

McNeil Island Marine Shoreline Restoration



Doris Small, Habitat Restoration Coordinator
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Chris Dwight, Habitat Biologist



Monica Shoemaker & Chris Robertson
DNR Aquatic Restoration



Henry Mack & Natasha Holt
DOC Marine Operations

McNeil Island

- 4400 acres
- 12 miles shoreline
- West Sound LE
- Alliance for a Healthy South Sound LIO
- Nearshore Chinook Chapter – South Sound
- Tribal – Squaxin, Nisqually & Puyallup
- Pierce County
- WDFW South Puget Sound Wildlife Area
- WDNR Nisqually Aquatic Reserve & SOAL





1875 – 1934 Federal acquisition of the island
1875 – 1981 Federal penitentiary operated
1981 - 2011 State penitentiary operated
Up to 1500 inmates & island residents

McNeil Island Management



1984 Land ownership transfer conditions:

- **Correctional use limited to designated parcels**
- **Remainder of island is for wildlife conservation**
- **Whenever possible, decommission infrastructure**
- **Protective of cultural resources & Gertrude Island**
- **No public access**



Shoreline debris



Impounded former embayments



WWII Torpedo netting as shoreline armor



McNeil Island Habitat Restoration Project Feasibility Report



July 2015

Corey Morss, P.E.
Doris Small
Jeff Query
Tony Godat

Washington Department of Fish and Wildlife



Identified two near-term projects

- Barge Landing debris removal
- Shoreline debris removal (10 sites)

