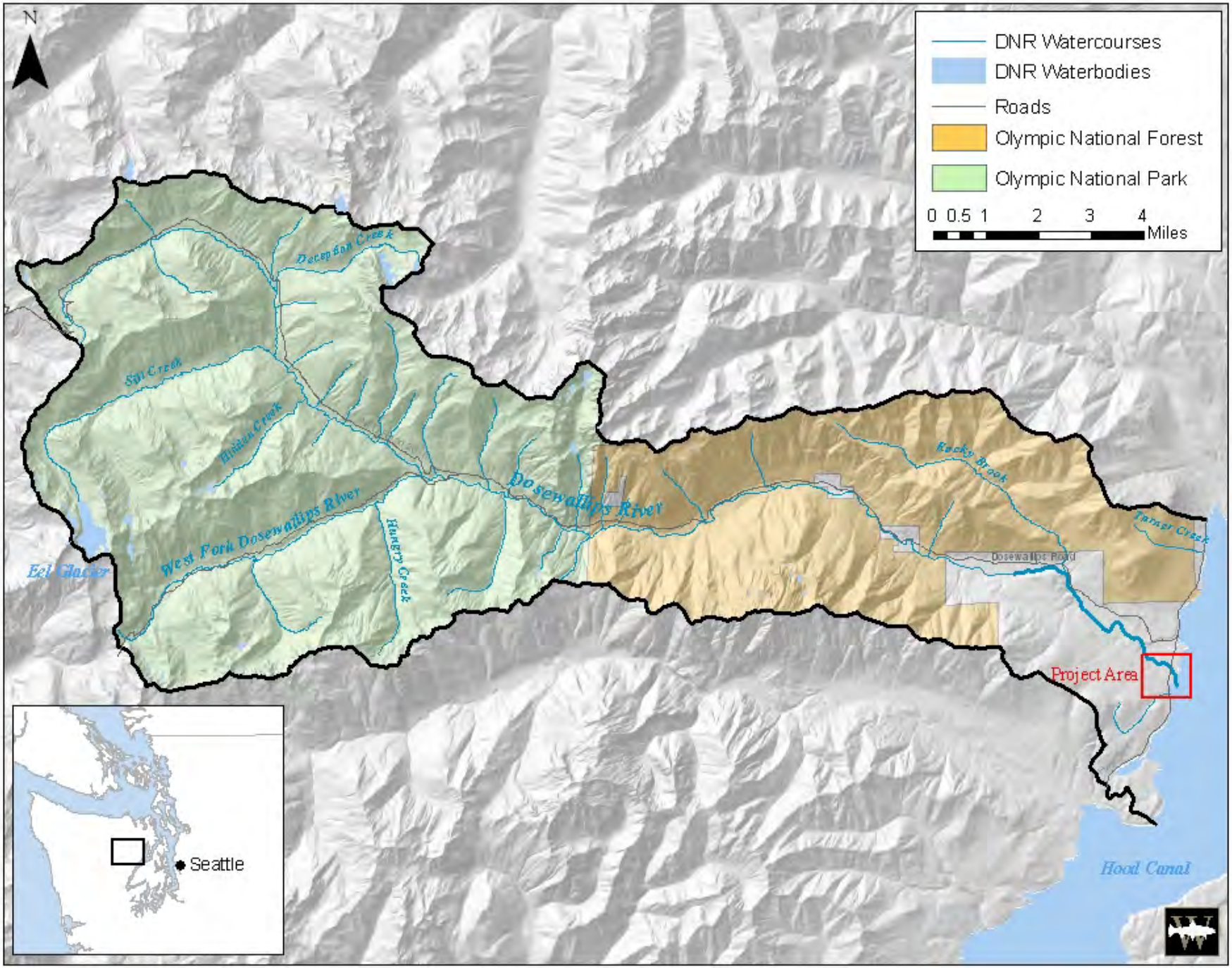
