

# 2023-2024 Annual Stormwater Public Education, Outreach, Involvement, and Participation Regional Report – Bear Creek MS4s



## Introduction

This report outlines the public education and outreach (PE/PO), and involvement and participation (PI/PP) strategies that municipal separate storm sewer systems (MS4s) in the Middle Rogue Basin implemented by RVCOG on behalf of the Bear Creek MS4s from July 1, 2023 to June 30<sup>th</sup>, 2024 to satisfy the conditions of the NPDES Phase II general permit issued by DEQ on November 30, 2018. The activities are integrated into individual Stormwater Management Plans (SWMPs) developed by the MS4s that were submitted to and approved by DEQ. Activities completed are applicable to the regulated small (Phase II) MS4s and include established MS4s (Existing Registrants) and new permittees (New Registrants). In the Middle Rogue Basin, the registrants include the Cities of Medford, Ashland, Grants Pass, Eagle Point, Central Point, and Rogue River, Rogue Valley Sewer Services (includes the Cities of Talent and Phoenix and Jackson County), and Josephine County.

Most of the activities summarized in this report are funded by the Bear Creek MS4s (Medford, Ashland, Central Point, and RVSS (representing Phoenix, Talent, and Jackson County)) with a few exceptions that include Grants Pass, Josephine County, and/or other partners through the TMDL Program. This report follows a similar format to previous years.

## Program Highlights

- Programs reached over *3,000 people* (not including visitation to the Stream Smart website).
- The website had 2,100 visitors. The most visited pages besides the landing page included the Rogue River Clean-up, Salmon Watch, Rogue Drinking Water Partnership, Virtual Resources, About the Program, and Resources.
- For social media, we have 594 Facebook followers and 250 Instagram followers. Our Facebook reach was 15,000 and we had 1,400 visits (an increase of 271%). Our Instagram reach was 91 and we had 51 visits which was an increase of 34% from last year.
- Continued the Salmon watch program for a 11th consecutive season in the Fall of 2023 and Spring of 2024. We conducted 32 in person field days with 29 different schools. Classes represented schools from the Bear Creek Valley and Greater Jackson County. *1,860 participants*.
- Other Salmon Watch related programs including teaching a hybrid class with ODFW's Salmon Release Program and LOGOS School in December at Tou Velle State Park (*20 participants*) and we completed our first Salmon Watch Traveling Roadshow in June at the Prospect Library (*12 attendees*). We also conducted two days of Salmon Watch Training (*14 participants each day*) and hosted a post field day debrief/Open House (*12 attendees*).
- Salmon Watch Partners included representatives from the TMDL DMAs and Bear Creek MS4s, Bear Creek Watershed Education Partners (BCWEP) volunteers, RVSS, Oregon State Parks, Oregon Department of Fish and Wildlife, BLM, the Freshwater Trust, the Army Corps of Engineers, Southern Oregon Land Conservancy, Kid Time, and local schools. New partners this year included the US Forest Service, Pollinator Project Rogue Valley (PPRV), and the Southern Oregon Forest Restoration Collaborative (SOFRC).
- Secured match funding for additional Stream Smart Programs including Salmon Watch, the Creek and River Clean-ups, and the Adopt Programs (River and Greenway) through the Ashland food Co-Op's Change for Good Program, local bottle drop funds, the American Fisheries Society, and ODFW.

- Presented education and outreach information at multiple local events including presentations in a partnership with the Stream Smart and/or TMDL programs, schools, and partners. *713 people reached.*
- Participated in and helped coordinate volunteer clean-ups in September 2023 and April 20<sup>th</sup>, 2024. *attendees.*
  - Fall Statistics and Activities:
    - 114 volunteers
    - Removed 4,895 lbs of trash
    - 1,700 invasive Species (blackberries) removed
    - Press releases and media interviews conducted
  - Spring Statistics and Activities – Overall Stats Pending, details for Pine Street Only:
    - 52 volunteers
    - Mulching and planting of pollinator gardens and restoration sites
    - Invasive Species(blackberries) removed
    - Press releases and media interviews conducted
- Hosted and/or helped coordinate 9 additional volunteer events reaching over 85 people. These events are outside of the Clean-up days, documented events, and the Salmon Watch Program.
- Continued activities along the Stream Smart Adopt-A-Greenway segment near the Expo Center including tying in and staffing starting locations for the Bear Creek clean-up and organizing an event coinciding with the Move for Your Water Event.
- Audiences reached included the general public schools (e.g., stormwater presentation at TRAILS Outdoor School, volunteer event with Crater High School), and local officials (through presentation of programs at RVCOG Board meetings).
- The Stream Smart program is continuing to expand with new partners and ties into specific programs including Jackson County Library District, the Ashland Food Co+Op, Medford Food Co+Op, the Cooperative Weed Management Area (CWMA), PPRV, and others.

## PUBLIC EDUCATION & OUTREACH (PE/PO) SUMMARY



*Image Courtesy of River Design Group*

### *General Program/Activity Description*

The PE/PO program is designed to develop, refine, and implement an education and outreach program to inform the public about the impacts of stormwater discharges on waterbodies and the steps that they can take to reduce pollutants in stormwater runoff consistent with the recommendations of the general permit and jurisdictional (MS4s) SWMPS. The goal of program is to educate residents on behaviors and practices that can cause or contribute to adverse stormwater impacts on receiving waters and provide actions that citizens, businesses, and others can take to reduce pollutants in stormwater runoff and prevent illicit discharge from entering the MS4 impacted receiving waters. Activities were developed over a 5-year implementation period. Regional activities are reviewed, updated (as needed) and scheduled annually

Work completed in 2023-2024 is based off the general SWMP created with the regional stormwater team and RVSS (<http://rvcog.org/wp-content/uploads/2017/01/SWMP-Draft-June-28th-2019.pdf>). Table 2 and Table 3 (page 15) summarize the general recommendations for developing SWMPs and were used to develop the program scopes. The scopes were used by the MS4s for developing and submitting their SWMPs. In addition, the general SWMP was used as the basis for regional implementation activities coordinated by RVCOG. Activity details for the implementation year follow the tables. The tables are provided as a reference to link into individual SWMPs as needed.

Table 2: Public Education & Outreach Activities

Activity/Description	Regional Activity?	Current Activity	New Activity/ Materials	Audience(s)			Permit Year				
				Public, Homeowners, HOA's, Schools, Businesses (Target Audience #1)	Local Elected Officials, Land Use Planners, Engineers (Target Audience #2)	Construction Site Operators (Target Audience #3)	1	2	3	4	5
<b>Electronic Communication Channels (Topics: 1-10)</b>											
Stream Smart	X	X		X	X						
RVCOG Website	X	X		X	X						
MS4s Individual Websites		X		X							
<b>Messaging/Campaigns</b>											
Meet annually to decide on a message or a campaign to focus on/highlight for the implementation year in addition to the activities that cover multiple topics.	X	X	X	X	X	X					
<b>Events (Topics: 1, 2, 7, 9) – Minimum of 4 events per year</b>											
Spring events (April/May) - 2	X	X		X	X						
Fall Events (September/October) - 2	X	X		X	X						
<b>Event Examples</b> Rogue Valley Earth Day(s) Arbor Day Events Land Steward Workshop Salmon Festival World Fish Migration Day Bear Creek Fall Festival Other											
<b>Media (Topics: 1-10)</b>											
Press Releases	X	X		X	X	X					
Social Media	X	X		X							
Print Media	X	X		X	X	X					
<b>Targeted Workshops/Trainings (Topics: 1-10) – 1-2 per year</b>											

Erosion Prevention & Sediment Control BMPs - Goal: target construction site operators		X	X		X	X		X		X	
Riparian/Restoration/Invasive Sp. Management			X	X	X		X				X
Low Impact Development/Green Infrastructure			X	X	X		X				
Homeowners/residential			X						X		
Landscape contractors/commercial & public maintenance operators			X			X				X	
Pesticide & Herbicide BMPs/Reduction			X	X			X				
Other topics			X	X	X	X					
<b>Printed Materials (Brochures, post cards), (Topics: 1-10)</b>											
Continue printing & distribution of existing brochures, postcards, etc.	X	X		X	X						
New/revised printed material for distribution	X		X	X	X	X					
<b>Presentations (Topics: 1-10)</b> - Updates to City Councils/Commissions (Target audience #2) minimum of once per year. Updates of what's coming/changes in 2019 (New Phase II Regulations).			X		X	X					
<b>Program Support/Implementation (Topics: 2, 3, 4, 6, 7, 9)</b>											
Salmon Watch	X	X		X							
Adopt-A-River	X	X		X	X						
Stream Smart (website, program admin)	X	X		X	X						
General funding for programs, events, brochures (e.g., Bear Creek Fall Festival, brochure printing, Clean Rivers Coalition)	X	X	X	X	X	X					

Shading indicates when activity taking place.

