

WSU Kitsap Extension 2023 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. February 9 - March 11, 2023, ~ 5 weeks ~ 28 hours ~ 25 new trainees**
 - **Audience:** New trainees and existing alumni
 - **Topics:** Watersheds, streams, invasive, wetlands, stream restoration, stream invertebrates, forests, septic systems, ground water, best management practices, green stormwater solutions.
 - **Engagement:** Training included 5 classroom sessions and 6 in-person field enrichment sessions. Field enrichment sessions provided hands-on learning that corresponded to the lecture training.

- **Classroom Locations:** 5 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 Heronswood Garden, Rhododendron Preserve, and Port Gamble Recovery Facility.

“The stream steward training opened my eyes to how connected and valuable our water sources are, and how fortunate we are to have them - and how important it is to protect them and teach others about this. It also opened up so many opportunities to volunteer and help in our community that I otherwise wouldn’t have known about.”

“The Stream Steward program enables community engagement and involvement at the grass roots level - this is essential if real and lasting progress in restoration and stewardship is expected in our communities.”

-2023 Stream Steward Trainees

2. Salmon Docent Training

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



Track I: October 24 and 26, 2023 ~ 2-days ~ 10 hours ~ 39 participants

- **Audience:** New and existing volunteers; 24 new trainees and 15 alumni.
- **Topics:** Salmon biology, anatomy, habitat, species, life cycle, local challenges, salmon and climate, and stormwater impacts.
- **Engagement:** Training included 2 in-person class sessions and 2 outdoor field excursions. 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 also dissected salmon, viewing the anatomy of the salmon through a scientific lens—fish were donated by the Suquamish Tribe. Trainees spent 4 hours in the field, walking the Big Tree trail at Rhododendron Preserve and the Clear Creek Trail in Silverdale, learning about the importance of salmon habitat and connectivity, community collaborations, and salmon interpretation.
- **Classroom Locations:** Clear Creek Sa’qad Interpretive Center, Rhododendron Preserve, Clear Creek Trail

Track II: 1-day, 3 hours: 20 trainees, October 2023

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

“Understanding the full life of the Salmon helps me see the details of what should be done, can be done, and what not to do. Knowing more about them adds to social conversations than just 'that's where the salmon swim.' This helps the public understand the importance of protecting them and how.”

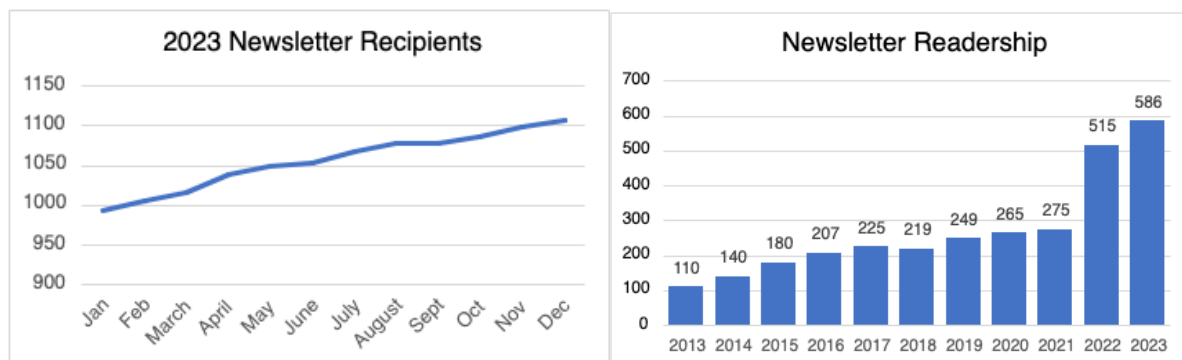
“The education of volunteers to share knowledge with the general public and, perhaps more importantly, the children of the community can foster an appreciation for the importance of the environment in general and the salmon specifically.”

“Providing this training gives local residents opportunity to learn about salmon and provide them with the skills to share this information with the public (not just on the day of Salmon Tours).”

-2023 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 2023, the average open rate was 56%, which is 19% above the industry average of 37%. The number of newsletter subscribers has had a net gain of 113 new subscribers over the course of the year, and as seen in the graphs below, the number of unique opens increased over 2023 as well. Compared with past years, the number of opens in 2023 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 2023, 4 events were coordinated, totaling over 9 hours of continuing education.
 - 3/13/23 – Presentation by Kitsap County Parks covering the newest trainings offered and all the different ways to get in Kitsap Parks.
 - 7/17/23 – Tour of the Salmon Center (Hood Canal Salmon Enhancement Group) – learning about the importance of habitat and restoration for salmon protection and what we can do to help.
 - 9/14/23 – Float with a Scientist event (open to the public) – learning the importance of estuaries and clean water.
 - 9/22/23 – Nature walk at Islandwood with Christina Woolf, Sr Naturalist – learning about the features of a healthy wetland and understanding what makes them you unique.



