

Regional Stormwater and Education Program Annual Report

This report outlines the public education, outreach, involvement, and participation strategies that municipal separate storm sewer systems (MS4s) in the Middle Rogue Basin implemented from July 1, 2021 to June 30th, 2022 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.

The majority of the activities covered 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 Eagle Point. This report follows a similar format to previous years. Activities for program implementation this year were impacted by COVID19 and social distancing restrictions in the first half of the year for most programs and returned to almost business as usual in the second as in-person events and activities were held again.

Program Highlights

- Programs reached over *2,400 people* (not including visitation to the Stream Smart website).
- The website and social media platforms had over *7,000 visitors* for the year. We are seeing a shift in users from the conventional website to the social media platforms. As a result, we are continuing to increase our social media activities.
- The Stream Smart platform was used to provide information to the public and other user groups, advertise events, promote programs, volunteer activities, and other activities.
- The Stream Smart program is continuing to expand with new partners and ties into specific programs including the Bear Creek Restoration Initiative website in development. The tie and exposure should help increase the profile of both programs.
- Continued the Salmon watch program for an ninth consecutive season in the Fall of 2021 and Spring of 202. We conducted 31 in person field days. Classes represented schools from the Bear Creek Valley and Greater Jackson County. *1,330 participants*.
- Salmon Watch Partners included representatives from the TMDL DMAs and Bear Creek MS4s, Bear Creek Watershed Education Partners (BCWEP) volunteers, RVSS, Rogue River Watershed Council (RRWC), 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.
- Secured funding to support continuation of the Salmon Watch Program in 2021 from Jackson Soil and Water Conservation District.
- Secured funding from Central Point Rotary for the 2022-2023 program. Funding from Jackson SWCD is pending.

Regional Stormwater and Education Program Annual Report

- Presented education and outreach information at multiple local events in a partnership with the Stream Smart and/or TMDL programs, schools, and partners. *650 people reached.*
- Participated in and helped coordinate volunteer clean-ups in September 2021 and April 2022. *301 attendees.*
 - Fall Statistics and Activities:
 - 173 volunteers
 - Removed 7,200 lbs of trash
 - Invasive Species(blackberries) removed
 - Press releases and media interviews conducted
 - Spring Statistics and Activities:
 - 128 volunteers
 - Mulching and planting at Pine Street/Expo
 - Pollinator Garden at Lithia and Driveway Sports Park planted
 - Invasive Species(blackberries) removed at Lynn Newbry Park
 - Press releases and media interviews conducted
- Continued activities along Stream Smarts Adopt-A-Greenway segment near the Expo Center.
- Audiences reached included the general public, schools, and local officials (through presentation of programs at RVCOG Board meetings).
- Engineer, planners, and contractors are the target audience for the Erosion Prevention and Sediment control brochure which is nearing completion and should be completed in this implementation year.

PUBLIC EDUCATION & OUTREACH (PE/PO) SUMMARY



General Program/Activity Description

Regional Stormwater and Education Program Annual Report

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 SWMPS. The goal of program activities is to educate residents on ways to reduce the behaviors and practices that cause or contribute to adverse stormwater impacts on receiving waters and provide steps that citizens, businesses, and others can take to reduce pollutants in stormwater runoff and prevent illicit discharge from entering the MS4 impacted receiving waters.

Work completed in 2021-2022 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 detail for the implementation year follows 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
Electronic Communication Channels (Topics: 1-10)											
Stream Smart	X	X		X	X						
RVCOG Website	X	X		X	X						
MS4s Individual Websites		X		X							
Messaging/Campaigns											
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					
Events (Topics: 1, 2, 7, 9) – Minimum of 4 events per year											
Spring events (April/May) - 2	X	X		X	X						
Fall Events (September/October) - 2	X	X		X	X						
Event Examples Rogue Valley Earth Day(s) Arbor Day Events Land Steward Workshop Salmon Festival World Fish Migration Day Bear Creek Fall Festival Other											
Media (Topics: 1-10)											
Press Releases	X	X		X	X	X					
Social Media	X	X		X							
Print Media	X	X		X	X	X					
Targeted Workshops/Trainings (Topics: 1-10) – 1-2 per year											

Regional Stormwater and Education Program Annual Report

Erosion Prevention & Sediment Control BMPs - Goal: target construction site operators		X	X		X	X		X		X	
Riparian/Restoration/Invasive Spp. 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					
Printed Materials (Brochures, post cards). (Topics: 1-10)											
Continue printing & distribution of existing brochures, postcards, etc.	X	X		X	X						
New/revised printed material for distribution	X		X	X	X	X					
Presentations (Topics: 1-10) - 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					
Program Support/Implementation (Topics: 2, 3, 4, 6, 7, 9)											
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 2021-2022

Stream Smart

The Stream Smart program was designed to help MS4s implement their education and outreach programs and public involvement and participation programs in partnership with other programs including local TMDL programs. 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 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 2021-2022 coordinator), Medford, Ashland, Central Point, RVSS, Jackson County, Grants Pass, Josephine County, and the Medford Water Commission. Core refers to those members who actively participate in meetings and program activities.

Activities included coordinating and facilitating 4 quarterly Stream Smart meetings (September, December, March, and June), sponsoring and promoting events, implementing activities and programs, 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/>), continuing to expand partners and promote the program, creating and installing signs incorporating the logo along local recreation corridors (Bear Creek Greenway), and hosting events on the Adopt-A-Greenway section from Pine Street to Upton Road near the Jackson County Expo.

Stream-smart.com

Regional Stormwater and Education Program Annual Report

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.



