Pacific Northwest Tribal Clean Water Act Training Workshop
November 17-20, 2025 | Tulalip, WA

Agenda

MONDAY, NOVEMBER 17, 2025
DAY 1: CLEAN WATER ACT (CWA) PRIMER AND FIELD TRIPS

To start off the training workshop, we will provide a Clean Water Act (CWA) primer session and will identify the linkages among CWA programs and how they work in concert with one another. Prior to the training, attendees should watch the CWA Overview video, which is available on the workshop webpage. *(Meeting room: Orca 1)*

9:30am – 10:00am: Welcome/Opening Invocation, Tulalip Tribes representative

10:00am – 10:15am: Introductions and Overview of the Training, Marla Stelk, NAWM and Andy Robertson, SMUM GeoSpatial Services

10:15am – 10:45am: Tribal Clean Water Program Basics, Dan Kusnierz, Penobscot Nation and National Tribal Water Council

10:45am – 11:00am: Morning break

11:00am – 11:30am: A Basic Introduction to Water Quality Standards (WQS), Yvonne Vallette

11:30am – 12:30pm: A Basic Introduction to Monitoring, Data, & Assessment, Angie Reed, Penobscot Nation and Tribal Exchange Network Group; Marissa Paulling, Northwest Indian Fisheries Commission; Seth Book, Skokomish Tribe

12:30pm – 1:30pm: Group lunch (provided)

AFTERNOON FIELD TRIPS *(1:30pm – 5:00pm)* – Attendees will participate in one of the following field trips to area sites. This will be an opportunity to view examples of the water quality approaches that will be discussed during the training sessions, as well as an informal setting to get to know other workshop attendees.

Field Trip Option #1: Boeing Test Site

The Boeing Test Site field visit will explore wetland restoration, beaver co-habitation, and complex jurisdictional determinations. The Boeing Test Site is a 52-acre area located within Quil Ceda Village, a municipality of the Tulalip Tribes Reservation. The property's wetlands are significantly modified from years of use as a U.S. Army Ammunition Storage Depot during WWII and as a test location for aviation and rocket components for military and commercial applications from 1951-1999. The Boeing Test Site is a nexus of wetlands, salmon streams, historic railroad grades, groundwater contamination clean-up, and potential development opportunities to support Tribal sovereignty. During this field visit, participants will observe wetland restoration efforts as well as beaver coexistence devices and strategies. We will also see areas of challenging jurisdictional determinations and highlight efforts to recategorize our streams and wetlands under active WOTUS definitions.

Field Trip Option #2: Lochsloy Floodplain Restoration Project

The Pilchuck River is the first major tributary of the Snohomish River, and is a vital producer of Chinook, Steelhead, Coho and other salmon species. However, loss of side channel habitat and trees along the riverbank has decimated historical run sizes. The Lochsloy Project, completed earlier this year, reconnected the Pilchuck River to a section of floodplain and restored close to a mile of the River between Granite Falls and Lake Stevens, WA. In partnership with local landowners, we removed 600 feet of an old, functionless levee on the Middle Pilchuck River; installed 7 engineered log jams near the project; and cut in a reconnection between a 9-acre wetland and the Pilchuck. This project restored reach-scale river processes, salmon habitat, and advanced a collaborative vision for watershed recovery in the Pilchuck basin.

Field Trip Option #3: Big Flats and Qwuloolt Estuary

Big Flats is a Superfund Site also known as the Tulalip Landfill. Currently, the site is being maintained by the Tribe and the remedy is protective, per the 2023 Five-Year Review. In addition to the on-site landfill remedy, the regional natural resource trustee council developed a preliminary restoration plan that identified the Qwuloolt Project, a historic tidal marsh and forest scrub-shrub habitat, as having the highest potential for restoring the tidal wetlands lost at Big Flats. For over a hundred years the Qwuloolt project area had been cut off from the natural influences of the Snohomish River and Salish Sea tides by levees, drained by ditches instead of stream channels, and characterized by a monoculture of invasive reed canary grass instead of native shrubs and grasses. Through the cooperation of its many partners, the Qwuloolt Estuary was breached 10 years ago on August 28, 2015, reconnecting approximately 400 acres of estuary habitat at the mouth of the Snohomish River, returning the historic and natural influences of the river and tides to the Qwuloolt.

TUESDAY, NOVEMBER 18, 2025

DAY 2: IN-DEPTH TRAINING SESSIONS

First of two full days of sessions providing focused training sessions and Tribe-to-Tribe sharing of lessons learned and lived experiences. Day 2 will cover monitoring, assessment, and data management.

