

Little Squalicum Estuary Project

Frequently Asked Questions

(Last revised June 2022)



MASTER PLAN SECTIONS

Habitat Enhancement Questions

What are the City's plans for habitat enhancement in Little Squalicum Park?

To help improve water quality and restore lost estuarine habitat in Bellingham Bay, the City of Bellingham will establish a new 2.4-acre intertidal estuary in the lower part of Little Squalicum Park. An estuary is where a river or stream meets the sea. The project will include excavating the estuary, re-aligning the existing creek and trail, installing native plants, and installing a new pedestrian bridge and culvert.

What are the goals of this project?

The goals of the Little Squalicum Estuary project are to improve water quality and salmon habitat, including removing a fish passage barrier at the mouth of Little Squalicum Creek. Little Squalicum Creek is the closest lowland stream to the Nooksack River. The Nooksack provides critical habitat for all five Pacific salmon species. The estuary is expected to be used by juvenile salmon originating from the lower Nooksack basin (Bellingham Bay, Squalicum Creek, and the Nooksack River).

Features of the new 2.4-acre estuary include a vegetated saltmarsh as well as native vegetation around the estuary that will help cool and filter freshwater entering Bellingham Bay. The project will also include "beach nourishment," which consists of installing new gravel along the shoreline to enhance tidal processes and provide habitat for spawning forage fish. Surf smelt – a type of forage fish – have been documented nearby, and this project aims to expand spawning gravels available for these and other forage fish species. Forage fish provide the foundation for local marine food webs and are an especially important food source for salmon ([Nearshore Juvenile Chinook Study](#), Beamer et al, 2015).

Why was Little Squalicum Park chosen for estuary habitat creation?

Historical records show that the area was a wetland before development. The project aims to restore similar habitat types within the same geographic area. An estimated 282 acres of coastal estuarine habitat has been lost to development over the last 150 years. Estuarine habitat is vital to the recovery of Pacific salmon.

The abutting nearshore area sees consistent use by juvenile salmon including threatened Chinook, which are known to concentrate in Bellingham's pocket estuary habitats ([Nearshore Juvenile Chinook Study](#), Beamer et al., 2015). In addition, its proximity to the Nooksack River (Whatcom County's largest salmon stream) makes Little Squalicum Park a promising location to provide rearing and foraging habitat for juvenile salmon as they migrate between fresh and saltwater. The park offers open space at a location where the railroad is elevated on a trestle—a rare feature along Bellingham's shoreline (non-elevated trestles can often preclude restoration projects).

Park and Beach Access Questions

How will the park change?

The southern field and forest adjacent to the beach will become the estuary. A small field area will be provided for recreation and the field just to the north (near the BTC parking lot) will remain unchanged. Some vegetation will be impacted during construction of the new estuary, but new plants will be added. All existing trails will be shifted west to accommodate the estuary footprint, and a new trail network will be installed along a new pedestrian bridge at the estuary mouth.

Will trails be impacted or closed?

During construction, the southern portion of the park and beach area will temporarily be closed for the safety of park users. The temporary closure is expected to be limited to June to December 2022. Signs will be posted to alert recreational users of closures during trail reconstruction.

Will dogs be allowed off-leash?

During construction, dogs and people will be blocked from the construction area in the southern portion of the park, but will be able to access the northern portion of the park (adjacent to BTC parking lot).

After construction is complete, dogs will be allowed off-leash in areas of the park per City policy PAR 3.01.20 except within the sensitive estuary habitat, which will be protected by a low fence. Please help steward the new estuary by keeping people and dogs out of this fragile area.



The beach is owned by the Port of Bellingham and is currently designated as an on-leash dog area. The City-managed park (the area from the railroad trestle and north) is designated as an off-leash dog park. The project will not change either of these designations.

Does this mean the beach will be inaccessible all summer (2022)?

Yes, the beach and lower Little Squalicum Park will be temporarily inaccessible during construction both in front of the park and north through the beach nourishment area (northwest of the pier) as we construct the estuary outlet and add nourishment to improve forage fish habitat.

Permitting limits construction to specific “fish windows” to protect forage fish, salmon and other fish species as well as water quality. During construction, you can access [Locust Beach](#) as an alternative beach, which is approximately 1.4 miles away from the project site.

Will there still be a sandy beach after construction?

