



INITIAL INVESTIGATION FIELD REPORT

☐ Check this box if you have attached any documents to this form (using the paperclip icon on the left).

ERTS #(s):
Parcel #(s):
County:
FSID #:
CSID #:
UST #:

701796
N/A
San Juan
12312587
15333

SITE INFORMATION

<u>Site Name (Name over door):</u> West Sound Marina	<u>Site Address (including City, State and Zip):</u> 525 Deer Harbor Rd In-Water Orcas, WA 98280	<u>Phone</u> <u>Email</u>
<u>Site Contact, Title, Business:</u> Betsy Wareham West Sound Marina Inc.	<u>Site Contact Address (including City, State and Zip):</u> PO Box 119 Orcas, WA 98280	<u>Phone</u> (360) 376-2314 <u>Email</u> betsy@westsoundmarina.com
<u>Site Owner, Title, Business:</u> WA Dept. of Natural Resources	<u>Site Owner Address (including City, State and Zip):</u>	<u>Phone</u> <u>Email</u>
<u>Site Owner Contact, Title, Business:</u> Gabe Harder, Aquatic Land Manager Aquatic Resources Division, Orca-Straits District	<u>Site Owner Contact Address (including City, State and Zip):</u> WA Department of Natural Resources - Northwest Region 919 North Township Street, Sedro-Woolley, WA 98284	<u>Phone</u> (360) 630-1297 <u>Email</u> gabriel.harder@dnr.wa.gov
<u>Previous Site Owner(s):</u>	<u>Additional Info (for any Site Information Item):</u> reported contamination is in-water; the upland portion of West Sound Marina is located on parcel 260912002000	
<u>Alternate Site Name(s):</u>		

<u>Latitude (Decimal Degrees):</u> 48.62927
<u>Longitude (Decimal Degrees):</u> -122.95852

INSPECTION INFORMATION

☒ Please check this box if there is relevant inspection information, such as data or photos, in an existing site report for this site.

<u>Inspection Conducted?</u> Yes ☐ No ☒	<u>Date/Time:</u>	<u>Entry Notice:</u> Announced ☐ Unannounced ☐
<u>Photographs taken?</u> Yes ☐ No ☐	Note: Attach photographs or upload to PIMS	
<u>Samples collected?</u> Yes ☐ No ☐	Note: Attach record with media, location, depth, etc.	

RECOMMENDATION

No Further Action (Check appropriate box below):	LIST on Confirmed and Suspected Contaminated Sites List: ☒
Release or threatened release does not pose a threat ☐	
No release or threatened release ☐	
Refer to program/agency (Name: _____) ☐	
Independent Cleanup Action Completed (contamination removed) ☐	

COMPLAINT (Brief Summary of ERTS Complaint):

Results of sediment sampling conducted as part of an existing DNR Aquatic Lands Lease were reported to Ecology by the lessee, West Sound Marina Inc.

CURRENT SITE STATUS (Brief Summary of why Site is recommended for Listing or NFA):

Analytical results indicate sediment contaminated with polycyclic aromatic hydrocarbons (PAHs) above applicable screening levels based on protection of the benthic community. Recommendation: add to Confirmed and Suspected Contaminated Sites List.

Investigator: Kim Wooten

Date Submitted: 11/25/2020

OBSERVATIONS**Please check this box if you included information on the Supplemental Page at end of report.**

Description (If site visit made, please be sure to include the following: site observations, site features and cover, chronology of events, sources/past practices likely responsible for contamination, presence of water supply wells and other potential exposure pathways, etc.):

The West Sound Marina has been operating in this location since 1950. Currently, the Marina includes approximately 180 moorage spaces, a fuel dock that dispenses gasoline and diesel, a pump-out station, and a repair facility with associated boat haul out. Cleaning and painting of boats is conducted on a pressure wash pad, with 3 drains that collect pressure wash water. General site features are shown on the figure on the Supplemental Page.

Sediment samples were collected from 12 locations within the marina on July 9, 2020. Samples were collected by hand from the top 10 cm of sediment. Two samples were collected at each location. Samples were analyzed for a variety of chemicals, including metals, tributyltin, PAHs, and polychlorinated biphenyls (PCBs).

