

# Little Squalicum Estuary



Analiese Burns, Habitat and Restoration Manager  
Bellingham Public Works, Natural Resources Division  
(360) 778-7968 [acburns@cob.org](mailto:acburns@cob.org)



# Location





1856

U.S. & G. SURVEY  
Permanent Library file  
No. 1 Plate No. Date 1856

COAST SURVEY

L. D. BACHE, Supdt.

NAISSANCE OF

NGHAM BAY

INGTON TER.

Hydrographic party

of Lieut. Comdg. J. ALDEN U.S.N. Asst.

Scale 40000

1856



Verified  
A. P. Hall, 1st Lieut. 1st Art.  
Acty. Asst. in charge U.S. Office





1954





2014









# Project Goals

## Goal 1

- Restore lost estuarine wetland habitat near the Nooksack River mouth that can serve as juvenile salmon rearing habitat for ESA-listed Chinook salmon. Restoration will also benefit ESA-listed Southern Resident Killer Whale.

## Goal 2

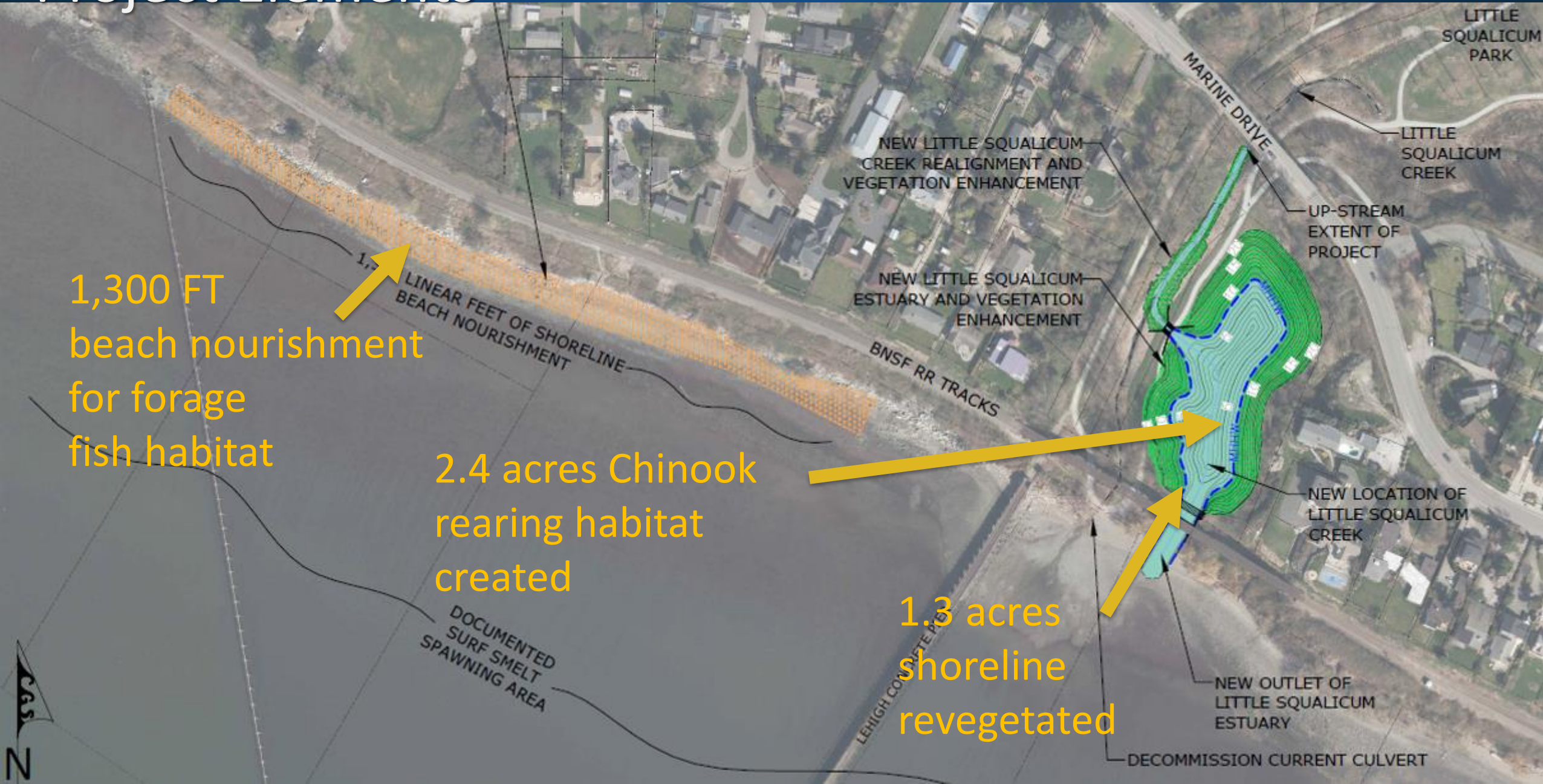
- Enhance sediment supply and forage fish spawning processes.

## Goal 3

- Enhance wetland water quality function and remove contaminated soils.



# Project Elements





# Project Elements

Beach Nourishment Area





# Landowner Permission

This project would not be possible without the partnership of landowners within the project area:

- Lehigh Northwest Cement Company
- Port of Bellingham,
- Whatcom County, BNSF, and
- City of Bellingham



# Funding

- City of Bellingham (majority funder)
- Washington Department of Ecology Centennial Clean Water Program
- Washington Department of Ecology One-Time Grant Program
- WA State Aquatic Lands Enhancement Account Grant Program (ALEA)
- WA State Estuary and Salmon Restoration Program (ESRP)
- US Fish and Wildlife Service National Coastal Wetland Conservation Grant Program
- Port of Bellingham
- Whatcom County
- Nooksack Salmon Enhancement Association (NSEA)



# Process To Date





# Construction

Began in 2022

\$3,474,179.48

Glacier Environmental Services

Design by Coastal Geologic Services

with support from Aspect Consulting, Jones Engineers, Northwest Ecological Services, Pacific Surveying and Engineering and Washington Conservation Corps



















# Community Work Party – January 14, 2023



































Before



After





Before



After





Before



After





Before



After









# Final Statistics

- \$6.1M total cost (design + construction)
- 4.85 acres coastal restoration, including
  - 2.4-acre estuary
  - 32,000 CY excavation
  - 10,000 CY beach nourishment for forage fish
  - 200 CY debris removal
  - ~20,000 plants installed
  - New pedestrian bridge



# Next Steps

- Post-construction monitoring

SCHEDULE	Y0	Y1	Y2	Y3	Y5
<b>Monitoring Tasks</b>					
Salinity Measurements	X	X	X	X	X
Photo monitoring	X	X	X	X	X
Snorkel Surveys		X	X	X	X
Riparian & Estuarine Vegetation		X	X	X	X
Visual Inspections	X	X	X	X	
Forage Fish Surveys *	X				
<b>Annual Report</b>		X	X	X	X

\* Whatcom MRC may conduct additional surveys

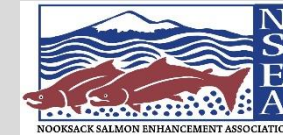


# Thank You!

## Funded By:



WASHINGTON STATE  
Recreation and Conservation  
Funding Board  
ALEA Grant Program



## Constructed By:



## Prime Design Consultant:



## Landowners:

City of Bellingham  
Port of Bellingham  
Whatcom County  
BNSF  
Lehigh Northwest Cement Co



# Questions?



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