



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

**STATE ENVIRONMENTAL POLICY ACT
DETERMINATION OF NONSIGNIFICANCE**

Date of Issuance: February 20, 2018

Lead agency:

Washington Department of Ecology, Toxics Cleanup Program, Northwest Regional Office

Agency Contact: Mark Adams, mark.adams@ecy.wa.gov, 425-649-7107

Permit Number: NA

Description of proposal:

A cleanup action will be conducted at the RG Haley International Corporation Model Toxics Control Act (MTCA) cleanup site under a Cleanup Action Plan and consent decree between the Washington Department of Ecology and one or more of the following parties: Port of Bellingham, City of Bellingham, Washington Department of Natural Resources, and Brooks Manufacturing. The cleanup action includes construction activities in a Marine Unit and an Upland Unit. Activities in the Marine Unit will include excavating and removing contaminated sediment, placing an amended sand cap within and beyond the sediment excavation, and placing an upper erosion protection layer within the intertidal zone. Activities in the Upland Unit will include performing in-situ soil stabilization, placing and grading excavated contaminated sediment on the upland surface, installing a protective cap over the upland surface and contaminated sediment, installing a gas venting system, and constructing a storm water drainage system.

Location of proposal: Within City of Bellingham limits at the southern terminus of Cornwall Avenue (Section 36, Township 38N, Range 02E)

Applicant/Proponent:

City of Bellingham,
Craig Mueller, Project Engineer
Public Works Engineering
104 West Magnolia Street, Suite 109
Bellingham, WA 98225
(360) 778-7922
camueller@cob.org

Ecology has determined that this proposal will not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW



DETERMINATION OF NONSIGNIFICANCE

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February 12, 2018

43.21C.030(2)(c). We have reviewed the attached Environmental Checklist and the draft Cleanup Action Plan for this site. These documents are available at:
<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=3928>.

This determination is based on the following findings and conclusions:

The proposed cleanup action is intended to protect human health and the environment from the ongoing release of hazardous substances to soil, groundwater, sediment, and air. As such it is intended to significantly improve, rather than adversely impact, environmental conditions. Significant shoreline erosion is also occurring at the site and will be rectified as part of the cleanup action. One set of potential adverse impacts to the environment are associated with cleanup project construction. These impacts include equipment noise and lights, construction traffic from the site, inadvertent petroleum leaks and spills, diesel equipment emissions, etc... Standard methods will be used to reduce / mitigate these impacts, and the City of Bellingham will assure that its development standards are met. A permit will also be needed from the Corps of Engineers for in-water construction work. The Corps will consult with natural resource agencies and other interested parties on how best to protect the environment in preparing the permit. Construction of the cleanup action will adhere to the terms / requirements outlined in the Corps permit. Some loss of eel grass in subtidal areas will also occur as part of the cleanup. The work that will result in the loss of eel grass is necessary to improve sediment conditions within the cleanup area.

The comment period for this DNS corresponds with the comment period on a draft Cleanup Action Plan for the RG Haley International site, and a draft Agreed Order between the Washington State Department of Ecology and the City of Bellingham for further engineering work at the RG Haley International site, which will end on March 21, 2018.

Responsible official:

Robert Warren
Section Manager
Toxics Cleanup Program, NWRO
Department of Ecology
3190 160th Avenue SE
Bellevue, WA 98008-5452
425-649-7054

Signature



Date 2 - 6 - 18

This SEPA decision may be appealed in accordance with WAC 197-11-680

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants: [\[help\]](#)

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals: [\[help\]](#)

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. BACKGROUND [\[help\]](#)

1. Name of proposed project, if applicable: [\[help\]](#) **Click here to enter text.**

R.G. Haley Site Cleanup Action

See Figure 1 Site Vicinity Map and Figure 2 Haley Site and Property Ownership.

2. Name of applicant: [\[help\]](#) **Click here to enter text.**

Craig Mueller, P.E., City of Bellingham Public Works

3. Address and phone number of applicant and contact person: [\[help\]](#)
Click here to enter text.

104 West Magnolia Street - Suite 109
(360) 778-7922
camueller@cob.org

4. Date checklist prepared: [\[help\]](#) **Click here to enter text.**

March 31, 2017

5. Agency requesting checklist: [\[help\]](#) **Click here to enter text.**

City of Bellingham (City)

6. Proposed timing or schedule (including phasing, if applicable): [\[help\]](#)
Click here to enter text.

Project timing is dependent on Ecology and other agency approval of the final design and related permitting. The duration of design and permitting is projected to be approximately two years. The construction schedule will be determined following completion of design and will require phasing of the upland and sediment activities, as well as coordination with the Whatcom Waterway and Cornwall Avenue Landfill Site cleanups. In-water work will be limited to permit-specified fish windows.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [\[help\]](#)
Click here to enter text.

The Haley Site is intended to be developed as a City park once construction for remediation is completed; however, the City will complete future park development as a separate action.

Post-construction monitoring will be performed for a duration and frequency identified in the long-term monitoring plan that will be developed during the design phase.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [\[help\]](#)
Click here to enter text.

- GeoEngineers 2016a. "Final Remedial Investigation/Feasibility Study Report, R.G. Haley Site." Prepared for the City of Bellingham. February 1, 2016.
- GeoEngineers 2016b. "Supplemental Sediment Investigation Report, R.G. Haley Site." Prepared for the City of Bellingham. **(date)**.
- GeoEngineers 2017. "Cleanup Action Plan, R.G. Haley Site, Bellingham, Washington." Prepared for the City of Bellingham and Ecology. **(date)**.
- Ecology 2017. Agreed Order between Washington State Department of Ecology and the City of Bellingham for the R.G. Haley Site Cleanup Action. **(date)**.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. [\[help\]](#)
Click here to enter text.

No. The City is planning to develop a public park that will include the Haley Site area following construction for remediation. Park development will require separate and independent permits to be completed in the future.

10. List any government approvals or permits that will be needed for your proposal, if known. [\[help\]](#)
Click here to enter text.

The Cleanup Action is anticipated to be conducted under a Consent Decree between the City of Bellingham, other potentially liable parties (PLPs) and Ecology in accordance with the Model Toxics Control Act (MTCA, Chapter 70.105D WAC). Under MTCA, the cleanup action is exempt from the procedural requirements of specific state and local environmental permits but must comply with the substantive requirements of each state or local permit. Federal permits and approvals are still required, where applicable. A list of anticipated permits for the project are presented below.

Federal Approvals/Permits:

- U.S. Army Corps of Engineers approval under Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. The City anticipates that the proposed action will qualify for a Nationwide Permit No. 38 for Cleanup of Hazardous and Toxic Waste (to be obtained as part of Joint Aquatic Resource Permit Application (JARPA) process)

State Approvals/Permits:

- Ecology National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit (CSWGP)
- Washington State Department of Natural Resources Aquatic Land Use Authorization
- Washington Department of Fish and Wildlife Hydraulic Project Approval (HPA) (exempt from procedural requirements, must comply with substantive requirements)
- Ecology CWA Section 401 Water Quality Certificate (to be obtained as part of JARPA process)
- Northwest Clean Air Agency Air Operating Permit (exempt from procedural requirements, must comply with substantive requirements)

City of Bellingham Approvals/Permits (exempt from procedural requirements, must comply with substantive requirements):

- Fill and Grade Permit (Bellingham Municipal Code [BMC] Title 16.70) and related construction planning and design documents
- Construction Stormwater Permit (BMC Title 15.42)
- Shoreline Substantial Development Permit Exemption (BMC Title 22.05)

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) [\[help\]](#)
Click here to enter text.

