SPENCER ISLAND ECOSYSTEM RESTORATION

PUGET SOUND & ADJACENT WATERS

SNOHOMISH COUNTY, WASHINGTON

Appendix G
Phase 1 Environmental Site Assessment

US Army Corps of Engineers®
Seattle District

PUGET SOUND NEARSHORE ECOSYSTEM RESTORATION PROJECT

Washington Department of FISH and WILDLIFE

Puget Sound and Adjacent Waters Spencer Island Ecosystem Restoration

Everett, Snohomish County, Washington

PHASE I
ENVIRONMENTAL SITE ASSESSMENT

July 2023

Prepared By
U.S. Army Corps of Engineers
Seattle District
Environmental Engineering & Technology Section

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TABLE OF CONTENTS

ACRONYMS & ABBREVIATIONS

ASTM	American Society for Testing and Materials
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
Corps	U.S Army Corps of Engineers, Seattle District
DNR	Department of Natural Resources
DOE	Washington Department of Ecology
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
HTRW	Hazardous, Toxic, or Radioactive Waste
MTCA	Model Toxics Control Act
NOAA	National Oceanic and Atmospheric Administration
NPL	National Priorities List
NWS	National Weather Service
PSAW	Puget Sound Adjacent Waters
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Conditions
WDFW	Washington Department of Fish and Wildlife
°F	Degrees Fahrenheit

1.0 INTRODUCTION

This Phase I Environmental Site Assessment (Phase 1 ESA) is part of the Puget Sound and Adjacent Waters (PSAW) Spencer Island Ecosystem Restoration study. The U.S. Army Corps of Engineers, Seattle District (Corps) is developing an Integrated Feasibility Report and Environmental Assessment, which documents the process of developing potential ecosystem restoration alternatives and associated environmental impacts of the PSAW Spencer Island Ecosystem Restoration study. A critical part of the feasibility analysis is the evaluation of known and suspected hazardous, toxic, or radioactive waste (HTRW) conditions with potential to impact project planning, design, and implementation. This Phase 1 ESA identifies all known and suspected HTRW releases and focuses only on the site.

1.1 Purpose

The purpose of conducting this Phase 1 ESA is to determine the environmental condition of the proposed project area. This ESA fulfils the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by Community Environmental Response Facilitation Act (CERFA). This report identifies known and potential sources of environmental risk or liability on the proposed project site, and in the surrounding areas. This information will assist the Corps' design team to manage and avoid HTRW hazards at the project site.

1.2 Description of the Project Area and Proposal for Federal Action

Spencer Island is located in the Snohomish River delta near Everett, Washington. Union and Steamboat Sloughs are tidally influenced distributary channels that border the vegetated island. The location of the site on the estuary salinity gradient provides an opportunity to restore tidal freshwater habitat, which has been lost due to development. The primary stressors are the combination of tidal barriers and their associated drainage networks. Breaching and lowering of dikes to suitable elevations is intended to restore tidal freshwater (low salinity) hydrology to support channel formation and the development of a tidal wetland community. Specific process-based restoration objectives to be achieved with this action include: (1) tidal channel formation and maintenance; (2) tidal flow; (3) distributary channel migration; (4) erosion and accretion of sediments; and (5) exchange of aquatic organisms.

Alternatives for the restoration study include partial restoration plans involving lowering dikes along Union and Steamboat Sloughs to support a riparian woodland corridor, planting riparian vegetation along a low natural levee, and expanding existing breaches of dikes on the northern and eastern sides of the island as well as adding a breach in the western dike. To complete the full restoration, which would achieve greater area of benefits in a faster time scale, the Corps would excavate a tidal channel network and add sinuous bends to the existing drainage channel network. Material from this excavation would be sidecast to block the previously established drainage channels that prevented natural inundation conditions in this deltaic island.

1.3 Scope of Work

The scope of work for this assessment was in general accordance with the ASTM International (ASTM) Standard Practices for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E1527 - 13). These methodologies are described as representing good commercial and customary practice for conducting a Phase I ESA of a property to identify *recognized environmental conditions* (RECs). The project effort includes the following tasks:

- Conduct a record search and review all reasonably attainable federal, state, and local government information and records to determine possible onsite sources of hazardous substances and environmental condition of the project area.
- Review of all reasonably attainable federal, state, and local government records of adjacent facilities with the potential to release contamination to determine possible offsite sources of hazardous substances.
- Analysis of historical data on prior uses of the project site(s) and the surrounding area.
- Interviews with property owners and/or tenants or other knowledgeable sources.
- Identify contamination sources using data gathered and evaluate what risk they pose and the effect to the categorization of the environmental condition of the project area.
- Identify all ongoing actions that may affect the environmental conditions of the project area.
- Determine the environmental condition of the project area.
- Determine the extent to which *recognized environmental conditions* may impact, or pose a risk to, the proposed project

The scope of this report did not include an audit of environmental regulatory compliance issues or permits, wetland delineation, or collection and testing of environmental samples.

2.0 SITE DESCRIPTION & PHYSICAL SETTING

2.1 General Location

Spencer Island is located east of Everett, Washington, between Union and Steamboat Sloughs in the Snohomish River Estuary at approximately river mile 3.8 (WDFW, 2023). The project footprint is located within the Whidbey Subbasin of Puget Sound and is approximately 350 acres in size (Figures 1 and 2).

