



Naval Air Station Whidbey Island Restoration Advisory Board Meeting November 12, 2024



NAS Whidbey Island RAB Meeting



Welcome WebEx attendees!

Please type in the chat:

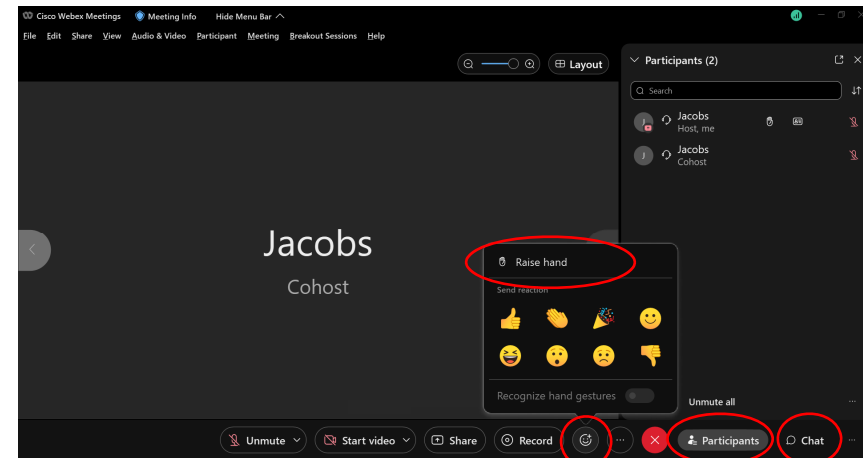
- first and last name
- email address
- phone number

Turn off video to preserve bandwidth

Online support available:

Leti Solaun: 352-246-5246

WebEx Overview



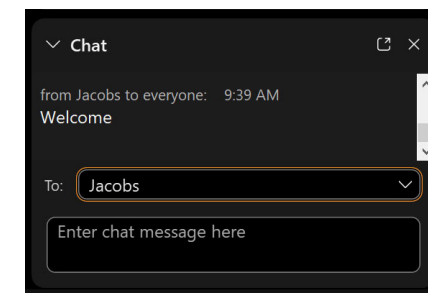
Everyone is muted on entry
To ask a question – click the smiley face, then select “Raise Hand” to request the moderator unmute you

Participants Tab
Click to see list of participants

Chat Tab
Click to type a question in the chat box

Call in:
844-992-4726

Access Code:
2631 977 1674





Agenda



- **Welcome and Introductions**
- **Meeting Guidelines**
- **RAB Purpose & Administrative Items**
- **Environmental Restoration Program Update**
 - Area 6 Landfill
 - Military Munitions Sites
 - State Petroleum Sites
 - Per- and Polyfluoroalkyl Substances (PFAS) Drinking Water and Investigation
- **Community Comments/Q&A**
- **Action Items/Next RAB**



Welcome and Introductions



- **Captain Gammache**
- **RAB Community Co-Chair:** Gary Winlund
- **Navy Co-Chairs:** Kendra Clubb & Laura Muhs
- **RAB Members:**
 - Celine Servatius*
 - Maddie Rose*
 - Joe Grogan*
 - Martha Yount*
 - Philip Derise*

**voting member*



Recognition of Al Williams



- **Began serving on RAB during 2017**
- **Al has been great facilitator and communicator of conversations in the community including:**
 - **Writing several opinion pieces in the local newspaper**
 - **Bringing community concerns to the Navy through the RAB co-chairs**
- **Al's dedication to volunteering was shaped by his childhood of growing up during WWII and having three generations of relatives serving in the military. Al “considered the opportunity for volunteer service to simply be paying a debt.”**
- **We sincerely appreciate all Al has done on the RAB and for the community.**



Welcome and Introductions



- **RAB Members (continued):**
 - Chan Pongkhamsing (EPA)
 - Binod Chaudhary (Ecology)
- **Presenters:**
 - Laura Muhs, Laura Himes, & Kendra Clubb
- **Other subject matter experts:**
 - Christie Kroskie, Scott Elkind, Janice Horton
- **Navy Public Affairs Officers:**
 - Michael Welding & Amanda Surmeier
- **Meeting Host/IT support/Stenographer/Facilitator:**
 - Jennifer Madsen, Leti Solaun, Eleanor Mitchell, JoAnn Grady



Question and Answer Guidelines



RAB Members will be invited to ask questions or comment about the work after each Navy presentation. Please raise your hand (or use the 'raise hand' option on your WebEx page) and when called on, state your name for the scribe.

Community Member comments or questions are welcome during the "community" portion of the meeting after all the Navy presentations and RAB members have had the opportunity to speak. Please raise your hand, and when called on, state your name for the scribe.

We request that comments and questions focus on presentation topics and observe a 2-minute time limit to allow for everyone to participate in the Q&A.



WEBEX Guidelines



Online Attendees

- All microphones are muted to reduce feedback.
- Videos are off to preserve bandwidth.
- By phone dial ***3** to raise your hand to notify the web host that you have a comment or question, and ***6** to unmute yourself after being called on. Please state your name for the scribe.
- If you prefer to write your comment, please enter your comment in the chat box and the web host will state your comment in the order received.



Overview : What is the RAB?



“A RAB is a stakeholder group that meets on a regular basis to discuss **environmental restoration** at a specific property that is either currently or was formerly owned by the Department of Defense (DoD), but where the DoD oversees the environmental restoration process....”

RAB members are a conduit of information between the community and the Navy.

What is *Environmental Restoration*?

- Includes all environmental investigations and/or cleanup that fall under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulatory framework.
- Also includes the Military Munitions Response Program (MMRP) and State-regulated Petroleum cleanups.
- Does not include installation compliance issues – pipelines, underground storage tanks, storm water, etc.