Sample results were compared to the sediment chemical criteria for protection of the benthic community in marine sediment, available in Table 8-1 of Ecology's Sediment Cleanup User's Manual. PAHs were present in multiple samples above the applicable Sediment Cleanup Objectives (SCOs), and in one sample above the higher screening value (the Cleanup Screening Level, or CSL). Metals and PCBs were not present in any sample above SCOs. There is no established SCO for tributyltin in marine sediment. For the purposes of classifying the tributyltin results in the contaminant table below, sample results were compared to the DMMP benthic toxicity screening level. Two samples contained tributyltin above this screening level.

The area where sediments were collected is state-owned and managed by the Washington state Department of Natural Resources (DNR). The land is leased to West Sound Marina under Aquatic Lands Lease No. 20-B12555. The results of the sampling were submitted to DNR by the lessee, and information was submitted to ERTS after DNR reviewed the results and noted that the PAH concentrations, in particular, meant a report to Ecology was warranted.

Documents reviewed:

Jen-Jay, Inc. June 2020. Benthic Sediment Sampling, West Sound Marina. (note: this document has a June date, but this is incorrect, as sampling was not done until July 2020)

WA DNR. November 2020. Letter to Betsy Wareham Re: Obligations as Related to Sediment Sampling Results - Aquatic Lease No. 20-B12555.

Westsound Marina Sediment Results. [data table]

CONTAMINANT GROUP	CONTAMINANT	SOIL	GROUNDWATER	SURFACE WATER	AIR	SEDIMENT	DESCRIPTION
Non-Halogenated Organics	Phenolic Compounds						Compounds containing phenols (Examples: phenol; 4-methylphenol; 2-methylphenol)
	Non-Halogenated Solvents						Organic solvents, typically volatile or semi-volatile, not containing any halogens. To determine if a product has halogens, search HSDB (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB) and look at the Chemical/Physical Properties, and Molecular Formula. If there is not a Cl, I, Br, F in the formula, it's not halogenated. (Examples: acetone, benzene, toluene, xylenes, methyl ethyl ketone, ethyl acetate, methanol, ethanol, isopropanol, formic acid, acetic acid, stoddard solvent, Naptha). <i>Use this when TEX contaminants are present independently of gasoline.</i>
	Polynuclear Aromatic Hydrocarbons (PAH)					C	Hydrocarbons composed of two or more benzene rings.
	Tributyltin					C	The main active ingredients in biocides used to control a broad spectrum of organisms. Found in antifouling marine paint, antifungal action in textiles and industrial water systems. (Examples: Tributyltin; monobutyltin; dibutyltin)
	Methyl tertiary-butyl ether						MTBE is a volatile oxygen-containing organic compound that was formerly used as a gasoline additive to promote complete combustion and help reduce air pollution.
	Benzene						Benzene
	Other Non-Halogenated Organics						TEX
	Petroleum Diesel						Petroleum Diesel
	Petroleum Gasoline						Petroleum Gasoline
	Petroleum Other						Oil-range organics
Halogenated Organics (see notes at bottom)	PBDE						Polybrominated di-phenyl ether
	Other Halogenated Organics						Other organic compounds with halogens (chlorine, fluorine, bromine, iodine). search HSDB (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB) and look at the Chemical/Physical Properties, and Molecular Formula. If there is a Cl, I, Br, F in the formula, it is halogenated. (Examples: Hexachlorobutadiene; hexachlorobenzene; pentachlorophenol)
	Halogenated solvents						PCE, chloroform, EDB, EDC, MTBE
	Polychlorinated Biphenyls (PCB)					B	Any of a family of industrial compounds produced by chlorination of biphenyl, noted primarily as an environmental pollutant that accumulates in animal tissue with resultant pathogenic and teratogenic effects
	Dioxin/dibenzofuran compounds (see notes at bottom)						A family of more than 70 compounds of chlorinated dioxins or furans. (Examples: Dioxin; Furan; Dioxin TEQ; PCDD; PCDF; TCDD; TCDF; OCDD; OCDF). <i>Do not use for 'dibenzofuran', which is a non-chlorinated compound that is detected using the semivolatile organics analysis 8270</i>
Metals	Metals - Other					B	Cr, Se, Ag, Ba, Cd
	Lead					B	Lead
	Mercury					B	Mercury
	Arsenic					B	Arsenic
Pesticides	Non-halogenated pesticides						Pesticides without halogens (Examples: parathion, malathion, diazinon, phosmet, carbaryl (sevin), fenoxycarb, aldicarb)
	Halogenated pesticides						Pesticides with halogens (Examples: DDT; DDE; Chlordane; Heptachlor; alpha-beta and delta BHC; Aldrin; Endosulfan, dieldrin, endrin)

