

WSU Kitsap Extension 2022 Annual Report

Stream Stewards and Salmon Docents

Cultivating environmental stewardship in Kitsap County through education and engagement opportunities.

About: The WSU Extension Water Stewardship Program provides Kitsap residents with educational training programs, volunteer opportunities, and educational events to help turn environmental knowledge into action.

Objective 1: Coordinate Stream Stewards Program



The Stream Steward training is a primary mode for recruiting new volunteers. The program specializes in training and continued engagement for a committed force of citizen volunteers. Once trained, these volunteers work on multiple projects throughout the year and across the county. They are engaged and keep their training current through a variety of classes and field excursions offered by WSU and its partners.

Strategy 1. Coordinate Stream Steward and Salmon Docent Trainings

- 1. Stream Stewards Training.** January - February 2022 ~ 6 weeks ~ 34 hours ~ 25 new trainees
 - **Audience:** New trainees and existing alumni (6 alumni returned for a refresher in 2022)
 - **Topics:** Watersheds, streams, invasive, wetlands, stream restoration, stream invertebrates, forests, septic systems, ground water, best management practices, green stormwater solutions.
 - **Engagement:** Training included 6 classroom sessions and 6 in-person field enrichment sessions. Field enrichment sessions provided hands-on learning that corresponded to the lecture training.
 - **Classroom Locations:** 6 classroom sessions took place using the Zoom platform virtually. The 6 field enrichment sessions took place throughout Kitsap County, three of the six locations include Stillwaters Environmental Center, Clear Creek Trail, and Manchester Stormwater Park.

“This (Stream Steward training) is the best thing I’ve been involved in over the past five years. I’m already using it in my daily life and sharing what I’m learning with others.”

“Public education on natural resource issues and solutions is the best way to protect our beautiful home. Each stream steward who walks away with a more informed understanding of best practices and choices we can make, has an exponential effect on Kitsap County because they share this knowledge with their friends, family, and community.”

-2022 Stream Steward Trainees

2. Salmon Docent Training

This training prepares volunteers to act as streamside Salmon Docents at Kitsap Salmon Tours.



Track I: October 18, 20, and 22, 2022 ~ 3-days ~ 11 hours ~ 45 participants

- **Audience:** New and existing volunteers; 25 new trainees and 15 alumni.
- **Topics:** Salmon biology, anatomy, habitat, species, life cycle, local challenges, salmon and climate, and stormwater impacts.
- **Engagement:** Training included 1 in-person class sessions, 1 Zoom class session and 1 outdoor field excursion. During the 6 class hours, trainees enhanced their knowledge from local experts about salmon in Kitsap County and the importance of habitat and clean water for the salmon life cycle. Trainees spent 1 hour in a lab, dissecting salmon, and viewing the anatomy of the salmon through a scientific lens with fish donated by the Suquamish Tribe. Trainees spent 5 hours in the field, touring Grovers Creek Hatchery, learning about the importance of salmon habitat, community collaborations, and salmon interpretation through a walk and talk at Poulsbo’s Fish Park.
- **Classroom Locations:** Olympic College lab, Grovers Creek Hatchery, and Poulsbo’s Fish Park.

Track II: 1-day, 3 hours: 15 trainees, October 17

- **Audience:** Olympic College students
- **Topics:** Salmon biology, anatomy, habitat, species, life cycle, and Salmon Tours logistics
- **Engagement:** Salmon dissection
- **Classroom Location:** Olympic College biology lab

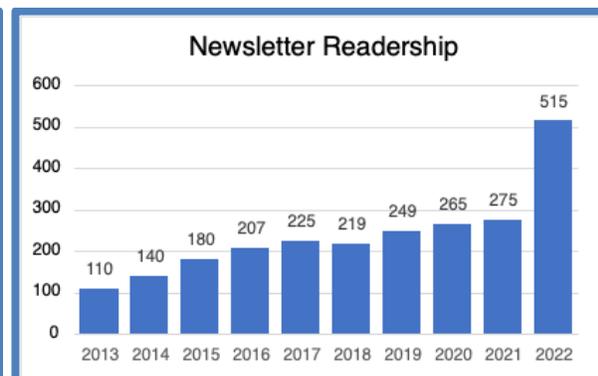
“The salmon training gave me the information and confidence to share the wonder of seeing salmon with others.”

