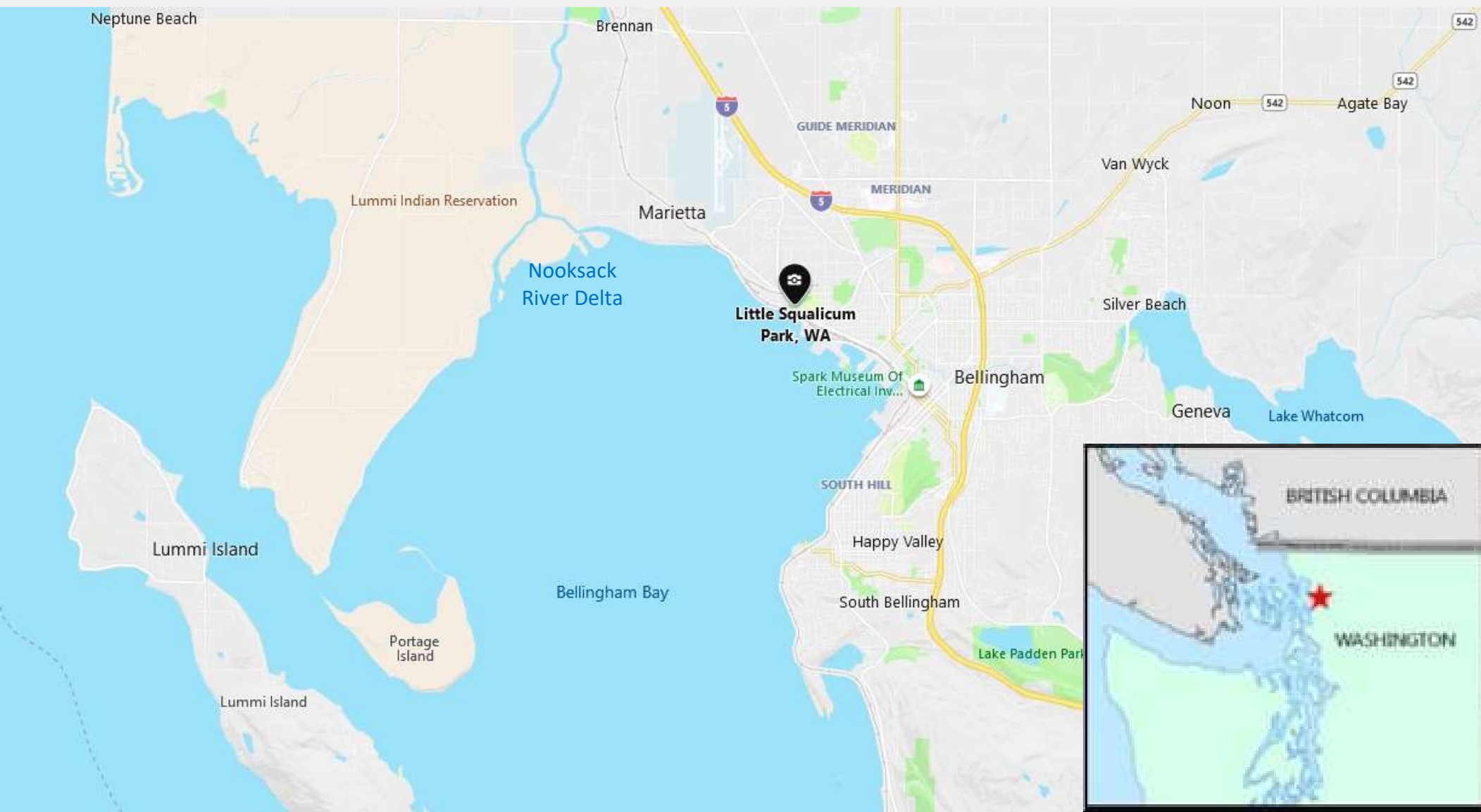


Project Location



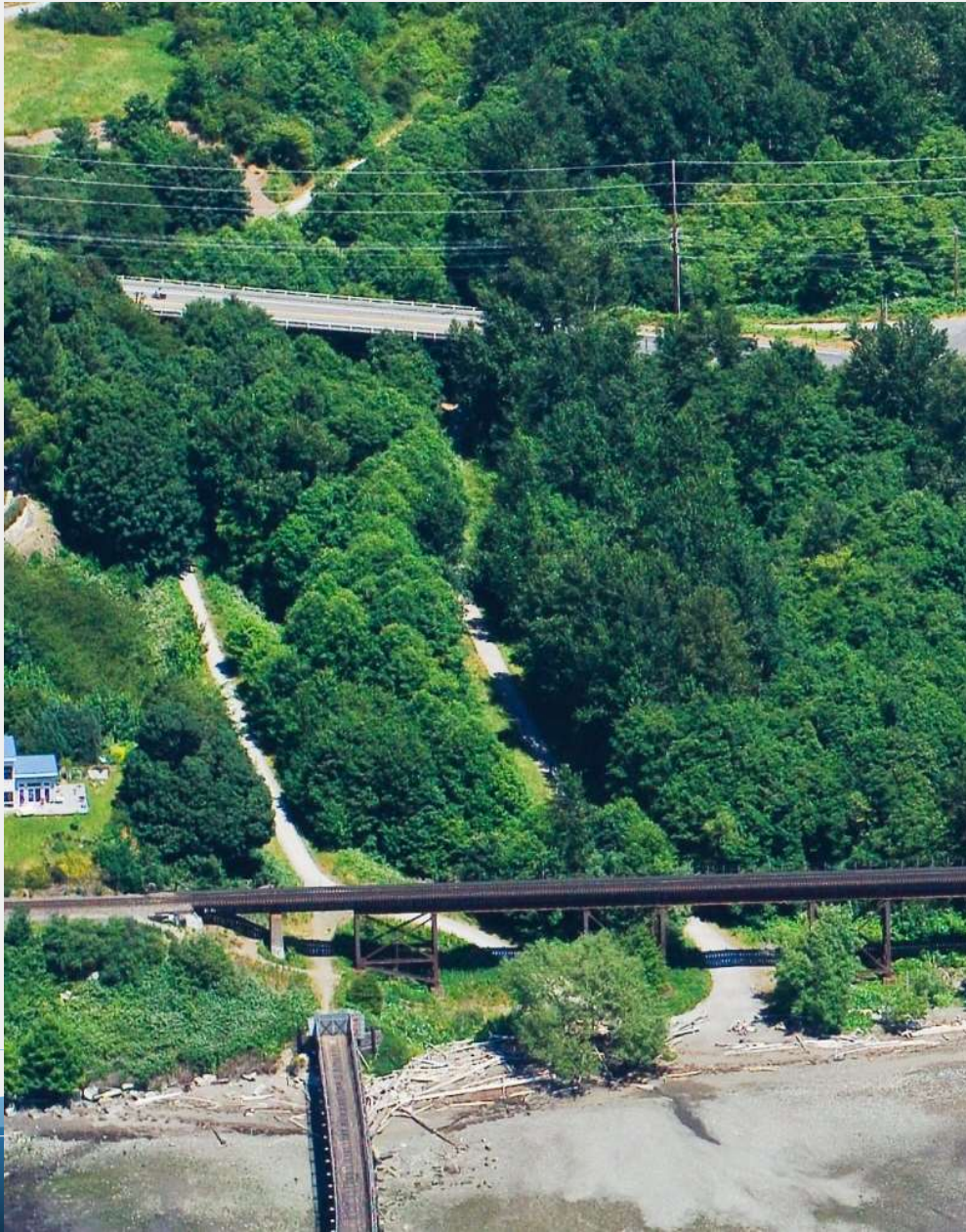


History

- Wh-mahl-ut-choo
(place of many springs)
- Use by Central Salish
for hunting, fishing



- Gravel pit 1912 – 1967
- Purchased as a park in 1976



Historical Wetlands

- Historical: 2.5 acres tidally-connected wetland
- Current: fragmented 0.75 acres wetland

