

Little Squalicum Estuary



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Outline

- Project Location
- Project Goals
- Process to Date
- Project Elements
- Construction and Funding
- Next Steps

Location



Marietta-Alderwood

Bellingham

South Hill

Little Squalicum Creek

Nooksack River Delta

BRITISH COLUMBIA

WASHINGTON

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



Note
The soundings are expressed in fathoms or feet, as within the dotted line, or in fathoms and show the depth at the mean of the lowest low water of the month of reference. The dotted lines beyond low water mark the bottom within the respective depths of 6, 12, and 18 fms. thus: for 12 fms. for 18 fms. The characteristic soundings only on the map, they are selected from the numerous soundings taken in the bay as to represent the figure of the bottom.

Latitude of Point Francis (approx.)
Longitude of do. west from Greenwich (they in arc) data to
Longitude of do. do. in time, 1856
Variation of the Magnetic Needle in July 1856

The Topography was executed in
The Hydrography do. in

Abbreviations used in the bottom
hnd. for hard | sft. for soft
stk. for sticky

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.

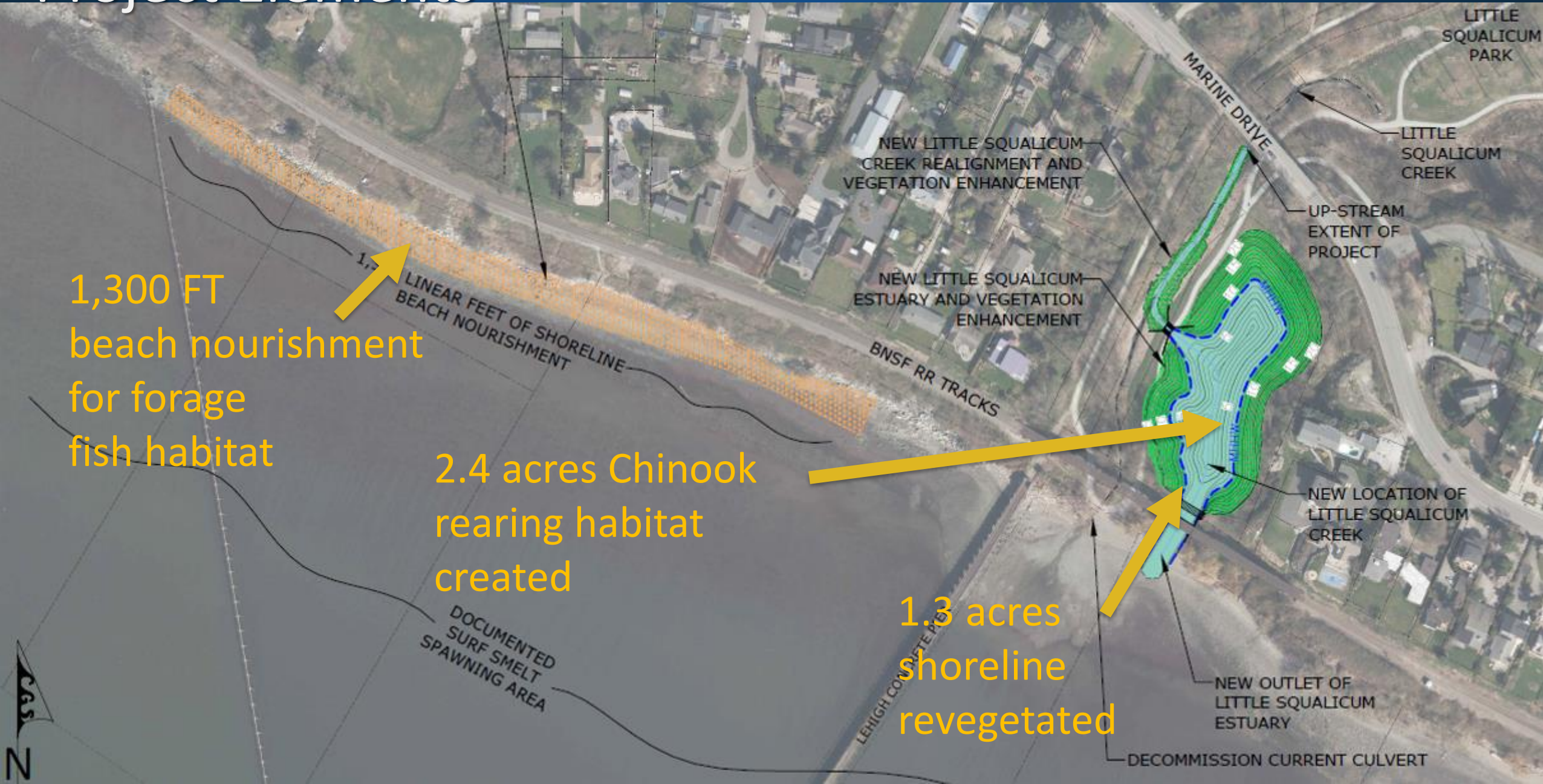
Goal 3

- Enhance wetland water quality function and remove contaminated soils.