Regional Stormwater and Education Program Annual Report

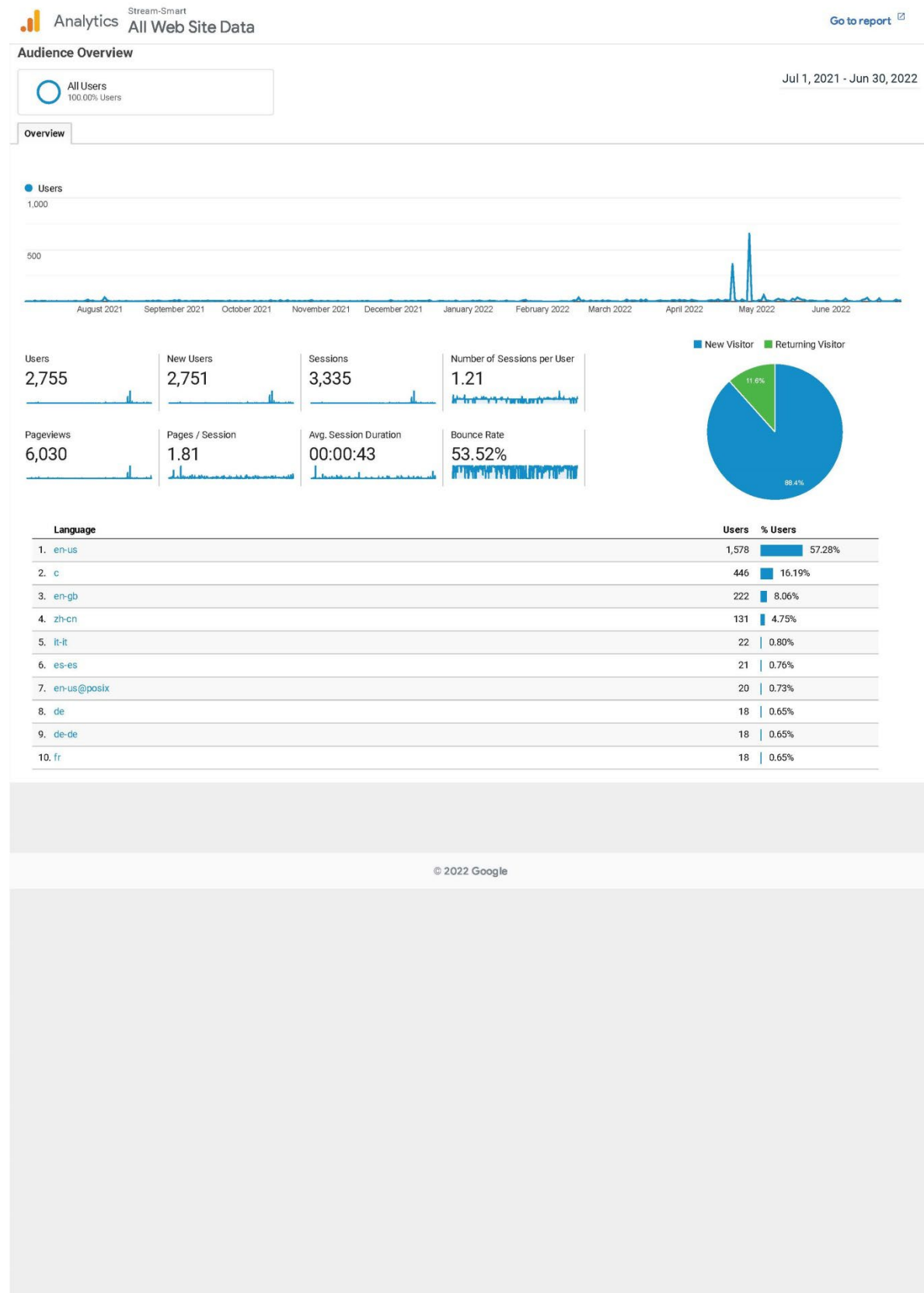
Web and Social Media Summary

Annual visitation to the website, Facebook, and Instagram show that the program shifted towards a high percentage of users learning about and participating in Stream Smart through social media platforms (62%) when compared to traditional channels (38%). The highest visited pages include the Creek Clean-ups, Programs and Projects, and general information about the program including contact information.

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

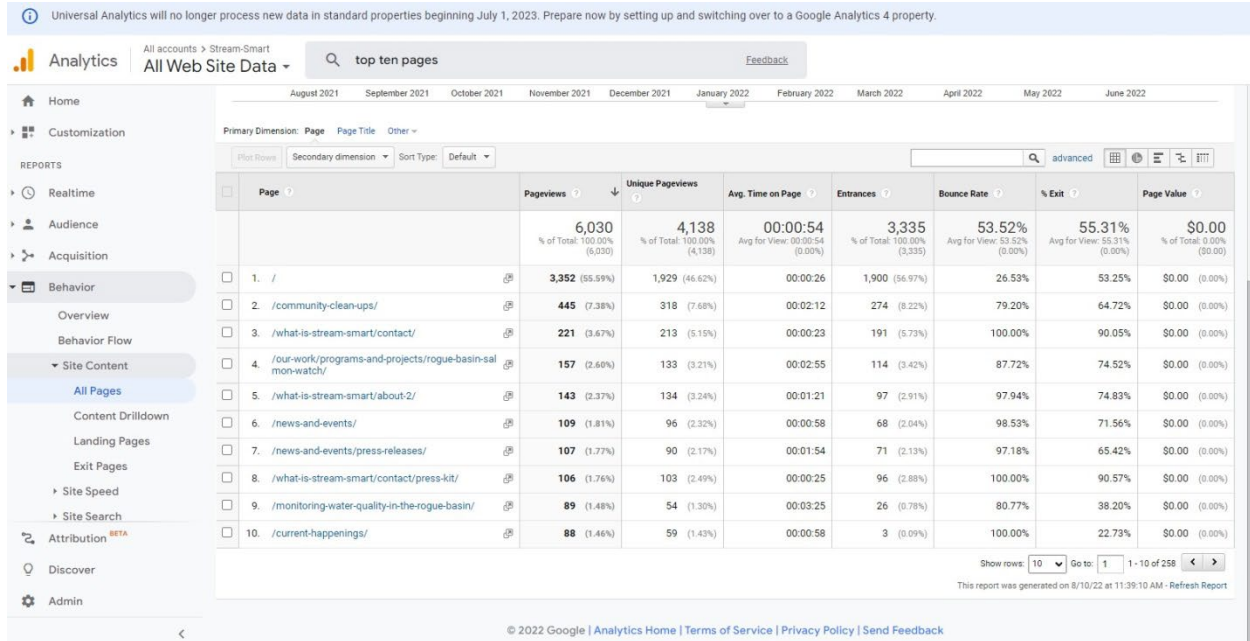
Regional Stormwater and Education Program Annual Report

Visitation to the website

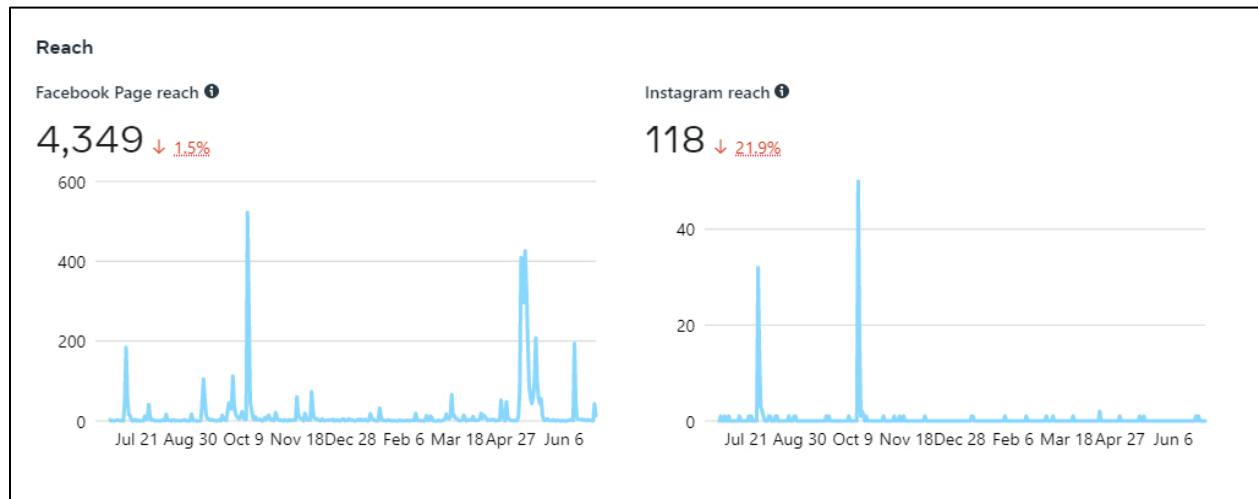


Regional Stormwater and Education Program Annual Report

The top ten pages included the community clean-ups, Salmon Watch, and monitoring.