“...the value of the content to me as an individual, the variety of presentations styles and topics, timeliness of topics, the welcoming feeling, the inspirations, and excitement you give me to get out and go see Kitsap peninsula and to volunteer in the community. Thank you, your programs were the best first thing I could have done when I arrived here from Iowa.”

-2022 Salmon Docent Trainees

Strategy 2. Increase citizen awareness and action by publishing involvement opportunities in monthly newsletter

The e-newsletter was distributed once per month and serves as a powerful tool for retaining and motivating volunteers. Volunteers craft their own experience by choosing from the activities advertised like tree planting, salmon counts, benthic invertebrate monitoring, and opportunities to educate the public. In 2022, the average open rate was 59%, which is 22% above the industry average of 37%. The number of newsletter subscribers has had a net gain of 111 new subscribers over the course of the year, and as seen in the graphs below, the number of unique opens significantly increased over 2022 as well. Compared with past years, the number of opens in 2022 has reached the highest point since the start of the newsletter in 2013.



Strategy 3. Encourage and Track Volunteer Participation

1. **Volunteer enrichment:** To ensure continued participation in Water Stewardship Programs, several continuing education and involvement opportunities are coordinated throughout the year. In 2022, 7 events were coordinated, totaling over 20 hours of continuing education.
 - 2/26 – Tree Planting event at Square Lake coordinated with Kitsap County Parks for Stream Stewards to continue to learn about forest restoration and help with planting.
 - 4/22; 4/23; 4/24 – Earth Day – Scotch broom removal – This 3-day event was opened to volunteers and the public. We collaborated with Our Forest Fund, and Kitsap County Parks to advertise, encourage and recruit volunteers to help remove scotch broom, and educate the public about the invasive scotch broom.
 - 6/10 – Lunch and Learn – WDFW Speaker Officer Murray spoke about protecting our wildlife. This was a requested topic for continuing education from our volunteers.
 - 7/20 – Wetlands and Pond Dipping with Kitsap Regional Library and Clear Creek Task Force.
 - 8/26 – Art & Science, Biological Pigments, connecting the science of color with native plants.
 - 9/23 – Duckabush Estuary Enrichment – This activity was open to the public and coordinated with WDFW, to promote healthy estuaries, life that depends on estuaries, watershed connectivity and ways to get involved.
 - 11/18 – Fungus Foray – This event was opened to our volunteers and the public for participants to learn the connection between wild foods and watershed health.



2. **Volunteer Participation:** The pie chart below shows the number of hours tracked in each volunteer category for Stream Stewards and Salmon Docents. The number of volunteer hours reported increased from 937.5 hours in 2021 to 2,361 hours in 2022. As we have been coming out of the Covid-19, we have worked to build community and get to know our volunteers and have encouraged them to continue to find activities that fulfill them in their desire to improve local ecosystems. As you can see with the number are making a great impact in our

communities. Volunteers contributed to a wide variety of projects in our community including helping the Hood Canal Salmon Enhancement Group with the summer chum count, Kitsap Salmon Tours and other salmon outreach projects with the Clear Creek Task Force, native plantings with different organizations, invasive removal projects, stewardship projects with Kitsap County Parks, and amphibian and macroinvertebrate monitoring to name a few.