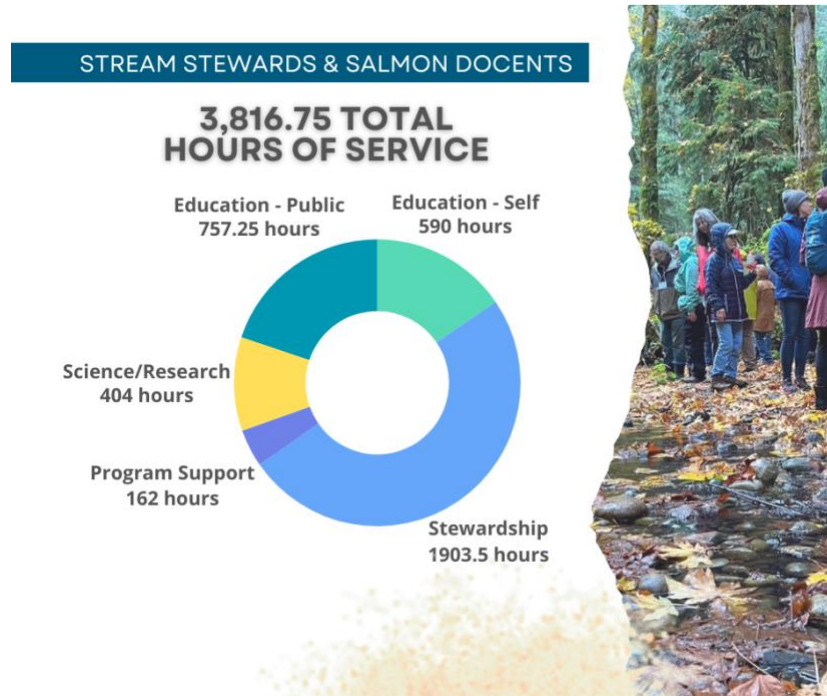
Attending Float with a Scientist event allowed attendees to become “more educated about the tidal zone so [they] can be more responsible landowners along Kitsap County’s shoreline.”

“The personnel involved from the organizer to the scientists were so very knowledgeable and willing to share. The choice of the venue and tide-timing was ideal for safely learning about the fragile marine environment that surrounds us.”

-2023 Float with a Scientist Attendees

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 2,361 hours in 2022 to 3,816 in 2023. 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 numbers, 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



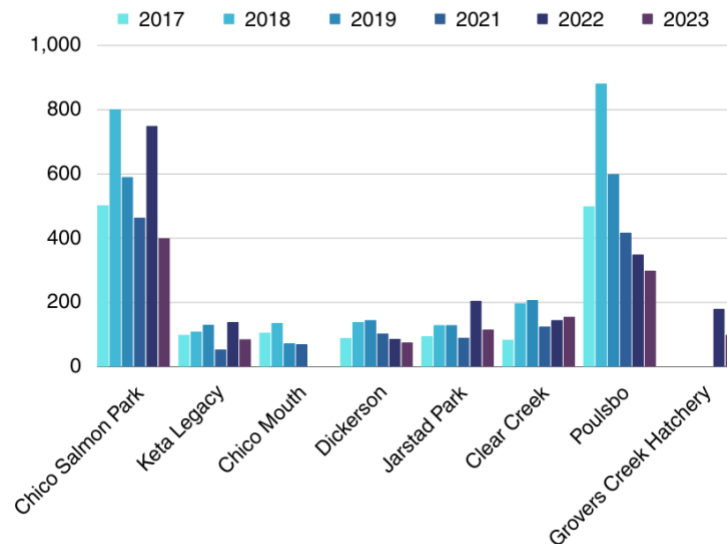
The WSU Watershed Stewardship Program coordinator leads the Salmon Tours planning team efforts, composed of representatives from 17 agencies and organizations. Through this event, the team strives to raise awareness about salmon habitat and biology, while also highlighting human impacts to salmon through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

- Kitsap Salmon Tours was held at 7 sites across the county on Saturday, Nov. 4th, 2023 from 10am-2pm

- 1,234 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 2023 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://kitsapsalmontours.org) website to continue to utilize the videos and Zoom education content that was created in 2020. That content can be viewed [here](#).

