WASHINGTON STATE
Department of Ecology

Cleanup of Port Gamble Bay

(a portion of the Port Gamble Bay and Mill Site)

Public Meeting

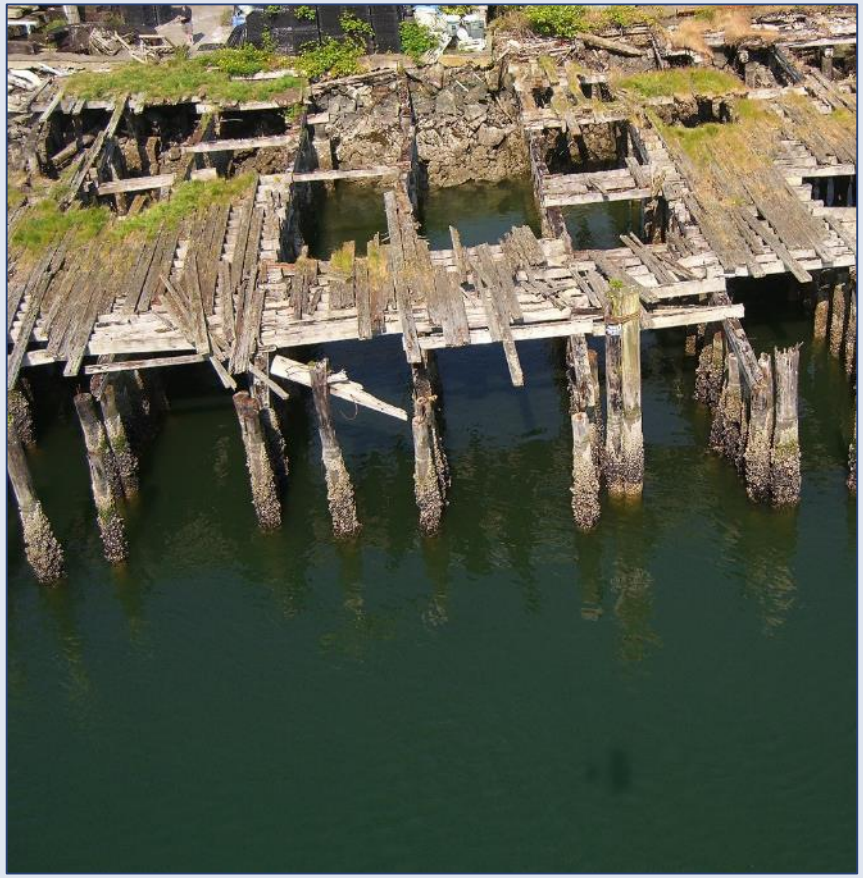
May 27, 2015

A Puget Sound Initiative Site
Reaching the goal of a healthy, sustainable Puget Sound

Puget Sound Initiative

- Over 100 sites around Puget Sound
- Restoring abundant natural resources and enhancing recreational access
- Assessing contamination baywide
- Working with Tribes on human and environmental health, and cultural and natural resources
- Working throughout communities to understand baywide context and individual site cleanups

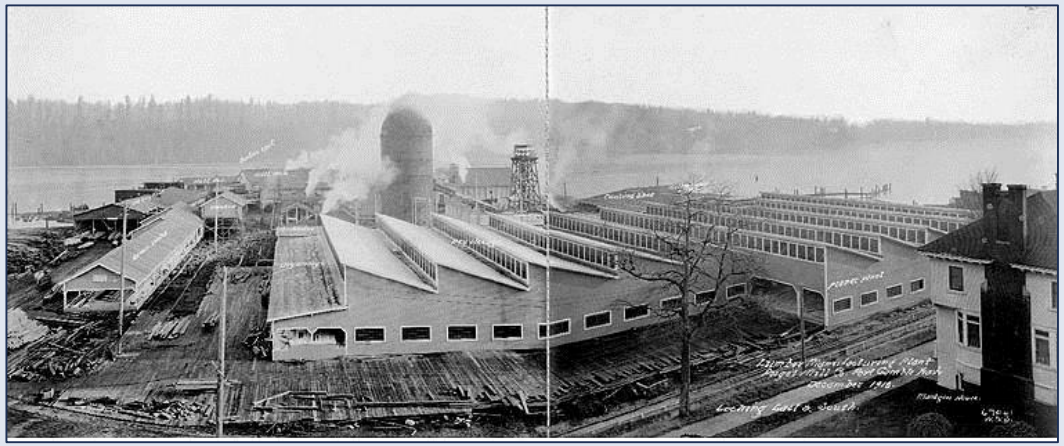
Presentation Overview



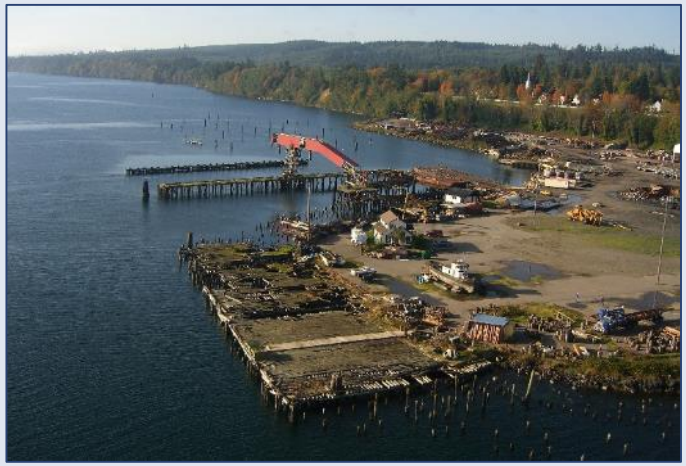
- History of industrial operations in Port Gamble
- Cleanup process and objectives
- Restoration in Port Gamble Bay
- Cleanup plans
- How to stay informed

History of Industrial Operations

- Sawmill established in 1853 and operated by Pope & Talbot for 142 years
- Mill shut down in 1995 and razed after a fire in 1997
- Since 1995 the site was leased for log sorting/chipping, materials handling and a marine research facility
- 2007 Pope & Talbot bankruptcy, ownership and management continues under Pope Resources and Olympic Property Group (PR/OPG)