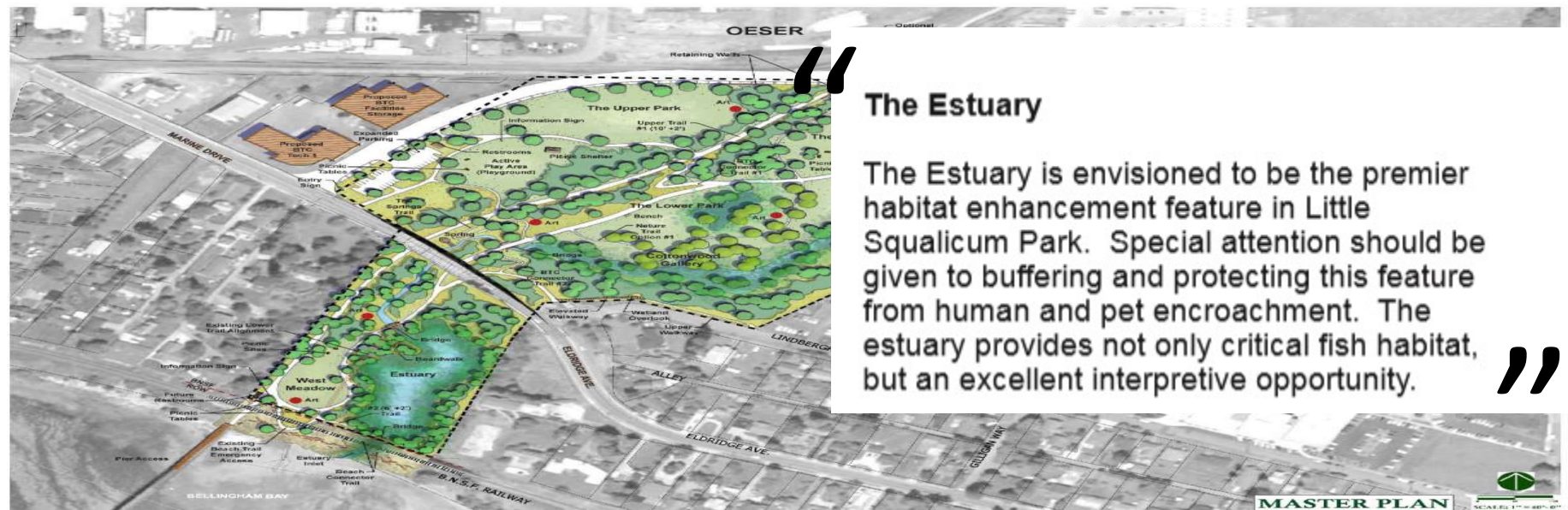


Master Plan

Little Squalicum Park MASTER PLAN



Little Squalicum Park MASTER PLAN

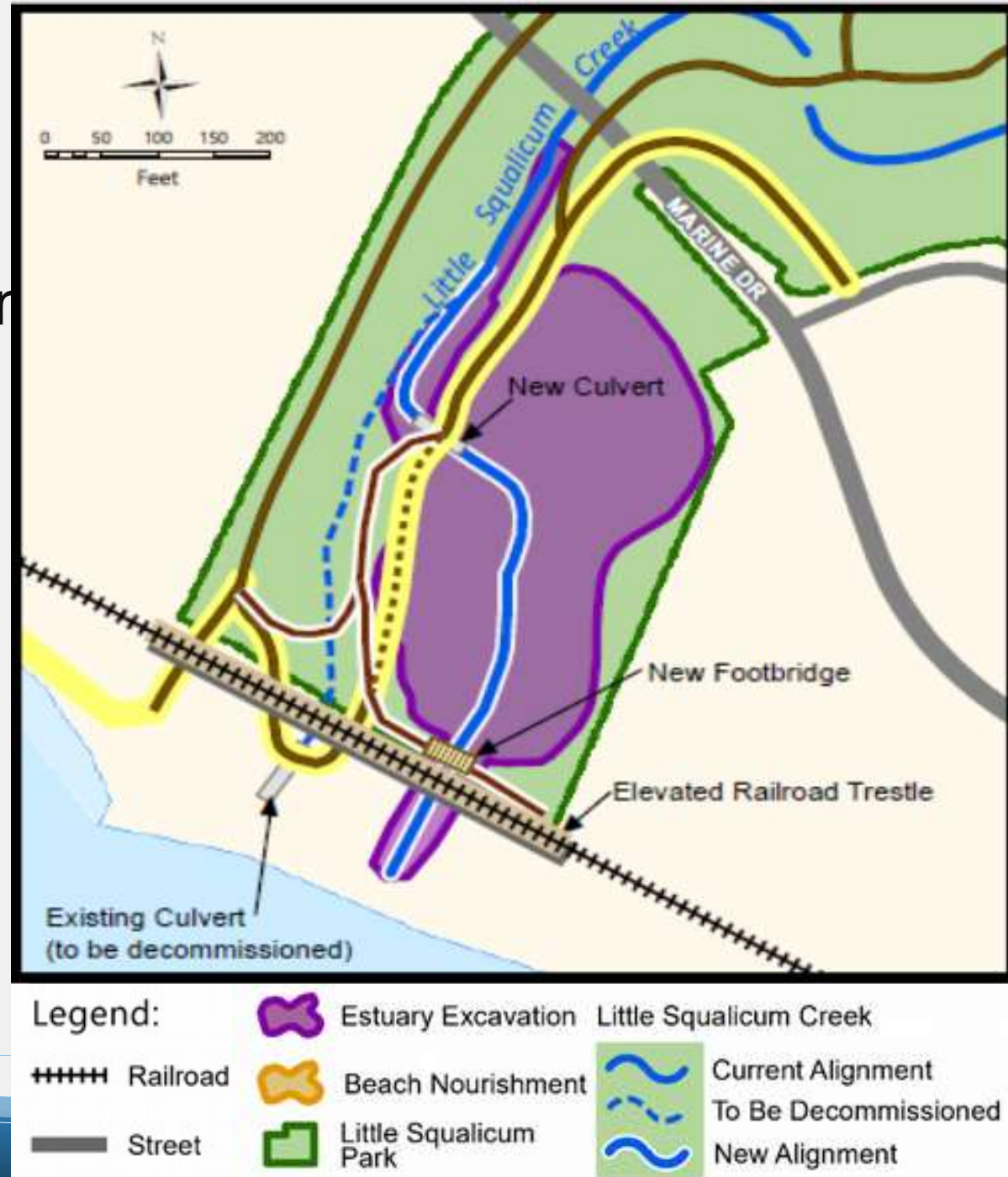


The Estuary

The Estuary is envisioned to be the premier habitat enhancement feature in Little Squalicum Park. Special attention should be given to buffering and protecting this feature from human and pet encroachment. The estuary provides not only critical fish habitat, but an excellent interpretive opportunity.