Historical land uses in the Site vicinity included railroad corridors (BNSF railroad constructed circa 1890), lumber mill operations (beginning in the late 1880s), wood treatment and storage (1948 to 1985), disposal of municipal waste at the Cornwall Avenue Landfill (1950s and 1960s), and pulp and paper mill activities. Several overwater wharves and piers were built within and adjacent to the Haley Site to support mill operations, coal transport, and related site operations.

The Haley Site is subdivided into two units: An Upland Unit and a Marine Unit, separated by the Ordinary High Water mark. The Upland Unit includes the former R.G. Haley property, a portion of the Cornwall property to the south, and the Port-owned portion of the Pine Street Beach to the north.

See Figure 3 Haley Site Units and Figure 4 Haley, Cornwall, and Whatcom Waterway Site Units. The Upland Unit also includes State-Owned Aquatic Land that was previously filled. The Marine Unit is composed entirely of State-Owned Aquatic Land.

As shown in Figure 2, the Haley Site overlaps with the adjacent Cornwall Avenue Landfill Site (Cornwall Site), which is being cleaned up under a 2014 Consent Decree (Whatcom County Superior Court Consent Decree No. 14-2-02593-5) and Cleanup Units 6A, 6B, 6c and 9 of the Whatcom Waterway Site being cleaned up under Whatcom County Superior Court 2007 Consent Decree No. 07-2-02257-7.

Past land uses at the Haley Site have impacted soils, groundwater, and sediments with hazardous chemicals that are required to be addressed under MTCA. Several cleanup actions have occurred or are ongoing at the Site including removal of seepage-pit sludge in 1985, installation of an oil recovery system with periodic removal of oil since 2000, installation of a sheet pile wall in 2002 with accompanying removal of 100 cubic yards (cy) of oily sediment in the shoreline, and placement of a sediment cap at the location of an intertidal seep in 2013.

The components of the selected cleanup action for the R.G. Haley site protect human and environmental health and meet the intent of applicable local, state and federal regulations. Elements of the cleanup plan for each unit are discussed below and presented in Figure 5 Cleanup Action Components and accompanying Figure 6 cross section. The proposed cleanup action is described in detail in the 2017 Cleanup Action Plan.

Upland Unit Remediation Elements

- In-situ soil solidification will be performed within the area of potentially mobile light non-aqueous-phase liquid (LNAPL) near the shoreline. The presence of LNAPL is related to historical wood treatment activities. Solidification will be accomplished by mixing the soil in-place with a cement-based amendment.
- A low-permeability containment cap will be constructed throughout most of the Upland Unit where chemical constituents in soil exceed relevant MTCA cleanup levels. The cap will be vented to prevent the buildup of soil vapors. Soil vapors will be treated, if needed.
- Drainage improvements will be implemented to control surface water runoff.
- The shoreline will be contoured to integrate the Upland Unit and Marine Unit remedies.
- Existing underground features (sheet-pile wall, underground piping, utilities and a surge tank) will be removed prior to constructing the upland remedy.

Marine Unit Remediation Elements

- LNAPL-impacted sediment in the intertidal zone will be removed in-the-dry along with debris and pilings in the excavation footprint. Sediment remaining at the bottom of the excavation will be capped with sand and protected from erosion by placing coarser materials (to be determined) on the finished surface. The excavated sediment will be placed in the upland for consolidation under the upland cap.
- Outside of the sediment removal area, a sediment cap with erosion protection will be placed in remaining intertidal and shallow subtidal areas where concentrations of chemical constituents in surface sediment exceed cleanup levels. This includes areas immediately west of the former Haley wood treatment facility and in the Pine Street Beach area.
- Natural recovery will be used in areas where contaminants in surface sediment are expected to achieve cleanup levels within 10 years as a result of the natural deposition of sediment. Monitored natural recovery (MNR) will be used over a large portion of the Marine Unit, and enhanced natural recovery (ENR) will be used between the proposed MNR and sediment cap areas. The natural deposition of clean sediment will be monitored in the MNR area; a thin layer of sand will be placed in the ENR area to augment the natural recovery process.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [\[help\]](#)
Click here to enter text.

The approximate 6-acre upland portion of the Site is generally located at 500 Cornwall Avenue on the northeastern shore of Bellingham Bay, between the Georgia Pacific West and Cornwall Avenue Landfill Sites (see Figure 1 and Figure 2). This location is within the Waterfront District – zoned Commercial Mixed Use. The Haley Site is located to the west of established landward township, section, and range grids. A legal description is available from the City.

B. ENVIRONMENTAL ELEMENTS [\[help\]](#)

1. Earth

- a. General description of the site [\[help\]](#)

Flat Rolling Hilly Steep Slopes Mountainous
 Other **Click here to enter text.**

- b. What is the steepest slope on the site (approximate percent slope)? [\[help\]](#)

Click here to enter text.

The steepest slope on the site is the shoreline bank with near-vertical to overhanging slopes in some areas. The maximum bank height is approximately five feet above the beach apron.

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [\[help\]](#)
Click here to enter text.

The surface of the Upland Unit consists of gravel, pavement (concrete and asphalt), and disturbed or compacted soil/fill material. Almost the entire upland portion of the Site was created by the placement of fill at the margin of Bellingham Bay. The fill is derived from different sources, including dredged sediment, lumber mill waste (wood debris and sawdust), landfill refuse associated with the Cornwall Avenue Landfill Site, and construction debris from unknown sources. Native marine sediment of variable composition is present beneath the fill materials. The Marine Unit of the site includes sandy and gravelly to cobbly beach deposits with some coarser material and shell and wood fragments. Glacial deposits referred to as glacial marine drift are present beneath the native marine sediment. The Chuckanut Formation (bedrock) is present beneath all of these geologic units.

Within the Marine Unit, a variety of natural substrates and anthropogenic materials are present. Beach surface materials exposed at low tides generally consist of sand, gravel and cobbles. Debris including ceramic and glass fragments, bricks, wood waste, lumber and riprap are also present on the beach surface. In the southern portion of the Haley Site there is an abundance of sawdust, wood chips and dimensional lumber exposed at the beach surface.

No agricultural soil/land is present.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [\[help\]](#)

Click here to enter text.

Shoreline erosion from marine processes was evaluated in the 2016 RI/FS based on a comparison of the top-of-bank locations in historical aerial photographs and a topographic survey of the Haley upland in 2005. Shoreline erosion was most prevalent along the bank section where a sheet pile barrier was installed in 2000/2001 following identification of an oil seep in 2000. Shoreline erosion protection measures were placed in this area in conjunction with sheet pile installation. No substantial erosion has occurred since then, and the shoreline profiles from 2005 and 2011 are very similar.

- e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [\[help\]](#)
Click here to enter text.

Further details regarding construction means and methods, areas, and material quantities for excavation, filling, grading and capping will be developed during future remedial design. It is currently anticipated that the entire six acres of the Upland Unit will be regraded and capped to contain contamination and prevent exposure of animal, plants and people visiting the site. For planning purposes, an estimated 7,700 cy of contaminated sediment excavated from the Marine Unit will be consolidated under the upland cap. An additional estimated 23,000 cy of imported fill material will be imported to the Upland Unit as part of cap construction.

An estimated 1.3 acres of the intertidal zone (above about elevation -4 feet NAVD88) in the Marine Unit will be excavated to a depth of about 5 feet below mudline in-the-dry, and then capped in-the-dry with material that will also be suitable for providing aquatic habitat. An additional estimated 5.6 acres of intertidal and subtidal aquatic land will be capped with approximate 30,000 cy of clean sand. The intertidal and shallow subtidal areas will be protected from erosion. A planned six-inch thick layer of clean sand cover will be placed over an approximate 2.9-acre ENR area of the Marine Unit.