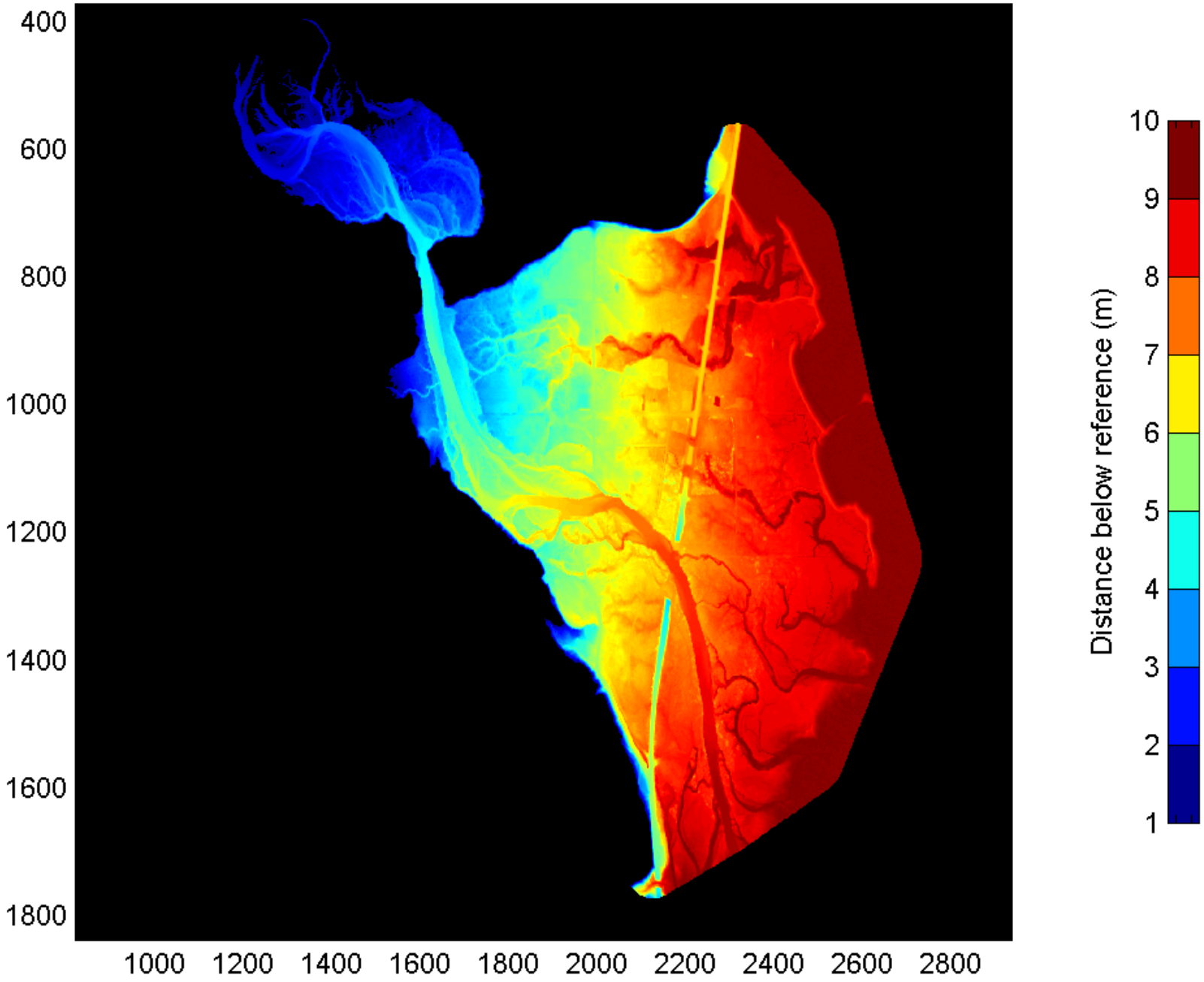
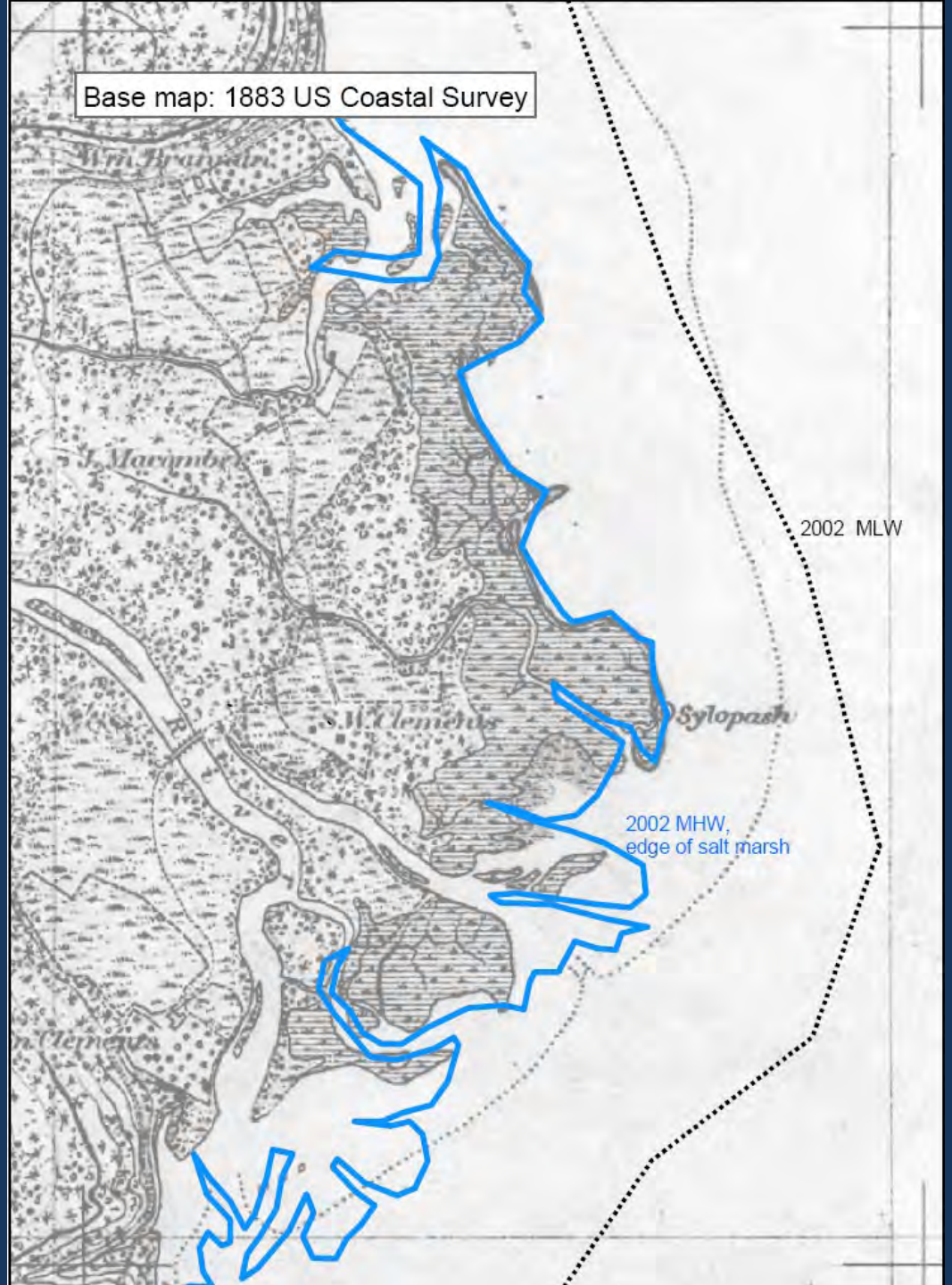
