$\sim$  ONLINE OPEN HOUSE: 1st > Please review this silent, looping slideshow.  $2^{nd}$  > Contact us in the chat to connect and ask questions.



## Whidbey Marine & Auto Supply Cleanup Site



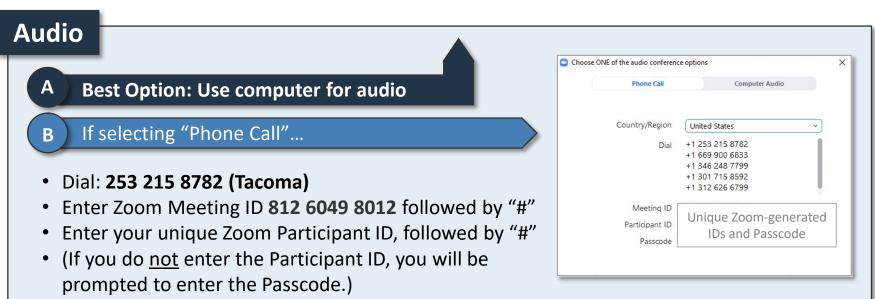
Public Comment Period: May 19, 12:00 am – June 20, 11:59 pm, 2025 Remedial Investigation, Feasibility Study, & Public Participation Plan

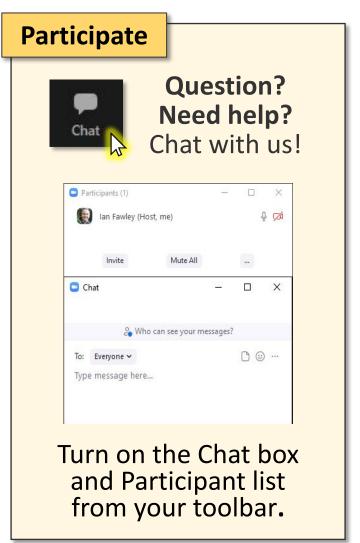
Online Open House: June 3, 2025, 4:00-6:00 pm



## Welcome to our online open house.









## **Online Open House Flow**



- 1. Review the silent, looping slideshow.
  Slides will advance every 30 40 seconds, for a total of about ten minutes.
- 2. Ask questions in the chat or raise your hand to be unmuted.
- 3. We will answer your questions one by one.

## **Ecology & Consultant Staff Available Today**

## John Rapp, LHG (in-person)

Ecology Toxics Cleanup Program Site Manager & Hydrogeologist

#### Kim Wooten (in-person)

Ecology Toxics Cleanup Program
Northwest Region Section Manager

### Heather Good, LHG (in-person)

Haley & Aldrich, Hydrogeologist

### Andrew Nakahara, P.E. (in-person)

Haley & Aldrich, Engineer

#### Kristen Forkeutis (in-person and online)

Ecology Toxics Cleanup Program
Community Outreach Specialist Manager

### Dhroov Shivjiani, P.E. (online)

Ecology Toxics Cleanup Program Uplands Unit Supervisor

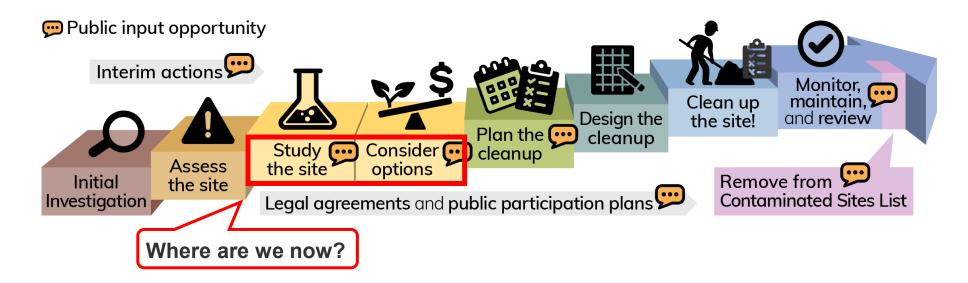
### Breeyn Greer, P.E. (online)

Haley & Aldrich, Engineer



## Washington's Cleanup Process

- The Model Toxics Control Act (MTCA) is Washington's environmental cleanup law. It provides requirements for contaminated site cleanup and sets standards that protect human health and the environment.
- WA Dept of Ecology (Ecology) enacts MTCA and oversees cleanups.
- The MTCA cleanup process is completed in steps over a variable timeline.