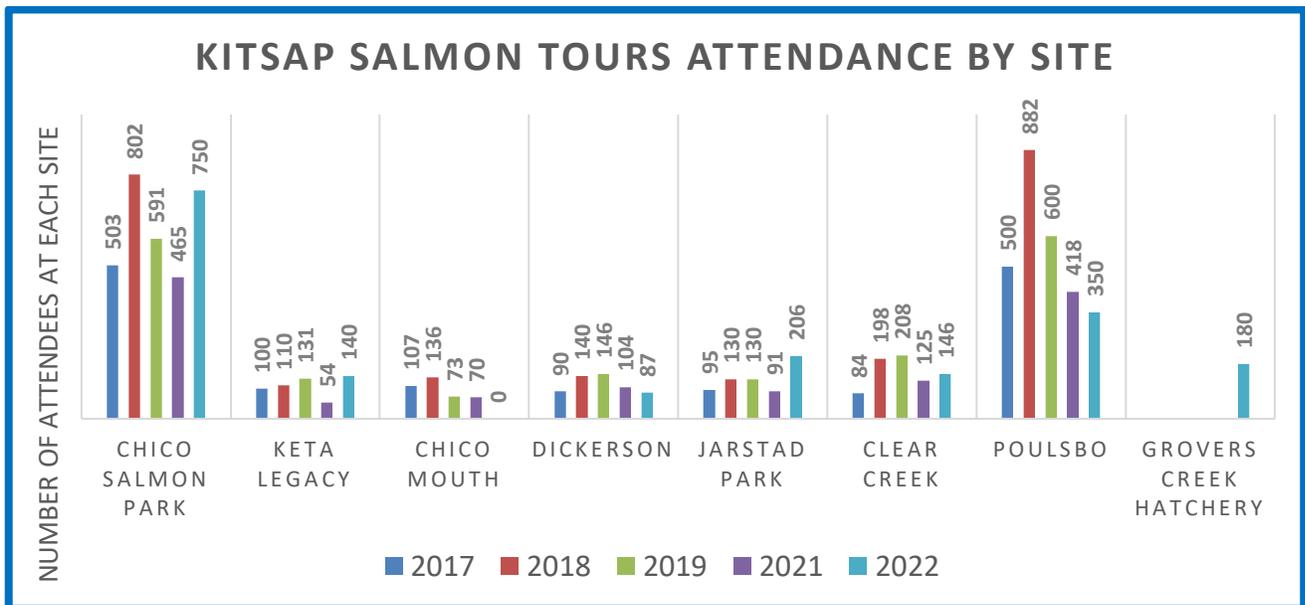


Objective 2: Coordinate Salmon Tours and Volunteer Docents



The WSU Watershed Stewardship Program coordinator leads the Salmon Tours planning team efforts, composed of representatives from 17 agencies and organizations. Through this event, the team strives to raise awareness about salmon habitat and biology, while also highlighting human impacts to salmon through stormwater, fish passage barriers, and development.

- Kitsap Salmon Tours was held at 7 sites across the county on Saturday, Nov. 5th, 10am-2pm
- 1,859 attendees were counted at the seven event sites. Note that it is possible that event attendees visited multiple sites, so these numbers represent the total flow of visitor traffic at all sites.
- Salmon Docents staffed 58 shifts at the annual Kitsap Salmon Tours event to educate the public about salmon biology, habitat, and management.
- Additionally, dozens of staff and volunteers from other agencies and organizations staffed 33 informational booths across the county, including: WA Dept. of Fish and Wildlife, WSU Puyallup Research Center, Kitsap PUD, Great Peninsula Conservancy, Mid-Sound Fisheries, Kitsap Regional Library, and many more.
- Due to construction at Mouth of Chico, that site was closed for the 2022 year.
- Kitsap Salmon Tours gained a new site at Grover’s Creek Hatchery, where attendees glean an understanding of hatchery practices of the local Suquamish tribe and life cycle of salmon.
- Additional self-guided viewing opportunities are advertised through the WSU Salmon Tours website, along with outdoor educational signage that was created in 2020 for each viewing site.
- We continue to update the [Kitsapsalmontours.org](https://www.kitsapsalmontours.org) website to continue to utilize the videos and Zoom education content that was created in 2020. That content can be viewed [here](#).
- 2022 write up in Tideland Magazine on Salmon Tours [here](#).



Objective 3: Facilitate Septic Sense Workshops



Strategy 1. Facilitate 3 Septic webinars

The [Septic Webinars](#) occurred:

- September 10th via Zoom from 10am-11am with 58 attendees
- September 13th via Zoom from 12pm-1pm with 64 attendees
- September 24th via Zoom from 10pm-11am with 59 attendees

As a result of the workshop:

- 90% of attendees said they could identify a failing system
- 79% said they know the basics of how their systems worked
- 93% said they know where to get more information about septic systems if needed
- 68% of respondents planned to make at least one change to help protect their septic system, based on what they learned in the webinar
 - Switching to non-toxic household cleaners and having their septic system inspected regularly were the two most common changes.
- 29 people asked for a follow up with Kitsap Health District

“Very informative, great speakers, well organized. Thanks”

“We have attended presentations at our community center in the past. This was much more effective especially with the Q and A after.”