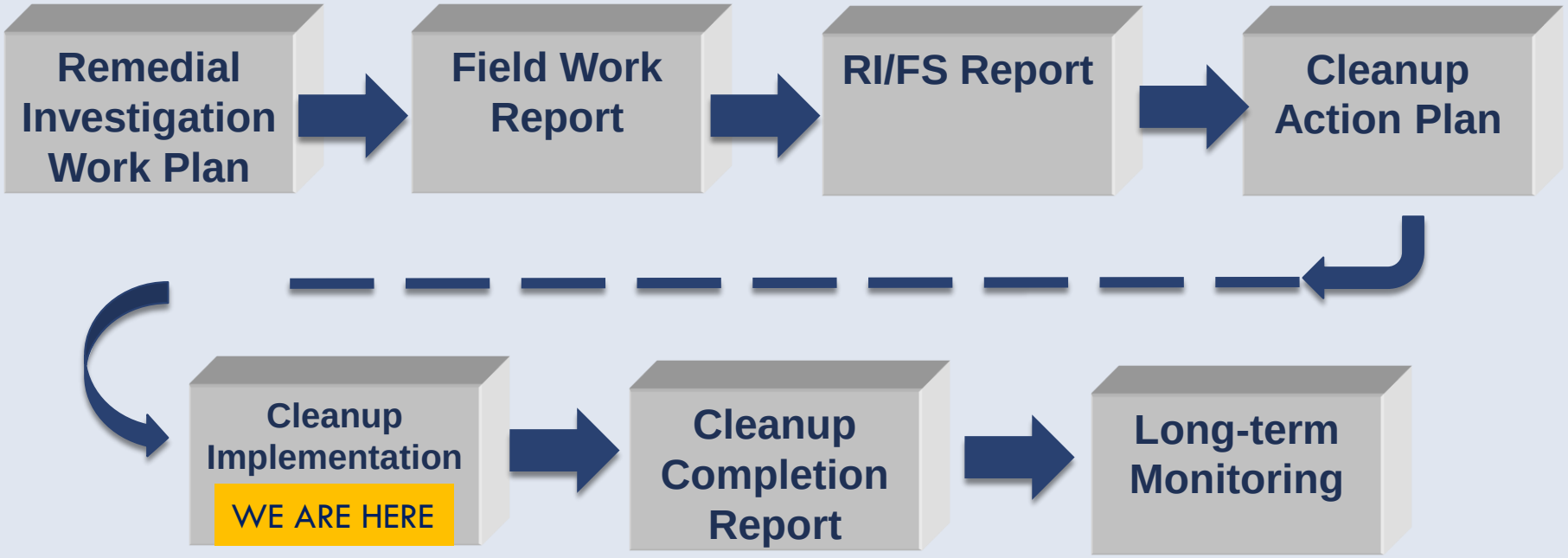
Cleanup Objectives



- Address threats to human health
  - Dioxins/furans, petroleum hydrocarbons and cadmium
- Address threats to the environment
  - Toxicity driven by wood waste
- Achieve the following:
  - Maximize active cleanup
  - Quickest time to full recovery
  - Minimize impacts of cleanup
    - Shellfish monitoring
    - Vessel management

Cleanup Process (MTCA)

Construction is anticipated to begin July 2015



Previous In-Water Cleanup Work

1995-2005

PR/OPG conducts voluntary interim remedial actions

2002-2005
PR/OPG excavates about **26,310 tons** of contaminated soils from former sawmill area

2003
Pope & Talbot dredges about **13,500 cubic yards** of wood waste and contaminated sediments

2007

Ecology and WDNR dredge about **17,000 cubic yards** of wood waste and contaminated sediments

2008

Agreed Order between Ecology and PR/OPG for the Site

2012

In-water **Partial Remedial Investigation/ Feasibility Study** complete

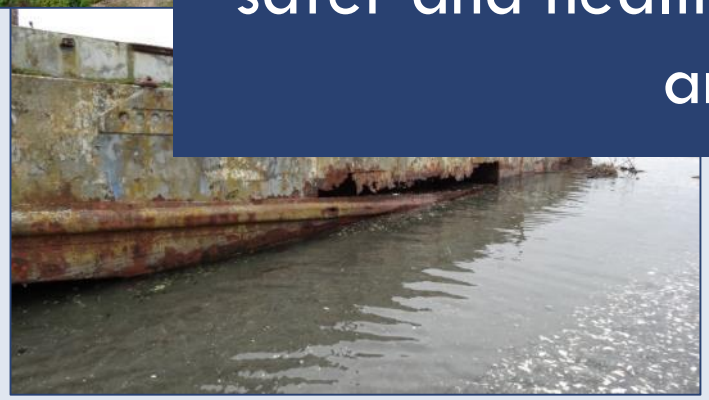
2013

Ecology and PR/OPG sign **Consent Decree including Cleanup Action Plan**

Vision for Port Gamble Bay

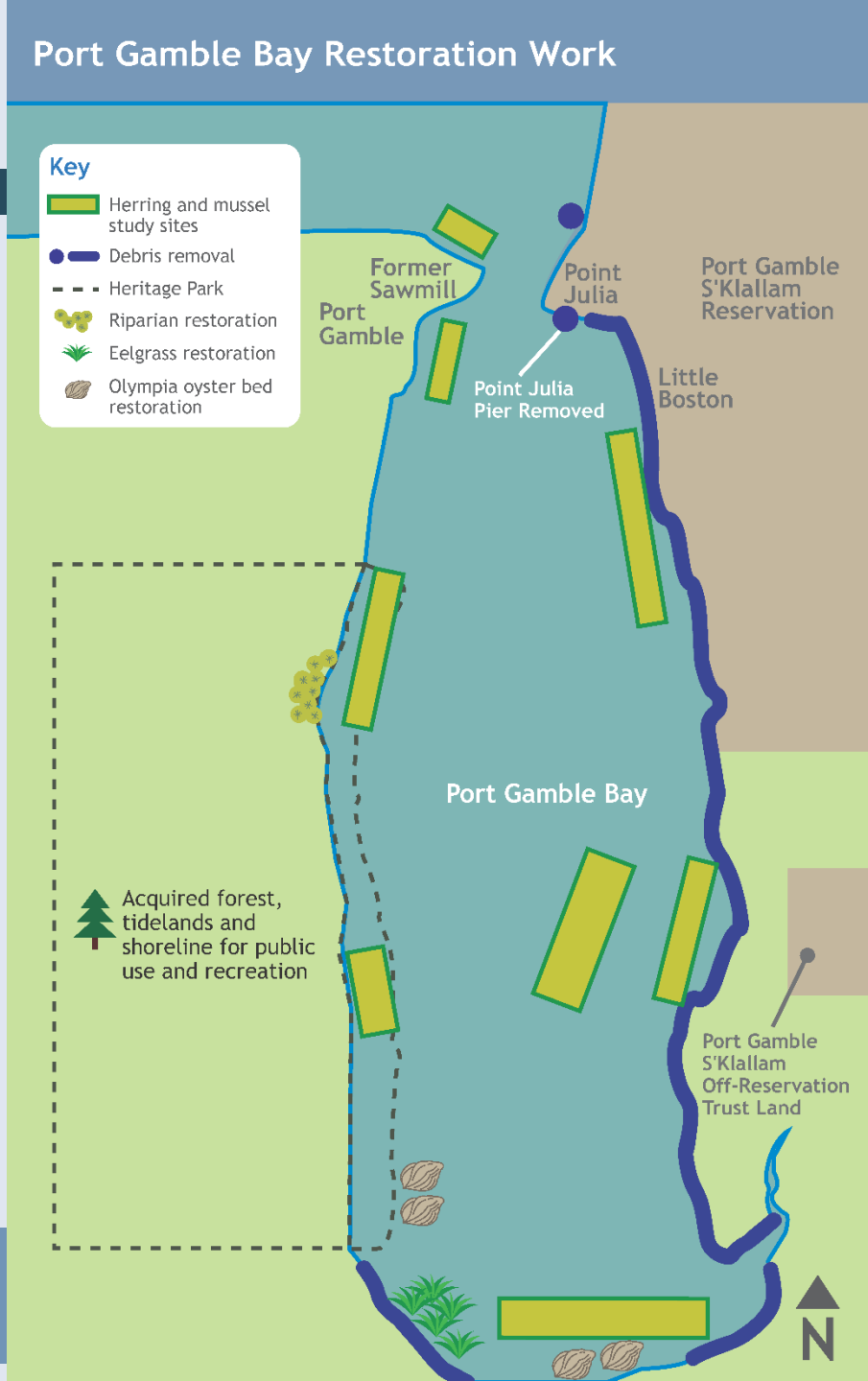
Vision for Port Gamble Bay

Cleaning up, restoring and protecting Port Gamble Bay is making the bay a safer and healthier place to live, work and play.



