ROGUE VALLEY
SEWER SERVICES
CLEAN WATER - HEALTHY COMMUNITIES

ANNUAL NPDES PHASE II REPORT FOR FISCAL YEAR 2021

FOR THE COMMUNITIES OF:

CITY OF PHOENIX
O•R•E•G•O•N

TALENT - OREGON
1911

JACKSON COUNTY
Oregon

ROGUE VALLEY SEWER SERVICES

Location: 138 West Vilas Road, Central Point, OR - Mailing Address: P.O. Box 3130, Central Point, OR 7502-0005
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Annual Report

MS4 Phase II General Permit

National Pollutant Discharge Elimination System
MS4 Stormwater Discharge Permit

State of Oregon
Department of
Environmental
Quality

Monitoring Year: FY21
Permit Registrant: Rogue Valley Sewer Services
Date Prepared/Submitted: November 1, 2021

DEQ File No.: 116270

Certification and Signature
1. Permit Registrant(s): Rogue Valley Sewer Services
2. Legally Authorized Representative: Carl Tappert
3. Title: General Manager
4. Email: ctappert@rvss.us
5. Phone: 541-779-4144
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations (40 CFR 122.22(d)).

Signature

10/22/2021
Date

Table of Contents

Instructions

At least once per year, the permit registrant must evaluate compliance with the requirements of the MS4 Phase II general permit using this Annual Report template. This self-evaluation includes assessment of progress made towards implementing the SWMP control measures in Schedule A, and implementation of actions to comply with any additional requirements identified pursuant to Schedule D.1 (Requirements for Discharges to Impaired Waterbodies).

For each SWMP control measure or activity listed below, please answer all the questions and in the comments field cite any relevant information and/or statistics that helps to illustrate implementation or compliance. If your answer is “No,” in the comments field explain the reasons and outline the anticipated implementation timeline. If the requirement does not apply, explain why it is not applicable in the comments field.

No later than November 1 each year, beginning in 2020, the permit registrant must submit an Annual Report to DEQ. One signed copy and one electronic copy must be submitted to DEQ using the address provided in permit. DEQ can provide an FTP site for submittal of the electronic copy, upon request.

General Information

Registrant Information

6. Permit Registrant(s): Rogue Valley Sewer Services		
7. Type(s): ☐ City / ☐ County / ☒ Special District / ☐ Other:		
8. Registrant Type: Existing Registrant: ☒ New Registrant: ☐		
9. Community Type: Large Community: ☒ Small Community: ☐		
10. DEQ Permit No: 116270		
11. EPA File No: ORS116270		
12. Physical Address: 138 W Vilas Rd		
City: Central Point	State: OR	Zip: 97502
13. Point of Contact:		
Title: Jennie Morgan	Email: jmorgan@rvss.us	Phone: 541-727-6876
14. Mailing Address (*if different*): PO Box 1130		
City: Central Point	State: OR	Zip: 97502

Municipal Separate Storm Sewer System (MS4) Information

15. Estimate the area in square mileage served by the MS4: 30.4 square miles

16. Estimate the population served by the MS4: 40,829

MS4 Stormwater Discharge Information

Identify the names of all known waters that receive a discharge from your MS4.

Receiving Waterbody	# of Outfalls	Impaired waterbody		Impairment(s)
		303d listed	TMDL issued	
a. Data is provided in the attached Table 1 in Appendix A.		Yes ☐ No ☐	Yes ☐ No ☐	
b.		Yes ☐ No ☐	Yes ☐ No ☐	
c.		Yes ☐ No ☐	Yes ☐ No ☐	
d.		Yes ☐ No ☐	Yes ☐ No ☐	
e.		Yes ☐ No ☐	Yes ☐ No ☐	
f.		Yes ☐ No ☐	Yes ☐ No ☐	
g.		Yes ☐ No ☐	Yes ☐ No ☐	
h.		Yes ☐ No ☐	Yes ☐ No ☐	
i.		Yes ☐ No ☐	Yes ☐ No ☐	
j.		Yes ☐ No ☐	Yes ☐ No ☐	

Coordination Among Registrants and Joint Agreements

Required for permit registrants relying on another entity to satisfy one or more of the requirements of the permit.

17. Is there a joint agreement in place for the implementation of one or more stormwater management program control measures? *Schedule A.2* Yes ☒ No ☐

18. If yes, has there been any change to the joint agreement(s) submitted previously? Yes ☐ No ☒
If yes, include, as an attachment, a summary of the changes.
The summary must identify the other co-registrants/co-implementers or other entities

Stormwater Management Program Information

19. Discuss the status and overall progress of establishing legal authority to control pollutant discharges into and discharges from the MS4 and to implement and enforce the conditions of this permit. *Schedule A.2.c*

RVSS established legal authority to control pollutant discharges into and discharges from the MS4 in its code with the initial permit issuance in 2007.

Stormwater Management Program Information

20. Is an updated SWMP Document attached? *Schedule A.2.c*

Yes ☒ No ☐ *(must be submitted with the second Annual Report)*

If necessary, provide an explanation:

The required revised public education and outreach and public involvement sections were submitted to DEQ in February 2020. Included with this annual report submission is the SWMP for remaining portions of the MS4 permit, see Appendix A.

21. Identify the publicly accessible website where the SWMP Document is posted. *Schedule 2.c & A.3.b.ii*

https:// www.rvss.us/pilot.asp?pg=stormwaterdocs

If necessary, provide an explanation:

22. Does the SWMP Document include an implementation schedule for control measures that have yet to be or are partially implemented? *Schedule A.2.c*

Yes ☒ No ☐

If necessary, provide an explanation:

The MS4 Phase 2 permit implementation schedule has deadlines extending into 2023.

23. Describe the method used to gather, track, and use SWMP information to set priorities or assess compliance: *Schedule A.2.d*

RVSS has developed MSAccess and GIS databases to track 1200-C/CN permitted projects and projects requiring compliance with the post-construction stormwater requirements. Dates of plan review and approval are tracked as well as installation and maintenance inspection dates. Inspection dates and locations are recorded in the field using Collector and evaluations are recorded in the field using Survey123. Collector and Survey123 are ESRI products that feed directly into our GIS databases. An MSAccess database was also created to track visits to stormwater outfalls including date of visit and outfall conditions based on the Center for Watershed Protection's 2004 field reconnaissance survey. The databases are queried periodically to determine how many inspections have occurred and work plans are then set to achieve the target number of annual inspections.

24. Have finances, staff, equipment and other support capabilities been provided to implement the permit? *Schedule A.2.e*

    Yes ☒ No ☐

    If necessary, provide an explanation:

25. During this monitoring year was compliance with the requirements of this permit evaluated? *Schedule B.1*

    Yes ☒ No ☐

    If necessary, provide an explanation:

26. During this monitoring year was it determined or reported that discharge from the MS4 caused or contributed to an excursion of an applicable water quality standard? *Schedule A.1.b*

    Yes ☐ No ☒

    If "Yes", complete Water Quality Standards section (p. 21) of this template.

Stormwater Management Program Control Measures

Public Education and Outreach

27. Provide a brief summary of the ongoing public education and outreach program. *Schedule A.3.a*

RVSS has a year-round public education and outreach program reaching diverse audiences in the jurisdiction through numerous communication channels and methods. All activities during this FY21 have been adjusted to reflect COVID safe practices. Socially distanced small groups outdoors, virtual, and traditional and electronic media have been the methods utilized during FY21. RVSS participates in or leads numerous collaborative projects and programs and engages community and school groups as well as individuals on a variety of topics and activities all related to increasing the understanding of stormwater issues, the impacts of stormwater on water quality, and ways to reduce pollutants in stormwater. RVSS partners frequently with the Rogue Valley Council of Governments (RVCOG) on public participation, education, and outreach, a copy of their annual report is attached in Appendix B.

28. Were the required components in place by the implementation date? *Schedule A.3.a.i*

Yes ☒ No ☐ *(Implementation date: Feb. 28, 2020 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)*

29. Provide the number of education and outreach activities conducted: *Schedule A.3.a.iii*

During this reporting year: Ten events were completed and over 560 people were contacted via live or virtual events and activities. See table under Question 34.

30. During the permit term:
If necessary, provide an explanation:

During the permit term prior to the reporting period, 39 events were completed with approximately 1,390 people contacted via live or virtual events and activities.

31. Indicate target audiences addressed during this reporting year: *Schedule A.3.a.iv*

- ☒ General public, homeowners, homeowner association, schoolchildren, and businesses
- ☒ Local elected officials, land use planners and engineers
- ☒ Construction site operators

32. Have each target audience been addressed during the permit term? *Schedule A.3.a.iv*

Yes ☒ No ☐

33. Indicate target topics addressed during this reporting year: *Schedule A.3.a.iv*

- ☒ Impacts of illicit discharges on receiving waters and how to report them
- ☒ Impacts from impervious surfaces and appropriate techniques to avoid adverse impacts
- ☐ BMPs for proper use, application and storage of pesticides and fertilizer
- ☒ BMPs for litter and trash control
- ☐ BMPs for recycling programs
- ☐ BMPs for power washing, carpet cleaning and auto repair and maintenance
- ☒ Low impact development/green infrastructure
- ☐ Information pertaining to maintenance of septic systems
- ☒ Watershed awareness and how storm drains lead to local creeks and rivers, and potential impacts to fish and other wildlife
- ☐ Other:

34. Describe the types of educational messages or activities distributed and/or offered during this reporting year. *Schedule A.3.a.iii*

ACTIVITY	AUDIENCE	LOCATION	PARTICIPANTS	NOTES
Greenway seeding/mulching	Local running club, PHS XC team	Phoenix	25	post-fire erosion & sed control work w/vols
Greenway seeding/mulching	Local running club, community members	Phoenix	25	post-fire erosion & sed control work w/vols
Greenway seeding/mulching	public	Phoenix	20	post-fire erosion & sed control work w/vols
Wildfire impacts public forum	public	Zoom	75	speakers, presentations, Q&A, recorded
willow staking Bear Cr	public	Talent	25	revegetation planting w/vols & partners
SOLVE BC Stewardship Day	public	Phoenix, Blue Heron	30	trash pick-up, veg mgmt, weeding
SOLVE BC Stewardship Day	public	Talent	16	trash pick-up, veg mgmt, weeding
Salmon Watch livestreams	Regional students	Zoom	300	livestream field trip, macros & riparian
Weeding Front St. facilities	Talent Middle School students	Talent	40	trash pick-up, veg mgmt, weeding
Weeding Civic Ctr facilities	public	Phoenix	6	trash pick-up, veg mgmt, weeding
			562	**Total Participants**

Audience - General Public:

- The monthly RVSS bill is mailed to approximately 25,000 customers and includes a graphic with a message. In FY21, there were two different messages related to protecting stormwater that were included on the bill, see the attachments in Appendix B.
- RVSS had two large illustrated interpretive signs designed and installed at two different stormwater facilities in Phoenix. The interpretive signs explain how the facilities work to protect water quality by managing stormwater, see the attachments in Appendix B.

Specific Audience: Dog/pet owners:

- RVSS contributed three signs to the City of Phoenix relaying a message to dog walkers to pick up dog waste to protect stormwater.

Specific Audience: Property owners/Homeowners and Construction Site Operators:

- Printed materials distributed included a poster on post-fire clean-up tips after the Almeda Fire that included information on protecting stormwater. The poster was distributed electronically and hard copies were posted in the burn area, see the attachments in Appendix B.

35. Was outreach to construction site operators working within your community offered during this reporting year? *Schedule A.3.a.v*

    Yes ☒ No ☐

36. Total number during the permit term: RVSS offers a Designated Erosion and Sediment Control Inspector course twice each year as well as renewal courses. In FY21, 37 new Erosion & Sediment Control (ESC) Inspectors were certified and 29 ESC inspectors were recertified. During the permit term 57 individuals were certified for the first time and 41 individuals renewed their certification.

37. Identify and describe the assessment/evaluation of, at least, one education and outreach activity that occurred during this reporting year. Include the assessment process or metric for evaluation, and why this activity was considered successful. *Schedule A.3.a.vi*

RVSS has contributed to the Rogue Basin Salmon Watch program for five years providing coordination and administration assistance. Prior to COVID, the Salmon Watch program was evaluated each year using pre and post tests administered to attendees, as well as written evaluations from the teachers. The test scores and written evaluations help to inform us on how the program should be modified to meet goals that include educating youth on what stormwater is and how it's quality is impacted by urbanization.

As live events were mostly curtailed last year, livestreamed Salmon Watch field trips were conducted in April 2021. Almost 300 students attended our virtual field trips over five sessions and were able to learn about macroinvertebrates and riparian ecology.

Of the students who participated in the livestreamed field trips, sixty-two students took a short quiz before and after the event. The analysis of the quizzes are below:

- 9.7% students decreased their test score after the field trip
- 17.7% students had no change to their test score after the field trip
- **72.6 % students increased their test score** after the field trip
- **21.0% of all the students who took the quizzes had an increase in test score of 50% or better**

The increase in student quiz scores indicates an understanding and retention of the concepts taught during the lesson and indicates that the activity was successful.

Pre and post testing is also used to evaluate the success of each Erosion Prevention and Sediment Control Designated Inspector course. In FY21, individuals being certified for the first time had an average pre-test score of 64.5% and an average post-test score of 89%, individuals recertifying had an average pre-test score of 61% and an average post-test score of 86%.

38. Will the assessment be used to inform future stormwater education and outreach efforts? *Schedule A.3.a.vi*

Yes ☒ No ☐

39. Provide an explanation:

Livestreamed Salmon Watch content was new this year and allowed us to serve students who might not be able to attend live field trips. It went well, so we will likely continue to use the content delivery method.

Public Involvement and Participation

40. Provide a brief summary of the overall progress towards implementation of this control measure. *Schedule A.3.b*

The Rogue Valley MS4 permittees formed the Stormwater Advisory Team (SWAT) in 2004 to work collaboratively on Stormwater Management Plan development and implementation. The SWAT is open to the public and anyone who participates is able to comment on the topics and proposals discussed. Voting is limited to MS4 permit holders that have adopted the Rogue Valley Stormwater Design Manual, currently there are seven voting member jurisdictions. RVSS has been a leading member of the SWAT, which meets quarterly.

RVSS makes a concerted effort to engage with each of its co-implementer's staff specifically to seek their input into our Stormwater Management program and to identify opportunities for collaboration. In FY21, RVSS worked with co-implementers, partners, and sought public comment on the proposed revisions to the regional Design Manual, which is publically available on the RVSS website.

In FY21, RVSS worked with our co-implementers and SWAT members to jointly develop Standard Operating Procedures (SOPs) and Best Management Practices (BMPs) for Municipal Operations in Pollution Prevention.

RVSS has a public involvement and participation program that provides opportunities for the public to participate in the development of the SWMP control measures. RVSS complies with public notice requirements in its implementation of its public involvement participation process.
RVSS maintains a publically accessible website with information on its SWMP implementation. The SWMP Document, Annual Reports and additional educational materials are available for viewing on RVSS' website. The RVSS website provides information on:

- Reporting an illicit discharge complaint
- Draft documents, final documents, and other SWMP policy documents for review and viewing
- Links to policies and guidance documents related to construction and post-construction stormwater management including education, training, and permitting.
- RVSS' contact information for stormwater issues

41. Were the required components in place by the implementation date? *Schedule A.3.b.i*

Yes ☒ No ☐ *(Implementation date: Feb. 28, 2020 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)*

42. Is the SWMP Document posted on a publicly accessible website? *Schedule A.3.b.ii*

Yes ☒ No ☐

43. Was the publicly accessible website updated during this reporting year? *Schedule A.3.b.ii*

Yes ☒ No ☐

If necessary, provide an explanation:

44. Does the publicly accessible website include illicit discharge complaint/reporting information or procedures? *Schedule A.3.b.ii.A*

Yes ☒ No ☐

If necessary, provide an explanation:

45. Does the publicly accessible website include draft documents issued for public comment, final reports, plans and other official SWMP policy documents? *Schedule A.3.b.ii.B*

Yes ☒ No ☐

If necessary, provide an explanation:

46. Does the publicly accessible website include links to all ordinances, policies and/or guidance documents related to the construction and post-construction stormwater management control programs, including education, training, licensing, and permitting? *Schedule A.3.b.ii.C*

Yes ☒ No ☐

If necessary, provide an explanation:

47. Does the publicly accessible website include contact information for relevant staff, including phone numbers, mailing addresses and email addresses? *Schedule A.3.b.ii.D*

Yes ☒ No ☐

If necessary, provide an explanation:

48. During this reporting year, was a stewardship opportunity created or partnered with another entity? *Schedule A.3.b.iii*

Yes ☒ No ☐

If "Yes", summarize the stewardship opportunity(s).

RVSS is a leading member of the "Stream Smart" collaborative, which maintains a publically accessible website focused on conveying information to the public on how they can help protect and improve water quality and promotes watershed stewardship as well as outreach and education events and opportunities. RVSS contributed to several stewardship opportunities through the reporting period:

- In April 2021, RVSS participated with other partners in the "Bear Creek Stewardship Day" event planning and clean-up event in Phoenix and Talent. "Bear Creek Stewardship Day" is a collaboration with numerous other entities in the region and uses the SOLVE platform to organize and implement a watershed-wide stewardship event that can include stream clean-up, riparian restoration, or stormwater quality facility improvement work at multiple sites.
- In October and November 2021, RVSS worked with partners to contribute to three events where volunteers seeded and mulched the burned section of the Bear Creek riparian area.
- In March 2021 RVSS worked with volunteers to do willow staking for propagation in a section of the burned Bear Creek riparian area.
- In April and May 2021 RVSS staff worked with a group of 40 Talent Middle School students to do maintenance tasks and learn about a stormwater facility.

Illicit Discharge Detection and Elimination

49. Provide a brief summary of the overall progress towards implementation of this control measure. *Schedule A.3.c*

In FY21 RVSS continued to implement this MCM as we have for the past 14 years with dry weather sampling of stormwater outfalls, following the protocols outlined in the Center for Watershed Protection's 2014 manual. We are in the process of updating our GIS stormwater maps through on the ground GPS data collection. In FY21 RVSS updated its escalating enforcement policy for non-compliance. RVSS is working with our co-implementers to help them develop SOPs to implement pollution prevention BMPs in their own operations. RVSS is also involved in the Middle Rogue Pesticide Stewardship Partnership having helped to establish the sampling locations and protocols beginning in 2014. In FY21 RVSS continued to coordinate with the partners to determine appropriate sampling locations and to evaluate the data.

50. Were the required components in place by the implementation date? *Schedule A.3.c.i*

Yes ☐ No ☐ *(Implementation date: Feb. 28, 2022 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)*

NA, not due yet.

51. Is the MS4 map(s) current? *Schedule A.3.c.ii.A*

Yes ☐ No ☒

52. Describe the MS4 map(s) format(s):

Our MS4 maps are in GIS format and we are in the process of updating them. The maps were created over 10 years ago using as-built plans, we are now in the process of field surveying stormwater features to update our GIS maps. Additionally, we have established processes for updating the stormwater mapping as development occurs.

53. Is the MS4 map(s) included as attachment? Yes ☐ No ☒

Or are the digital shapefiles available for electronic submittal? Yes ☒ No ☐

(Implementation date: Feb. 28, 2022 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)

If necessary, provide an explanation: RVSS has a digital map available on its website that includes stormwater mapping: https://rvss.maps.arcgis.com/apps/webappviewer/index.html?id=4b2c53347bf9400c8397e3b94053a710

54. Is the digital inventory of all known outfalls, with the associated receiving waterbody current? *Schedule A.3.c.ii.B*

Yes ☒ No ☐

If necessary, provide an explanation:

55. Indicate if the following features are included on your MS4 map:
    - ☒ Location of all known outfalls, including the requirements in *Schedule A.3.c.ii.B*
    - ☒ Stormwater collection and conveyance system, including the requirements in *Schedule A.3.c.ii.C*
    - ☒ Stormwater structural controls, including the requirements in *Schedule A.3.c.ii.C*
    - ☐ Location of known chronic discharges *Schedule A.3.c.ii.D*

    If necessary, provide an explanation:
    We have no known chronic discharges.

56. Have non-stormwater discharges into the MS4 been prohibited through enforcement of an ordinance or other regulatory mechanism? *Schedule A.3.c.iii*

    Yes ☒ No ☐

    If necessary, provide an explanation:

57. Indicate which of the following have an ordinance or other regulatory mechanism to prohibit discharge to the MS4: *Schedule A.3.c.iii*
    - ☐ Septic, sewage, and dumping or disposal of liquids or materials other than stormwater into the MS4
    - ☐ Discharges of washwater resulting from the hosing or cleaning of gas stations, auto repair garages, or other types of automotive services facilities
    - ☐ Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility, including motor vehicles, cement-related equipment, and port-a-potty servicing, etc.
    - ☐ Discharges of washwater from mobile operations, such as mobile automobile or truck washing, steam cleaning, power washing, and carpet cleaning, etc.
    - ☐ Discharges of washwater from the cleaning or hosing of impervious surfaces in municipal, industrial, commercial, or residential areas (including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc.) where detergents are used and spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed)
    - ☐ Discharges of runoff from material storage areas, which contain chemicals, fuels, grease, oil, or other hazardous materials from material storage areas
    - ☐ Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; discharges of pool or fountain filter backwash water
    - ☐ Discharges of sediment, unhardened concrete, pet waste, vegetation clippings, or other landscape or construction-related wastes
    - ☐ Discharges of trash, paints, stains, resins, or other household hazardous wastes
    - ☐ Discharges of food-related wastes (grease, restaurant kitchen mat and trash bin washwater, etc.)

    If necessary, provide an explanation:

RVSS code currently addresses this in Section 4.05.100 with the following language: 3) Discharge. a) Prohibition of Illegal Discharges. No person shall throw, dump, drain, or otherwise discharge, cause, or allow others under its control to throw, dump, drain, or otherwise discharge into the public storm sewer system any pollutants or waters containing any pollutants, other than Stormwater. The commencement, conduct, or continuance of any illegal discharge into the storm sewer system is prohibited. If any discharge is determined by the manager, or designee, to cause, or threaten to cause, a condition of pollution, contamination or nuisance, the discharge shall be stopped, treated and cleaned up to the maximum extent practicable by the person responsible for the discharge. The prohibition shall not apply to any non-Stormwater discharge permitted under an NPDES permit,…"

RVSS is working to revise its ordinance to include the specific list of illicit discharges contained in the permit.

58. Is the written escalating enforcement and response procedure included as an attachment? *Schedule A.3.c.iv*

Yes ☒ No ☐

(For Existing Registrant must be submitted with the third Annual Report, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)

If necessary, provide an explanation:

59. Is there a phone number, webpage, and/or other communication channel publicized for the public use to report illicit discharges? *Schedule A.3.c.v.A*

☒ Phone number(s)
☐ Webpage(s)
☐ Other communication channels

If necessary, provide an explanation:

60. Provide the number of complaints received during this reporting year. *Schedule A.3.c.v.D*

Number: Nine *(complaints related to IDDE)*

61. On average, how long did it take to respond to complaints? *Schedule A.3.c.v.B*

In working days: 1.2

See attached complaint spreadsheet in Appendix C.

62. Provide the number of complaints that included notification of the Oregon Emergency Response System during this reporting year. *Schedule A.3.c.v.B*

Number of notification: Zero

63. Provide the number of complaints where staff performed an investigation during this reporting year. *Schedule A.3.c.v*

Number: Nine *(investigations related to IDDE)*

64. On average, how long did it take to conduct an initial investigation? *Schedule A.3.c.v.B*

In working days: 4.6

65. Provide the number of illicit discharges discovered and eliminated during this reporting year. *Schedule A.3.c.v*

Number: Two; S. Oregon Linen and 2475 Finley Ln

66. On average, how long did it take to eliminate an illicit discharge? *Schedule A.3.c.v.B*

In working days: 55

67. Provide the number times escalating enforcement procedure was used to eliminate illicit discharge during this reporting year. *Schedule A.3.c.v.D*

Number of times: Three; S. Oregon Linen, 2475 Finely Ln and Wagner Cr outfall discharge

Do any of the illicit discharges involve the repair or replacement of the wastewater and/or storm sewer conveyance systems? *Schedule A.3.c.v.B*

Yes ☐ No ☒ NA ☐

If necessary, provide an explanation:

68. Provide the number of illicit discharges that were referred to another entity during this reporting year. *Schedule A.3.c.v.C*

Number: Zero

69. On average, how long did it take to notify the entity(s)?

In working days:

if necessary, provide an explanation:

70. Indicate which of the following are included in the complaints or reports tracking documentation: *Schedule A.3.c.v.D*
    - ☒ Date the complaint was received and, if available, the complainant's name and contact information
    - ☒ Name of staff responding to the complaint
    - ☒ Date the investigation was initiated
    - ☒ The outcome of the staff investigation
    - ☐ Corrective action(s) taken to eliminate the illicit discharge
    - ☒ The responsible party for the corrective action(s)
    - ☐ The status of enforcement procedure(s), when necessary
    - ☒ The date the corrective action(s) was completed and staff who evaluated final compliance

    If necessary, provide an explanation:

71. Provide percentage of outfalls inspected. *Schedule A.3.c.vi.A/B*
    Known outfalls screened this reporting year: We conducted dry season screening at 52 outfalls this year.

72. Known outfalls screened during the permit term:

    If necessary, provide an explanation: 83 outfalls have been screened since March 2019

73. Provide percentage of outfalls inspected as part of field screening of priority location. *Schedule A.3.c.vi.C*
    Priority location outfalls screened this reporting year: The Almeda fire burned through RVSS' MS4 September 8, 2021, during the dry season monitoring period. Following the fire, RVSS prioritized visiting all the outfalls in the burn zone to assess fire damage to the structures and to determine whether any illicit discharge was happening as a result of fire damage. This resulted in a handful of outfalls (five) being visited both pre and post fire in FY21. In total, 47 outfalls were prioritized for inspection following the fire.

74. Priority location outfalls screened during the permit term: No outfalls were previously identified as priorities.

    If necessary, provide an explanation:

75. Indicate which of the following dry-weather field screening activities have been performed in the last year: *Schedule A.3.c.vi*
    - ☒ General observation
    - ☒ Field Screening and Analysis
    - ☐ Pollutant Parameter Action Levels
    - ☒ Laboratory Analysis

    If necessary, provide an explanation:

76. If flow is observed and the source is unknown, provide a brief description of the field investigation and analysis process. *Schedule A.3.c.vi.D-G*

All flowing outfalls are sampled and analyzed for E. coli, for any samples that exceed the 406MPN/100ml a follow-up investigation is conducted to determine the source of the flow. There is consistent high ground water in the Rogue Valley and most flow from outfalls is groundwater or irrigation runoff.