The source of imported fill material to be used for capping, including consideration of suitable dredged material (beneficial reuse) from other locations, will be identified as part of remedial design and construction planning.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [\[help\]](#)
Click here to enter text.

The Haley shoreline is identified as an area with the potential for erosion. However, the remedy is intended to stabilize the shoreline and prevent erosion. Erosion in the upland area is not expected because of the relatively flat finished topography. In-water capping areas will be protected from erosion.

During construction, potential erosion will be controlled through the use of stormwater BMPs and other pollution control measures to be described in the project SWPPP, TESC and related civil engineering plans.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [\[help\]](#)
Click here to enter text.

A low-permeability cap will be constructed throughout the Upland Unit, preventing surface water infiltration and reducing potential generation and transport of contaminated groundwater. The capping system includes a topsoil surface and a drainage layer over an impervious liner. The drainage layer will direct infiltrating surface water toward Bellingham Bay. It is also anticipated that approximately 15 percent of the Upland Unit will be covered with pavement or other surficial impervious surfaces.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [\[help\]](#)
Click here to enter text.

Coverage will be obtained under Ecology's Construction Stormwater General Permit (CSWGP). A stormwater pollution prevention plan (SWPPP) will be prepared including best management practices (BMPs) and temporary erosion and sediment control (TESC) measures consistent with CSWGP and City drainage control requirements. All contractors will be required to implement erosion control practices as specified in Ecology and City guidance during construction, including BMPs to prevent erosion and stormwater runoff. The design of the upland and in-water cap and other finished surfaces will include erosion-protection elements.

2. Air

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [\[help\]](#)
Click here to enter text.

Short-term emissions from vehicle and heavy equipment are anticipated to occur during the construction of the remedy. These emissions are typical for construction projects using similar equipment. Other potential short-term air emissions may include volatile components of the soil and odor occurring during soil grading and solidification. Air monitoring will be conducted during construction, and additional BMP controls will be implemented if action thresholds are exceeded. BMPs may include covering disturbed soil or limiting the area disturbed at any one time. Dust emissions during dry periods will be controlled by wetting roadways and ground surface areas that may be disturbed. No long-term emissions are anticipated following construction, other than soil vapors that will be vented in a controlled manner from the cap. The soil vapors will be managed by an integrated soil vapor/landfill gas collection system that will be designed for the combined Haley and Cornwall Avenue Landfill sites.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [\[help\]](#)
Click here to enter text.

The Cornwall Avenue Landfill will produce landfill gases that will be collected, treated (if necessary) and vented as part of the remedy.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any: [\[help\]](#)
Click here to enter text.

During construction, air monitoring will be conducted for air emissions and odors. BMPs to control emissions, odor and dust will be identified during design and construction planning.

The soil vapors and landfill gas will be managed by an integrated collection system designed and constructed to meet the requirements of the Northwest Clean Air Agency and Ecology.

3. Water

- a. Surface Water: [\[help\]](#)

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. [\[help\]](#)

Click here to enter text.

The Marine Unit of the site exists entirely within Bellingham Bay. There are no surface water features associated with the Upland Unit. Adjacent to the Site, a drainage ditch is located along the east side of the railroad tracks that receives runoff from the base of the bluff to the east. Also, a surface depression that collects runoff is located adjacent to the southeastern corner of the Site on the Cornwall property.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. [\[help\]](#)

Click here to enter text.

Cleanup activities will take place within Bellingham Bay and within 200 feet of the shoreline. In-water work will include removal of debris (pilings or other large debris) in areas to be capped, excavation of sediment and bank soil in the intertidal area above about -4 feet NAVD 88 (Figure 2), temporary removal of rip rap, capping with material in the excavated area, and placement of imported sand material in intertidal and shallow subtidal areas to be capped. Excavation and capping in the intertidal area are anticipated to be conducted using land-based equipment to be further evaluated during the design phase. Excavation and capping will be completed in-the-dry. Placement of a sand cap over sediment in subtidal areas will be conducted using barge-mounted equipment.

Within 200 feet of the shoreline, debris will be removed, the existing sheet pile wall will be removed and upland soil will be solidified in-place as described in Item A(11) above. The area to be solidified is depicted in Figure 2. A cap with a low permeability liner and overlying soil drainage layer will be placed over the solidified soil and adjacent upland cleanup areas.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected.

Indicate the source of fill material. [\[help\]](#)

Click here to enter text.

For planning purposes, an estimated 7,700 cy of contaminated sediment are planned to be excavated from the upper intertidal zone of the beach; a currently unknown quantity of debris and old pilings will be removed to facilitate sediment excavation. An estimated 23,000 cy of cap material are planned to be placed in areas to be capped in Bellingham Bay.

Further details regarding material quantities for excavation, filling, grading and capping will be developed during the remedial design.

Excavation and capping areas are depicted in Figure 3 and Figure 4.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [\[help\]](#)

Click here to enter text.

No surface water withdrawals will be required. Excavation in the upper intertidal zone is planned to be completed in-the-dry. Stormwater controls will be installed to manage runoff during and following construction.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

[\[help\]](#)

Click here to enter text.

Yes, portions of the Marine Unit are within the 100-year floodplain. Since a federal permit will be required, the project actions will be assessed for effects on listed species (e.g., Chinook salmon,

steelhead, summer chum salmon, sockeye salmon, and killer whales) and critical habitat and will cover listed species effects related to potential 100-year floodplain impacts if applicable.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. [\[help\]](#)
Click here to enter text.

No wastes are planned to be discharged to surface water. BMPs will be implemented to control potential spills of fluids from construction vehicles and possible temporary fuel storage. Upland construction will be conducted to minimize potential for releasing contaminated soils and groundwater, NAPL, and landfill materials to the aquatic environment. Near-shore sediment excavation is planned to be conducted in-the-dry.

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [\[help\]](#)
Click here to enter text.

Groundwater along the waterfront is considered non-potable. Existing groundwater monitoring wells may be sampled during or after construction. Potential groundwater dewatering needs during upland construction, if any, will be identified during design and construction planning. It is anticipated that water from monitoring well sampling or construction dewatering, if any, will be disposed of through the City's Publicly Owned Treatment Works, if feasible, and/or at a permitted off-site disposal facility.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals: agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. [\[help\]](#)
Click here to enter text.

No septic or other systems will be constructed as part of the cleanup project.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [\[help\]](#)
Click here to enter text.

Stormwater from the site will be managed in accordance with CSWGP and City requirements, as described in a construction SWPPP and TESC plan to be prepared. Following construction, stormwater will infiltrate into the soil drainage layer above the low permeability liner of the upland cap and will be directed toward Bellingham Bay.

- 2) Could waste materials enter ground or surface waters? If so, generally describe. [\[help\]](#)
Click here to enter text.

BMPs will be implemented to control potential spills of fluids from construction vehicles. Upland construction will be conducted to control migration of potentially contaminated groundwater. Near-shore sediment excavation is planned to be conducted in-the-dry.

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

Click here to enter text.

Post-construction stormwater runoff from the Haley Site will infiltrate into a soil drainage layer and be directed toward Bellingham Bay.

- d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Click here to enter text.

Stormwater runoff will not contact contaminated soil beneath the upland low-permeability cap. The solidified soil will reduce contaminant leaching to groundwater, and the nearshore sediment cap will provide additional attenuation of chemicals prior to groundwater discharging to surface water.