Three additional projects for further study

- Milewa Creek Estuary
- Bodley/Bradley Creek Estuary
- Floyds Cove



Bodley/Bradley Creek

Milewa Creek Estuary

Floyds Cove

Luhr Creek culvert

Still Harbor

McNeil Island

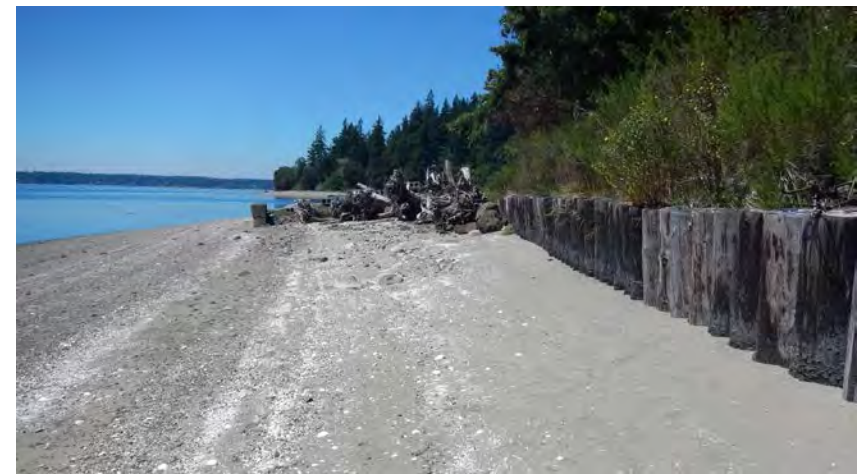
Butterworth Reservoir

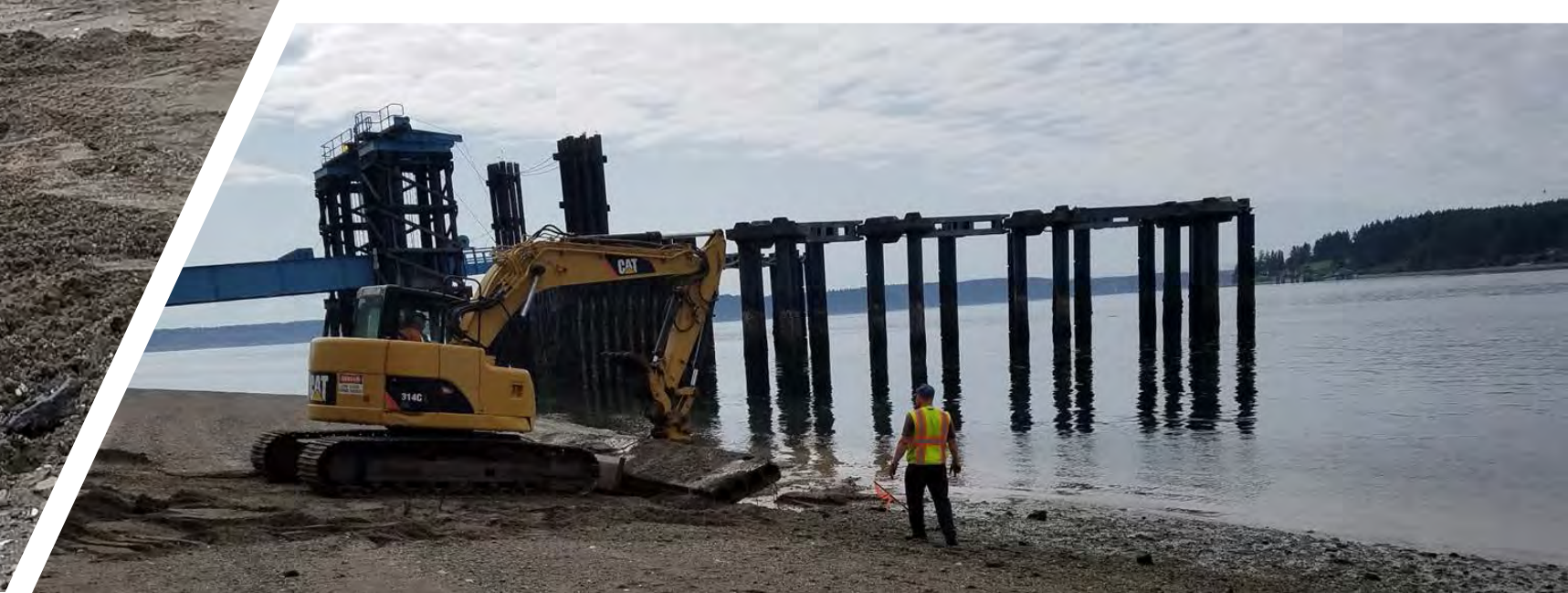
Eden Cr dam

Barge Landing

McNeil Island - Barge Landing Site







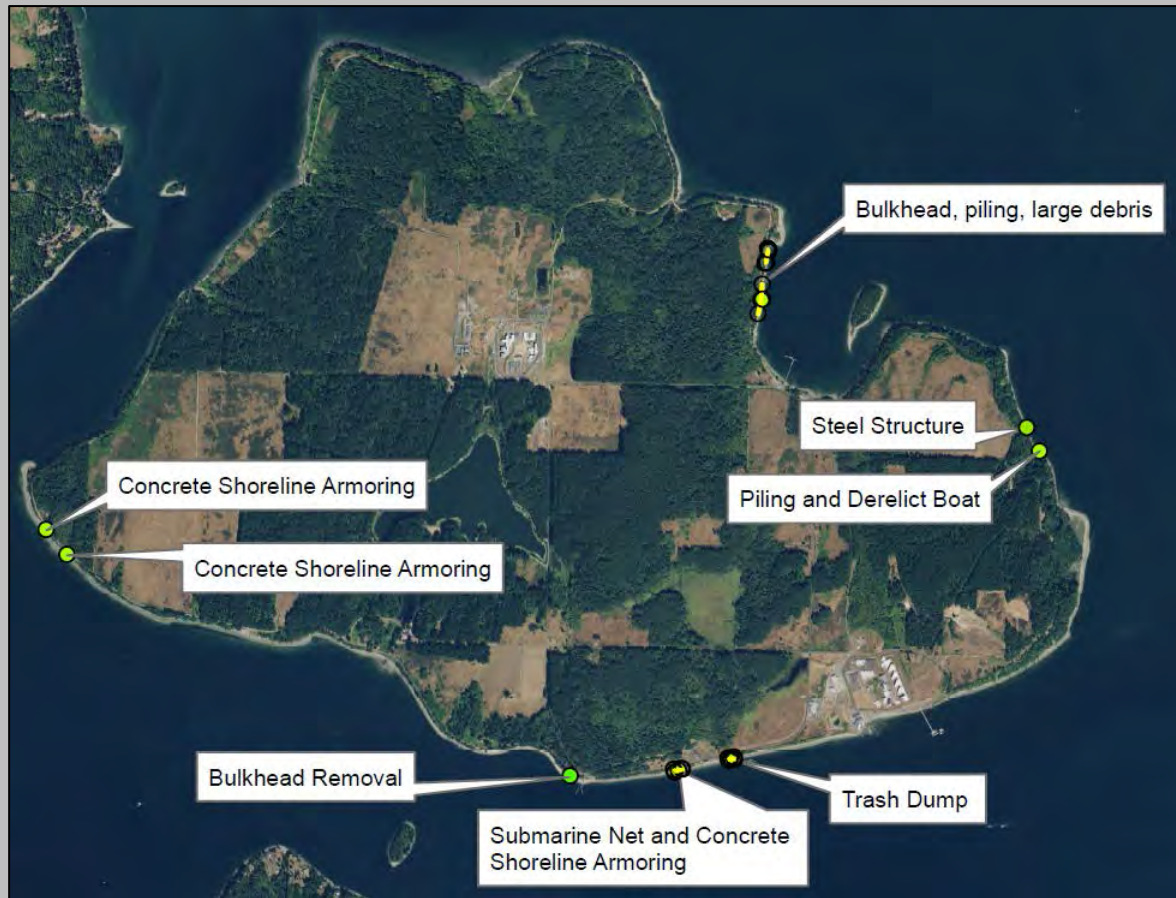


Completed July 2018

- 61 ecology blocks
- 24 concrete voided slab sections
- 33 creosote piling
- Approximately 200 cy crushed gravel

<https://www.kuow.org/stories/homeowners-keep-building-walls-around-puget-sound-but-biologists-are-taking-out-more>

2018/2019 Island Wide Restoration



- Removal of shoreline armoring, creosote pilings and debris in six locations.
- Close to 1,000 tons of concrete was hauled away by barge along with 55 tons of scrap metal and more than 51 tons of pilings.
- 557-foot bulkhead was pulled out along with a derelict boat.



<https://pugetsoundblogs.com/waterways/2018/12/06/mcneil-island-becoming-known-for-fish-and-wildlife-not-just-prison/>

<https://www.king5.com/article/news/local/state-cleaning-100-year-old-debris-from-south-puget-sound-island/281-620466240>