Yes. The project will not remove the sandy beach adjacent to Little Squalicum Park. We will be adding a layer of sediment northwest of the pier as beach nourishment to improve habitat for forage fish. This will be a mix of cobbles and sand and will be graded out from the bluff to low tide.

Will the City be removing the overwater pier as part of this project?

As a [separate project](#), the City is working on opening the pier to public access in the future. The outer 600 feet of the pier will be removed. Approximately 1200 linear feet of the pier will be retained for public use.

Project Background Questions

How did this project come about?

The City of Bellingham conducted a feasibility study in 2009 using funding from the Department of Ecology via the Bellingham Bay Action Team. The project was prioritized by the public during the City’s rigorous [Little Squalicum Park master planning process](#) (2009). The Bellingham Bay Action Team ranked this project as the #1 habitat project for future funding. Project design was done in coordination with BNSF (underlying landowner), the Port of Bellingham (underlying landowner), Lehigh Northwest Cement Company (underlying landowner), Bellingham Technical College, Whatcom County (underlying landowner), and the City of Bellingham Parks Department (land manager). In addition, the Nooksack Salmon Enhancement Association (NSEA), the Port of Bellingham, and the Whatcom County Marine Resources Committee have provided letters of support.



Funding for this project comes from the City of Bellingham, Greenways Levy, Washington Department of Ecology Centennial Clean Water Program, Washington Department of Ecology One-Time Grant Program, Washington State Aquatic Lands Enhancement Account Grant Program, Washington State Estuary and Salmon Restoration Program, U.S. Fish and Wildlife Service National Coastal Wetland Conservation Grant Program, Port of Bellingham, Whatcom County, and NSEA.

What is the history of the site?

A midden site found in the project area indicates that Lummi Nation peoples used the area for camping and shellfish processing. Protection of this cultural site is incorporated in the project design. Little Squalicum Park encompasses areas that were also historically used for industrial purposes. However, the estuary project is not located within an existing hazardous clean-up site. In addition, multiple pre-project, during-project, and post-project investigations, including ongoing soil sampling, are being implemented to ensure that the project meets health standards for humans, fish and wildlife.

What is an estuary?

An estuary is a partially enclosed, sheltered coastal water body where freshwater from rivers and streams mixes with salt water from the ocean. Estuary habitat is integral to the salmon lifecycle and therefore vital to the recovery of Pacific salmon.

Fish and Wildlife Questions

How do estuaries help people, fish, and other wildlife? What kinds of fish and other wildlife will use the newly created estuary and associated nearshore environment?

The mixing of fresh and saltwater, combined with the protected nature of estuaries, creates a unique nutrient-rich nursery for both out-migrating juvenile salmon adjusting to saltwater on their way to the ocean, and adult migrating salmon adjusting back to freshwater on their way back to their spawning grounds.

The beach at Little Squalicum Park is a documented spawning area for important forage fish species such as Pacific Sand Lance, Surf Smelt, and Pacific Herring. Additionally, several other fish species have been found to use Little Squalicum Park's nearshore habitat including Pacific groundfish, rockfish, surfperch and stickleback.

In addition to supporting salmon and other fish species, Little Squalicum Estuary will provide forage and refuge habitat for a variety of wildlife that use pocket estuaries in Bellingham Bay, including but not limited to: great blue heron, bufflehead, goldeneye, merganser, grebe, bald eagle, mink and river otter.

The Little Squalicum Estuary will provide an enriched wildlife viewing area right along the trail for Bellingham residents and visitors to enjoy, and will remove culverts and berms to accommodate future sea-level rise.

Who monitors fish populations in Bellingham Bay and the new estuary habitat?

The City of Bellingham will monitor use of the estuary by salmonids, as well as use of the beach nourishment area by forage fish for spawning.

How can I help care for the new estuary habitat?

- Help steward the sensitive new estuary and plantings by staying on designated trails and recreation areas, and guiding pets to do the same.
- Bag and dispose of pet waste in trash both at home and away.
- Restore native vegetation at planting parties organized by the [City of Bellingham](#) and local organizations.

More Information

Visit cob.org/LSE-project to learn more about this project.

To subscribe to quarterly email announcements about the City's habitat restoration program, email habitatnews@cob.org or visit cob.org/Habitat-News.