CONTAMINANT GROUP	CONTAMINANT	SOIL	GROUNDWATER	SURFACE WATER	AIR	SEDIMENT	DESCRIPTION
Other Contaminants	Radioactive Wastes						Wastes that emit more than background levels of radiation.
	Conventional Contaminants, Organic						Unspecified organic matter that imposes an oxygen demand during its decomposition (Example: Total Organic Carbon)
	Conventional Contaminants, Inorganic						Non-metallic inorganic substances or indicator parameters that may indicate the existence of contamination if present at unusual levels (Examples: Sulfides, ammonia)
	Asbestos						All forms of Asbestos. Asbestos fibers have been used in products such as building materials, friction products and heat-resistant materials.
	Other Deleterious Substances						Other contaminants or substances that cause subtle or unexpected harm to sediments (Examples: Wood debris; garbage (e.g., dumped in sediments))
	Benthic Failures						Failures of the benthic analysis standards from the Sediment Management Standards.
	Bioassay Failures						For sediments, a failure to meet bioassay criteria from the Sediment Management Standards. For soils, a failure to meet TEE bioassay criteria for plant, animal or soil biota toxicity.
Reactive Wastes	Unexploded Ordnance						Weapons that failed to detonate or discarded shells containing volatile material.
	Other Reactive Wastes						Other Reactive Wastes (Examples: phosphorous, lithium metal, sodium metal)
	Corrosive Wastes						Corrosive wastes are acidic or alkaline (basic) wastes that can readily corrode or dissolve materials they come into contact with. Wastes that are highly corrosive as defined by the Dangerous Waste Regulation (WAC 173-303-090(6)). (Examples: Hydrochloric acid; sulfuric acid; caustic soda)

(fill in contaminant matrix above with appropriate status choice from the key below the table)

Status choices for contaminants	
Contaminant Status	Definition
B— Below Cleanup Levels (Confirmed)	The contaminant was tested and found to be below cleanup levels. (Generally, we would not enter each and every contaminant that was tested; for example if an SVOC analysis was done we would not enter each SVOC with a status of "below". We would use this for contaminants that were believed likely to be present but were found to be below standards when tested)
S— Suspected	The contaminant is suspected to be present; based on some knowledge about the history of the site, knowledge of regional contaminants, or based on other contaminants known to be present
C— Confirmed Above Cleanup Levels	The contaminant is confirmed to be present above any cleanup level. For example—above MTCA method A, B, or C; above Sediment Quality Standards; or above a presumed site-specific cleanup level (such as human health criteria for a sediment contaminant).
RA— Remediated - Above	The contaminant was remediated, but remains on site above the cleanup standards (for example—capped area).
RB— Remediated - Below	The contaminant was remediated, and no area of the site contains this contaminant above cleanup standards (for example— complete removal of contaminated soils).

Halogenated chemicals and solvents: Any chemical compound with chloro, bromo, iodo or fluoro is halogenated; those with eight or fewer carbons are generally solvents (e.g. halogenated methane, ethane, propane, butane, pentane, hexane, heptane or octane) and may also be used for or registered as pesticides or fumigants. Most are dangerous wastes, either listed or categorical. Organic compounds with more carbons are almost always halogenated pesticides or a contaminant or derivative. Referral to the HSDB is recommended if you are unfamiliar with a chemical name or compound, as it contains useful information about synonyms, uses, trade names, waste codes, and other regulatory information about most toxic or potentially toxic chemicals.

Dibenzodioxins and dibenzofurans are normalized to a combined equivalent toxicity based on 2,3,7,8-tetrachloro-p-dibenzodioxin as set out in WAC 173-340-708(8)(d) and in the Evaluating the Toxicity and Assessing the Carcinogenic Risk of Environmental Mixtures using Toxicity Equivalency Factors Focus Sheet (<https://fortress.wa.gov/ecy/clarc/FocusSheets/tef.pdf>). Results may be reported as individual compounds and isomers (usually lab results), or as a toxic equivalency value (reports).

