality within the waterbody and Budd Inlet?

Historically, Capitol Lake has suffered from a variety of water quality problems, as evidenced by aquatic weed infestations, algal blooms, closure of the swimming area due to bacteria concentrations, and restrictions on boating and other beneficial uses. There are a number of factors that affect the water quality and overall aquatic health of the existing Capitol Lake aquatic ecosystem; of greatest concern is compliance with dissolved oxygen water quality standards. The Washington State Department of Ecology Draft Total Maximum Daily Load (TMDL) for Budd Inlet describes Capitol Lake as the largest source of low dissolved oxygen conditions in Budd Inlet. Modeling indicated that estuary restoration was the only alternative assessed during the Environmental Impact Statement (EIS) process that could meet water quality standards and TMDL allocations. Restoration of estuary tidal and river flow conditions will restore dissolved oxygen to beneficial natural levels.

3. How does this project benefit Puget Sound?

This project will have great benefits to the Puget Sound aquatic ecosystem. Restoration of the estuary will provide productive habitat for shellfish, salmon, and other anadromous species, including aquatic species listed as threatened under the Endangered Species Act. Creating foraging and resting habitat will serve as a key step in restoring productive migratory fisheries in south Puget Sound and advancing orca recovery. The project will also address chronic water quality violations by improving dissolved oxygen conditions in Budd Inlet and produce habitat that will better sequester carbon than existing conditions. The project will include educational interpretive materials that will increase public understanding and observation of ecosystem restoration and its benefits to the watershed and Puget Sound, with potential application to improve success and reduce costs of future Puget Sound estuary restoration projects.

4. How will recreation be affected by this project?

The Heritage Park Loop Trail, including the pedestrian bridge that connects the east and west side of the North Basin, will remain. Dedicated bike lanes and improved pedestrian space will be integrated into the new 5th Avenue Bridge. A trail extension will be constructed to connect the Heritage Park Loop Trail to West Bay. Elevated boardwalks will be constructed along the west shoreline of the South and Middle Basins, and adjacent to the shoreline habitat areas. These boardwalks will feature tribal art and educational interpretive signage. A few water access points will be established in North Basin, including at Marathon Park. The fishing pier at the south end of the South Basin will be reconstructed.

5. What are the benefits to the local community and economy?

The project will result in improvements to ecosystem vitality and watershed health, including habitat for native and commercially important species including salmonids, expanded recreation infrastructure, and restored in-water use. Restoration of active public use of the waterbody with new boardwalks, water access points, a fishing pier, habitat areas, and restored water-based recreation will benefit development and commerce in downtown Olympia. Additional recreation activities and enhanced pedestrian paths between areas of downtown are anticipated to draw potential customers to the business district. The project will also result in enhanced economic, cultural heritage, spiritual, and educational value associated with ecosystem restoration for tribal populations, addressing equity and social justice impacts of existing conditions.

Climate resiliency will be increased across downtown Olympia by reducing maximum flood elevations by approximately 1 foot compared to conditions with the 5th Avenue Dam in place. It is anticipated that there will be reduced, avoided, or deferred regulatory compliance costs for LOTT Clean Water Alliance, and therefore Thurston County residents, with improved water quality and stormwater infrastructure compared to current conditions. In addition to long-term benefits, construction spending will temporarily support jobs, labor income, and economic output.

6. Who is involved in this project?

The current Capitol Lake is located on the Washington State Capitol Campus and is managed by DES.* DES and their multidisciplinary consultant team are leading this restoration effort. Primary partners and stakeholders include the Squaxin Island Tribe,* City of Olympia,* City of Tumwater,* Thurston County,* Port of Olympia,* LOTT Clean Water Alliance,* Washington Department of Fish & Wildlife, Washington State Department of Natural Resources, and the community at large. A Memorandum of Understanding was developed in 2022 with the members of the project-specific Funding and Governance Work Group (FGWG). FGWG members recognize that after construction of the estuary, continued governance of the project and funding of sediment management in West Bay will be necessary to contribute to the health of Budd Inlet and the Deschutes River watershed and will help maintain a working waterfront and recreational boating. The FGWG members are transitioning the MOU into a legally binding Interlocal Agreement in 2024. * = *FGWG Members*

7. Are local Tribes engaged in this project?

The Deschutes Estuary Basin is the ancestral home to many of the Squaxin Island Tribe's members. The Squaxin Island Tribe has been actively involved in the long-term planning for the estuary restoration project. The Squaxin Island Tribe is an integral part of the project visioning and execution and will help guide design of features across the restored landscape, including estuary design and habitat types, traditional plantings, and boardwalks, as well as fishing and water access points. There is great opportunity for tribal art, history, and knowledge to be integrated throughout the restored estuary. Removal of the 5th Avenue Dam and restoration of the estuary system will have beneficial effects for ecological, cultural, spiritual, educational, and economic values for the Squaxin Island Tribe. It is important to note that during the EIS process, the Squaxin Island Tribe stated that estuary restoration was the only alternative that they support. This input, and potential effects to Tribal resources, were considered in the process to identify the preferred alternative.

8. Does the public get a say in this project?

DES completed a State Environmental Policy Act-required EIS, which culminated in 2022 with a Notice of Action Taken and determination of estuary restoration as the preferred alternative for long-term management of the waterbody. This included a robust public engagement process, during which DES engaged with the Squaxin Island Tribe, governmental and agency partners, and the community at large, and provided formal comment periods to solicit input regarding proposed alternatives. Estuary restoration was selected by DES as the preferred alternative for the long-term management project because it was determined to best achieve project goals and provide other environmental benefits, was determined to be environmentally and economically sustainable, and had the broadest stakeholder support. As the project moves through design and permitting, the public will have opportunities to provide informal input to the design process and provide formal public comment for several of the required permits. Details on upcoming opportunities for public involvement will be shared on the [meetings page](#) of the project website and via the project newsletter, which can be subscribed to on the project website. There also is a Community Sounding Board (CSB), which provides input to DES throughout the project. CSB members are [listed](#) on the project website and include representatives from several local organizations that support and facilitate public involvement.