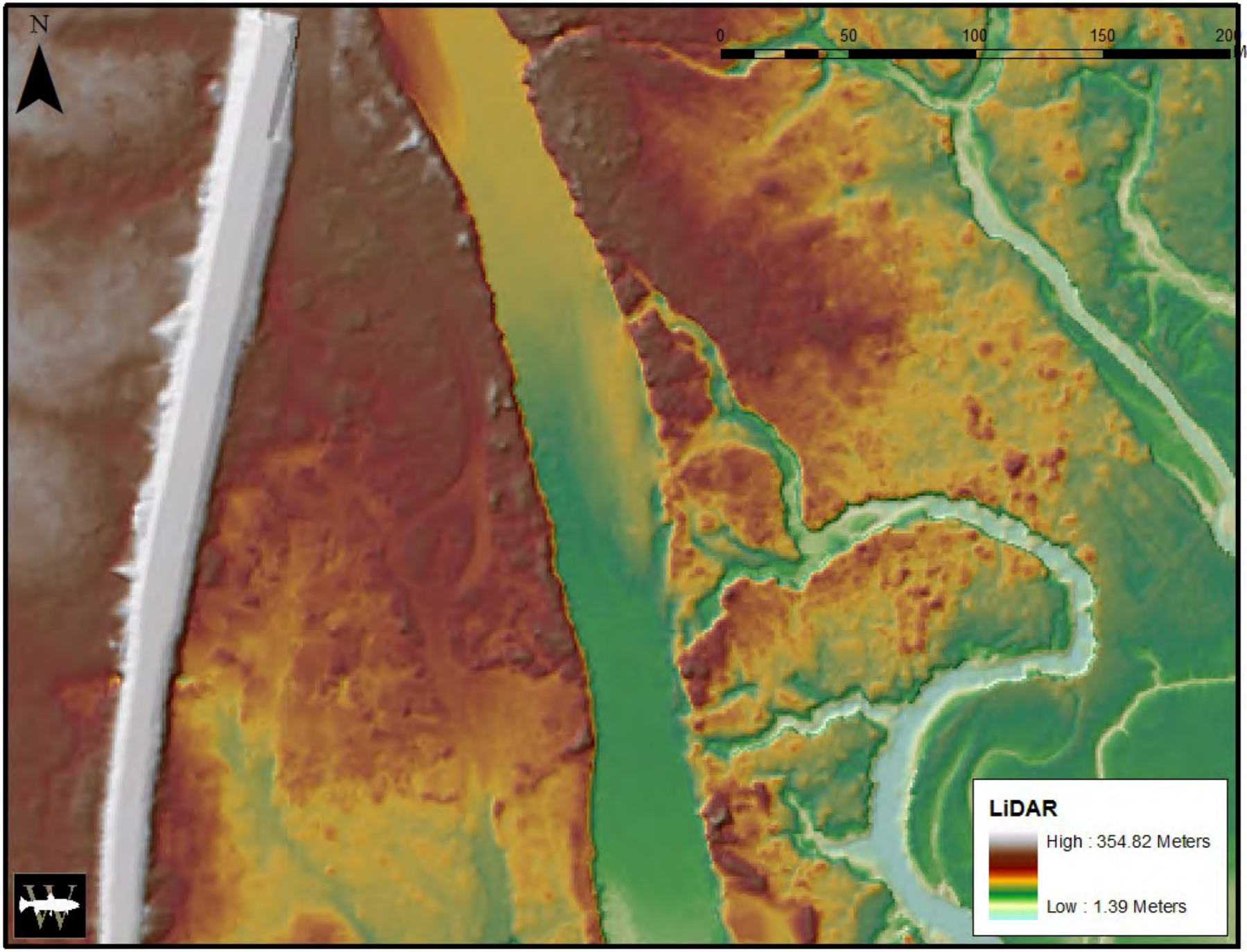
15 Years of Restoration in the Dosewallips Estuary