Social Media Visitation



Regional Stormwater and Education Program Annual Report

Social Media Demographics

Audience

Current audience

Potential audience

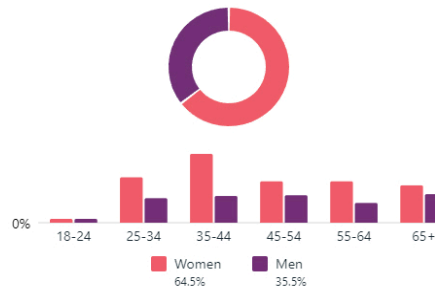
Facebook Page likes ⓘ

397

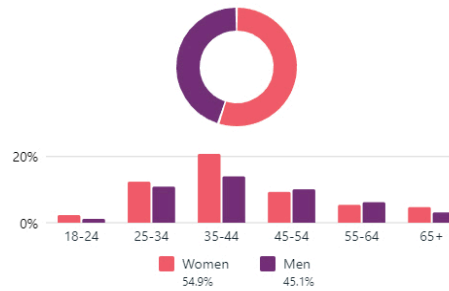
Instagram followers ⓘ

239

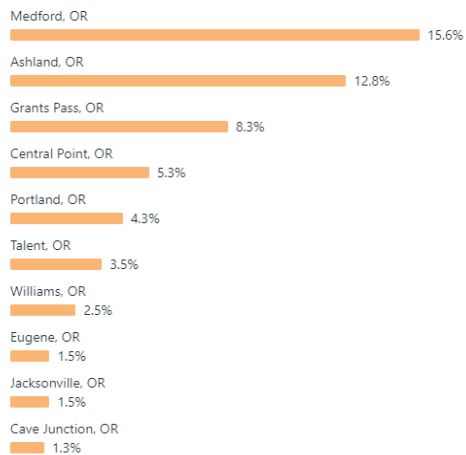
Age & gender ⓘ



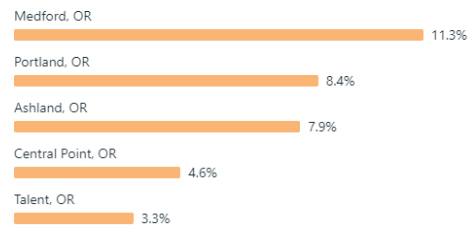
Age & gender ⓘ



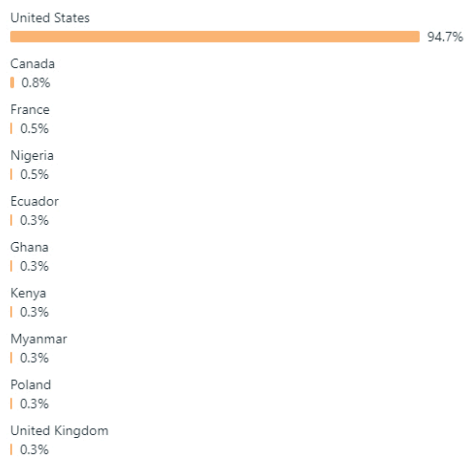
Top cities



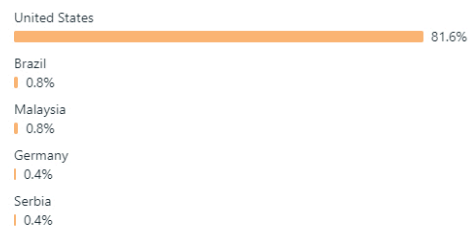
Top cities



Top countries



Top countries



Regional Stormwater and Education Program Annual Report

Example Posts

The screenshot shows a Facebook interface. At the top, the page is titled "Stream Smart - a clean water project". Below the header, there are navigation icons and a search bar. The left sidebar contains several promotional sections: "Page tips" with a link to "How to Create Effective Posts", "Create ad" with options to create new ads or boost existing ones, "Free Meta Business Tools" including post templates, appointment bookings, online events, and job postings, and "Insights" showing reach and engagement data. The main content area displays a post from "Stream Smart - a clean water project" published by Amie Nicole Siedlecki on June 14. The post text reads: "We have so much fun teaching elementary, middle, and high school students about salmon, macroinvertebrates, riparian areas, and water quality during our Salmon Watch classes! Getting these awesome 'thank you' notes from students is the cherry on top! 🍒🍒🍒". Below the text is a handwritten note on lined paper. The note is dated "5-26-22" and reads: "Dear Ryan and Amie, Thank you so much for teaching us about fish. I liked the macroinvertebrates". Below the note is a colorful drawing of a fish, a person, and a tree. The post has 263 people reached, 31 engagements, and a distribution score that is 12.2x higher than the previous post. There are 2 shares and a "Boost post" button.

Stream Smart - a clean water project

Page tips [See all \(1\)](#)

How to Create Effective Posts [X](#)

Short, visual posts created for the right audience are more successful.

[Learn how](#)

Create ad [See all](#)

How would you like to grow your business?

[Create new ad](#)
Make an ad using text, photos or videos to promote your business

[Boost a post](#)

[Boost an Instagram post](#)

Automated Ads
Get personalized ads that adjust over time to help you get better results.

Free Meta Business Tools [X](#)

- [Post templates](#)
Quickly create visually pleasing posts with free, pre-made creative assets.
- [Add appointment bookings](#)
Display your services and availability so that people can book an appointment.
- [Host paid online events](#)
Create online events that people can pay to access.
- [Post a job](#)
Find qualified candidates by posting job opportunities with your business on Facebook.

[Show more](#)

Insights [See all](#)

Last 28 days: Jul 11 - Aug 7

156

Stream Smart - a clean water project

Published by Amie Nicole Siedlecki · June 14 · [...](#)

We have so much fun teaching elementary, middle, and high school students about salmon, macroinvertebrates, riparian areas, and water quality during our Salmon Watch classes! Getting these awesome "thank you" notes from students is the cherry on top! 🍒🍒🍒

Date: 5-26-22

Dear Ryan and Amie,

Thank you so much

for teaching us about fish

I liked the macroinvertebrates

263 People reached

31 Engagements

↑ +12.2x higher Distribution score

[Boost post](#)

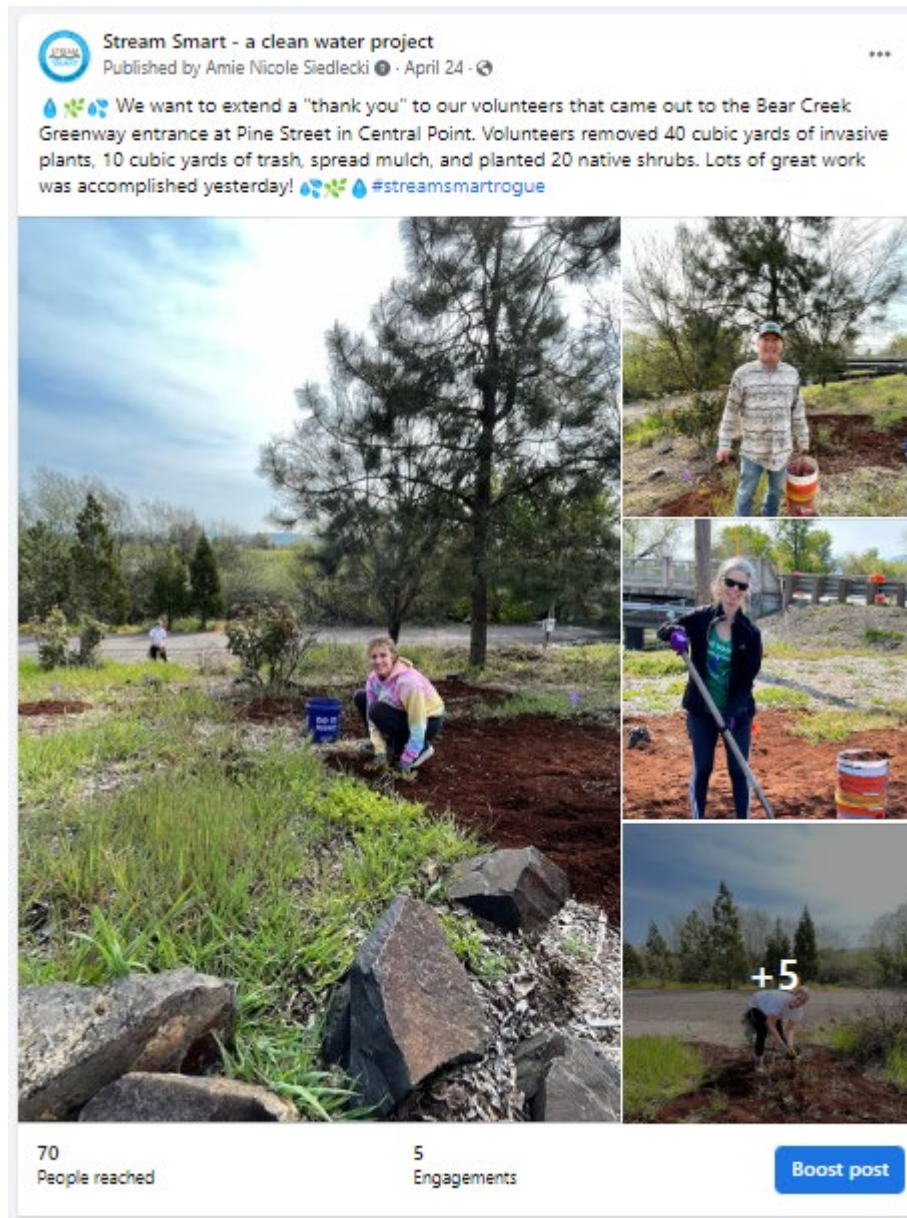
[You and 5 others](#)

2 Shares

Regional Stormwater and Education Program Annual Report



Regional Stormwater and Education Program Annual Report



Regional Stormwater and Education Program Annual Report

Examples of Other Articles, Press Releases, and Media

Rogue Basin Partnership December/January Newsletter Article Salmon Watch – Fall 2021

"What does the term, 'anadromous' mean when referring to salmon?"