More information on RABs, including the RAB Rule Handbook, can be found at: <http://www.denix.osd.mil/rab/home/> and <https://pacific.navy.mil/NASWIRAB/>



Administrative Items



- **Approve October 2023 RAB Meeting Minutes**
- **Review October 2023 RAB Action Items**
 - **Navy to connect with Al Williams regarding residents whose water may not have been sampled during their phase of sampling**
 - In Jan 2024, the Navy mailed letters and postcards to property owners and tenants in the sampling areas near NASWI that had not previously been sampled to request permission to sample their well.
 - **Navy to follow up with Krista Jackson regarding deeper well depths for her property**
 - Navy provided the information to Ms. Jackson.
 - **Navy to provide more information on the Area 31 cleanup status:**
 - 1996 - Removal of the oil/water separator and the ash pile
 - 1996-2000 – Conducted oil skimming and bioventing. Terminated after EPA and Ecology agreed the remedial action objectives had been successfully met and the recovery system had removed fuel to the practicable endpoint.
 - Land use controls limiting site access and prohibiting groundwater use.
 - Groundwater is naturally attenuating the residual petroleum contamination and it is not migrating off-site.



Administrative Items (Cont.)



- **Review October 2023 RAB Action Items**
 - **Navy to follow up with Shannon Stone to provide information on the PFAS investigations.**
 - Navy spoke directly to Ms. Stone after the RAB meeting in Oct 2023.
- **New Action Items:**
 - **Reviewing RAB Charter & RAB member application**
 - RAB Navy and Community Co-Chairs review and suggest changes for voting RAB members to consider



NAS Whidbey Island Environmental Restoration



Laura Himes, P.E.

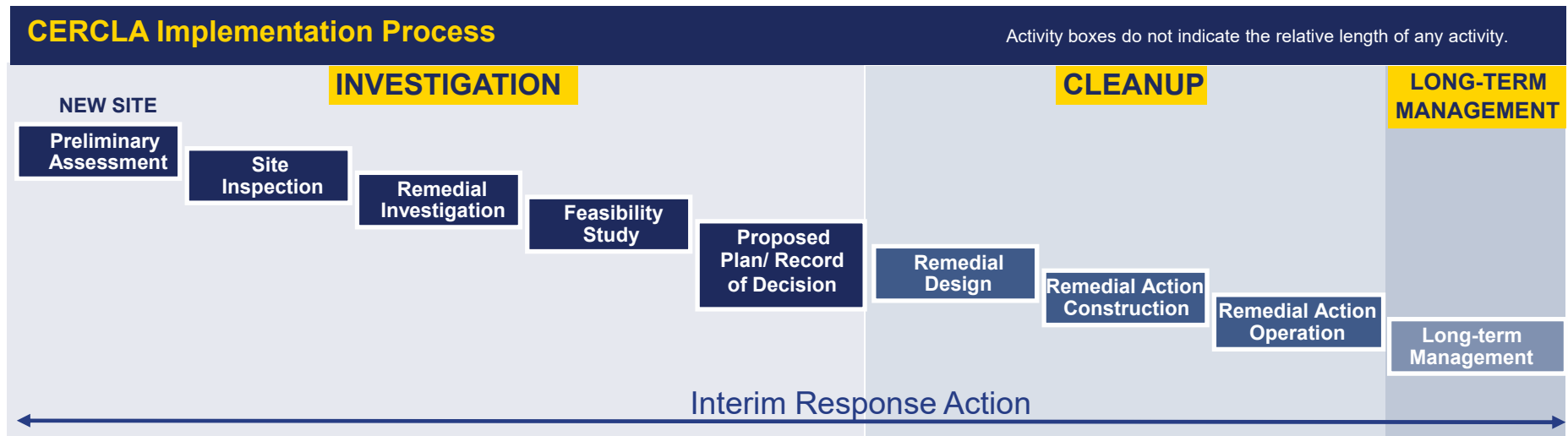


NAS Whidbey Island Environmental Restoration Sites





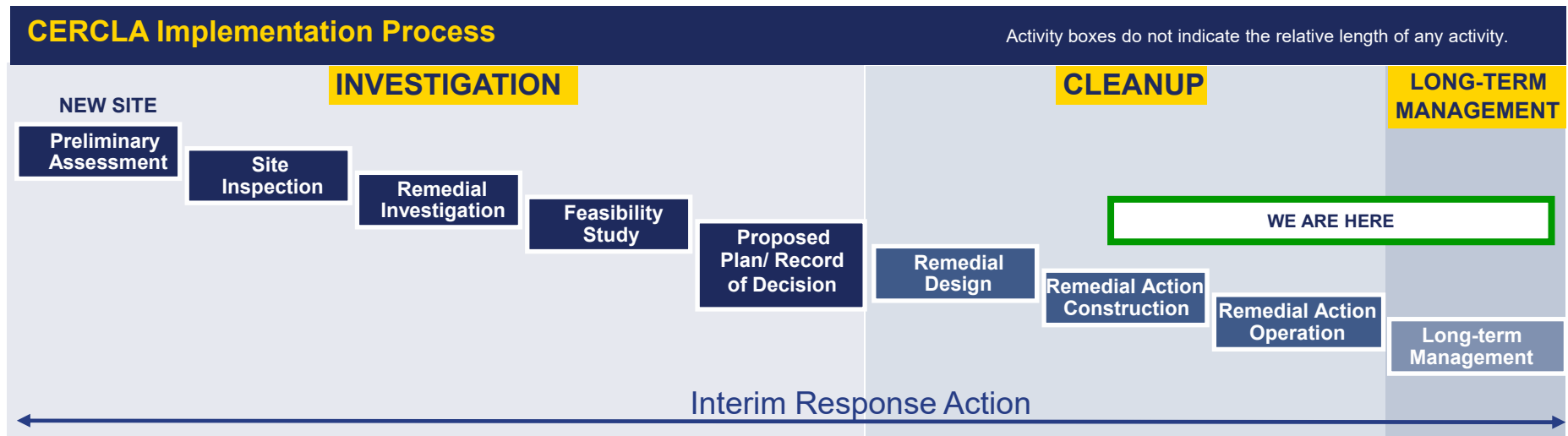
CERCLA PROCESS



- Conducted under CERCLA
- Interim response actions, such as drinking water response actions, can occur any time in the CERCLA process
- Formal public comment period for Proposed Plans