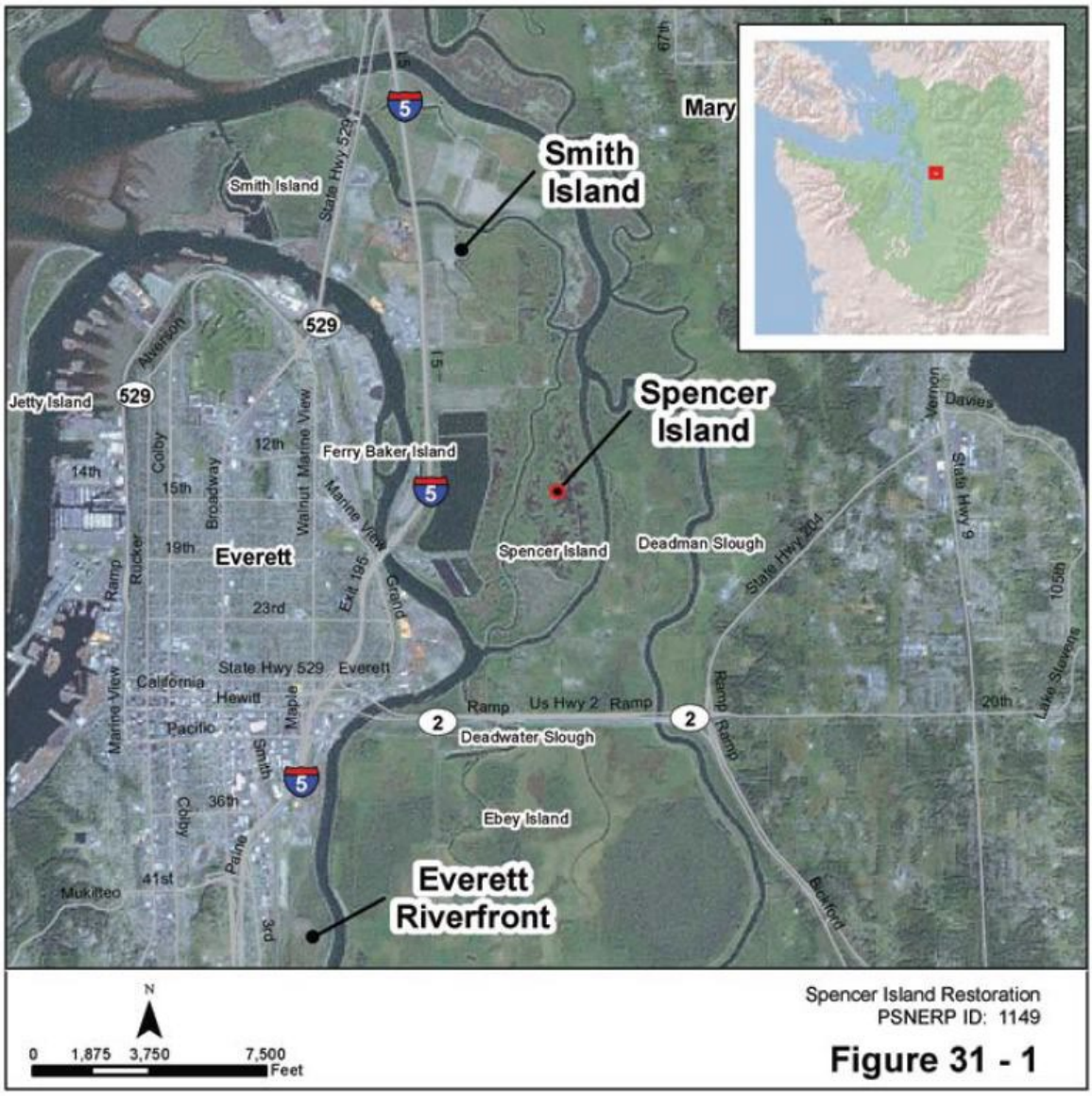

Figure 1. Study Area. (Source: USACE, Conceptual (10%) Design Report, Spencer Island)

Figure 2. Spencer Island Study Area is outlined in blue. (Source: Google Earth Imagery)

2.2 Site Description

Spencer Island lies on the salinity gradient from estuarine scrub-shrub to riverine tidal forested wetland zones. Historically, the Snohomish River had extensive freshwater wetlands, more than four times the amount of tidal wetlands, due to the broad, gently sloping valley eroded by continental ice sheets. Unlike the Skagit River, the Snohomish River does not have a divergent delta, and this reduces the amount of estuarine channel. Deposition patterns associated with the distributary channels created natural levees. Coarser, better drained soils are found in the natural levees that line the banks of the distributary channels and create distinctive riparian corridors in the deltas (Tanner et al., 2002).

The Spencer Island study area exhibits impacts due to the dike system developed in the early 1900's as the diked areas subsided compared to the non-diked areas. Land subsidence occurs as underlying organic floodplain deposits break down in areas that are connected to flood waters and flooding brings benefits to the tidal marsh through addition of sediment that nourishes and builds up elevation over time (Snohomish County, 2018).

Spencer Island provides important rearing habitat for juvenile salmonids, especially chinook salmon. The area provides habitat for many waterfowl species including merganser, green-winged teal, bufflehead, mallard, pintail, wigeon, wood duck, gadwall, swan, Canada goose, as well as marsh birds, including American bittern, Virginia rail, marsh wren, and willow flycatcher (WDFW, 2023).