## **Site Details**

#### Site Name:

Whidbey Marine & Auto Supply

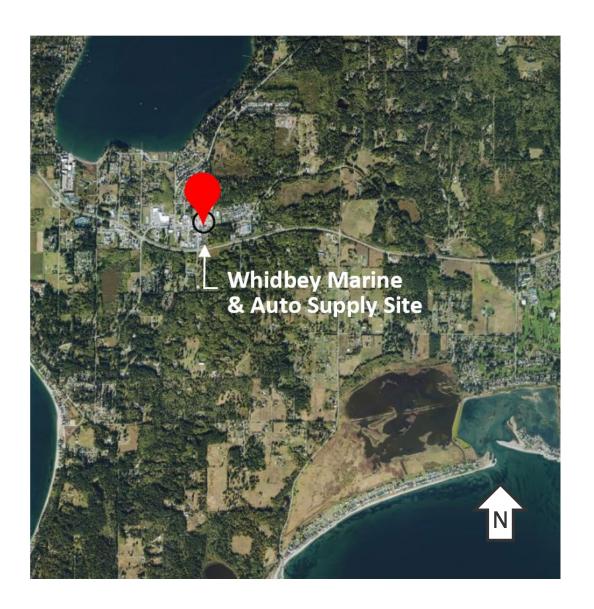
#### Site Address:

1695 East Main Street

Freeland, Washington

Facility Site ID: 17222251

Site Cleanup ID: 5610





## Site Background

- 1971–2014: Whidbey Marine & Auto Supply operated as a retail gasoline service station, auto and boat supply store, and auto repair facility.
- 2005: A release of unleaded gasoline from an underground storage tank was reported to Ecology. The site was entered into Ecology's Voluntary Cleanup Program (VCP), which helps property owners manage cleanups under MTCA.
- 2006–2011: A series of interim actions (or early partial cleanups) took place.

Continued on next slide



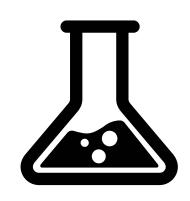
## Site Background

- 2012-2016: Continue groundwater monitoring.
- 2017-2020: The site was terminated from VCP in 2017 and entered into the Washington Pollution Liability Insurance Agency (PLIA) Petroleum Technical Assistance Program (PTAP). In 2020 PLIA terminated the site from its program and Ecology took over.
- 2021-2025: Ecology's Toxics Cleanup Program awarded state funded contracts with consulting firm Haley & Aldrich (HA) to continue the cleanup process under MTCA.



## Study the site (Remedial Investigation)

- The Remedial Investigation (RI) assessed the site for contaminants of concern.
- Investigations found the following contaminants were present at levels that exceeded standards under MTCA.
  - **Soil:** Total Petroleum Hydrocarbons (TPH) and associated chemical contaminants such as benzene, toluene, ethylbenzene, and total xylene (ie: BTEX). Other contaminants also included tetrachloroethylene (PCE).
  - **Groundwater:** TPH and associated chemical contaminants such as benzene, toluene, ethylbenzene, and total xylene (ie: BTEX). Other contaminants included PCE and trichloroethylene (TCE).





## **Groundwater Contamination**

- Beneath the site, there are two distinct groundwater zones: a perched zone about 60 feet below the ground surface and a deeper zone about 100 feet below the ground surface.
- The deeper zone comprises the regional aquifer or Sea-Level Aquifer, which is Whidbey Island's main source of drinking water.
- The Freeland Water and Sewer District operates four drinking water supply wells located south and south-east of the site that pull water from the Sea-Level Aquifer.

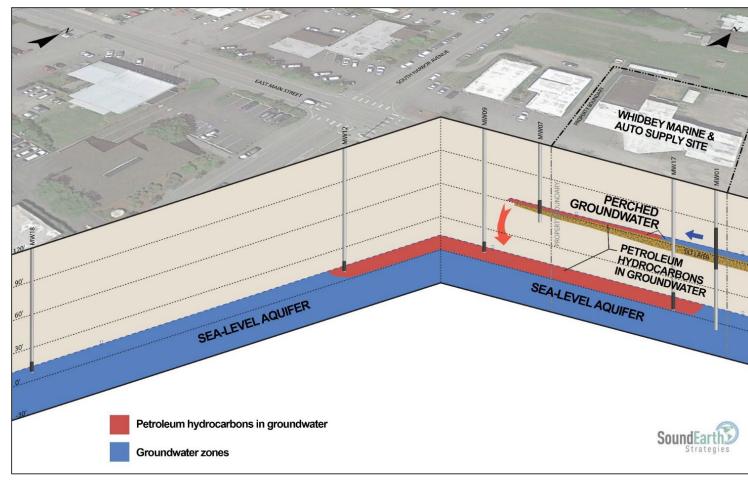


Four drinking water supply wells south and south-east of the site



## **Groundwater Contamination**

- Contamination has slowly traveled through the subsurface reaching both the perched groundwater zone and the Sea-Level Aquifer in the vicinity beneath the property.
- There is no immediate threat to the drinking water supply. However, the contamination remains a concern and must be addressed.
- Groundwater will be monitored periodically



Extent of groundwater contamination



## Consider the options (Feasibility Study)

The **Feasibility Study (FS)** evaluated the following four cleanup methods (alternatives) by comparing the costs and environmental benefits.