CERCLA Five Year Review (FYR)



- FYRs are required for sites where cleanup is complete, but land use controls are required where cleanup is ongoing (including groundwater monitoring) and/or have land use controls to restrict land use.
- The Sixth CERCLA FYR process for NAS Whidbey Island has been completed for sites that have a Record of Decision (ROD).
- Ensure that the remedial actions selected in the RODs for Operable Units 1, 2, 3, 4 and 5 remain protective of human health and the environment.
- Final signed July 2024



CERCLA Program FYR Protectiveness Statements



Protectiveness evaluations and statements

- Remedies at OU 1, OU 2, OU 3, and OU 5 are short-term protective of human health and the environment based on per- and polyfluoroalkyl substances (PFAS) and OU 1 Area 6 remedy implementation.

Operable Unit	Area
Operable Unit 1 (Ault Field)	Area 5, Highway 20/Hoffman Road Landfill
	Area 6, Landfill Operations Area and Former Hazardous Waste Storage Area
Operable Unit 2 (Ault Field)	Area 2, Western Highlands Landfill
	Area 3, 1969 – 1970 Landfill
	Area 4, Walker Barn Storage Area
	Area 14, Pesticide Rinsate Disposal Area
	Area 29, Clover Valley Fire School
Operable Unit 3 (Ault Field)	Area 16, Runway Ditches
Operable Unit 5 (Ault Field)	Area 1, Beach Landfill
	Area 31, Former Runway Fire School
	Area 52, Jet Engine Test Cell





CERCLA Program FYR Protectiveness Statements



Protectiveness evaluations and statements

- Remedies at OU 4 remain protective of human health and the environment.

Operable Unit	Area
Operable Unit 4 (Seaplane Base)	Area 39, Auto Repair and Paint Shop
	Area 41, Building 25 and Building 26 Disposal Area
	Area 44, Seaplane Base Nose Hangar
	Areas 48 and 49, Seaplane Base Salvage Yard and Landfill





CERCLA Sixth Five Year Review Protectiveness Summary



- **The remedy at OU 4 remains protective of human health and the environment.**
- **The remedies at OU 1, OU 2, OU 3, and OU 5 are short-term protective of human health and the environment.**
 - The remedies at OU 1 Area 5, OU 2, OU 3, and OU 5 currently protect human health and the environment with respect to contaminants addressed in the ROD.
 - Progress is being made towards meeting the remedial action objectives (RAOs) as documented through Land Use Controls (LUCs) and monitoring of groundwater.
 - The remedies at OU 1 Area 6, OU 2, OU 3, and OU 5 are short-term protective while ongoing PFAS investigations and evaluations are conducted through the CERCLA process to refine the PFAS conceptual site model (CSM) and potential exposure risks.
 - PFAS are present in groundwater at concentrations exceeding EPA's regional screening levels (RSLs).
 - Known off-site drinking water exposures have been addressed and on-site LUCs prevent exposure to groundwater
 - PFAS may impact the future protectiveness of the remedy
 - For the OU 1 Area 6 remedy to remain protective in the long-term, the amended remedy proposed in the ROD Amendment needs to be fully implemented (currently implementing).



Recommendations and Follow-up Actions from this Sixth Five-Year Review



OU 1 Area 6

- Fully implement the ROD Amendment (as of July 2024, still constructing the second AOP groundwater treatment system and finishing downgradient groundwater delineation investigation)

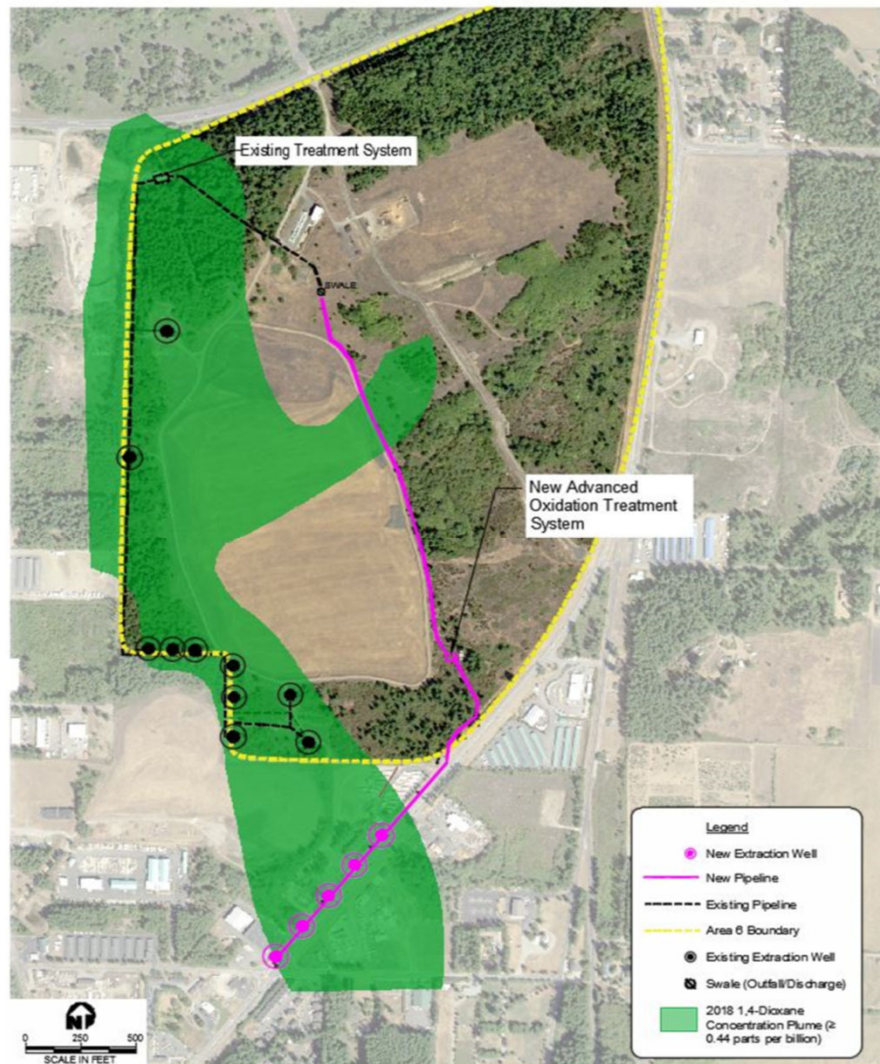
OU 1, 2, 3, and 5

- Continue ongoing PFAS investigations and evaluations through the CERCLA process to refine the PFAS Conceptual Site Models and assess potential exposure risks