Restoration

Restoration work occurring throughout Port Gamble Bay



Restoration in Port Gamble Bay

Eelgrass restoration

- Restore 2 acres of native eelgrass within southwestern portion of the bay

Restoration in Port Gamble Bay

Olympia oyster habitat enhancement

- Enhance more than 9 acres of oyster habitat and plant enhanced habitat with millions of oyster seed

Restoration in Port Gamble Bay

Remove debris and contaminated structures

- Point Julia pier
- Middle Creek and other pilings
- Derelict barge
- Debris on bay's beaches

Restoration in Port Gamble Bay

Remove debris and contaminated structures

- Point Ju
- Middle
- Derelic
- Debris

This effort has removed nearly 500,000 pounds of creosote pilings, concrete, steel and debris.

Restoration in Port Gamble Bay

Riparian restoration

- Restore more than one acre of degraded land with native trees, shrubs and groundcovers
- Bolster other Heritage Park restoration efforts by Kitsap County Parks and Recreation staff

Restoration in Port Gamble Bay

Pacific Herring studies

- Investigate rapid decline of Pacific herring spawning survival
- Determine genetics of Port Gamble herring stock

Mussel study

- Investigate chemicals of concern in caged mussels and collect baseline data for upcoming cleanup actions

Preservation in Port Gamble Bay

Land Acquisition

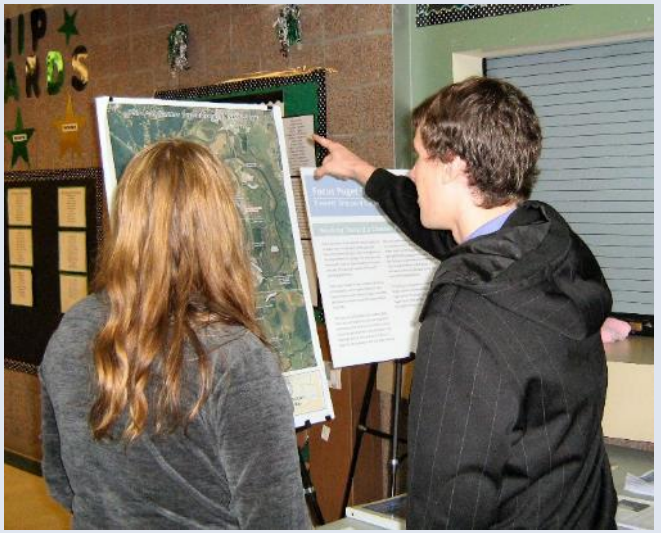
- Purchased 535 acres, including 74 acres of tidelands
- Plans to purchase ~200 additional acres of forested uplands adjacent to the Port Gamble Heritage Park
- Collaborative community and tribal effort

Port Gamble Heritage Park

Upland block

Tribal and Community Input into Cleanup Design

- Incorporate best management practices
  - Pile removal
  - Dredging equipment
  - Avoid and minimize habitat impacts
- Minimize impacts to shellfish and fishery harvests
- Avoid and minimize impacts to cultural resources
- Ongoing community involvement



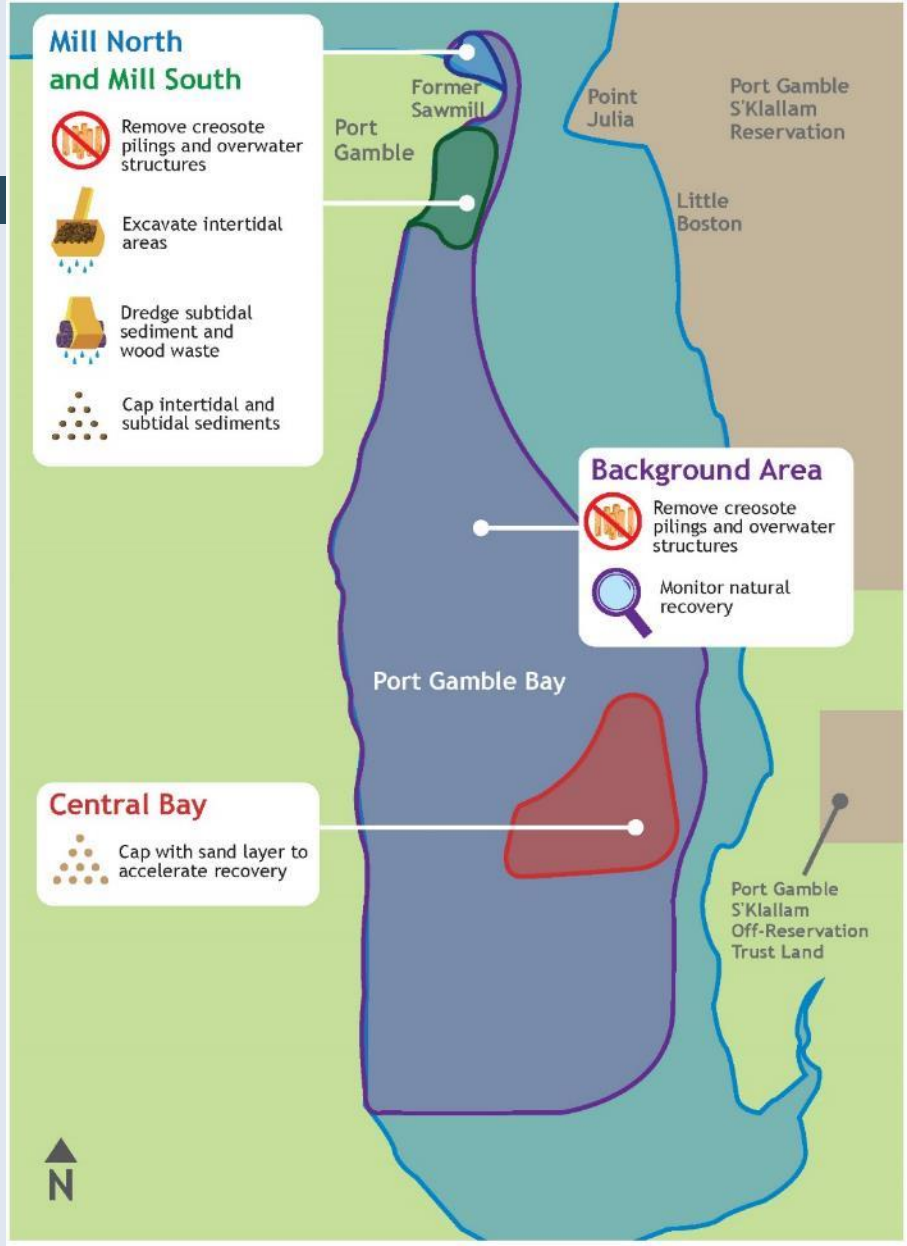
Next Steps: In-Water Work and Construction