- Alternative 1: Thermal remediation, Monitored Natural Attenuation (MNA), institutional controls, and compliance monitoring
- Alternative 2: Chemical oxidation (ISCO) treatment, MNA, institutional controls, and compliance monitoring
- Alternative 3: Permeable sorptive barrier (PSB), MNA, institutional controls, and compliance monitoring
- Alternative 4: MNA, institutional controls, and compliance monitoring





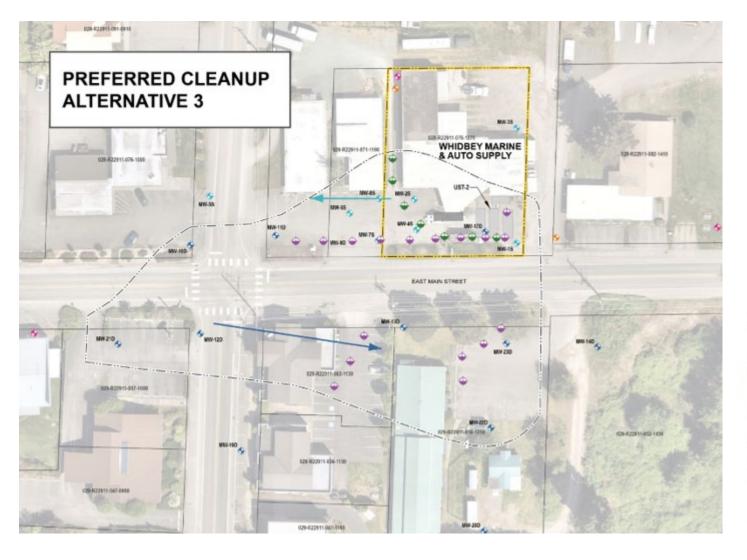
## Preferred cleanup alternative

**Alternative 3,** the preferred cleanup alternative, consists of the following activities and is shown on the next slide:

- Permeable sorptive barrier (PSB): This treatment involves the use of liquid activated carbon to treat contaminated groundwater flowing off-property.
- MNA: This relies on natural processes to decrease (or "attenuate") concentrations of contaminants in soil and groundwater.
- Institutional controls: Legal or administrative measures will be put in place to restrict or prohibit activities that could result in exposure to contaminants.
- Compliance monitoring: The groundwater will be monitored during the cleanup restoration time frame of 30 years to confirm the cleanup action protects human health and the environment.



## Preferred cleanup alternative



#### LEGEND

#### **PSB TREATMENT POINTS**

- Treatment point in perched groundwater
- Treatment point in Sea-Level Aquifer

#### PROPOSED COMPLIANCE MONITORING WELLS

- Perched groundwater monitoring well
- Sea-Level Aquifer groundwater monitoring well

#### **EXISTING WELLS**

- Perched groundwater monitoring well
- Sea-Level Aquifer monitoring well
- Groundwater flow direction, perched zone
- Groundwater flow direction, Sea-Level Aquifer
- Former pump island
  - Former underground storage tank (UST)
- Currently known site boundary
- Property boundary
  - Parcel boundary

#### NOTES

- All locations and dimensions are approximate.
- Currently known site boundary represents the approximate extent of known chemical concentrations detected above applicable screening levels.
- Groundwater flow directions are inferred from measurements made by Haley & Alrich during 2024 sampling.



### Review & comment on documents

Ecology invites you to review and comment on the following documents for the Whidbey Marine & Auto Supply cleanup site.

- Remedial Investigation: Details the types and locations of contamination at the site.
- Feasibility Study: Explains the different cleanup methods, called alternatives, including Ecology's preferred cleanup alternative. This study is combined into one document with the Remedial Investigation.
- Public Participation Plan: Describes how Ecology will inform the community about the site activities and ways to become involved.

Access the documents here: <a href="https://go.ecology.wa.gov/WhidbeyMarine">https://go.ecology.wa.gov/WhidbeyMarine</a> (Printed documents are also available at the Freeland Library.)





## What happens next?







### May 19-June 20, 2025

2025-2026

2025-2027

 Hold the public comment period with an open house event

- Respond to the public comments
- Finalize the documents
- Plan the cleanup (Cleanup Action Plan)



# **Submit Your Comments**

May 19, 2025 12:00 am to June 20, 2025 11:59 pm



#### **Comment online:**

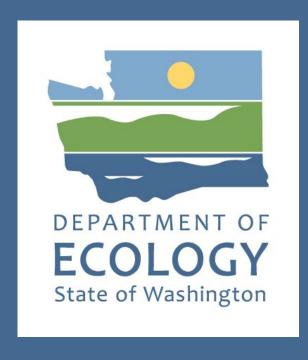
https://go.ecology.wa.gov/WhidbeyMarineComments

#### OR



## **Contact the Site Manager:**

John Rapp 913 Squalicum Way, Unit 101 Bellingham, WA 98225 John.Rapp@ecy.wa.gov



## Thank you

John Rapp, Site Manager 206-247-3242 John.Rapp@ecy.wa.gov

Kristen Forkeutis, Outreach Specialist 425-240-4353 Kristen.Forkeutis@ecy.wa.gov

#### Reminder:

A digital PDF of this presentation will be available on Ecology's webpage: https://go.ecology.wa.gov/WhidbeyMarine