Area 6 - ROD Amendment Summary

September 2019



Area 6 –1993 ROD:

- Previous landfill operations: Former Industrial Waste Disposal Area (1969-early1980s); Area 6 Landfill (1969-1992)
- ROD remedy includes: Landfill cap; groundwater treatment plant for chlorinated solvents; groundwater monitoring; and land use controls

1,4-dioxane:

- Emerging contaminant 1,4-dioxane was discovered in 2003, current groundwater treatment plant does not treat it

ROD amendment includes the following:

- Adds 1,4-dioxane as a chemical of concern (COC)
- Remove COCs (1,1-DCA and cis-1,2-DCE) that have reached cleanup levels
- Modifies cleanup levels for 1,1-DCE and vinyl chloride
- Groundwater treatment using Advanced Oxidation Processes (AOP) including new additional treatment plant to south, upgrading current treatment plant to AOP from air stripper and expanding the well network.
- Integrated remedy that will comprise of an active treatment component, monitored natural attenuation (MNA) (passive treatment), and Institutional Controls (ICs)
- Prior to the transition from active to passive remediation, the Navy will validate the efficacy of MNA.



Area 6 Landfill Update



Work conducted since last RAB...

- Southern AOP Groundwater Treatment System:
 - AOP full time operation since October 2021
 - Treated 136 million gallons to date
- Western AOP Groundwater Treatment Plant:
 - New system includes 4 new production wells
 - Started operation of upgraded system in September 2024
 - New system has met remedial goals
- Downgradient Delineation:
 - The original sampling results of all seven new monitoring wells was non-detect
 - Conducted well camera, resurvey, and redevelopment for 6-DW-38 in Sept 2024
 - Resample all seven wells and 6-DW-38 in Oct 2024 – awaiting validated results
- Routine operation activities:
 - Performed land use control inspections
 - Conducted on-going west groundwater treatment system and landfill maintenance and operation
 - Conducted groundwater monitoring



Area 6 Landfill – West AOP Plant Construction





Area 6 Landfill Update



Work planned before next RAB...

- Western AOP system:
 - Finish construction activities
 - Prepare Construction Completion Report
 - Operate new system
- Downgradient delineation investigation:
 - Prepare Downgradient Delineation Investigation Report
- Routine operation activities:
 - Continue on-going south AOP groundwater treatment system and landfill maintenance and operation
 - Conduct groundwater monitoring



Military Munitions Response Program Update



Presenter:

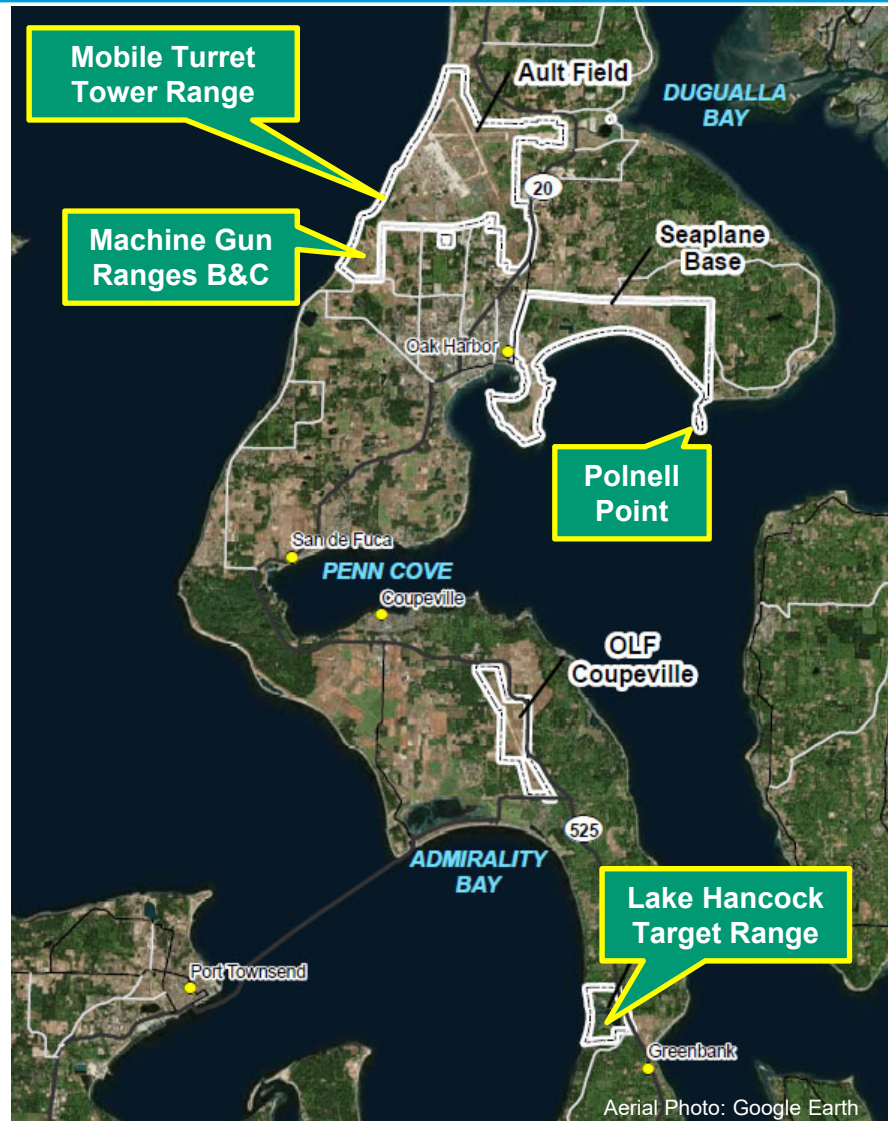
Laura Himes, P.E.