"Which water quality tests can we perform to determine if a habitat is healthy for salmon and other aquatic life?"

"Name two characteristics of aquatic insects described within the word, 'macroinvertebrate.'"

"Where are riparian zones located?"

These are just a handful of the questions that are asked and subsequently answered following a successful Salmon Watch field day. For those unfamiliar with the Salmon Watch program, it was created by Oregon Trout in 1993 to cultivate a sense of stewardship for students with local creeks and rivers and the aquatic life that proliferates in those areas. A typical Salmon Watch field day includes four program modules: salmon biology/salmon lifecycle, water quality, macroinvertebrates, and riparian systems. Each module is taught by a local expert or professional in that field of study. Salmon Watch field days are held in both Jackson and Josephine counties, most frequently at county or state parks with easy instream access.

Despite the challenges of the ongoing pandemic, a lack of school bus drivers, and limited chaperones, Salmon Watch field days persisted over a 7-week period, providing outdoor education to 3rd through 7th grade students. Due to generous funding from the Jackson Soil and Water Conservation District, and contributions from water quality programs of our local cities (Ashland, Central Point, Grants Pass, Jacksonville, Medford, Phoenix, and Talent) and counties (Jackson and Josephine), as well as 12 additional partner organizations, Salmon Watch field days were provided to 9 school districts and 2 private schools within the Rogue Basin on a no-cost basis. Overall, collaboration and partnership are key to making these kinds of awesome things happen! To learn more about Salmon Watch, visit: <https://www.stream-smart.com/our-work/programs-and-projects/rogue-basin-salmon-watch/>.

Fall 2021 Program Statistics:

- # of students served: over 1,240
- # of schools that participated: 20
- # of individual instructors that contributed: 38

Regional Stormwater and Education Program Annual Report

8/15/22, 10:48 AM

Cleanup effort focuses on nine sites along Bear Creek – Medford News, Weather, Sports, Breaking News | Mail Tribune



Cleanup effort focuses on nine sites along Bear Creek

By Terri Harber | Updated: Sep 25, 2021 04:54 PM

A



Andy Atkinson / Mail TribuneAnnie and Tiffany Idart move a cut limb during the Greenway Cleanup Saturday morning in Central Point.



A group of volunteers spent Saturday morning beautifying local outdoor areas to mark Bear Creek Stewardship Day.



One of the volunteers, Amanda Wolfe, of Central Point, was walking along the greenway near Pine Street and pushing a wheelbarrow full of mulch material.

"It's my first time at the cleanup," said Amanda, a teacher at Abraham Lincoln Elementary School. "I didn't want to just sit there, complain and not do anything to help."

While she doesn't use the trail area there often, her aunt does, she said.

Wendie Wolfe, also of Central Point, was pushing a wheelbarrow and passed her niece, Amanda, on the trail. Both were among about 20 volunteers at the Pine Street hauling and spreading mulch.

ADVERTISEMENT

By continuing on this site, you agree to our Privacy Policy.

x

<https://www.mailtribune.com/top-stories/2021/09/25/cleanup-effort-focuses-on-nine-sites-along-bear-creek/>

1/7

Regional Stormwater and Education Program Annual Report

8/15/22, 10:48 AM

Cleanup effort focuses on nine sites along Bear Creek – Medford News, Weather, Sports, Breaking News | Mail Tribune



Helen Hull, 16, and her younger brother, Gibson Hull, 14, both of Central Point, were raking mulch material next to the trail on a patch of land near the Pine Street bridge over the creek.

"We've gone on bike rides here before," Helen remembered.

Gibson had been at the April cleanup pulling weeds and taking up bushes. He said he hadn't had the chance to get a good look at the spots where he worked the last time.

This was the first time Helen has participated.

Both siblings said they felt positive about the work they were doing.

"It's a good experience," Helen noted.

Others were seen picking up garbage or trimming bushes.

Bear Creek Stewards, the organization that hosted the clean-up, is composed of members representing local cities, groups and businesses. On Saturday, focus was on beautification projects at nine locations along the watershed from Central Point to the Ashland area. Volunteers could choose from an array of locations to do their work as well as select an activity.

For example, Coleman Creek, Blue Heron and Lynn Newbry parks were slated for blueberry grubbing. Pine Street was not only a mulching site but volunteers were also weeding and involved with plant maintenance.

The Bear Creek Greenway trail is 20 miles long and runs from Central Point to Ashland.

The Pine Street area has been the subject of improvement work since the Penninger Fire in 2018, said Amie Siedlecki, Water Quality Technician, Natural Resources, Rogue Valley Council of Governments.

That fire started near the Jackson County Expo in July of 2018 that burned 97 acres. It resulted in the death of a homeless man and destroyed five outbuildings, according to previous reports.

Replacement cotton and juniper trees, still young, can be seen at the Pine Street location, which also has interpretive signs that provide information about such topics as fire safety, ecology and plants there, Siedlecki said.

A large amount of creek corridor was also burned in the Alameda Fire that occurred in September of 2020.

Social distancing was emphasized and face masks were available to help the participants avoid exposure to COVID-19. The event was also a way to recognize National Public Lands Day, which was also on Saturday.

Their cleanups in April coincide with Earth Day and the last one involved more than 200 volunteers. They removed about 7,000 pounds of trash, 480 pounds of dead juniper and more than 500 pounds of metal that was later recycled, the Bear Creek Stewardship reported.

By continuing on this site, you agree to our Privacy Policy.

✕

<https://www.mailtribune.com/top-stories/2021/09/25/cleanup-effort-focuses-on-nine-sites-along-bear-creek/>

2/7

Regional Stormwater and Education Program Annual Report

Salmon Watch

Conducted another successful year of the Salmon Watch Program. The program is largely supported through the NPDES Phase II and TMDL Programs. Overall, 31 field days were conducted with 52 classes and over 1,300 students. Classes included schools from the Bear Creek Valley, Greater Jackson County, and Josephine County. 17 organizations, agencies, and municipalities donated their time to the program for module instruction and provided in kind match to the program. Additional in kind match was also provided by the Oregon Department of Fish and Wildlife (donations of fish for dissection), Oregon State Parks (waiver of some permit fees), Jackson County (fee waivers) and the Jackson Soil and Water Conservation District (funding). The match reduces overall program costs in terms of funding needed to implement the program and also helps us to leverage grant funding for the program. Grant funding was provided by Jackson Soil and Water Conservation District. Grants funding helps provide contractors for module instruction, supplies for the program, and transportation funding support for local schools. Details on the class dates, field locations, schools involved, number of students, and other information (e.g., volunteer instructors) can be found in Tables 1.1 and 1.2.

In addition to the field classes, other activities are also conducted including 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, and other logistics. In addition, we recorded the training program in partnership with the Bureau of Land Management. 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/>

2021 Field Day Statistics

Table 1.1: 2021/2022 Salmon Watch Field Trip Information

Date	Location	School/District	# Students	Grade	# Classes	Contributing Partners
9/22/2021	McGregor Park (MG)	Orchard Hill Elementary	22	5	1	RVCOG, RRWC, BLM, MFR, V
9/28/2021	MG	Talent Elementary	63	4	2	BCWEP, MFR
9/29/2021	MG	Shady Cove Elementary	54	3 and 4	2	ODFW
9/30/2021	Blue Heron Park (BH)	Phoenix Elementary	55	5	2	RVSS, BCWEP
10/5/2021	MG	Butte Falls Elementary	20	4	1	BLM