4. Plants [\[help\]](#)

- a. Check the types of vegetation found on the site: [\[help\]](#)

- deciduous tree: red alder (*Alnus rubra*), black cottonwood (*Populus balsamifera*) and Douglas-fir (*Pseudotsuga menziesii*),
- evergreen tree fir, cedar, pine, other
- shrubs: butterfly bush (*Buddleja davidii*), Scotch broom (*Cytisus scoparius*) and Himalayan blackberry (*Rubus armeniacus*).
- grass
- pasture
- crop or grain
- orchards, vineyards or other permanent crops
- wet soil plants
- water plants: green, brown and red algae, eelgrass.
- other types of vegetation: common tansy (*Tanacetum vulgare*), white sweet clover (*Melilotus albus*), thistle (*Cirsium* sp) and common mullein (*Verbascum thapsus*) and burdock (*Arctium* sp).

- b. What kind and amount of vegetation will be removed or altered? [\[help\]](#)

Click here to enter text.

Upland vegetation is dominated by Himalayan blackberry (*Rubus armeniacus*) and other invasive species. These species are characteristic of a disturbed site and has colonized the upland unit since cessation of industrial activities. All upland vegetation will be removed as part of upland remedial activities. Following construction, the surface of the low-permeability cap will be revegetated for erosion protection.

Intertidal and subtidal submerged aquatic vegetation includes macroalgae and eelgrass.

Approximately 0.27 acres of eelgrass will be buried by the construction of the shallow subtidal cap. A mitigation plan for potential loss of habitat will be developed during design and may include natural recovery and other mitigation actions. The details of mitigation will be identified following discussions with state and federal resource agencies and stakeholders.

- c. List threatened and endangered species known to be on or near the site. [\[help\]](#)

Click here to enter text.

There are no known threatened and endangered plant species known to be on or near the site.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [\[help\]](#)

Click here to enter text.

The upland area will be revegetated for erosion protection following construction. Additional details for revegetation will be evaluated during the design phase.

- e. List all noxious weeds and invasive species known to be on or near the site.

Click here to enter text.

Butterfly bush (*Buddleja davidii*), Scotch broom (*Cytisus scoparius*) and Himalayan blackberry (*Rubus armeniacus*).

Japanese eelgrass (*Zostera japonica*) and Sargassum seaweed (*Sargassum muticum*).

5. Animals

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include: [\[help\]](#)

birds: gulls, cormorant, geese, hawk, heron, eagle, songbirds.

mammals: vole, shrew, raccoon, deer, river otter harbor seal.

fish: salmon, steelhead, trout, rockfish, forage fish.

Click here to enter text.

- b. List any threatened and endangered species known to be on or near the site. [\[help\]](#)

Click here to enter text.

Listed Species That May Occur in the vicinity of the project:

Common Name	Scientific Name
Bull Trout	<i>Salvelinus confluentus</i>
Puget Sound Chinook Salmon	<i>Oncorhynchus tshawytscha</i>
Puget Sound Steelhead	<i>Oncorhynchus mykiss</i>
Southern Resident Killer Whale	<i>Orcinus orca</i>
Bocaccio Rockfish	<i>Sebastes paucispinis</i>
Yelloweye Rockfish	<i>Sebastes ruberrimus</i>
Canary Rockfish	<i>Sebastes pinniger</i>

The following ESA-listed species may occur in Whatcom County and/or Puget Sound, but are not expected to occur in the immediate vicinity of the project: Dolly Varden (*Salvelinus malma*), Canada lynx (*Lynx canadensis*), yellow-billed cuckoo (*Coccyzus americanus*), marbled murrelet (*Brachyramphus marmoratus*), streaked horned lark (*Eremophila alpestris strigata*), and humpback whale (*Megaptera novaeangliae*).

- c. Is the site part of a migration route? If so, explain. [\[help\]](#)

Click here to enter text.

The site is located within the Pacific Flyway, a major north-south flyway for migratory birds in America, extending from Alaska to Patagonia.

- d. Proposed measures to preserve or enhance wildlife, if any: [\[help\]](#)
Click here to enter text.

The project will enhance wildlife habitat in the long-term through site remediation efforts. In-water work will be conducted during approved in-water work windows. Upland areas will be revegetated for erosion protection following construction, and a mitigation plan for potential loss of habitat will be developed during design that may include natural recovery and other mitigation actions.

The project will adhere to additional applicable regulatory requirements related to the preservation of animals. It is anticipated that an Endangered Species Act (ESA) Biological Evaluation (BE) will be prepared during permitting to address impacts to the federally-listed species. BMPs and conservation measures will be included in the BE to minimize impacts to federally-listed species and will also provide protection for non-listed wildlife.

- e. List any invasive animal species known to be on or near the site.
Click here to enter text.

Although European green crabs have been observed in Padilla Bay and may be migrating northward based on anecdotal information, their current status in Bellingham Bay is uncertain.

6. Energy and natural resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [\[help\]](#)
Click here to enter text.

No utilities will be brought to the Site as part of the cleanup action. Utility corridors may be included in the design of the cap to support future development of the upland as a park.

- b. Would your project affect the potential use of solar energy by adjacent properties?
If so, generally describe. [\[help\]](#)
Click here to enter text.

No

- c. What kinds of energy conservation features are included in the plans of this proposal?
List other proposed measures to reduce or control energy impacts, if any: [\[help\]](#)
Click here to enter text.

No energy conservation plans are currently included in the cleanup action

7. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal?
If so, describe. [\[help\]](#)
Click here to enter text.

The project is being implemented to prevent further releases of hazardous chemicals from the site. Potential releases and accidental spills from construction vehicles and material storage during construction will be managed through engineering controls and other BMPs. Long-term monitoring and maintenance will be conducted to evaluate the performance of the remedy over time.

- 1) Describe any known or possible contamination at the site from present or past uses.
Click here to enter text.

The nature and extent of contamination in both the Haley Upland and Marine Units are described in the 2016 Final Remedial Investigation/Feasibility Study Report and are further summarized in the 2017 Cleanup Action Plan. Site contamination originated from the use and release of wood treatment chemicals consisting of a diesel-like carrier oil and pentachlorophenol (PCP). The primary contaminants associated with this source include diesel-range hydrocarbons, polycyclic aromatic hydrocarbons (PAHs), carcinogenic PAHs (cPAHs), PCP, and dioxins/furans. The diesel-like oil is the primary LNAPL component at the Haley Site. Site contaminants were released over time to site soils, groundwater and sediments.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.
Click here to enter text.

The Haley Cleanup Action is intended to address site contaminants and protect human health and the environmental. Existing site conditions related to these contaminants are accounted for in the proposed cleanup action.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.
Click here to enter text.

BMPs will be implemented to control potential spills of fluids from construction vehicles and possible temporary fuel storage.

- 4) Describe special emergency services that might be required.
Click here to enter text.

None expected beyond contingencies for standard emergency health and safety response.

- 5) Proposed measures to reduce or control environmental health hazards, if any:
Click here to enter text.

See responses to Items 7(a)(2) through (4) above.

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [\[help\]](#)
Click here to enter text.

Existing ambient noise associated with waterfront and urban activities in the area will not affect the project.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. [\[help\]](#)

Click here to enter text.

Routine construction noise is anticipated while the remedy is implemented; no noise impacts will occur following construction of the remedy unless remedy maintenance is needed in the future. During cleanup of the upland and upper intertidal areas, remediation equipment will be in use and will consist primarily of heavy earthmoving or similar equipment. Placement of in-water cap materials will utilize barge-mounted equipment, tug boats and other support vessels.

- 3) Proposed measures to reduce or control noise impacts, if any: [\[help\]](#)

Click here to enter text.

Remediation activities will adhere to the City's noise ordinance.

8. Land and shoreline use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [\[help\]](#)

Click here to enter text.

