NOTES:
1. Site units are shown based on those in Figure 2-3 Cleanup Action Plan, Whatcom Waterway Site, September 2007.
3. Vertical datum: Mean Lower Low Water (MLLW).
4. Unit 2B was established in the Cleanup Action Plan based on the anticipated marina access channel location. This location will be adjusted during final design.
5. Remedial Action Unit (RAU) boundaries were defined in the Final Cleanup Action Plan for the GP West Pulp and Tissue Remedial Action Unit (Aspect 2014).

Figure 1
Site Vicinity Map
Whatcom Waterway Cleanup in Phase 1 Site Areas
Figure 2
Construction Project for Phase 1 Areas
Final Engineering Design Report
Whatcom Waterway Cleanup in Phase 1 Site Areas

LEGEND:
- **Dredge and Cap**
- **Stabilize and Cap Shoreline**
- **Dredge with Upland Landfill Disposal**
- **Cap**
- Existing dock or wharf
- Sediment Site Unit

**SOURCE:** Figure 6-5 of Exhibit 1 of the First Amendment to the Whatcom Waterway Site Consent Decree (2011).

**HORIZONTAL DATUM:** Washington State Plane North, NAD 83 Feet.

**VERTICAL DATUM:** Mean Lower Low Water (MLLW).

**SCALE IN FEET**

**STABILIZE AND CAP CENTRAL WATERFRONT SHORELINE**
- Remove former Chevron Pier and mooring dolphins
- Address stabilization and source control requirements along shoreline
- Shape & Cap shoreline in remaining areas with appropriate cap armorings
- Replace selected mooring piles and affected structures

**STABILIZE AND CAP SOUTH WATERWAY SHORELINE**
- Remove timber structures in work area
- Stabilize south shoreline with shoreline cut-back and capping
- Shape & Cap shoreline with appropriate armorings
- Protect G.P. West dock structure

**CONSTRUCT LOG POND CONTINGENCY ACTIONS**
- Place cap material in southeast corner of log pond
- Shape, cap, and armor SST and central and north shorelines
- Remove selected timber pilings
- Eliminate creosote bulkhead

**DREDGE AND CAP UNITS 3B, 2A AND PORTION OF 2C**
- Dredge as required to place cap in indicated area
- Place sediment cap with appropriate armorings
- Manage dredge materials by upland disposal
- Taper cap at edge of G.P. West dock structure

**DREDGE APPROXIMATELY 60,000 CY WITH UPLAND LANDFILL DISPOSAL**
- Dredge to base of contamination in Berth 1
- Remove high spot in Berth 2
- Manage residuals including placement of sand cover in dredge areas

**FEDERAL CHANNEL**

**UNIT 5A**

**UNIT 5B**

**UNIT 5C**

**UNIT 2B**

**UNIT 2C**

**UNIT 1A**

**UNIT 1B**

**UNIT 1C**

**UNIT 2A**

**UNIT 3A**

**UNIT 3B**

**UNIT 3C**

**UNIT 4**

**UNIT 6A**

**UNIT 6B**

**UNIT 6C**

**OUTER HARBOR LINE**

**INNER HARBOR LINE**

**SCALE IN FEET**

**SOURCE:** Figure 6-5 of Exhibit 1 of the First Amendment to the Whatcom Waterway Site Consent Decree (2011).

**HORIZONTAL DATUM:** Washington State Plane North, NAD 83 Feet.

**VERTICAL DATUM:** Mean Lower Low Water (MLLW).
NOTES:
1. Site units are shown based on those in Figure 2-3 Cleanup Action Plan, Whatcom Waterway Site, September 2007.
2. Unit 9 boundary updated based on PRDI findings.
3. Unit 2B was established in the Cleanup Action Plan based on the anticipated marine access channel location. This location will be adjusted during final design.
4. Remedial Action Unit (RAU) boundaries were defined in the Final Cleanup Action Plan for the GP West Pulp and Tissue Remedial Action Unit (April 2014).
NOTE: The final cap elevation, composition, and thickness to be determined during engineering design.

CROSS-SECTION A-A'

NATIVE SANDS

NATIVE DRIFT SEDIMENTS

NOTE: The final cap elevation, composition, and thickness to be determined during engineering design.

Sediments from 1A, 1B, 5B, and a portion of 1C

Avg. Mercury < 1.2 mg/kg

Avg. Dioxin/Furans < 33 ng/kg
Figure 5a Outer Waterway - Existing Conditions

SOURCE: Drawing prepared from bathymetric survey provided by Wilson Engineering.


VERTICAL DATUM: Mean Lower Low Water (MLLW), Feet.

NOTES:
- Replacement Sheetpile Wall Constructed Under Separate Project (Permit #NWS-2012-286)
- Existing Timber Dock
- Existing Bulkhead (Cut Piles Above Tieback Connection)

LEGEND:
- Existing Major Contour (5' Interval)
- Existing Minor Contour (1' Interval)

Eelgrass Bed (Approx.)

Ballingham Shipping Terminal (BST)

SOURCE: Drawing prepared from bathymetric survey provided by Wilson Engineering.