The National Wetland Inventory maps the entire study area as a wetland habitat (Figure 3) and classification codes are described below:

- Freshwater Emergent Wetland: 118 acres (PEM1Cd) and 152 acres (PEM1Ad)
- Freshwater Forested/Shrub Wetland: 30.8 acres (PFOA)

The Freshwater Emergent Wetland (PEM1) is a Palustrine System, Emergent Class and a Persistent Subclass that includes all non-tidal wetlands dominated by trees, shrubs, persistent emergents, and all wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 parts per thousand (ppt). The vegetation is characterized as rooted herbaceous hydrophytes that exclude mosses and lichens and is present for most of the growing season. About 118 acres of the island includes a water regime that is seasonally flooded whereas the remaining 152 acres includes a water regime that is temporary flooded with the water table lying beneath the ground surface for most of the growing season. The 30.8 acres mapped as Freshwater Forested/Shrub Wetland (PFOA) is also a Palustrine System with a Forested Class that is characterized by woody vegetation 6 meters or taller and a temporary flooded water regime.

Figure 3. National Wetland Inventory database results for the study area which include classification codes PEM1Cd, PEM1Ad, and PFOA. (Source: National Wetland Inventory Database)

2.3 Hydraulics and Geomorphology

The project area is located in an east-west rending topographic depression (or trough) and glacially eroded between the Getchell Plateau to the north and the Intercity Plateau to the south. The tough has been filled to its present-day land surface with deltaic alluvium sediments overlain by estuarine deposits. The deltaic alluvial sediments accumulated relatively rapidly through progradational deltaic river processes in a fjord like setting during the late Pleistocene and early Holocene epochs (Snohomish County, 2013).

According to the Washington Department of Natural Resources (DNR) Geology Portal, the subsurface geology for the study area is characterized as Quaternary alluvium that is unconsolidated or semi-consolidated alluvial clay, silt, gravel, and/or cobble deposits. The alluvium locally includes peat, muck, and diatomite, locally includes beach, dunes, lacustrine, estuarine, marsh, landslide, lahar, glacial, or colluvial deposits.

The Natural Resource Conservation Service, formally the Soil Conservation Service, has mapped three soil types in the project area. The majority is mapped as Puget silty clay loam, which has a low infiltration rate and a seasonal groundwater depth of 24-47 inches. Puget silty clay loams are loose soils that were eroded and deposited by water, artificially drained, and are found in depressional areas in floodplains. Permeability of Puget soils is slow and the capacity of the soil to hold water that is available for plant use is high. Puget silty clay loams are a hydric soil that is a primary indicator of the presence of wetlands. When Puget silty clay loam soils are drained and protected from flooding or are infrequently flooded, they are suitable to use for cropland and considered to be prime agricultural soils.

The two other soils mapped in the project area include Snohomish silt loam and Xerorthents. The Snohomish silt loam is in isolated pockets less than five acres in size in the project area, while the Xerorthents soil lines the outer edge of Spencer Island. The Snohomish silt loam is characterized as a hydric soil that has been artificially drained. It is underlain by peat deposits at a depth of 29 to 60 inches. Xerorthent soils are disturbed areas replace with mixed fill material that is located on till plains. The soil is well drained and is not classified as a hydric soil.

2.4 Regional Climate

Regional climate for Everett, Washington, according to National Oceanic Atmospheric Administration (NOAA) National Weather Service (NWS) over the past 23 years averages temperatures from 54.7°F (average minimum) to 75.7°F (average maximum). Average precipitation over the same time period ranges from 0.00-0.37 inches per year with an average value of 0.03 inches per year.

2.5 Water Quality and Salinity

Ecology Water Quality Atlas Map was searched for Union and Steamboat Sloughs. No water quality issues were identified for Union Slough while two water quality issues were identified for Steamboat Slough: bacteria (fecal coliform) and water temperature. Shellfish harvesting sampling conducted in 1993 yielded exceedances for fecal coliform as a historic Category 2 determination since 2004. In the Snohomish Estuary Reach, the most likely sources of fecal coliform bacteria include human waste from failing septic systems and waste from cattle, horses, pets, and wildlife (Snohomish County, 2018). The last assessment cycle was conducted in 2018. In addition, water temperature within Steamboat Slough is designated for aquatic life as excellent quality. Historically, water temperature exceeded the criterion during August 1996 and water temperature has a historic Category 2 determination since 2004. Ecology staff concluded in the 2018 assessment cycle that human influences on water quality in Washington State are not likely to impact observed temperatures.

3.0 ENVIRONMENTAL DATA BASE REVIEW

3.1 Regulatory Agency Databases Records Search

A search of *Standard Environmental Records Sources* as defined in ASTM E-1527 - 13 was performed to identify *recognized environmental conditions.* Reviews of records related to the Property and nearby properties kept by both Federal and State regulatory agencies were conducted (DOE, 2023a; EPA, 2023). This review was used to help identify known or potential sources of contamination that could adversely affect the Property. Table 1 provides a summary of the ASTM standard environmental records sources databases searched and corresponding radii and quantitative results of the record search corresponding to databases. More than one database may list findings.