## Work Completed in 2023-2024

### *Stream Smart*

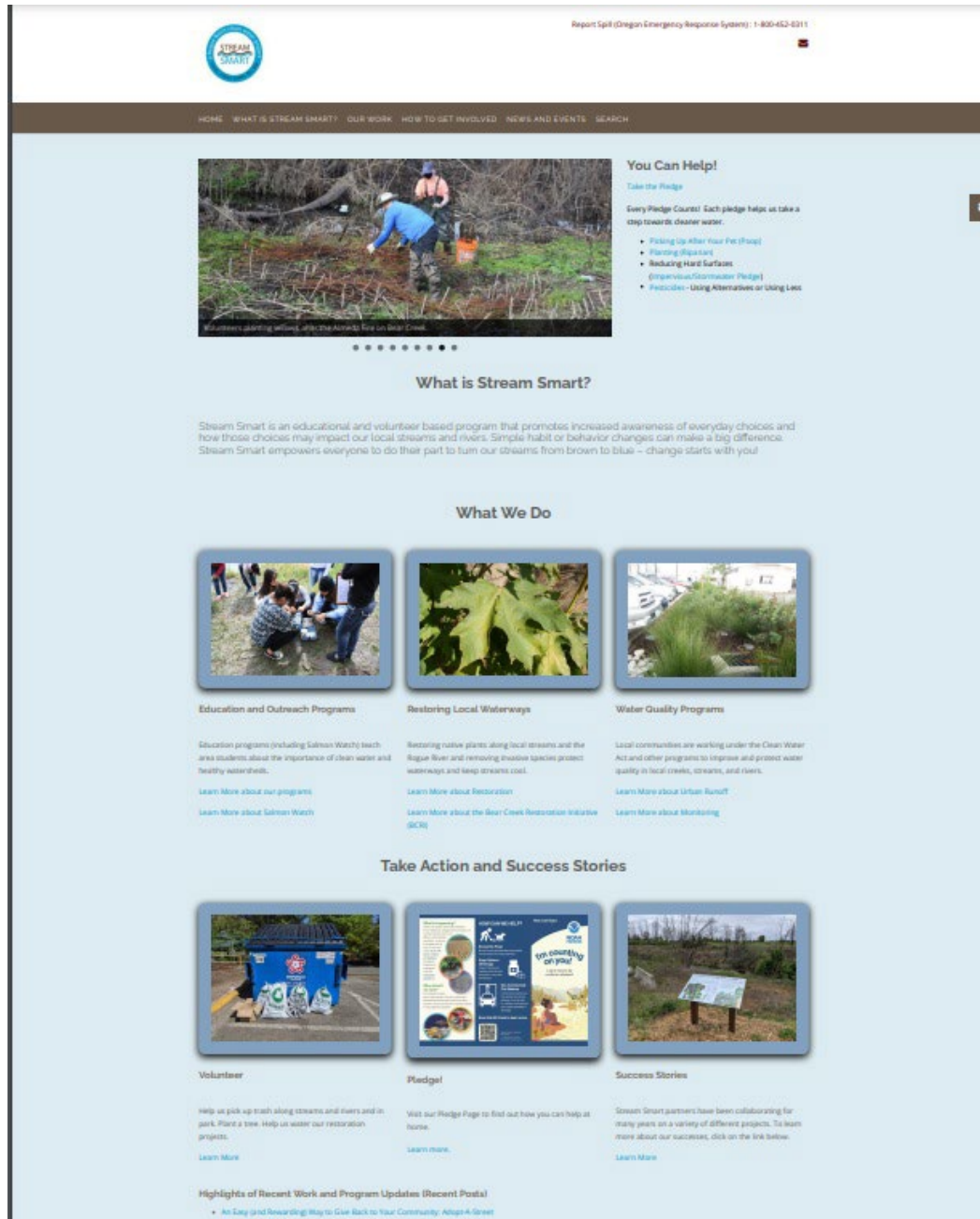
The Stream Smart program was developed to help MS4s and their partners implement their education and outreach programs and public involvement and participation programs in partnership with other programs including local TMDL programs (Bear Creek and the Rogue River). It was developed as a tool to provide an informational resource on a number of water quality and watershed related topics, advertise and promote events and volunteer opportunities, and encourage residents to help improve water quality in the region by taking actions at home or in their community.

MS4s provide the majority of the funding for the Stream Smart Program and many members also serve on the Advisory Committee to help direct program activities. The core Advisory Team includes RVCOG (the 2023-2024 coordinator), Medford, Central Point, RVSS, Jackson County, Grants Pass, and Josephine County. Core refers to those members who actively participate in meetings and program activities. In 2023 -2024, we decided to shift the meetings to two larger meetings of the Advisory Committee instead of 4, and hosting smaller meetings to focus on specific tasks, actions, and events as needed.

Activities included coordinating and facilitating 2 Stream Smart Advisory Committee meetings (September and March), sponsoring and promoting events, implementing activities and programs including Salmon Watch and the Creek and River Clean-ups, promoting and marketing of the program, creating and updating content for the website, creating content for media and social media postings, and participating in local events. Major accomplishments for the program included maintaining the website (<https://www.stream-smart.com/>), expanding the social media content by creating a campaign to help with fundraising and outreach on what Stream Smart is and what we do to the public, continuing to expand partners including increased coordination with the Cooperative Weed Management Area (CWMA), promoting the program throughout the Rogue above the Wild and Scenic Section with blogs and activities, supporting programs through additional funding channels (Change for Good Program), adding in new materials and programs including the Salmon Watch Traveling Roadshow, continuing to create and install signs incorporating the logo along local recreation corridors (e.g., Bear Creek Greenway), hosting a number of volunteer events in both Jackson and Josephine Counties, establishing additional support programs for banners, continuing to support local clean-up activities, volunteer supplies, tools, and other needs through a bottle drop account, adopting a section of the Rogue River, working with Crater Renaissance and hosting events on the Adopt-A-Greenway section from Pine Street to Upton Road near the Jackson County Expo.

### *Stream-smart.com*

The figure below shows the home page for Stream Smart including the menu bars, information highlights including programs, relevant news articles, and what is happening now. We revised the website to help users understand what Stream Smart is, important programs, and accomplishments. In addition, we revised the funders page to recognize the contributions of the Bear Creek MS4s, Bear Creek and Rogue DMAs, and others. We also added some information on the Stormwater Advisory Team (SWAT) and meetings to the website to advertise that the meetings are public and have a public involvement component for those who are interested.

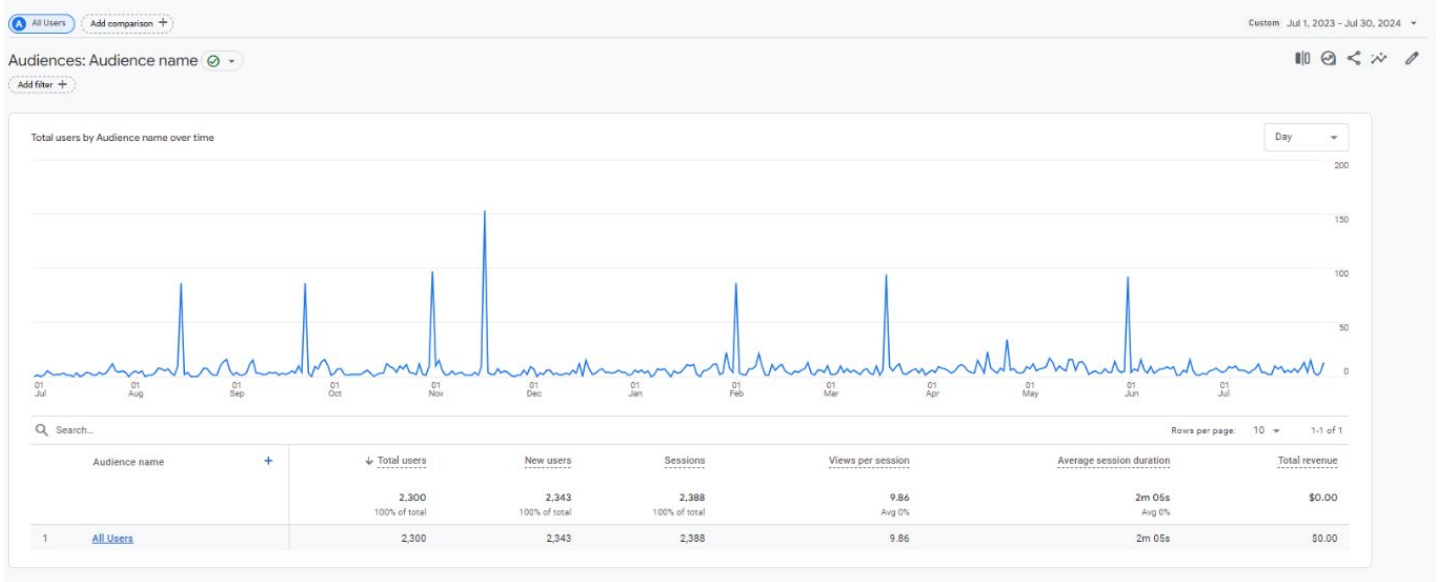


## Web and Social Media Summary

Annual visitation to the website, Facebook, and Instagram show that the program continues to shift towards a high percentage of users learning about and participating in Stream Smart through social media platforms when compared to traditional channels. The most visited web pages include the Rogue Clean-ups, events and press releases, and what is Stream Smart.

Most of the social media visitation based mostly on interactions on Facebook (likes) is local, although there is some interest from Portland and Eugene.

### Visitation to the website



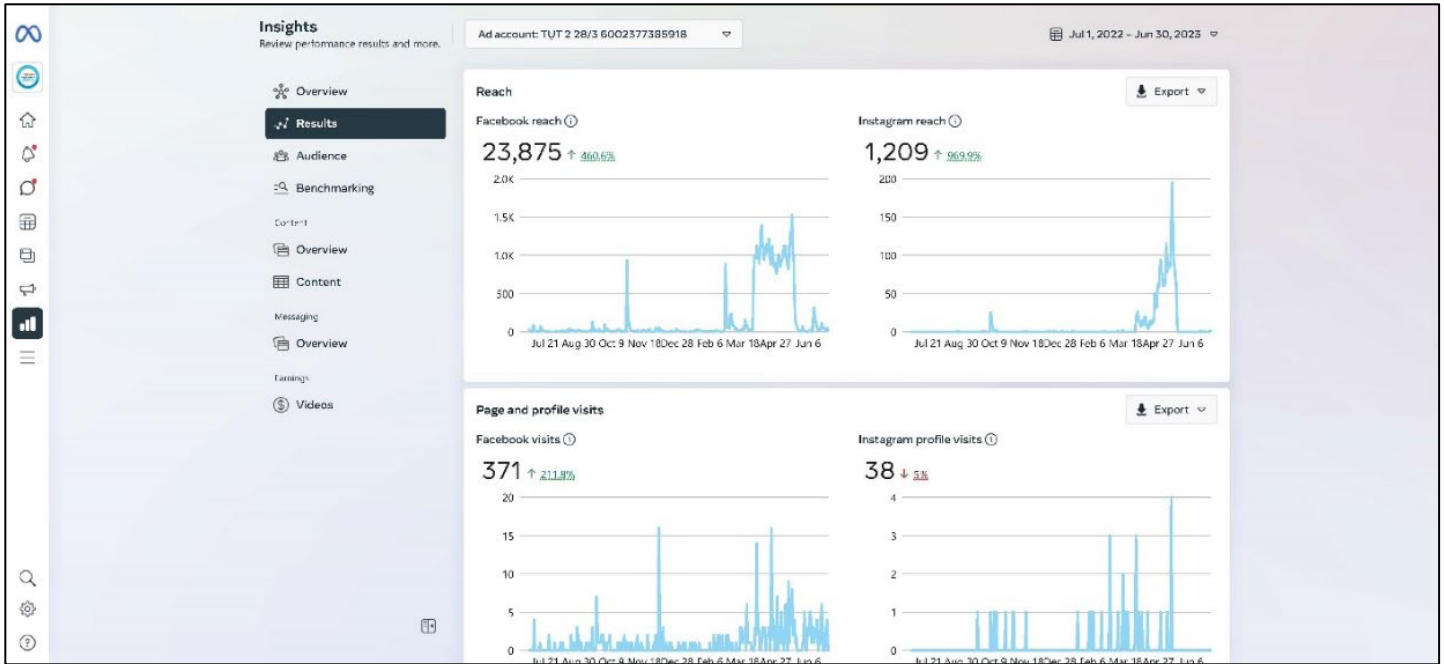
The top ten pages included the home page, the Rogue River Clean-up, Salmon Watch, and current happenings.