Project Elements

- Estuary excavation
- Fish passage improvement
- Native plantings
- Beach nourishment
- Protective fencing
- Trails







- Restore tidal and sedimentary processes
- Improve fish passage
- Return saltmarsh, mudflat and estuary habitats
- Enhance a forage fish spawning beach

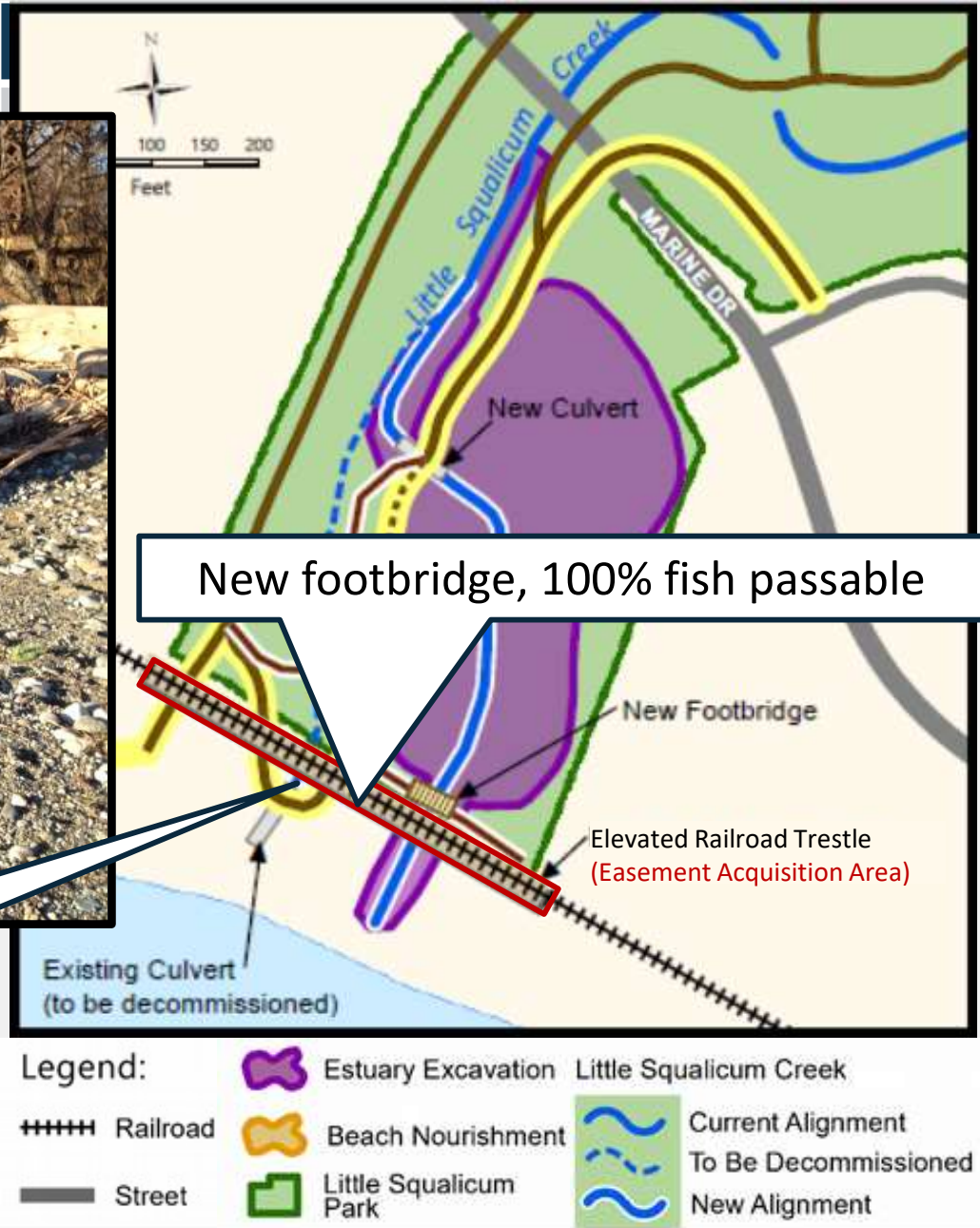


- “First stop” for juvenile salmon departing the Nooksack River
- Rearing, refuge, foraging & osmoregulatory habitat





Culvert to be decommissioned



Trails & Access

- Improved trail
- Improved access to waterfront
- New pedestrian bridge over estuary inlet
- Prime estuary viewpoints