“Excellent webinar, I really appreciated learning how my system works, and how to maintain it. It was well worth the time spent. Thank you to all who presented!”

-2022 Septic Webinar Attendees

Objective 4: Collaborate with other natural resource professionals

- Attended 3 West Sound Partners for Ecosystem Recovery (WSPER) meetings
- Attended 3 KEEP Meetings
- Attended 3 CWK Education Partner Meetings

Green Stormwater Solutions (GSS) Program

Enhancing citizen knowledge and understanding about green stormwater solutions to enhance landscape management practices

About. The WSU Extension Green Stormwater Solutions program provides Kitsap residents with educational training programs, volunteer opportunities, and educational events to reduce water pollution and enhance landscape management practices.

Objective 1. Perform outreach to homeowners about green stormwater solutions to encourage installations



Fair Preparation

Cities of Port Orchard, Bremerton, Poulsbo, Bainbridge Island (WSSOG) have chosen "Natural Yard Care" education as their near-term action for meeting the requirements of their Department of Ecology NPDES stormwater permits. WSU Kitsap Extension Horticulture Education and Master Gardener volunteers have been determined to be the best messenger for the Natural Yard Care techniques to reduce water pollution. There is an opportunity to provide specific messaging through the current structure of WSU Kitsap Horticulture education to include the reduction of weed and feed and other inorganic fertilizers. Run off from lawns can contain pollutants that we wish to keep out of streams, wetlands and Puget Sound.

Strategy 1. Coordinate public outreach events staffed by WSU Staff & Rain Garden Mentor (RGM) volunteers

- 29 public outreach events took place with a total of 851 direct contacts

Soil Science Training – February 4, 2022	○ 55 trainees
Integrated Pest Management Training February 18, 2022	○ 48 trainees
Natural Yard Care Training February 25, 2022	○ 39 trainees
Drainage Sense Webinars – 10/13, 10/19, 10/21, 11/2	○ 124 direct contacts
Advanced Training Webinars – 9/15, 9/22, 10/6, 10/27	○ 187 direct contacts
Kids Cultivate Program (Blueberry Park) – 7/13, 7/20, 7/27, 8/3, 8/10	○ 398 direct contacts
Raab Park Youth Garden’s Children’s Program 7/11, 7/18, 7/25, 8/1,	○ 272 direct contacts
Zoom Clinic (weekly) 5/8 – 8/12	○ 38 direct contacts
Virtual Plant Clinics – 1/10 – 12/15	○ 320 direct contacts
Answer Clinics	○ Office – 270 direct contacts ○ Farmer’s Markets – 1046 direct contacts
Organic Gardening Classes – 12 classes	○ 384 trainees
Kitsap Fair and Stampede – August 24-28	○ Open Hort – 67 volunteer shifts –320 hours ○ Heritage Garden – 44 volunteer shifts ○ 1800 = direct contacts

Strategy 2. Promote green stormwater solution information through various outlets

The program published 25 posts on WSU Kitsap Master Gardener Facebook page related to aspects of green stormwater solutions, along with dissemination through the Rain Garden Mentor classes; tours and outreach; to CWK partners & Stormwater Department Public Events; Natural Yard Care; and Organic Gardening.

36 Rain Garden Mentor volunteer hours

12,496 Master Gardener volunteer hours

Objective 2: Perform outreach to homeowners about Natural Yard Care (NYC)



Home Show Booth



Kitsap Fair

Strategy 1. Disseminate natural yard card information through outreach events and Master Gardener/Rain Garden Mentor volunteers

- 17 natural yard care outreach events and 5 trainings took place with 456 direct contacts and 4200 indirect contacts

Natural Yard Care training to Master Gardeners Feb. 25, 2023	○ 32 new Master Gardeners trained ○ Alumni trained
Master Gardener Zoom Chats	○ 15 sessions held ○ 38 questions answered ○ 36 direct contacts ○ 350 indirect contacts
10 Advanced Training sessions	○ 187 direct contacts
Kitsap Home and Garden Show	○ 146 direct contacts