Primary Subject Matter Expert:

Scott Elkind, P.E.



Military Munitions Response Program Update





Lake Hancock Target Range



Work conducted since last RAB...

- Reporting
 - Finalized 2023 Surface Clearance Completion Report
- 2023 Surface Clearance
 - Complete surface clearance activities and LUC repairs in November 2023.
 - 118 munitions items identified. All were classified as “Material Documented as Safe (MDAS)”
- 2024 Surface Clearance
 - Complete surface clearance activities and LUC repairs in September 2024.
 - 160 items identified, all MDAS.





Lake Hancock Target Range



Work planned before next RAB...

- Removal Action and Land use controls, including:
 - Complete 2025 surface clearance within entire removal action area
 - Maintain signage and fencing
- Reporting:
 - Complete 2024 Surface Clearance Completion Report



Future work planned...

- Continue annual surface clearance



State Petroleum Program Update



Presenter:

Laura Himes, P.E.

Primary Subject Matter Expert:

Christie Kroskie, L.G.



State Petroleum Program Update

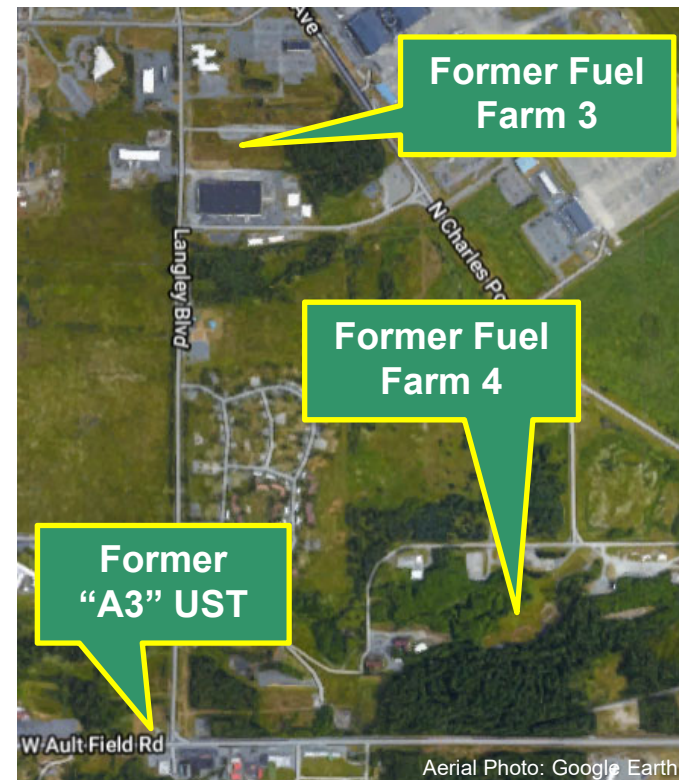
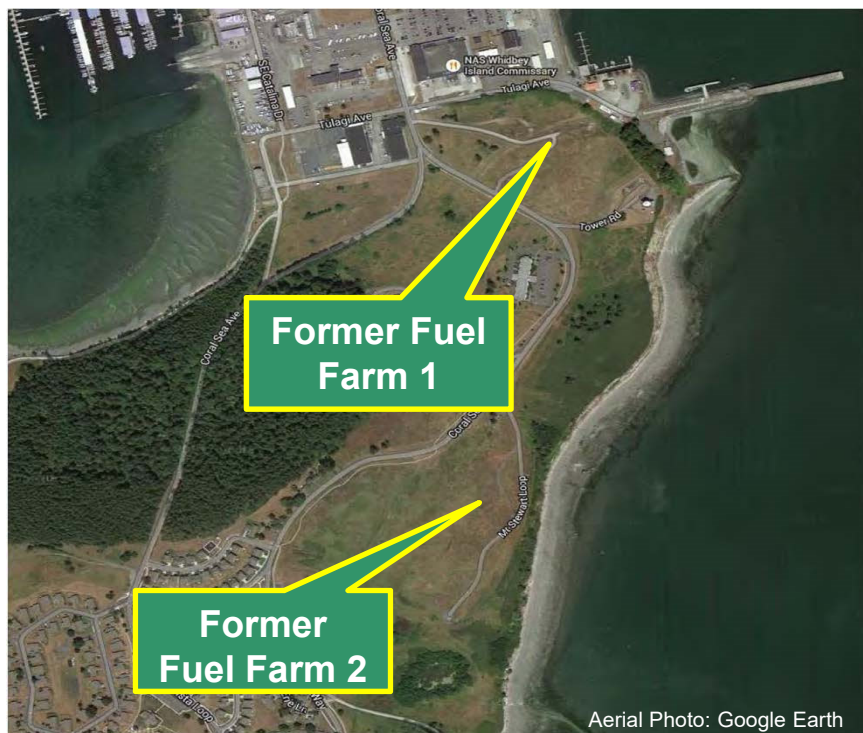


Work conducted since last RAB:

- Continued free-product recovery and groundwater monitoring/sampling

Work planned before next RAB:

- Free-product recovery and groundwater monitoring/sampling at Fuel Farms
- Land Use Inspection and FYR at Former A3 UST





5 Minute Break

Break



PFAS Drinking Water & Investigation Update



Presenter: Kendra Clubb, P.E.