Regional Stormwater and Education Program Annual Report

10/6/2021	Harnish Wayside (Eagle Point)	Crater Lake Charter School	43	4 and 5	2	V
10/12/2021	BH	Phoenix Elementary	50	4	2	RVCOG, BLM, BLM, TFT
10/13/2021	Tou Velle State Park (TV)	John Muir Outdoor School	30	6 an 7	2	MWC, JC
10/14/2021	TV	Logos	54	3-5	2	4H, BLM, V, V
10/15/2021	TV	Abe Lincoln Elementary	42	4	2	MFR, SOLC, V, V
10/19/2021	TV	Sams Valley Elementary	40	5	2	TFT, BLM, MFR, SOLC
10/20/2021	Cascade Christian High School	Cascade Christian High School	53	7	2	BLM, V
10/21/2021	Valley of the Rogue State Park	Talent Elementary and OTS Charter School	30	2-5	2	SOLC, MFR, BLM, 4H
10/22/2021	Reinhardt Park	Allen Dale Elementary	75	5	3	BLM, MFR, V, V
10/18/2021	Scenic Middle School (SMS)	Scenic Middle School (SMS)	250	8th	10	CP
10/19/2021	Scenic Middle School (SMS)	Scenic Middle School (SMS)				CP
10/20/2021	Scenic Middle School (SMS)	Scenic Middle School (SMS)				RVCOG
10/20/2021	Scenic Middle School (SMS)	Scenic Middle School (SMS)				RVCOG
12/21/2021	Scenic Middle School (SMS)	Scenic Middle School (SMS)				
10/21/2021	Scenic Middle School (SMS)	Scenic Middle School (SMS)				RVCOG
10/22/2021	Scenic Middle School (SMS)	Scenic Middle School (SMS)				
10/22/2021	Scenic Middle School (SMS)	Scenic Middle School (SMS)				RVCOG
10/26/2021	Provolt	Woodland Charter School	15	5	1	BLM
10/27/2021	Lynn Newbry Park (LNP)	Talent Elementary	45	3	2	V,V
10/28/2021	TV	Oak Grove Elementary	69	4	2	BLM, RRWC, V,V
11/2/2021	Cantrall Buckley (CB)	Ruch Outdoor School	72	Mixed	2	BLM, AP, RVCOG
11/2/2021	TV	Kids Unlimited	156	5	5	RR, BLM, KT
11/3/2021	TV	Kids Unlimited		6		BLM, RVCOG, MWC

Regional Stormwater and Education Program Annual Report

11/4/2021	TV	Kids Unlimited		7		MWC, MWC, BLM, RVCOG
4/1/2022	TV	McLoughlin Middle School	60	6	2	RVCOG, RVCOG, ODFW, ODFW
5/1/2022	MG	Ashland	15	3	1	ODFW, RVCOG

Color Legend

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

Table 2: Summary of Partners and in-kind Supporters (does not include match funding by Ms4s and DMAs)

Abbreviation	Organization Name	Support Detail
AP	Applegate Partnership and Watershed Council	Module Instruction
ACOE	Army Corps of Engineers	Site access/facility use, hand washing stations, fee waivers
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
JC	Jackson County	Site Access, Fee waivers (Cantrall Buckley)
JSWCD	Jackson Soil & Water Conservation District	Match Funding
Medford	City of Medford	Module Instruction
MWC	Medford Water Commission	Module Instruction
ODFW	Oregon Dept. of Fish & Wildlife	Module Instruction, Supplies
KT	Kid Time	Module Instruction
SOLC	Southern Oregon Land Conservancy	Module Instruction
RRWC	Rogue River Watershed Council	Module Instruction
RVCOG	Rogue Valley Council of Governments	Module Instruction, Coordination, Admin
RVS	Rogue Valley Sewer Services	Module Instruction, Coordination,

Regional Stormwater and Education Program Annual Report

4H	4 H	Module Instruction
TFT	The Freshwater Trust	Module Instruction
BCWEP*	Bear Creek Watershed Education Partners (*Volunteers – Former Board Members)	Module Instruction

Program Photos



Regional Stormwater and Education Program Annual Report



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

General Program Results

Before and after surveys were conducted with students from all school except Scenic Middle School. 387 students responded to the pre-program survey and 184 responded to the post-program survey. Scores increased from 2.85/16 (18% correct answers) to 5/16 (31%). Details on the results and questions frequently missed can be found below

Pre-program

Regional Stormwater and Education Program Annual Report

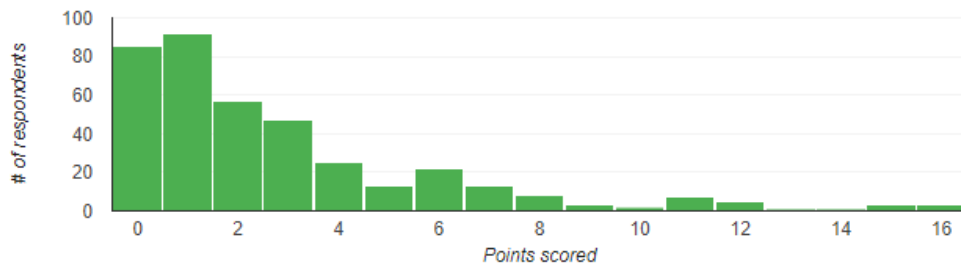
Insights

Average
2.85 / 16 points

Median
2 / 16 points

Range
0 - 16 points

Total points distribution



Frequently missed questions ?

Question	Correct responses
1. What is a watershed?	168 / 387
2. Which items below can make streams unhealthy?	69 / 387
3. What is a macroinvertebrate?	160 / 387
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?	14 / 387
5. What do salmon need to be healthy in our streams?	38 / 387
6. What is a riparian area?	120 / 387
7. Riparian areas are good for streams because:	52 / 387
8. What is a storm drain?	188 / 382

Post-Program Results

Regional Stormwater and Education Program Annual Report

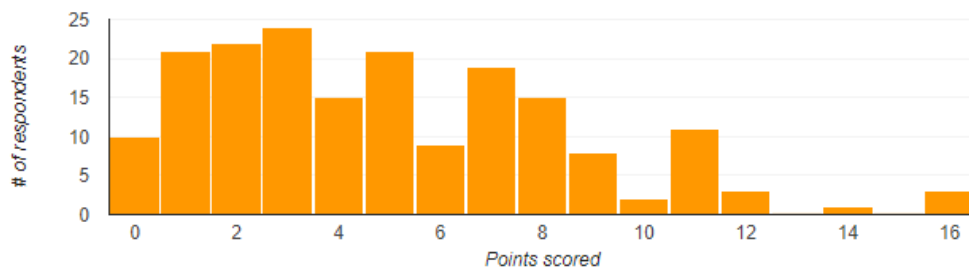
Insights

Average
5 / 16 points

Median
4 / 16 points

Range
0 - 16 points

Total points distribution



Frequently missed questions ?

Question	Correct responses
2. Which items below can make streams unhealthy?	59 / 184
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?	8 / 184
5. What do salmon need to be healthy in our streams?	41 / 184
7. Riparian areas are good for streams because:	48 / 184

Scenic Middle School

Before and after surveys were conducted with students from Scenic Middle School. 208 students responded to the pre-program survey and 219 responded to the post-program survey. Scores increased from 5.36/21 (26% correct answers) to 10.31/21 (49%). Details on the results and questions frequently missed can be found below. It should be noted that the questions for the Scenic survey and general survey are different, although there is considerable overlap in the questions asked.