77. Have pollutant parameter action levels been established and are they included as an attachment? *Schedule A.3.c.vi.F*

    Yes ☒ No ☐

    (For Existing Registrant must be submitted with the third Annual Report. New Registrants must submit by September 1, 2023 and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner))

    If necessary, provide an explanation: Pollutant parameter action levels have been proposed and are included as an attachment for DEQ's review and approval. The action levels were submitted to DEQ for informal comment earlier this year.

78. Are all persons responsible for investigating and eliminating illicit discharges and illicit connections into the MS4 appropriately trained to conduct such activities? *Schedule A.3.c.vii*

    Yes ☒ No ☐

    If necessary, provide an explanation:

79. Are all new staff working to implement the IDDE program trained within 30 days of their assignment to this program*? Schedule A.3.c.vii*

    Yes ☒ No ☐

    If necessary, provide an explanation:

Construction Site Runoff Control

80. Provide a brief summary of the overall progress towards implementation of this control measure. *Schedule A.3.d*

RVSS has had a robust construction site runoff control program since issuance of the initial Phase 2 permit in 2007. RVSS became a 1200-C Agent in 2006 and in 2010 began implementing the 1200-CN permit, which requires us to do in-house reviews of erosion prevention and sediment control plans. We have been offering a local Designated Inspector Erosion and Sediment Control course for at least a decade in order to educate local contractors, engineers and public works employees on proper erosion prevention and sediment control measures. In FY21, RVSS certifed 37 new ESC inspectors and recertified 29. RVSS has in-house inspectors that provide oversight inspections of 1200-C and CN permitted projects.

Since the Almeda fire in September 2020 burned 8% of RVSS' MS4, the vast majority of RVSS' time with regard to construction site runoff control has been spent on the clean-up and rebuilding. Directly after the fire, the RVSS Stormwater Manager was in close communication with planning staff at the Cities of Talent and Phoenix and Jackson County, as well as DEQ, to help coordinate and expedite the rebuilding process. Rebuilding after the fire presented multiple challenges to the construction site runoff control program and aspects of the program that worked sufficiently pre-fire were insufficient due to the high volume of activity for demolition, debris removal, redesign and rebuilding of structures and infrastructure, permitting, construction, and overall communication. The planning staff were inundated with work but with increased effort into coordination and communication, the permitting and tracking process of demolition and construction was confirmed and strengthened, even in the face of high staff turnover at the City of Talent. In agreement with the DEQ 1200-C permit Coordinator, RVSS is not requiring 1200-C/CN permitting during the demolition phase of burned lots, but is requiring the property owners to obtain 1200-C/CN coverage as they move into rebuilding. All small lot (< one acre disturbance) builders must obtain free Small Site Stormwater permits, the permits are universal, not site specific but require developers to adhere to ESC standards and requirements. RVSS uses the permits to track who is building where and what responsible parties to contact as needed.

In terms of on-the-ground activities to control construction site runoff, RVSS was proactive during the rebuilding process. As soon as staff were allowed back into the burned areas of the MS4, we installed curb inlets and area drains throughout the MS4. Private landowners were contacted, which was often challenging considering their displacment and lack of phone or email information on property data, but once permission was granted, private drains were protected. In all, approximately 200 area drain and 200 curb inlets were protected with BMPs installed by RVSS staff. As demolition and clean-up began and ran through the winter and into spring, RVSS staff maintained the curb inlet and drain protection, spending a minimum of eight staff hours per week on the effort. As demolitiong transitioned to rebuilding in the spring, RVSS established direct contact with small lot permit holders via email, phone, and in person, and let them know that they would be responsible for maintaining curb and area drain BMPs going forward.

RVSS staff regularly inspects the rebuilding area (usually weekly) and interfaces with permit holders and the many subcontractors and laborers working on site to communicate the construction site requirements and ESC practices. In some cases, many contacts with the same contractors have been required. As the building process has continued through the summer, permit holders have become more regular in their BMPs and communicating the ESC requirements to their subcontractors, resulting in less potential for polluted runoff into the MS4.

81. Were the required components in place by the implementation date? *Schedule A.3.d.i*

Yes ☐ No ☐ *(Implementation date: Feb. 28, 2023 for Existing Registrants, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)*

NA, not yet required.

82. Do ordinances or other regulatory mechanisms require erosion controls, sediment controls, and waste materials management controls to be used and maintained at all qualifying construction projects? *Schedule A.3.d.ii*

Yes ☒ No ☐ NA ☐

If necessary, provide an explanation:

RVSS' code, section 4.05.110 Development, requires that projects greater than one acre in area obtain a 1200-CN permit and those greater than five acres in area obtain a 1200-C permit. The permits detail the requirements for erosion and sediment controls and waste management practices. In addition, Section 4.05.110 6) states "*Projects Less Than One Acre. Construction activities that disturb less than one acre are not required to obtain an RVSS construction or NPDES 1200-C permit. Such projects, including single-family home construction, are required to meet all other provisions of this chapter*."

83. Indicate the minimum land disturbance where construction site operators are required to complete and implement an Erosion and Sediment Control Plan (ESCP) for construction project sites: *Schedule A.3.d.ii*

In square feet or portion of an acre: 1 ft^2 ☐, acres ☒

If necessary, provide an explanation:

Projects greater than one acre are required to create and implement an ESCP in accordance with the 1200-C/CN permit. Projects less than one acre currently sign a one page "Small site stormwater permit" that lists BMPs that the developer agrees to follow. The permits are not site specific and no plan for the project is required. RVSS' code requires construction projects less than one acre to abide by the prohibition on illicit discharges. The code does not specifically require erosion, sediment or waste management controls.

84. For construction projects that disturb one or more acres (or that disturb less than one acre, if it is part of a "common plan of development or sale" disturbing one or more acres), provide a brief description how these projects are referred to DEQ or the appropriate DEQ agent, to obtain a NPDES Construction Stormwater General Permit. *Schedule A.3.d.iii*

RVSS is an Agent of DEQ and administers the 1200-CN permit. Projects are referred to RVSS by its co-implementing planning departments during the plan review phase. Building permits are not to be issued by the co-implementers until the required erosion prevention and sediment control permits are obtained from RVSS.

85. Provide the written specifications that address the proper installation and maintenance of such controls during all phases of construction activity as an attachment *Schedule A.3.d.iv*

Attached: Yes ☐ No ☒

If necessary, provide an explanation:

RVSS served on an ACWA committee in 2013 to create the ACWA Construction Site Stormwater Guide, which we distribute in our Designated Erosion Control Inspector Certification classes. The ACWA SW Site Guide was provided as an attachment to our FY19 report.

86. Provide the Erosion and Sediment Control Plan template as an attachment. *Schedule A.3.d.iv.A*

Attached: Yes ☐ No ☒

If necessary, provide an explanation:

The current Small Site Stormwater permit was provided as an attachment to our FY19 report. We are currently working jointly with the SWAT to develop a template for projects disturbing 7,000 sf or more.

87. Indicate which of the following are required for qualifying construction projects: *Schedule A.3.d.iv*

☒ Site operator required to complete a ESCP template or worksheet prior to beginning construction/land disturbance
☒ Site operator required to keep the ESCP on site
☒ Site operator required to maintain and update the ESCP as site conditions change, or as needed.
☒ Site operator required to provide the ESCP to the permit registrant, DEQ, or another administrating entity

If necessary, provide an explanation:

Yes, for all projects disturbing one acre or more.

88. ESCPs [from construction projects that will result in land disturbance of one or more acres (or that disturb less than one acre, if it is part of a "common plan of development or sale" disturbing one or more acres)] are reviewed using a checklist or similar document to determine compliance. *Schedule A.3.d.v*

Yes ☒ No ☐

89. Provide the ESCP review template or checklist as an attachment. *Schedule A.3.d.v*

Attached: Yes ☐ No ☒

90. Indicate the minimum land disturbance where you require the ESCP to be reviewed, if different than one acre:

ft^2 ☐, acres ☐

If necessary, provide an explanation:

RVSS uses the DEQ provided list of required elements as a review checklist, this was provided with the FY20 report.

91. All construction projects [that will result in land disturbance of one or more acres (or that disturb less than one acre, if it is part of a "common plan of development or sale" disturbing one or more acres)] are expected or scheduled to be inspected at least once per permit term. *Schedule A.3.d.vi.A.1*

Indicate the number of inspections completed to comply with this requirement during this reporting year: 64 inspections of 1200-C and 1200-CN permitted sites were completed in FY21, see Appendix D for a table of active 1200-C_CN projects in FY21 and inspections conducted.

Indicate the number of inspections completed to comply with this requirement during the permit term: 258 inspections of 1200-C and 1200-CN permitted sites have been completed during the permit term.

If necessary, provide an explanation:

92. Are construction projects with visible sediment in stormwater/dewatering discharge or when a complaint is received inspected? *Schedule A.3.d.vi.A.2*

Yes ☒ No ☐

93. Indicate number of projects that were inspected based on this inspection trigger:
If necessary, provide an explanation:
No complaints were received in FY21 regarding discharge from construction projects.

94. Indicate the total number of construction projects that were inspected this monitoring year: 21, 1200-C/CN permitted projects were inspected in FY21 and many hundred Small Site permitted projects were inspected, see question 98 for further explanation on Small Site permits.

95. Indicate the total number of construction projects that were inspected during the permit term: 62, 1200-C/CN permitted sites and likely close to 500 Small Site Permitted projects have been inspected.

96. Indicate which of the following are documented during an inspection: *Schedule A.3.d.vi.B*
- ☐ That the ESCP is reviewed to determine if the described
- ☒ Control measures were installed, implemented, and maintained appropriately
- ☒ Assessment of the site's compliance with the ordinances or requirements
- ☒ Visual observation of any existing or potential non-stormwater discharges, illicit connections, and/or discharge of pollutants from the site
- ☒ Recommendations to the construction site operator for follow-up
- ☒ Education or instruction provided to the site operator related to stormwater pollution prevention practices

If necessary, provide an explanation:

97. If available, provide a copy of the written or electronic inspection report form. *Schedule A.3.d.vi.B*

Attached: Yes ☐ No ☒ Provided with the FY20 annual report.

98. For Existing Large Communities: Indicate the number of new construction projects inspected that disturb less one acre during this monitoring year. Is this number at least 25% of the qualifying new construction sites? *Schedule A.3.d.vi.C*

If necessary, provide an explanation:
RVSS issues Small Site Stormwater Permits for projects disturbing less than one acre. In FY21, 458 Small Site Stormwater permits were issued. At this time, RVSS does not have a formal mechanism for tracking inspections of Small Site permitted projects, however the majority of these permits were issued for projects within the Almeda fire burn zone. Since the fire, RVSS has had an inspector dedicated to spending one day a week working in this area conducting erosion and sediment control inspections, we estimate that there have been hundreds of inspections conducted. Furthermore, there were 32 brown tags issued to small site permitted projects in the burn zone in FY21.

99. Provide the written escalating enforcement and response procedure as an attachment. *Schedule A.3.d.vii*

Yes ☒ No ☐

(For Existing Registrant must be submitted with the third Annual Report. Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)

If necessary, provide an explanation:
See Attachments document, Appendix C, Question 58.

100. Was the escalating enforcement procedure used to achieve compliance at any construction projects? *Schedule A.3.d.vii*

Yes ☒ No ☐

Indicate number of times during this reporting year: Six Brown Tags were issued for four different 1200-CN permitted projects, one of which escalated into a notice of non-compliance. Additionally, 32 Brown

Tags were issued for Small Site permitted projects. A record of the Brown Tags issued for Small Sites is provided in Appendix D and the record of Brown Tags issued to 1200-C/CN permitted sites is included in the Question 91 1200-C_CN Inspection Reporting table, also in Appendix D.

101. Indicate number of times during the permit term: In total, 70 Brown Tags and one notice of non-compliance have been issued.

If necessary, provide an explanation:

102. Were all persons responsible for ESCP reviews, site inspections, and enforcement appropriately trained to conduct such activities? *Schedule A.3.d.viii*

Yes ☒ No ☐

If necessary, provide an explanation:

103. Were all new staff working to implement the construction site runoff control program appropriately trained within 30 days of their assignment to this program? *Schedule A.3.d.viii*

Yes ☒ No ☐

Post-Construction Site Runoff for New Development and Redevelopment

104. Provide a brief summary of the overall progress towards implementation of this control measure. *Schedule A.3.e*

RVSS has had a Stormwater Design Manual in place since 2006 that stipulates design guidelines for stormwater treatment and detention. Initially there was a large focus on manufactured devices for stormwater treatment, however since 2012 RVSS has shifted toward emphasizing the use of Low Impact Development techniques where practicable. The Design Manual is reviewed, revised, and updated regularly. The Design Manual is adopted by the City of Medford and Ashland as well, who both have their own MS4 permits.

Since March 2019, RVSS has led the Working Group through a process to draft new design guidelines to meet the retention requirements of the new MS4 permit including design guidelines for Low Impact Development BMPs. We are now in the process of revising the Design Manual text to incorporate the new requirements. Additionally, RVSS reviews and approves stormwater management plans and conducts installation and maintenance inspections of stormwater management facilities.

105. Were the required components in place by the implementation date? *Schedule A.3.e.i*

Yes ☐ No ☐ *((Implementation date: Feb. 28, 2023 for Existing Registrant, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner)*

NA, requirement not in force yet.

106. For projects creating or replacing impervious area, indicate the area (or threshold) where the site is required to implement the post-construction site runoff program requirements: *Schedule A.3.e.ii*

In square feet: 2500 ft^2

If necessary, provide an explanation:

107. Indicate which of the following are required at qualifying sites: *Schedule A.3.e.ii*

☒ The use of structural stormwater controls

☐ A site-specific stormwater management approach that targets natural surface or predevelopment hydrological function through the installation and long-term operation and maintenance of stormwater controls
☒ Long-term O&M of stormwater controls at project sites that are under the ownership of a private entity
If necessary, provide an explanation:

108. Were ordinance(s), code(s) and development standards reviewed to identify, minimize or eliminate barriers that inhibit design and implementation techniques intended to minimize impervious surfaces and reduce stormwater runoff? *Schedule A.3.e.iii*

Yes ☐ No ☐

109. If barriers were identified or if necessary, provide an explanation:

NA, requirement not in force yet.

110. Provide an explanation of the timeline for removal of barriers or if removal is outside your authority:
NA, requirement not in force yet.

111. Indicate which of the following technical standards are used to determine the retention requirement: *Schedule A.3.e.iv.A*

☐ Volume-based method
☐ Storm event percentile-based method
☐ Annual average runoff-based method

If necessary, provide an explanation:
NA, requirement not in force yet.

112. For projects that are unable to meet the retention requirement, is the remainder of the rainfall/runoff treated prior to discharge with a structural stormwater control? *Schedule A.3.e.iv.B*

Yes ☐ No ☐ NA, requirement not in force yet.

113. Was the stormwater structural control designed to remove, at minimum, 80 percent of the total suspended solids?

Yes ☒ No ☐

If necessary, provide an explanation: In FY21 RVSS proposed revisions to the Rogue Valley Stormwater Design Manual to match the 2018 updates to the Washington Department of Ecology Technology Approval Program (TAPE). The TAPE program had considered devices approved for both Pre-treatment and Basic treatment to meet the 80% TSS removal standard, but upon further review determined that the devices approved for pre-treatment did not actually meet the standard. RVSS' proposal was to discontinue allowing devices only approved for pre-treatment, this was adopted by SWAT in April 2021 and went into effect July 1st, 2021.

114. Are the allowable structural stormwater controls and specifications available for review? *Schedule A.3.e.iv.C*

Yes ☒ No ☐

115. Indicate if they are attached or the location where they can be viewed:
Attached ☐
Location: The Rogue Valley Stormwater Design Manual is available on our website.

If necessary, provide an explanation:

116. Have alternatives for projects complying with the retention requirement been approved? *Schedule A.3.e.iv.D*
Yes ☐ No ☐ NA, requirement not in force yet.

117. If yes, are the written technical justifications evaluated? *Schedule A.3.e.iv.D*
Yes ☐ No ☐

118. Provide a brief description of the factors of technical infeasibility or site constraints that prevented the on-site management of the runoff amount stipulated in the stormwater retention requirement or a portion thereof. *Schedule A.3.e.iv.D*

If necessary, provide an explanation: NA, requirement not in force yet.

119. Before the allowance of alternative compliance, were mitigation options established? *Schedule A.3.e.iv.D*
Yes ☐ No ☐

If necessary, provide an explanation: NA, requirement not in force yet.

120. If applicable, indicate which of the following mitigation options have been used and provide a narrative description of the implementation of the mitigation option? *Schedule A.3.e.iv.D*

☐ Off-Site Mitigation
☐ Off-Site Groundwater Replenishment Projects

If necessary, provide an explanation:
NA, requirement not in force yet.

121. Was a procedure developed for the review and approval of structural stormwater control plans for new development and redevelopment projects? *Schedule A.3.e.v*
Yes ☒ No ☐

If necessary, provide an explanation:
RVSS has been reviewing and approving structural stormwater control plans since issuance of the first MS4 permit in 2007. Projects that will develop or redevelop 2500sf or more are referred to RVSS by its co-permittees during the plan review phase and must be approved by RVSS prior to building permit issuance.

122. Indicate the minimum land disturbance or creation of new impervious area where plans are required to be reviewed: 2500 ft^2 ☒, acres ☐ of land disturbance ☐ creation of new impervious area ☐

123. Are all sites that use alternative compliance to meet the retention requirement reviewed?
Yes ☐ No ☐ NA, requirement not in force yet.
If necessary, provide an explanation:

124. Indicate if an inventory and implementation strategy is used to ensure that all stormwater controls are operated and maintained to meet the site performance standard in Schedule A.3.e.iv of the permit? *Schedule A.3.e.vi*
Yes ☒ No ☐

If necessary, provide an explanation:

RVSS requires an Operation and Maintenance manual be submitted for every project going through the stormwater management review process. The manual includes standard inspection guidelines, templates for recording inspections, contact information and a Declaration of Covenants, recorded on the deed of the property. RVSS conducts installation inspects of these facilities to ensure they are installed per the approved plans. Once installation is accepted by RVSS, the facilities are entered into our geodatabase, all privately owned and operated facilities in our database are inspected at least once every three years to ensure their long-term operation and maintenance. See the attached table of inspection records in Appendix E.

125. Indicate which of the following strategies have been developed to ensure that all stormwater controls are operated and maintained to meet the site performance standard in Schedule A.3.e.iv. *Schedule A.3.e.vi*

- ☒ Legal authority to inspect and require effective operation and maintenance of privately owned and operated stormwater controls
- ☒ Inspection procedures and an inspection schedule to ensure compliance with the O&M requirements of each stormwater control operated by the permit registrant and by other private entities
- ☒ A tracking mechanism for documenting inspections and the O&M requirements for each stormwater control
- ☐ Reporting requirements for privately owned and operated stormwater controls that document compliance with the O&M requirement in Schedule A.3.f.

If necessary, provide an explanation:

126. Are the location of all public and private stormwater controls installed during this permit term documented on the MS4 Map? *Schedule A.3.e.vi*

Yes ☒ No ☐

If necessary, provide an explanation:

127. Were all persons responsible for performing post-construction runoff site plan reviews, administrating the alternative compliance program, or performing O&M practices or evaluating compliance with long-term O&M requirements appropriately trained to conduct such activities? *Schedule A.3.e.vii*

Yes ☒ No ☐

If necessary, provide an explanation:

128. Were all new staff working to implement the post-construction site runoff for new development and redevelopment program appropriately trained within 30 days of their assignment to this program? *Schedule A.3.e.vii*

Yes ☒ No ☐

If necessary, provide an explanation:

Pollution Prevention and Good Housekeeping for Municipal Operations

129. Provide a brief summary of the overall progress towards implementation of this control measure. *Schedule A.3.f*

RVSS drafted a template Standard Operating Procedure document this year for compliance with the requirements of section A.3.f.iv. and made it available to all the MS4 permit entities in Southern Oregon. We then specifically adapted the template for our own Operation and Maintenance department and for those of the cities of Talent and Phoenix. We are continuing to work with our co-permittees on improving mechanisms for tracking these activities.

130. Were the required components in place by the implementation date? *Schedule A.3.f.i*

Yes ☐ No ☐ NA, requirement not in force yet. *(Implementation date: Feb. 28, 2022 for Existing Registrants, Sept. 1, 2023 for New Registrants and February 28, 2024 for Albany, Corvallis, Millersburg, Springfield and Turner))*

131. Were O&M strategies for existing controls developed for both permit registrant-owned controls and controls owned and operated by another entity discharging to the MS4? *Schedule A.3.f.ii*

Yes ☐ No ☐ N/A ☐

If necessary, provide an explanation:

Standard Operating Procedures have been developed for use by RVSS, City of Phoenix and City of Talent for all of the elements listed under question 137. Jackson County is still working on developing their SOPs and will have them in place by Feb. 2022, see SOP manuals attached in Appendix F.

132. Indicate the percentage of catch basins inspected/cleaned: *Schedule A.3.f.iii*

Percentage inspected this reporting year: ; Percentage cleaned:

	Inspected:	Cleaned:
Jackson County: The county did not record how many inlets were inspected in FY21, but 421 inlets were cleaned, all inlets requiring cleaning were cleaned.		
Phoenix: 30%		100% of those inspected and requiring cleaning were cleaned
RVSS: Did not perform catch basin cleaning inFY21 year as crews were redirected to responding to the Almeda fire.		
Talent: 20%		100% of those inspected and requiring cleaning were cleaned

133. If known, estimate of material removed: units

Jackson County: 16 yards from 421 inlets

Phoenix: 1.5 yards from 30 inlets

RVSS: No cleaning performed in FY21.

Talent: 21 yards from 60 inlets

134. Percentage inspected during the permit term: ; Percentage cleaned:

	Inspected:	Cleaned:
Jackson County: Not recorded		60%
Phoenix: 52%		36%
RVSS:		26% of catch basins in White City Industrial
Talent: 45%		15%

135. If known, estimate of material removed: units

Jackson County: 32 yards

Phoenix: 3 yards

RVSS: 5 yards

Talent: 46 yards

If necessary, provide an explanation:

RVSS has responsibility for inspection and maintenance of catch basins in White City Industrial. A resurvey of the City of Phoenix stormwater infrastructure is planned, number reported above are based on current data in our GIS database, which we know to be out of date.

136. Indicate if a catch basin inspection prioritization system and/or an alternate inspection frequency has been established. *Schedule A.3.f.iii*

Yes ☒ No ☐

If necessary, provide an explanation:

Jackson County: The County will inspect 30% of its catch basins annually and maintain those requiring it within the year.

Phoenix: Phoenix will inspect 30 percent of the SW system every year. Catch basins, pipes and inlets that are determined to need cleaning and/or maintenance will be cleaned and maintained within one month.

RVSS: RVSS maintains the stormwater system in White City Industrial and maintains a list of hotspots. All hotspots and culverts are inspected annually, if catch basin sumps are 50% or more full, flushing is scheduled. The White City Industrial area is divided into five stormwater basins, one basin is flushed and TV'ed each year.

Talent: Talent will inspect 10 percent of the SW system every year. Catch basins, pipes and inlets that are determined to need cleaning and/or maintenance will be cleaned and maintained within 6 months.

137. During the permit term were existing procedures for inspection and maintenance schedules reviewed/updated to ensure pollution prevention and good housekeeping practices were conducted for the following activities? *Schedule A.3.f.iv*

- ☒ Pipe cleaning for stormwater and wastewater conveyance systems
- ☒ Cleaning of culverts conveying stormwater in roadside ditches
- ☒ Ditch maintenance
- ☒ Road and bridge maintenance
- ☒ Road repair and resurfacing including pavement grinding
- ☒ Dust control for roads and municipal construction sites
- ☒ Winter road maintenance, including salt or de-icing storage areas
- ☒ Fleet maintenance and vehicle washing
- ☒ Building and sidewalk maintenance including washing
- ☒ Solid waste transfer and disposal areas
- ☒ Municipal landscape maintenance
- ☒ Material storage and transfer areas, including fertilizer and pesticide, hazardous materials, used oil storage, and fuel
- ☐ Firefighting training activities
- ☒ Maintenance of municipal facilities including public parks and open space, golf courses, airports, parking lots, swimming pools, marinas, etc.

If necessary, provide an explanation:

See attached SOPs for RVSS, Phoenix and Talent. Jackson County is in the process of developing procedures for the areas above. Firefighting training is conducted by the Fire Districts, which are distinct special districts, not under the jurisdiction of RVSS or its co-permittees.

138. Do any permit registrant-owned facilities have coverage under DEQ's 1200-Z Industrial Stormwater Discharge Permit? *Schedule A.3.f.v*

Yes ☐ No ☒ NA ☐

If "Yes", provide DEQ File Number(s):
If necessary, provide an explanation:

139. Are practices in place to reduce the discharge of pollutants to the MS4 associated with the application and storage of pesticides and fertilizers? *Schedule A.3.f.vi*

Yes ☒ No ☐

If necessary, provide an explanation:

RVSS contracts pesticide application through Jackson County.

Phoenix only used two gallons of pesticide this year, applied with a backpack sprayer. No pesticides were applied during or before a rain event. Phoenix is in the process of developing an Integrated Pest Management Plan that will include SOPs for pesticide use.

Talent: The City of Talent adopted a revised Integrated Pest Management policy in 2018 that aimed to phase out the use of synthetic pesticides within three years.

Jackson County follows an Integrated Vegetation Management plan that aims to use the most environmentally effective and economically practicable product for the targeted weed, see the attached policy, 3.6 Jackson County Roads Guidelines for Pesticide Application.

140. Are methods/practices in place to reduce the discharge of litter within the jurisdiction? *Schedule A.3.f.vii*

Yes ☒ No ☐

If necessary, provide an explanation:

Jackson County: White City Residential side streets are swept once every two to three months. The main roads in White City Residential; Antelope, Ave. G, Atlantic and Ave A are swept ten times per year. Outside White City Residential, Antelope Rd., and curb and gutter portions of Table Rock Rd and East and West Vilas are swept ten times per year. Streets without curb and gutter and less than 22 feet wide are considered to be self-cleaning and are not swept.

The county also has an Adopt-a-Road Program, through which organizations pledge to clean roadside areas at least twice a year, and the County's Community Justice Crews clean-up litter along county roadways. Additionally, the County's parks program invests considerable resources into clearing homeless camps from county parks and riparian areas.

Phoenix: the city has a leaf collection program that last year removed more than 40 yards of leaves, keeping them out of the streets and from clogging stormwater drains. City street sweeping is conducted regularly; the city is divided into three zones and each zone is swept once a week.

RVSS: Staffs Bear Creek clean up events for the cities of Talent and Phoenix.