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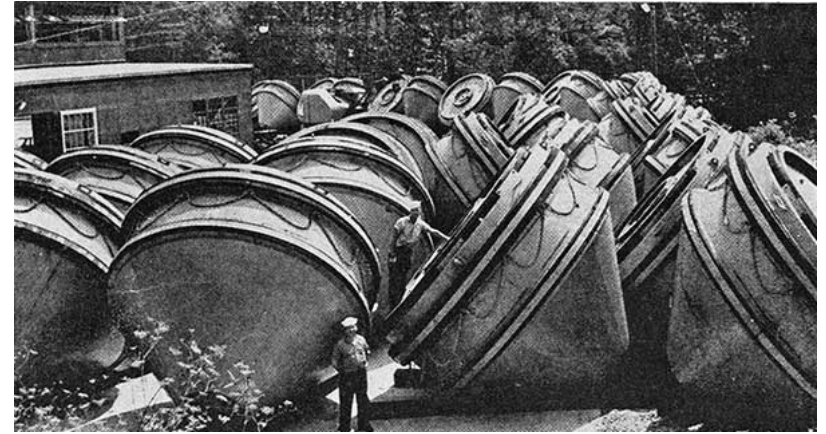
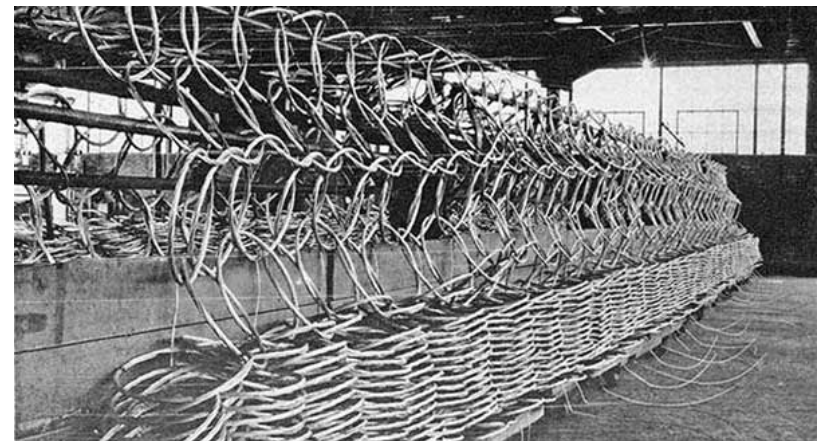
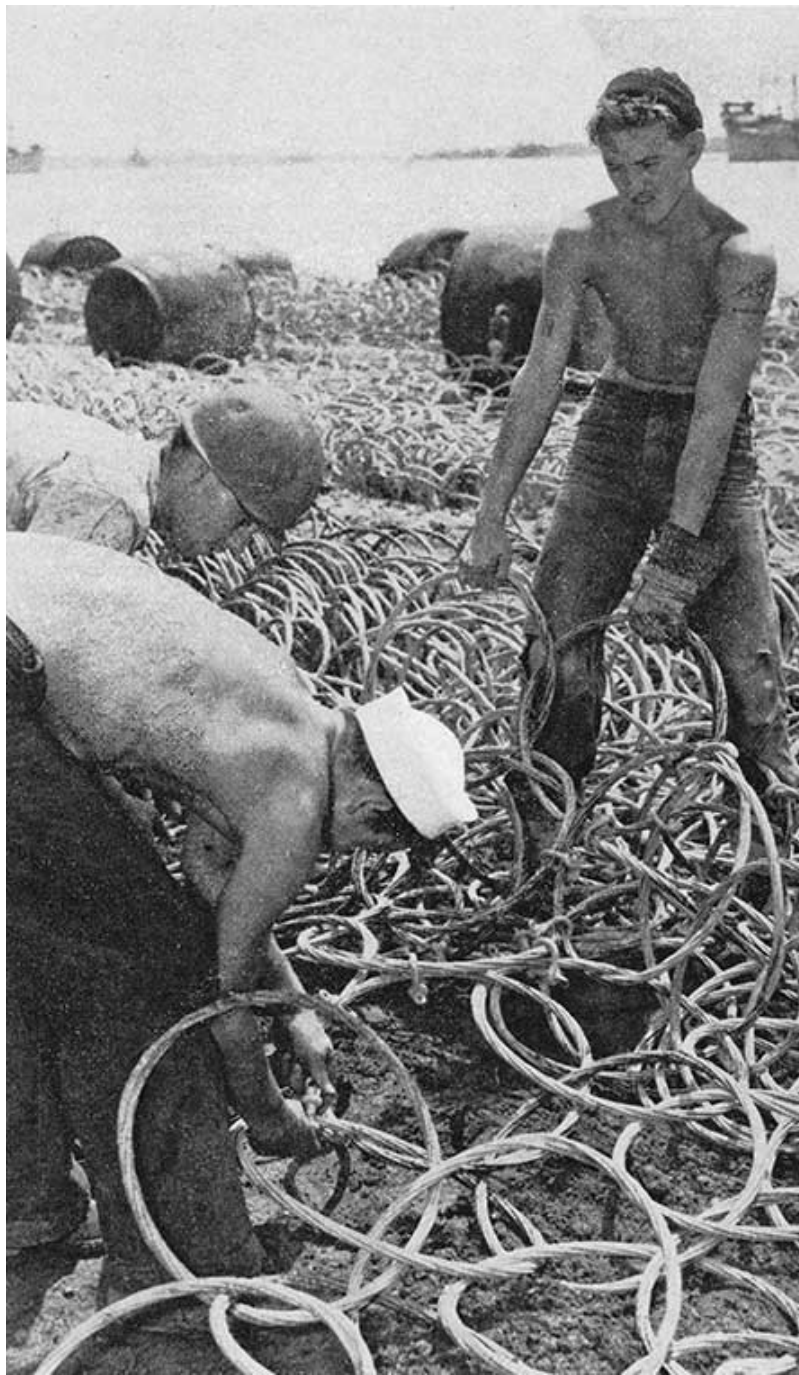
A 557-foot bulkhead was pulled out along with a derelict boat.