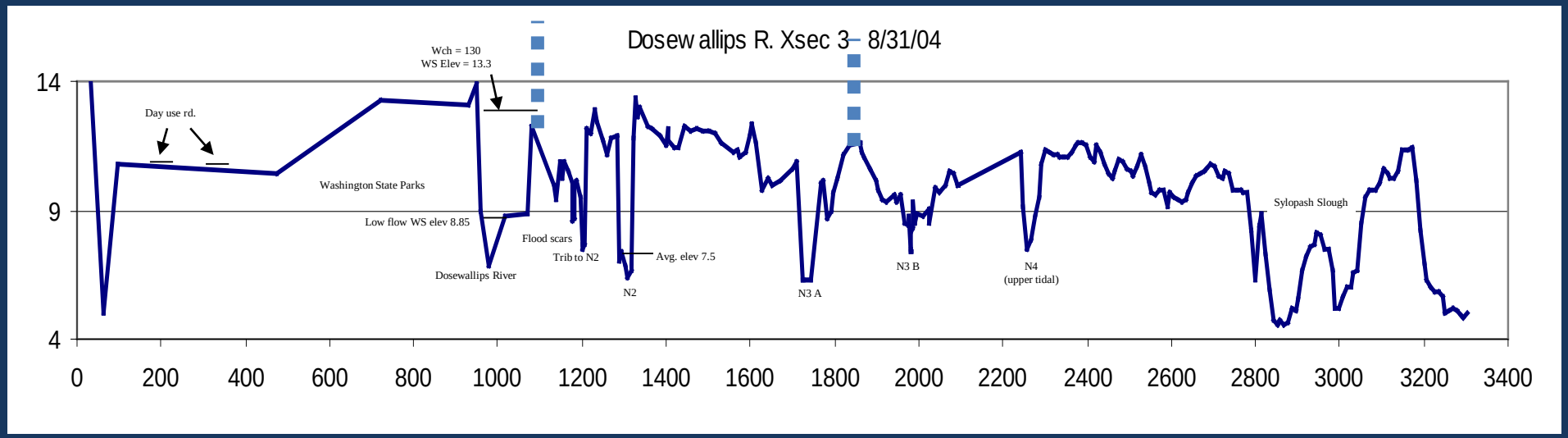
Micah Wait
Wild Fish Conservancy

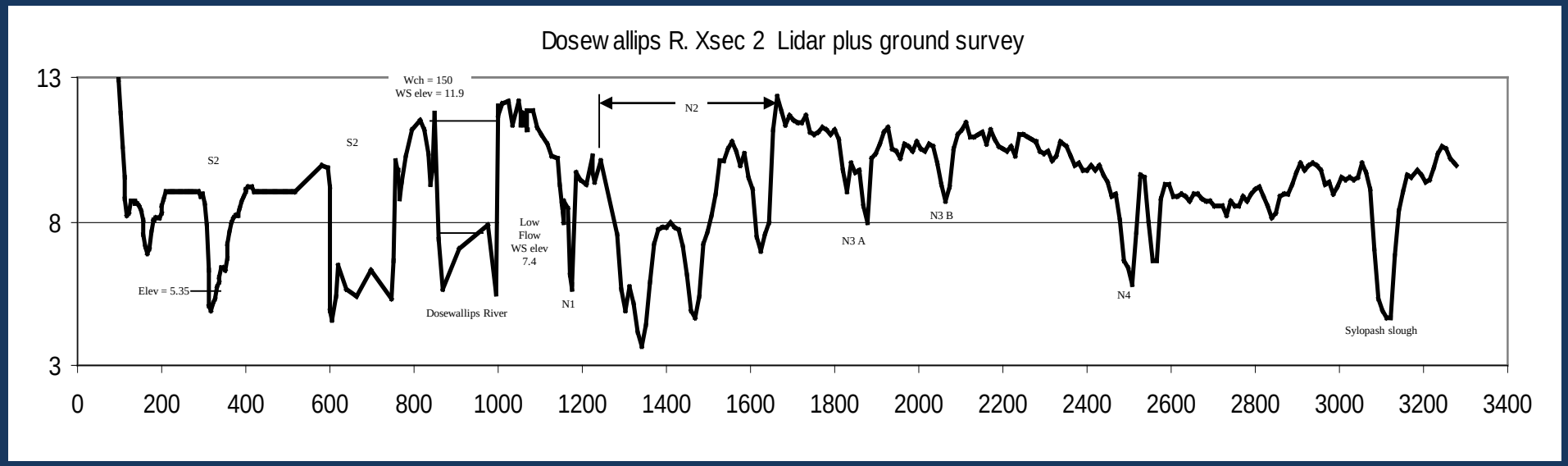

N
DNR Watercourses
DNR Waterbodies
Roads
Olympic National Forest
Olympic National Park
0 0.5 1 2 3 4
Miles
Deception Creek
Spit Creek
Hidden Creek
Dosewallips River
West Fork Dosewallips River
Hungry Creek
Eel Glacier
Rocky Brook
Tunnel Creek
Dosewallips Road
Project Area
Hood Canal
Seattle


400
600
800
1000
1200
1400
1600
1800
1000
1200
1400
1600
1800
2000
2200
2400
2600
2800
Distance below reference (m)
10
9
8
7
6
5
4
3
2
1


Base map: 1883 US Coastal Survey
2002 MLW
2002 MHW,
edge of salt marsh
Sylopash


N
0
50
100
150
200
LiDAR
High : 354.82 Meters
Low : 1.39 Meters


Dosewallips R. Xsec 3 – 8/31/04
Wch = 130
WS Elev = 13.3
Day use rd.
Washington State Parks
Low flow WS elev 8.85
Dosewallips River
Flood scars
Trib to N2
N2
Avg. elev 7.5
N3 A
N3 B
N4
(upper tidal)
Sylopash Slough
14
9
4
0
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
2800
3000
3200
3400


Dosewallips R. Xsec 2 Lidar plus ground survey
Wch = 150
WS elev = 11.9
S2
S2
N2
Elev = 5.35
Dosewallips River
Low
Flow
WS elev
7.4
N1
N3 A
N3 B
N4
Sylopash slough
13
8
3
0
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
2800
3000
3200
3400

Project Objectives

- Increase channel complexity
- Promote floodplain and distributary connectivity
- Restore riparian forest process