The figure shows a table of the top ten pages on the website. The columns include Page path and screen class, Views, Users, Views per user, Average engagement time, Event count, and Key events.

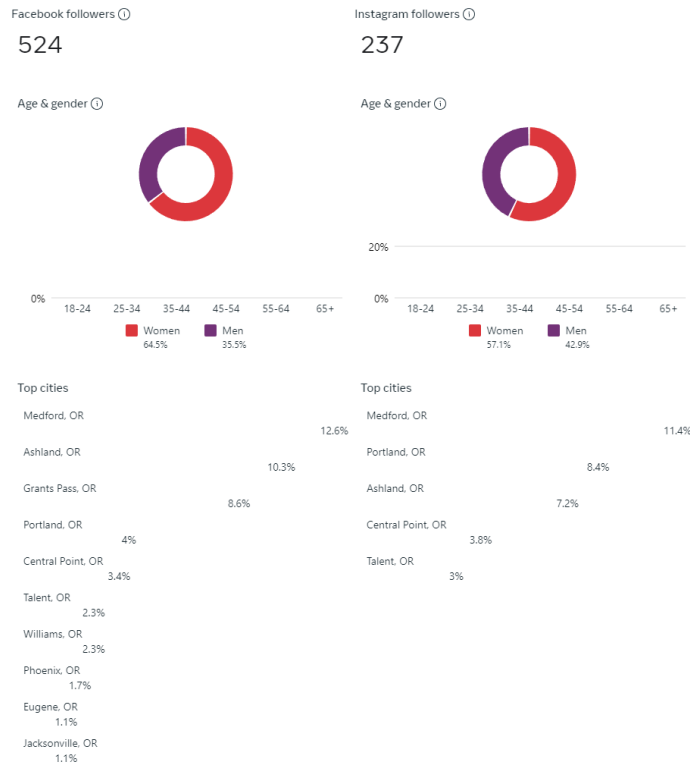
Page path and screen class	Views	Users	Views per user	Average engagement time	Event count	Key events
/	23,261	2,140	10.87	3m 08s	30,879	0.00
/rogue-river-clean-ups/	247	173	1.43	25s	760	0.00
/our-work/programs-and-projects/rogue-basin-salmon-watch/	183	91	2.01	1m 00s	522	0.00
/our-work/programs-and-projects/rogue-drinking-water-partnership/	167	90	1.86	48s	500	0.00
/virtual-resources/	148	87	1.70	36s	408	0.00
/current-happenings/	133	74	1.80	11s	308	0.00
/what-is-stream-smart/about-2/	110	75	1.47	33s	274	0.00
/our-work/resources/	98	42	2.33	46s	219	0.00
/monitoring-water-quality-in-the-rogue-basin/	70	42	1.67	29s	190	0.00
/what-is-stream-smart/	70	54	1.30	23s	171	0.00



### Social Media Visitation



### Social Media Demographics



Example Posts

Title	Date published	Reach	Engagements	Likes and reactions	Comments	Shares
Have you been out to Blue Heron Park lately? Go check out Blue Heron Park! Stream Smart - a clean water project	Boost post Thu Jun 29, 11:45am	70 Accounts Center accounts reached	6 Post engagements	5 Reactions	0 Comments	1 Shares
BottleDrop is hosting a statewide #HiddenBottleHunt from July 5th... Stream Smart - a clean water project	Boost post Fri Jun 23, 11:25am	48 Accounts Center accounts reached	4 Post engagements	1 Reactions	0 Comments	2 Shares
Any guesses as to what these are and how they are helpful in ident... Stream Smart - a clean water project	Boost post Fri Jun 23, 11:10am	91 Accounts Center accounts reached	8 Post engagements	2 Reactions	3 Comments	0 Shares
Come on down to Bear Creek Park to learn about natural resources ... Stream Smart - a clean water project	Boost post Thu Jun 22, 4:18pm	56 Accounts Center accounts reached	4 Post engagements	1 Reactions	0 Comments	0 Shares
Join the community conversation on Oregon's Water Strategy tomorrow... Stream Smart - a clean water project	Boost post Thu Jun 22, 2:53pm	54 Accounts Center accounts reached	1 Post engagements	0 Reactions	0 Comments	1 Shares
Were you a participant at the Rogue River Clean-Up? If so, you likely... Stream Smart - a clean water project	Boost post Thu Jun 22, 9:45am	134 Accounts Center accounts reached	28 Post engagements	11 Reactions	1 Comments	2 Shares
Join Bee City USA-Medford, Oregon this Saturday, June 17th... Stream Smart - a clean water project	Boost unavailable Tue Jun 13, 9:39am	54 Accounts Center accounts reached	8 Post engagements	5 Reactions	0 Comments	1 Shares
A vote for Stream Smart is a vote for water quality monitoring... Stream Smart - a clean water project	Boost unavailable Mon Jun 12, 2:57pm	19 Accounts Center accounts reached	5 Post engagements	1 Reactions	0 Comments	1 Shares
Are you an Ashland Food Co-op owner/member? If so, today is the... Stream Smart - a clean water project	Boost post Mon Jun 12, 10:09am	103 Accounts Center accounts reached	9 Post engagements	4 Reactions	0 Comments	2 Shares
Have you checked out our upcoming events recently? We added m... Stream Smart - a clean water project	Boost post Thu Jun 8, 4:43pm	31 Accounts Center accounts reached	6 Post engagements	3 Reactions	0 Comments	2 Shares
Happy World Ocean Day! To celebrate, consider donating to SOLVE... Stream Smart - a clean water project	Boost post Thu Jun 8, 9:33am	17 Accounts Center accounts reached	1 Post engagements	0 Reactions	0 Comments	0 Shares

**Stream Smart - a clean water project**  
 April 17 · 🌐

🌱🌿🌳 Last Thursday and Friday, a special spring Salmon Watch program was held for Talent Middle School 7th graders. Special thanks to our partners, Rogue Valley Sewer Services, Southern Oregon Forest Restoration Collaborative, Pollinator Project Rogue Valley, Karin Onkka, and the Rogue River Watershed Council! 🐟🌊🌳

#streamsmartrogue

📣 Boost this post to reach up to 5094 more people if you spend \$77. [Boost post](#)

👍❤️👍 4 1 comment

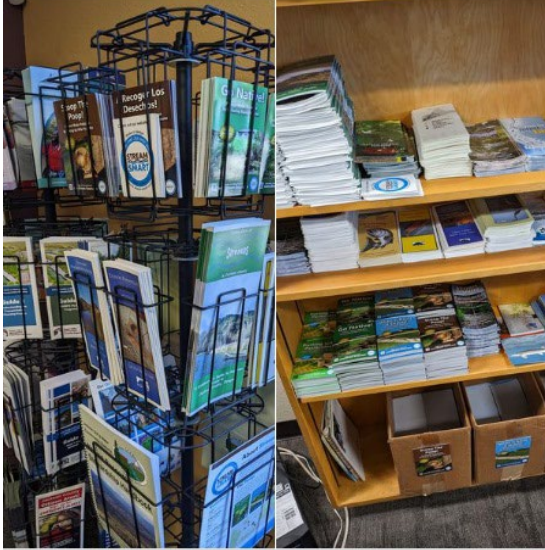
👍 Like    💬 Comment    🔄 Copy    ➦ Share

**Pollinator Project Rogue Valley · Follow**  
 It was wonderful to be part of this event! Thanks for inviting us!  
 18w Like Reply

**Stream Smart - a clean water project**  
June 6 · 🌐

🌱🌱🌱 Stream Smart - a clean water project is a hub for environmental education resources, water quality and stormwater information, and more! If you are looking for specific information related to waterways, home and yard care as it relates to stormwater, native plants, and more, reach out to us! Or if you have brochures that you would like us to share, we can add those to our available collection. 🌱🌱🌱

#streamsmartrogue



📣 Boost this post to reach up to 5094 more people if you spend \$77. [Boost post](#)

👍 2


**Stream Smart - a clean water project**  
March 22 · 🌐

🌱🌱🌱 Thanks Crater Land Lab students for walking the 4-mile round-trip to deliver water to a pollinator patch that they planted back in December! As part of [Make a Move for Water!](#), students hauled gallon jugs of water the whole way, representing what many people in developing countries have to do to get drinking water.

Additional thanks to Rogue Valley Sewer Services for coming out to help and teach students about common pollutants that can be found going into storm drains, which empty into creeks and rivers, eventually entering the ocean.

And one last thanks to the City of Central Point Government - City Hall for hauling the trash bags away! 🌱🌱🌱

#streamsmartrogue





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## Creek Safety Watch Monthly Advisories – Keeping the Public Safe and Aware of Water Quality Issues

Posted on June 5, 2024 by Amie Siedlecki

Have you heard Stream Smart partners in a recent interview on the local news or seen a news article in print or on social media regarding bacteria levels in Bear Creek and its tributaries? Every year, starting around Memorial Day, Creek Safety Watch monthly advisories are published by the Rogue Valley Council of Governments (RVCOG). These advisories provide information on elevated bacteria (E. coli) levels observed within the Bear Creek Watershed, potential causes for these elevated levels, and Stream Smart choices that we can make to limit the number of occurrences. As part of the public outreach for a regional monitoring program under the Clean Water Act, these advisories serve to keep the public safe and aware of water quality issues within the watershed. The monthly advisories are published until Labor Day, but bacteria levels in creeks are monitored all year.