Table 1. Source Lists and Associated Number of Sites for PSAW Spencer Island Fleas

Agency	Description	Search Radius (miles)	Results
US EPA	National Priorities List (NPL)	1	0
US EPA	Delisted NPL Sites	1	0
US EPA	CERCLA	1	0
US EPA	RCRA Generators	1	0
US EPA	RCRA Treatment, Storage, or Disposal Facilities	1	0
US EPA	RCRA Corrective Action Sites	1	0
US EPA	Institutional Controls Registry	Property only	0
US EPA	Toxic Release Inventory	1	0
USCG	Emergency Response Notification System	Property only	0
Washington State Department of Ecology	State and Tribal Cleanup Sites[1]	1	0
Washington State Department of Ecology	Formerly Used Defense Sites	1	0
Washington State Department of Ecology	State Landfills and Waste Treatment/Disposal Plants	1	0
Washington State Department of Ecology	State and Tribal Brownfield's	1	0
Washington State Department of Ecology	State and Tribal Leaking Underground Storage Tanks	1	0
Washington State Department of Ecology	State and Tribal Registered Underground Storage Tanks[2]	1	2
Washington State Department of Ecology	State and Tribal Environmental Covenants Registry	Property and adjoining properties only	0
Washington State Department of Ecology	Emergency Spill Response	1	0

1. Includes active cleanups, either started or awaiting cleanup. Does not include No Further Action (NFA) sites.
2. Based on reporting period for FY2023

3.2 Known Environmental Conditions

Two state underground storage tanks are registered within 1 mile of the project footprint: Canyon Lumber and Everett Public Works Service Center (Figure 4). Canyon Lumber is an upland site for soil contamination of confirmed mercury, metals, and non-halogenated pesticides. The early notice letter for Canyon Lumber was completed on June 10, 2013. Everett Public Works Service Center is

an upland site for confirmed soil contamination of petroleum and suspected contamination in groundwater. The early notice letter for Everett Public Works Service Center was completed on March 4, 2013 (DOE, 2023a).

Additionally, arsenic and lead contamination may be associated with a nearby historical smelter. The Everett smelter, built by Puget Sound Reduction Company, operated from 1894-1912 (DOE, 2023b). The Everett smelter was west of the Snohomish River and approximately 1 mile northwest of the project area. ASARCO Incorporated (Asarco) purchased the property in 1903 and operated the smelter until 1912 when it was demolished. The property was sold in various parcels and homes were built on many of the parcels. The highway interchange between East Marine View Drive and State Route 529 was built across the old smelter site in the 1950s. Arsenic and lead contamination was discovered in 1990 in soil and groundwater during an environmental assessment of their property. The contaminated parcels from the smokestacks settled over a 1.1 square mile area. Ecology conducted a cleanup between 1999-2007 to clean up the most highly contaminated areas, including the former smelter property. In 2009, Ecology received funding through a bankruptcy settlement with Asarco to continue cleanup work and during 2009-2019, the settlement funds were spent on residential cleanup in the upland areas.

As of March 2023, soil cleanup for the 2019 cleanup group is now complete. All cleanup plans and designs are now finalized for the 2020 cleanup group. Construction will begin for this group in the coming months. Ecology is working with the City of Everett to improve the existing stormwater drainage system in northeastern Everett by repairing cracks in this system of pipes. These repairs will help decrease contamination from the smelter area from reaching the Snohomish River (DOE, 2023b).

Although Spencer Island was not identified for remediation by the Department of Ecology due to the historical smelter operations, previously conducted soil sampling in the adjacent Smith Island in November 2009 identified arsenic soil concentrations exceeding MTCA Method A levels for unrestricted land use (Snohomish County, 2013). No existing available data documenting soil concentrations for arsenic on Spencer Island was identified in association with development of this Phase I ESA.

A derelict vessel is present in the north central portion of Spencer Island. A physical investigation of the vessel by WDFW found no motor, fuel tanks, fuel smell, or visible indications of sheen in the vicinity. Currently, WDFW is working with Washington (DNR) to try and remove the derelict vessel.

A second derelict vessel and barge are present in Steamboat Slough adjacent to Spencer Island (See Section 6.0). While release of contaminants into Steamboat Slough from the vessel is unknown at this time, any of the alternatives implemented for the ecosystem restoration project are unlikely to alter hydraulic conditions in such a way that results in mobilization of potentially impacted sediments.

The Corps interviewed Seth Ballhorn (WDFW) about additional contamination information for the property owned by Washington Department of Fish and Wildlife. The parcel was used for agricultural purposes prior to WDFW acquiring the property in 1989 which may have included pesticides, herbicides, or fertilizers during that time. WDFW completed spot treating of Himalayan blackberry with herbicide along the Union Slough dike trail. The use of pesticides and/or fertilizer may have been used to cultivate crops for waterfowl prior to 2005. There is no information available to suggest any herbicides/pesticides were applied or used outside the recommended standards or intended use. Seth Ballhorn indicates no knowledge or evidence of contaminated fill

was located on Spencer Island; however, hog fuel (wood chips) was used to build up the earthen dikes around the island between 1969 to 1978 and approximately 6 hog fuel stockpile sites were located throughout the island. There is no reason to suspect this hog fuel constitutes HTRW. Although no structures are located on Spencer Island currently, Seth Ballhorn reports that according to the 2007 Snoqualmie Wildlife Area Management Plan, there have been several fires on Spencer Island with the first fire escaping the dike initially set to burn the remains of a mobile home on Spencer Island. No new information was provided by WDFW that would indicate the presence of HTRW at the site.

The Corps interviewed Erik Stockdale, the Planning Manager in the Surface Water Management Division for the Snohomish County Parks Administration Division for additional information about potential contamination. Erik Stockdale provided information that the entire area of Spencer Island is within the plume of the old Everett ASARCO plant and that four water right claims are located within the South Spencer Island boundaries that are listed as "tide gate" for the purpose of "irrigation and stock watering." With the exception of the ASARCO smelter plume, no information was provided by Snohomish County that would indicate the presence of HTRW.