Talent: The City of Talent is divided into two zones with each zone being swept every other week.

141. Are practices in place to ensure that collected material or pollutants removed in the course of maintenance are managed and disposed of in a manner such as to prevent such pollutants from entering the waters of the state in accordance with state and federal rules? *Schedule A.3.f.viii*

Yes ☒ No ☐

If necessary, provide an explanation:

The City of Phoenix, City of Talent, and RVSS' SOPs manuals developed for MPP3 cover BMPs for material disposal.

Jackson County: Jackson County will develop SOPs to address this and will have them in place by Feb. 28th, 2022.

142. Were all persons responsible for evaluating O&M practices, evaluating compliance with long-term O&M requirements or ensuring pollution prevention at facilities and during operations appropriately trained to conduct such activities? *Schedule A.3.f.ix*

Yes ☐ No ☐

If necessary, provide an explanation:

Jackson County: The County will develop a training schedule that will be in place by Feb. 28th, 2022.

Phoenix: All staff will be required to read the *Standard Operating Procedure and BMP manual for Pollution Prevention and Good Housekeeping* and new hires will shadow current employees to learn how to implement the BMPs. Phoenix will also have RVSS SW staff conduct training of their employees at least once per permit term.

RVSS: Upon hire, new staff will be provided a copy of the *Standard Operating Procedure and BMP manual for Pollution Prevention and Good Housekeeping.* Training will be conducted within a year. A checklist will be used to track when the manual is provided.

Talent: All staff will be required to read the finalized SOP manual. Additional training will be sought out as needed.

143. Were all new staff working to implement the pollution prevention and good housekeeping for municipal operations program appropriately trained within 30 days of their assignment to this program? *Schedule A.3.f.ix*

Yes ☐ No ☒

If necessary, provide an explanation:

See response to question 142.

Monitoring

If the requirement does not apply, mark "NA" and explain why it does not apply to you in the comments field.

144. Was municipal stormwater monitoring performed at outfall locations, in the receiving waterbody, or to demonstrate compliance with this permit? *Schedule B.3*

Yes ☒ No ☐

145. If "Yes" is the data included in the Annual Report?

Yes ☒ No ☐

If necessary, provide an explanation:
See attached Appendix F.

Wood Village Monitoring Requirements

146. Provide a summary of the following to evaluate the control strategies established for the Lower Columbia Slough Phosphate, Lead, and Bacteria TMDLs: *Schedule D.1.b*

Phosphate:

Lead:

Bacteria:

147. Indicate which of the following were completed:

☐ For phosphate, monitor influent and effluent dissolved orthophosphate concentrations and total phosphate concentrations at a representative site in Fairview Lake (Reach 4) and Fairview Creek (Reach 5)
☐ For lead, estimates of the effectiveness of controls to remove TSS
☐ For bacteria, measuring E. coli concentrations and its distribution over flows (for example, flow duration intervals) to demonstrate compliance with E. coli criteria

If necessary, provide an explanation:

Water Quality Standards

148. During this monitoring year was it determined or reported that the MS4 discharge caused or contributed to an exceedance of an applicable water quality standard? *Schedule A.1.b*

Yes ☐ No ☒

If necessary, provide an explanation:

149. How and when did the exceedance of an applicable water quality standard occur? *Schedule A.1.b*

If necessary, provide an explanation:

150. Was the exceedance self-reported or did DEQ send written notification? *Schedule A.1.b*

Self-reported: Yes ☐ No ☐

If necessary, provide an explanation:

151. Within 48 hours was an investigation started into the cause of the water quality exceedance? *Schedule A.1.b.i*

Yes ☐ No ☐

If necessary, provide an explanation:

152. Within 30 days of becoming aware of the exceedance, was DEQ notified in writing, if self-reporting? *Schedule A.1.b.ii*

Yes ☐ No ☐

If necessary, provide an explanation:

153. Within 60 days of becoming aware of or being notified of the exceedance, was a report submitted to DEQ that documents the following: *Schedule A.1.b.iii*

☐ The results of the investigation, including the date the exceedance was discovered
☐ A brief description of the conditions that triggered the exceedance or the cause
☐ Corrective actions taken or planned, including the date corrective action was completed or is expected to be completed

If necessary, provide an explanation:

154. Were the corrective actions implemented in accordance with the schedule approved by DEQ? *Schedule A.1.b*

Yes ☐ No ☐

If necessary, provide an explanation:

155. Provide any additional comments or narrative description, if necessary:

Appendix Table of Contents

Appendix A: General Information

Question 16a. Table 1. MS4 Receiving Water Body 303d and TMDL Information

Question 20. Stormwater Management Plan (SWMP) Document

Table 1. RVSS MS4 Receiving Water Body 303d and TMDL listings *, **.

Stream	Sub-Stream	RVSS Stream code	Total Outfalls	Last sampled (calendar year)	303d listed Y/N	Impairment	TMDL Y/N	Impairment
Rogue River		0			Y	DO, mercury	Y	Fecal coliform, Temp.
Bear Creek		1	15	2019	Y	Arsenic, DO	Y	aquatic weeds, DO, pH, E. coli, P, Temp.
Willow		2					N	
Jackson		4	30	2013	Y	Biological criteria, DO	N	Fecal coliform, Temp.
	Dean	5			N		N	
	Horn (W Fork Jackson) LLID 1229318423752	6	30	2018	Y	DO	Y	E. coli
Griffin		7	66	2013	Y	DO, pH	Y	DO, fecal coliform
	Daisy	8	24	2018	N		N	
Mingus		9	65	2018	N		N	
Elk		10	13		N		N	
Lone Pine		11			Y	DO, pH	Y	Temp., E. coli
Hopkins Canal		12			N		N	
	Bear Cr Feeder Canal	13			N		N	
	Coker Butte Canal	14			N		N	
Crooked		15	7	2018	N		N	
Gore		20	5	2018	N		N	
Coleman		21	11	2015	N		Y	DO, E. coli, fecal coliform, Temp.
Payne		22	8	2015	N		Y	DO, fecal coliform, Temp.
East Main Canal		23		2016	N		N	
Anderson		24	1	2015	N		N	
Phoenix Canal (West Main canal)		26	9	2016	N		N	
Wagner		27	24	2016	Y	DO	Y	E. coli, Temp.
Meyer		28			N		Y	Fecal coliform, Temp.
Talent Canal	Canal	29			N		N	
Butler		30			N		Y	DO, Temp., Fecal Coliform
Lower East Canal		32			N		N	

Table 1. RVSS MS4 Receiving Water Body 303d and TMDL listings *, **.

Stream	Sub-Stream	RVSS Stream code	Total Outfalls	Last sampled (calendar year)	303d listed Y/N	Impairment	TMDL Y/N	Impairment
Neil Creek		44			N		Y	Do, E. Coli, Temp.
Emigrant Creek		45			N		Y	Temp., P
Upton Slough		35	2		N		N	
	Upton Lateral	36			N		N	
	Coker Butte Lateral				N		N	
Whetstone		37	4		N		N	
	Ave. A Trib./Agate Slough	41	5	2018	N		N	
	Swanson	42		2018	N		N	
	N. fork of Whetstone: LLID 1228851424204	43	1	2018	Y	aquatic weeds/ algae	N	
Little Butte		38			N		N	
	Dutton Pond	39			N		N	
Denman		40			N		N	
	Total outfalls		**335**					
	Total without CP		**67**					
	40% of outfalls screened by 2022		26.8					
	20% screened each subsequent y		33.5					

*303d and TMDL status listings as of September 2019.

**Based on MS4 boundary prior to Central Point secession.

APPENDIX B: Public Education and Outreach Documentation

Question 27. RVCOG Annual Report of E and O Activities 2020-2021

Question 34. Back of RVSS bill graphics, Stormwater Interpretive Signs, Fire Clean-up Tips

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, 2020 to June 30th, 2021 to satisfy the conditions of the NPDES Phase II general permit issued by DEQ on November 30, 2018. The activities form a framework that is being integrated into the Stormwater Management Plans (SWMPs) being created by the MS4s. 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 and Ashland, Rogue Valley Sewer Services (including Cities of Talent and Phoenix and Jackson County), Cities of Grants Pass, Eagle Point, Central Point, and Rogue River 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.

Program Highlights

- Programs reached over 1,100 people (not including visitation to the Stream Smart website).
- Completed a redesign of the Stream Smart website (https://www.stream-smart.com/) working with a technical team and web consultant. The page went live in the Fall of 2020.
- The website had over 1,000 visitors in the first quarter of the implementation year (July-September) *1,015 views*.
- Continued the Salmon watch program for an eighth consecutive season in the Winter of 2020 and Spring of 2021. We conducted 5 hybrid/zoom sessions and 12 in person field days. Classes represented schools from the Bear Creek Valley and Greater Jackson County. *794 participants.*
- Participated in and helped coordinate a volunteer clean-up in April 2021. *215 participants cleaned up 3.5 tons of trash.*
- Completed a final draft of an Erosion Prevention and Sediment Control Brochure that is scheduled to be printed in the 2021-2022 implementation year.
- Expanded the Stream Smart Program with additional partners, content, and programs in new areas in the Rogue Basin.

PUBLIC EDUCATION & OUTREACH (PE/PO)

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 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 2020-2021 is based off the draft SWMP guidance created with the regional stormwater team and RVSS (http://rvcog.org/wp-content/uploads/2017/01/SWMP-Draft-June-28th-2019.pdf).

Work Completed in 2020-2021

Stream Smart

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 2020-2021 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 a major renovation of the website be completed and going live in the Fall of 2020 (https://www.stream-smart.com/), drafting, revising, and adopting of bylaws for the program, implementing the bylaws, continuing to expand partners and promote the program, creating and installing signs incorporating the logo along local recreation corridors (Bear Creek Greenway), and adopting the Greenway section from Pine Street to Upton Road near the Jackson County Expo.

Stream-smart.com

The figure below shows the revised home page for Stream Smart including the new menu bars, information highlights including programs, relevant news articles, and what is happening now.

Report Spill (Oregon Emergency Response System) : 1-800-452-0311

HOME WHAT IS STREAM SMART? OUR WORK HOW TO GET INVOLVED NEWS AND EVENTS VIRTUAL RESOURCES

Number of Pledges - 78

Pledges in Jackson and Josephine County

Every Pledge Counts

Reduction in Pollution

Take a Pledge!

What's New/Recent Updates

- Bear Creek Stewardship Day Clean-Up celebrating National Public Lands Day on September 25th, 2021. For more information, visit: Bear Creek Stewards.
- To learn more about drinking water, visit the Rogue Drinking Water Partners (RDWP) page.
- Responding to Wildfires.

What We Do

Manage Urban Runoff

Local communities are managing runoff from impervious (hard) surfaces including parking lots, roads, driveways and rooftops to improve local water quality conditions and reducing flooding.

Learn More

Restore Local Waterways

Restoring native plants along local streams and the Rogue River and removing invasive species are vital for protecting waterways and keeping streams cool for fish and other aquatic species.

Learn More

Education and Outreach

Education program including Salmon Watch teach area students about the importance of clean water and healthy watersheds.

Learn More

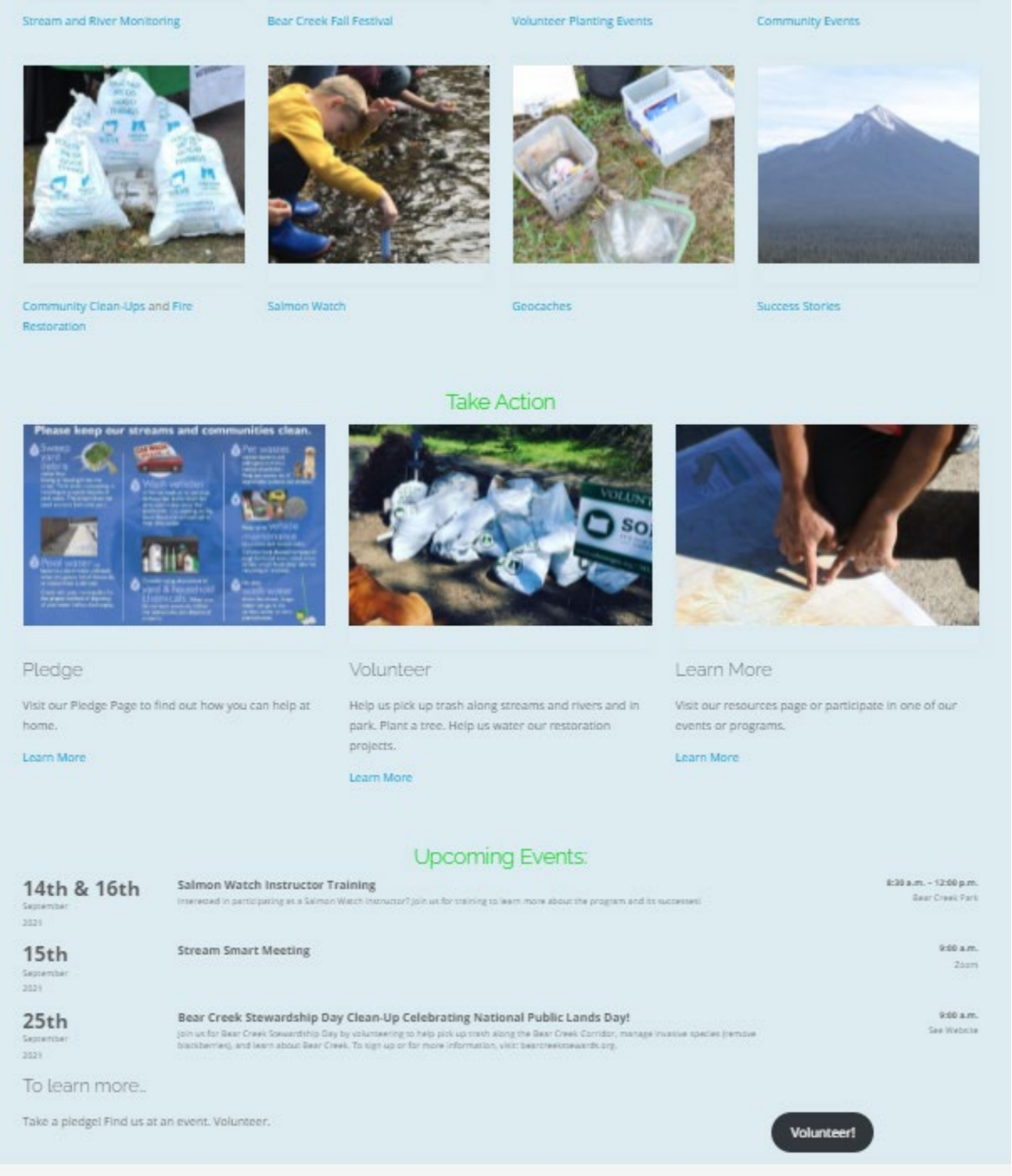
What's Happening Now

Stream and River Monitoring

Bear Creek Fall Festival

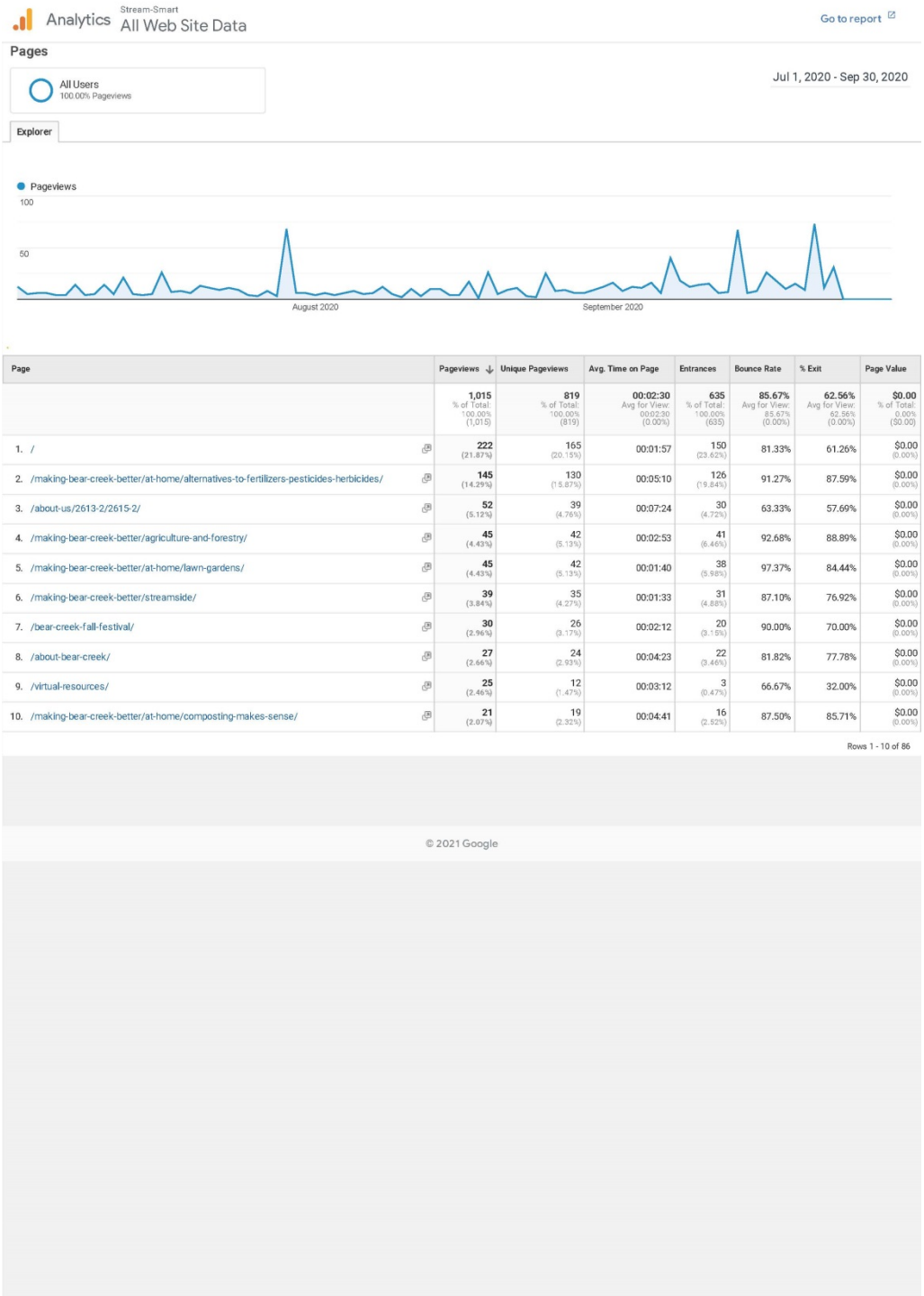
Volunteer Planting Events

Community Events



Visitation to the website was more difficult to track this year for a number of reasons. First, there were the three different versions of the homepage used during the year (the original, a test website, and the new website), software/program changes, and a link being broken when the new page went live leaving a gap of several months without any data collected. A detailed discussion of the first quarter of tracking is provided in this report. The top ten pages included making Bear Creek Better (focusing on alternatives to pesticides, lawns and gardens, ag and forestry,

streamsides, and composting), about us, the fall festival, about Bear Creek, and Virtual Resources (see figure below).



Analytics Stream-Smart All Web Site Data — Go to report

Pages

All Users
100.00% Pageviews

Jul 1, 2020 - Sep 30, 2020

Explorer

Pageviews
100
50
August 2020
September 2020

Page	Pageviews ↓	Unique Pageviews	Avg. Time on Page	Entrances	Bounce Rate	% Exit	Page Value
	1,015 % of Total: 100.00% (1,015)	819 % of Total: 100.00% (819)	00:02:30 Avg for View: 00:02:30 (0.00%)	635 % of Total: 100.00% (635)	85.67% Avg for View: 85.67% (0.00%)	62.56% Avg for View: 62.56% (0.00%)	$0.00 % of Total: 0.00% ($0.00)
1. /	222 (21.87%)	165 (20.15%)	00:01:57	150 (23.62%)	81.33%	61.26%	$0.00 (0.00%)
2. /making-bear-creek-better/at-home/alternatives-to-fertilizers-pesticides-herbicides/	145 (14.29%)	130 (15.87%)	00:05:10	126 (19.84%)	91.27%	87.59%	$0.00 (0.00%)
3. /about-us/2613-2/2615-2/	52 (5.12%)	39 (4.76%)	00:07:24	30 (4.72%)	63.33%	57.69%	$0.00 (0.00%)
4. /making-bear-creek-better/agriculture-and-forestry/	45 (4.43%)	42 (5.13%)	00:02:53	41 (6.46%)	92.68%	88.89%	$0.00 (0.00%)
5. /making-bear-creek-better/at-home/lawn-gardens/	45 (4.43%)	42 (5.13%)	00:01:40	38 (5.98%)	97.37%	84.44%	$0.00 (0.00%)
6. /making-bear-creek-better/streamside/	39 (3.84%)	35 (4.27%)	00:01:33	31 (4.88%)	87.10%	76.92%	$0.00 (0.00%)
7. /bear-creek-fall-festival/	30 (2.96%)	26 (3.17%)	00:02:12	20 (3.15%)	90.00%	70.00%	$0.00 (0.00%)
8. /about-bear-creek/	27 (2.66%)	24 (2.93%)	00:04:23	22 (3.46%)	81.82%	77.78%	$0.00 (0.00%)
9. /virtual-resources/	25 (2.46%)	12 (1.47%)	00:03:12	3 (0.47%)	66.67%	32.00%	$0.00 (0.00%)
10. /making-bear-creek-better/at-home/composting-makes-sense/	21 (2.07%)	19 (2.32%)	00:04:41	16 (2.52%)	87.50%	85.71%	$0.00 (0.00%)

Rows 1 - 10 of 86

© 2021 Google

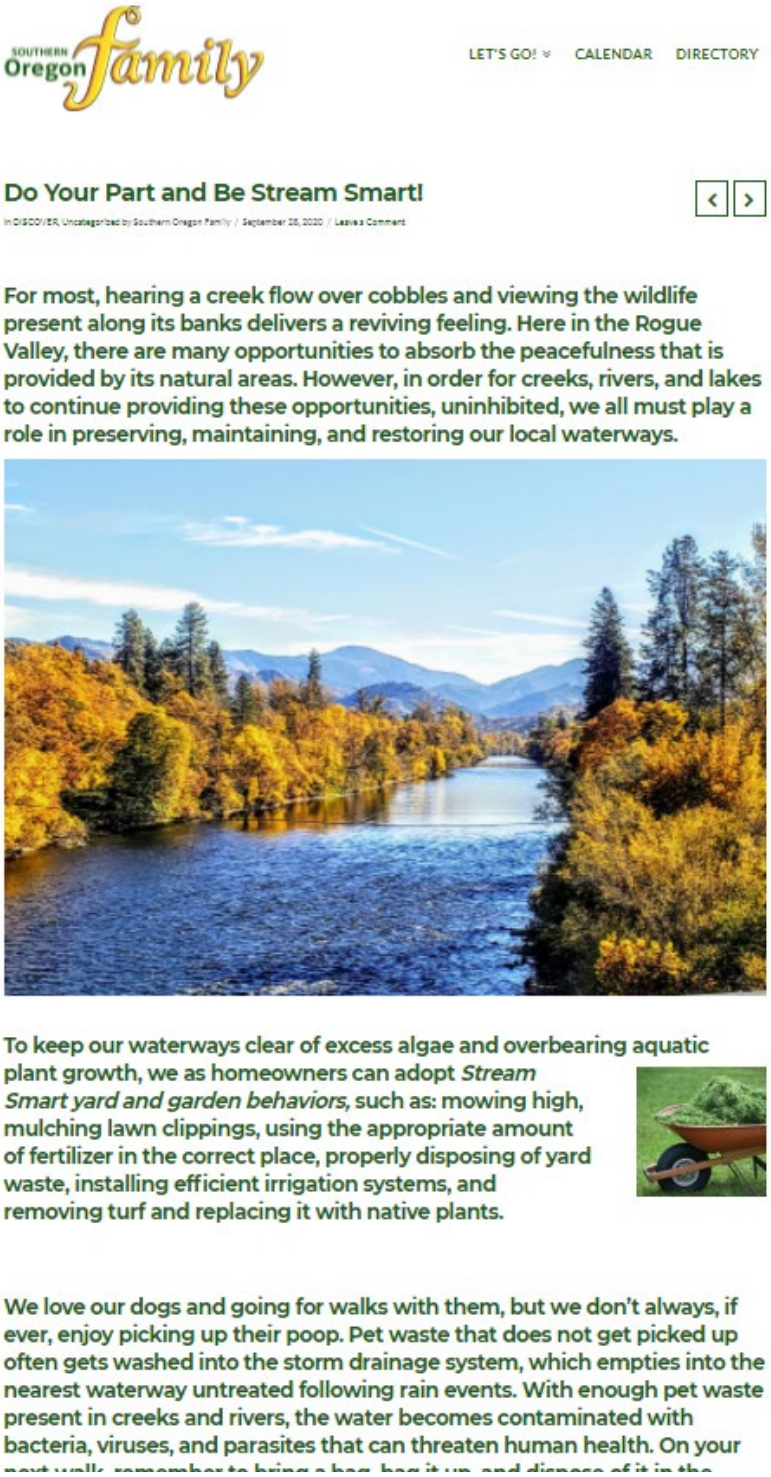
Examples Posts


Stream Smart - a clean water project
Published by Greg Stabach · May 4 ·
Salmon Watch Spring Field Sessions begin today!
A hatched Stonefly!
56
People Reached
8
Engagements
–
Distribution Score
Boost Post


Stream Smart - a clean water project
Published by Greg Stabach · April 14 ·
Come Join us on Saturday, April 24th!
Rogue Valley Earth Day
April 10 ·
ECOQUEST ACTIVITY! Are You Stream Smart? Join Rogue Valley Council of Governments to find out! On Saturday, April 24, 10AM - 2PM, help improve the health of Bear Creek by participating in one or more Stream Smart - a clean water project activities! Learn how to collect and analyze water quality samples, help with a local restoration project (watering, clearing, mulching, monitoring health), or pick up litter. There are numerous other activities that you can enjoy here including walking, biking, bird watching, and geocaching. For details and to participate, visit https://www.roguevalleyearthday.net/ecoquest-guide
#StreamSmartRogue
24
People Reached
2
Engagements
–
Distribution Score
Boost Unavailable
1
1 Comment
Like
Comment
Share
Most Relevant
Comment as Stream Smart - a clean water project
Rogue Valley Earth Day
Thanks for caring for Bear Creek and celebrating Earth Day!
Like · Reply · Message · 16w

Examples of Other Articles, Press Releases, and Media

Stream-Smart Article in Southern Oregon Family Magazine



Southern Oregon family

LET'S GO! CALENDAR DIRECTORY

Do Your Part and Be Stream Smart!