Construction to start July 2015

(two seasons of in-water work)

Cleanup Overview

- Pile removal demonstration June 2015
- Cleanup begins July 2015
- Construction activities from July through January of the next two years
- Long-term monitoring to ensure recovery



Port Gamble Bay and Mill Site

Overview of Cleanup Schedule

Anticipated to be completed within two construction seasons within the allowable in-water work windows

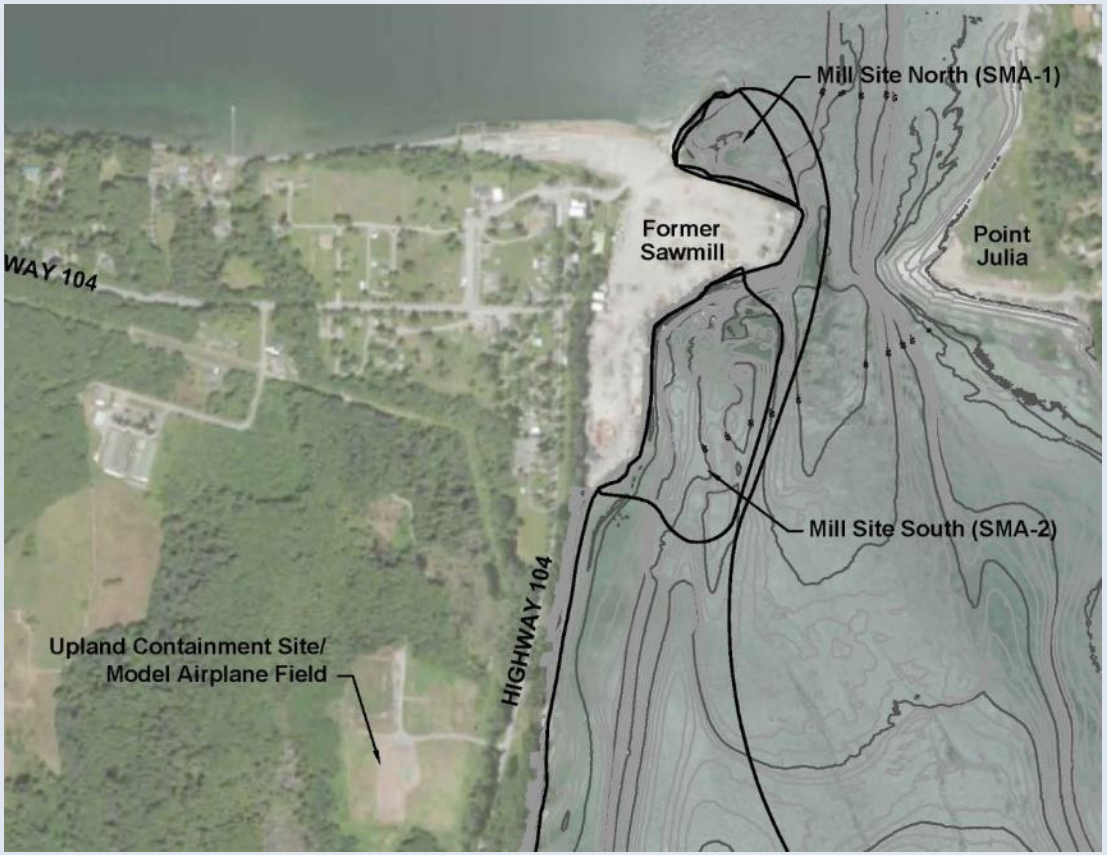
Time	Activity
June 2015	Pile removal demonstration
July 2015 to January 2016	Begin pile removal and mill south (SMA 2) construction
July 2016 to January 2017	Finish pile removal and mill north (SMA 1) to central bay (SMA 3) construction
2017 to 2027	Monitor sediment recovery

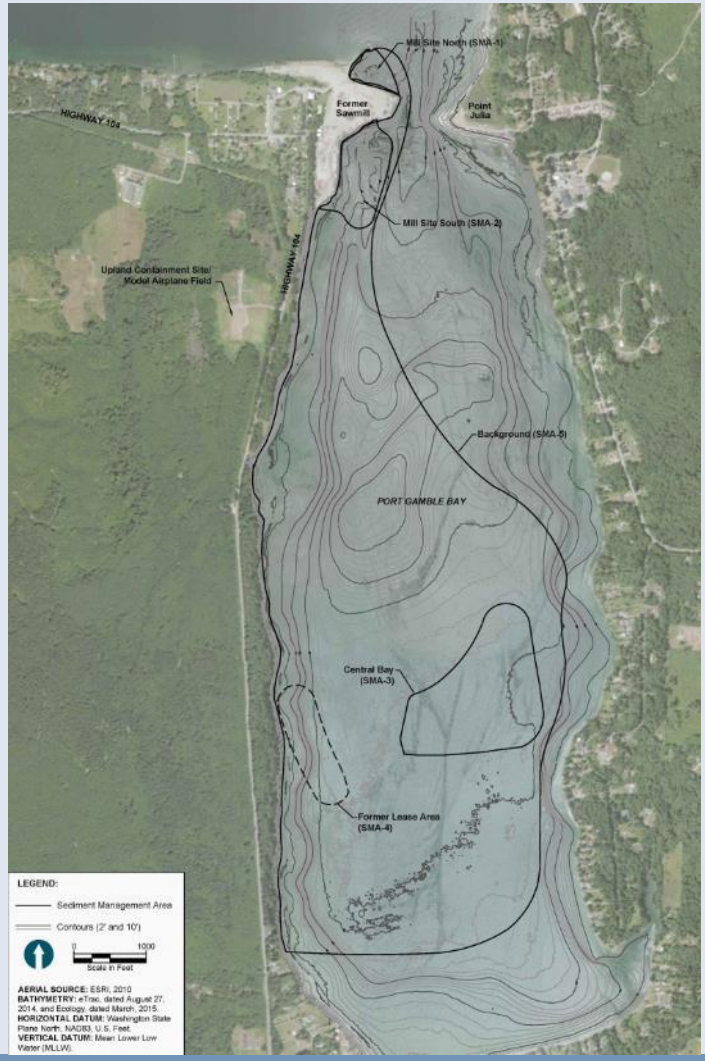
Port Gamble Cleanup Project Elements

- Remove ~6,000 creosote-treated piles and overwater structures
- Excavate ~30,000 cubic yards of intertidal sediments “in the dry”
- Dredge ~40,000 cubic yards of subtidal sediments using mechanical equipment (environmental bucket)