9. How will sediment be managed in the estuary and West Bay?

Dredging will occur in the Middle and North Basins during estuary restoration to restore the historic main channel and side channels of the Deschutes River. Sediment dredged during construction will be beneficially reused within the project area to create new shoreline habitat areas. Once the estuary is restored, sediment transported by the Deschutes River will continue to deposit, move, and shift within the estuary and will not be held back by the 5th Avenue Dam, allowing sediments that flow through the estuary to deposit in West Bay or further out into the Sound. Sediment accumulation will be monitored at least annually along the eastern shore of West Bay where there is recreational and commercial navigation. Numerical modeling predicts that, on average, focused maintenance dredging will be needed in West Bay on a 6-year frequency, along the eastern shore of West Bay, at the Olympia Yacht Club and private marinas, in areas of navigational access between these resources, and at the Port of Olympia. Maintenance dredging to support the existence of commercial and recreational navigation in the former Deschutes Estuary occurred in these areas before the 5th Avenue Dam was constructed. Shared funding will be provided by members of the FGWG through 2050 for the maintenance dredging, as described in the MOU (refer to FAQ #12).

10. How is this project related to planned sediment cleanup activities at the Port of Olympia?

Remediation of aquatic sediments in lower Budd Inlet is a critical part of the ongoing effort to improve the health of the Deschutes River Watershed, but it is a separate project from the Deschutes Estuary Restoration Project. The Port of Olympia's remediation project to address dioxin and polycyclic aromatic hydrocarbon exceedances within West Bay sediments is required by the Washington State Department of Ecology's Model Toxics Control Act (MTCA) to restore the health of the marine environment and to protect the health of consumers of fish and shellfish. The Deschutes Estuary Restoration Project is being implemented to improve water quality and ecological functions, to restore active community use, and to manage future sediment deposition. Sequencing between the two projects is important. The Port's sediment remediation in West Bay will likely be completed before removal of the 5th Avenue Dam occurs as part of the Deschutes Estuary Restoration Project.

11. How is the City of Olympia Sea Level Rise Response Plan being incorporated?

To address flooding vulnerabilities of downtown Olympia and its combined sewer system, the City of Olympia, LOTT Clean Water Alliance, and the Port of Olympia prepared an Olympia Sea Level Rise Response Plan. The Olympia Sea Level Rise Response Plan is focused on increasing resiliency of the City of Olympia from the effects of rising sea levels. This Response Plan has been referenced and incorporated into the Deschutes Estuary Restoration Project conceptual design. Hydrodynamic and sediment transport numerical modeling conducted for the Deschutes Estuary Restoration Project in 2020 incorporated relative sea level rise projections consistent with those used in the Olympia Sea Level Rise Response Plan. The estuary and new 5th Avenue Bridge designs use the Olympia sea level rise projections and associated regional updates to ensure that the new infrastructure constructed as part of the project will be resilient over the long term, and that the estuary habitat will adapt to and accommodate future increased water levels. With dam removal, flood levels across the City of Olympia could be lowered by approximately 1 foot. The Deschutes Estuary Restoration Project is also evaluating the opportunity to interrupt a primary flooding pathway into downtown by increasing the shoreline elevation across Heritage Park by up to 4 feet. Sea level rise adaptation measures will be coordinated between the Deschutes Estuary Restoration Project and the City of Olympia.

12. How is this project being funded?

The project is funded for a portion of the design and permitting work through an initial allocation by the Washington State Legislature through the Climate Commitment Act. The Squaxin Island Tribe was awarded \$6.4 million for fish barrier removal in South Puget Sound. DES sponsored the Tribe in their submittal for this funding opportunity, and much of this grant funding will be used to advance Deschutes Estuary design and permitting. Additional funding is needed to advance restoration design after 2024. Construction funding will rely on funds from a variety of sources, including federal and state entities, and potentially funds from private and non-profit granting programs. As the party responsible for constructing the 5th Avenue Dam, and as the resource manager, the State of Washington is expected to contribute majority funding for design, permitting, and construction. After construction, shared funding is expected to be provided by members of the FGWG through 2050 for West Bay maintenance dredging, as described in the signed/executed MOU (refer to FAQ #9).

13. When will this project be complete?

Design work began in October 2023 and will occur over an approximately 3- to 5-year duration contingent on funding. Permitting is anticipated to begin in 2025 and to conclude concurrent with the design process. Construction could begin as early as 2027, if design and permitting are completed on schedule and if construction funding is obtained during the design and permitting process such that there is no delay between project phases. If only partial funding has been obtained, DES would evaluate whether phased construction could begin with discrete project elements while the remaining funding is pursued. A construction duration of approximately 6 years was estimated during the conceptual design period, with dam removal occurring in the first half of 2030 if funding is received to enable full construction without delay. The contractor will identify opportunities to compress the schedule, as appropriate, which could also result in reduced construction costs.

More information:

A robust technical analysis was performed as part of the EIS process, which culminated in submittal of a Final EIS in 2022. This document provides an overview of the 14 discipline areas assessed as part of this process. Long- and short-term benefits and impacts were determined for the following: hydrodynamics and sediment transport; navigation; water quality; aquatic invasive species; fish and wildlife; wetlands; air quality and odor; land use, shorelines, and recreation; cultural resources; visual resources; sediment quality; transportation; public services and utilities; and economics. The Final EIS and its attachments can be accessed on the [Library](#) page of the project website.