The Site is currently unused and access is restricted by fencing and a locked gate. The Cornwall Avenue Landfill to the south is vacant and undergoing cleanup planning and design. Adjacent to the northern boundary of the Site, a private school at the Alger Learning Center provides classes and other resources to home-schooled students. Port facilities, including the Bellingham Shipping Terminal are located to the west.

Cleanup of the Site will not preclude current land uses at adjacent properties.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [\[help\]](#)

Click here to enter text.

No

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

Click here to enter text.

No

- c. Describe any structures on the site. [\[help\]](#)

Click here to enter text.

The upland portion of the Site is currently fenced and vacant. A vertical sheet pile barrier is present along a portion of the shoreline. Numerous remnant timber pilings and debris associated with historical activities are present. Concrete pads, roadways and building foundations are also present in the upland and the northern portion of the site is covered with asphalt.

- d. Will any structures be demolished? If so, what? [\[help\]](#)

Click here to enter text.

Remnant Site features (see above) will be removed during construction for cleanup.

- e. What is the current zoning classification of the site? [\[help\]](#)
Click here to enter text.

This Site is part of the Waterfront District and are zoned Commercial Mixed Use.

- f. What is the current comprehensive plan designation of the site? [\[help\]](#)
Click here to enter text.

Waterfront District, Commercial Mixed Use (Pine Street Beach).

- g. If applicable, what is the current shoreline master program designation of the site? [\[help\]](#)
Click here to enter text.

Waterfront District Shoreline Designation—Mixed Use and Recreational Use.

- h. Has any part of the site been classified as a critical area by the city or county? If so, specify.
[\[help\]](#)
Click here to enter text.

Areas below the Ordinary High Water Mark (OHWM) are considered fish and wildlife habitat conservation areas as well as frequently flooded areas.

- i. Approximately how many people would reside or work in the completed project? [\[help\]](#)
Click here to enter text.

None

- j. Approximately how many people would the completed project displace? [\[help\]](#)
Click here to enter text.

None. Currently, there are no permanent residences or places of work within the project area.

- k. Proposed measures to avoid or reduce displacement impacts, if any: [\[help\]](#)
Click here to enter text.

None

- L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [\[help\]](#)
Click here to enter text.

Cleanup of the Site is compatible with and necessary for future use as a park that is currently being planned by the City.

- m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:
Click here to enter text.

Not applicable

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [\[help\]](#)
Click here to enter text.

None

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [\[help\]](#)
Click here to enter text.

None

- c. Proposed measures to reduce or control housing impacts, if any: [\[help\]](#)
Click here to enter text.

None

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [\[help\]](#)
Click here to enter text.

No buildings or other structures extending above ground level are proposed as part of the project.

- b. What views in the immediate vicinity would be altered or obstructed? [\[help\]](#)
Click here to enter text.

The Haley Cleanup Action would improve the overall appearance of the site and would include restoration of the shoreline area.

- c. Proposed measures to reduce or control aesthetic impacts, if any: [\[help\]](#)
Click here to enter text.

None; no long-term aesthetic impacts will occur from the project prior to planned development as a park in the future.

11. Light and glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [\[help\]](#)
Click here to enter text.

Some night work may be required to complete off-shore construction within designated in-water work windows (to be further evaluated during design and permitting) or during low-tide periods. During such times, mobile work light stands will be in use for visibility and safety.

- b. Could light or glare from the finished project be a safety hazard or interfere with views? [\[help\]](#)
Click here to enter text.

No

- c. What existing off-site sources of light or glare may affect your proposal? [\[help\]](#)
Click here to enter text.

None

- d. Proposed measures to reduce or control light and glare impacts, if any:
Click here to enter text.

Use of artificial lighting during night-time work periods will adhere to requirements of the City ordinance regulating construction activities and lighting.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity? [\[help\]](#)
Click here to enter text.

The Pine Street Beach located at the northeast corner of the Marine Unit is used informally for waterfront viewing and beach access. Hand-carried watercraft may also launch here. The Site is the proposed location of a future City park that is planned to be developed as a separate action.

- b. Would the proposed project displace any existing recreational uses? If so, describe. [\[help\]](#)
Click here to enter text.

No

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [\[help\]](#)
Click here to enter text.

None

13. Historic and cultural preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [\[help\]](#)
Click here to enter text.

According to the Historic Property Resources Technical Report prepared by Artifacts Consulting (2007) for the New Whatcom Redevelopment Project EIS, the Bloedel Donovan Lumber Mill (Office) located northeast of the project site at 100 East Pine Street is potentially eligible for the National Register of Historic Places, the Washington Heritage Register, and Bellingham's Local Landmark Registry. This location is not expected to be affected by the Haley Cleanup Action.

Reference: Artifacts Consulting, Inc. 2007. New Whatcom Redevelopment Project EIS Historic Property Resources Technical Report. December 2007. Prepared for: Port of Bellingham and Blumen Consulting Group, Inc., Prepared by: Artifacts Consulting, Inc.

Cultural Resource Consultants (CRC) conducted a cultural resources overview for the R.G. Haley Project in 2013 that included remnant pilings at the Site. Based on the past operational use of the pilings, and in accordance with Washington State Department of Archaeology and Historic Preservation (DAHP) guidance, Wessen (2010) previously recommended that the pilings not be considered eligible for State or National registers.

References: Cultural Resource Consultants, Inc. (CRC) 2013. Cultural Resources Overview for the RG Haley Project, Bellingham, Whatcom County, Washington. Technical Memo #1303A-2 Prepared for: GeoEngineers, Inc. by Katherine M. Kelly and Glenn D. Hartmann of Cultural Resource Consultants, Inc. May 22, 2013.

Wessen, G. 2010. An Archaeological Survey of the Boulevard/Cornwall Overwater Pedestrian Walkway Project Area, Bellingham, Washington. Wessen & Associates, Inc., Burien.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [\[help\]](#)
Click here to enter text.

Cultural resource surveys for the Haley Site and vicinity were conducted by Northwest Archaeological Associates (NAA) in 2007 in support of the Waterfront District Draft EIS and by CRC in 2013. The Bellingham waterfront including the vicinity of the project site was traditionally occupied by ancestors of the present-day Lummi Nation and Nooksack Indian Tribe. Winter villages were usually located along protected coastlines where activities such as shellfish gathering and fishing could be pursued. The CRC and NAA studies determined that there is medium to high potential for encountering archeological artifacts within the Upland and Marine Units based on the presence of geomorphic features in the area such as beach terraces, embayments, and proximity to the historical mouth of Whatcom Creek. However, historical filling of the site and industrial activities makes it unlikely that pre-contact archaeological materials would be encountered within Site fill materials. Additionally, the area below the bluff is occupied by the BNSF Railway mainline, the construction of which could have potentially displaced or buried areas with higher probability of having cultural resources near the original shoreline.

Reference: Northwest Archaeological Associates, Inc. 2007. Cultural Resources Assessment for the New Whatcom Redevelopment Project, Whatcom County, Washington December 12, 2007. NWAA Report Number WA 06-101. Prepared for Blumen Consulting Group. Prepared by Northwest Archaeological Associates, Inc. Seattle, Washington

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [\[help\]](#)
Click here to enter text.

The CRC 2013 Cultural Resources Review conducted background research, reviewed historical photographs and results of previous surveys and consulted with tribes. CRC archival research included review of project plans, related reports, and the DAHP Washington Information System for Architectural and Archaeological Records Data (WISAARD) database.