VERTICAL DATUM: Mean Lower Low Water (MLLW), Feet.

NOTES:

LEGEND:
- Existing Major Contour (5' Interval)
- Existing Minor Contour (1' Interval)

Eelgrass Bed (Approx.)

Ballingham Shipping Terminal (BST)
Figure 5b Inner Waterway - Existing Conditions

LEGEND:

- Existing Major Contour (5' Interval)
- Existing Minor Contour (1' Interval)

SOURCE: Drawing prepared from bathymetric survey provided by Wilson Engineering.
VERTICAL DATUM: Mean Lower Low Water (MLLW), Feet.

SOURCE: Drawing prepared from bathymetric survey provided by Wilson Engineering.
VERTICAL DATUM: Mean Lower Low Water (MLLW), Feet.

Figure 5b
Inner Waterway - Existing Conditions
Final Engineering Design Report
Whatcom Waterway Cleanup in Phase 1 Site Areas
Log Pond Area - Existing Conditions

**Legend:**
- Existing Major Contour (5\% Interval)
- Existing Minor Contour (1\% Interval)

**Source:** Drawing prepared from bathymetric survey provided by Wilson Engineering.

**Horizontal Datum:** Washington State Plane North, NAD83, Feet.

**Vertical Datum:** Mean Lower Low Water (MLLW), Feet.

**Notes:**
Figure 6
Site Staging and Stockpile Areas
Final Engineering Design Report
Whatcom Waterway Cleanup in Phase 1 Site Areas

LEGEND:

- Access Route
- Stockpile/Staging Area
- Nearshore Work Area

SOURCE: Drawing prepared from bathymetric survey provided by Wilson Engineering.
VERTICAL DATUM: Mean Lower Low Water (MLLW), Feet.

DRAFT NOT FOR CONSTRUCTION
NOTES:
2. Residuals Management Finished Grade not Presented in this Figure. See Details (Figure 8c) for Residuals Management Cover and Transition Slope Area Cap.

SOURCE: Drawing prepared from bathymetric survey provided by Wilson Engineering.
VERTICAL DATUM: Mean Lower Low Water (MLLW), Ft.

LEGEND:
- Existing Major Contour (5' Interval)
- Existing Minor Contour (1' Interval)
- Proposed Post-Dredge Major Contour (5' Interval)
- Proposed Post-Dredge Minor Contour (1' Interval)

Outer Waterway Dredging and Residuals Management Site Plan
Final Engineering Design Report
Whatcom Waterway Cleanup in Phase 1 Site Areas
NOTES:
1. Second dredge pass to be completed to remove slough material from under pier slope (See Figure 8a, Section A) and return elevation to design dredge elevation prior to placing residuals cover.
Figure 9a

Inner Waterway Dredging Site Plan
Final Engineering Design Report
Whatcom Waterway Cleanup in Phase 1 Site Areas

SOURCE: Drawing prepared from bathymetric survey provided by Wilson Engineering.
VERTICAL DATUM: Mean Lower Low Water (MLLW), Feet.

NOTES:
1. Figure does not show excavation/backfill, which may be necessary behind containment wall.

LEGEND:

- Existing Major Contour (5' Interval)
- Existing Minor Contour (1' Interval)
- Area of Dredging
- Proposed Major Contour (5' Interval)
- Proposed Minor Contour (1' Interval)
Figure 9b
Inner Waterway Capping Site Plan
Final Engineering Design Report
Whatcom Waterway Cleanup in Phase 1 Site Areas

**SOURCE:** Drawing prepared from bathymetric survey provided by Wilson Engineering.

**HORIZONTAL DATUM:** Washington State Plane North, NAD83, Feet.

**VERTICAL DATUM:** Mean Lower Low Water (MLLW), Feet.

**NOTES:**
1. Figure does not show excavation/backfill, which may be necessary behind containment wall.
2. Final locations of replaced float and pilings will be determined in coordination with WDFW and USACE.
SOURCE: Drawing prepared from bathymetric survey provided by Wilson Engineering.


VERTICAL DATUM: Mean Lower Low Water (MLLW), Feet.

LEGEND:

- Existing Major Contour (5' Interval)
- Existing Minor Contour (1' Interval)
- Structure/Shoreline Debris for Removal
- Dolphins to be Removed

Figure 10
South Shoreline Site Plan (Structure and Debris Removal)
Final Engineering Design Report
Whatcom Waterway Cleanup in Phase 1 Site Areas
Source: Drawing prepared from bathymetric survey provided by Wilson Engineering.
Horizontal Datum: Washington State Plane North, NAD83, Feet.
Vertical Datum: Mean Lower Low Water (MLLW), Feet.

Legend:
- Existing Major Contour (5' Interval)
- Proposed Major Contour (5' Interval)
- Existing Minor Contour (1' Interval)
- Proposed Minor Contour (1' Interval)
- Area of Capping
- Armor Rock Area

Figure 11
South Shoreline Capping Site Plan
Final Engineering Design Report
Whatcom Waterway Cleanup in Phase 1 Site Areas