Funded by DNR Aquatic Restoration

<https://www.dnr.wa.gov/mcneil-island-shoreline-restoration>

<https://www.king5.com/article/news/local/state-cleaning-100-year-old-debris-from-south-puget-sound-island/281-620466240>

<https://pugetsoundblogs.com/waterways/2018/12/06/mcneil-island-becoming-known-for-fish-and-wildlife-not-just-prison/>

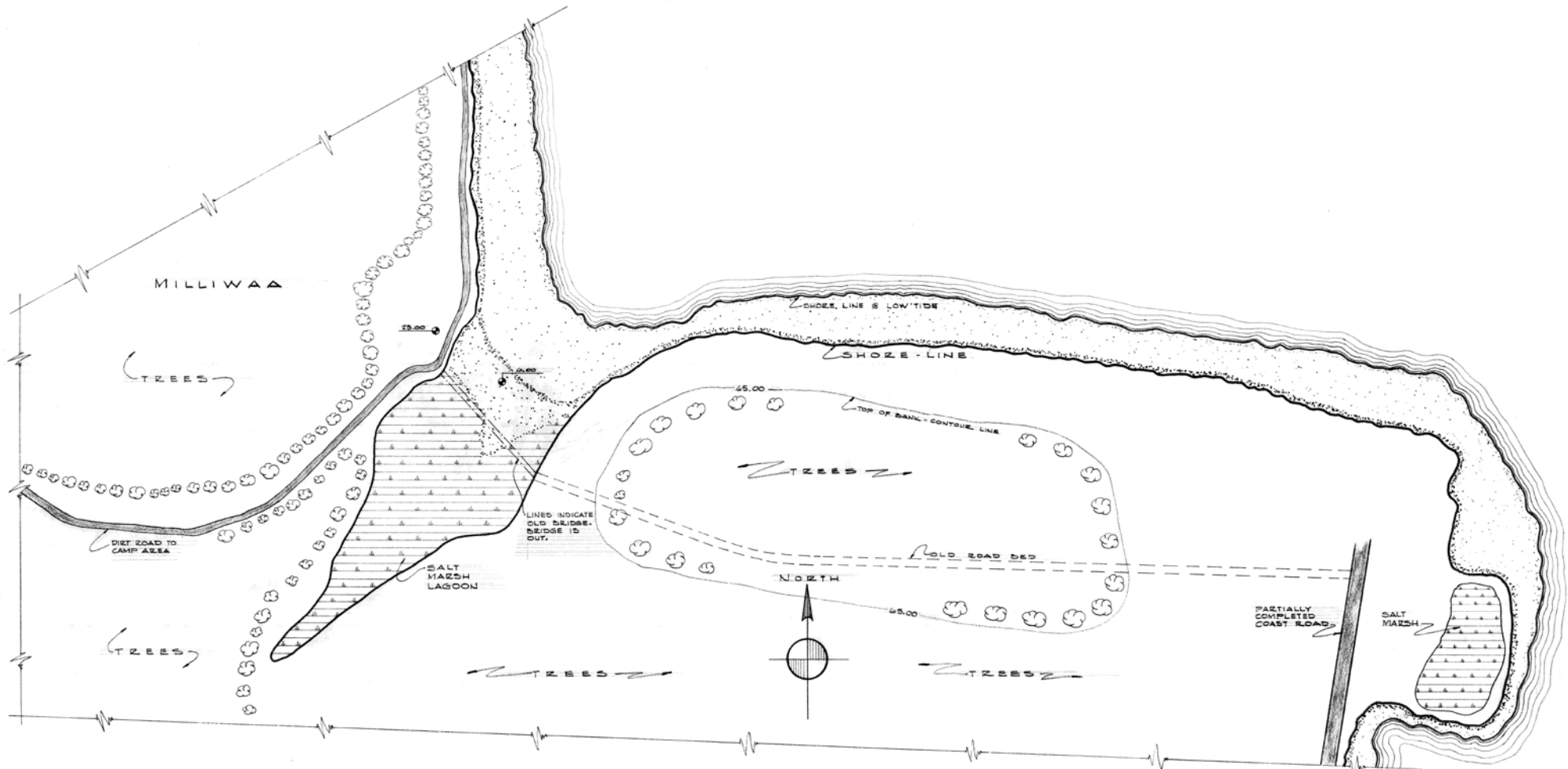


Milewa Creek Estuary









EXISTING PARTIAL PLOT PLAN
 SCALE: 1" = 100'-0"

A PROPOSAL FOR LAND RECLAMATION IN CONJUNCTION WITH THE COAST ROAD CONSTRUCTION BY MEANS OF A NEW SEAWALL AT EXISTING LAGOON NEAR MILLIWAA. APPROXIMATELY 9.20 ACRES OF LAND WILL BE RECLAIMED FOR FUTURE BEEF PASTURE & HAY FIELD.

PROPOSED & DRAWN BY TRUITT, #28299 & PHILLIPS, #30799

U. S. PENITENTIARY McNEIL ISLAND, WASH.	
Drawn by PHILLIPS	Checked by 17
AS NOTED	DATE SEPT 14, 1968
Sheet 1 of 2	Project AT MILLIWAA
APPROVED	
BUILDING & CROPPING MANAGER	WARDEN
REVISIONS	PRINTS

Alternatives at Milewa Estuary:

- 1) Remove culvert & rebuild 100' bridge*
- 2) Remove culvert & build bypass road at head of estuary*
- 3) Remove culvert & use existing road for bypass*