See Appendix C for the full interview questionnaires.

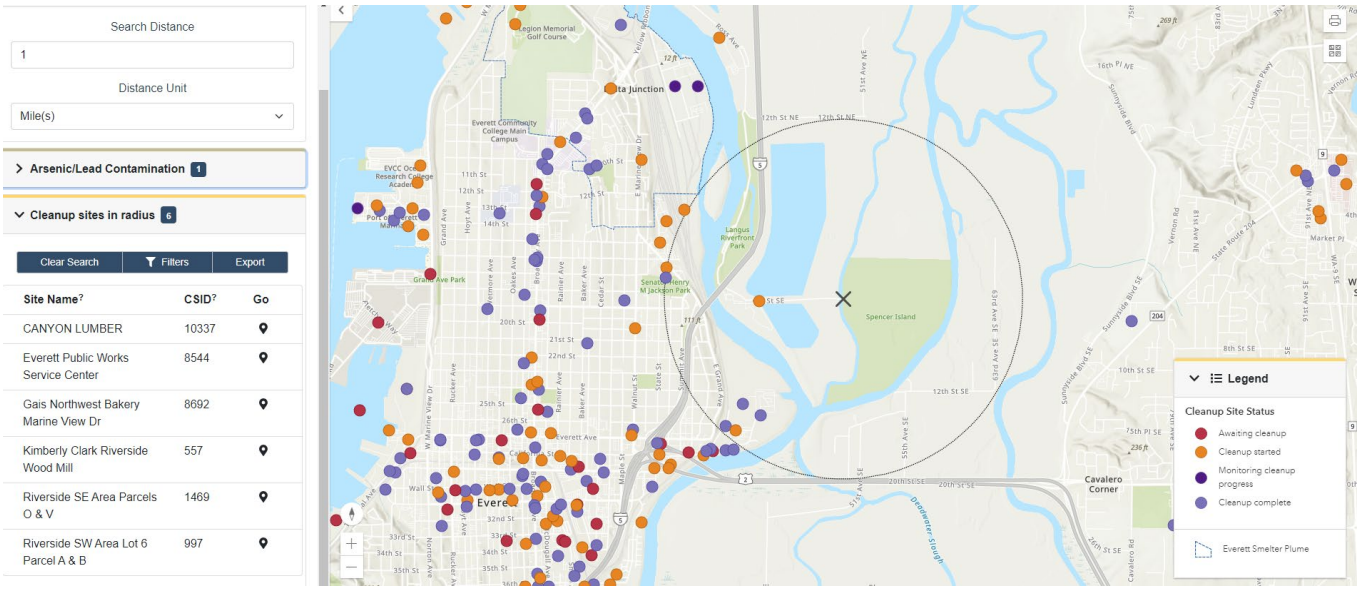

Figure 4. Cleanup Sites located within 1 mile of Spencer Island. Four Cleanup Sites are listed as 'No Further Action'. The Everett Smelter Plume is outlined in blue. (Source: DOE. 2023a)

4.0 PROPERTY HISTORY

4.1 Property History

Spencer Island was diked in the early 1900s and used primarily for grazing. During this period, drainage practices and lack of tidal inundation resulted in up to 4 feet of subsidence which alters the effectiveness of creating the historic type and range of habitats. These practices also altered the restored drainage patterns (Tanner et al., 2002).

Tidal inundation, with a maximum diurnal range of approximately 12 feet, was restored to part of the site in the 1990s. Before the restoration, the site was characterized by dense monotypic stands of invasive reed canary grass. Large patches of cattails occurred in some lower elevation areas. Vegetation in higher elevation habitats (i.e., spoil piles and dikes) was composed primarily of non-native blackberries. In the east and southern third of the site, reed canary grass and blackberry grade into a forested wetland area composed of canopy-forming red alder and willow, black cottonwood and Sitka spruce, and an understory of mixed shrubs and emergent plants (Tanner et al., 2002).

The site was colonized by plant assemblage characteristic of tidal freshwater wetlands, a habitat that has become uncommon in the region due to human impacts in estuaries. Invertebrate assemblages and densities were similar to those found at reference sites just to the south of the island. Breaching of these dikes resulted in access by several species of juvenile salmon (Tanner et al., 2002).

Since the northern dike breached in 2005, it appears that mudflat sedimentation and vegetation colonization are occurring within the site. However, the preexisting field drain system appears to have captured tidal flows, precluding the development of a dendritic network (WDFW, 2023).