RVCOG collects and analyzes water quality samples from Bear Creek and its tributaries every month on behalf of the local communities (Ashland, Talent, Phoenix, Medford, Central Point, and Jacksonville) and Jackson County. When bacteria samples exceed water quality standards for contact recreation (e.g., wading and swimming), an advisory notice is sent to local media outlets and is posted online. Water contact recreation is a defined beneficial use for Bear Creek. However, this use is not supported in all areas of the watershed during all times of the year. Residents are asked to use caution when in contact with any waterways, and especially to avoid ingestion (which may cause illness) and contact with open wounds (which may cause infection). Very young children should be fully supervised when playing in or near the water to avoid swallowing the water. It is important to note that contact with any water body – creeks, rivers, lakes, or swimming pools – carries some level of risk.

The bacteria can come from a number of potential sources including: 1) pet waste, 2) livestock waste, 3) wild animals, 4) leaking septic systems, 5) illegal dumping from portable toilets or RVs, or 6) any other activity that results in the discharge of fecal matter directly into creeks or through storm drains.

On a regional scale, communities are implementing best management practices (BMPs) to help reduce and eliminate bacteria entering streams and storm drains. Examples include the installation of bioswales, constructed wetlands, and commercial treatment devices.

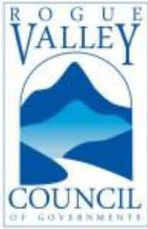
Everyone can help by learning how to be Stream Smart. Examples of what you can do include: 1) picking up after your pets, 2) keeping manure, cat litter, and other waste material away from creeks and storm drains, 3) having your septic system inspected and repaired if failing, and 4) putting toddlers in swim diapers.

If you are unsure of whom to call or have questions regarding which creeks are tested, please call Amie Siedlecki (541-423-1371) or Greg Stabach (541-423-1370) from the Rogue Valley Council of Governments' (RVCOG) Natural Resources Department or visit: [Natural Resources – Rogue Valley Council of Governments \(rvcog.org\)](https://www.naturalresources-roguevalleycouncilofgovernments.org). Additional monitoring information is also available from [Monitoring Water Quality in the Rogue Basin – Stream Smart \(stream-smart.com\)](https://www.monitoringwaterqualityintheroguebasin.com) page.

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# PRESS RELEASE

Rogue Valley Council of Governments,  
Natural Resources Department

**CREEK SAFETY WATCH**  
**Bear Creek Watershed – Jackson County**  
**September 5<sup>th</sup>, 2023**



**Important Note: This information is for select creeks in the Bear Creek Basin only – IT DOES NOT COVER ALL CREEKS IN JACKSON COUNTY OR ALL CREEKS IN THE BEAR CREEK WATERSHED.** If you have questions about a specific creek, please call RVCOG (see contact information below).

Routine, monthly water quality testing results indicate that the following creeks have exceeded state bacteria standards for contact recreation (swimming, wading, etc.). Residents are asked to use caution when in contact with any waterways and especially to avoid ingestion (which may cause illness) and contact with open wounds (which may cause infection). Very young children should be fully supervised when playing in the water to avoid swallowing the water. It is important to note that contact with any water body – creeks, rivers, lakes, or swimming pools – carries some level of risk.

**Possible causes of high levels of bacteria in the creeks include:** 1) pet waste, 2) livestock waste, 3) wild animals, 4) leaking septic systems, 5) illegal dumping from portable toilets or RVs, or 6) any other activity that results in the discharge of fecal matter directly into creeks or through storm drains.

Citizens are asked to notify the appropriate agency of any concerns. Failing septic systems and other pollutants discharged into streams should be reported to the Department of Environmental Quality. Complaints can be reported to the complaint hotline at 1-888-997-7888 or online at <http://www.deq.state.or.us/complaints/rep.htm>. If you are unsure of whom to call or have questions regarding which creeks are tested, please call Amie Siedlecki (541-423-1371) or Greg Stabach (541-423-1370) from the Rogue Valley Council of Governments’ (RVCOG) Natural Resources Department, or visit <http://rvcog.org/what-we-do/natural-resources/>.

**What you can do:** 1) pick up after your pets, 2) keep manure, cat litter, and other waste material away from creeks and storm drains, 3) have your septic system inspected and repaired if failing, and 4) put toddlers in swim diapers.

More information is available from RVCOG’s Natural Resources Department (<http://rvcog.org/what-we-do/natural-resources/>), Stream Smart’s Monitoring Water Quality in the Rogue Basin webpage (<http://www.stream-smart.com/monitoring-water-quality-in-the-rogue-basin/>), the Oregon Department of Human Services ([www.egov.oregon.gov/DHS](http://www.egov.oregon.gov/DHS)), and the Environmental Protection Agency (<http://www.epa.gov/waterscience/criteria/humanhealth/>).

**The following creeks have exceeded state bacteria standards for contact recreation (swimming, wading etc.):**

Ashland Creek at Granite Street (Ashland)
Bear Creek at Blue Heron Park (Phoenix)
Bear Creek at Table Rock Road (Medford)
Jackson Creek between Beall Lane and Dean Creek Road (Central Point)
Bear Creek between Pine Street and Kirtland Road (Central Point)

### *Salmon Watch Program Overview*

The Salmon Watch program is available annually to schools in Bear Creek Valley, Greater Jackson County, and Josephine County. The program is coordinated by the Rogue Valley Council of Governments and Rogue Valley Sewer Services on behalf of local communities in Bear Creek and the Middle Rogue Watersheds (DMAs and MS4s). The program teaches students about watershed health and stewardship by learning about Salmon, what they need to be healthy and thrive, and how our decisions can impact them. The main element of the program is a field trip that brings students out to a local creek or river to learn in the field. Specifics of how the program works are discussed in the 2023-2024 summary provided below. In addition, the complete Salmon Watch Fall 2023 and Spring 2024 Activity Report is available online (<https://rvcog.org/what-we-do/natural-resources/stormwater-101/>) and included below.

Keys to the success of the program is support from partners including multiple organizations (NGOs, Education Groups, and Watershed Councils), agencies, and municipalities who donate their time to the program for module instruction and provide other in kind (or direct) match to the program. For example, the Oregon Department of Fish and Wildlife donates fish for dissection, Oregon State Parks waives some permit fees, Jackson County waives parking and use fees and the Jackson Soil and Water Conservation District through direct funding. The match reduces overall program costs and helps us leverage additional program funding. Grants funding helps provide contractors for module instruction, supplies for the program, and transportation funding support for local schools.

In addition to the field classes, other activities conducted include recruiting schools and instructors through emails and personal contacts, program advertising and marketing, updating and completing program surveys, coordinating logistics for the program (schools, sites, programs, and instructors), obtaining permits for site use at State Parks (Tou Velle and Valley of the Rogue), managing contracts for instructors, providing reimbursements for program expenses, maintaining and stocking kits, presenting the program to schools, and other logistics. The Salmon Watch program page and resources are housed on the Stream Smart page.

<https://www.stream-smart.com/our-work/programs-and-projects/rogue-basin-salmon-watch/>

<https://www.stream-smart.com/virtual-resources/>



## Fall 2023 and Spring 2024 Program Summary

In the fall of 2023 and Spring of 2024, the Rogue Valley Council of Governments, working on behalf of the NPDES Phase II Stormwater Communities (Ashland, Central Point, Jackson County, Medford, Phoenix, and Talent), Rogue Valley Sewer Services (RVSS), and local water quality programs (TMDLs- including Grants Pass, Josephine County, Phoenix, Talent, and Jacksonville) partnered with the Jackson Soil and Water Conservation District, Bear Creek Watershed Education Partners (BCWEP), the Rogue River Watershed Council, and others to implement the Salmon Watch Program. Classes were conducted primarily in September, October, and early November (week ending November 3<sup>rd</sup>) of 2023 with Talent Middle School participating in 2 days in the Spring of 2024 (April). We also held a special session in December 2023 in partnership with a class from Logos Public Charter School who participated in the Oregon Department of Fish and Wildlife (ODFW) Eggs to Fry program and released fry as part of the Salmon module into the Rogue River. Overall, 32 field days were conducted with 28 schools and over 1,860 students. Classes represented schools from the Bear Creek Valley, greater Jackson County, and Grants Pass/Josephine County.

In addition, 20+ organizations, agencies, and municipalities donated their time to the program and provided in-kind match to the program. The match reduces program costs and also allows us to leverage grant funding for the program. Details on the class dates, field locations, schools involved, number of students, and other information (e.g., volunteer instructors) can be found in the Table 1.

The Salmon Watch program received financial support from the Jackson Soil and Water Conservation District, in addition to the Bear Creek DMAs and MS4s, Josephine County, and the City of Grants Pass. We continued our partnership with the Army Corps of Engineers operating under the MOU established for the program to host out of McGregor Park near Trail. In addition, we continued to work with Oregon State Parks and Jackson County to waive some fees for park use (Tou Velle, Valley of the Rogue, and Cantrall Buckley). ODFW has also continued to provide fish for the dissection module, in addition to donating time for training and instruction.

In addition to the field classes, there are a number of other program activities that are conducted to implement the program. Activities include an instructor training held on August 22<sup>nd</sup> and 23<sup>rd</sup> for both contracted educators and volunteer instructors, recruiting schools and instructors through emails, personal contacts, and at events, advertising the program, completing before and after program surveys, providing in-school presentations (limited outside of RVSS' jurisdictions), coordinating logistics for the program (schools, sites, programs, and instructors), obtaining permits for site use at state parks (Tou Velle), managing contracts for instructors, providing reimbursements for program expenses (transportation, parking fees, and program equipment and supplies), maintaining and stocking kits, and other logistics.

## Salmon Watch Field Day

For most classes, the format is the same in terms of timing, modules, and other logistics. There are exceptions for classes that make special arrangements (e.g., Scenic Middle School).

Salmon Watch field days are scheduled for around 4.5 hours (time of classes on-site) at field locations spread throughout Bear Creek and the Middle Rogue Watershed. Field sites include (although not all are used every year) Cantrall Buckley Park, Griffin Creek at Scenic Middle School, McGregor Park, Tou Velle State Park, Valley of the Rogue State Park, Reinhart Volunteer Park, Fish Hatchery Park, Palmerton Park, and numerous sites along Bear Creek (Bear Creek Park, Blue Heron Park, Coyote Trails Nature Center, Lynn Newbry Park, Cascade Christian High School, and North Mountain Park).