The Artifacts (2007) technical report built upon the previous cultural resource work documenting the Georgia Pacific Pulp and Tissue Mill facilities in the Georgia Pacific Due Diligence Existing Building Assessment prepared by RMC Architects and Artifacts Consulting, Inc. in 2004. Archival research included the review of materials at the Bellingham Public Library, Whatcom Museum of History and Art, State Archives Northwest Regional Branch, Center for Pacific Northwest Studies, Tacoma Public Library's Northwest Room, Washington State Historical Society, Whatcom County Assessor's records, the City of Bellingham, Washington State Department of Archaeology and Historic Preservation, Washington State Library, the US Army Corps of Engineers, and the Seattle Public Library.

The 2007 NAA cultural resource assessment supported preparation of the Master Plan EIS for redevelopment of Bellingham Bay waterfront including development alternatives, a proposed marina, and other in-water and overwater improvements.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.
Click here to enter text.

All work will occur consistent with Section 8 (Historic, Cultural and Archaeological Resources) of the Waterfront District Planned Action Ordinance (Bellingham Municipal Code [BMC] 16.30) and associated Cultural Resource Management Plan. An Unanticipated Discovery Plan will also be prepared and implemented during construction.

Following DAHP guidance and current practice, the locations of pilings removed from the site are planned to be recorded on an archaeological site form, as included in the 2013 CRC report.

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [\[help\]](#)
Click here to enter text.

The Site is currently accessed by Cornwall Avenue. On-site roadways are private.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [\[help\]](#)
Click here to enter text.

No. The nearest transit stop is about half a mile away.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [\[help\]](#)
Click here to enter text.

None

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [\[help\]](#)
Click here to enter text.

No

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [\[help\]](#)
Click here to enter text.

Some remedial activity may take place near the Barge Dock that is part of the Bellingham Shipping Terminal.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [\[help\]](#)

Click here to enter text.

Workers will drive to the Site regularly during construction of the remedy. Trucks will intermittently haul debris to permitted off-site disposal and/or recycling facilities, and will also transport imported capping and other materials and equipment to the Site. The number of vehicle trips will depend on the construction means and methods to be further evaluated following the design phase. All traffic will adhere to City ordinances related to construction projects and traffic control. The completed project will not generate truck or vehicle traffic except during occasional field visits for monitoring and possible maintenance.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

Click here to enter text.

No

- h. Proposed measures to reduce or control transportation impacts, if any: [\[help\]](#)

Click here to enter text.

All traffic will adhere to City ordinances related to construction projects and traffic control.

15. Public services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [\[help\]](#)

Click here to enter text.

No

- b. Proposed measures to reduce or control direct impacts on public services, if any. [\[help\]](#)

Click here to enter text.

None

16. Utilities

- a. Check utilities currently available at the site: [\[help\]](#)

electricity natural gas water refuse service telephone sanitary sewer
 septic system other Click here to enter text.

There are no utilities currently available at the site; however, abandoned utilities from historical operations will be removed as needed to facilitate construction for remediation. City stormwater drain lines discharging to Bellingham Bay also cross the Site at Pine Street Beach and along the Cedar Street alignment. Water, sewer and power utilities are present along East Pine Street, northeast of the Haley Site. There is also an abandoned water main, mapped by CityIQ, as running along the BNSF railroad alignment.

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [\[help\]](#)

Click here to enter text.

None

C. SIGNATURE [\[HELP\]](#)

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.



Signature: _____

Name of signee Craig Mueller, PE

Position and Agency/Organization Project Engineer, City of Bellingham

Date Submitted: March 31, 2017

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS [\[help\]](#)

(IT IS NOT NECESSARY to use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Click here to enter text.

Proposed measures to avoid or reduce such increases are:

Click here to enter text.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Click here to enter text.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

Click here to enter text.

3. How would the proposal be likely to deplete energy or natural resources?

Click here to enter text.

Proposed measures to protect or conserve energy and natural resources are:

Click here to enter text.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

Click here to enter text.

Proposed measures to protect such resources or to avoid or reduce impacts are:

Click here to enter text.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

Click here to enter text.

Proposed measures to avoid or reduce shoreline and land use impacts are:

Click here to enter text.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Click here to enter text.

Proposed measures to reduce or respond to such demand(s) are:

Click here to enter text.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.
Click here to enter text.

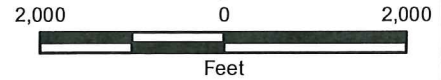
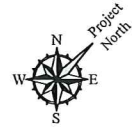


Path: P:\00056114\GIS\IMXD\Fig_1-1_VicinityMap.mxd Map Revised: 14 July 2016 maugust



Legend

 Haley Site per Agreed Order, Exhibit 1




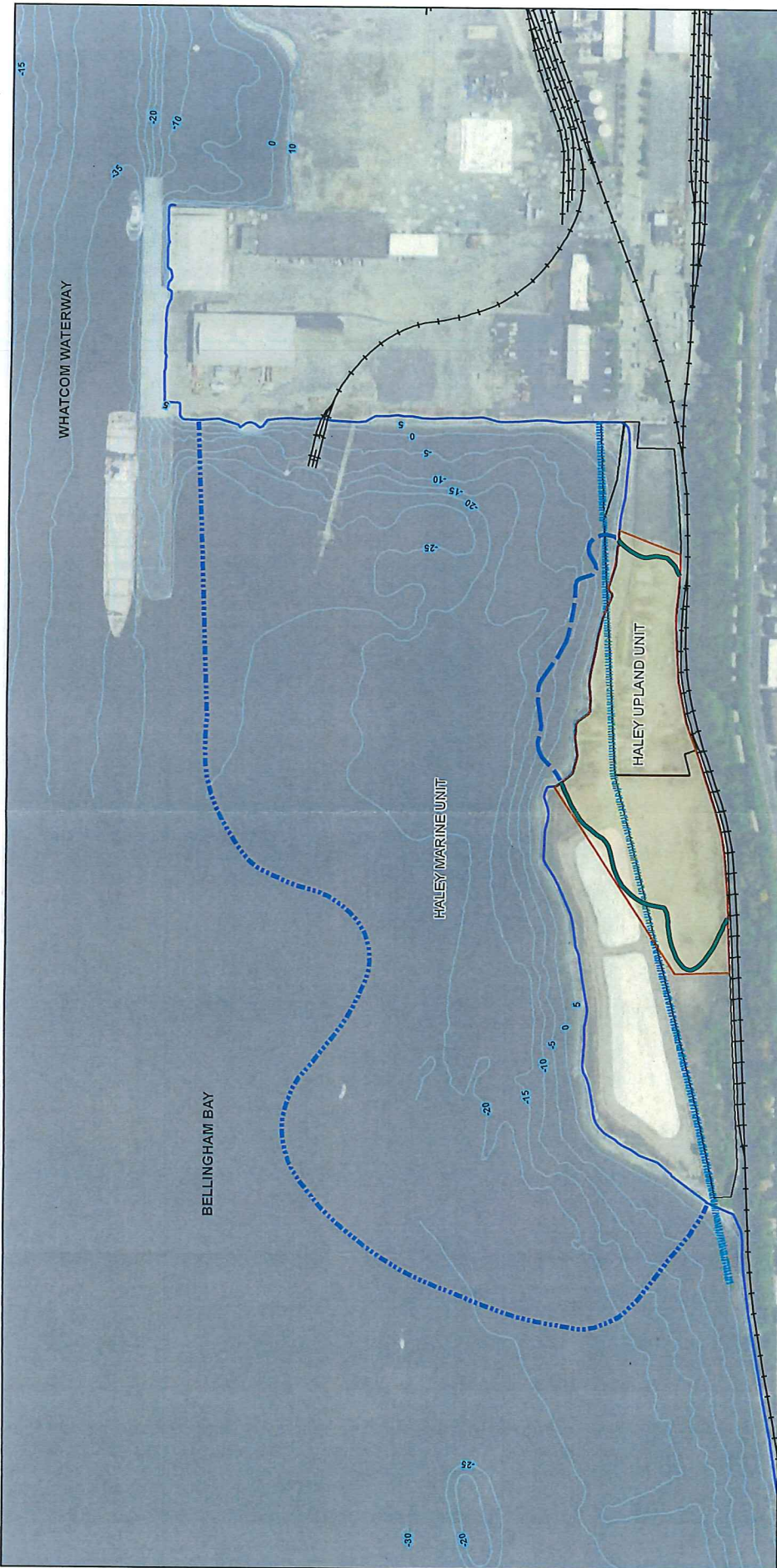
Reference: Whatcom County GIS, City of Bellingham GIS, Aerial from Esri, 2013.