4.2 Aerial Photographs and Maps

Figure 5. December 1985 Aerial Photograph. (Source: Google Earth Imagery)

Figure 6. July 1991 Aerial Photograph. (Source: Google Earth Imagery)

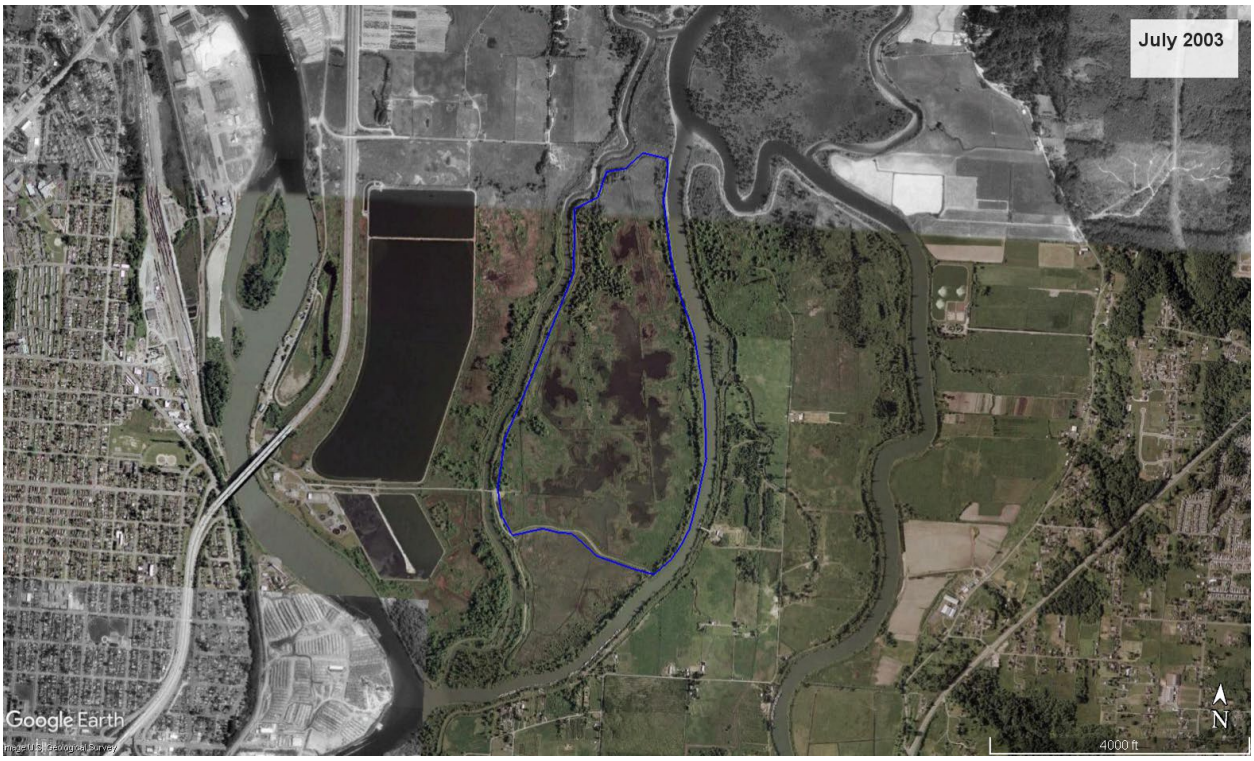

Figure 7. July 2003 Aerial Photograph. (Source: Google Earth Imagery)

Figure 8. July 2006 Aerial Photograph. (Source: Google Earth Imagery)

Figure 9. May 2013 Aerial Photograph. (Source: Google Earth Imagery)

Figure 10. July 2020 Aerial Photograph. (Source: Google Earth Imagery)

Figure 11. June 2022 Aerial Photograph. (Source: Google Earth Imagery)

4.3 Records Review

Spencer Island was jointly purchased in 1989 by Snohomish County Parks and Recreation Department and WDFW. The county manages the south half of the island for recreation, including hiking trails and bird watching. Prior to accidental breaching in the 1990's, WDFW managed the north half of the island for waterfowl breeding and wildlife-oriented recreation. Because dike breach restoration was not consistent with waterfowl management activities conducted by WDFW in the northern section of the island, a 2,500-foot internal cross dike was constructed to restrict tidal influence to just the southern portion of the island and avoid flooding of WDFW property. After construction of the cross dike, three dike breaches were excavated by the County in November 1994 to connect the southern portion of the island to the tidal sloughs.

The island is designated as the Spencer Island Regional Park. Public access to the island is provided by a pedestrian bridge over Union Slough. The island has a series of dike-top trails that run along the perimeter and cross the island.

There are no private properties within the project footprint to be acquired (Snohomish County, 2023).

5.0 ADJOINING PROPERTY

Adjacent properties west of Spencer Island (across Union Slough) include 4 properties owned by the City of Everett. Adjacent properties east of Spencer Island (across Steamboat Slough) include 7 private residential properties (Snohomish County, 2023).

6.0 RESULTS OF VISUAL RECONNAISSANCE

Visual reconnaissance to Spencer Island was conducted on June 14, 2023, to visually inspect and document the conditions of the site for HTRW. Overall, the mash environment appears to be intact, the trails are well maintained, and one historic rusted-out metal drum was found along the cross trail. No other signs of HTRW contamination were located around Spencer Island (Appendix B).

Additional information was gathered after viewing the derelict vessel and barge on Steamboat Slough. The site has become intertidal in the last 18 years and as the slough widens, there has been an increase in debris that has accumulated on site including an unmarked derelict barge and vessel. Although additional information about the derelict vessel and barge could not be obtained, an online newspaper article dated October 3, 2014, titled "*Everett's boat graveyard, Steamboat Slough*" includes a similar photograph of a derelict vessel which may have been dumped by uninterested owners (Figure 12).