Enhanced park area

EXISTING TRAIL

New bridge for pedestrians & maintenance;
Prime viewpoint

Improved trail

Pedestrian bridge at inlet;
Prime viewpoint

ESTUARY

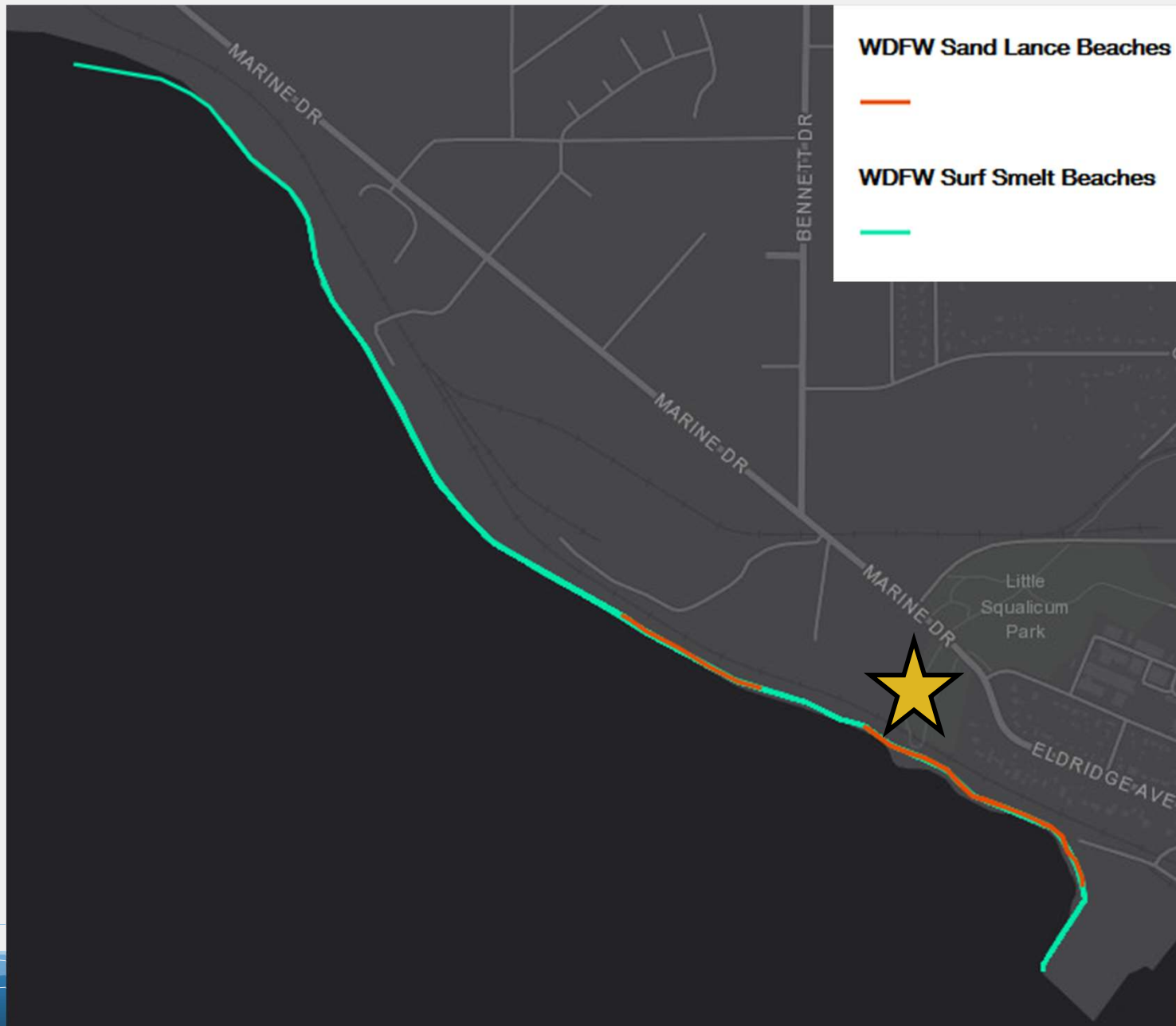
BELLINGHAM BAY



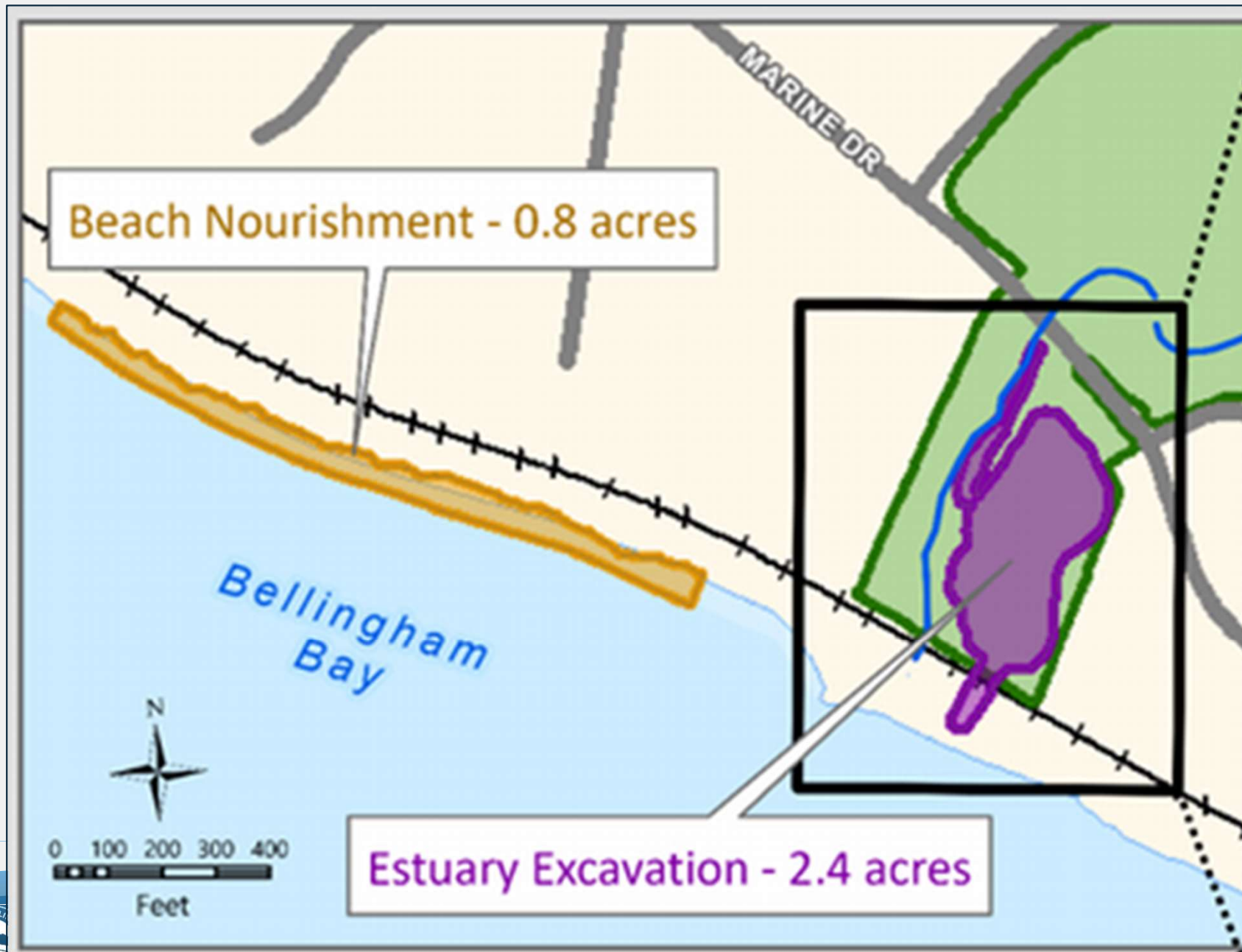
Trail to pier

Trail to beach &
estuary

Forage Fish



Beach Nourishment for Forage Fish



Similar approach nearby...



Treatment/Activity	Restored Process/Function
Estuary Restoration- 2.4 acres	Restores lost estuarine function, tidal connectivity, sediment & nutrient exchange
Fish passage improvement – replace 36” concrete culvert replaced with 100% passable footbridge	Improves salmonid rearing & spawning, restore tidal exchange
Riparian plantings - 0.26 acres saltmarsh & 0.94 acres of riparian buffer, with 7,690 native plants	Restores riparian buffer functions (water quality + habitat and nutrient input)
Beach nourishment – 1.16 acres (1,300 LF) of documented forage fish spawning habitat	Enhanced forage fish spawning, enhance sediment supply
Protective fencing	Flourishing and sustainable habitat!