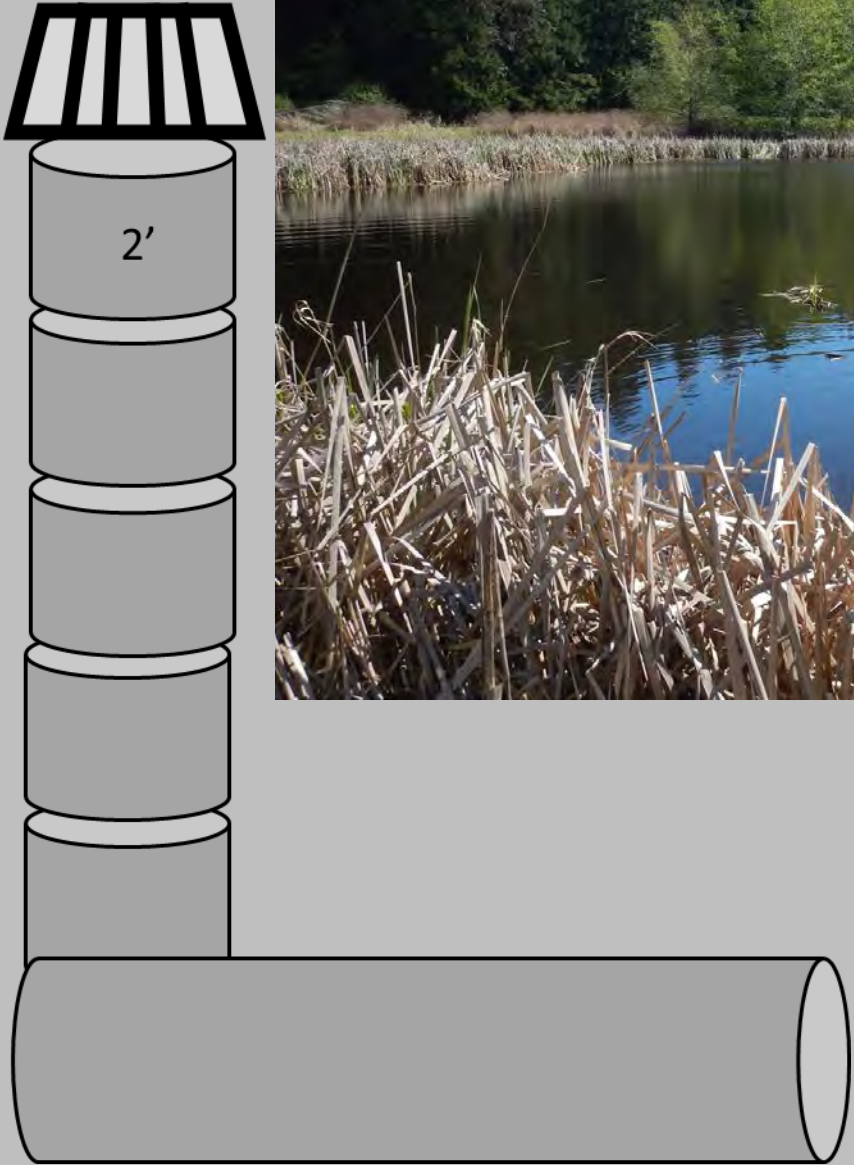


Bodley Creek
(Bradley Cr)

8/04/2016 3:33 PM









Bodley Creek: Beaver assisted restoration

- Plant beaver-enticing vegetation
- Remove standpipe in sections
- Install BDAs
- Replace culvert when funding available
- Keep planting



8/04/2016 3:24 PM

Floyds Cove





Still Harbor Feasibility



Legend

- Streams
- Roads

Restoration Action Project Status

- Priority
- Address Stakeholder Needs

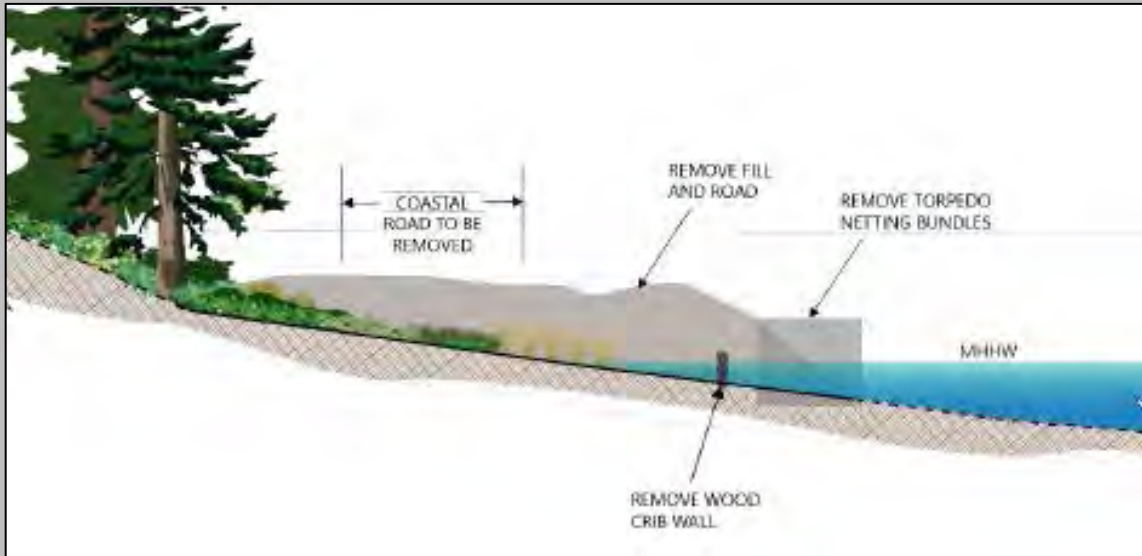
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Figure 22.
Restoration Opportunities in Still Harbor, McNeil Island, Washington.

HERRERA
ESRI Aerial Imagery

6.11 Project/120207.20-01680-000/Project/Report/0106/Map/Map01/Fig_22/Still_Harbor_Feasibility07.aprx







Still Harbor Shoreline Monitoring

- Forage Fish Surveys
- Beach Profile
- Sediment Size
- Beach Wrack
- Logs and Riparian Vegetation



- **McNeil Island is part of your LE**
 - *Significant restoration work has been happening there*
- **We're looking to gain partners & continue momentum**
 - *Include McNeil Island restoration on LE project list?*
- **When is the field trip?**

Thanks for your interest!