Notes:

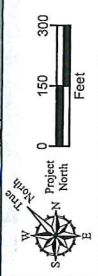
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. It is unlawful to copy or reproduce all or any part thereof, whether for personal use or resale, without permission.

Projection: NAD 1983 UTM Zone 10N

Vicinity Map	
R.G. Haley Site Bellingham, Washington	
GEOENGINEERS 	Figure 1



- Estimated area exceeding soil and/or groundwater cleanup levels.
- Estimated area exceeding sediment cleanup levels based on benthic toxicity.
- Estimated area exceeding sediment bioaccumulation-based cleanup levels.
- BNSF Railroad
- Bathymetric Contour (5-ft interval)
- Inner Harbor Line

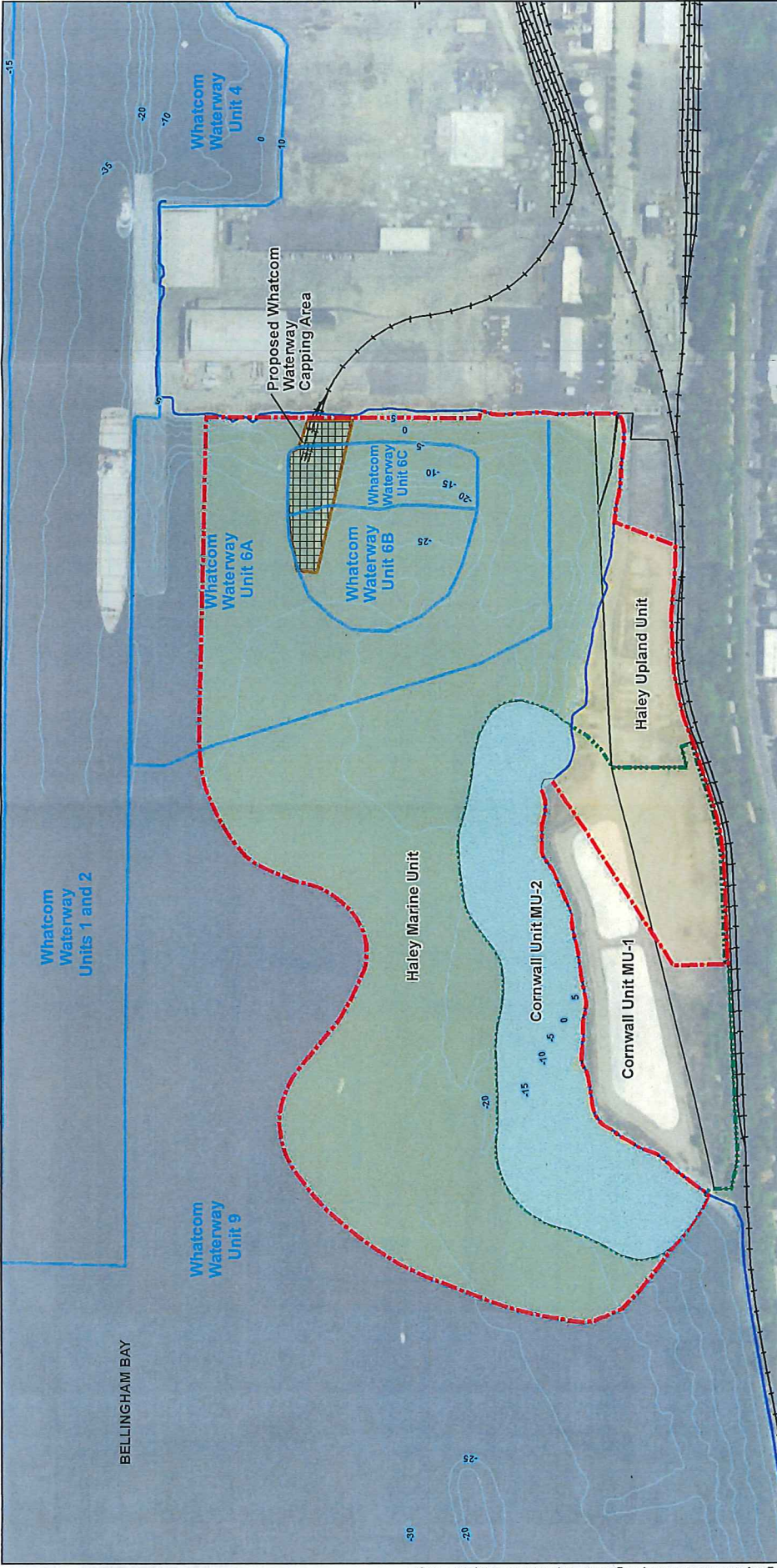


Reference: Aerial from Google Earth, August 2011.
 Contour elevation displayed is referenced to
 NAVD83 vertical datum.

Notes:

1. Locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document of electronic file. The master file is stored by GeoEngineers, Inc.
3. The estimated location of the centerline of the Haley Site is based on existing RI data, although first order site components. The upland site boundaries will be further evaluated during a future phase of work and adjusted, if needed.