Additional Subject Matter Experts:

Laura Himes, Janice Horton, & Christie Kroskie



PFAS Policy Background



- In May 2016, the U.S. Environmental Protection Agency (USEPA) released lifetime health advisories for two PFAS, perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), at 70 parts per trillion (ppt) for both PFOS and PFOA, individually or combined.
- In June 2016, Deputy Assistant Secretary of the Navy for Environment issued policy requiring drinking water sampling and testing for PFAS at Navy installations.
- On 26 April 2024, the EPA published the final National Primary Drinking Water Regulation for six PFAS and established enforceable Maximum Contaminant Levels (MCLs), effective 25 June 2024
- On 3 Sept 2024, the DoD published a memorandum that describes DoD's plans to incorporate the EPA's drinking water regulation into DoD's ongoing PFAS cleanups and prioritize actions to address private drinking water wells with the highest levels of PFAS from DoD activities.



PFAS Off-Base Drinking Water Update



- 331 wells sampled to-date near OLF Coupeville, Ault Field, and Area 6 Landfill
- 26 wells (63 homes) exceed new DoD DW interim action levels
- Completed interim removal actions for 14 wells/33 homes including PFAS treatment to the Town of Coupeville's drinking water system (exceeded 70 ppt PFOS and/or PFOA)
- Interim removal actions underway for 7 wells/10 homes (exceed 70 ppt PFOS and/or PFOA)
- New interim removal actions planned for 5 wells/20 homes (exceed DoD's new interim action level)
- 66 wells currently sampled as part of the biannual sampling program (specific to NAS Whidbey Island)
 - Wells with prior detections of PFAS with EPA MCLs
 - Wells adjacent to properties with wells with exceedances of 70 ppt PFOS and/or PFOA
 - Wells adjacent to the Navy's interim removal actions



PFAS Off-Base Drinking Water Update



Work conducted since last RAB...

- Continue short term solutions, such as bottled water or point of use filters
- Biannual drinking water well sampling (Nov 2023 & April 2024)
 - Identified one well/one home above 70 ppt PFOS and/or PFOA
- Conducted drinking water investigation in Feb 2024
 - Identified 3 wells/5 homes above 70 ppt PFOS and/or PFOA
- Received DoD guidance to implement the EPA's MCLs in Sept 2024
 - Identified 5 wells/20 homes above DoD DW levels
- Long-term solutions in Coupeville:
 - Town operated the PFAS treatment system, including media changeout in Aug 2024 and quarterly sampling
 - Finalized work plans & access agreements for new drinking water line
- Long-term solutions in Oak Harbor:
 - New well (connection in Nov 2021) – PFAS monitoring & tech memorandum
 - Started removal actions for 4 wells/6 homes (new wells and City of Oak Harbor connections)



PFAS Off-Base Drinking Water Update

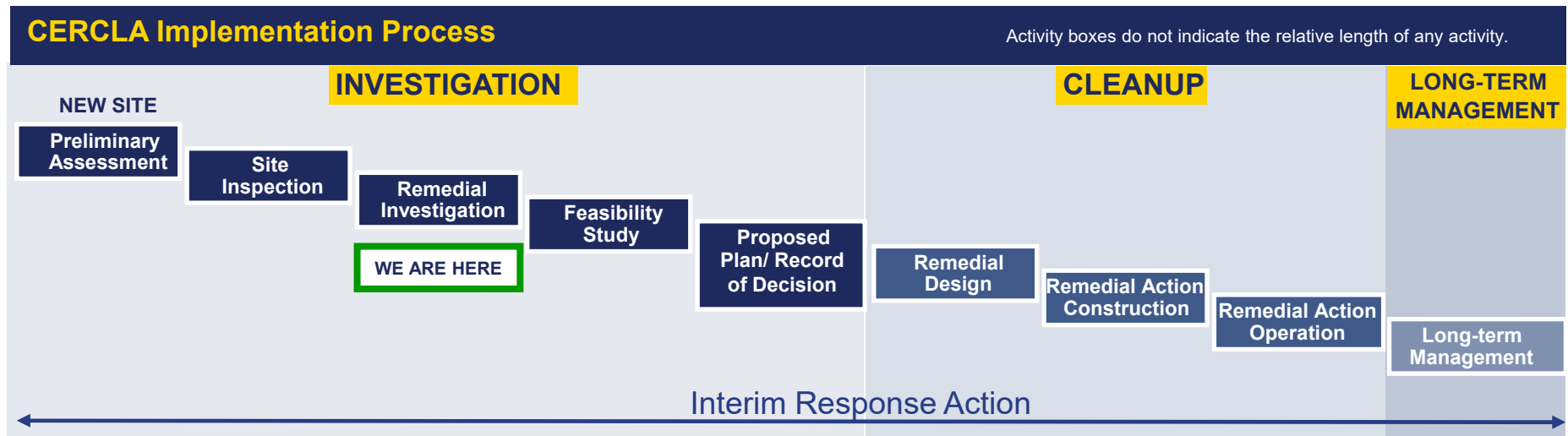


Work planned before next RAB...

- Biannual drinking water well sampling (Fall 2024 and Spring 2025)
- Finalize Action Memorandum for Point of Use Filters
- Finalize Action Memorandum for long-term solutions at 5 wells/20 homes
- Long-term solution in Coupeville:
 - Town will continue to operate PFAS treatment system, including quarterly sampling and granular activated carbon (GAC) changeout, as necessary
 - Construct final segment of new waterline – fieldwork Jan-Mar 2025
 - Start TCRA plans for one home
- Long-term solution in Oak Harbor (near Ault Field and Area 6):
 - New well (connection in Nov 2021) – Continue PFAS monitoring
 - Complete TCRA for 4 wells/6 homes (new wells and City of Oak Harbor connections) – start quarterly monitoring of new wells
 - Start TCRA plans for 4 wells/19 homes



Where are we in PFAS investigations?