The “classic” four module model is used from the Salmon Watch Curriculum for the programs. Instructors are assigned stations to discuss Salmon Biology/Salmon Life Cycle (station 1), Water Quality (station 2), Macroinvertebrates (station 3), and Riparian Areas (station 4). Each station also has activities for students, including salmon viewing (when spawning), salmon dissection, water quality testing, macroinvertebrate sampling, native plant identification, drawing riparian cross sections and longitudinal profiles, scavenger hunts, and shade surveys. Classes are divided up into 4 groups and rotated through the stations at approximately 35 minutes, allowing every student to participate in each of the four stations. Examples of completed activity forms are included in Appendix A and an example schedule is presented below:

### *Schedule*

9:00-9:15	Intro (Lead Instructor)
9:15-9:50	Rotation 1
9:55-10:30	Rotation 2
10:35-11:10	Rotation 3
11:15-12:00	Lunch
12:05-12:40	Rotation 4
12:45 - 1:30	Wrap-Up (Lead Instructor)

There are a few exceptions to the field day, most notably at Scenic Middle School. Due to the size of the class, the program is structured over 8 days where one module (e.g., Salmon) is taught to all 5 of the 8<sup>th</sup> grade periods for the class. In addition, for smaller classes (30 students or less), we have adjusted the schedule to use only 3 instructors teaching the four sessions. One session (usually riparian) is either shared amongst the instructors or taught once by each instructor onsite.

### **Field Day Statistics**

Table 1.1 summarizes all of the Salmon Watch classes completed in the fall of 2023 and spring of 2024. Information on the dates, field locations, schools/districts, grade levels, number of students, and contributing partner organizations (volunteer instructors) are included in the table.



**Table 1.1: 2023/2024 Salmon Watch Field Trip Information**

Class Number (Field Days)	Date	Location	School	Grade	Number of Students	Partners (organizations providing match instructor time)
1	9/19/2023	McGregor Park (MG)	Mae Richardson Elementary	4th	60	RVCOG, SOLC
2	9/20/2023	MG	Crater Renaissance Academy	9th/10th	45	KT, RVSS
3	9/21/2023	MG	Talent Elementary & Bellview Elementary	4th	68	RVSS
4	9/25/2023	MG	Bellview Elementary	2nd/3rd/5th	76	ODFW, RVCOG
5	9/26/2023	MG	Crater Lake Charter	4th/5th	60	BLM, RVSS
6	9/27/2023	MG	Butte Falls Elementary & Orchard Hill Elementary	4th/5th	59	TFT, BLM
7	9/28/2023	Reinhart Volunteer Park (RVP)	Allen Dale Elementary	5th	75	RR, SOFRC, RVCOG
8	10/3/2023	MG	Roosevelt Elementary	5th	67	RVSS
9	10/4/2023	MG	Shady Cove Elementary	3rd/7th	48	BLM, SOFRC
10	10/5/2023	MG	Helman Elementary & CAMP	5th-8th	70	RVCOG
11	10/9/2023	Griffin Creek	Scenic Middle School	7th	100	RVCOG, CP
12	10/10/2023	Griffin Creek	Scenic Middle School	7th	100	RVCOG, CP
13	10/10/2023	Tou Velle State Park (TV)	Talent Elementary & Elemental Forest School	2nd-5th	59	SOLC, RVSS
14	10/11/2023	Griffin Creek	Scenic Middle School	7th	100	RVCOG

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15	10/12/2023	Griffin Creek	Scenic Middle School	7th	100	RVCOG
16	10/12/2023	TV	Griffin Creek Elementary	4 <sup>th</sup>	60	RVSS
17	10/17/2023	TV	Kennedy Elementary & Talent Elementary	4th/5 <sup>th</sup>	66	PPRV, RVSS
18	10/18/2023	TV	Orchard Hill & Woodland Charter	4th/5th	73	MWC, RVCOG, SOFRC
19	10/19/2023	TV	Kennedy Elementary, St. Mary's School, and Sylvies River	1st-8th & 12th	58	RVCOG, TFT
20	10/20/2023	TV	Outdoor Discovery Program	K-5th	54	SOLC, RBP, RRK
21	10/23/2023	TV	Walker Elementary	4th	40	MWC
22	10/24/2023	TV	Sams Valley Elementary	5th	45	RR, MWC, JSWCD
23	10/25/2023	TV	Kids Unlimited Academy	6th-8th	67	RVCOG, RRK
24	10/26/2023	TV	Helman Elementary & Trails Outdoor School	4th/5th	56	BCWEP
25	10/31/2023	Cascade Christian	Cascade Christian Middle School	7th	67	RVCOG, BCWEP
26	11/1/2023	TV	Oak Grove Elementary	4th	60	BLM, MWC, USFS
27	11/2/2023	TV	Griffin Creek Elementary, Talent Elementary, Pinehurst Elementary	1st-6th	63	RVCOG, BCWEP
28	12/14/2023	TV	Logos Public Charter School	K-5th	51	SOLC, RVSS
29	4/11/2024	Blue Heron Park	Phoenix-Talent School District	7th	76	SOFRC, RRWC, RVSS, RVCOG, PPRV
30	4/12/2024	Blue Heron Park	Phoenix-Talent School District	7th	76	SOFRC, RRWC, RVSS, RVCOG, PPRV

**Color Legend**

<b>MS4 or DMA</b>
<b>All. Regional Enrollment.</b>
<b>Medford</b>
<b>Phoenix/Talent</b>
<b>Central Point</b>
<b>Ashland</b>
<b>Josephine County/Grants Pass</b>
<b>Other Schools – Jackson County</b>

**Table 2: Key to Instructional Partners and Project Supporters**

<b>Abbreviation</b>	<b>Organization Name</b>	<b>Support Detail</b>
BLM	U.S. Dept. of Interior, Bureau of Land Management	Module Instruction, Training Video Production, Program Site (Provolt)
CP	City of Central Point	Module Instruction
GH	Gold Hill	City of Gold Hill
JC	Jackson County	Site Access, Fee waivers (Cantrall Buckley), Module Instruction
KT	Kid Time	Module Instruction
MWC	Medford Water Commission	Module Instruction
ODFW	Oregon Dept. of Fish & Wildlife	Module Instruction, Supplies, fish
OSPK	Oregon State Parks	Fee waivers
PPRV	Pollinator Project Rogue Valley	Module Instruction
RR	City of Rogue River	Module Instruction
RBP	Rogue Basin Partnership	Module Instruction
RRK	Rogue Riverkeeper	Module Instruction
RRWC	Rogue River Watershed Council	Module Instruction
RVCOG	Rogue Valley Council of Governments	Module Instruction, Coordination, Admin
RVSS	Rogue Valley Sewer Services	Module Instruction, Coordination,
SOFRC	Southern Oregon Forest Restoration Collaborative	Module Instruction
SOLC	Southern Oregon Land Conservancy	Module Instruction
TFT	The Freshwater Trust	Module Instruction
USACE	Army Corps of Engineers	Site access/facility use, hand washing stations, fee waivers
USFS	Forest Service	Module Instruction
BCWEP*	Bear Creek Watershed Education Partners (*Volunteers – Former Board Members)	Module Instruction

## Pre and Post Program Surveys

Surveys are used to evaluate what students learned in the program and provide a measure of the effectiveness of the program. Surveys are provided to classes prior to and after the field day is completed. Any changes in survey results provide an indication of what the students learned and how effective the instructors were.

A general survey is sent out to all participants and additional surveys are provided to select classes (e.g., Scenic Middle School).

*Survey Results (as of 5/9/2024)*

### *General Program Results*

Before and after surveys were conducted with students from all schools, except Scenic Middle School. 616 students responded to the pre-program survey and 257 responded to the post-program survey. Average scores increased from 3.16/16 (19.8% correct answers) to 5.97/16 (37.3%). Details on the results and questions frequently missed can be found below.

### *Pre-Program Frequently Missed Questions*

Frequently missed questions ?	
Question	Correct responses
1. What is a watershed?	270 / 616
2. Which items below can make streams unhealthy?	100 / 616
4. What kinds of fish in the Rogue River are born in freshwater and travel to the ocean to grow to be adults and back to freshwater to reproduce?	30 / 616
5. What do salmon need to be healthy in our streams?	47 / 616
6. What is a riparian area?	236 / 616
7. Riparian areas are good for streams because:	156 / 616

### *Post-Program Frequently Missed Questions*



### ! Frequently missed questions ?

Question	Correct responses
2. Which items below can make streams unhealthy?	81 / 257
4. What kinds of fish in the Rogue River are born in freshwater and travel to the ocean to grow to be adults and back to freshwater to reproduce?	27 / 257
5. What do salmon need to be healthy in our streams?	91 / 257
7. Riparian areas are good for streams because:	70 / 257

#### *Scenic Middle School*



Before and after surveys were conducted with students from Scenic Middle School. 293 students responded to the pre-program survey and 142 responded to the post-program survey. Scores increased from 6.96/21 (33.1% correct answers) to 10.13/21 (48.2%). Details on the results and questions frequently missed can be found below. It should be noted that the questions for the Scenic Middle School survey and general survey are different, although there is considerable overlap in the questions asked.

#### *Pre-Program Frequently Missed Questions – Scenic Middle School*

 Frequently missed questions 

Question	Correct responses
What is the scientific term for a fish that spends part of it's life cycle in salt water and part in fresh water	107 / 293
3. Which items below can make streams unhealthy (pollute the streams or make them unhealthy for fish and aquatic species)?	55 / 293
4. What is a macroinvertebrate?	120 / 293
6. What kinds of fish in the Rogue River (and local creeks including Griffin) are NOT born in freshwater and travel to the ocean to grow to be adults and back to freshwater to reproduce?	15 / 293
8. Healthy riparian areas are important for streams because:	12 / 293
9. Which of the following do salmon need to be healthy in our streams?	21 / 293

*Post-Program Frequently Missed Questions – Scenic Middle School*

 Frequently missed questions 

Question	Correct responses
3. Which items below can make streams unhealthy (pollute the streams or make them unhealthy for fish and aquatic species)?	63 / 142
6. What kinds of fish in the Rogue River (and local creeks including Griffin) are NOT born in freshwater and travel to the ocean to grow to be adults and back to freshwater to reproduce?	7 / 142
8. Healthy riparian areas are important for streams because:	17 / 142
9. Which of the following do salmon need to be healthy in our streams?	34 / 142

**Next Steps and Recommended Program Changes**

- Update the training materials, specifically the instructor manuals and reference guides. In addition, create an outline of how to teach each module/section for new instructors.