Figure 12. Derelict Vessel from October 3, 2014, newspaper article *Everett's boat graveyard, Steamboat Slough.* (Source: Hearts Newspapers, LLC. 2023)

7.0 SUMMARY OF FINDINGS AND CONCLUSIONS

A Phase I ESA of the project area performed in conformance with the scope and limitations of ASTM Standard E1527 – 13 occurred. Due to the lack of soil/sediment sampling for arsenic and lead contamination that may exist due to the historical Everett smelter, soil/sediment sampling is recommended to confirm that contamination constituting HTRW, as defined by the Corps, does not exist within the project boundaries. Additional desktop research or potential soil sampling around the derelict vessel located on Spencer Island should be considered to assess for the presence of petroleum/diesel products that may have leaked from the vessel. The Corps recommends that a Phase II Environmental Site Assessment be completed to help characterize the nature and extent of contamination associated with historical smelter operations that may have impacted the project footprint.

APPENDIX A

A summary of sites near Spencer Island with a known or suspected release of contaminants is provided in the table below.

Cleanup Site ID	Facility Site ID	Cleanup Site Name	Address	City	Site Status
8544	27491233	Everett Public Works Service Center	4027 4th Street SE	Everett	Cleanup Started
10337	73655877	Canyon Lumber	3821 26th PL	Everett	Cleanup Started

APPENDIX B

Attached Site Visit Report.

APPENDIX C

Attached completed interview questionnaires.

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SIGNATURE & QUALIFICATION PAGE

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 312.10 of 40 Code of Federal Register (CFR) 312 and the ASTM Standard.

I have the specific qualifications, based on education, training, and experience to assess a property of the nature, history, and setting of the Property. I have developed and performed the Phase I ESA in conformance with the ASTM and CERCLA standards and practices set forth in 40 CFR 312 and the ASTM standard.

PREPARED BY:

Katie Richwine
Physical Scientist

ASSESSORS PROFESSIONAL EXPERIENCE

Education:
Bachelors of Science, Marine Science, Eckerd College
Masters of Science, Masters in Earth and Space Sciences, Applied Geosciences (MESSAGe), University of Washington

Brief Summary of Relevant Experience:
Katie has over 10 years of experience working on marine environmental research and technical projects. Her areas of expertise include marine geology, hydrographic bathymetry, applied geosciences (tsunami modelling, Geographic Information System Mapping, and geomorphology), and remediation of contaminated sediment sites. She has worked on contaminated sites for the last 4 years to include preliminary assessments through long-term monitoring projects.

APPENDIX B

Trip Report
Spencer Island, Everett, Snohomish County, Washington

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1. INTRODUCTION

a. Date of Visit: June 14, 2023

b. Location: Spencer Island, Everett, Washington

c. Purpose: A site visit was conducted to visually inspect and document conditions of the site for potential presence of hazardous, toxic, and radioactive waste for inclusion into the Phase 1 Environmental Site Assessment.

d. Participants:

Katie Richwine	USACE	(206) 764-3465
Kristen Kerns	USACE	(206) 764-3474

2. SUMMARY

Kristen Kerns and Katie Richwine arrived at the Site at approximately 0930. The weather conditions were overcast, cloudy, with a temperature approximately 65°F. The Site inspection participants visually inspected access to Spencer Island and walked trails to the north and across the island to inspect Spencer Island west to east on the cross-through trail. The Site appears to be in good condition with limited HTRW contamination viewed from the trails the team accessed.

3. DISCUSSION

The Site Inspection Team enter Spencer Island via access across a bridge. Spencer Island appears to be a marsh environment with trail access north, south and a cross-through trail to the eastern side of the island. The Site Inspection Team began walking north on the trail and the trail appears to be well maintained. The Site Inspection Team did not see any evidence of HTRW on the north trail.

The Site Inspection Team retraced their steps and noticed one storm outfall in the levee looking west. The team took the cross-through trail towards the eastern side of the island. The team saw one rusted-out metal drum on the northern side of the cross-though trail. The team ended on the eastern side of the island and crossed the second bridge to view the East Channel, which is just south of the project footprint. A derelict barge and vessel are located on the eastern shoreline of the channel.

Overall, the marsh environment appears to be intact with no obvious signs of vandalism. The trails are well maintained for easy access.

Katie Richwine
Physical Scientist
USACE

Site Visit Photos

Photo 1. Spencer Island entrance west side	

Photo 2. Main entrance looking east	

Photo 3. Trail heading north	

Photo 4. Storm outfall in levee	

Photo 5. West side looking west	
Photo 6. West side looking east	

Photo 7. Rusted Drum	
Photo 8. Central Part of the Island	

Photo 9. Along Cross Island Trail	
Photo 10. Derelict Barge on East Channel	

Photo 11. Derelict Vessel (north of the derelict barge) on East Channel	

APPENDIX C

Phase I Environmental Site Assessment – Interview Questionnaire

Interview Questionnaire Form

Project Name/No.: Spencer Island Ecosystem Restoration Project
Date: Complete by July 21, 2023

Interviewer: Katie Richwine/Kristen Kerns
Person being interviewed: Seth Ballhorn
Person being interviewed is the: Washington Department of Fish and Wildlife non-federal sponsor
Location of interview: email

Current Land Use: Wildlife area.

1. To the best of your knowledge, has the Property ever been used in the past for industrial and/or commercial purposes?
No, previous to WDFW acquiring the property it was used for agricultural purposes.

2. Have the adjacent properties ever been used for industrial and/or commercial purposes?
No, the only adjoining parcel is owned by Snohomish County, that parcel was also used for agricultural purposes.