Process To Date



Project Elements



Project Elements



Project Elements

Beach Nourishment Area



LEGEND:

SOIL REUSE

REUSE UPPER BEACH SEDIMENT

SOIL REUSE EXCLUSION

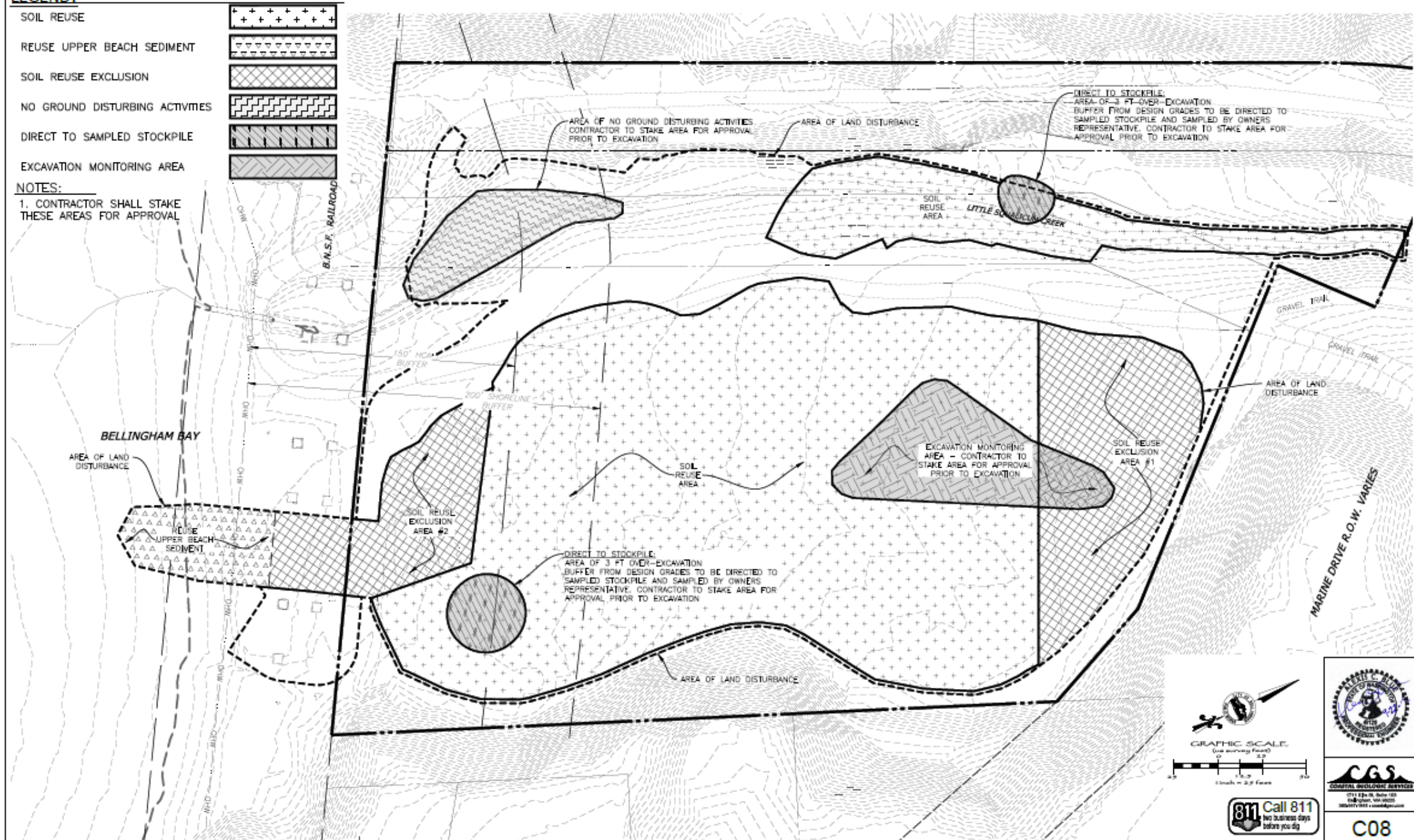
NO GROUND DISTURBING ACTIVITIES

DIRECT TO SAMPLED STOCKPILE

EXCAVATION MONITORING AREA

NOTES:

1. CONTRACTOR SHALL STAKE THESE AREAS FOR APPROVAL



07/22/17	1. SOIL REUSE	DATE
07/25/17	2. SOIL REUSE	DATE
07/27/17	3. SOIL REUSE	DATE
07/28/17	4. SOIL REUSE	DATE
07/29/17	5. SOIL REUSE	DATE
07/30/17	6. SOIL REUSE	DATE
07/31/17	7. SOIL REUSE	DATE
08/01/17	8. SOIL REUSE	DATE
08/02/17	9. SOIL REUSE	DATE
08/03/17	10. SOIL REUSE	DATE

PROJECT ENGINEER	ACE	DESIGN/PLANN	CHAMBER	INSPECTOR	
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DESIGN/PLANN	CHAMBER	INSPECTOR	
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CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horizontal: 1" = 20'
Vertical: 1" = 10'

DATUM
NAD 83/98
NAVD88

Job No.
Date: 8/28/2017
Field:

LITTLE SQUALICUM ESTUARY
SOIL HANDLING PLAN

SHEET
11 OF 26

Construction

- \$3,474,179.48
- Glacier Environmental Services
- This project would not be possible without the partnership of landowners within the project area: Lehigh Northwest Cement Company, Port of Bellingham, Whatcom County, and BNSF.

Funding

- City of Bellingham
- Greenways Levy
- 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)













Before



After





Next Steps

- Community Work Party – January 16, 2023



Next Steps

- Post-construction monitoring

SCHEDULE	Y0	Y1	Y2	Y3	Y5
Monitoring Tasks					
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				
Annual Report		X	X	X	X

* Whatcom MRC may conduct additional surveys

Thank you, questions?



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