- Change the training format to host a mock field day which better shows all program elements, how to teach, teaching points, and suggested kit use.
- Add in hands on activities for several of the stations for program use and for events (e.g., life cycle figurines, salmon game).
- Host a pre-season “open house” as part of the training featuring new materials, modules, and other changes to the program.
- Review and update the survey questions.
- Continue to work with municipal separate storm sewer systems (MS4), designated management agencies (DMA), Jackson SWCD, Stream Smart, and other partners to continue the program.
- Work with local, regional, and statewide programs to continue to expand the program. Expansion would be additional programs offered (number), new field locations, and modules (Fire Ecology – SOFRC), Stormwater (NMP), and Cultural/Native American History (NMP).
- Continue to add programs later in the season and in the spring as time and resources allow. Timing is to allow better coordination with ODFW’s in-class fish program where schools grow salmon from eggs and release them later in the year.
- Continue to expand the program by adding back in service learning programs and bringing back the Student Education Symposium if possible (phasing programs back in).
- Use survey results to refine the program teaching points as needed.
- Continue to highlight the program as an important regional Stream Smart program.
- Establish geocaches at field site locations.
- Establish permanent locations for the modules at the established field locations:
  - Map locations of sites, and
  - Flag areas and/or map locations of the class layouts for each field site.

### **New in 2023**

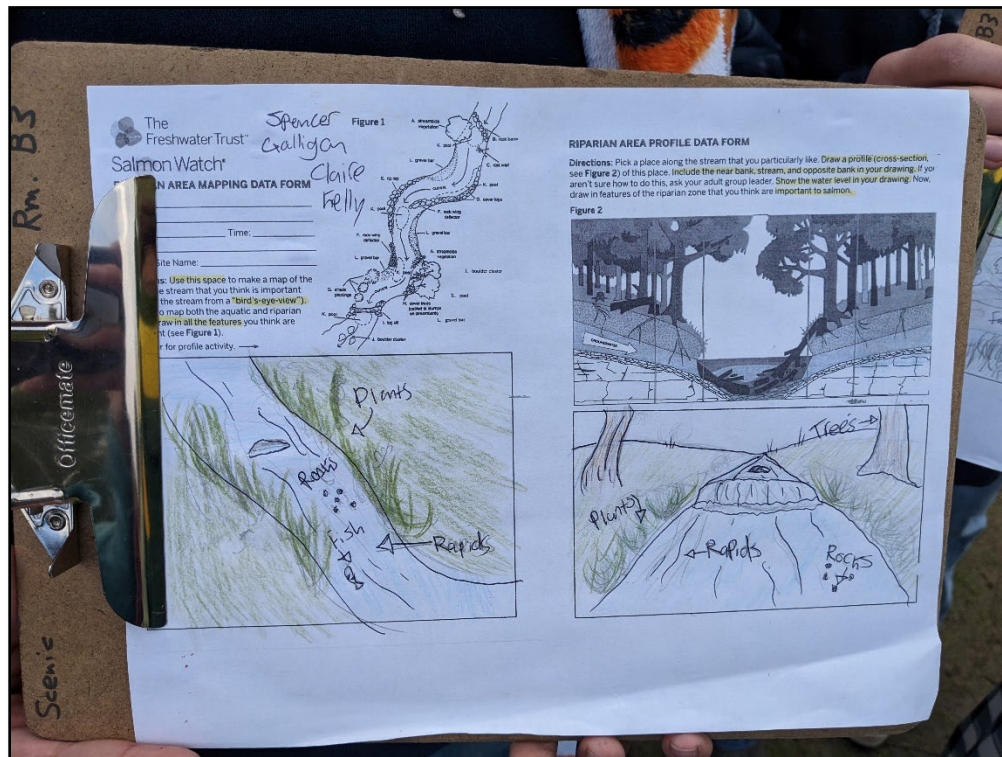
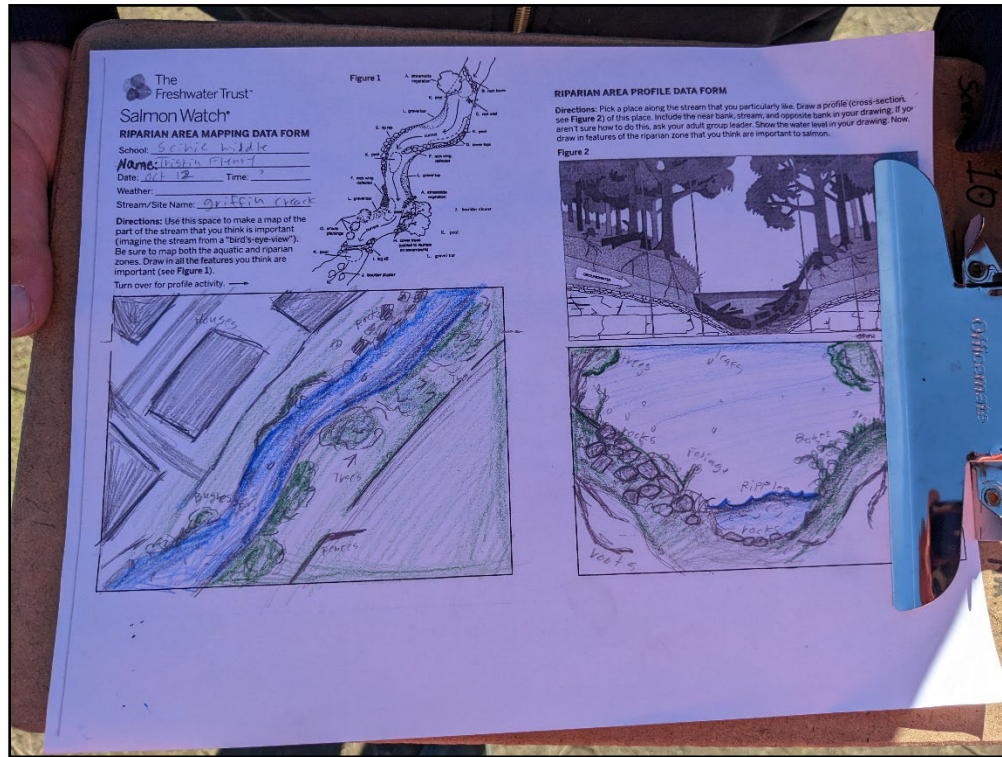
- Salmon Watch Open House – program debriefing with instructors to get feedback on the program, recommended changes, etc.
- Salmon Watch Kit Cleaning Work Party – a small work party with 5 instructors came to RVCOG and helped clean out and reorganize the Salmon Watch kits. Snacks and drinks were provided (funded through the Stream Smart Bottle Drop Give account).
- A 5<sup>th</sup> station module was incorporated into the spring Salmon Watch field trips at Blue Heron Park on April 11<sup>th</sup> and 12<sup>th</sup>. This module is currently offered through Pollinator Project Rogue Valley.

### Program Photos





### Appendix A: Data Sheet/Activity Examples



## Appendix B: Salmon Watch Wrap-Up for Fall 2023



### Salmon Watch Program Summary – Fall 2023

#### Another Successful Year in the Books!

In collaboration with partners and volunteers, we were able to provide 7 weeks of field trips, bringing students outdoors to learn about their local watersheds. Thanks to funding from the Jackson Soil & Water Conservation District and contributions from the water quality programs of local cities (Ashland, Central Point, Grants Pass, Jacksonville, Medford, Phoenix, and Talent) and counties (Jackson and Josephine), as well as seventeen additional partner organizations, we were able to provide no-cost field trips to students primarily in grades 3rd-8th from nine school districts and twelve private/charter schools in the Rogue Basin. In addition, we taught mixed (1<sup>st</sup> through 5<sup>th</sup>) and AP high school classes. Collaboration and partnership make it happen!

# of students served: 1,706

# of schools participating: 28

# of individual instructors contributing: 34

Coordinating agencies:



Students learning about the Rogue River Basin and the importance of watersheds.

Students collecting macroinvertebrates using D-nets.



Students learn at 4 stations:

- Salmon Biology
- Riparian Ecology
- Water Quality
- Macroinvertebrates



### Thank you, Salmon Watch Partners!



*Erosion Prevention and Sediment Control Brochure*

The Erosion Prevention and Sediment Control brochure was completed in early 2024 and print ready versions were distributed to MS4s and are available online (<https://rvkog.org/what-we-do/natural-resources/stormwater-101/>). The brochure is designed with a target audience of Engineers, Planners, and Contractors. It will be provided at front counters and be provided during the review and/or application process.

Final Version

**Best Management Practices (BMPs):**  
BMPs are activities or procedures that are followed to prevent erosion, control sediment, and reduce polluted runoff. They shall be installed prior to initial clearing, grading, or construction work and maintained throughout a project. All construction activities typically need to correctly implement and maintain one or more of the 5 BMPs that are pictured here depending on the scope of work and project location.

**PERIMETER PROTECTION**  
(Silt Fencing, Straw Bales, Fiber Socks, etc...)  
Good: [Image of silt fence] Bad: [Image of no silt fence]

**EROSION PREVENTION**  
Good: [Image of erosion control mat] Bad: [Image of exposed soil]

**CONSTRUCTION ENTRANCE**  
Good: [Image of mat at entrance] Bad: [Image of dirt on road]

**STORM DRAIN PROTECTION**  
Good: [Image of silt sock in drain] Bad: [Image of no silt sock]

**CONCRETE WASHOUT**  
Good: [Image of washout area] Bad: [Image of dirt on concrete]

**ONLY RAIN IN THE STORM DRAIN**  
a Regulate Basin clean water project  
**STREAM SMART**  
cool, clean water for life

Our goal is to protect our waterways by ensuring that our streets, alleys, storm drainage systems and other rights-of-way remain clean and safe. For more information on stormwater and stormwater resources visit: [www.stream-smart.com](http://www.stream-smart.com)

**STORMWATER POLLUTION PREVENTION:**  
**EROSION PREVENTION AND SEDIMENT CONTROL CONSTRUCTION ACTIVITIES**

**A PERMIT** for Erosion Prevention and Sediment Control at construction sites may be required. Call the local stormwater jurisdiction to verify prior to clearing the site.

A 1200-C permit will be required for sites that disturb one or more acres, or less than an acre but are part of a larger common plan of development. For information, contact the local stormwater jurisdiction.

**WHY** would a permit for erosion prevention and sediment control be necessary? Stormwater runoff associated with construction activities can be a major contributor of pollutants to the storm drain systems and creeks.

Pollutants like dirt, fuels, oil, trash, concrete washout, lime, joint compound, and paint could end up in stormwater systems that flow into streams.