In DISCOVER, Uncategorized by Southern Oregon Family / September 28, 2020 / Leave a Comment

For most, hearing a creek flow over cobbles and viewing the wildlife present along its banks delivers a reviving feeling. Here in the Rogue Valley, there are many opportunities to absorb the peacefulness that is provided by its natural areas. However, in order for creeks, rivers, and lakes to continue providing these opportunities, uninhibited, we all must play a role in preserving, maintaining, and restoring our local waterways.

To keep our waterways clear of excess algae and overbearing aquatic plant growth, we as homeowners can adopt *Stream Smart yard and garden behaviors,* such as: mowing high, mulching lawn clippings, using the appropriate amount of fertilizer in the correct place, properly disposing of yard waste, installing efficient irrigation systems, and removing turf and replacing it with native plants.

We love our dogs and going for walks with them, but we don't always, if ever, enjoy picking up their poop. Pet waste that does not get picked up often gets washed into the storm drainage system, which empties into the nearest waterway untreated following rain events. With enough pet waste present in creeks and rivers, the water becomes contaminated with bacteria, viruses, and parasites that can threaten human health. On your

Link to full article https://southernoregonfamily.com/do-your-part-and-be-stream-smart/

Adopt-A-Greenway (for use in newsletters, social media)

Adopt-A-Greenway

In March, *Stream Smart*, a Rogue Basin clean water project, formally adopted the Pine Street to Upton Road section of the Bear Creek Greenway (Greenway) in Central Point through the Adopt-A-Greenway program. The Adopt-A-Greenway program is managed by Jackson County Parks and is just one of many ways to volunteer and give back to the Greenway and Bear Creek.

Due to COVID-19 and social distancing requirements, as well as the tremendous volunteer support in the region, the *Stream Smart* team has looked for new ways to involve the community. Over the past several years, *Stream Smart* has hosted Bear Creek Stewardship Day clean-ups at the Pine Street Greenway entrance, along with restoration and recovery actions as part of the Peninger Fire Restoration Projects, so it seemed natural to adopt this section.

Future plans to maintain and improve this section of the Greenway include, but are not limited to the following activities: trash clean-ups, planting and mulching, treating or pulling invasive weeds, re-establishing and creating nature trails, water quality and restoration project monitoring, educational events, and implementing interpretive signage related to fire preparedness, the salmon life cycle, riparian areas, water quality, and other topics.

For information on upcoming volunteer opportunities, please visit the *Stream Smart* website at: http://www.stream-smart.com/how-to-get-involved/volunteer/.

Salmon Watch

Conducted another successful year of the Salmon Watch Program. The program is largely supported through the NPDES Phase II and TMDL Programs. Coordination of the program is completed jointly by RVCOG and RVSS. Due to the ongoing pandemic, changes were made to the program to accommodate distance learning prior to the students being back on campus and to meet social distancing requirements when they were. The resulting program was a scaled down version of the Rogue Basin Program. Overall, 12 field days were conducted with 14 classes. In addition, we conducted 6 hybrid/zoom sessions with multiple classes and schools. Overall, almost 800 students participated in the programs (794). Classes included schools from the Bear Creek Valley and Greater Jackson County. 8 organizations, agencies, and municipalities donated their time to the program and provided in kind match to the program. 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), and the Gray Family foundation (funding).

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 Table 1.1and 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 in-school presentation using Zoom for schools to use on an as needed basis. We also offered the presentation as a "live" option for schools.

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/

2020 Field Day Statistics

Table 1.1: 2020/2021 Salmon Watch Field Trip Information

Date	*Program*	*Number of Participants*
11/12/2020	Salmon Watch Interactive	35
4/27/2021	Salmon Watch Virtual Session (am and pm)	300
4/28/2021	Salmon Watch Virtual Session (am and pm)	
4/29/2021	Salmon Watch Virtual Session (am)	
5/4/2021	Kids Unlimited Salmon Watch Session	109
5/13/2021	Kids Unlimited Salmon Watch Session	
5/17/2021	Salmon Watch at Scenic	250
5/17/2021	Salmon Watch at Scenic	
5/18/2021	Salmon Watch at Scenic	
5/18/2021	Salmon Watch Session (Scenic) - Amie and Greg	
5/19/2021	Salmon Watch Session (Scenic) - Craig	
5/20/2021	Salmon Watch at Scenic	
5/20/2021	McGloughlin Salmon Watch Session	100
5/21/2021	Salmon Watch at Scenic	
5/21/2021	McGloughlinSalmon Watch Session	
		794 Total

Table 2: Summary of Partners and in-kind Supporters

Abbreviation	*Agency/Entity*	*Contribution*
BLM	U.S. Dept. of Interior, Bureau of Land Management	Field Day Instruction
CP	City of Central Point	Field Day Instruction
JSWCD	Jackson Soil & Water Conservation District	Field Day Instruction, Funding
ODFW	Oregon Dept. of Fish & Wildlife	Field Day Instruction, Funding
GRAY	Gray Family Foundation	Funding
RRK	Rogue Riverkeeper	Field Day Instruction
OPRD	Oregon Parks and Recreation Department	Fee waiver for programs
RVSS	Rogue Valley Sewer Services	Field Day Instruction, Coordination
RVCOG	Rogue Valley Council of Governments	Field Day Instruction, Coordination, Administration
TFT	The Freshwater Trust	Field Day Instruction
BCWEP*	Bear Creek Watershed Education Partners (*Volunteers – Former Board Members)	Field Day Instruction

Program Photos

Survey Results

As part of the salmon Watch Program, pre and post surveys are sent to participants. For the virtual/livestreamed sessions, Sixty-two students took the survey (quiz) before and after the sessions. The results of the pre and post quizzes are summarized below (information provided by RVSS):

9.7% students decreased their test score
17.7% students had no change to their test score
72.6 % students increased test score from the pre quiz to the post quiz
21.0% of all the students who took the quizzes had an increase of 50% or better

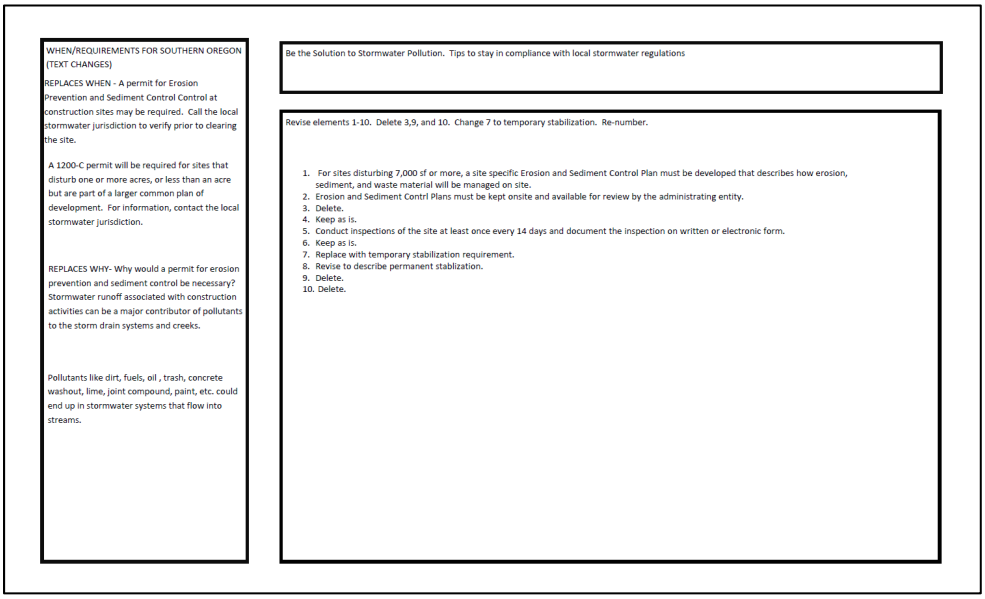
The increase in student quiz scores indicates an understanding and retention of the concepts taught during the lesson and indicates that the activity is successful.

Erosion Prevention and Sediment Control Brochure

Work continued on the Erosion Prevention and Sediment Control brochure and a draft was sent to Goldstreet Designs in June. The brochure would be available at front counters with a target audience of Engineers, Planners, and Contractors. The final format of the brochure was modified from the 2019-2020 design in that the erosion graphic was removed in favor of a list of recommendations.

A working meeting was convened in March of 2021. In addition, RVCOG revised the draft template for the brochure based on meeting discussions and also talked with GoldStreet about design needs including what information and formats needed for completing the brochure. The brochure is anticipated to be completed in 2021-2022. Final high quality images are needed for completing a proof prior to printing.

June 2021 Draft



WHEN/REQUIREMENTS FOR SOUTHERN OREGON (TEXT CHANGES)

REPLACES WHEN - A permit for Erosion Prevention and Sediment Control 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.

REPLACES WHY- 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, paint, etc. could end up in stormwater systems that flow into streams.

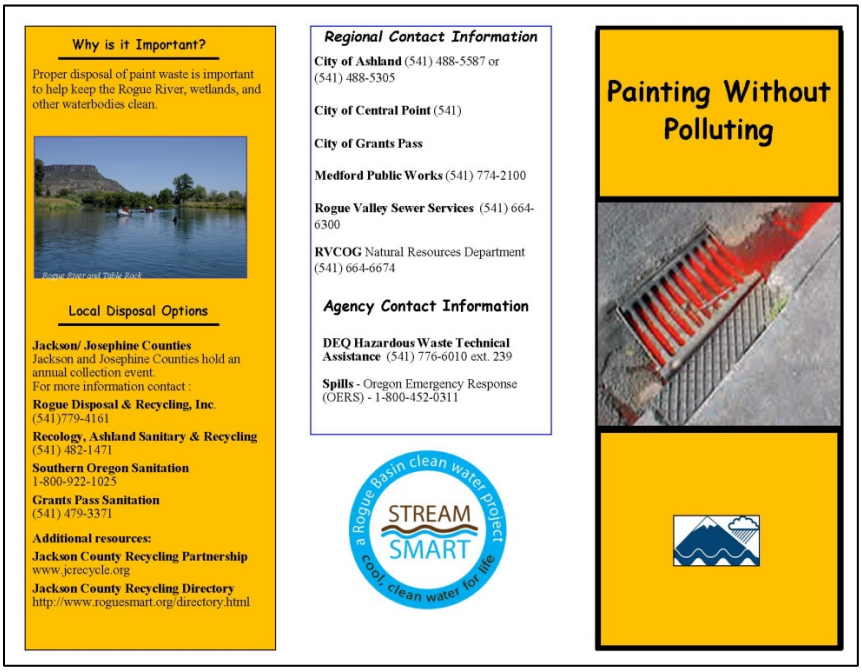
Be the Solution to Stormwater Pollution. Tips to stay in compliance with local stormwater regulations

Revise elements 1-10. Delete 3,9, and 10. Change 7 to temporary stabilization. Re-number.

1. 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.
2. Erosion and Sediment Contrl Plans must be kept onsite and available for review by the administrating entity.
3. Delete.
4. Keep as is.
5. Conduct inspections of the site at least once every 14 days and document the inspection on written or electronic form.
6. Keep as is.
7. Replace with temporary stabilization requirement.
8. Revise to describe permanent stablization.
9. Delete.
10. Delete.

Brochure Distribution

Brochure distribution was limited during the year due to COVID19 and the fires. Events were cancelled, offices were closed to the public, businesses were closed, and other factors limited our ability to distribute brochures. Brochures were available at front counters, local libraries (when open), at meetings, and online. A target for 2020-2021 was Paint stores. Updates to the Paint brochure were drafted for distribution.



Why is it Important?

Proper disposal of paint waste is important to help keep the Rogue River, wetlands, and other waterbodies clean.

Rogue River and Table Rock

Local Disposal Options

Jackson/ Josephine Counties
Jackson and Josephine Counties hold an annual collection event.
For more information contact :
Rogue Disposal & Recycling, Inc
(541)779-4161
Recology, Ashland Sanitary & Recycling
(541) 482-1471
Southern Oregon Sanitation
1-800-922-1025
Grants Pass Sanitation
(541) 479-3371

Additional resources:
Jackson County Recycling Partnership
www.jcrecycle.org
Jackson County Recycling Directory
http://www.roguesmart.org/directory.html

Regional Contact Information

City of Ashland (541) 488-5587 or (541) 488-5305

City of Central Point (541)

City of Grants Pass

Medford Public Works (541) 774-2100

Rogue Valley Sewer Services (541) 664-6300

RVCOG Natural Resources Department (541) 664-6674

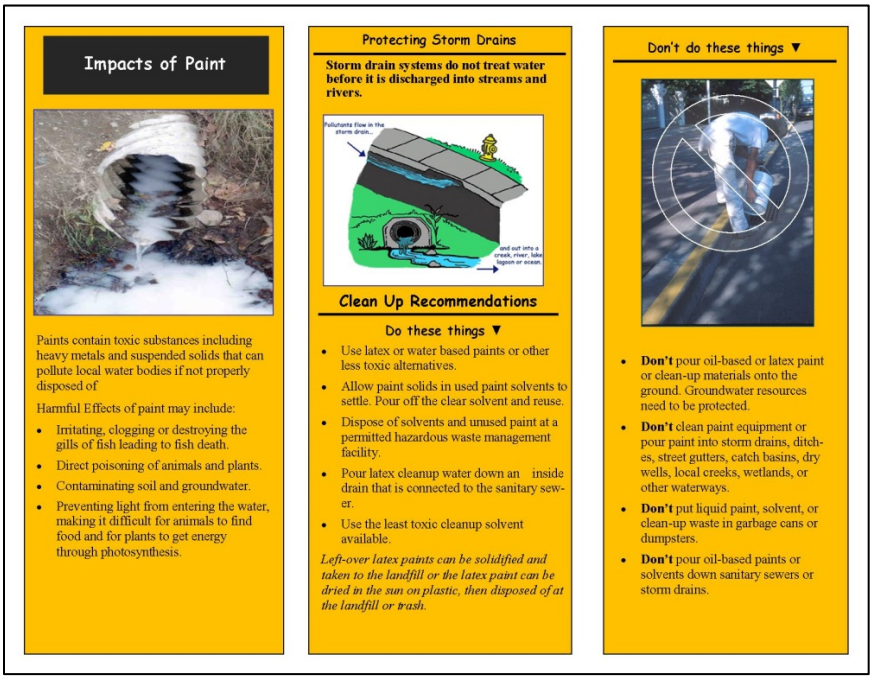
Agency Contact Information

DEQ Hazardous Waste Technical Assistance (541) 776-6010 ext. 239

Spills - Oregon Emergency Response (OERS) - 1-800-452-0311

a Rogue Basin clean water project
STREAM SMART
Cool, clean water for life

Painting Without Polluting



Impacts of Paint

Paints contain toxic substances including heavy metals and suspended solids that can pollute local water bodies if not properly disposed of

Harmful Effects of paint may include:

- Irritating, clogging or destroying the gills of fish leading to fish death.
- Direct poisoning of animals and plants.
- Contaminating soil and groundwater.
- Preventing light from entering the water, making it difficult for animals to find food and for plants to get energy through photosynthesis.

Protecting Storm Drains

Storm drain systems do not treat water before it is discharged into streams and rivers.

Pollutants flow in the storm drain...

...and out into a creek, river, lake, lagoon or ocean.

Clean Up Recommendations

Do these things ▼

- Use latex or water based paints or other less toxic alternatives.
- Allow paint solids in used paint solvents to settle. Pour off the clear solvent and reuse.
- Dispose of solvents and unused paint at a permitted hazardous waste management facility.
- Pour latex cleanup water down an inside drain that is connected to the sanitary sewer.
- Use the least toxic cleanup solvent available.

Left-over latex paints can be solidified and taken to the landfill or the latex paint can be dried in the sun on plastic, then disposed of at the landfill or trash.

Don't do these things ▼

- **Don't** pour oil-based or latex paint or clean-up materials onto the ground. Groundwater resources need to be protected.
- **Don't** clean paint equipment or pour paint into storm drains, ditches, street gutters, catch basins, dry wells, local creeks, wetlands, or other waterways.
- **Don't** put liquid paint, solvent, or clean-up waste in garbage cans or dumpsters.
- **Don't** pour oil-based paints or solvents down sanitary sewers or storm drains.

Activity Summary

Date	***Event***	***Description***	***Number of People***
3/1/21-6/30/21	Adopt-A-Greenway	The Stream Smart program adopted the section of the Bear Creek Greenway that extends from Pine Street through Upton Road and includes the Expo Center. Activities completed for the program include sign installation, trash	25

		pick-up, and restoration related program (mulching, watering). Number represent activities outside of other related activities in this table (e.g., Ecoquest Activity)	
July 1st 2020 through June 3oth, 2021	Geocaches	5 Geocaches were monitored and maintained as needed as part of the Stream Smart and water quality programs. Number of people reflects logged visits to all 5 of the Geocaches during the implementation year.	72

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.

Date	School	Equipment	Number of Participants
7/20/20	Ivy School	Tools (shovels, fire rakes, etc.)	10
10/22/20	Ivy School	Tools (shovels, fire rakes, etc.)	10
March and April 2021	Applegate Partnership and Watershed Council. Loaned kits for the Applegate's Programs with local schools and residents at Cantrall Buckley park	Salmon Watch Kits	100*
March 2021	Talent Middle School	Tools (shovels, fire rakes, etc.)	25
April 2021	Multiple and volunteers. Loaned to Rogue River Keeper.	WQ Kits	20
May 2021	Multiple. SOLC's Living on Your Land Program	WQ and macro kits	100*

*Estimated, not included in overall participation total.

PUBLIC INVOLVEMENT & PARTICIPATION (PI/PP)

Description

The PI/PP program is designed to provide opportunities for the public to participate in the development of the SWMP control measures.

Work Completed in 2020-2021

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

Bear Creek Clean-ups

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.

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. (RVCOG)
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.

	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

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

Agencies, Groups, 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)
- Local schools – elementary, middle school, and high school, public and private
- Southern Oregon Education Service District
- Jackson Soil and Water Conservation District (SWCD)
- Rogue Riverkeeper (RRK)
- Bureau of Land Management
- Medford Water Commission
- Scenic Middle School
- SOLVE
- Crater Renaissance Academy
- Gray Family Foundation
- Gordon Elwood Foundation
- Local communities (Ashland, Talent, Phoenix, Medford, Central Point, Jacksonville, Grants Pass, and Rogue River)
- Jackson and Josephine Counties
- Local Geocachers
-

FY2021 Back of RVSS bill stormwater graphics

Designing To Improve Water Quality

When rainwater or snowmelt move over paved surfaces like roads and parking lots, they pick up accumulated pollutants like automotive fluids, metals, bacteria, and sediment. This stormwater typically flows to a curb inlet that empties directly into a nearby stream.

Diseñando para mejorar la calidad del agua

Al llover o descongelarse la nieva, el agua se desliza sobre carreteras, estacionamientos, y áreas pavimentadas, mezclándose con contaminantes, como aceite de vehículos, metales, bacteria, y sedimento. Esta agua pluvial entra en las grietas de desagüe y se descarga directamente a los arroyo locales.

What is happening in this swale?

Stormwater and groundwater from the vicinity of the Civic Center enter the swale in front of you and flow slowly through the vegetation. The design of the swale allows water to infiltrate and for sediment to settle.

Plants and soil filter and remove pollutants from the stormwater before it ultimately enters Bear Creek.

¿Que sucede en esta área pantanosa?

Agua pluvial y subterránea que viene del Civic Center se descarga al área pantanosa que usted ve y fluye lentamente entre la vegetación. El diseño del área pantanosa permite que el agua entre y el sedimento se asiente al fondo.

Las plantas y el suelo remueven contaminantes del agua antes de entrar al Bear Creek.

Benefits from this facility include:

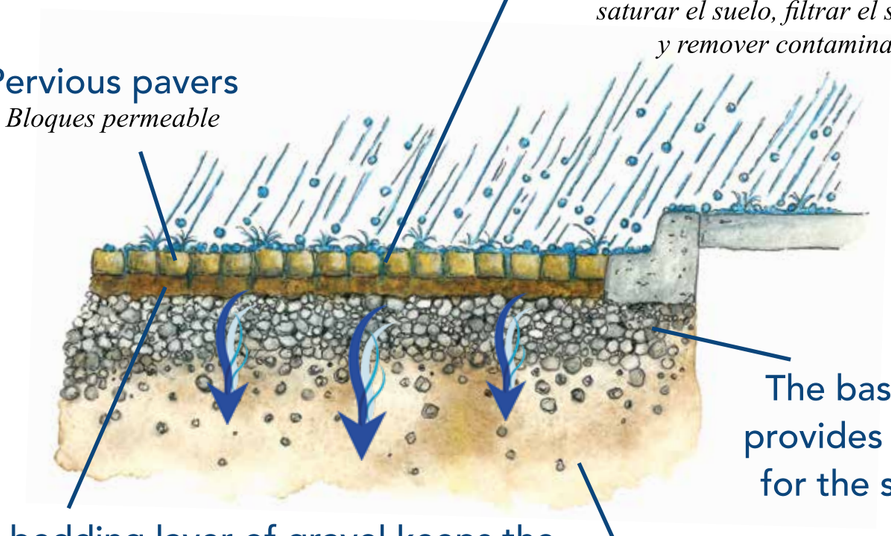
- Removes pollutants
- Reduces flooding
- Controls runoff volume and flow
- Recharges groundwater
- Provides wildlife habitat

Los beneficios de este sistema incluyen:

- *Remueve contaminantes*
- *Reduce riesgo de inundaciones*
- *Controla el flujo del escurrido de agua*
- *Reabastece el agua subterránea*
- *Provee hábitat para animales*

Take a closer look:

Miremos más de cerca:



Design by Karin Onkka; Artwork by Nancy Wylie

These features were funded jointly by Rogue Valley Sewer Services and the City of Phoenix.
For more information about water quality go to stream-smart.com.

Rogue Valley Sewer Services y la cuidad de Phoenix han cubierto el costo de estos proyectos.
Para más información sobre calidad de agua, visite stream-smart.com.

Let The Rain Soak In!

The depression and plantings before you are a feature called a “rain garden.”

Designed to improve water quality, the rain garden captures runoff from the parking lot and other paved areas in the park. Pollutants such as automotive fluids, metals, bacteria, and sediment are filtered through the vegetation and allowed to settle.

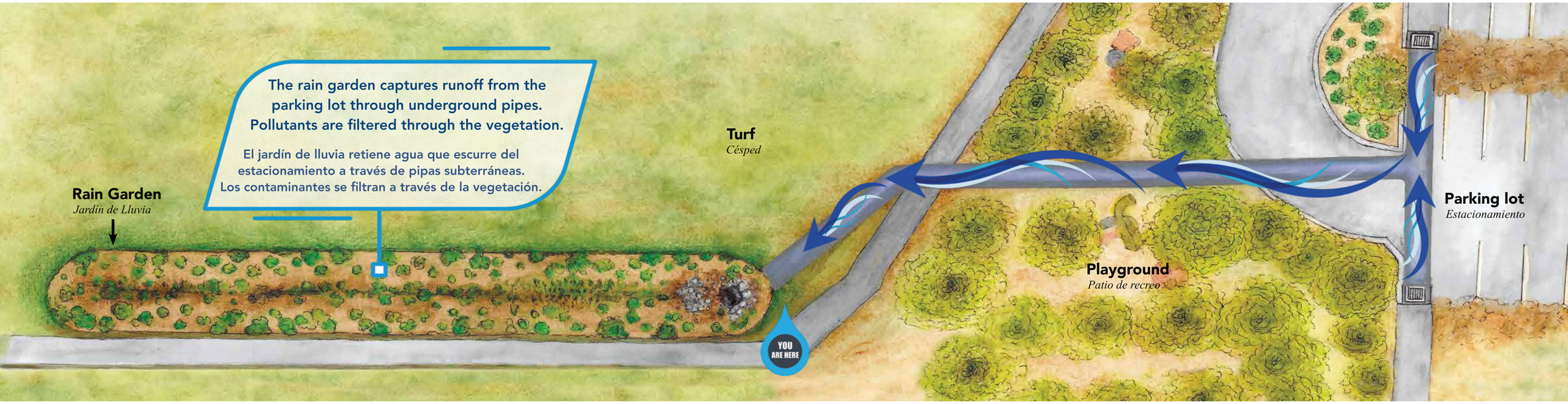
Prior to construction, Colver Park had drainage problems and no stormwater treatment. Rogue Valley Sewer Services designed and constructed this facility in coordination with the City of Phoenix. This facility is large enough to capture and treat 100% of the runoff from a 100-year storm event, serving the community and protecting water quality.

¡Deje que la lluvia sature!

El área y las plantas delante de usted forman un sistema llamado “jardín de lluvia.”

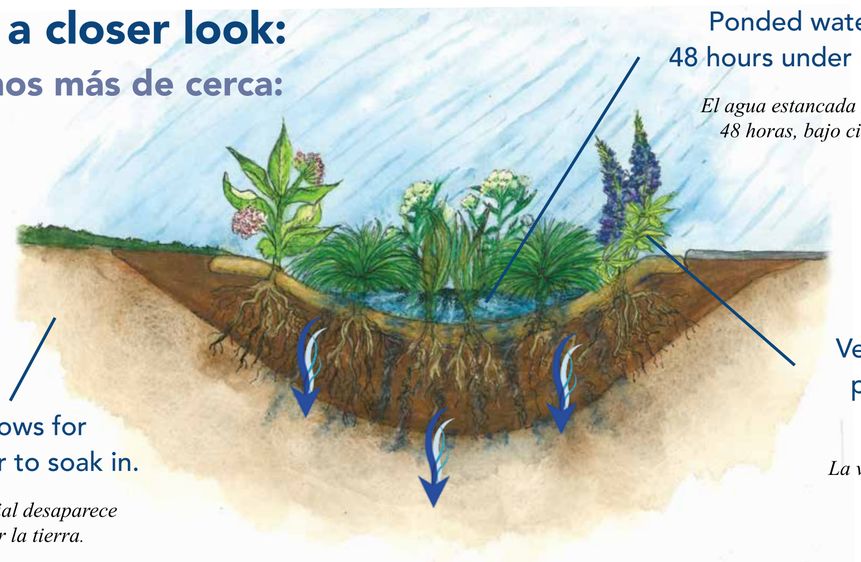
Diseñado para mejorar la calidad del agua, el jardín de lluvia colecciona la agua que escurre del estacionamiento y otras áreas pavimentadas del parque. Contaminantes como el aceite de vehículos, metales, bacterias y sedimentos se filtran a través de la vegetación y se dejan asentar en el fondo.