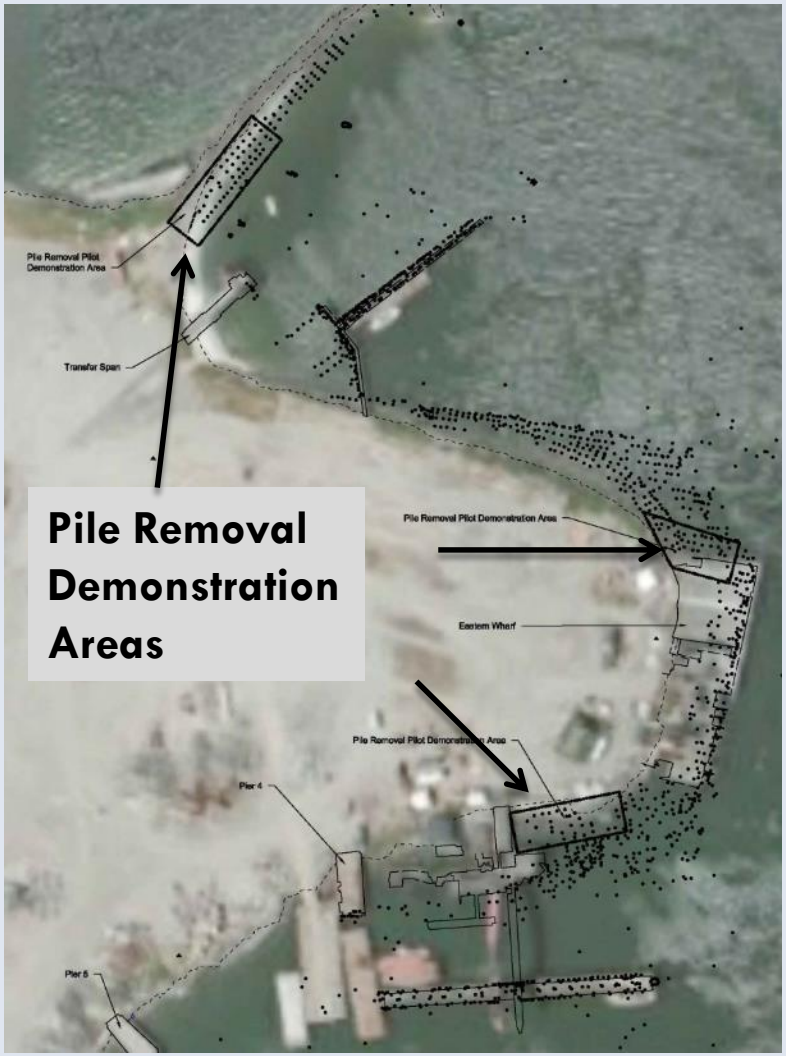
- Transplant eelgrass to mitigate dredging impacts
- Cap 10 acres
- Cover 68 acres with thin sand layer to enhance recovery
- Monitor natural recovery over next 10 years (640 acres)