3. Have there ever been potentially hazardous substances (paints, pesticides, dry cleaning fluids, automotive or industrial batteries, etc.) stored, used, or disposed on the Property?
WDFW has spot treated Himalayan blackberry with herbicide along the Union slough dike trail. Prior to the unintentional breach in 2005, WDFW attempted to cultivate crops for waterfowl, that cultivation likely involved the use of some fertilizer and/or pesticides. The property was managed for agricultural purposes prior to acquisition by WDFW in 1989, it is likely that pesticides, herbicides, or fertilizers were used during that time.

4. Did you observe evidence or have prior knowledge that fill dirt has been brought onto the Property that is from a contaminated site or from an unknown origin?
While not fill dirt, hog fuel (wood chips) was used to build up the earthen dikes around Spencer. From 1969 to 1978, the earthen dike encircling the island was built higher (averaging ten feet tall) and wider by hauling in thousands of yards of large wood chips, also known as hog fuel. There were approximately 6 hogfuel stockpile sites throughout the island (see WDFW desktop review).

5. Did you observe evidence or have prior knowledge of any pits, ponds, or lagoons located on the Property in connection with waste treatment or waste disposal?
No.

6. Did you observe evidence or have prior knowledge of any stained soil on the property previously?
No

7. Did you observe evidence or have prior knowledge that any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade, buried, and/or burned on the Property?
According to the 2007 Snoqualmie Wildlife Area Management Plan (pg. 20), there have been several fires on Spencer Island: "The first fire that escaped to the dike was initially set to burn the remains of a mobile home on the Island."

8. Did you observe evidence or have prior knowledge of historical or current use and/or disposal of munitions, ordnances, or explosive materials/waste on the Property?
No.

9. Did you observe evidence or have prior knowledge that there have been previously storage tanks (underground or aboveground) located on the Property?
No.

10. Has a private well or a non-public water system ever served the Property?
Not to my knowledge.

11. Do you have evidence or prior knowledge that the well or water system has been designated contaminated by any government environmental/health agency?
No.

12. Does the Owner or Occupant of the Property have any knowledge of any environmental liens; federal, state, or local government agency notices of violations, or other enforcement actions concerning environmental issues with respect to the Property or any facility located on the Property?
No.

13. Has the Owner or Occupant of the Property been informed of past or current existence of hazardous/toxic substances or petroleum products with respect to the Property or any facility located on the Property?
No.

14. Do you have any knowledge of previous ESAs, EBSs, remedial action reports, geotechnical studies, or other similar studies conducted on the Property or facility located on the Property?
No.

15. Describe any structures on the Property and their construction age:
No structures on the property.

16. Is there anyone else we can interview about your Property?
Suggest reaching out to Snohomish County about the adjacent

17. Other information provided:

Interview Questionnaire Form

Project Name/No.: Spencer Island Ecosystem Restoration Project
Date: Complete by July 21, 2023

Interviewer: Katie Richwine/Kristen Kerns
Person being interviewed: Rich Patton and Erik Stockdale
Person being interviewed is the: Rich is the Snohomish County Parks Administration Division Manager; Erik is the Planning Manager in the Surface Water Management Division
Location of interview: email

Current Land Use: public park

1. To the best of your knowledge, has the Property ever been used in the past for industrial and/or commercial purposes?

No

2. Have the adjacent properties ever been used for industrial and/or commercial purposes?

No

3. Have there ever been potentially hazardous substances (paints, pesticides, dry cleaning fluids, automotive or industrial batteries, etc.) stored, used, or disposed on the Property?

No. The entire area is within the plume of the old Everett ASARCO plant.

4. Did you observe evidence or have prior knowledge that fill dirt has been brought onto the Property that is from a contaminated site or from an unknown origin?

No. The only fill on the property was used to build the diking system. The dikes purportedly have a core of sawdust or "hog fuel"

5. Did you observe evidence or have prior knowledge of any pits, ponds, or lagoons located on the Property in connection with waste treatment or waste disposal?

No

6. Did you observe evidence or have prior knowledge of any stained soil on the property previously?

No

7. Did you observe evidence or have prior knowledge that any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade, buried, and/or burned on the Property?

No

8. Did you observe evidence or have prior knowledge of historical or current use and/or disposal of munitions, ordnances, or explosive materials/waste on the Property?

No

9. Did you observe evidence or have prior knowledge that there have been previously storage tanks (underground or aboveground) located on the Property?

No

10. Has a private well or a non-public water system ever served the Property?

The Ecology water rights database reveals four water right claims within the South Spencer Island boundaries (WDFW and County ownership), for "irrigation and stock watering." Both list "tide gate" as the source of water. https://ecology.wa.gov/regulations-permits/guidance-technical-assistance/water-rights-search

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11. Do you have evidence or prior knowledge that the well or water system has been designated contaminated by any government environmental/health agency?

No

12. Does the Owner or Occupant of the Property have any knowledge of any environmental liens; federal, state, or local government agency notices of violations, or other enforcement actions concerning environmental issues with respect to the Property or any facility located on the Property?

No

13. Has the Owner or Occupant of the Property been informed of past or current existence of hazardous/toxic substances or petroleum products with respect to the Property or any facility located on the Property?

No

14. Do you have any knowledge of previous ESAs, EBSs, remedial action reports, geotechnical studies, or other similar studies conducted on the Property or facility located on the Property?

No

15. Describe any structures on the Property and their construction age:

None

16. Is there anyone else we can interview about your Property?

17. Other information provided:

Please call Erik Stockdale at 425-512-7543 if you have any questions.