Antes de construirse, Colver Park tenía problemas de desagüe y no había un sistema de tratamiento de aguas pluviales. Rogue Valley Sewer Services diseño y construyo este sistema con la ayuda de la cuidad de Phoenix. Este sistema tiene la capacidad necesaria para retener y filtrar 100% del agua que escurre de una tormenta de probabilidades anuales de 1 en 100. Así se beneficia la comunidad y protegemos la calidad del agua.



Take a closer look:

Miremos más de cerca:



Benefits from this facility include:

- Removing pollutants
- Controlling runoff volume
- Recharging groundwater
- Providing wildlife habitat
- Reducing flooding

Los beneficios de este sistema incluyen:

- *Eliminación de contaminantes*
- *Control de descarga de agua pluvial*
- *Reabastecimiento de agua subterránea*
- *Provisión de hábitat para animales*
- *Reducir posibilidad de inundaciones*

Design by Karin Onkka; Artwork by Nancy Wylie
For more information about water quality go to stream-smart.com.
Para más información sobre calidad de agua, visite stream-smart.com.

Wildfire clean-up TIPS

Cleaning up after a fire is traumatic. As you go through this process, it's important to protect yourself and the environment as you begin the first steps to recover.

Fire debris can include hazards such as:

- Tiny particles of dust, dirt, and soot that can easily become airborne and inhaled
- Toxic amounts of heavy metals including arsenic, cadmium, copper, lead and mercury
- Asbestos
- Material such as propane tanks, air conditioners, batteries, cleaning products, pesticides, and herbicides that are hazardous or require special handling and disposal

Important phone #s:

- City of Talent: (541) 535-1566
- Rogue Valley Sewer Services: (541) 664-6300
- Recology: (541) 482-1471
- Rogue Disposal: (541) 779-4161
- DEQ, Medford Office: (541) 776-6010
- FEMA: (1-800) 621-3362

Protect yourself.

Make sure it is safe to start work. Get clearance from the appropriate authorities supervising the fire clean-up. Follow your jurisdictions procedures. Identify and mitigate hazards such as damaged trees and unstable structures. Wear a N95 mask, gloves, safety glasses, & sturdy shoes.

When possible...

Any clean-up of fire impacted properties should be conducted by professionals who have the appropriate expertise for these activities.

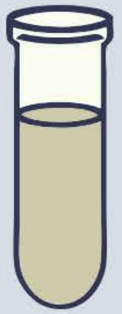
Cleaning up retardant.

The residue left from fire retardant and foams should be wetted to control dust and then shoveled or swept up or sponged off with plain water. Washwater can go onto lawns or pervious soil but should never get washed into stormdrains.

Don't wash it down the drain.

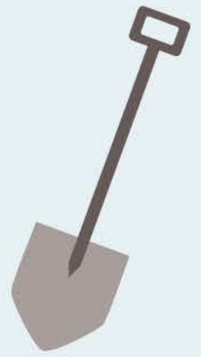
Never wash waste or debris into stormdrains. Using a broom or a low pressure hose, push small amounts of ash onto soil or landscaped areas.

Check for pollutants and hazardous materials.



Soil, ash, and debris can contain numerous contaminants such as asbestos and metals. Ash needs to be tested for hazardous materials before it can be accepted at the landfill. Call Rogue Disposal for details.

Know what you have, segregate materials, dispose of properly.



Debris removal requires approval from the City of Talent. Contact the City for info. Different types of materials are disposed of differently. Contact your disposal company so you know how to dispose of ash, metal, and hazardous materials including vehicles, appliances, medical waste, and contaminated soil.

If you see a spill or hazardous material:

Call DEQ 888-997-7888 or report online at https://www.oregon.gov/deq/Get-Involved/Pages/File-Pollution-Complaint.aspx. **If there is a spill that poses a threat to public health and safety, call 911.**

APPENDIX C: Illicit Discharge Detection and Elimination

Code Enforcement Policy

Subject:	**Code Enforcement**
Approved by:	**Resolution 21-06**

Rogue Valley Sewer Services has adopted a Code to regulate certain activities related to sanitary sewer and stormwater. Enforcement of these code provisions is generally done through the provisions of Section 8.50.050 which authorizes the assessment of a civil fine not to exceed $2,000 for each code violation.

Enforcement of certain stormwater violations is addressed in Section 4.05.110 3).

Enforcement of FOG regulations is defined by Resolution 17-19. The penalty for violation includes a monthly surcharge set each year with the annual rate resolution.

Penalties for making sewer connections without a permit are defined in Code Section 9.10.045.

The purpose of this policy is to establish a framework to assess and collect civil penalties within the limits established by Sections 4.05.110 and 8.50.050 of the RVSS Code.

Policy Goals: The goals of this enforcement policy are to:

- Protect public health and the environment
- Obtain and maintain compliance with applicable code provisions
- Deter future violations
- Ensure consistent and predictable enforcement actions

Progressive Enforcement: RVSS may undertake informal communications to obtain compliance without resorting to formal enforcement action. Such communications are not required nor are they considered part of the progressive enforcement plan. Depending on the immediacy and severity of the violation, RVSS may skip steps 1 and 2 and move directly to step 3 of the enforcement plan.

1. Warning: A Warning is a written notice of violation. This can be in the form of a hand written Brown Tag, email or actual letter. The Warning will identify:
    a. the nature of the violation,
    b. actions needed to correct the violation
    c. time period in which corrections must be made.

2. Notice of Violation: If compliance is not attained from a Warning, RVSS will issue a Notice of Violation. The Notice will include the following:
    a. a citation of the ordinance, rule or order involved;
    b. a description of the violation;
    c. steps needed to correct the violation;
    d. a time frame to complete all corrective action;
    e. the penalty that will be levied if the violation is not corrected.
3. Notice of Civil Penalty: If the deadlines identified in the Notice of Violation are not met, or, if the severity of the violation is such that no warnings are deemed necessary, RVSS will issue a Notice of Civil Penalty. This notice will include the following:
    a. all of the information included in the Notice of Violation
    b. the amount of the penalty assessed
    c. a time frame to complete all corrective action
    d. a time frame to pay the penalty.
    e. a statement of the right to request a hearing before the RVSS Board of Directors.
4. Additional penalty: Failure to complete corrective action or pay the civil penalty imposed within the allotted time frame will result in an additional civil penalty equal to the initial penalty.

Remedies for Non-Compliance: At any point deemed necessary by RVSS, RVSS may take any or all of the following actions:

1. Undertake corrective actions using RVSS resources . In this case the violator will be billed for all costs incurred by RVSS in addition to any civil penalty.
2. Report the violation to Oregon DEQ or other government agency with jurisdiction for further enforcement.
3. File suit in Jackson County Circuit Court for collection of unpaid civil penalties.

Classification of Violation: Code violations are separated into three classifications, with three levels of magnitude, broadly defined in Table 1.

Any repeat of a minor or moderate level violation within a two year time span will move the violation to the next highest magnitude.

Civil Penalty: The amount of the civil penalty will be based on the Class and magnitude of the violation, in accordance with Table 2. Each day a violation continues shall be considered a separate violation.

Table 1. Violation class and magnitude matrix with example violations.

	Class 1 *Actions that result in discharge of pollutants*	Class 2 *Actions that impact RVSS infrastructure and/or non-compliance with permit and agreement requirements*	Class 3 *Failure to comply with administrative provisions of permits and agreements*
Major	Release of pollutants into waters of the state		
Moderate	Release of pollutants that are contained before reaching waters of the state	Any unpermitted work on, or damage to, public sewer or stormwater facilities, or work in conflict with agreements	
Minor	Release of pollutants that are contained on property where the release originated	Failure to install or maintain stormwater controls; failure to allow proper inspection of sewer or stormwater facilities.	Failure to comply with administrative provisions of permits and agreements

Table 2. Civil penalty value based on class and magnitude.*

	Class 1	Class 2	Class 3
Major	$2,000	$1,000	$500
Moderate	$1,000	$750	$500
Minor	$500	$500	$250

*In addition to these civil penalties, RVSS will recover any costs incurred to correct or mitigate the violation.

Illicit Discharge Complaint Tracking FY21

Report Date	Reported by:	Location of Incident	Type of Incident	Initial Response Date	Initial Investigation Date	Discharge stopped Date	Date of OERS contact	Incident Response including dates of investigation.
10/1/2020	Neighbor	approx. 3131 Ave. A White City (JaCo)	water in gutter w/oil sheen running into curb inlet	10/1/2020	10/1/2020		NA	Oyung went to location on 10/1/2020 5 hours after initial report. There was some water in gutter on both sides of street. North side of street was trickling into curb inlet. Water in gutters looked clean, no oil sheen observed. Water did not appear to be originating from outside of gutter. I spoke to a different neighbor about what he had seen and he said he thought it was a water leak and had been going on a couple days. Oyung called in potential leak to Medford Water Comm. Case closed.
10/14/2020	customer	120 Cascade Ct	sewer smell in yard	10/14/2020	10/14/2020		NA	Main line not surcharged. Customers exterior c/o was clear. Had them run water and their service was flowing.
1/26/2021	MP (RVSS)	612 N Main, PHX	graywater discharge to SW	1/26/2021	1/26/2021		NA	Oyung has had contact with person prior to gain access to protect area drain on site. Rod Cameron, owner living onsite. 541-261-0853. Oyung asked him how he was handling the gray and black water and he said he was having the black water pumped by D&D and he was letting the gray water run from trailer through hose onto parking lot and into area drain next to trailer. Oyung notified him that he was not to put gray water into area drain and suggested he drain graywater into soil on other side of trailer. Mr. Cameron said he would comply right away.
1/11/2021	Neighbor	2475 FINLEY LN, MF (JaCo)	Anon. complaint from neighbor to DEQ about petroleum product going into ditch with stormwater runoff. Neighbor: Frances 541-973-9370	1/11/2021	1/11/2021	3/30/2021	NA	Oyung investigated and met reporting neighbor who described a variety of activities and actions resulting in surface water carrying petroleum products into ditch. Individuals at 2475 Finley have made several small (4'-10" deep) ditches to carry water across driveway and from backyard to roadside ditch. Parked vehicles and RVs present on property are probably source for petroleum product. After several letters, visits to resident and reporting neighbor, **incident resolved/closed.** Resident cleaned front parking area, added rock, filled in 2 private ditches carrying petroleum products to shared ditch. Oyung observed and photographed; see SW Hotline folder for more info.
2/19/2021	Amie S. RVCOG	Outfall south side of Wagner Cr. At Talent Ave.	flow from outfall looked white	2/22/2021	2/22/2021	2/22/2021	NA	Oyung searched source area. Found paint-like substance in AD next to 79 Stage Wy. Gave painter at 79 Stage a Brown Tag. 2/24, opened 1st downstream CB and found evidence of white substance in stormwater. Evidence seemed to decrease further downstream. No evidence of paint in stormwater feature so that was unlikely the source of what Amie saw on 2/19. No other possible ID observed in drainage area. RVSS issued Notice of Non-compliance to Suncrest Homes. Suncrest Homes paid
3/10/2021	RVCOG	Southern OR Linen, White City (JaCo)	sediment/sludge discharged into OF into ditch	3/11/2021	3/11/2021	8/4/2021	NA	RVCOG staff observed and photographed illicit discharge on 3/5/21 coming out of a" stormwater outfall pipe into a ditch. The color/substance seen in the pictures went into the ditch and dissipated approximately 50 yards or so dowstream. Sediment/sludge still visible on 3/11/2021. Flow in ditch towards west. Oyung went to location and spoke to Antonio Casillas, Plant Manager and showed him the outfall and told him the sediment would need to be cleaned up and no discharge to the ditch was allowed. He was to determine the source of the discharge into ditch and eliminate the source.3/15/21: Mfd Tx staff and FO visit and manager found source: AD in covered work area around dryer exhaust. Lint was being washed into AD. SOL will change practice.5/25: still lint in the ditch. 6/1 a letter with fine levied send to SOL. 7/2/21: FO visited site. Precipitation event on 6/22/21 probably washed out most of lint. The downstream end of the ditch at grate has a high need for maintenance to remove built up debris. Tim Hammond/RVSS cleaned ditch inlet. Aug. 2021: RVSS fine paid 8/2/21. SOLS sent invoice evidence of pipe being cleaned on 8/4/21. Site visited and looks ok when Oyung visited site Aug 24 2021: Southern OR Linen Service ditch looked ok. Some residual lint in places but mostly ok. No water flowing in ditch, not water flowing out of any pipes.
4/1/2021	City of Medford Pretreatment staff	Vital Earths, White City (JaCo)	possible risk to SW system inside fertilizer packaging operation	4/1/2021	5/4/2021		NA	Visited exterior 5/4/21 and 5/11/21. Found drain leaving building and entering box with lid on south side of building. Visited interior of bldg. 5/18/21. Found the liquid fertilizer was stored in totes usually less than 20 in a large space (approx. 50'x50') with a 2-3' rim around most of area offering secondary containment. Morgan recommended we contact JaCo code enforcement since it is an interior structural issue. FO sent email to JaCo Code Enforcement supervisor Alicia Brown on 5/26/21 to request assistance who replied 6/14.See Hotline FY21 for more notes, photos.
5/12/2021	PHX	306 Cheryl Ln, PHX	SD full and backing up	5/12/2021	5/12/2021		NA	Private storm drain in apartment complex. Called and left message with Karen. Forward info to Frances, RVSS Stormwater. Paul and Frances both left voicemails for Karen. No response. She was notified in VM that if the catch basin on private property, it is the private prop. Owner responsibility to clean. Not clear what basin she was concerned about or damage.
5/19/2021	RVCOG	ditch north of RR tracks on Pacific Ave. White City (JaCo)	large amount of algae in ditch	5/25/2021	5/25/2021		NA	RVCOG staff observed and photographed ditch with algae on 5/19/21, sent photo via text to Oyung. Amie S. stated that her concern was the amount of algae in ditch. Oyung followed up on 5/25/21, confirmed algae. Noted that water was very clear, presence of other aquatic plants indicated perennial water in the ditch. After storm 6/22/21, JM noted the algae was gone. FO visited 7/2/21 and took photos. No floating algae but water very brown and looked like it had alot of tannins, perhaps from Murphy yard. See photos in K:\DATA\Stormwater Post 2011\Illicit Discharge Detection & Elimination\Hotline calls\Hotline Calls & Spill Reports FY2021\ditch at RR tracks on Pacific\photos taken by Oyung July 2-2021
			Avg working days:	**1.22**	**4.67**	**55.33**		

RVSS *proposed* Pollutant Parameter Action Levels for dry weather sampling in the Bear Creek Watershed

Indicator monitoring is used to confirm illicit discharges, and provides clues about their source or origin. The following indicators can be used during dry weather outfall inspections to determine whether or not an upstream investigation is warranted.

Parameter	Bear Creek Basin Action Level	Rationale
E. coli	406 MPN/100mL	Single sample standard for fresh water.
pH	6.5-8.5	OAR 340-041-0275 water quality standard for the Rogue Basin.
Temperature	NA	Not a useful parameter as outfalls are only visited one time.
Conductivity	>450 uS/cm	Based on sample values from Bear Creek OFs, see explanation below.
Turbidity	15 NTU	Based on recommendation of Rogue Basin Coordinator.
Total Chlorine residual	Not measuring.	

Conductivity Pollutant Parameter Action Level

RVSS has a very small dataset from dry season sampling of flowing outfalls over the past 9 years, from which the average conductivity is 455 with a standard deviation of 145 us/cm. The OFs have not had any other parameters that would indicate a pollutant issue. RVSS' data corroborates with data collected at stormwater outfalls by RVCOG from 2013 to 2018 during dry weather. RVCOG's average conductivity during dry weather sampling is 426 with a standard deviation of 341 us/cm.

DEQ had suggested a pollutant parameter action level of >325uS/cm for the Willamette Valley, and the Rogue Basin TMDL coordinator thought this was appropriate. However, based on data collected from stormwater outfalls in the Bear Creek watershed, this value seems too conservative. I am proposing a pollutant parameter action level of 450 uS/cm for dry weather sampling in the Bear Creek Valley.

APPENDIX D: Construction Site Runoff Control

Question 91. A. 1200-C_CN Permitted Projects Active in FY21

Question 91.b 1200-C_CN Inspection Reporting Record

Question 100. Small Site Brown Tag Issuance Record

Erosion and Sediment Control Permits Active in FY21: 1200-C, 1200-CN				
1200CPermitNo	**DateAssigned**	**NoticeofTerminationDate**	**AreaDistur**	**PermitteeLegalName**
SWQ17-020-CN	8/15/2017	10/21/2020	4.37	Suncrest Homes
SWQ18-21-CN	8/20/2018	10/30/2020	2.32	Christian Snively
SWQ18-22-CN	6/22/2018	11/15/2020	1.4	Rogue Innovation LLC
SWQ19-03-CN	9/24/2018	8/7/2020	4.97	RA Murphy Construction, Inc.
SWQ19-09-CN	3/14/2019	2/18/2021	4.42	Rogue Community College District
SWQ19-10-C ABAN		7/1/2020	12.54	VPA Associates, Inc.
SWQ19-12-CN	6/5/2019	3/2/2021	4	Cota Homes
SWQ19-14-CN	11/20/2019		3.03	Herman Construction Group
SWQ19-16-CN	4/22/2019		2.4	Magnolia Heights, LLC
SWQ19-19-CN	4/10/2019		1.2	Knouff Inc.
SWQ19-20-C	6/19/2019		7.14	Phoenix-Talent School District
SWQ19-22-CN	6/19/2019	12/9/2020	2.3	Mark McAlister
SWQ19-23-CN	11/8/2019		4.59	Archangel Gabriel Orthodox Temple
SWQ20-06-CN	9/27/2019		1.25	Kellenbeck Development and Manag
SWQ20-12-CN	2/28/2020		2.5	Glen Mar Construction
SWQ20-21-CN	6/24/2020		2.156	RA Murphy Construction
SWQ21-01-CN	9/16/2020		1.78	Thornton Engineering
SWQ21-02-CN	10/22/2020		3.7	Thornton Engineering
SWQ21-06-CN	3/31/2021		2.8	Housing Authority of Jackson County
SWQ21-07-CN	12/16/2020	2/26/2021	1.78	Phoenix-Talent School District
SWQ21-08-C	2/22/2021		5	Cornerstone Contracting, Inc.
SWQ21-09-C	2/17/2021		2.22	Bob Fellows Construction LLC
SWQ21-10-CN	12/9/2020	1/19/2021	2.5	All-Ways Excavating LLC
SWQ21-12-C	3/4/2021		17	CAL-AM Properties, Inc.
SWQ21-15-CN	5/18/2021		1.35	Timber Products Company
SWQ21-17-C	4/15/2021		39.4	Bear Lake MHC, LLC
SWQ21-18-CN	4/7/2021		1.2	Wilson Equipment
SWQ21-21-CN	6/9/2021		4.23	Talent Urban Renewal Agency
SWQ21-25-CN	6/9/2021		2	Sandy Unruh
SWQ21-26-CN	5/19/2021		4.3	Suulutaaq, Inc.
SWQ21-27-CN	6/9/2021		4.747	US West Electric

RVSS 1200-C and 1200-CN Permitted Site Inspections During FY21

ObjectID *	Project Name	Permit Number	Inspection Date	Temperatu	Weather C	BMP Inspection Type	Storm Event	Is stormwa	browntagissued
204	Small site	<Null>	9/23/2020 18:35	66	Cloudy	Regular Inspection	<Null>	No	Yes
228	Shadow creek estates	SWQ19-12-CN	12/14/2020 21:50	<Null>	Clear	Regular Inspection	Post	No	Yes
240	Shadow creek estates	SWQ19-12-CN	12/18/2020 21:08	45	Cloudy	Re-Inspection	Post	No	Yes
249	Shadow creek estates	SWQ19-12-CN	12/31/2020 0:25	<Null>	Light Drizzl	Re-Inspection	Pre	No	Yes
239	Magnolia Investments	SWQ19-16-CN	12/17/2020 21:05	45	Cloudy	Regular Inspection	Post	No	Yes
246	Jacqueline Estates	SWQ19-19-CN	12/30/2020 18:47	36	Cloudy	Regular Inspection	Pre	No	Yes
208	McAlister Meadows	SWQ19-22-CN	11/16/2020 18:53	48	Light Drizzl	Regular Inspection	Post	No	Yes
206	Tamarack Estates	SWQ18-21-CN	11/4/2020 18:46	62	Clear	Regular Inspection	<Null>	No	No
216	Phoenix Industrial Studios	SWQ18-22-CN	11/16/2020 20:06	50	Storming	Regular Inspection	during	Yes	No
229	Phoenix Industrial Studios	SWQ18-22-CN	12/16/2020 17:56	<Null>	Cloudy	Regular Inspection	Post	No	No
207	RCC Health Building	SWQ19-09-CN	11/5/2020 22:44	71	Cloudy	Regular Inspection	<Null>	No	No
218	RCC Health Building	SWQ19-09-CN	11/16/2020 20:26	50	Cloudy	Regular Inspection	Post	No	No
224	RCC Health Building	SWQ19-09-CN	12/8/2020 15:47	36	Clear	Regular Inspection	<Null>	No	No
238	RCC Health Building	SWQ19-09-CN	12/17/2020 22:16	48	Cloudy	Regular Inspection	Post	No	No
215	Shadow creek estates	SWQ19-12-CN	11/16/2020 19:48	50	Cloudy	Regular Inspection	Post	No	No
220	VA Building 220 Replacement	SWQ19-14-CN	11/16/2020 20:52	50	Cloudy	Regular Inspection	Post	No	No
235	VA Building 220 Replacement	SWQ19-14-CN	12/17/2020 21:39	48	Cloudy	Regular Inspection	Post	No	No
243	VA Building 220 Replacement	SWQ19-14-CN	12/30/2020 18:14	35	Cloudy	Regular Inspection	Pre	No	No
261	VA Building 220 Replacement	SWQ19-14-CN	6/23/2021 15:16	63	Clear	Regular Inspection	Post	No	No
214	Magnolia Investments	SWQ19-16-CN	11/16/2020 19:40	50	Cloudy	Regular Inspection	Post	No	No
227	Magnolia Investments	SWQ19-16-CN	12/14/2020 22:15	<Null>	Clear	Regular Inspection	Post	No	No
248	Magnolia Investments	SWQ19-16-CN	12/31/2020 0:02	<Null>	Cloudy	Re-Inspection	Pre	No	No
210	Jacqueline Estates	SWQ19-19-CN	11/16/2020 19:15	48	Cloudy	Regular Inspection	Post	No	No
231	Jacqueline Estates	SWQ19-19-CN	12/17/2020 21:21	48	Light Drizzl	Regular Inspection	Post	No	No
264	Jacqueline Estates	SWQ19-19-CN	6/23/2021 15:41	63	Clear	Regular Inspection	Post	No	No
209	Phoenix High School	SWQ19-20-C	11/16/2020 18:51	48	Cloudy	Regular Inspection	Post	No	No
230	Phoenix High School	SWQ19-20-C	12/16/2020 17:59	<Null>	Cloudy	Regular Inspection	Post	No	No
251	Phoenix High School	SWQ19-20-C	2/25/2021 18:25	39	Cloudy	Regular Inspection	<Null>	No	No
222	McAlister Meadows	SWQ19-22-CN	11/23/2020 17:35	<Null>	<Null>	Re-Inspection	<Null>	No	No
223	McAlister Meadows	SWQ19-22-CN	11/30/2020 18:42	35	Light Drizzl	Regular Inspection	<Null>	No	No
225	McAlister Meadows	SWQ19-22-CN	12/9/2020 18:39	44	Light Drizzl	Regular Inspection	<Null>	No	No
219	Exit 24 Storage Phase 2	SWQ20-06CN	11/16/2020 20:39	51	Cloudy	Regular Inspection	Post	No	No
221	VA Replacement Buildings 225	SWQ20-12-CN	11/16/2020 21:06	50	Cloudy	Regular Inspection	Post	No	No
236	VA Replacement Buildings 225	SWQ20-12-CN	12/17/2020 21:45	48	Cloudy	Regular Inspection	Post	No	No
244	VA Replacement Buildings 225	SWQ20-12-CN	12/30/2020 18:27	36	Cloudy	Regular Inspection	Pre	No	No
262	VA Replacement Buildings 225	SWQ20-12-CN	6/23/2021 15:19	63	Clear	Regular Inspection	Post	No	No
217	Cascade Fire	SWQ20-21-CN	11/16/2020 20:23	50	Cloudy	Regular Inspection	Post	No	No
237	Cascade Fire	SWQ20-21-CN	12/17/2020 21:47	48	Cloudy	Regular Inspection	Post	No	No
247	Cascade Fire	SWQ20-21-CN	12/30/2020 19:07	36	Cloudy	Regular Inspection	Pre	No	No

RVSS 1200-C and 1200-CN Permitted Site Inspections During FY21

ObjectID *	Project Name	Permit Number	Inspection Date	Temperatu	Weather C	BMP Inspection Type	Storm Event	Is stormwa	browntagissued
266	Cascade Fire	SWQ20-21-CN	6/23/2021 16:13	65	Clear	Regular Inspection	Post	No	No
205	Wash-N-Go	SWQ21-01-CN	10/16/2020 15:06	42	Clear	Initial Inspect	<Null>	No	No
211	Wash-N-Go	SWQ21-01-CN	11/16/2020 19:27	48	Cloudy	Regular Inspection	Post	No	No
234	Wash-N-Go	SWQ21-01-CN	12/17/2020 21:35	48	Light Drizzl	Regular Inspection	Post	No	No
241	Wash-N-Go	SWQ21-01-CN	12/30/2020 18:02	35	Cloudy	Regular Inspection	Pre	No	No
258	Wash-N-Go	SWQ21-01-CN	6/23/2021 14:49	63	Clear	Regular Inspection	Post	No	No
212	White Mountain Plaza Access Road	SWQ21-02	11/16/2020 19:32	48	Cloudy	Initial Inspect	<Null>	No	No
213	White Mountain Plaza Access Road	SWQ21-02	11/16/2020 19:34	48	Cloudy	Regular Inspection	Post	No	No
233	White Mountain Plaza Access Road	SWQ21-02	12/17/2020 21:33	48	Light Drizzl	Regular Inspection	Post	No	No
242	White Mountain Plaza Access Road	SWQ21-02	12/30/2020 18:04	35	Cloudy	Regular Inspection	Pre	No	No
259	White Mountain Plaza Access Road	SWQ21-02	6/23/2021 14:51	63	Clear	Regular Inspection	Post	No	No
260	White Mountain Plaza Access Road	SWQ21-02	6/23/2021 15:03	63	Clear	Regular Inspection	Post	No	No
252	Phoenix HS Track	SWQ21-07CN	2/26/2021 17:58	44	Light Drizzl	Regular Inspection	<Null>	No	No
253	VA Retrofit	SWQ21-08-C	3/9/2021 18:39	42	Cloudy	Initial Inspect	<Null>	No	No
263	VA Retrofit	SWQ21-08-C	6/23/2021 15:21	63	Clear	Regular Inspection	Post	No	No
254	River Rock Ranch	SWQ21-09-CN	3/22/2021 19:29	47	Cloudy	Initial Inspect	<Null>	No	No
265	River Rock Ranch	SWQ21-09-CN	6/23/2021 15:52	63	Clear	Regular Inspection	Post	No	No
226	Willow Estates	SWQ21-10-CN	12/9/2020 22:47	50	Cloudy	Initial Inspect	<Null>	No	No
232	Willow Estates	SWQ21-10-CN	12/17/2020 21:31	48	Light Drizzl	Regular Inspection	Post	No	No
245	Willow Estates	SWQ21-10-CN	12/30/2020 18:44	36	Cloudy	Regular Inspection	Pre	No	No
250	Willow Estates	SWQ21-10-CN	1/12/2021 17:21	46	Light Drizzl	Regular Inspection	<Null>	No	No
256	TURA Gateway	SWQ21-21-CN	6/14/2021 17:44	62	Cloudy	Initial Inspect	<Null>	No	No
267	D&S Harley	SWQ21-25-CN	6/24/2021 22:27	96	Clear	Initial Inspect	<Null>	No	No
257	Totem MHP	SWQ21-26-CN	5/24/2021 15:22	64	Clear	Initial Inspect	<Null>	No	No
255	RVMV	SWQ21-27-CN	6/14/2021 17:09	63	Cloudy	Initial Inspect	<Null>	No	No