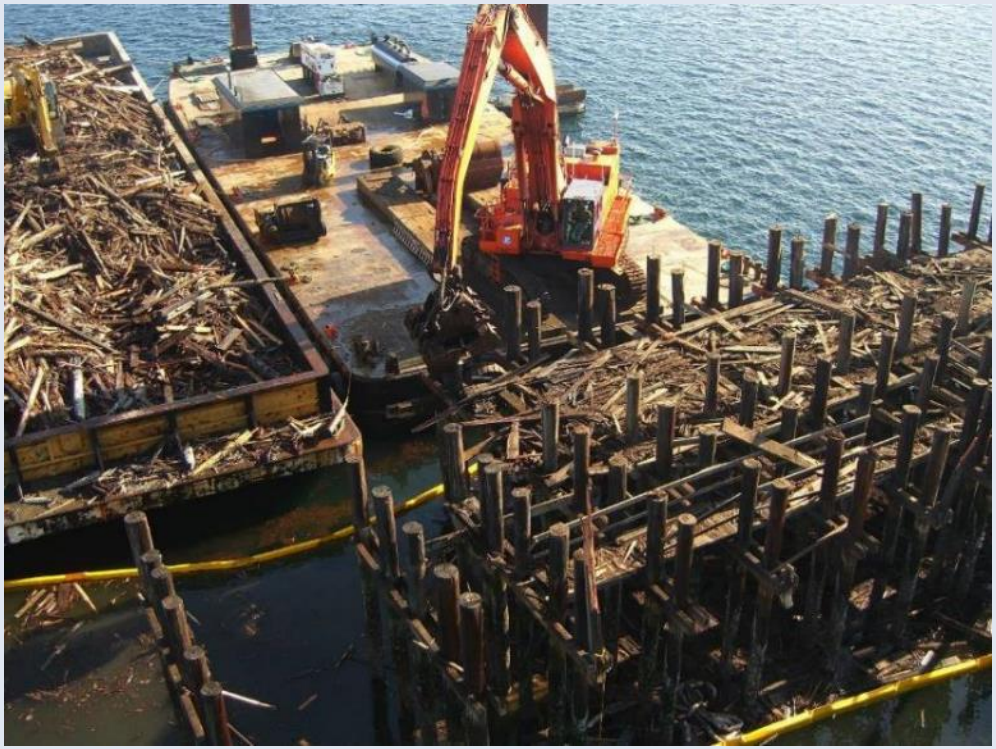
Port Gamble Sediment Management Areas



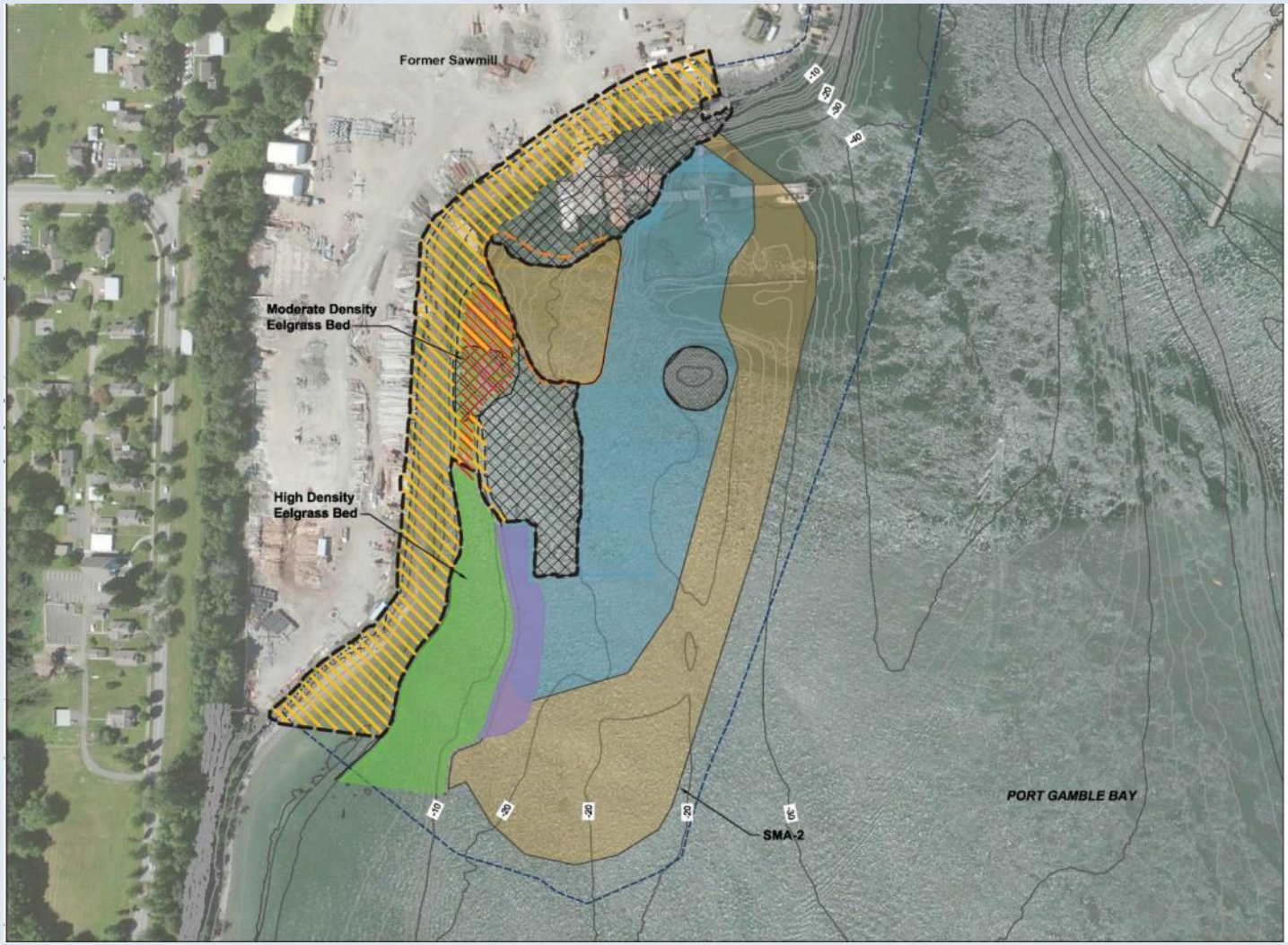


Pile Removal Demonstration





South Mill (SMA2)



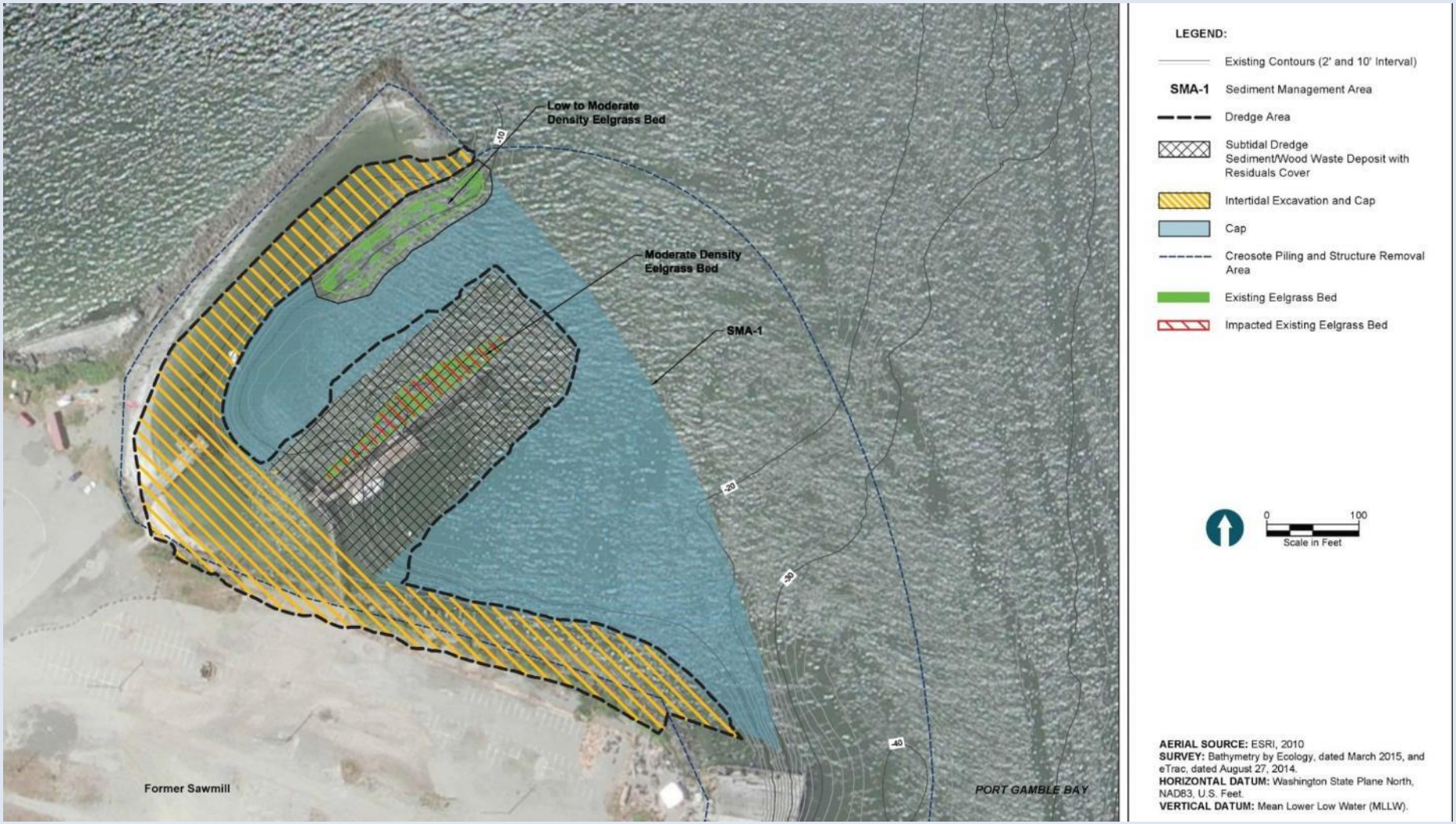
LEGEND:

- **SMA-2** Sediment Management Area
- Existing Contours (2' and 10' Interval)
- Subtidal Dredge Sediment/Wood Waste Deposit with Residuals Cover
- Intertidal Excavation and Cap
- Cap
- EMNR
- Dredge Area
- Creosote Piling and Structure Removal Area
- 2007 Dredge and Cap Area
- Existing Eelgrass Bed
- Impacted Existing Eelgrass Bed
- Proposed Eelgrass Transplant Mitigation Area

0 200
Scale in Feet

AERIAL SOURCE: ESRI, 2010
SURVEY: Bathymetry by Ecology, dated March 2015, and eTrac, dated August 27, 2014.
HORIZONTAL DATUM: Washington State Plane North, NAD83, U.S. Feet.
VERTICAL DATUM: Mean Lower Low Water (MLLW).