Inclusive

- Accessible for all abilities
- Increased public awareness of aquatic land

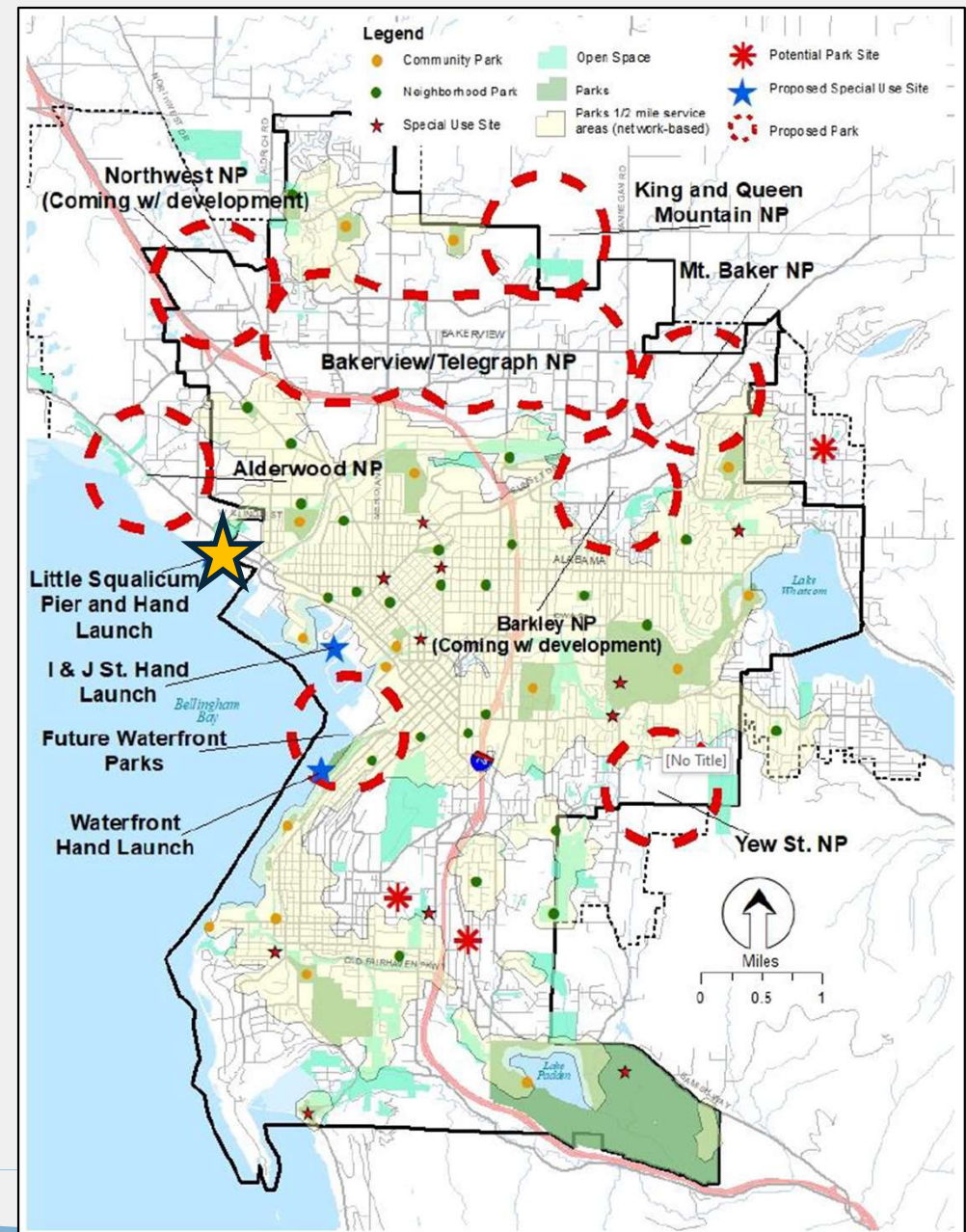


Example Interpretive Sign
at Bloedel Donovan Park



Little Squalicum Beach:
Gentle grades for mobility

- Only accessible public waterfront access north of Squalicum Harbor



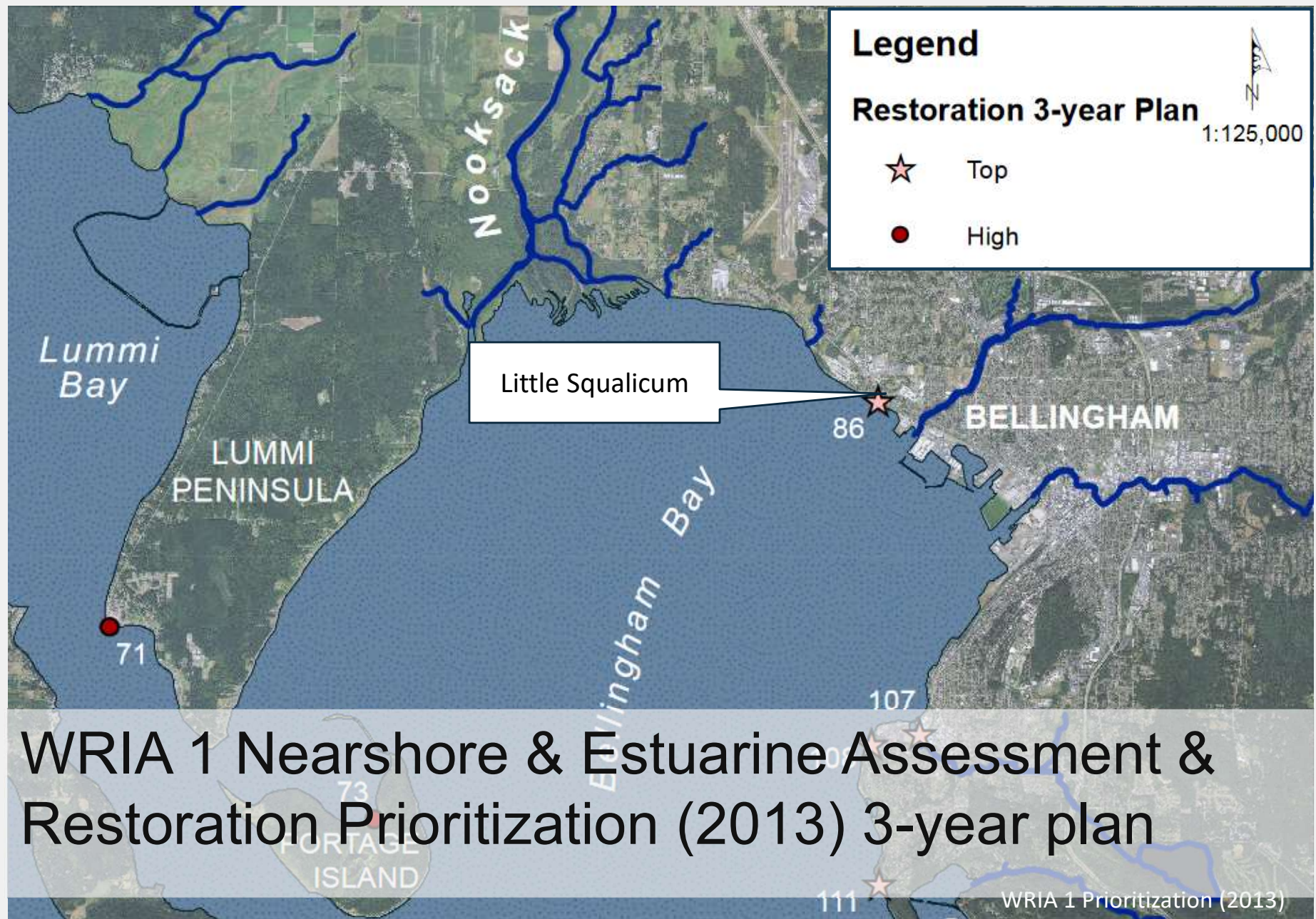
Important Pocket Estuary

- Implements WRIA1 Salmonid Recovery Plan
- Pocket estuaries important for non-natal juvenile Chinook salmon



Juvenile Chinook:
Little Squalicum Beach Seine

(Beamer et al. 2016; Beamer et al. 2003 [Skagit]; Hirschi et al. 2003 [Hood Canal])



Puget Sound Partnership Action Agenda

IMPLEMENTATION PLAN

CHAPTER 4 | NEAR TERM ACTIONS FOR PUGET SOUND RECOVERY

TIER	NTA #	NTA TITLE	OWNER	OBJECTIVES	VITAL SIGNS(S) & REGIONAL PRIORITY APPROACH(ES)	COST
4	2018-0750	Assessment and Prioritization of Contaminants of Emerging Concern Impairing the Health of Chinook salmon	Department of Fish and Wildlife	The objective of this study is to assess the potential threat of contaminants of emerging concern in stormwater and wastewater to juvenile Chinook salmon so that remedial actions can be implemented to protect the salmon health, and improve salmon recovery.	CHIN4.8	\$475,000
4	2018-0759	Dungeness River Riparian Habitat Protection	Jamestown S'Klallam Tribe	Permanently conserve a number of previously identified Dungeness River riparian properties downstream of DHR ownership (river mile 11.4) on approximately 160 acres and about 4 miles of river channel.	CHIN7.1, FP3.2	\$8,000,000
4	2018-0766	Monitoring and management of piscivorous fish populations in the Lake Washington Ship Canal	WRIA 8 Lead Entity	Work with fisheries co-managers to devise and implement a predator monitoring (and ultimately management) program to improve the survival of juvenile salmon through the Lake Washington Ship Canal.	CHIN3.2	\$100,000