Small Site Projects for which a Brown Tag or Stop Work Order was Issued: FY 2021

Permit No.	Date	Address	Violation(s)	RVSS Inspector	1200CN Inspector or Resident Name	Brown Tag (BT) or Stop Work Order?
Small lot	5/27/2021	255 Oak Crest	need to move toilet (he says it is also Verity's), sweep pavement, replace biobags at inlet	FO	Bill Burfield	BT
Small lot	4/9/2021	Creekside Estates	perimeter BMPs needed around work site, streets need to be swept	JM	Brent/Adroit (building clubhouse)	BT
Small lot	2/26/2021	405 Barnum, Phoenix	perimeter controls must be installed or spoils removed	Dan H.	Buntin Const.	BT
Small lot	5/13/2021	405 Barnum, Phoenix	portapotty too close to inlet, cover or move stockpile, replace inlet protection	FO	Buntin Const.	BT
Small lot	6/21/2021	100 Willow Springs	replace biobags at 2 inlets, shovel out material in gutter, excessive trash on site	JM	Buntin Const. holds permit but JM gave sub. Cox Const. the BT and left VM for Trevor with Cox.	BT
Small lot	4/9/2021	205 Suncrest	sediment in street	FO	Chris Snively	NO BT Issued
Small lot	5/27/2021	271 Rockfellow, Talent	need to sweep pavement at 271 and 265 driveways	FO	Clason Const./John Clason	BT
Small lot	2/2/2021	343 Geraldine, 325 & 327 Everett, Talent	track out from demo, debris & soil on street, sidewalk, gutter.	FO	contractor: Eddie Conrad for Claudio Alvarez	BT

Small Site Projects for which a Brown Tag or Stop Work Order was Issued: FY 2021

Permit No.	Date	Address	Violation(s)	RVSS Inspector	1200CN Inspector or Resident Name	Brown Tag (BT) or Stop Work Order?
Small lot	4/9/2021	166 Autumn Ridge	sediment in street	FO	David Powell	NO BT Issued
Small lot	6/8/2021	301/303/305/307 Everett	needs pavement cleaned	FO	Eddie Conrad/Alvarez	BT
Small lot	6/8/2021	308 Everett	needs pavement cleaned	FO	Eddie Conrad/Alvarez Const.	BT
Small lot	6/8/2021	349 Geraldine	needs pavement cleaned	FO	Eddie Conrad/Alvarez Const.	BT
Small lot	5/27/2021	256 Oak Crest	need to sweep pavement	FO	Elegant Custom Homes, Jeff Bezner	BT
Small lot	5/11/2021	321, 323, 325, 327 Everett	gravel/sed on pavement/driveway	FO	emailed Eddie Conrad, Alvarez	BT
Small lot	4/9/2021	Mtn View Estates	need perimeter control/wattles, area drains need filter media	JM	Fortner Excavation	BT
Small lot	4/9/2021	155 Suncrest, 157 Autumn Ridge	track out, debris & soil on street, sidewalk, gutter.	FO	Jarrod Cota, Cota Homes	BT
Small lot	5/11/2021	336 Everett	sediment/trash in gutter	FO	Jason Rossetto, Harmony Modern Homes. BT emailed	BT

Small Site Projects for which a Brown Tag or Stop Work Order was Issued: FY 2021

Permit No.	Date	Address	Violation(s)	RVSS Inspector	1200CN Inspector or Resident Name	Brown Tag (BT) or Stop Work Order?
Small lot	6/9/2021	201 Autumn Ridge	needs pavement cleaned	FO	Keith Young/Young Bros.	BT
Small lot	4/9/2021	220 Autumn Ridge	track out, debris & soil on street, sidewalk, gutter.	FO	Kyle Taylor, Taylored elements	BT
	6/4/2021	Creekside Estates	corner lot across from unit 53 needs perimeter control or removal	FO	Mark Hoy	BT
Small lot	6/30/2021	1033 North Rose, Phx	piles of dirt on sidewalk along Barnum, filter media in curb inlet in front of house needs replacing	FO	Mike has a phone # listed on permit: 541-601-2737	BT
Small lot	2/11/2021	neighborhood of Barnum & Brandon Wy. Phx	slurry, slippery substance on sidewalk, street, gravel stockpiled uncovered	FO	R2 Jim Cooper	BT
Small lot	5/27/2021	267 Oak Crest	need to sweep pavement	FO	Solid Ground	BT
Small lot	2/19/2021	79 Stage Way, Talent	paint like substance into nearby area drain	FO	Suncrest Homes	BT

Small Site Projects for which a Brown Tag or Stop Work Order was Issued: FY 2021

Permit No.	Date	Address	Violation(s)	RVSS Inspector	1200CN Inspector or Resident Name	Brown Tag (BT) or Stop Work Order?
Small lot	5/27/2021	401 Creekside, Talent	need perimeter control/wattles	FO	Suncrest Homes	BT
Small lot	5/13/2021	220, 224, 228 Cheryl Ln. Phoenix	perimeter control needed, sweep pavement	FO	Taylored Elem	BT
Small lot	5/13/2021	1000 Arana	stockpile needs to be covered, sweep sidewalk & gutter	FO	texted and emailed Eddie Conrad, Alvarez	BT
None	2/26/2021	243 Oakcrest, Jackson Co.	track out from demo, debris & soil on street, sidewalk, gutter.	FO	Tim Plankenhorn, Verity Construction	BT
Small lot	5/13/2021	210, 212 Cheryl Ln Phoenix	perimeter control needed, sweep pavement	FO	Tom Malot	BT
Small lot	5/13/2021	1020 Arana	cover or remove stockpile, sweep pavement	FO	Verity, Tim Plankenhorn	BT

Small Site Projects for which a Brown Tag or Stop Work Order was Issued: FY 2021

Permit No.	Date	Address	Violation(s)	RVSS Inspector	1200CN Inspector or Resident Name	Brown Tag (BT) or Stop Work Order?
Small lot	5/27/2021	238 Oak Crest	need to move toilet, replace biobags at inlet	FO	Verity, Tim Plankenhorn	BT
Small lot	4/9/2021	Creekside Estates	material in street/curb. Need perimeter control/wattles, biobags/area drain protection	JM	Wes Norton/Roxy Ann Rock	BT

APPENDIX E: Post- Construction Site Runoff for New Development and Redevelopment

Question 124. Record of RVSS Inspection of Privately Maintained and Operated Stormwater Facilities

RVSS Inspection of Privately Maintained and Operated Stormwater Facilities

1200C Permit	RVSProjectName	Location	Notification Ltr Sent	Date Inspected	Maint Reqd	Main tIssues Deadline	Maint Issues Completed
115244	Sophia's Place	Phoenix	21-May-21	09-Jun-21	FALSE		
115026	Pear Tree Self Storage	Jackson County	15-Mar-21	08-Jun-21	FALSE		
SWQ18-12	Western Beverage	Jackson County	26-Feb-21	18-May-21	FALSE	31-Aug-21	
	Kamerin Springs Wetland	Talent	15-Mar-21	18-May-21	TRUE	30-Oct-21	
SWQ15-008-C	Lisk Estates Phase 2	Jackson County		18-May-21	FALSE		
114776	Kyra Subdivision	Jackson County		18-May-21	FALSE		
	JCURA- Dutton Pond	Jackson County		18-May-21	FALSE		
SWQ18-05	Rivergate House of God	Talent	04-Mar-02	11-May-21	FALSE	31-Aug-21	
	Arnos St. Improvements	Talent	15-Mar-25	11-May-21	FALSE		
SWQ11-007	West Valley View, Ph 1	Talent	15-Mar-21	11-May-21	TRUE	30-Sep-21	
	West St. Improvements	Talent	15-Mar-21	11-May-21	FALSE		
	West St. Improvements	Talent	15-Mar-21	11-May-21	FALSE		
SWQ15-011-CN	Phoenix Plaza	Phoenix	15-Mar-21	05-May-21	FALSE		
SWQ15-011-CN	Phoenix Plaza	Phoenix	15-Mar-21	05-May-21	TRUE	30-Sep-21	
SWQ15-011-CN	Phoenix Plaza	Phoenix	15-Mar-21	05-May-21	FALSE	30-Sep-21	
SWQ17-006-CN	Wilson Equipment	Jackson County	05-Mar-21	04-May-21	FALSE		
	Mountain View Middle School	Jackson County	15-Mar-21	23-Apr-21	TRUE	30-Sep-21	
SWQ14-007-CN	White City Elementary Site Improvements	Jackson County	15-Mar-21	23-Apr-21	TRUE	30-Sep-21	
swq18-14	Gracelyn Subdivision	White City	15-Mar-21	23-Apr-21	FALSE		
SWQ18-03	Henius Kirkland Rock	White City	22-Mar-21	23-Apr-21	FALSE		
SWQ18-10	RCC High Tech Center	White City	12-Feb-21	16-Apr-21	TRUE	24-Jun-21	06-Jul-21
SWQ19-02	South Valley Construction	White City	04-Mar-21	16-Apr-21	TRUE	20-Jun-21	
SWQ17-016	Biomed Diagnositics	White City	22-Mar-21	15-Apr-21	TRUE	20-Jun-21	
SWQ18-23-CN	Linde Electronics	White City	04-Mar-21	22-Mar-21	TRUE	30-Jun-21	30-Apr-21
SWQ17-009	Rogue Credit Union W Main	Jackson County	16-Jan-20	04-Mar-20	TRUE		
SWQ17-003	401 S Pacific Highway	Talent	16-Jan-20	04-Mar-20	FALSE		
SWQ14-005-CN	HLT Gas & Mini Mart	Jackson County	29-Jan-20	25-Feb-20	TRUE	18-Mar-20	
SWQ13-007	Oregon Shakespeare Festival	Talent	29-Jan-20	24-Feb-20	TRUE		
SWQ13-007	Oregon Shakespeare Festival	Talent	29-Jan-20	24-Feb-20	TRUE		
SWQ13-007	Oregon Shakespeare Festival	Talent	29-Jan-20	24-Feb-20	TRUE		

RVSS Inspection of Privately Maintained and Operated Stormwater Facilities

1200C Permit	RVSProjectName	Location	Notification Ltr Sent	Date Inspected	Maint Reqd	Main tIssues Deadline	Maint Issues Completed
SWQ14-002	Lanfear Partition	White City	29-Jan-20	13-Feb-20	TRUE		
SWQ16-009	141 Trout Way	Jackson County		13-Feb-20	TRUE		
SWQ16-005-C	Patriot Station	Jackson County	27-Jan-20	13-Feb-20	FALSE		
SWQ16-011-CN	Dollar General	Talent		15-Oct-19	TRUE		
115694	Talent Civic Center	Talent		25-Feb-19	TRUE		
SWQ13-008	Chuck Roberts Parking lot	Talent		04-Dec-18	FALSE		
SWQ13-008	Chuck Roberts Park	Talent		04-Dec-18	FALSE		
SWQ13-008	Chuck Roberts Parking lot	Talent		04-Dec-18	FALSE		
	Front St. Improvements	Talent		04-Dec-18	TRUE		
	Front St. Improvements	Talent		04-Dec-18	FALSE		
	Front St. Improvements	Talent		04-Dec-18	FALSE		
	E. Main St.	Talent		04-Dec-18	FALSE		
	E Main St.	Talent		04-Dec-18	TRUE		
SWQ15-006	Talent Community Center	Talent		27-Nov-18	TRUE		
SWQ16-014-CN	Rite Aid Phoenix	Phoenix	11-Mar-20		FALSE		
115694	Talent Civic Center	Talent			FALSE		
SWQ18-12	Western Beverage	Jackson County	26-Feb-21		FALSE	31-Aug-21	
SWQ20-02	Table Rock Elementary	White City			FALSE		

Appendix F: Pollution Prevention and Good Housekeeping for Municipal Operations

Question 131. SOP documents for City of Phoenix, City of Talent, and RVSS

Standard Operating Procedures
and Best Management Practices
for Pollution Prevention and Good Housekeeping
City of Talent

September 23, 2021

Table of Contents

INTRODUCTION:

The City of Talent operates under a Municipal Separate Storm Sewer System (MS4) Phase II permit, held by Rogue Valley Sewer Services, that requires development of a pollution prevention or "good housekeeping" program. The program describes how the City is required to operate and maintain facilities to reduce the discharge of pollutants to waters of the state. This document is a required part of the permit and outlines Standard Operating Procedures (SOPs) that the City of Talent and its contractors will use to implement Best Management Practices (BMPs) for pollution prevention and good housekeeping to keep pollution out of the stormwater system and our waterways. These BMPs do not address other environmental issues or regulations.

Stormwater runoff in the Rogue Valley flows into the stormwater system and then directly into creeks and rivers untreated. Stormwater management facilities do exist on some properties to capture and treat runoff from that property; however, most properties and roads do not have stormwater management facilities. As stormwater flows across impervious surfaces (for example roads, parking lots, driveways and roofs) it picks up and carries anything in its path, such as oil, paint, sediment, trash, chemicals, delivering these substances to the stormwater system and eventually creeks. Pollution Prevention and Good Housekeeping practices are used to keep pollutants off impervious surfaces and prevent their transport to the stormwater system and creeks.

The City of Talent commits to providing training and orientation to all new staff to implement these pollution prevention and good housekeeping practices. As the program changes, follow-up training will be provided.

The City of Talent will maintain records for the program activities to meet the permit requirements. These records will include a descriptive summary of activities in an Annual Report that is provided to the RVSS Stormwater Manager.

CONVEYANCE SYSTEM MANAGEMENT AND MAINTENANCE

Cleaning Pipes, Catch Basins, and Inlets

The Phase II permit requires at least 50 percent of the jurisdiction's owned or operated catch basins and inlets within the MS4 be inspected at least once every five years. After inspecting, any maintenance or cleaning is to take place to ensure all catch basins and inlets continue to function as designed. The City of Talent is responsible for the maintenance of the stormwater conveyance system within city limits and for ensuring that inspection and maintenance requirements are met.

Operators are to perform conveyance system maintenance in a manner that prevents contamination of stormwater systems with pollutants and isolates stormwater system pollutants from downstream waterways. Maintenance is done to ensure adequate flow through facilities, prevent flooding and to repair damaged conveyances. Stormwater conveyance systems are maintained on a regular schedule.

Best Management Practices (BMPs):

1. Talent will inspect 10 percent of the SW system every year. Catch basins, pipes and inlets that are determined to need cleaning and/or maintenance will be cleaned and maintained within 6 months.
2. Schedule stormwater system maintenance during the summer when flow is low or non-existent.
3. A shovel, backhoe, vacuum truck, or similar equipment may be used to clean out accumulated debris and sediment from catch basins.
4. No water, sediment or debris shall be allowed to flow downstream, particularly at outfalls.
5. Material removed from catch basins is disposed of at the landfill.
6. Report the location of catch basins that show signs of illicit dumping (i.e. used motor oil, paint, etc.) to the RVSS SW Manager.
7. If repairs are necessary during wet weather, use pre-cast structures if possible.
8. Isolate activities near water bodies to avoid contact between fresh concrete and water.

Culvert Cleaning and Repair

Replacement and repair of drainage structures restores function and can prevent failure of the drainage structure. This activity may include the use of temporary water management. Repairs and replacements may require excavating, diverting or impounding water, and backfilling. NOTE: Culvert replacement or extension will frequently require permits outside the scope of this guide.

BMPs:

1. Perform work when water flow in the ditch is low, except in cases of emergency where water is backed up onto the roadway or adjacent property. Divert flow to minimize turbidity, when and where possible.
2. Prior to ground disturbance, install erosion control and sediment prevention measures to prevent the downstream movement of sediment dislodged during culvert work.
3. Removed material shall be hauled or placed above the Ordinary High Water Line (OHWL) where there is no opportunity for material to reach waters of the State. If placing above the OHWL, either:
    a. Dry material and then haul away to the landfill, or

b. Stabilize material in place within 14 days. Stabilization may include spreading and top seeding; covering with matting or straw, or other appropriate erosion prevention measures.

Ditch Shaping, Grading, Cleaning

Machine cleaning, grading, and reshaping of ditches assists in maintaining or improving drainage. Vegetation located in the ditch may be removed during cleaning. Ditch maintenance may require permitting through the Army Corps of Engineers or Department of State Lands, Figure 7.1 below is used by ODOT to determine when permitting may be needed.

NOTE: In this document, the term “ditch” or “drainage ditch”, for the purpose of municipal operations, is a facility, typically parallel to a road or parking lot, which exclusively carries stormwater runoff draining from the road or other constructed facilities. In our region, there are also structures called “ditches” that are excavated channels (lined and unlined) that are used to transport irrigation water (though stormwater can also enter and be conveyed by these facilities). Also in our region, there are mapped streams that flow in channelized streambeds, sometimes adjacent and parallel to roads, which can look just like a ditch. These streams (either with or without fish) may look like ditches because the channel has been modified or impacted by development. Ditches used to convey stormwater, irrigation, and channelized streams are all regulated differently so it is important to identify them correctly. It can be difficult to distinguish a ditch, which exclusively carries stormwater or irrigation runoff from a channelized creek, so refer to the RVSS Stormwater Manager as needed.

7.1. When Is A Waterway (Corps/DSL) Permit Needed for Ditch Maintenance?

Answer all questions from both columns

WATERWAY ISSUES			WETLAND ISSUES
Is there running or standing water in drainage facility other than during or after rainfall events?	Yes ☐ No ☐	☐ Yes ☐ No	Is there wetland vegetation (willows, rushes, cattails) in ditch?
Does the drainage have an open water connection to a lake, pond, creek, river, or wetland?* * If yes, contact *REC* to make appropriate coordination with local ODFW/NMFS fisheries biologist regarding potential impacts to fish.	Yes ☐ No ☐	☐ Yes ☐ No	Is there standing water or wetland vegetation adjacent to ODOT ROW? (Call Region Environmental Coordinator for assistance)
Is the waterway subject to tidal influence?	Yes ☐ No ☐	☐ Yes ☐ No	Would the activity add to or change the existing facility? (Add rip-rap, extend culverts, ditch widening or deepening or new work)
A 'Yes' to any questions in this column	If ALL responses are 'No'		A 'Yes' to any question in this column
PERMIT AND BIOLOGICAL ASSESSMENT MAY BE NEEDED Contact Region Environmental Coordinators	NO WATERWAY PERMITS NEEDED If ODOT Best Management Practices are followed		PERMIT MAY BE NEEDED Contact Region Environmental Coordinators

ODOT Environmental Permit Coordinators: Check regional listings for name and phone number.

<u>BMPs:</u>

1. Perform ditch work when flows are low or non-existent, but soil is moist to prevent dust. Maintenance work may be performed during wet weather in cases of emergency where water is backed up onto the roadway or adjacent property.

2. If flow is present, install check dams at the downstream end of the work zone following ODOT RD1006 Type 2 or 6, prior to beginning ditch work.
3. When practical, protect/maintain existing vegetation.
4. Machine brush ditches when removal of soil is unnecessary and control of vegetation growth is adequate to ensure drainage.
5. Reshape ditches to have flatter side-slopes where space exists and where vegetation can quickly re-establish.
6. Evaluate and modify existing ditch slopes, where feasible and appropriate, to trap sediment and support development of vegetation.
7. Removed material shall be hauled or placed above the Ordinary High Water Line (OHWL) where there is no opportunity for material to reach waters of the State. If placing above the OHWL, either:
    a. Dry material and then haul away to the landfill, or
    b. Stabilize material in place within 14 days. Stabilization may include spreading and top seeding; covering with matting or straw, or other appropriate erosion prevention measures.
8. Re-seed drainage ditches and steep slopes above the Ordinary High Water Line, or install non-vegetative permanent erosion prevention measures.
9. Install and maintain temporary sediment control until vegetation is re-established.
10. After soil is stabilized and sediment has settled out of water, scoop sediment out from behind check dams, and then wait for water to clear, this may take a day.
11. Once water is clear, remove sediment controls.

Emergency Maintenance

These activities are needed to restore and manage the sanitary and storm sewers in the event of emergencies.

<u>BMPs:</u>

1. Identify environmental concerns, notifying any regulatory agencies, coordinating technical needs and staff, and obtaining verbal approval or after-the-fact permits as required by the situation.
2. Avoid and/or minimize additional impacts to wetlands or waterbodies. Coordinate with the relevant agencies on required mitigation.
3. Provide, whenever possible, adequate sediment control or bank stabilization necessary to keep material from entering watercourses.
4. Maintenance and repairs should be carried out in such a manner that additional impacts to wetlands or streams are avoided.
5. Removed material can be dried and then disposed of at the landfill.

ROAD REPAIR & MAINTENANCE

Pavement Repair and Resurfacing

Includes a variety of practices to seal the roadway surface, restore surface life, flexibility, skid resistance and restore roadway markings. These may include major and minor patching of intermittent potholes, small depressions, edge breaks, and any surface irregularities with asphalt concrete material. Preparation work may include grinding of existing surfaces in some areas. Methods include:

- *Slurry seal:*
  The process of slurry sealing involves mixing and placing a liquid emulsified asphalt and sand mixture over existing asphalt to seal and maintain the road surface. This activity also includes crack sealing prior to slurry seal.
- *Chip Seal:*
  Chip sealing generally involves applying a single layer each of liquid asphaltic material and aggregate to a paved roadway. Excess gravel is swept onto the shoulders after sealing.
- *Pavement overlays:*
  The process of pavement overlays involves placement and compaction of hot mix asphalt concrete (a uniform mixture of hot asphalt oil and fine aggregate that hardens by cooling) over existing asphalt surfaces. Preparation work may include grinding of existing surfaces in some areas.

<u>BMPs for all pavement repair and resurfacing activities:</u>

1. Cover all storm drains within the work area and immediately downstream.
2. When possible, use a vacuum sweeper to prepare the site instead of flushing with water.
3. Use water, as needed, to reduce dust during sweeping.
4. After the activity is complete:
   a. Sweep up and remove excess material from the roadway surface
   b. Remove material accumulated in front of inlets
   c. Deposit excess material at approved disposal sites, such as the landfill
   d. Remove inlet protections and properly dispose or store for reuse.

<u>BMPs for saw cutting:</u>

1. When saw cutting, storm drains must be covered with an impermeable barrier, not a filter BMP.
2. Install impermeable booms or barriers at the downstream end of the work to trap saw cut slurry.
3. Use a vacuum either while cutting or immediately following work to suck up saw-cut slurry.

<u>BMPs for pavement repair, resurfacing and overlays:</u>

1. Avoid paving or asphalt applications during wet weather. Cold mix may be applied in wet weather.
2. When working near water bodies, install perimeter controls to reduce runoff to water bodies. Refer to the ODOT Erosion Control Manual for guidance on perimeter control BMP installation.

3. Crack sealing operations that require water for cooling should use hand spray containers or backpack water tanks to avoid runoff.
4. Collect and remove broken asphalt from the site and dispose of properly. Recycle old asphalt products.
5. Load asphalt emulsions at least 150 feet away from an Ordinary High Water Line.
6. Do not use diesel fuel as a releasing agent. Use environmentally sensitive releasing agents such as plant based release agents.
7. If using concrete in a roadway connected to a waterbody, use foam or a quickset material designed for use in water to plug the void prior to using concrete. The plug is needed to prevent concrete from entering the waterbody.
8. Capture and recycle or dispose of release agents and materials as directed by a Safety Data Sheet or as directed by the manufacturer.

Pavement Striping and Marking:

Includes centerline, shoulder line, intersection, and miscellaneous pavement painting activities utilizing paint, beads, etc. The process includes use of a grinder to remove old markings, graffiti, center and shoulder lines, and disposal of waste paint.

BMPs:

1. Use only federally approved, low volatile organic compound (VOC) paint.
2. Use shovels, brooms, buckets and vacuums to collect all grindings and other loose materials and dispose of properly. Note: Some thermoplastic grindings are to be treated as hazardous material and disposed of at an appropriate facility.
3. Clean up spills on site with absorbents, shovels, and buckets, dispose of properly.

Vacuum Sweeping:

Performed on roadways and parking areas to remove dirt, leaves, debris, and other loose material from construction activities, to keep it out of the stormwater system and waterways. Collected materials must be disposed of at an approved waste facility.

BMPs:

1. Use water, as needed, to reduce dust during sweeping.
2. If collected material will be stockpiled temporarily, follow stockpiling BMPs.
3. Deposit excess material at approved sites.

Gravel Road Work

Gravel road maintenance includes restoring gravel roadways slope, drainage, and grade by blading, reshaping, and smoothing existing surface materials using a grader to provide a suitable driving surface.

BMPs:

1. Maintain existing roadside vegetation for natural filtration of contaminants and capture of sediments.
2. If not possible to maintain vegetated buffer, install perimeter controls to keep rock, excess sediment, and foreign debris out of ditches, and streams.
3. When re-gravelling, install temporary check dams in the roadside ditch down gradient of the work. Remove any accumulated sediment from the upstream side of the temporary check dam and dispose of at an approved location. When work is completed, remove the temporary check dam.
4. Contain spills with a dike composed of natural materials until berms or absorbent materials can be set up.