"It was rewarding to share some of the new information about salmon with attendees to Salmon Tours. There were a lot of people from out of town/out of state that had no concept of salmon runs. It was fun to share and watch kids and adults' eyes light up when they saw salmon thrashing around." -2023 Salmon Docent Trainees

Salmon Tours Attendance by Site



Objective 3: Facilitate Septic Sense Workshops



Strategy 1. Facilitate 3 Septic webinars

The [Septic Webinars](#) and Workshop occurred:

- September 19th, 2023, via Zoom from 10am-11am with 54 attendees
- September 23rd, 2023, via Zoom from 12pm-1pm with 30 attendees
- October 3rd, 2023, in person from 10pm-11am with 33 attendees

As a result of the in-person workshop:

- 100% of attendees said they could identify a failing system.
- 94% said they know the basics of how their systems worked.
- 94% said they know where to get more information about septic systems if needed.

As a result of the online webinar:

- 92% of attendees said they could identify a failing system.
- 60% said they know the basics of how their systems worked.
- 88% said they know where to get more information about septic systems if needed.

"Very well organized and presented. I enjoyed the experience."

"I wouldn't have thought to consider master gardeners as a resource for drain field ground cover. Thank you!"

"Wonderful event. I hope to attend future workshops."

"Helpful. Thank you for offering the Zoom event. This is our second-year viewing."

-2023 Septic Workshop 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

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 a chance to provide specific massaging through the current structure of WSU Kitsap Horticulture education to reduce weed, feed, and other inorganic fertilizers. Run-off from lawns can contain pollutants that we wish to keep out of streams, wetlands, and Puget Sound.



Rain Garden Demonstration

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

- 279 public outreach events took place with a total of 2,576 direct contacts.
- Outreach events include advanced training webinars, volunteer kids' education programming, outreach at the Kitsap County Fair, and the Master Gardener ongoing plant clinics.
- In addition to public outreach events, the program provided training to the public incorporating green stormwater solutions education, resources and methods. Trainings included:
 - Soil Science Training – February 3rd, 2023: 48 total trainees
 - Integrated Pest Management Training – February 10th, 2023: 46 total trainees
 - Natural Yard Care Training – February 24th, 2023: 44 total trainees

GSS Events / Trainings	Total Trainees / Contacts
Advanced Training Webinars – 7/19, 10/5	○ 62 direct contacts
Kids Cultivate Program (Blueberry Park) – 7/13, 7/20, 7/27, 8/3, 8/10	○ 368 direct contacts
Raab Park Youth Garden's Children's Program 7/12, 7/19, 7/26, 8/2, 8/9	○ 254 direct contacts
Zoom Clinic (weekly) 5/8 – 8/12	○ 22 direct contacts
Virtual Plant Clinics – 1/10 – 12/15	○ 362 direct contacts
Answer Clinics	○ Office – 235 direct contacts ○ Farmer's Markets – 1,046 direct contacts
Organic Gardening Classes – 12 classes	○ 181 trainees
Kitsap Fair and Stampede – August 24-28	○ Open Hort – 67 volunteer shifts – 320 hours ○ Heritage Garden – 44 volunteer shifts ○ 2,300 = indirect 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.

Total volunteer hours in outreach efforts for Green Stormwater Solutions:

- 23 hours from Rain Garden Mentor volunteers
- 15,875 hours from Master Gardener volunteers

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 244 direct contacts and 4,200 indirect contacts.
- Additional Natural Yard Care training provided to Master Gardeners on February 25th, 2023: 32 new Master Gardeners trained with 12 returning Alumni retrained on NYC.

NYC Events / Trainings	Total Trainees / Contacts
Natural Yard Care training to Master Gardeners Feb. 25, 2023	<ul style="list-style-type: none"> ○ 32 new Master Gardeners trained ○ 12 Alumni trained
Master Gardener Zoom Chats	<ul style="list-style-type: none"> ○ 15 sessions held ○ 22 questions answered ○ 25 direct contacts ○ 430 indirect contacts
2 Advanced Training sessions	<ul style="list-style-type: none"> ○ 62 direct contacts
Kitsap Home and Garden Show	<ul style="list-style-type: none"> ○ 120 direct contacts

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

By the Numbers

There were no new trainings offered for 2023. From 2011-2019, 268 professionals were trained who will now market what they learned into new services to the public.

Objective 4: Collaborate with other natural resource professionals

- WSNLA networking meetings and trainings – 2/2, 2/8, 4/11, 9/27, 10/18
- Other networking: WSSOG NYC meetings – 1/31, 2/15, 3/8, 3/15, 3/22, 3/29, 4/12, 4/19, 4/26, 4/29, 5/3, 5/17, 5/20, 5/24
- WSSOG regular meetings – 2/21, 6/20, 10/17, 12/19
- CWK Education Partners Meetings – 1/31, 3/14, 6/13, 9/12, 12/12
- CWK Scope meeting 11/1
- December – became a member of Pacific Horticulture