FOR ECOLOGY II REVIEWER USE ONLY (For Listing Sites):

How did the Site come to be known: ☒ Site Discovery (received a report): _____ (Date Report Received)
☐ ERTS Complaint
☐ Other (please explain): _____

Does an Early Notice Letter need to be sent: ☒ Yes ☐ No
If No, please explain why: _____

NAICS Code (if known): _____
Otherwise, briefly explain how property is/was used (i.e., gas station, dry cleaner, paint shop, vacant land, etc.):

Site Unit(s) to be created (Unit Type): ☐ Upland (includes VCP & LUST) ☒ Sediment
If multiple Units needed, please explain why: _____

Cleanup Process Type (for the Unit): ☒ No Process ☐ Independent Action
☐ Voluntary Cleanup Program ☐ Ecology-supervised or conducted
☐ Federal-supervised or conducted

Site Status: ☒ Awaiting Cleanup ☐ Construction Complete – Performance Monitoring **Model Remedy Used?** ☐
☐ Cleanup Started ☐ Cleanup Complete – Active O&M/Monitoring **If yes, was this a** ☐
☐ No Further Action Required **transformer spill?**

Site Manager (Default: _____): _____

Specific confirmed contaminants include:

_____ in Soil

_____ in Groundwater

Tributyltin, PAHs in Other (specify matrix:)

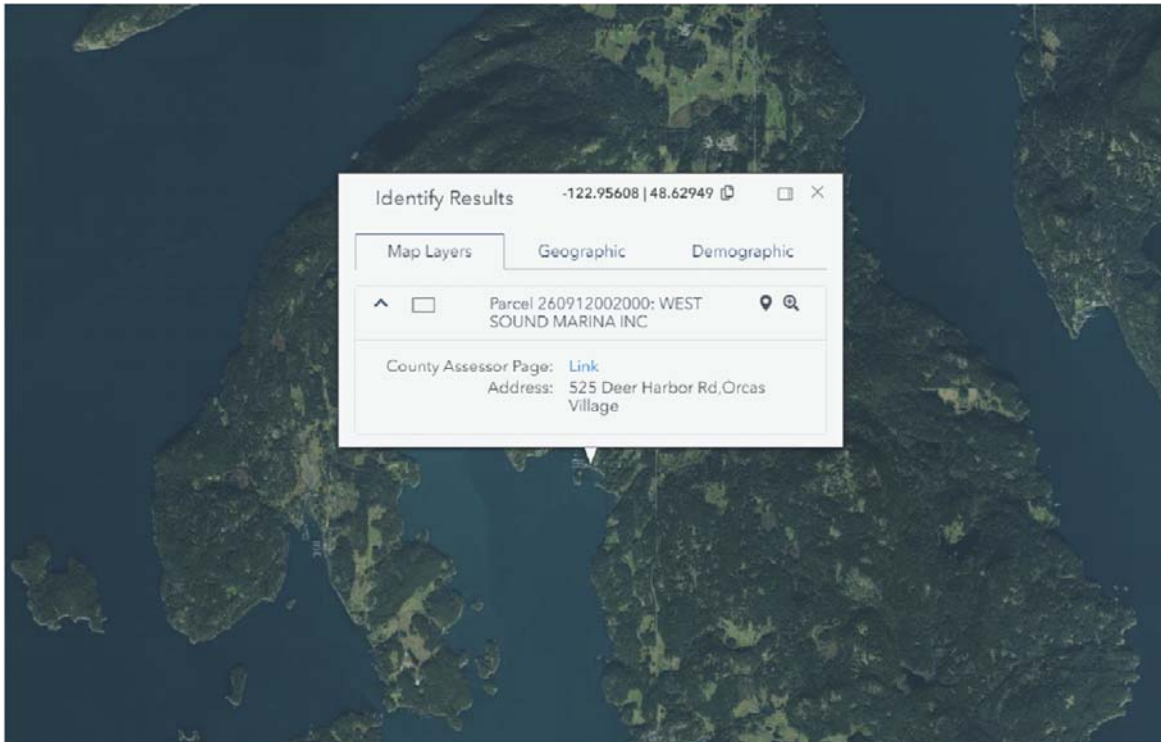
Facility/Site ID No. (if known):

12312587

Cleanup Site ID No. (if known):

15333

COUNTY ASSESSOR INFO: Please attach to this report a copy of the tax parcel/ownership information for each parcel associated with the site, as well as a parcel map illustrating the parcel boundary and location.



Please use this box for any text that requires special formatting

Figure from Jen-Jay Diving sampling report, with new labels added for locations of note to make them more visible. Red numerals indicate sampling location ID, and blue text indicates a general site feature. PAHs above SCOs were present in samples 1, 3, and 7. Tributyltin above the DMMP screening level was present in samples 4 and 5.