Shoulder Blading and Rebuilding

Activity includes restoring and reshaping shoulder sections or gravel surfaces by hand or mechanical means to ensure adequate width, smoothness, and drainage. New material may be added under this activity. This work is done to correct rutting and buildup of materials; correct drop-offs; restore proper cross section shape; repair erosion; to maintain safety; and to maintain proper drainage to provide a safe surface for vehicle recovery; to provide an adequate clear zone, and to drain water away from the road.

BMPs:

1. Protect and maintain existing vegetation, when practicable.
2. Either install perimeter sediment controls, or maintain a clear buffer space from the edge of the road surface to the ditch to prevent material from entering waterways.
3. Install check dams in roadside ditches when there is no buffer space and it is not possible to install perimeter controls.
4. Evaluate the width of the blading activity and (if the site warrants) modify the width to minimize disturbance of vegetation.
5. Blade in dry weather while moisture is still present in soil and aggregate (to minimize dust) where possible.
6. Permanently stabilize disturbed soils using BMPs (seeding, plants, etc.) as conditions warrant.
7. Care should be taken not to over-steepen ditch slopes/channels or decrease ditch/channel capacity. These actions could result in slope failure and increase likelihood of erosion.

Dust Control (for roads and construction sites)

The application of dust palliatives controls dust generated during routine activities, including road or construction work and road maintenance. Dust palliatives create a hard, compact surface that resists potholing, rutting and loss of aggregate. In addition, control of road surface soils reduces the short-term, localized air quality hazards associated with unpaved roads. Dust palliatives may include water, calcium magnesium acetate, magnesium chloride, or lignin sulfonates, applied in a liquid form.

BMPs:

1. Construct gravel berms at the low shoulders of the roadway during preparation for application of dust palliatives to inhibit liquid palliatives from entering waters of the state, where appropriate.
2. Do not apply dust palliatives during rain.
3. Use water (whenever feasible) as a dust palliative.
4. Apply materials in a manner that is not detrimental to either water or vegetation. Apply materials in accordance with the manufacturers' recommendations.
5. Provide adequate spill containment materials onsite when palliatives are applied.
6. The rate of application should be low enough to prevent runoff of dust suppressant product into roadside ditches.
7. Dispose of excess materials per manufacturers' recommendations.

GENERAL MAINTENANCE

Building, Parking Lot, and Sidewalk Maintenance

The maintenance of buildings, parking lots, and sidewalks can include washing, sweeping, painting, and other activities. Litter control is required in all city operations to reduce the discharge of pollutants and litter to the storm sewer system. Street sweeping can prevent pollutants such as sediment particles, organics, oil, grease, trash, road salt, and trace metals from entering and plugging the stormwater system. Hot or polluted wash water may not be discharged to the stormwater system.

BMPs:

1. Prior to washing parking lots, sidewalks or driveways, use dry cleanup methods first (sweep, blow, vacuum).
2. Protect storm drains with filtering BMPs such as witch's hats or impervious BMPs such as drain covers/mats prior to any maintenance activity. **Wood chip bio-bags are not appropriate protection for washing and painting.**
3. Wastewater from washing is not permitted to flow into the stormwater system. When maintenance operations produce wash water, the wash water must be collected and disposed of in the sanitary sewer system or directed to a location where it can infiltrate into the soil.
4. Use biodegradable soap and cold water.
5. Follow EPA lead paint guidelines if pre-1978 era paint is involved.
6. Immediately clean-up spills of any pollutants, such as oil, diesel, and transmission fluids with absorbent materials.
7. Properly dispose of debris.

Street Sweeping

The City of Talent is divided into two zones with each zone being swept every other week. The Northern Zone is generally Colver Rd. to Rapp Rd. and the Southern Zone is everything south of Rapp Rd.

General Excavation

BMPs:

1. Develop a schedule for erosion prevention, sediment control and stormwater system BMP installation throughout the project.
2. Prior to ground disturbance, install all erosion prevention, sediment control and stormwater system BMPs.
3. If work is stopped for 14 days or more, stabilize soils through installation of temporary erosion prevention measures, such as straw or erosion control matting. See DEQ's Construction BMP manual for applicable measures and installation and inspection measures https://www.oregon.gov/deq/FilterPermitsDocs/BMPManual.pdf.
4. When work is complete, stabilize the site with permanent erosion prevention measures such as seeding, gravel, or bark mulch.

BMPs:

1. All portable toilets should be located on flat, secure locations where they are less likely to be knocked or blown over, and 30 feet from a stormwater inlet. Ensure routine maintenance and cleaning is conducted.

Material and Waste Storage, Transfer, and Disposal

Prevent or reduce the discharge of pollutants to stormwater from material storage leaks or spills by minimizing the storage of hazardous materials, by storing materials in a designated area, by installing secondary containment or control measures, by properly labeling all containers and piles and by conducting regular inspections. These types of activities include:

- Material stockpiles
- Fertilizer, Pesticide, and Paint Storage
- Fuel, oil, pressurized gases, and solvent storage
- Building and Custodial supply storage
- Construction and repair supply storage

BMPs:

1. Sediment or debris removed from storm sewer inlets, detention ponds, or vehicle-washing areas will be taken to the dump.
2. Designate and sign areas for material delivery and storage.
3. Keep an accurate, up-to-date inventory of materials delivered and stored on-site.

4. Label all containers and keep closed when not in use.
5. Try to keep products in their original containers, and/or keep them well labeled, especially if hazard warnings are appropriate. Never store hazardous or flammable materials in glass jars or breakable containers.
6. Keep areas clean, neat and well labeled. Use dry cleanup methods in the storage area. Periodically inspect material storage areas to ensure that all materials are properly stored when not in use. Properly dispose of unused materials.
7. Storage of reactive, ignitable, or flammable liquids must comply with fire codes. Have product identification placards posted and Safety Data Sheets (SDS's) available for products.
8. Avoid storing near drainage paths or waterways.
9. When feasible, keep stored materials covered to prevent precipitation washing onto them. If materials must be stored uncovered, they must be in a sealed container with **tight**-fitting lids and secondary containment.
10. Do not store chemicals, drums, or bagged materials directly on the ground. Place these items on a pallet and preferably in secondary containments, such as prefabricated containments for barrels and drums.
11. Store unfinished metal parts and materials under cover.
12. Large, non-metal and non-rubber materials such as piping can be stored outside without a protective covering.

Material Stockpiles

1. When siting a loose material stockpile: consider overall site drainage, locate piles away from storm drains and waterbodies.
2. Stockpiles shall not be located on public streets.
3. Install protection around any downstream stormwater inlets.
4. Consolidate loose material (gravel, mulch, etc.) and install a physical barrier such as a silt fence or berm around the perimeter of the pile.
5. If the stockpile will not be moved for 14 days or more cover the pile with an erosion prevention measure, see DEQ's Construction BMP manual for applicable measures and installation and inspection measures: https://www.oregon.gov/deq/FilterPermitsDocs/BMPManual.pdf.

Spill Control

1. A supply of spill response materials is to be stored in a well-labeled location in the public works shop. It is to be accessible to all staff.
2. Spill kits are to be kept in every City vehicle.
3. Kits shall be checked on an annual basis to ensure they are stocked.
4. All field employees are to be trained on how to respond to spills and utilize spill kits.

EQUIPMENT AND VEHICLE MAINTENANCE

Regular maintenance activities for equipment and vehicles includes repairs and washing.

Equipment and Vehicle Washing

BMPs:

1. City vehicles will only be washed at the following locations:
   - Wash area where wastewater drains to a pervious surface (turf, planted area, soil, etc.)
   - Commercial car wash
   - Washing on pavement is ONLY allowed where wastewater drains to the sanitary sewer or when washing can only go into the SW system if it has no chemicals, soaps, detergents, steam or heated water, and no engine, transmission or undercarriage washing.
2. Use environmentally sensitive cleaning agents when cleaning equipment and vehicles.
3. Cleaning is limited to removal of snow, ice, mud, and dirt from the surface of the vehicles only.
4. Sediment removed from vehicle washing areas (sediment traps, etc.) may need to be characterized prior to disposal to ensure there is no contamination (petroleum or metals) that requires specialized handling and disposal. Any waste characterization should be documented.

Vehicle Storage

BMPs:

1. When possible, store vehicles and equipment and perform maintenance activities inside a building.
2. Equipment and vehicles at construction sites shall be parked more than 150 away from Ordinary High Water Line at the end of a workday, or in an approved location.
3. Monitor vehicles and equipment closely for leaks and use drip pans as needed until repairs can be performed.
4. When drip pans are used, check frequently to avoid overtopping and properly dispose of fluids.
5. Drain fluids from leaking or wrecked vehicles and from motor parts as soon as possible.
6. Recycle or dispose of all wastes properly and promptly.

Vehicle Maintenance

BMPs:

1. Vehicles requiring a Commercial Driver's license for operation are to be inspected every time they are driven to identify leaks, drips and potential maintenance needs.
2. Perform routine preventive maintenance to ensure heavy equipment and vehicles are operating optimally.
3. Vehicle maintenance and refueling shall occur at least 150 feet away from an Ordinary High Water Line, or in an approved containment area.
4. Recycle or dispose of all wastes properly and promptly.
5. Do not dump any liquids or other materials outside.

LANDSCAPE & VEGETATION MANAGEMENT AND MAINTENANCE

Organic material, soil, and sediment as well as chemicals can act as a pollutant in waterways so BMPs relate to keeping this material and other landscape materials from entering waterbodies.

General Landscaping

BMPs

1. Mulch or vegetate bare areas as soon as possible to minimize erosion.
2. Leave clippings on grassy areas or dispose of by composting.
3. Brush off mowers (reels and decks) and tractors over grassy areas or in contained washout areas. Do not brush or hose off mowers over paved areas that drain to the stormwater system.
4. Remove (sweep or shovel) materials such as soil, mulch and grass clippings from parking lots, streets, curbs, gutters, and sidewalks. Collect and dispose of trash.
5. Repair broken sprinkler heads as soon as possible and only irrigate at a rate that can infiltrate into the soil to limit run-off.

General Vegetation Management

Effective December 2018, the City of Talent has an Integrated Pest Management (IPM) plan that should be followed for vegetation management. For issues not addressed by the IPM, refer to the BMPs below.

Methods for vegetation removal:

- Mechanical: using equipment such as mowers, chain saws, brushers, etc.
- Biological: using a natural predator to control the noxious weed or unwanted vegetation.
- Cultural: incorporating native or more appropriate plant material to out-compete the unwanted vegetation.
- Chemical: applying herbicides in accordance with the label.
- Alternative: steam weeding

BMPs

1. When feasible, use mechanical means to remove unwanted vegetation.
2. Use chemical methods only when mechanical, biological, cultural and alternative methods are not effective or feasible.

Use and Storage of Pesticides and Fertilizers

Fertilizers and pesticides over-applied on impervious surfaces or vegetation, or when a rain event is likely to occur in the following 24 hours, can be transported in stormwater runoff, so it is important to properly store, handle, apply, and clean up all fertilizers, and pesticides. When pesticide application is needed, a licensed pesticide applicator will follow the following protocols:

BMPs:

1. It is recommended that the jurisdiction identify buffer limits for areas around water resources or require only aquatic approved pesticides to be used adjacent to water bodies.

    a. Site-specific minimization/avoidance measures may be developed.
2. Consider establishing spray setbacks from impervious surfaces.
3. Over-spray guards may be used to avoid spraying water bodies or impervious surfaces.
4. Prior to application, check the local weather to ensure there is a low likelihood of windy conditions or a rainfall event occurring in the 12 to 24 hours following application.
    a. Do not apply product in windy conditions, or if rain is predicted within the next 24 hours.
5. Follow label directions when applying, storing, handling, mixing, recycling, and disposing of chemicals and empty containers. Never perform these activities near stormwater inlets.
6. Have spill cleanup materials available in case of a spill.
7. Clean up chemicals promptly using dry methods, if possible.
8. Apply pesticides and fertilizers in accordance with the manufacturer's recommended application rates.
9. Application equipment should be checked on at least a monthly basis during the period of active use to ensure the equipment is applying the material at the prescribed rate.
10. In all cases, application should be limited to the minimum amount of product required to achieve the desired result (i.e., avoid over-application of product).
11. Chemicals should be stored inside when not in use.
12. Recycle or dispose of all spent or excess chemicals properly and promptly.

DEFINITIONS:

OHWL: ordinary high water line (also called "mark") is a line on the bank or shore to which high water ordinarily rises each year. Generally, the line can be determined by examining a bank or shore and visually estimating the point below which upland vegetation does not occur.

Integrated Pest Management Plan (IPM): IPM is a strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and non-target organisms, and the environment. (Edited from University of California Agriculture and Natural Resources IPM Program)

ATTRIBUTIONS:

Environmental Services Division Water Resource Section, 2010, *Evaluation Report For Stormwater Management Plan Minimum Control Measure #6 BMP OM1 Pollution Control Manuals for City Operations*, Springfield, Oregon, City of Springfield

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Oregon Department of Transportation Maintenance and Operations Branch, Revised 2020, *Routine Road Maintenance Water Quality and Habitat Guide Best Management Practices Revised 2020*, (Blue Book) Salem, Oregon, State of Oregon

Marion County Department of Public Works, 2014, *Best Management Practices for Clean Water 2014 Crew Manual*, *Salem*, Oregon, Marion County

Road Services Division/Water Quality Program Department of Community Services Multnomah County, *Multnomah County Road Services Road Maintenance and Operations Manual 2015,* 2015, Portland, Oregon, Multnomah County

Tierra Group International LTD, 2018, *Standard Operating Procedures for Municipal Operations Douglas County*, Castle Rock, Colorado, Douglas County Public Works Engineering

APPENDIX:

FORMS to record data for reporting purposes:

STORMWATER MAINTENANCE REPORT FORM
SUGGESTED FIELDS

DATE REPAIRS/MAINTENANCE ACTIVITY COMPLETED: TIME Start Finish

EMPLOYEES COMPLETING WORK:

ADDRESS/LOCATION OF REPAIR:

PROBLEM DESCRIPTION:

DESCRIPTION OF REPAIR/MAINTENANCE ACTIVITY:

LOCATES CALLED IN? YES NO

DESCRIBE MATERIAL REMOVED: SEDIMENT TRASH OTHER (DESCRIBE)

AMOUNT OF MATERIAL REMOVED: CUBIC FEET

AMOUNT/SIZE/TYPE OF PIPE REPLACED

EQUIPMENT USED

NOTES

Standard Operating Procedures
& Best Management Practices
for Pollution Prevention and Good Housekeeping

City of Phoenix, Oregon

August 27, 2021

Table of Contents

INTRODUCTION:

The City of Phoenix operates under a Municipal Separate Storm Sewer System (MS4) Phase II permit, held by Rogue Valley Sewer Services, that requires development of a pollution prevention or "good housekeeping" program. The program describes how the City is required to operate and maintain facilities to reduce the discharge of pollutants to waters of the state. This document is a required part of the permit and outlines Standard Operating Procedures (SOPs) that the City of Phoenix and its contractors will use to implement Best Management Practices (BMPs) for pollution prevention and good housekeeping to keep pollution out of the stormwater system and our waterways. These BMPs do not address other environmental issues or regulations.

Stormwater runoff in the Rogue Valley flows into the stormwater system and then directly into creeks and rivers untreated. Stormwater management facilities do exist on some properties to capture and treat runoff from that property; however most properties and roads do not have stormwater management facilities. As stormwater flows across impervious surfaces (for example roads, parking lots, driveways and roofs) it picks up and carries anything in its path, such as oil, paint, sediment, trash, chemicals, delivering these substances to the stormwater system and eventually creeks. Pollution Prevention and Good Housekeeping practices are used to keep pollutants off impervious surfaces and prevent their transport to the stormwater system and creeks.

The City of Phoenix commits to providing training and orientation to all new staff to implement these pollution prevention and good housekeeping practices. As the program changes, follow-up training will be provided.

The City of Phoenix will maintain records for the program activities to meet the permit requirements. These records will include a descriptive summary of activities in an Annual Report that is provided to the RVSS Stormwater Manager.

CONVEYANCE SYSTEM MANAGEMENT AND MAINTENANCE

Cleaning Pipes, Catch Basins, and Inlets

The Phase II permit requires at least 50 percent of the jurisdiction's owned or operated catch basins and inlets within the MS4 be inspected at least once every five years. After inspecting, any maintenance or cleaning is to take place to ensure all catch basins and inlets continue to function as designed. The City of Phoenix is responsible for the maintenance of the stormwater conveyance system within city limits and for ensuring that inspection and maintenance requirements are met.

Operators are to perform conveyance system maintenance in a manner that prevents contamination of stormwater systems with pollutants and isolates stormwater system pollutants from downstream waterways. Maintenance is done to ensure adequate flow through facilities, prevent flooding and to repair damaged conveyances. Stormwater conveyance systems are maintained on a regular schedule.

Best Management Practices (BMPs):

1. Phoenix will inspect 30 percent of the SW system every year. Catch basins, pipes and inlets that are determined to need cleaning and/or maintenance will be cleaned and maintained within one month.
2. Schedule stormwater system maintenance during the summer when flow is low or non-existent.
3. A shovel, backhoe, vacuum truck, or similar equipment may be used to clean out accumulated debris and sediment from catch basins.
4. No water, sediment or debris shall be allowed to flow downstream, particularly at outfalls.
5. Material removed from catch basins is disposed of at the landfill.
6. Report the location of catch basins that show signs of illicit dumping (i.e. used motor oil, paint, etc.) to the RVSS SW Manager.
7. If repairs are necessary during wet weather, use pre-cast structures if possible.
8. Isolate activities near water bodies to avoid contact between fresh concrete and water.

Culvert Cleaning and Repair

Replacement and repair of drainage structures restores function and can prevent failure of the drainage structure. This activity may include the use of temporary water management. Repairs and replacements may require excavating, diverting or impounding water, and backfilling. NOTE: Culvert replacement or extension will frequently require permits outside the scope of this guide.

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3. Removed material shall be hauled or placed above the Ordinary High Water Line (OHWL) where there is no opportunity for material to reach waters of the State. If placing above the OHWL, either:
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Answer all questions from both columns

WATERWAY ISSUES			WETLAND ISSUES
Is there running or standing water in drainage facility other than during or after rainfall events?	Yes ☐ No ☐	☐ Yes ☐ No	Is there wetland vegetation (willows, rushes, cattails) in ditch?
Does the drainage have an open water connection to a lake, pond, creek, river, or wetland?* * If yes, contact *REC* to make appropriate coordination with local ODFW/NMFS fisheries biologist regarding potential impacts to fish.	Yes ☐ No ☐	☐ Yes ☐ No	Is there standing water or wetland vegetation adjacent to ODOT ROW? (Call Region Environmental Coordinator for assistance)
Is the waterway subject to tidal influence?	Yes ☐ No ☐	☐ Yes ☐ No	Would the activity add to or change the existing facility? (Add rip-rap, extend culverts, ditch widening or deepening or new work)
A 'Yes' to any questions in this column	If ALL responses are 'No'		A 'Yes' to any question in this column
PERMIT AND BIOLOGICAL ASSESSMENT MAY BE NEEDED Contact Region Environmental Coordinators	NO WATERWAY PERMITS NEEDED If ODOT Best Management Practices are followed		PERMIT MAY BE NEEDED Contact Region Environmental Coordinators

ODOT Environmental Permit Coordinators: Check regional listings for name and phone number.

<u>BMPs:</u>

1. Perform ditch work when flows are low or non-existent, but soil is moist to prevent dust. Maintenance work may be performed during wet weather in cases of emergency where water is backed up onto the roadway or adjacent property.

2. If flow is present, install check dams at the downstream end of the work zone following ODOT RD1006 Type 2 or 6, prior to beginning ditch work.
3. When practical, protect/maintain existing vegetation.
4. Machine brush ditches when removal of soil is unnecessary and control of vegetation growth is adequate to ensure drainage.
5. Reshape ditches to have flatter side-slopes where space exists and where vegetation can quickly re-establish.
6. Evaluate and modify existing ditch slopes, where feasible and appropriate, to trap sediment and support development of vegetation.
7. Removed material shall be hauled or placed above the Ordinary High Water Line (OHWL) where there is no opportunity for material to reach waters of the State. If placing above the OHWL, either:
    a. Dry material and then haul away to the landfill, or
    b. Stabilize material in place within 14 days. Stabilization may include spreading and top seeding; covering with matting or straw; or other appropriate erosion prevention measures.
8. Re-seed drainage ditches and steep slopes above the Ordinary High Water Line, or install non-vegetative permanent erosion prevention measures.
9. Install and maintain temporary sediment control until vegetation is re-established.
10. After soil is stabilized and sediment has settled out of water, scoop sediment out from behind check dams, and then wait for water to clear, this may take a day.
11. Once water is clear, remove sediment controls.

Emergency Maintenance

These activities are needed to restore and manage the sanitary and storm sewers in the event of emergencies.

BMPs:

1. Identify environmental concerns, notifying any regulatory agencies, coordinating technical needs and staff, and obtaining verbal approval or after-the-fact permits as required by the situation.
2. Avoid and/or minimize additional impacts to wetlands or waterbodies. Coordinate with the relevant agencies on required mitigation.
3. Provide, whenever possible, adequate sediment control or bank stabilization necessary to keep material from entering watercourses.
4. Maintenance and repairs should be carried out in such a manner that additional impacts to wetlands or streams are avoided.
5. Removed material can be dried and then disposed of at the landfill.

ROAD REPAIR & MAINTENANCE

Pavement Repair and Resurfacing

Includes a variety of practices to seal the roadway surface, restore surface life, flexibility, skid resistance and restore roadway markings. These may include major and minor patching of intermittent potholes, small depressions, edge breaks, and any surface irregularities with asphalt concrete material. Preparation work may include grinding of existing surfaces in some areas. Methods include:

- *Slurry seal:*
  The process of slurry sealing involves mixing and placing a liquid emulsified asphalt and sand mixture over existing asphalt to seal and maintain the road surface. This activity also includes crack sealing prior to slurry seal.
- *Chip Seal:*
  Chip sealing generally involves applying a single layer each of liquid asphaltic material and aggregate to a paved roadway. Excess gravel is swept onto the shoulders after sealing.
- *Pavement overlays:*
  The process of pavement overlays involves placement and compaction of hot mix asphalt concrete (a uniform mixture of hot asphalt oil and fine aggregate that hardens by cooling) over existing asphalt surfaces. Preparation work may include grinding of existing surfaces in some areas.

BMPs for all pavement repair and resurfacing activities:

1. Cover all storm drains within the work area and immediately downstream.
2. When possible, use a vacuum sweeper to prepare the site instead of flushing with water.
3. Use water, as needed, to reduce dust during sweeping.
4. After the activity is complete:
   a. Sweep up and remove excess material from the roadway surface
   b. Remove material accumulated in front of inlets
   c. Deposit excess material at approved disposal sites, such as the landfill
   d. Remove inlet protections and properly dispose or store for reuse.

BMPs for saw cutting:

1. When saw cutting, storm drains must be covered with an impermeable barrier, not a filter BMP.
2. Install impermeable booms or barriers at the downstream end of the work to trap saw cut slurry.
3. Use a vacuum either while cutting or immediately following work to suck up saw-cut slurry.

BMPs for pavement repair, resurfacing and overlays:

1. Avoid paving or asphalt applications during wet weather. Cold mix may be applied in wet weather.
2. When working near water bodies, install perimeter controls to reduce runoff to water bodies. Refer to the ODOT Erosion Control Manual for guidance on perimeter control BMP installation.

3. Crack sealing operations that require water for cooling should use hand spray containers or backpack water tanks to avoid runoff.
4. Collect and remove broken asphalt from the site and dispose of properly. Recycle old asphalt products.
5. Load asphalt emulsions at least 150 feet away from an Ordinary High Water Line.
6. Do not use diesel fuel as a releasing agent. Use environmentally sensitive releasing agents such as plant based release agents.
7. If using concrete in a roadway connected to a waterbody, use foam or a quickset material designed for use in water to plug the void prior to using concrete. The plug is needed to prevent concrete from entering the waterbody.
8. Capture and recycle or dispose of release agents and materials as directed by a Safety Data Sheet or as directed by the manufacturer.

Pavement Striping and Marking:

Includes centerline, shoulder line, intersection, and miscellaneous pavement painting activities utilizing paint, beads, etc. The process includes use of a grinder to remove old markings, graffiti, center and shoulder lines, and disposal of waste paint.

BMPs:

1. Use only federally approved, low volatile organic compound (VOC) paint.
2. Use shovels, brooms, buckets and vacuums to collect all grindings and other loose materials and dispose of properly. Note: Some thermoplastic grindings are to be treated as hazardous material and disposed of at an appropriate facility.
3. Clean up spills on site with absorbents, shovels, and buckets, dispose of properly.

Vacuum Sweeping:

Performed on roadways and parking areas to remove dirt, leaves, debris, and other loose material from construction activities, to keep it out of the stormwater system and waterways. Collected materials must be disposed of at an approved waste facility.

BMPs:

1. Use water, as needed, to reduce dust during sweeping.
2. If collected material will be stockpiled temporarily, follow stockpiling BMPs.
3. Deposit excess material at approved sites.

Gravel Road Work

Gravel road maintenance includes restoring gravel roadways slope, drainage, and grade by blading, reshaping, and smoothing existing surface materials using a grader to provide a suitable driving surface.

BMPs:

1. Maintain existing roadside vegetation for natural filtration of contaminants and capture of sediments.
2. If not possible to maintain vegetated buffer, install perimeter controls to keep rock, excess sediment, and foreign debris out of ditches, and streams.
3. When re-gravelling, install temporary check dams in the roadside ditch down gradient of the work. Remove any accumulated sediment from the upstream side of the temporary check dam and dispose of at an approved location. When work is completed, remove the temporary check dam.
4. Contain spills with a dike composed of natural materials until berms or absorbent materials can be set up.

Shoulder Blading and Rebuilding

Activity includes restoring and reshaping shoulder sections or gravel surfaces by hand or mechanical means to ensure adequate width, smoothness, and drainage. New material may be added under this activity. This work is done to correct rutting and buildup of materials; correct drop-offs; restore proper cross section shape; repair erosion; to maintain safety; and to maintain proper drainage to provide a safe surface for vehicle recovery; to provide an adequate clear zone, and to drain water away from the road.

BMPs:

1. Protect and maintain existing vegetation, when practicable.
2. Either install perimeter sediment controls, or maintain a clear buffer space from the edge of the road surface to the ditch to prevent material from entering waterways.
3. Install check dams in roadside ditches when there is no buffer space and it is not possible to install perimeter controls.
4. Evaluate the width of the blading activity and (if the site warrants) modify the width to minimize disturbance of vegetation.
5. Blade in dry weather while moisture is still present in soil and aggregate (to minimize dust) where possible.
6. Permanently stabilize disturbed soils using BMPs (seeding, plants, etc.) as conditions warrant.
7. Care should be taken not to over-steepen ditch slopes/channels or decrease ditch/channel capacity. These actions could result in slope failure and increase likelihood of erosion.