**Be the Solution to Stormwater Pollution.** Follow these tips to stay in compliance with local stormwater regulations.

- For sites disturbing 7,000 sf or more, a site specific Erosion and Sediment Control Plan must be developed that describes how erosion, sediment, and waste material will be managed on site. All sites that need a plan must keep it on site and available.
- For projects requiring inspections all inspection records must be kept on site by the permit holder and available for review by the administrative entity.
- Implement the approved plans and recommended BMPs.
- Conduct inspections at the required frequency specified in the permit or daily. Document the inspection in written or electronic form.
- Promptly maintain or replace any damaged or ineffective BMPs observed during the site inspection.
- Bare ground that will not be worked for 14 days or more must be stabilized with temporary or permanent measures.
- Sites must be permanently stabilized at the end of the project.

*Brochure Distribution*

Brochure distribution and other materials (e.g., stickers) continued at events, front counters, meetings, and other areas. An estimated 750 brochures and other materials were given out during the year including at events (Earth Day). Brochure provided included the Stream Smart Post Card Series in English and Spanish, and the Stormwater Brochure. Many events are going zero waste, so we are moving towards QR codes for many of our brochures and providing links to those interested. We will continue to distribute brochures and track the brochures through QR codes.

*Events and Activity Summary*

<i>Date</i>	<i>Event</i>	<i>Description</i>	<i>Number of People</i>
2/15/24	OHA Board and General Meeting	Presented the Stream Smart Program to a local community group. Program focused on volunteer activities and programs that are done with schools (e.g., Salmon Watch)	30
4/8/2024	S.O.R.E (Southern Oregon Regional Envirothon)	Participated in and supported the annual Envirothon at CHS. Assisted with the water quality and macroinvertebrate station.	50
4/19/2024	N x N	Attended a Network-to-Network event representing the Stream Smart program and how partnerships and collaboration could be increased across the Rogue Basin by a number of sectors.	40
4/19/2024	Rogue Valley Earth Day at the Farm	Staffed a booth at the annual Earth Day Celebration focused on water quality, educational programs (e.g., Salmon Watch), and volunteer opportunities.	233
4/20/24	Earth Day at Blue Heron Park	Tabled at the event for Stream Smart.	200
4/22/2024	RCC Earth Day at Redwood Campus	Tabled for Stream Smart and promoted the RRCU, Adopt-A-River, and SalmonWatch.	80
6/14/24	Change For Good Tabling (Ashland CO+OP)	Tabled to promote the Stream Smart program and its activities including Salmon Watch, creek and river clean-ups, Adopt-A-River, Adopt-A-Greenway, monitoring, and other programs. Stream Smart was selected as the June recipient of the Change for Good program.	100
6/22/2024	Change For Good Tabling (Ashland CO+OP)	Day #2 of tabling for the Change for Good Program.	144
6/24/2024	Salmon Watch Traveling Roadshow	Pilot program with Jackson County Libraries. Salmon Watch is being presented as a one hour indoor version for interested libraries in the summer of 2024.	12

*Totals*

889

*Working with local schools*

The Regional Phase II program promotes, coordinates, creates, updates, and maintains materials, equipment to lend to schools including education kits, microscopes, and other resources. In addition, the program also works with schools directly for presentations, and with partners and programs that provide programs with schools. We had 8 programs (not including the Fall Salmon Watch field days in the summary) reaching participants.

Date	School/Partner	Equipment/Activity	Number of Participants
September through November 2023	Varies	All Salmon Watch Kits. Used to implement the Salmon Watch Program.	Detailed in Salmon Watch section and Salmon Watch report (over 1,708)
October 16 <sup>th</sup> , 2023	TRAILS Outdoor School	In class presentation on stormwater and stormwater management followed by a field tour of the onsite facilities (downspout disconnects, swales, etc.)	50
12/8/23	CHS	Worked with CHS on setting up water quality meters and provided training on use.	3
12/14/23	LOGOS/ODFW	Used Salmon Watch Kits (macros, water quality) in partnership with the release of Salmon Fry as part of the Eggs to Fry Program.	20
12/15/23	CHS	Planting Day with Crater High School at the Adopt-A-Greenway section	40
April 2024	Talent Elementary School	Salmon Watch Kits	152
Spring and Fall	CTE Board meetings with Crater Renaissance Academy (CRA)	Provide support on equipment needed to train students for future careers in natural resources.	25
3/22/24	Move for Your Water	Worked with Crater High School on an event in the Adopt-A-Greenway Section by the Expo Center. The event focused on drinking water, runoff, and maintenance of the Peninger planting area.	35

4/8/24	S.O.R.E (Southern Oregon Regional Envirothon)	Hosted the aquatic ecology testing station (water quality and macros). In addition, provided an update on the Stream smart Program, volunteer activities, and educational program including Salmon Watch.	55
January 2024 – March 2024	OSU Extension – Student Watershed Assessment Team (SWAT)	Loaned Macro and Water Quality Kits, provided survey 1-2-3 forms, and maps for the SWAT to monitoring water quality and riparian conditions at the Penninger Fire site and Blue Heron Park.	20

Totals

400

**PUBLIC INVOLVEMENT & PARTICIPATION (PI/PP)**

*Description*

The PI/PP program provides opportunities for the public to participate in the development of the SWMP control measures. Table 3 shows PI/PP activities that meet the general permit requirements. Activity details for the implementation year are below the table.

Table 3: Public Involvement & Participation Activities											
Activity	Regional Activity	Current Activity	New Activity/ Materials	Audience(s)			Permit Year				
				Public, Homeowners, HOA's, Schools, Businesses (Target Audience #1)	Local Elected Officials, Land Use Planners, Engineers (Target Audience #2)	Construction Site Operators (Target Audience #3)	1	2	3	4	5
<b>Public involvement &amp; participation in development of SWMP</b>											
Public will be invited to meetings (as appropriate) including quarterly SWAT meetings	X	X		X	X	X					
Hold workshops, Council work sessions, open houses, and/or other meetings to provide an opportunity for the public input, comment, and participation in the SWMP Development.	X		X	X	X						
<b>Website</b>											
Stream Smart	X	X		X	X	X					
RVCOG	X	X		X	X						
MS4s - SWMP, permit holders SWMP implementation, contact information, illicit discharge complaints and reports		X		X							
<b>Stewardship Opportunities (Outreach Goal – 1,000+ participants per year)</b>											
Adopt A River/Creek Clean-ups	X	X		X	X						
Salmon Watch	X	X		X	X						
Volunteer Planting Events/Riparian restoration	X	X		X							
Add new and/or replace worn/missing storm drain markers with volunteers	X		X	X							
LID/GI facility maintenance and training on proper maintenance/enhancement with volunteers	X	X		X			X		X		
Other volunteer activity	X	X	X	X	X						
<b>Shading indicates when activity taking place.</b>											

*SWAT Meetings*

Quarterly SWAT meetings were held in July, October, January, and April. Updates on the PE/PO and PI/PP programs were provided at all 4 meetings by the Rogue Valley Council of Governments. Reports were presented in person and included as part of the meeting minutes. Copies of the reports are available online on the TMDL pages or Stormwater pages on the RVCOG website.

*Websites*





Annual creek clean ups are conducted as part of the MS4 Public Involvement and Participation programs in partnership with other programs. Clean-ups are scheduled twice a year in April and September. A summary of the September 2022 event and examples of outreach material and advertising is presented below. 108 volunteers participated in the event.



### **Bear Creek Stewardship Day: September 16<sup>th</sup>, 2023**

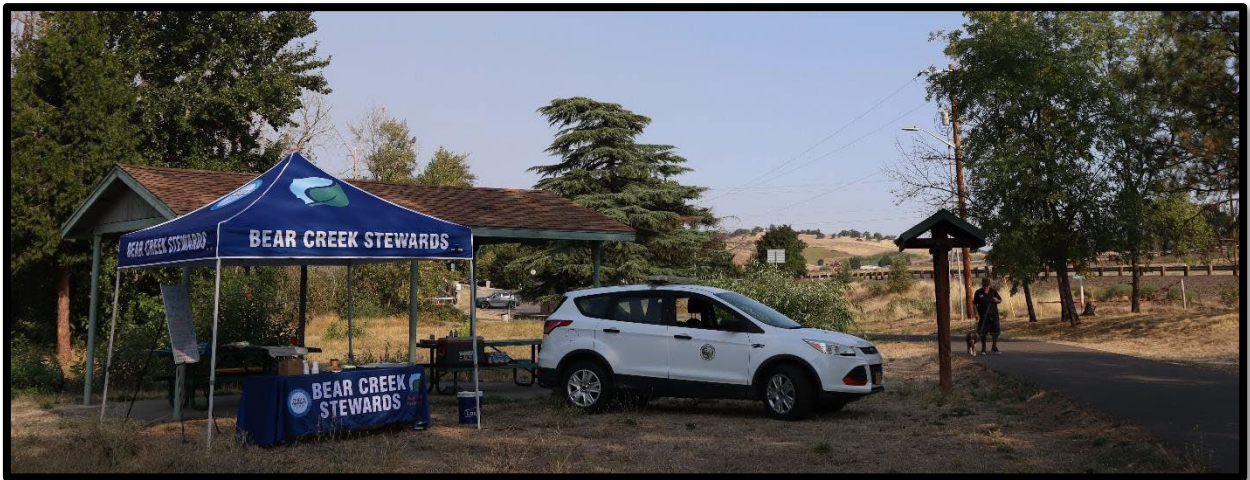
The Bear Creek Stewards is a collaboration of individuals and organizations that promote a thriving Bear Creek Greenway corridor through the convergence of art, environmental stewardship, and recreation. Since 2015, the group has organized a Bear Creek Stewardship Day clean-up every April and September, with the exceptions of the April 2020 event (which was canceled due to COVID-19) and the September 2020 event (which was canceled due to the Almeda Fire).

The Bear Creek Stewards hosted a Stewardship Day on September 16<sup>th</sup>, 2023 as part of the Stop Oregon Litter and Vandalism (SOLVE)-sponsored fall clean-up. We want to thank the 114 volunteers that removed 4,895 pounds of trash and 1,700 square feet of branches, blackberry, and invasive species during the event.

While SOLVE is the state-wide sponsor, we had several local donors for the event including The Gordon Elwood Foundation, Jackson Soil and Water Conservation District, Lithia & Driveway, Medford Food Co-op, Recology, and Rogue Disposal. The event ran from 9:00 am-12:00 pm and had 9 check-in locations scheduled along or near Bear Creek from Central Point to Ashland.