North Mill (SMA 1)

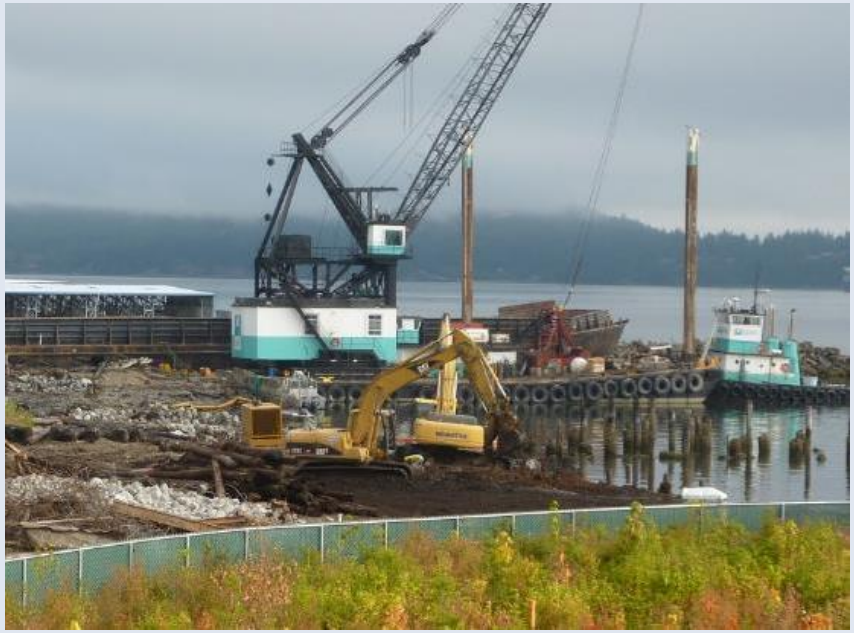


What to Expect During Construction

Pile removal

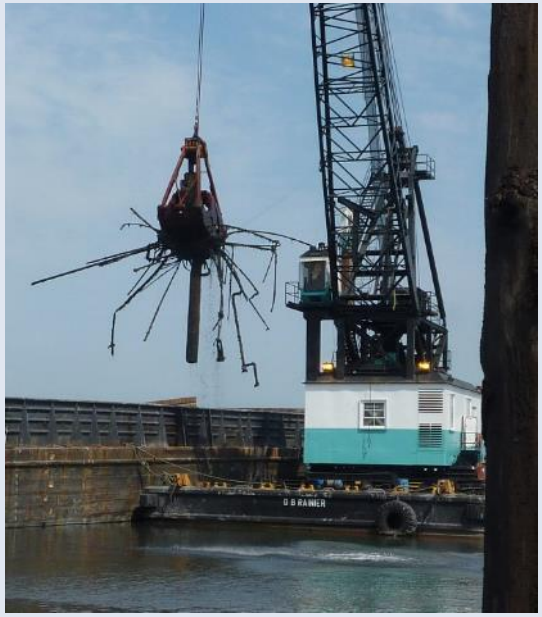
What to Expect During Construction

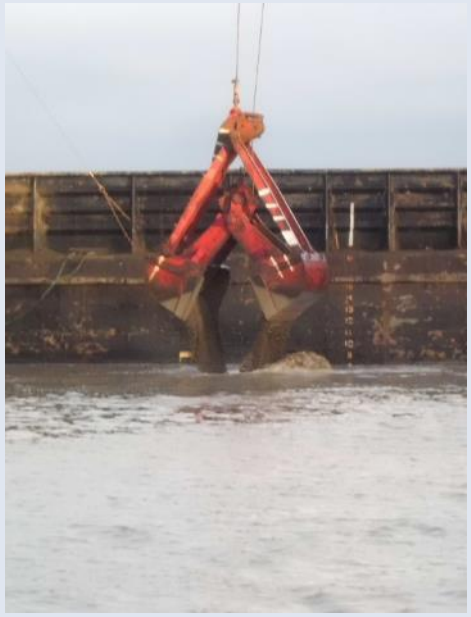
Beach excavation



What to Expect During Construction

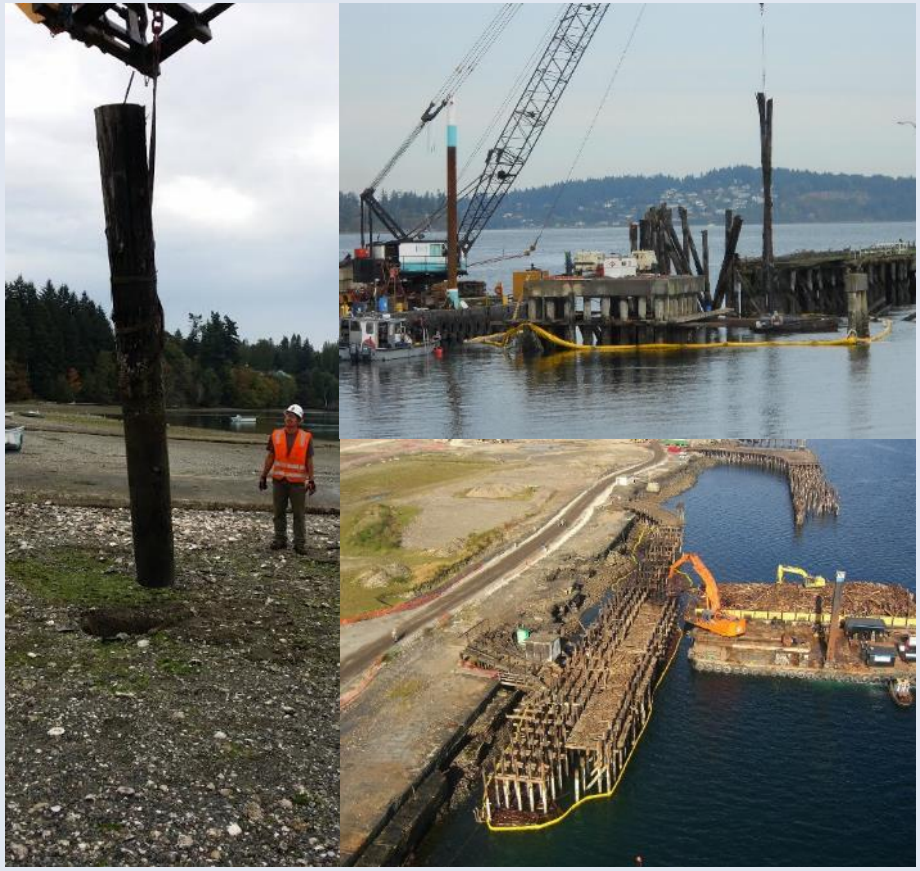
Dredging and capping





What to Expect During Construction

- Best management practices
- Temporary storage of dredged material
- Health and safety measures
- Vessel management and access
- Contractor work schedule
- Communications