8:30am – 10:15am: In-depth Training on Monitoring and Assessment (*Orca 1*)

8:30am – 8:50am:	Considerations for Monitoring and Assessment, Lisa Kusnierz, EPA Region 10
8:50am – 9:10am:	Developing QAPPs, Cindy Fields, EPA Region 10
9:10am – 9:30am:	Clearwater River Toxics Assessment and Monitoring Project, Brooke Stowell, Nez Perce Tribe
9:30am – 9:50am:	Monitoring and assessment presentation, Jenna Ziogas, Jamestown S'Klallam Tribe
9:50am – 10:10am:	Setting up a biomonitoring program in the Kootenai River Basin, Genny Hoyle, Kootenai Tribe of Idaho

10:15am – 10:45am: Morning break

10:45am – 12:15pm: In-depth Training on Monitoring and Assessment *continued* (*Orca 1)*

Case Study of the Salish Sea Model: Advanced modeling around the State of Washington's water quality assessment data, its use in sewage management, and what it means for Tribes. Session will include presentation and group discussion.

Presenters: Erica Marbet, Squaxin Island Tribe; Cristiana Figueroa-Kaminski, Anise Ahmed, and Teizeen Mohamedali, Washington Department of Ecology; Mindy Roberts, Washington Conservation Action

12:15pm – 1:30pm: Group lunch (provided)

1:30pm – 3:00pm: In-depth Training on Data Management *(Concurrent sessions at introductory and advanced levels. Participants will select one of the two sessions based on knowledge and level of experience.)*

1:30pm – 3:00pm: Introductory Session (*Orca 1*)

1:30pm – 2:00pm:	Introduction to WQX, WQP demo, Alena Reynolds, Skokomish Tribe
2:00pm – 2:30pm:	Using R for data management, Angie Reed, Penobscot Nation, and Alena Reynolds, Skokomish Tribe
2:30pm – 3:00pm:	Use of GIS for Water Quality Programs, Kathy Allen, SMUM GeoSpatial Services

1:30pm – 3:00pm: Advanced Session (*Chinook 1*)

1:30pm – 2:00pm:	Tribal presentation on ATTAINS for monitoring and assessment, Kayla Bowe, Red Lake Nation (remote)
2:00pm – 3:00pm:	Tribal use of GIS field-based apps and data for water quality management, Michelle Totman, Michelle Bahnick, and Lacey Wright, Tulalip Tribes

3:00pm – 3:30pm: Afternoon break

3:30pm – 5:00pm: Tribal Closed Door Session (*Orca 1*) Facilitator: Marissa Paulling, NWIFC

WEDNESDAY, NOVEMBER 19, 2025

DAY 3: IN-DEPTH TRAINING SESSIONS

Second of two full days of sessions providing focused training sessions and Tribe-to-Tribe sharing of lessons learned and lived experiences. Day 3 will cover water quality standards and regulatory and non-regulatory approaches to program building.

8:30am – 10:10am: In-depth Training on Non-Regulatory Approaches to Program Building (*Orca 1*)

8:30am – 8:50am:	Overview of potential non-regulatory and regulatory pathways, Yvonne Vallette
8:50am – 9:10am:	Tribal presentation on non-regulatory approaches to program building, Valerie Streeter, Tulalip Tribes
9:10am – 9:30am:	Tribal presentation on non-regulatory approaches to program building, Kylie Ball, Nez Perce Tribe
9:30am – 9:50am:	Tribal presentation on non-regulatory approaches to program building, Eric Berntsen, Kalispel Tribe of Indians
9:50am – 10:10am:	Working together to implement 319, Kate Loy, Washington Department of Ecology

10:10am – 10:30am: Morning break

10:30am – 12:10pm: In-depth Training on Regulatory Approaches to Program Building (*Orca 1*)

10:30am – 10:50am:	Introduction to regulatory programs and TAS, Yvonne Vallette
10:50am – 11:10am:	Implementation of the Clean Water Act in northern Idaho/Eastern WA using the Spokane River PCBs, metals, and DO TMDLs and the SF Coeur d'Alene River metals 4b justification, Kristin Lowell, Lummi Nation
11:10am – 11:30am:	PNW Tribal Wetlands Working Group (TWIG), Rue Hewett Hoover, Nez Perce Tribe