Regional Stormwater and Education Program Annual Report

Pre Program Scenic Middle School

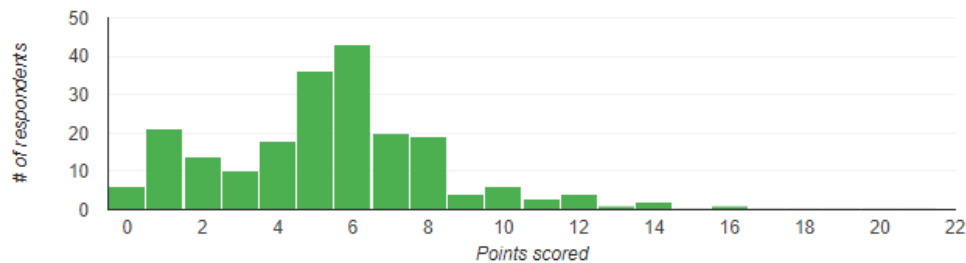
Insights

Average
5.36 / 21 points

Median
5 / 21 points

Range
0 - 16 points

Total points distribution

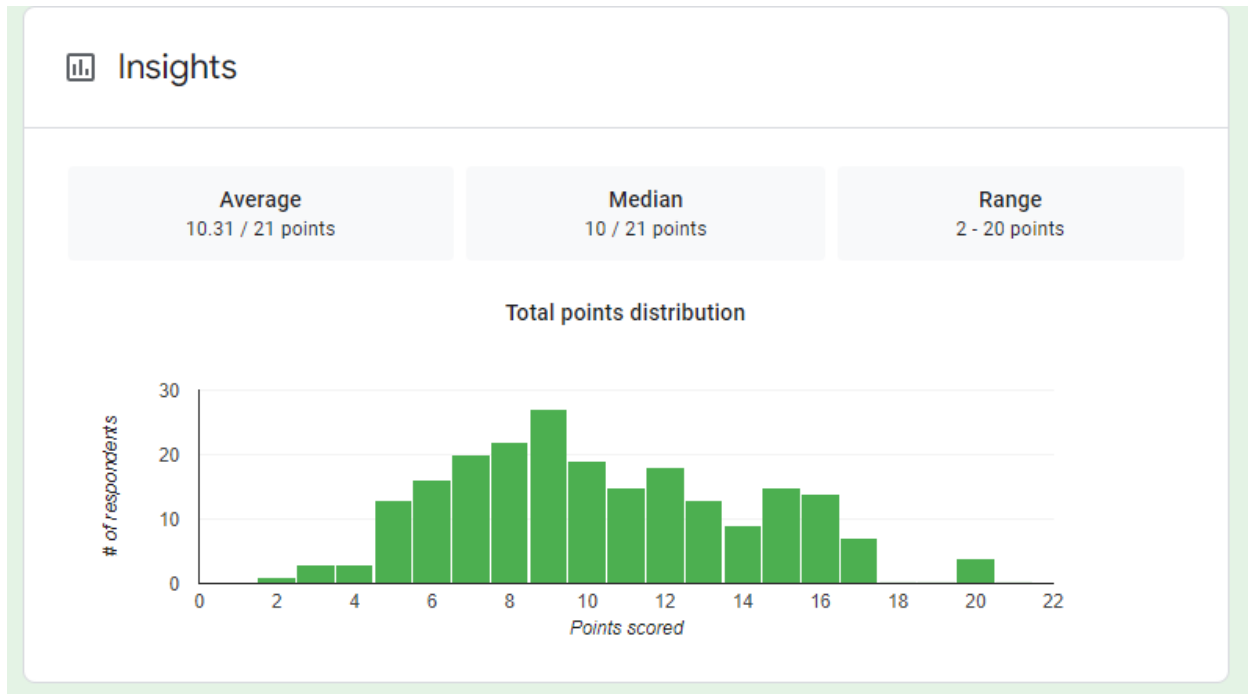


Frequently missed questions ?

Question	Correct responses
1. What is a watershed?	101 / 208
3. Which items below can make streams unhealthy?	21 / 208
4. What is a macroinvertebrate?	58 / 208
5. What does the presence of certain types of macroinvertebrates in a stream tell us?	68 / 208
6. What kinds of fish in the Rogue River (and local creeks including Griffin) are born in freshwater and travel to the ocean to grow to be adults and back to freshwater to reproduce?	0 / 208
7. What is a riparian area?	62 / 208
8. Riparian areas are good for streams because:	19 / 208
9. What do salmon need to be healthy in our streams?	9 / 208

Regional Stormwater and Education Program Annual Report

Post Surveys



Frequently Missed Questions

Frequently missed questions ?

Question	Correct responses
6. What kinds of fish in the Rogue River (and local creeks including Griffin) are born in freshwater and travel to the ocean to grow to be adults and back to freshwater to reproduce?	10 / 219
8. Riparian areas are good for streams because:	37 / 219
9. What do salmon need to be healthy in our streams?	69 / 219

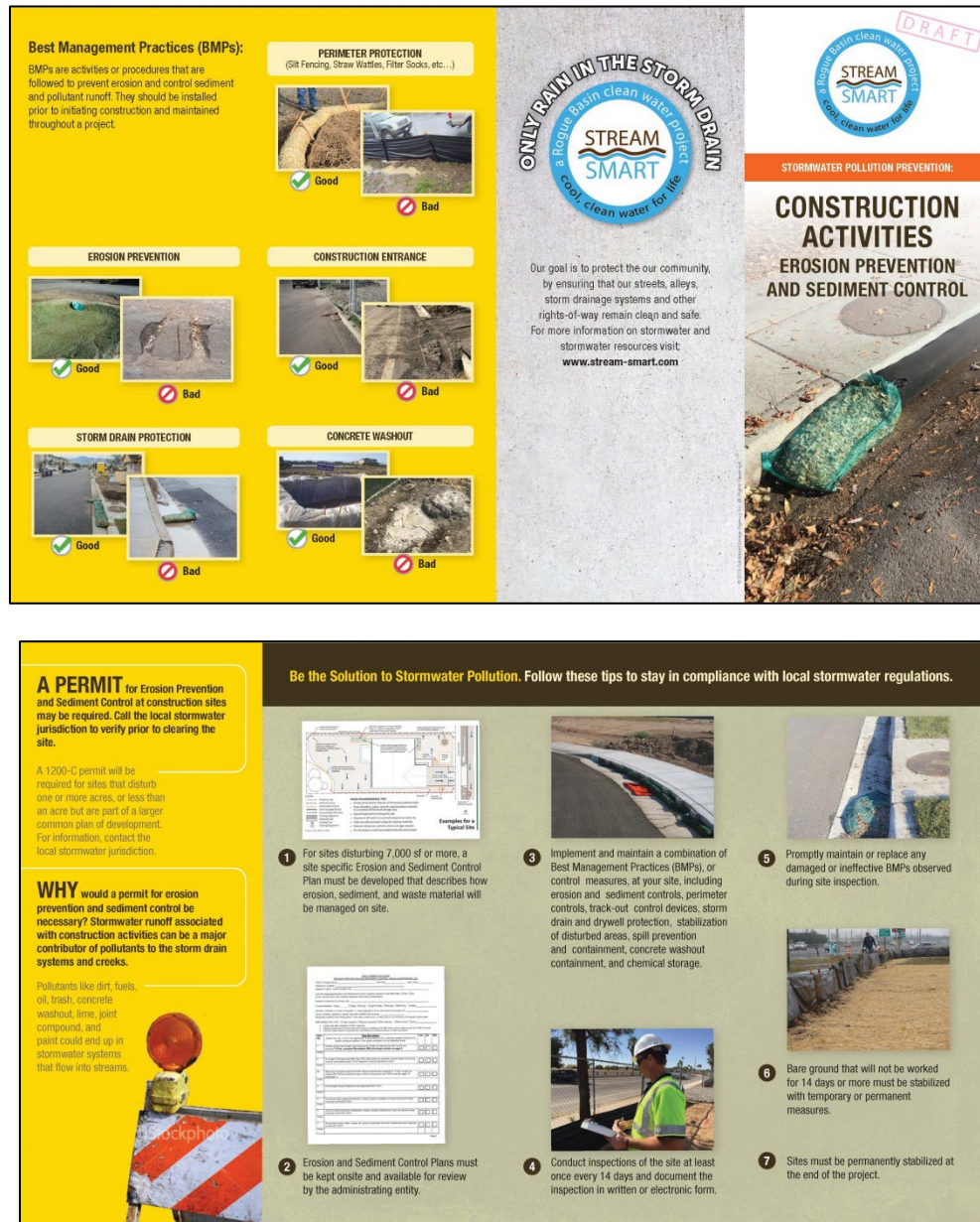
Erosion Prevention and Sediment Control Brochure

Work continued on the Erosion Prevention and Sediment Control brochure and completed drafts were sent to Goldstreet Designs for revision. Revisions were discussed through email and on the phone, with a planned meeting in the first quarter of the implementation year in 2022-2023.

Regional Stormwater and Education Program Annual Report

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.

June 2022 Draft



Brochure Distribution

Brochure distribution continued to limited due to COVID19. Brochures were available at front counters, local libraries (when open), at meetings, and online. An estimated 250 brochures 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.