Construction Best Management Practices

- Protect fishes by working within allowable in-water work windows
- When feasible, remove pile and excavate intertidal areas when dry
- Dredging-specific practices
  - Restrict subtidal dredging to the cooler months
  - Use environmental buckets and turbidity curtains
  - Monitor water quality
- Shellfish and archaeological monitoring

Temporary Sediment Stockpiling on Mill Site

Shellfish Monitoring During Construction

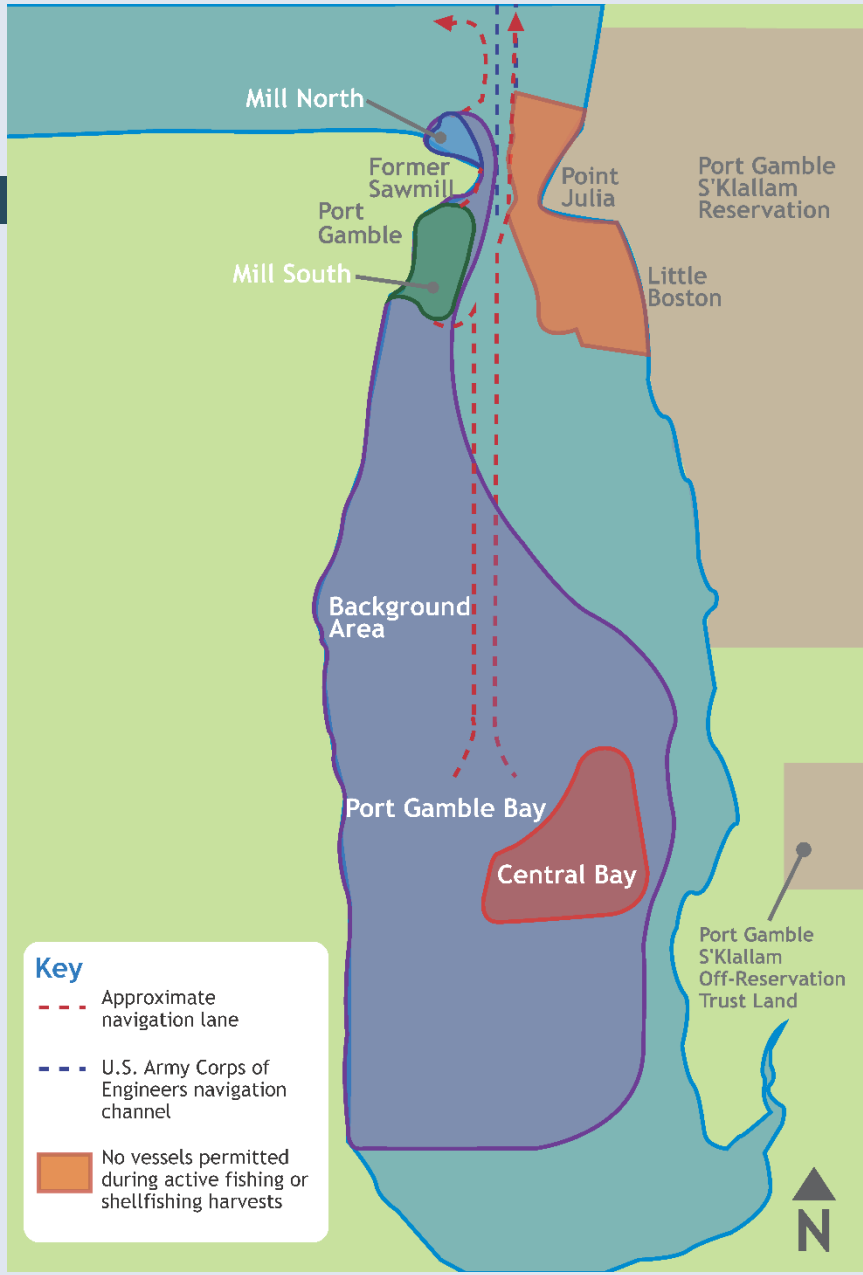
- Collaborative effort between PR/OPG, Port Gamble S'Klallam Tribe and Washington Department of Health
- Shellfish biotoxin monitoring
- Shellfish chemical monitoring

Land-based Access

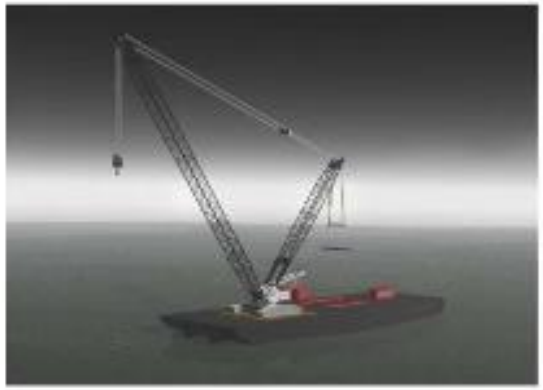
- Haul routes will be used to:
  - Reuse or dispose of excavated and dredged material offsite
  - Bring in sand and gravel
- Haul route is designated along SR 104, Walker Street and Puget Way

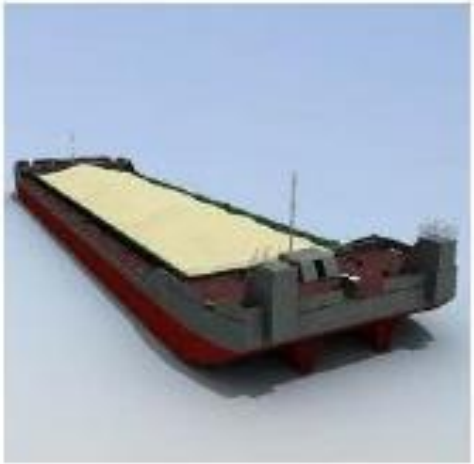
Water-based Access

- Vessel Management Plan ensures coordinated approach
- Barges used for in-water work
- Barge will not be anchored in eelgrass beds or documented geoduck tracts
- Activities will be directed to a primary navigation lane in and out of the bay



Vessels Used During Cleanup





Contractor Work Schedule

- Work schedule
  - Monday through Saturday
  - Generally working from 7 am to 10 pm
  - Periodic nighttime and Sunday work
- Construction
  - Noise
  - Odors
  - Construction traffic
  - Visual impacts

Communications

- Prior to construction
  - Open house to share cleanup construction plans—May 27
- Tribal construction coordination
  - Routine meetings with Ecology, Tribes, PR/OPG
- Community outreach
  - In-person staff to answer questions during designated office hours
  - Project hotline and email address staffed by Ecology
  - Informational signs in Port Gamble, Point Julia/Little Boston and at Salsbury Point
  - Regular updates on construction activities distributed via website, email, informational signs, and at the general store

Questions?

Questions or concerns during construction?

- Call 888-707-8663
- Email info@PortGambleBayCleanup.com
- Visit www.PortGambleBayCleanup.com
- Visit www.ecy.wa.gov/cleanup/3444.html