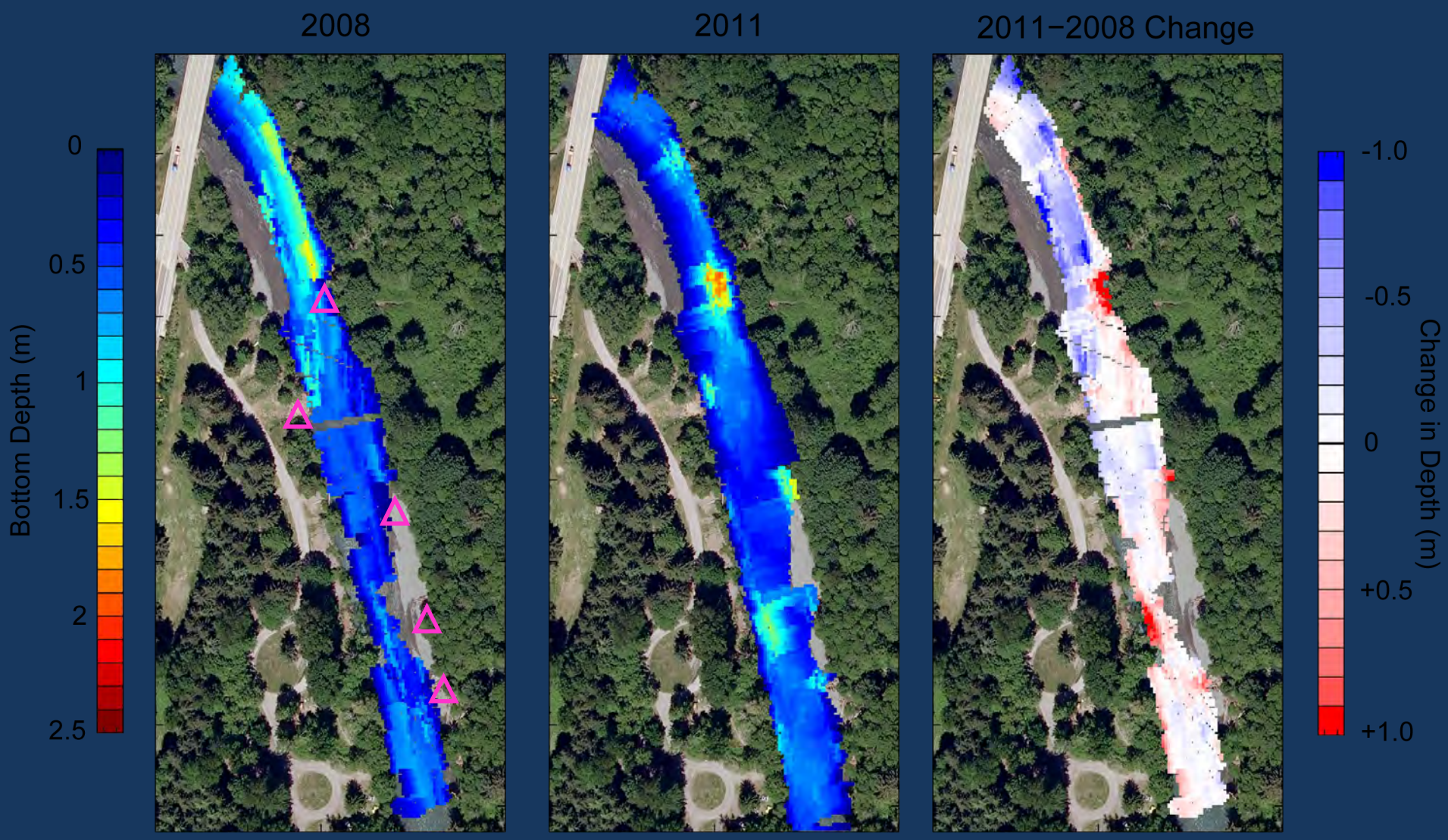
Actions

- Engineered Log Jams
- Levee and Revetment Removal
- Invasive removal/Native plantings