Regional Stormwater and Education Program Annual Report

Events and Activity Summary

Date	Event	Description	Number of People
1/5/2022	Water Forum	Served as a panelist on a regional water forum hosted by Senator Golden. We spoke on water quality and watershed programs including, but not limited to, water quality, Clean Water Act Program activities (TMDL and Stormwater) including local implementation programs, and regional collaboration programs.	100
4/12/2022	Oregon Life Long Learning Institute (OLLI) Class – Volunteer and Education Programs	Conducted a class on Volunteer and Education Programs including Salmon Watch, Stream Smart, and the Creek Clean-ups. Audience was a mix of general public and some Municipal Staff. Class videos are available online.	16
4/19/2022	OLLI Class Clean Water Act Programs – TMDL and MS4 Programs	Conducted a class on Regional Clean Water Program implementation including the MS4 Program (Public Education and Outreach and Public Involvement and Participation). Class videos are available online.	15
4/22/2022	Rogue Valley Earth Day at SOU's Farm	<p>Annual Rogue Valley Earth Day Event that was held following a 2 year absence due to COVID. The event was organized the SOU which was new since COVID. Our booth featured the Stream Smart Program. A brief summary of activities and featured included is below.</p> <ul style="list-style-type: none"> ○ Participated in the Ecoquest Activity Program ○ Stormwater/stormwater pollutants (theme –Ms4 Program) ○ Restoration and Healthy Streams (theme – TMDL) ○ Activities <ul style="list-style-type: none"> ▪ Stormwater pollutants identification and solutions ▪ Mazes (SW and Goat Head) ▪ Restoration Habitat Identification 	500+
6/28/2022	Jackson Soil and Water Conservation District's Field Camp	Taught two stations at the field camp focused on Salmon Watch activities. One of the stations was the macroinvertebrate identification station, and the other was a combined riparian and water quality station.	60

Working with local schools

Regional Stormwater and Education Program Annual Report

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.

Date	School/Partner	Equipment	Number of Participants
September through November 2021 and April and May 2022	Varies	All Salmon Watch Kits. Used to implement the Salmon Watch Program.	Detailed in Salmon Watch section and Salmon Watch report (over 1,300)
October 2021 through January 2022	Oregon State University Extension	Loaned the macro and water quality kits for monitoring students conducted on urban stream and forests (riparian areas) in the Bear Creek watershed including areas impacted by recent fires.	20
April 4 th , 2022	Southern Oregon Regional Envirothon	Prepped and loaned Macro kits for the Southern Oregon Regional Envirothon.	30
April 2022	Loaned for use in SOLC's Living on Your Program. The program takes 4 th grade classes from Phoenix, Talent, and Ashland on educational field trips in the Ashland Watershed. The stream section had up to 50 students per day and 8 scheduled classes.	Macroinvertebrate kits.	400
6/28/2022 and 6/29/2022	Loaned materials for use at the Jackson Soil and Water Conservation Districts Field Camp for local schools.	Macroinvertebrate Kits, Water Quality Kits, and Riparian Kit	100

Regional Stormwater and Education Program Annual Report

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 detail for the implementation year follows 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
Public involvement & participation in development of SWMP											
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						
Website											
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							
Stewardship Opportunities (Outreach Goal – 1,000+ participants per year)											
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						
Shading indicates when activity taking place.											

SWAT Meetings

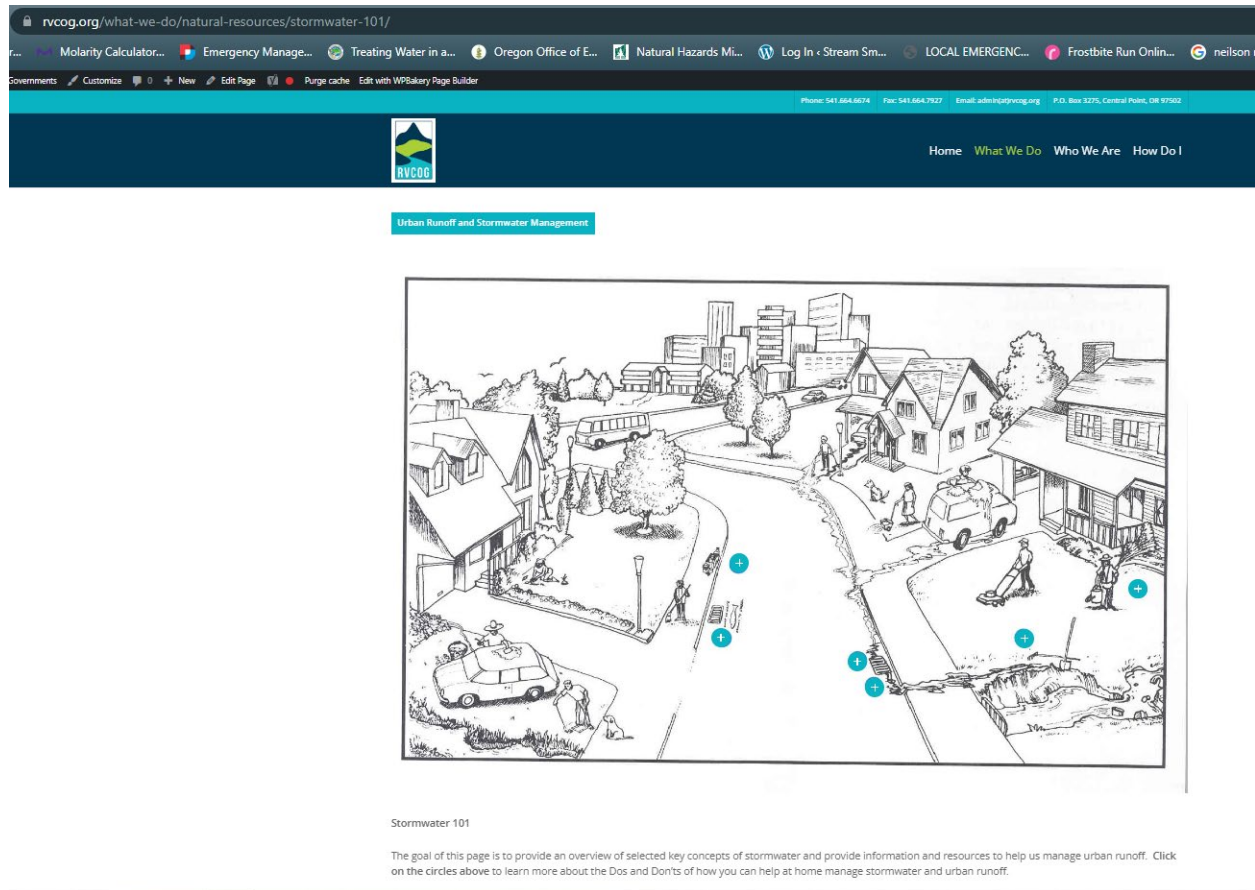
Quarterly SWAT meetings were held in July, October, January, and April. Updates on the PE/PO and PI/PP programs were provided at all 4 meetings by the Rogue Valley Council of Governments.

Websites

Regional Stormwater and Education Program Annual Report

Updated the stormwater material on the RVCOG website and stormwater related pages.

- Stormwater 101 - <http://rvcog.org/what-we-do/natural-resources/stormwater-101/>



This website is the main overview page for MS4 related content on the RVCOG website. It has general information on stormwater, the six minimum control measures, and links to most of the programs active brochures including the Stream Smart Pledge Cards, Yard Care, Concrete, Paint, and the older version of the Erosion Brochure. The page also contains links to resources, the regional design manual (<http://rvcog.org/what-we-do/natural-resources/stormwater-101/rogue-valley-stormwater-quality-design-manual/>) and using the car wash kit (<http://rvcog.org/what-we-do/natural-resources/stormwater-101/car-wash-kits/>)

Updates and work on the Stream Smart website was covered previously. Direct information related to stormwater can be found at <https://www.stream-smart.com/our-work/programs-and-projects/urban-runoff-stormwater-management/>. In addition, copies of stormwater brochures are available on the resources page (<https://www.stream-smart.com/our-work/resources/>).