11:30am – 11:50am: Planning and implementing low-tech, process-based wetland and floodplain restoration on Kalispel Aboriginal Lands in Idaho and Washington, Eric Berntsen, Kalispel Tribe of Indians

11:50am – 12:10pm: Wetland Functional Assessment incorporating Tribal cultural and spiritual history, Andy Robertson, SMUM GeoSpatial Services

12:10pm – 1:30pm: Group lunch (provided)

1:30pm – 3:20pm: In-depth Training on Water Quality Standards and Water Quality Certifications (*Orca 1*)

1:30pm – 2:00pm: Considerations for water quality standards and water quality certifications and Case study of TAS for 401, Erica Marbet, Squaxin Island Tribe

2:00pm – 2:20pm: A Meandering Path – Development of Swinomish Water Quality Standards and Steps Toward Implementation, Todd Mitchell and Shannon Stewart, Swinomish Indian Tribal Community

2:20pm – 2:40pm: Tribal presentation on WQS Revisions, Colleen Parrott, Chehalis Tribe

2:40pm – 3:00pm: Tribal presentation on Water Quality Standards, Nancy Schuldt, Fond du Lac Band

3:00pm – 3:20pm: Tribal presentation on 401 Certification, Kurt Nelson, Tulalip Tribes

3:20pm – 3:40pm: Afternoon break

3:40pm – 5:00pm: Bringing It All Together: Advancing Water Quality Goals Across Programs (*Orca 1*)
Recap of the Training, Group Q&A, and Closing, NAWM and SMUM staff

THURSDAY, NOVEMBER 20, 2025

DAY 4: HANDS-ON WORKSHOPS

Day 4 will feature hands-on workshops in smaller groups for attendees to apply the knowledge they've gained during the training and learn more in-depth skills in a particular area of focus. Attendees should sign up ahead of time for their preferred workshop.

Workshop #1: Hands-on Training on Field Monitoring Techniques *(Orca 1)*

- **Times**: 8:00 am – 12:00 pm
- **Session Description**: This session will be a chance to walk through data collection, introduce field equipment, and demonstrate field data collection techniques. The session may include both classroom and field components.
- **Presenters/Facilitators**: Seth Book, Dan Kusnierz, Andy Robertson; Edyth Hermosillo

Workshop #2: Introduction to R for Environmental Data *(Chinook 1)*

- **Times:** 8:30am – 9:00am: Optional pre-workshop setup time
  9:00am – 3:00pm: Workshop Session
  3:00pm – 5:00pm: Optional individual work session
- **Session Description:** Participants will learn basic coding skills in R and RStudio to perform exploratory data analyses and how to plot results graphically using the programming language and sample data sets from ecological and environmental science applications. *Topics include:*
  - Overview of R, RStudio, terminology, basic coding, and best practices
  - Cleaning, manipulating, and analyzing data
  - Making charts, plots, and tables
  - Exploratory data analysis
- **Audience:** There are no prerequisites for this workshop, however, participants may be required to download free open-source software and example datasets to complete the lessons. Participants are also encouraged to bring some of their own data to practice with as time allows; instructions and FAQs will be provided with confirmation of acceptance.
- **Presenters/Facilitators:** Angie Reed, Jan Ng
- **Details for Delivery:**
  - The workshop will include short lectures/demonstrations complemented by hands-on activities.
  - Attendees will need to bring a laptop computer with the latest version of R installed in order to follow along with lessons, which will use tribally relevant example data for improved learning outcomes.

Workshop #3: Advanced Topics in R *(Chinook 2)*

- **Times:** 8:30am – 9:00am: Optional pre-workshop setup time
  9:00am – 3:00pm :Workshop Session
  3:00pm – 5:00pm: Optional individual work session
- **Session Description:** This workshop explores more in-depth topics on using R by exploring the tools and features that help with task automation, manipulation, and visualization. Participants will be required to download free open-source software, R and RStudio, and example datasets to complete the lessons. *Topics include:*
  - R Markdown/Quarto
  - Data QC tools
  - Connecting R to Survey123
- **Audience:** Participants should have some prior experience with R, including setup, basic navigation, common terminology.
- **Presenters/Facilitators:** Jess Kunke, Alena Reynolds
- **Details for Delivery:**
  - The workshop will include short lectures/demonstrations complemented by hands-on activities.
  - Attendees will need to bring a laptop computer with the latest version of R installed in order to follow along with lessons, which will use tribally relevant example data for improved learning outcomes.