1. Pine Street, Central Point (Rogue Valley Council of Governments, Stream Smart, and the City of Central Point)
2. McAndrews Road, Medford (Rogue Riverkeeper)
3. Hawthorne Park, Medford (City of Medford)
4. Alba Dr., Medford (Medford Food Co-op)
5. Coyote Trails Nature Center, Medford (Rogue River Watershed Council)
6. Northridge Terrace, Medford/Phoenix (Rogue Valley Sewer Services)
7. Blue Heron Park, Phoenix (Save The Phoenix Wetlands and Southern Oregon Monarch Advocates)
8. Lynn Newbry Park, Talent (City of Talent)
9. Wranglers Arena, North Ashland (Southern Oregon Geocaching)

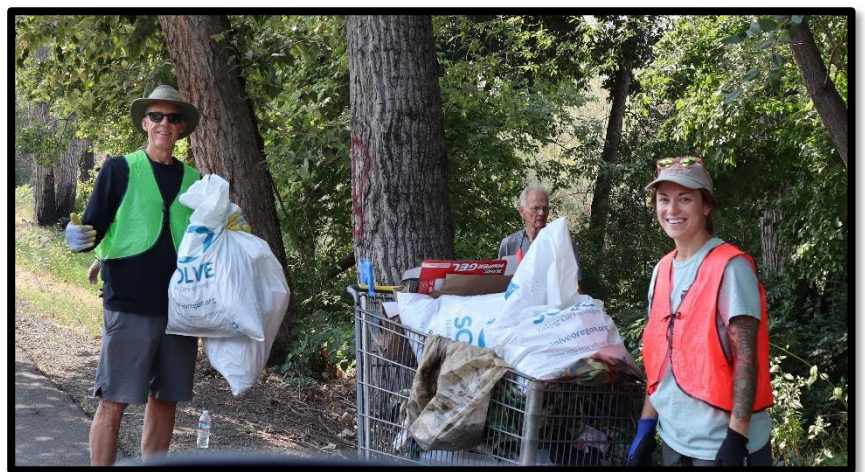
Since 2015, the Bear Creek Stewards have removed approximately 74,737 pounds of trash from the Bear Creek corridor. This would not have been possible without the tireless effort of volunteers. For more information about the Bear Creek Stewards, visit: <http://www.bearcreekstewards.org>.



Location/Date:	Fall 2023 Clean-Up Event Registration					
	Attended	Adults	Minors	Pounds of Trash	Pounds of Recycling	Invasive Species Removed
Pine Street	18	18	0	1800	0	0
McAndrews Road	7	7	0	1000	31	0
Hawthorne Park	9	9	0	275	4	0
Alba Drive	11	10	1	540	0	0
Coyote Trails Nature Center	7	7	0	60	0	120
Northridge Terrace	10	8	2	450	1	1500
Blue Heron Park	25	24	1	120	0	0
Lynn Newbry Park	7	7	0	150	0	0
Wranglers Arena	20	18	2	500	0	0
<b>Total</b>	<b>114</b>	<b>108</b>	<b>6</b>	<b>4,895</b>	<b>36</b>	<b>1700</b>

<b>93%</b>	<b>95%</b>	<b>5%</b>
<b>Attended vs registered</b>	<b>were adults</b>	<b>were under 18</b>

Our efforts resulted in over 100 participants removing over 2 tons of trash and 1,700 square feet of dead plants/invasive species from approximately 10 miles of the Bear Creek Greenway corridor. Not only do these tasks lead to a more aesthetically-pleasing Bear Creek Greenway, but also the potential for water quality improvements, an increase in biodiversity due to invasive species removal and native plantings, and a bolstered sense of environmental stewardship.



## Changes noted between the previous 7 events:

- The percentage of children participating in events:
  - 31% were under 18 in 2019
  - 14% were under 18 in April 2021
  - 23% were under 18 in September 2021
  - 20% were under 18 in April 2022
  - 14% were under 18 in September 2022
  - 20% were under 18 in April 2023
  - 5% were under 18 in September 2023
  
- There are fluctuations between events with the participation no-show rates:
  - In September 2019, more people than registered participated (123%)
  - In April 2021, less people than registered participated (88%)
  - In September 2021, again, less people than registered participated (71%)
  - In April 2022, more people than registered participated (104%)
  - In September 2022, more people than registered participated (118%)
  - In April 2023, more people than registered participated (107%)
  - In September 2023, less people than registered participated (93%)



**Summary of Clean-Up Efforts: April 2015 – September 2023**

<b>Date</b>	<b>Participants</b>	<b>Check-In Locations</b>	<b>Miles Cleaned Up</b>	<b>Pounds of Trash</b>	<b>Other Tasks</b>	<b>Location</b>
April 2015	81	1	1	2,000		Medford
September 2015	32	2	2	1,200		Medford
April 2016	101	3	3	1,500		Medford
September 2016	52	3	3	2,000		Medford
April 2017	118	5	5	4,800		Medford and Phoenix
September 2017	81	7	6.5	4,500		Central Point, Medford, Phoenix, and Talent
April 2018	191	8	7	5,100	0.25 acres of blackberry removed	Medford, Phoenix, Talent, and Ashland
September 2018	93	8	7	4,000	0.5 acres of blackberry removed	Medford, Phoenix, Talent, and Ashland
April 2019	232	9	8	5,600	1 acre of blackberry removed	Central Point, Medford, Phoenix, Talent, and Ashland
September 2019	167	11	10	3,345	Planted 420 plants and removed 10 cubic yards of blackberries	Central Point, Medford, Phoenix, Talent, and Ashland

April 2021	215	8	10	6,960	100 plants mulched, 480 lbs of dead juniper removed, over 1/3 acre of blackberries removed, and 500 lbs of metal recycled	Central Point, Medford, Phoenix, Talent, and Ashland
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September 2021	173	9	10.5	7,605	Weeded, 1000 square feet of invasive plants removed, 20 plants mulched, removed dead pine branches and limbs, Trees of Heaven (invasive species), and blackberry brambles and vines	Central Point, Medford, Phoenix, Talent, and Ashland
April 2022	180	9 scheduled *2 canceled	9	7,860	Pollinator garden planted and maintained, invasive plant removal, weeding, mulching, and graffiti removal	Central Point, Medford, Phoenix, Talent, and Ashland

September 2022++	118	8 scheduled *1 canceled	9	4,385	Pollinator garden weed removal, watering planted conifers, invasive plant removal, mulching, trash removal	Central Point, Medford, Phoenix, Talent, and Ashland
April 2023	191	9	10	8,987	Pollinator garden weed removal, watering planted	Central Point, Medford, Phoenix, Talent, and Ashland

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					conifers, invasive plant removal, mulching, trash removal	
September 2023	114	9	10	4,895	Pollinator garden weed removal, invasive plant removal, mulching, trash removal	Central Point, Medford, Phoenix, Talent, and Ashland





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## *Other Volunteer Activities*

Nine volunteer events were completed in partnership with the Stream Smart Program, Activities (126 participants)

<b><i>Date</i></b>	<b><i>Activity</i></b>	<b><i>Number of Volunteers</i></b>
7/12/23	Peninger Work Day with Crater Renaissance Academy (CRA)	15
8/5/23	Baker Park Clean-up	20
9/30/23	Stream Smart Adopt-A-Street Clean-up	4
12/15/23	Peninger Work Day #2 with CRA	40
1/15/24	Stream Smart Adopt-A-Street Clean-up	4
1/24/24	RVP Volunteer Day with Dutch Brothers	12
4/20/24	Adopt-A-Greenway Planting and Maintenance Day	4
4/27/24	RVP Trail Building with Boy Scouts	12
6/22/24	RVP Trail Building with Boy Scouts	15

### ***Total***

## **Miscellaneous Activity Summary**

As part of the Phase II implementation programs, we also work annually on several online maps that track program activities and surveys that document hot spots, and visual inspections of storm drains.

Implementation Maps (in development/ongoing)

Base Map

<https://rvcog.maps.arcgis.com/apps/mapviewer/index.html?webmap=adbb31b9ef8d4e8690bef7392edd1349>

App (Interactive Base Map)

<https://rvcog.maps.arcgis.com/apps/instant/nearby/index.html?appid=ab8b849b05b84baa99a831324f20006c>

Storm Drain Visual Survey Form

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<https://arcg.is/1TyLun>

Link to Survey form with Results – Last survey June 29<sup>th</sup>, 2023

<https://arcg.is/1LTSKW0>

## **Agencies, Groups, sponsors, and funders that RVCOG worked with on stormwater and water quality issues and volunteering for program activities:**

- Bear Creek Watershed Education Partners (a former 501c(3) organization, now just a volunteer organization)
- Oregon Department of Fish and Wildlife
- Oregon State Parks
- Regional Environmental Education Leaders (REEL)
- Freshwater Trust (TFT)
- Rogue River Watershed Council (RRWC)
- Cooperative Weed Management Areas (CWMAs) in Jackson and Josephine County
- Local schools – elementary, middle school, and high school, public and private
- Local Scouts (clean-ups)
- Southern Oregon Education Service District
- Jackson Soil and Water Conservation District (SWCD)
- Rogue Riverkeeper (RRK)
- Bureau of Land Management (BLM)
- U.S. Army Corps of Engineers (USACE)
- Medford Water Commission (MWC)
- Scenic Middle School (SMS)
- SOLVE
- Southern Oregon Land Conservancy (SOLC)
- Pollinator Project Rogue Valley (PPRV)
- Solid Waste Agency
- Republic Services
- Southern Oregon Forest Restoration Collaborative (SOFRC)
- Crater Renaissance Academy
- Applegate Partnership and Watershed Council
- Gordon Elwood Foundation
- Local communities (Ashland, Talent, Phoenix, Medford, Central Point, Jacksonville, Grants Pass, and Rogue River)
- Jackson and Josephine Counties
- Rogue Valley Sewer Services
- North Mountain Park
- Jackson County Libraries
- Local Geocachers
- Rogue Drinking Water Partnership
- Kid Time
- United States Forest Service
- Rogue Basin Partnership (RBP)
- Extreme Terrain

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- Grants Pass Clinic
- Lithia Motors, Inc.
- Medford Food Co-op
- Phoenix-Talent School District
- Recology
- Rogue Disposal
- Starbucks
- Dutch Brothers