- **Conducted under CERCLA**
- **Interim response actions, such as drinking water response actions, can occur any time in the CERCLA process**
- **Formal public comment period for the Proposed Plans**



NAS Whidbey Island PFAS Remedial Investigation (RI) Locations



- **Ault Field**

- Former Area 6 Landfill
- Former Runway Fire School
- Current Fire Training Area
- Ault Field Airfield
- Former Wastewater Treatment/Sewage Lagoon Area

- **Seaplane Base**

- Site 61 - Maintenance Building
- Former Biosolids Application Area

- **OLF Coupeville**



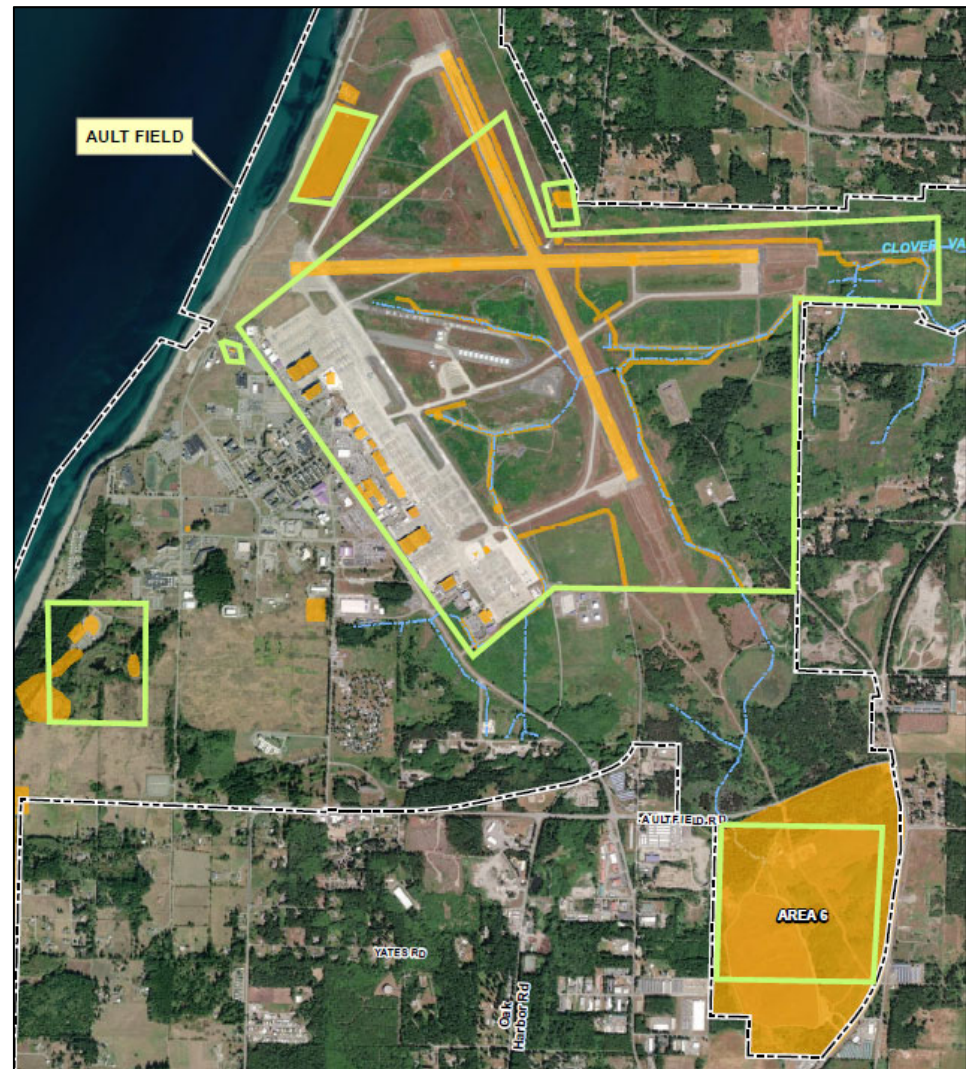


Ault Field PFAS RI Locations



- Former Area 6 Landfill
- Area 31, Former Runway Fire School
- Current Fire Training Area
- Ault Field Airfield
- Former Wastewater Treatment/Sewage Lagoon Area

NOTE: Green boundaries are approximate areas where RIs are being conducted.