Bear Creek Clean-ups

Regional Stormwater and Education Program Annual Report

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. In 2020-2021, the September Clean-up was cancelled due to the Almeda fire which occurred 2 weeks before the event was planned. A summary of the April 2021 event and examples of outreach material and advertising is presented below. 215 volunteers participated in the event.



Regional Stormwater and Education Program Annual Report

Bear Creek Stewardship Day, April 17, 2021

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 every April and September. (The April 2020 event was canceled due to COVID-19 and the September 2020 event was canceled due to the Almeda fire.)

The Bear Creek Stewards hosted a Stewardship Day on April 17, 2021 as part of the Stop Oregon Litter and Vandalism (SOLVE) sponsored Spring Cleanup. We want to thank the 215 volunteers that removed nearly 3 ½ tons of trash, over 500 pounds of metal, and Himalayan blackberry during the event.

While SOLVE is the state-wide sponsor, we had several local donors for the event including Crater Sand and Gravel, Extreme Terrain, The Gordon Ellwood Foundation, Grants Pass Clinic, Jackson Soil and Water Conservation District, Lithia Auto Group, Medford Food Co-op, Recology, Rogue Disposal and Starbucks.

The event ran from 9 am-12 pm at 8 check-in locations along or near Bear Creek from Central Point to Ashland.

1. Pine Street, Central Point. (RVCOC)
2. McAndrews Road, Medford. (City of Medford)
3. Hawthorne Park, Medford. (Rogue Riverkeeper)
4. Bear Creek Park, Alba Dr., Medford. (Medford Food Co-op)
5. CTNC, Medford. (RRWC)
6. Blue Heron Park, Phoenix. (RVSS and City of Phoenix)
7. Lynn Newbry Park, Talent. (RVSS and City of Talent)
8. Wranglers Arena, North Ashland. (Southern Oregon Geocaching)

Since 2015 the Bear Creek Stewards have removed more than 42,000 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>.



Regional Stormwater and Education Program Annual Report

	Fall 2021 Clean-Up Event Registration			
Location/Date:	Attended	Adults	Minors	Pounds of Trash
Pine Street	18	16	2	40
McAndrews Road	35	30	5	4000
Hawthorne Park	42	40	2	500
Alba Dr.	23	18	5	700
Coyote Trails Nature Center	16	14	2	220
Blue Heron Park	35	26	9	400
Lynn Newbry Park	16	15	1	100
Wranglers Arena	30	26	4	1000
Total				
	215	185	30	6960

88%	86%	14%
Attended vs registered	were adults	were under 18

Our efforts resulted in 215 participants removing nearly 3.5 tons of trash, 1/3 of an acre of invasive blackberries, 100 plants mulched, and over 500 pounds of metal recycled from approximately 10 miles of the Bear Creek Greenway corridor.

Changes noted between the previous 2 events:

- The percentage of children participating in event was much lower
 - 31% were under 18 in 2019
 - 14% were under 18 in 2021
- While the number of participants were similar, there were noticeable differences
 - In September 2019, more people than registered participated (123%)
 - In April 2021, less people than registered participated (88%)



Pine St Check-in Location

Regional Stormwater and Education Program Annual Report

Summary of Cleanup efforts 2015 - September 2021

Date	Participants	Check in locations	Miles clean up	Pounds of trash	Other tasks	Location
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 removal	Medford, Phoenix, Talent and Ashland
September 2018	93	8	7	4,000	0.5 acres of blackberry removal	Medford, Phoenix, Talent and Ashland
April 2019	232	9	8	5,600	1 acre of blackberry removal	Central Point, Medford, Phoenix, Talent and Ashland
September 2019	167	11	10	3,345	Planted 420 plants Removed 10 cubic yards of blackberries	Central Point, Medford, Phoenix, Talent and Ashland
April 2021	215	8	10	6,960	100 plants mulched, over 1/3 acre of blackberries removed 500 lbs of metal recycled	Central Point, Medford, Phoenix, Talent and Ashland

Regional Stormwater and Education Program Annual Report

Bear Creek Stewardship Day: April 23rd, 2022

The Bear Creek Stewards hosted a Stewardship Day on April 23rd, 2022 as part of the Stop Oregon Litter and Vandalism (SOLVE)-sponsored spring clean-up. Two of the starting locations (stations) had to be cancelled due ongoing impacts of the Pacific Pride fire. A summary report from the event is provided below. We want to thank the 180 volunteers that removed **7,860 lbs** of trash, branches, blackberry, and other invasive species during the event.

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 and Stream Smart)
2. Bear Creek/Rogue River Confluence (Nate's Rogue Adventures)
3. McAndrews Road, Medford (Rogue Basin Partnership) (**Canceled**)
4. Hawthorne Park, Medford (City of Medford) (**Canceled**)
5. Alba Dr., Medford (Medford Food Co-op)
6. Coyote Trails Nature Center, Medford (Rogue Riverkeeper)
7. Blue Heron Park, Phoenix (City of Phoenix and Rogue Valley Sewer Services)
8. Lynn Newbry Park, Talent (The City of Talent and Rogue Valley Sewer Services)
9. Wranglers Arena, North Ashland (Southern Oregon Geocaching)

In addition to SOLVE, the state-wide sponsor, we had several local donors for the event including Extreme Terrain, The Gordon Elwood Foundation, Jackson Soil and Water Conservation District, Lithia & Driveway, Medford Food Co-op, Recology, Rogue Disposal, and Starbucks.



Regional Stormwater and Education Program Annual Report

Event Summary Statistics

Spring 2022 Clean-Up Event Registration				
Location/Date:	Attended	Adults	Minors	Pounds of Trash/Plant Material
Pine Street	15	15	0	3300
Bear Creek/ Rogue River	6	6	0	500
McAndrews Road	Canceled			
Hawthorne Park	Canceled			
Alba Drive	34	31	3	1635
Coyote Trails Nature Center	45	24	21	1500
Blue Heron Park	29	22	7	275
Lynn Newbry Park	29	27	2	150
Wranglers Arena	22	19	3	500
Total	180	144	36	7860 trash and plant material

104%	80%	20%
Attended vs registered	were adults	were under 18

Our efforts resulted in 180 participants removing nearly 4 tons of trash and dead plants/invasive species from approximately 9 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.



Regional Stormwater and Education Program Annual Report

Changes noted between the previous 4 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
- 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%)



Regional Stormwater and Education Program Annual Report

Summary of Clean-Up Efforts: April 2015 – April 2022

Date	Participants	Check in locations	Miles clean up	Pounds of trash	Other tasks	Location
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,	Central Point, Medford, Phoenix, Talent, and Ashland

Regional Stormwater and Education Program Annual Report

					and 500 lbs of metal recycled	
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



Regional Stormwater and Education Program Annual Report

Other Volunteer Activities

Four volunteer events were completed in partnership with the Stream Smart Program, TMDL Program, and Jackson County to help stabilize the area burned by the Almeda fire. Activities included manual seeding, spreading straw, picking up garbage, and planting willow staking.

<i>Date</i>	<i>Activity</i>	<i>Number of Volunteers</i>
1/29/2022	Willow Staking	25
2/12/22	Willow Staking	12
3/12/2022	Willow Staking	16
6/25/2022	Clean-up and Plant Stewardship Event at the Adopt-A-Greenway Section	20
Total		73

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)
- Rogue Basin Partnership (RBP)
- Cooperative Weed Management Areas 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
- U.S. Army Corps of Engineers
- Medford Water Commission
- Scenic Middle School
- Southern Oregon University (OLLI Program)
- SOLVE
- Southern Oregon Land Conservancy (SOLC)
- Crater Renaissance Academy
- Applegate Partnership
- Gordon Elwood Foundation
- Local communities (Ashland, Talent, Phoenix, Medford, Central Point, Jacksonville, Grants Pass, and Rogue River)
- Jackson and Josephine Counties

Regional Stormwater and Education Program Annual Report

- Rogue Valley Sewer Services
- North Mountain Park
- Local Geocachers
- Rogue Drinking Water Partnership
- Kid Time
- Extreme Terrain
- Grants Pass Clinic
- Lithia Motors, Inc.
- Medford Food Co-op
- Phoenix-Talent School District
- Recology
- Rogue Disposal
- Starbucks