4	2018-0779	Update Chinook Recovery Strategy in several key Puget Sound watersheds	Long Live the Kings	Incorporate new information for recovery and develop adaptive management processes in key watersheds. Products include locally updated Chinook recovery strategies and a summary of best available science for project selection and local policy efforts.	CHIN8.1	\$704,000
4	2018-0781	Little Squalicum Estuary Restoration Project	City of Bellingham	The Little Squalicum Estuary Restoration Project improves water quality and restores juvenile salmonid habitat in the lower Nooksack Basin by creating an approx. 2-acre estuary and a fish-accessible tidal connection with Little Squalicum Creek.	SA3.3, CHIN7.1	\$1,864,045
4	2018-0787	Upper Puyallup River Watershed Assessment and Resiliency Planning	South Puget Sound Salmon Enhancement Group	Complete a watershed assessment of Upper Puyallup Basin to evaluate regulatory effectiveness to protect natural processes and create an acquisition and restoration strategy that identifies actions to build resiliency to changing flow and thermal regimes.	CHIN2.3	\$347,000

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IMPLEMENTATION PLAN

CHAPTER 4 | NEAR TERM ACTIONS FOR PUGET SOUND RECOVERY

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4	2018-0787	Upper Puyallup River	South Puget	Complete a watershed assessment of Upper Puyallup		\$347,000



The Little Squalicum Estuary Restoration Project improves water quality and restores juvenile salmonid habitat in the lower Nooksack Basin by creating an approx. 2-acre estuary and a fish-accessible tidal connection with Little Squalicum Creek.

4 2018-0781 Little Squalicum Estuary Restoration Project City of Bellingham