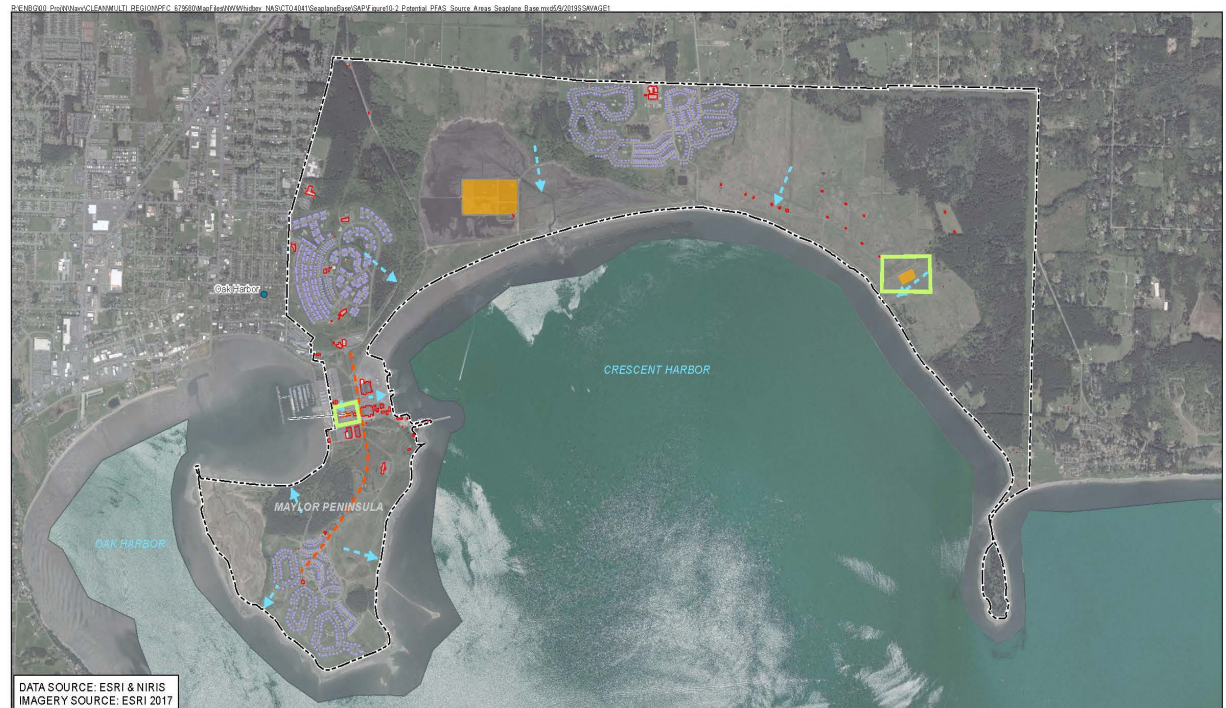


Seaplane Base PFAS RI Locations



- **Site 61- Maintenance Building**
- **Former Biosolids Application Area**

NOTE: Green boundaries are approximate areas where RIs are being conducted.





PFAS Investigations Update



Work conducted since last RAB...

- OLF Coupeville RI:
 - Prepared the draft Phase 1 RI report
 - Started planning for Phase 2 RI (fieldwork starts June 2025)
- Current Fire Training Area RI:
 - Conducted limited fieldwork in Nov 2023 & Sept 2024
 - Preparing the draft Phase 1 RI report
- Area 31, Former Runway Fire School & Ault Field Airfield RI:
 - Prepared the draft Phase 1 RI report (Area 31 only)
 - Started planning for Phase 1 Ault Field Airfield RI & Phase 2 Area 31RI (fieldwork anticipated to start March 2025)
- Area 6 Landfill RI:
 - Conducted fieldwork Nov/Dec 2023, Feb 2024, & Sept 2024
 - Preparing the draft Phase 1 RI report
- Baseline Groundwater Model Report for Ault Field/Seaplane Base:
 - Draft Report reviewed by EPA and Ecology



PFAS Investigations





PFAS Investigations Update



Work planned before next RAB...

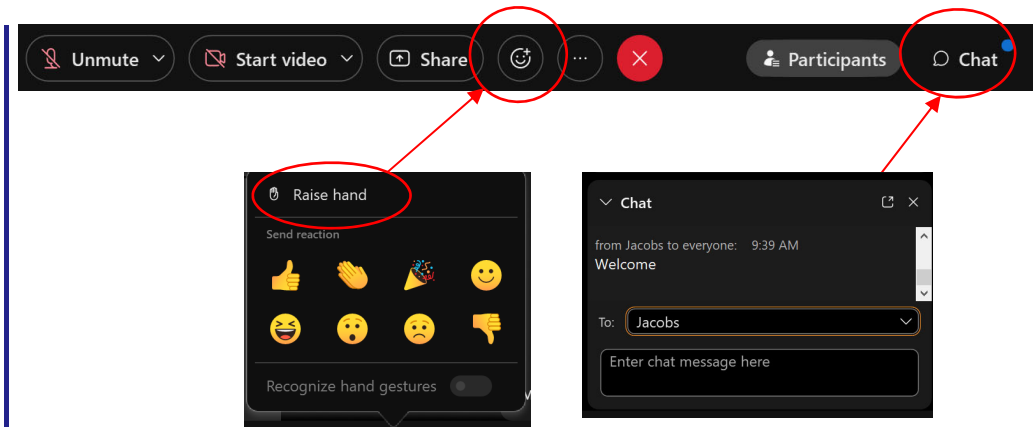
- OLF Coupeville RI:
 - Finalize Phase 1 RI report
 - Finalize Phase 2 RI work plans & start fieldwork in June 2025
- Current Fire Training Area RI:
 - Finalize Phase 1 RI report
 - Award Phase 2 RI
- Area 31, Former Runway Fire School & Ault Field Airfield RI:
 - Finalize Phase 1 RI report (Area 31 only)
 - Finalize Phase 2 (Area 31) & Phase 2 (Airfield) work plans & start fieldwork in Mar 2025
- Area 6 Landfill RI:
 - Finalize Phase 1 RI report
 - Award Phase 2 RI
- Baseline Groundwater Model Report for Ault Field/Seaplane Base:
 - Finalize report
- Site 61, Seaplane Base Maintenance Building:
 - Award Phase 1 RI



Community Comments



- **We welcome comments from community members**
- **In-person**
 - Please use microphone and state your name.
- **Virtual**
 - Raise hand, “Raise Hand” in WebEx, or chat to the host to unmute your audio line
 - If joined by phone, dial ***3** to raise hand and ***6** to unmute
 - If prefer to write a comment, please enter it in the ‘chat box’
- **Questions will be answered in the order received**
- **Please keep comments to 2 minutes**



WebEx Overview

- **Use the “Raise Hand”**
 - the moderator will “unmute” you to ask your question
- **Use the “Chat Box”**
 - type question at any time
 - the moderator will ask your question



Action Items/Next RAB



- **Action Items**
- **Next RAB ~ Fall 2025**



Relevant websites



- **NASWI RAB**

<https://pacific.navfac.navy.mil/NASWIRAB>

- **NASWI and DoD PFAS**

<https://pacific.navfac.navy.mil/NASWIPFAS>

<https://www.acq.osd.mil/eie/eer/ecc/pfas/map/pfasmap.html>

- **Navy Environmental Restoration Program**

<https://www.navfac.navy.mil/Business-Lines/Environmental/Products-and-Services/Environmental-Restoration/>



THANK YOU



**Thank you for attending the
November 2024 NAS Whidbey Island RAB**

**For more information or additional
questions please contact:**

Naval Air Station Whidbey Island Public Affairs

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Phone: 360-257-2286