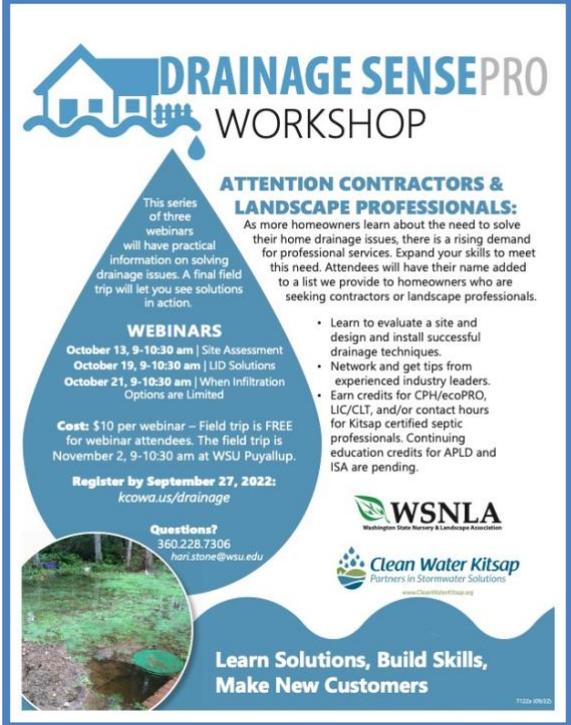
Objective 3: Train local building professionals on Drainage and other water mitigation issues

By the Numbers

124 attendees at the Drainage Sense Pro Webinars 10/13, 10/19, 10/21 and Field Trip 11/2; with the 48 trained professionals from 2017-2018 wanting to market what they learned into new services to the public

Promotions

- 4 media promotions for Drainage Sense Pro - 3 issues WSNLA's "B&B" magazine calendar of events (July-October issues)
- 1 Master Gardener Facebook page promoting workshop
- Posted on the following Websites
 - WSU Kitsap Extension
 - Clean Water Kitsap
 - Washington State Nursery & Landscape Association (WSNLA)
 - Washington Assoc. Landscape Professionals (WALP)
- 11 Newsletters sent to Industry Professionals



DRAINAGE SENSE PRO WORKSHOP

ATTENTION CONTRACTORS & LANDSCAPE PROFESSIONALS:
As more homeowners learn about the need to solve their home drainage issues, there is a rising demand for professional services. Expand your skills to meet this need. Attendees will have their name added to a list we provide to homeowners who are seeking contractors or landscape professionals.

This series of three webinars will have practical information on solving drainage issues. A final field trip will let you see solutions in action.

WEBINARS
October 13, 9-10:30 am | Site Assessment
October 19, 9-10:30 am | LID Solutions
October 21, 9-10:30 am | When Infiltration Options are Limited

Cost: \$10 per webinar – Field trip is FREE for webinar attendees. The field trip is November 2, 9-10:30 am at WSU Puyallup.

Register by September 27, 2022:
kcowa.us/drainage

Questions?
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WSNLA
Washington State Nursery & Landscape Association

Clean Water Kitsap
Partners in Stormwater Solutions

Learn Solutions, Build Skills, Make New Customers

Drainage Sense Pro Evaluation Data – Knowledge Gained

100% of participants stated that they will implement new knowledge and/or skill that they gained from the field trip

90% of participants of “Low Impact Development” webinar indicated that they would share what they learned at the workshop with others

Objective 4: Collaborate with other natural resource professionals

- WSNLA networking including attending monthly local Olympic Chapter meetings – 3/2, 3/16, 9/21, 10/24
- Other networking: WSSOG NYC meetings – 1/26, 2/2, 2/9, 2/16, 2/23, 3/2, 3/23, 4/6, 4/13, 4/22, 4/27, 12/14
- WSSOG regular meetings – 2/15, 4/19, 6/21, 8/16, 10/18, 12/20
- CWK Education Partners Meetings – 3/2, 6/1, 9/7, 12/7
- CWK Scope meeting 7/22