400
Feet
N

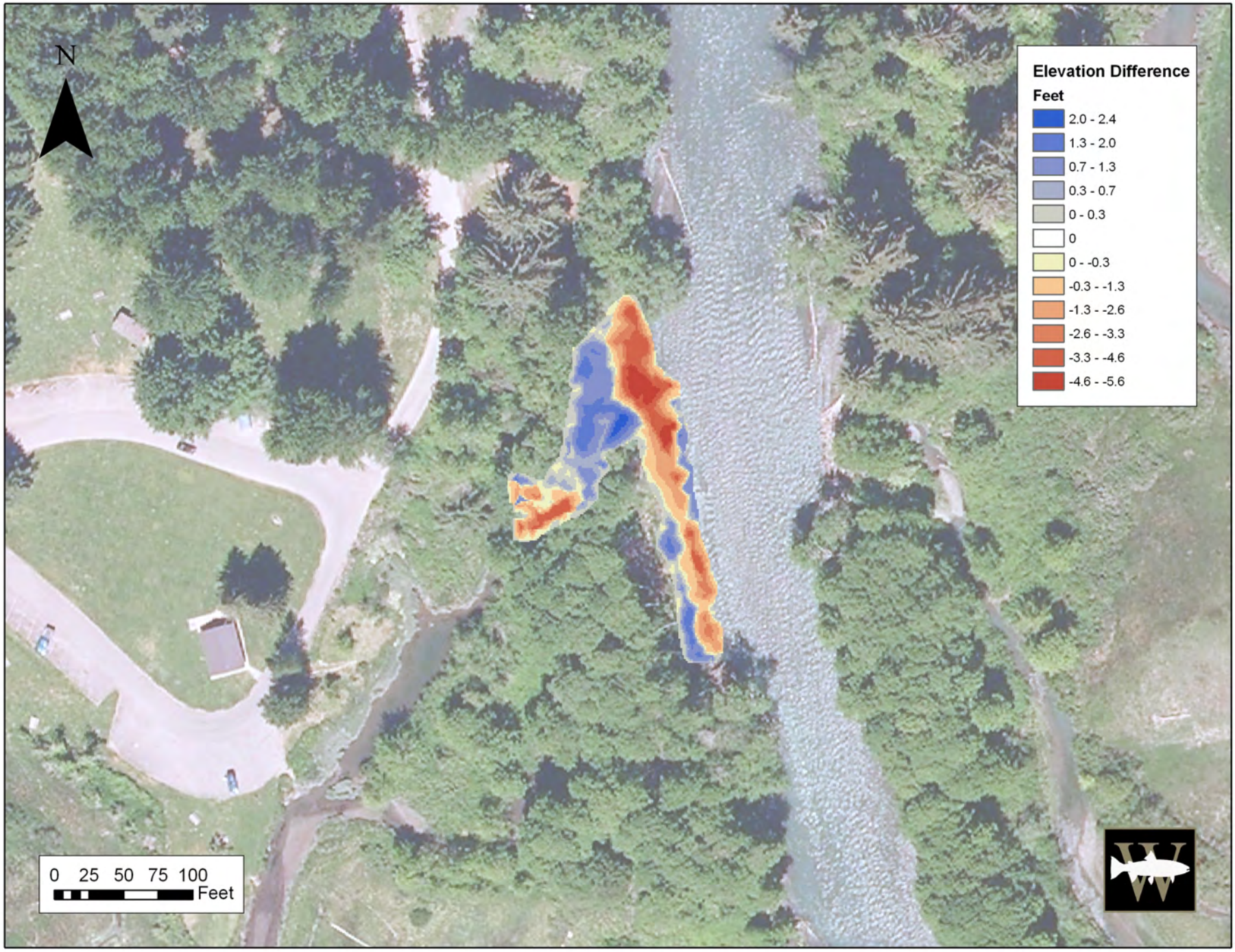
VOLVO
VOLVO
ECR235CL

Bathymetry Data



△ Engineered Log Jam constructed in Summer 2008

N
Elevation Difference
Feet
3.3 - 6.6
2.6 - 3.3
1.3 - 2.6
0.7 - 1.3
0.2 - 0.7
0 - 0.2
0
0 - -0.2
-0.2 - -0.7
-0.7 - -1.3
-1.3 - -2.6
-2.6 - -3.3
0 25 50 75 100
Feet


N
Elevation Difference
Feet
2.0 - 2.4
1.3 - 2.0
0.7 - 1.3
0.3 - 0.7
0 - 0.3
0
0 - -0.3
-0.3 - -1.3
-1.3 - -2.6
-2.6 - -3.3
-3.3 - -4.6
-4.6 - -5.6
0 25 50 75 100
Feet