Haley Site Units	
R.G. Haley Site Bellingham, Washington	
GEOENGINEERS	Figure 3



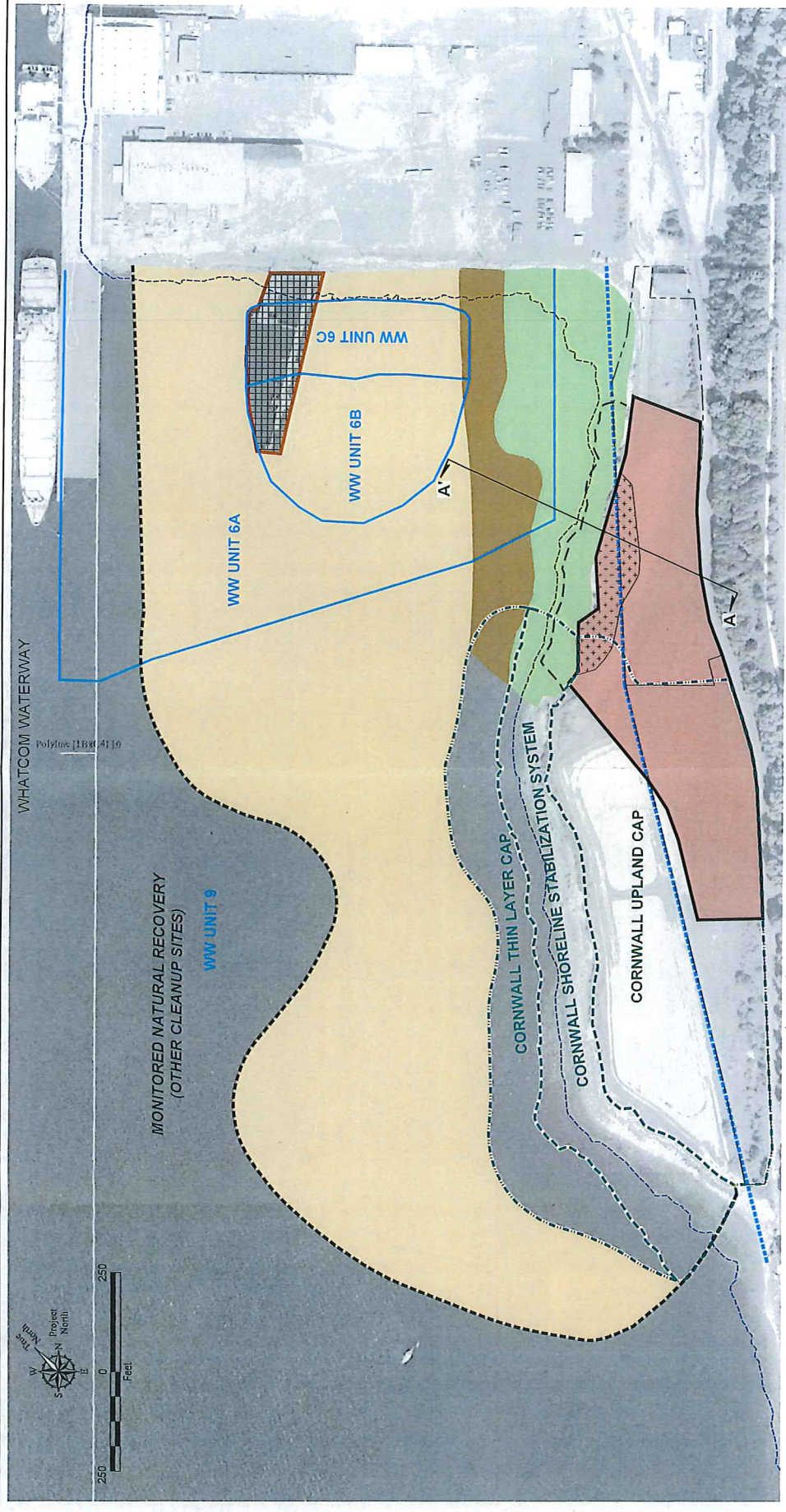
Legend
 BNSF Railroad
 Current Shoreline
 Bathymetric Contour (5-ft interval)

Scale: 0 150 300 Feet
 Project: North
 North
 S N E W

Reference: Aerial from Google Earth, August 2011.
 NAVD83 vertical datum.

- Notes:**
1. The locations of all features shown are approximate.
 2. This drawing is for information purposes. It is intended to show the general location of the site units and does not constitute a contract. The master file is stored by GeoEngineers, Inc. of electronic files. The master file is stored by GeoEngineers, Inc.
 3. The estimated extent of the upland portion of the Haley Site is based on existing RI data, although that data was not specifically intended for this purpose. The upland site boundaries will be further evaluated during a future phase of work and adjusted, if needed.

Haley, Cornwall and Whatcom Waterway Site Units
R.G. Haley Site Bellingham, Washington
GEOENGINEERS
Figure 4



Notes

- The locations of all features shown are approximate.
- This drawing is for information only. It is not to be used as a permit or to show features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The material is stored by GeoEngineers, Inc. and is not to be used without the written consent of GeoEngineers, Inc.

Reference: Base aerial photo from Google Earth Pro 2015.

Legend

	Cross Section Location		Extent of Sediment Removal
	Cornwall Cleanup Action Components		Haley Marine Unit Boundary
	"WW Unit" Designation (Whatcom Waterway Units Slated for MNR)		Whatcom Waterway Capping and Armoring
	Inner Harbor Line		Limit of Intertidal Zone (-4ft NAVD88)

HALEY CLEANUP ACTION COMPONENTS

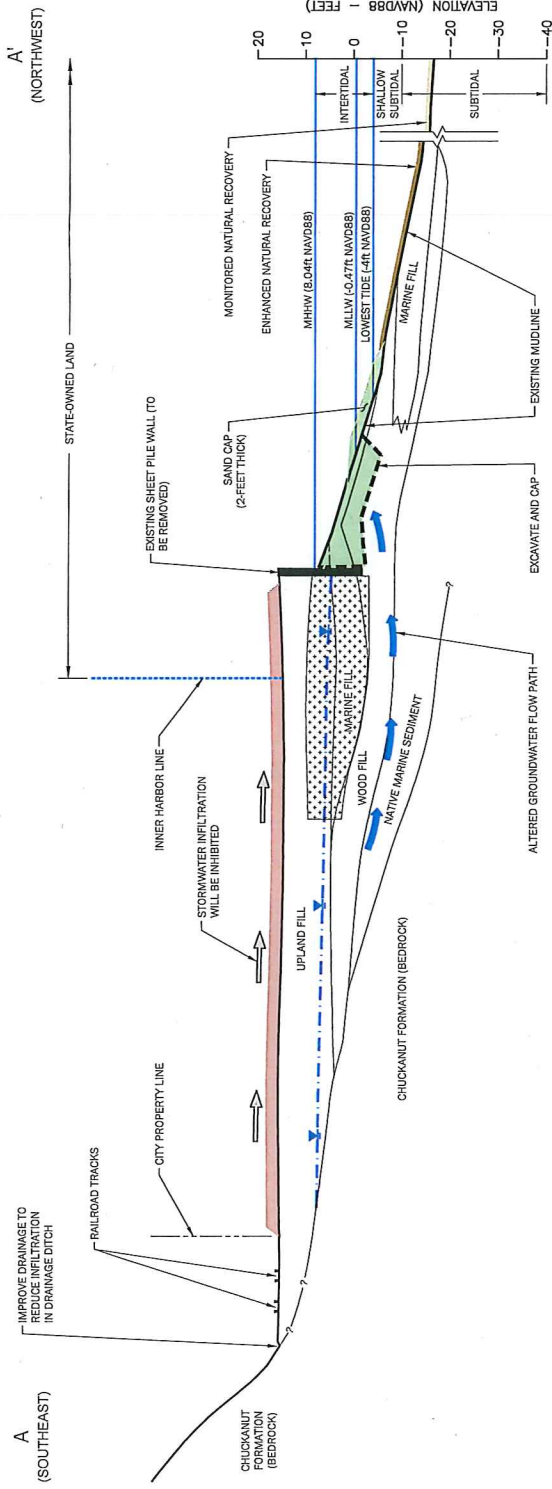
	Low-Permeability Upland Cap
	In-Situ Soil Solidification
	Sand Cap (2-Feet to 5-Feet Thick)
	Enhanced Natural Recovery
	Monitored Natural Recovery

Cleanup Action Components

R.G. Haley Site
Bellingham, Washington

GEOENGINEERS

Figure 5



HORIZONTAL SCALE: 1"= 50'
 VERTICAL SCALE: 1"= 25'
 VERTICAL EXAGGERATION: 2X



Legend

- Low-Permeability Upland Cap
- In-Situ Soil Solidification
- Sand Cap (Ranges from 2 Feet to 5 Feet Thick)
- Enhanced Natural Recovery
- Monitored Natural Recovery

Notes

1. Directions given on cross section line refer to Project North.
2. The subsurface conditions shown are based on interpretation between widely spaced borings. The conditions shown are considered approximate; actual subsurface conditions may vary from those shown.
3. Details regarding the shoreline slope, the bank transition area, and post-cleanup upland grades and bathymetry will be determined during remedial design.
4. This figure is for informational purposes only. It is intended to assist in the identification of features discussed in a related document.

**Selected Cleanup Action
 Cross Section A-A'**

R.G. Haley Site
 Bellingham, Washington



Figure 6