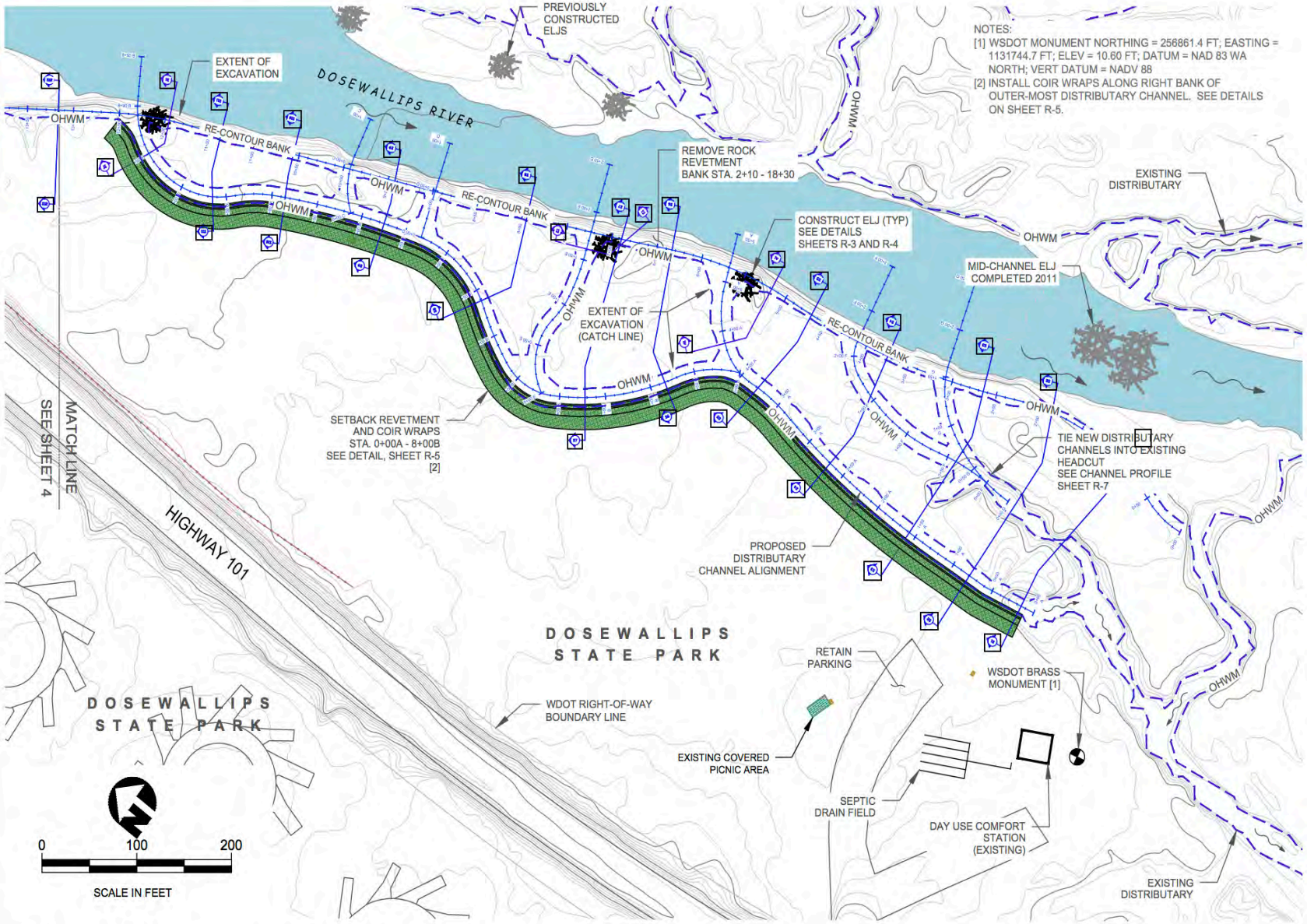
Sylopash Slough
N4
N3
N2
N1
S1
New Distributaries

Dosewallips Estuary Barge Removal

- Over 2,700 tons of creosoted material removed
- Over 200’ of linear shoreline restored
- 6,000 sq ft of intertidal and upland native plantings
- 11 pieces of large wood used as cross-shore placement and vertical snags

Lessons Learned

- Patience working on public lands
- Apex ELJs built on gravel bars will attract flow and encourage scour at distributary nodes
- Rapid response is possible, especially with intensive ELJ placement
- Non anchored wood structures will be temporary



NOTES:
[1] WSDOT MONUMENT NORTHING = 256861.4 FT; EASTING = 1131744.7 FT; ELEV = 10.60 FT; DATUM = NAD 83 WA NORTH; VERT DATUM = NADV 88
[2] INSTALL COIR WRAPS ALONG RIGHT BANK OF OUTER-MOST DISTRIBUTARY CHANNEL. SEE DETAILS ON SHEET R-5.

DATE
REVISIONS

WILD FISH CONSERVANCY NORTHWEST

15629 Main Street NE
P.O. Box 402
Duvall, WA 98019

SEAL

SOUTH SITE PLAN

LOWER DOSEWALLIPS RIVER RESTORATION PHASE IV 2015

BRINNON, WA

DATE: 07-06-17
DRAWN BY: S. KROPP
DESIGNED BY: A. STONKUS S. KROPP
SCALE: 1" = 100'
JOB NO. :
SHEET NO.
R-2
SHEET _____ of ___XX___

C:\Users\HP_75\Documents\Work Files\01. PROJECTS - Active\02. Lower Dosewallips\5. Phase IV - 2017 Design\1. Sheets\(9) South Site Plan.dwg
Mod: 07/06/2017, 15:33 | Plotted: 07/06/2017, 16:21 | Layout: R2