Dust Control (for roads and construction sites)

The application of dust palliatives controls dust generated during routine activities, including road or construction work and road maintenance. Dust palliatives create a hard, compact surface that resists potholing, rutting and loss of aggregate. In addition, control of road surface soils reduces the short-term, localized air quality hazards associated with unpaved roads. Dust palliatives may include water, calcium magnesium acetate, magnesium chloride, or lignin sulfonates, applied in a liquid form.

BMPs:

1. Construct gravel berms at the low shoulders of the roadway during preparation for application of dust palliatives to inhibit liquid palliatives from entering waters of the state, where appropriate.
2. Do not apply dust palliatives during rain.
3. Use water (whenever feasible) as a dust palliative.
4. Apply materials in a manner that is not detrimental to either water or vegetation. Apply materials in accordance with the manufacturers' recommendations.
5. Provide adequate spill containment materials onsite when palliatives are applied.
6. The rate of application should be low enough to prevent runoff of dust suppressant product into roadside ditches.
7. Dispose of excess materials per manufacturers' recommendations.

GENERAL MAINTENANCE

Building, Parking Lot, and Sidewalk Maintenance

The maintenance of buildings, parking lots, and sidewalks can include washing, sweeping, painting, and other activities. Litter control is required in all city operations to reduce the discharge of pollutants and litter to the storm sewer system. Street sweeping can prevent pollutants such as sediment particles, organics, oil, grease, trash, road salt, and trace metals from entering and plugging the stormwater system. Hot or polluted wash water may not be discharged to the stormwater system.

BMPs:

1. Prior to washing parking lots, sidewalks or driveways, use dry cleanup methods first (sweep, blow, vacuum).
2. Protect storm drains with filtering BMPs such as witch's hats or impervious BMPs such as drain covers/mats prior to any maintenance activity. **Wood chip bio-bags are not appropriate protection for washing and painting.**
3. Wastewater from washing is not permitted to flow into the stormwater system. When maintenance operations produce wash water, the wash water must be collected and disposed of in the sanitary sewer system or directed to a location where it can infiltrate into the soil.
4. Use biodegradable soap and cold water.
5. Follow EPA lead paint guidelines if pre-1978 era paint is involved.
6. Immediately clean-up spills of any pollutants, such as oil, diesel, and transmission fluids with absorbent materials.
7. Properly dispose of debris.

Street Sweeping

The City of Phoenix is divided into three zones, East Side, West Side, and Old Town with each zone swept once every three weeks. See attached map. The City sweeps one zone every week usually on Fridays, it takes about seven hours to complete sweeping for one zone.

General Excavation

BMPs:

1. Develop a schedule for erosion prevention, sediment control and stormwater system BMP installation throughout the project.
2. Prior to ground disturbance, install all erosion prevention, sediment control and stormwater system BMPs.
3. If work is stopped for 14 days or more, stabilize soils through installation of temporary erosion prevention measures, such as straw or erosion control matting. See DEQ's Construction BMP manual for applicable measures and installation and inspection measures https://www.oregon.gov/deq/FilterPermitsDocs/BMPManual.pdf.
4. When work is complete, stabilize the site with permanent erosion prevention measures such as seeding, gravel, or bark mulch.

BMPs:

1. All portable toilets should be located on flat, secure locations where they are less likely to be knocked or blown over, and 30 feet from a stormwater inlet. Ensure routine maintenance and cleaning is conducted.

Material and Waste Storage, Transfer, and Disposal

Prevent or reduce the discharge of pollutants to stormwater from material storage leaks or spills by minimizing the storage of hazardous materials, by storing materials in a designated area, by installing secondary containment or control measures, by properly labeling all containers and piles and by conducting regular inspections. These types of activities include:

- Material stockpiles
- Fertilizer, Pesticide, and Paint Storage
- Fuel, oil, pressurized gases, and solvent storage
- Building and Custodial supply storage
- Construction and repair supply storage

BMPs:

1. Sediment or debris removed from storm sewer inlets, detention ponds, or vehicle-washing areas will be taken to the dump.
2. Designate and sign areas for material delivery and storage.
3. Keep an accurate, up-to-date inventory of materials delivered and stored on-site.
4. Label all containers and keep closed when not in use.
5. Try to keep products in their original containers, and/or keep them well labeled, especially if hazard warnings are appropriate. Never store hazardous or flammable materials in glass jars or breakable containers.
6. Keep areas clean, neat and well labeled. Use dry cleanup methods in the storage area. Periodically inspect material storage areas to ensure that all materials are properly stored when not in use. Properly dispose of unused materials.
7. Storage of reactive, ignitable, or flammable liquids must comply with fire codes. Have product identification placards posted and Safety Data Sheets (SDS's) available for products.
8. Avoid storing near drainage paths or waterways.
9. When feasible, keep stored materials covered to prevent precipitation washing onto them. If materials must be stored uncovered, they must be in a sealed container with **tight**-fitting lids and secondary containment.
10. Do not store chemicals, drums, or bagged materials directly on the ground. Place these items on a pallet and preferably in secondary containments, such as prefabricated containments for barrels and drums.
11. Store unfinished metal parts and materials under cover.
12. Large, non-metal and non-rubber materials such as piping can be stored outside without a protective covering.

Material Stockpiles

1. When siting a loose material stockpile: consider overall site drainage, locate piles away from storm drains and waterbodies.
2. Stockpiles shall not be located on public streets.
3. Install protection around any downstream stormwater inlets.
4. Consolidate loose material (gravel, mulch, etc.) and install a physical barrier such as a silt fence or berm around the perimeter of the pile.
5. If the stockpile will not be moved for 14 days or more cover the pile with an erosion prevention measure, see DEQ's Construction BMP manual for applicable measures and installation and inspection measures: https://www.oregon.gov/deq/FilterPermitsDocs/BMPManual.pdf.

Spill Control

1. A supply of spill response materials is to be stored in a well-labeled location in the public works shop. It is to be accessible to all staff.
2. Spill kits are to be kept in every City vehicle.
3. Kits shall be checked on an annual basis to ensure they are stocked.
4. All field employees are to be trained on how to respond to spills and utilize spill kits.

EQUIPMENT AND VEHICLE MAINTENANCE

Regular maintenance activities for equipment and vehicles includes repairs and washing.

Equipment and Vehicle Washing

BMPs:

1. City vehicles will only be washed at the following locations:
   - Wash area where wastewater drains to a pervious surface (turf, planted area, soil, etc.)
   - Commercial car wash
   - Washing on pavement is ONLY allowed where wastewater drains to the sanitary sewer
2. Use environmentally sensitive cleaning agents when cleaning equipment and vehicles.
3. Cleaning is limited to removal of snow, ice, mud, and dirt from the surface of the vehicles only.
4. Sediment removed from vehicle washing areas (sediment traps, etc.) may need to be characterized prior to disposal to ensure there is no contamination (petroleum or metals) that requires specialized handling and disposal. Any waste characterization should be documented.

Vehicle Storage

BMPs:

1. When possible, store vehicles and equipment and perform maintenance activities inside a building.
2. Equipment and vehicles at construction sites shall be parked more than 150 away from Ordinary High Water Line at the end of a workday, or in an approved location.
3. Monitor vehicles and equipment closely for leaks and use drip pans as needed until repairs can be performed.
4. When drip pans are used, check frequently to avoid overtopping and properly dispose of fluids.
5. Drain fluids from leaking or wrecked vehicles and from motor parts as soon as possible.
6. Recycle or dispose of all wastes properly and promptly.

Vehicle Maintenance

BMPs:

1. Vehicles requiring a Commercial Drivers license for operation are to be inspected every time they are driven to identify leaks, drips and potential maintenance needs.
2. Perform routine preventive maintenance to ensure heavy equipment and vehicles are operating optimally.
3. Vehicle maintenance and refueling shall occur at least 150 feet away from an Ordinary High Water Line, or in an approved containment area.
4. Recycle or dispose of all wastes properly and promptly.
5. Do not dump any liquids or other materials outside.

LANDSCAPE & VEGETATION MANAGEMENT AND MAINTENANCE

Organic material, soil, and sediment as well as chemicals can act as a pollutant in waterways so BMPs relate to keeping this material and other landscape materials from entering waterbodies.

General Landscaping

BMPs

1. Mulch or vegetate bare areas as soon as possible to minimize erosion.
2. Leave clippings on grassy areas or dispose of by composting.
3. Brush off mowers (reels and decks) and tractors over grassy areas or in contained washout areas. Do not brush or hose off mowers over paved areas that drain to the stormwater system.
4. Remove (sweep or shovel) materials such as soil, mulch and grass clippings from parking lots, streets, curbs, gutters, and sidewalks. Collect and dispose of trash.
5. Repair broken sprinkler heads as soon as possible and only irrigate at a rate that can infiltrate into the soil to limit run-off.

General Vegetation Management

Methods for vegetation removal:

- Mechanical: using equipment such as mowers, chain saws, brushers, etc.
- Biological: using a natural predator to control the noxious weed or unwanted vegetation.
- Cultural: incorporating native or more appropriate plant material to out-compete the unwanted vegetation.
- Chemical: applying herbicides in accordance with the label.
- Alternative: steam weeding

BMPs

1. When feasible, use mechanical and other non-chemical means to remove unwanted vegetation.
2. Use chemical methods only when mechanical, biological, cultural and alternative methods are not effective or feasible.

Use and Storage of Pesticides and Fertilizers

Fertilizers and pesticides over-applied on impervious surfaces or vegetation, or when a rain event is likely to occur in the following 24 hours, can be transported in stormwater runoff, so it is important to properly store, handle, apply, and clean up all fertilizers, and pesticides. When pesticide application is needed, a licensed pesticide applicator will follow the following protocols:

BMPs:

1. It is recommended that the jurisdiction identify buffer limits for areas around water resources, or required only aquatic approved pesticides to be used adjacent to water bodies.
    a. Site-specific minimization/avoidance measures may be developed.
2. Consider establishing spray setbacks from impervious surfaces.
3. Over-spray guards may be used to avoid spraying water bodies or impervious surfaces.
4. Prior to application, check the local weather to ensure there is a low likelihood of windy conditions or a rainfall event occurring in the 12 to 24 hours following application.
    a. Do not apply product in windy conditions, or if rain is predicted within the next 24 hours.
5. Follow label directions when applying, storing, handling, mixing, recycling, and disposing of chemicals and empty containers. Never perform these activities near stormwater inlets.
6. Have spill cleanup materials available in case of a spill.
7. Clean up chemicals promptly using dry methods, if possible.
8. Apply pesticides and fertilizers in accordance with the manufacturer's recommended application rates.
9. Application equipment should be checked on at least a monthly basis during the period of active use to ensure the equipment is applying the material at the prescribed rate.
10. In all cases, application should be limited to the minimum amount of product required to achieve the required results (i.e., avoid over-application of product).
11. Chemicals should be stored inside when not in use.
12. Recycle or dispose of all spent or excess chemicals properly and promptly.

DEFINITIONS:

OHWL: ordinary high water line (also called "mark") is a line on the bank or shore to which high water ordinarily rises each year. Generally, the line can be determined by examining a bank or shore and visually estimating the point below which upland vegetation does not occur.

ATTRIBUTIONS:

Environmental Services Division Water Resource Section, 2010, *Evaluation Report For Stormwater Management Plan Minimum Control Measure #6 BMP OM1 Pollution Control Manuals for City Operations*, Springfield, Oregon, City of Springfield

Environmental Services Division Water Resource Section, 2017, *City of Springfield Pollution Control Manual For Routine Maintenance Activities Pollution Control Best Management Practices (PC BMPs) and Control Measures (CMs),* Springfield, Oregon, City of Springfield

Oregon Department of Transportation Maintenance and Operations Branch, Revised 2020, *Routine Road Maintenance Water Quality and Habitat Guide Best Management Practices Revised 2020*, (Blue Book) Salem, Oregon, State of Oregon

Marion County Department of Public Works, 2014, *Best Management Practices for Clean Water 2014 Crew Manual*, *Salem*, Oregon, Marion County

Road Services Division/Water Quality Program Department of Community Services Multnomah County, *Multnomah County Road Services Road Maintenance and Operations Manual 2015,* 2015, Portland, Oregon, Multnomah County

Tierra Group International LTD, 2018, *Standard Operating Procedures for Municipal Operations Douglas County*, Castle Rock, Colorado, Douglas County Public Works Engineering

APPENDIX:

FORMS to record data for reporting purposes:

STORMWATER MAINTENANCE REPORT FORM
SUGGESTED FIELDS

DATE REPAIRS/MAINTENANCE ACTIVITY COMPLETED: TIME Start Finish

EMPLOYEES COMPLETING WORK:

ADDRESS/LOCATION OF REPAIR:

PROBLEM DESCRIPTION:

DESCRIPTION OF REPAIR/MAINTENANCE ACTIVITY:

LOCATES CALLED IN? YES NO

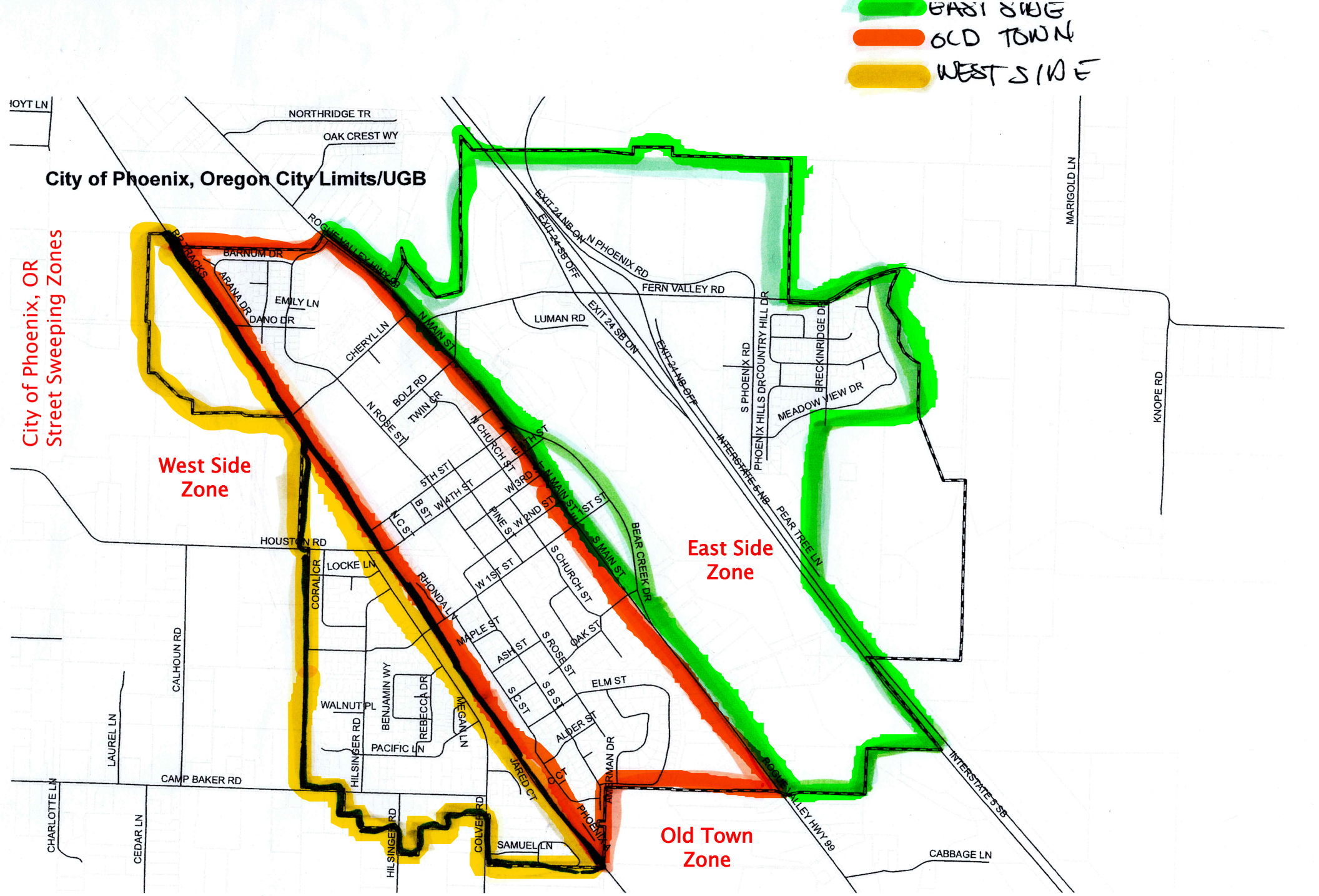
DESCRIBE MATERIAL REMOVED: SEDIMENT TRASH OTHER (DESCRIBE)

AMOUNT OF MATERIAL REMOVED: CUBIC FEET

AMOUNT/SIZE/TYPE OF PIPE REPLACED

EQUIPMENT USED

NOTES


EAST SIDE
OLD TOWN
WEST SIDE
City of Phoenix, Oregon City Limits/UGB
City of Phoenix, OR
Street Sweeping Zones
West Side Zone
East Side Zone
Old Town Zone
NORTHRIDGE TR
OAK CREST WY
MARIGOLD LN
ROGUE VALLEY HWY 99
EXIT 24 NB ON
EXIT 24 SB OFF
N PHOENIX RD
EXIT 24 SB ON
EXIT 24 NB OFF
FERN VALLEY RD
LUMAN RD
INTERSTATE 5 NB
PEAR TREE LN
S PHOENIX RD
COUNTRY HILLS DR
BRECKINRIDGE DR
MEADOW VIEW DR
KNOPE RD
BARNUM DR
ARANA DR
EMILY LN
DANO DR
CHERYL LN
N MAIN ST
BOLZ RD
TWIN CR
N ROSE ST
N CHURCH ST
5TH ST
W 4TH ST
W 3RD ST
W 2ND ST
PINE ST
B ST
C ST
S MAIN ST
BEAR CREEK DR
HOUSTON RD
LOCKE LN
CORAL CR
RHONDA LN
W 1ST ST
S CHURCH ST
MAPLE ST
ASH ST
S ROSE ST
OAK ST
ELM ST
S B ST
S C ST
ALDER ST
AMERMAN DR
WALNUT PL
BENJAMIN WY
REBECCA DR
MEGAN LN
PACIFIC LN
HILSINGER RD
CALHOUN RD
LAUREL LN
CAMP BAKER RD
JARED CT
COLVER RD
SAMUEL LN
CHARLOTTE LN
CEDAR LN
CABBAGE LN
INTERSTATE 5 SB

Standard Operating Procedures and Best Management Practices for Pollution Prevention and Good Housekeeping

ROGUE VALLEY
SEWER SERVICES
CLEAN WATER - HEALTHY COMMUNITIES

Finalized July 2021

Table of Contents

INTRODUCTION:

Rogue Valley Sewer Services (RVSS) operates under a Municipal Separate Storm Sewer System (MS4) Phase II permit which requires development of a pollution prevention or "good housekeeping" program. This document describes the Standard Operating Procedures (SOPs) that RVSS and its contractors will use to implement Best Management Practices (BMPs) for pollution prevention and good housekeeping to keep pollution out of the stormwater system and our waterways. These BMPs do not address other environmental issues or regulations.

Stormwater runoff in the Rogue Valley flows into the stormwater system and then directly into creeks and rivers untreated. Stormwater management facilities do exist on some properties to capture and treat runoff from that property, however most properties and roads do not have stormwater management facilities. As stormwater flows across impervious surfaces (for example roads, parking lots, driveways and roofs) it picks up and carries anything in its path, such as oil, paint, sediment, trash, chemicals, delivering these substances to the stormwater system and eventually creeks. Pollution Prevention and Good Housekeeping practices are used to keep pollutants off impervious surfaces and prevent their transport to the stormwater system and creeks.

CONVEYANCE SYSTEM MANAGEMENT AND MAINTENANCE

Cleaning Pipes, Catch Basins, and Inlets

The Phase II permit requires at least 50 percent of the jurisdiction's owned or operated catch basins and inlets within the MS4 be inspected at least once every five years. After inspecting, any maintenance or cleaning is to take place to ensure all catch basins and inlets continue to function as designed. RVSS is responsible for maintenance of the stormwater conveyance system in White City Industrial, within which all catch basins are inspected annually.

Perform conveyance system maintenance in a manner that prevents contamination of stormwater systems with pollutants and isolates stormwater system pollutants from downstream waterways. Maintenance is done to provide for adequate flow through facilities, prevent flooding and to repair damaged conveyances. As with sanitary sewer systems, stormwater conveyance systems should be maintained on a regular schedule.

BMPs:

1. RVSS' Operation and Maintenance department maintains a list of hotspots within the White city Industrial stormwater system. These hotspots, as well as all culverts in White City Industrial, will be inspected annually.
    a. If the sump is 50% full or more, flushing will be scheduled.
2. White City Industrial is divided into five stormwater basins. One basin will be flushed and TV'd each year, so that in five years, all basins will be flushed and TV'd.
3. Documentation: Completion of flushing and TV work are to be documented in the respective Digital Applications so that footages and numbers can be used for annual reporting.
4. All RVSS maintained manufactured stormwater management facilities are inspected by RVSS' inspectors annually in June, per SOP 14.10. If cleaning is needed to prevent back-up during leaf-fall, put in a request for cleaning. If cleaning will only be needed after leaf-fall, schedule in a request for cleaning post-leaf fall.
5. Schedule stormwater system maintenance during the summer when flow is low or non-existent.
6. A shovel, backhoe, vacuum truck, or similar equipment may be used to clean out accumulated debris and sediment from catch basins.
7. No water, sediment or debris shall be allowed to flow downstream, particularly at outfalls.
    a. When conveyance systems are flushed, a vacuum truck is used to collect debris and sediment (and any water used in the jetting process).
8. When working near outfalls, if the vacuum will not be sufficient to keep material from moving downstream, block the end of the outfall.
9. Material removed from catch basins is taken to the RVSS lagoon for drying and then disposed of at the landfill.
10. Report the location of catch basins that show signs of illicit dumping (i.e. used motor oil, paint, etc.) to the SW Manager.
11. If repairs are necessary during wet weather, use pre-cast structures if possible.
12. Isolate activities near water bodies to avoid contact between fresh concrete and water.

Culvert Cleaning and Repair

Replacement and repair of drainage structures to restore function or to prevent failure of drainage structure. This activity may include the use of temporary water management. Repairs and replacements may require excavating, diverting or impounding water, and backfilling. NOTE: Culvert replacement or extension will frequently require permits outside the scope of this guide.

BMPs:

1. Perform work when water flow in the ditch is low, except in cases of emergency where water is backed up onto the roadway or adjacent property. Divert flow to minimize turbidity, when and where possible.
2. Prior to ground disturbance, install erosion control and sediment prevention measures to prevent the downstream movement of sediment dislodged during culvert work.
3. Removed material shall either be hauled to the RVSS lagoons for drying and disposal at the landfill, or placed above the Ordinary High Water Line (OHWL) where there is no opportunity for material to reach waters of the State. If placing above the OHWL, either:
    a. Dry material and then haul away to the landfill, or
    b. Stabilize material in place within 14 days. Stabilization may include spreading and top seeding; covering with matting or straw; or other appropriate erosion prevention measures.

Ditch Shaping, Grading, Cleaning

Machine cleaning, grading, and reshaping of ditches to maintain or improve drainage. Vegetation located in the ditch may be removed during cleaning. Ditch maintenance may require permitting through the Army Corps of Engineers or Department of State Lands, Figure 7.1 below is used by ODOT to determine when permitting may be needed.

NOTE: In this document, the term “ditch” or “drainage ditch”, for the purpose of municipal operations, is a facility, typically parallel to a road or parking lot, which exclusively carries stormwater runoff draining from the road or other constructed facilities. In our region, there are also structures called “ditches” that are excavated channels (lined and unlined) that are used to transport irrigation water (though stormwater can also enter and be conveyed by these facilities). Also in our region, there are mapped streams that flow in channelized streambeds, sometimes adjacent and parallel to roads, which can look just like a ditch. These streams (either with or without fish) may look like ditches because the channel has been modified or impacted by development. Ditches used to convey stormwater, irrigation, and channelized streams are all regulated differently so it is important to identify them correctly. It can be difficult to distinguish a ditch, which exclusively carries stormwater or irrigation runoff from a channelized creek, so refer to the Stormwater Manager if unclear.

7.1. When Is A Waterway (Corps/DSL) Permit Needed for Ditch Maintenance?

Answer all questions from both columns

WATERWAY ISSUES			WETLAND ISSUES
Is there running or standing water in drainage facility other than during or after rainfall events?	Yes ☐ No ☐	☐ Yes ☐ No	Is there wetland vegetation (willows, rushes, cattails) in ditch?
Does the drainage have an open water connection to a lake, pond, creek, river, or wetland?* * If yes, contact *REC* to make appropriate coordination with local ODFW/NMFS fisheries biologist regarding potential impacts to fish.	Yes ☐ No ☐	☐ Yes ☐ No	Is there standing water or wetland vegetation adjacent to ODOT ROW? (Call Region Environmental Coordinator for assistance)
Is the waterway subject to tidal influence?	Yes ☐ No ☐	☐ Yes ☐ No	Would the activity add to or change the existing facility? (Add rip-rap, extend culverts, ditch widening or deepening or new work)
A 'Yes' to any questions in this column	If ALL responses are 'No'		A 'Yes' to any question in this column
PERMIT AND BIOLOGICAL ASSESSMENT MAY BE NEEDED Contact Region Environmental Coordinators	NO WATERWAY PERMITS NEEDED If ODOT Best Management Practices are followed		PERMIT MAY BE NEEDED Contact Region Environmental Coordinators

ODOT Environmental Permit Coordinators: Check regional listings for name and phone number.

BMPs:

1. Perform ditch work when flows are low or non-existent, but soil is moist to prevent dust. Maintenance work may be performed during wet weather in cases of emergency where water is backed up onto the roadway or adjacent property.
2. If flow is present, install check dams at the downstream end of the work zone following ODOT RD1006 Type 2 or 6, prior to beginning ditch work.
3. When practical, protect/maintain existing vegetation.
4. Machine brush ditches when removal of soil is unnecessary and control of vegetation growth is adequate to ensure drainage.
5. Reshape ditches to have flatter side-slopes where space exists and where vegetation can quickly re-establish.
6. Evaluate and modify existing ditch slopes, where feasible and appropriate, to trap sediment and support development of vegetation.
7. Removed material shall either be hauled to the RVSS lagoons for drying and disposal at the landfill, or placed above the Ordinary High Water Line (OHWL) where there is no opportunity for material to reach waters of the State. If placing above the OHWL, either:
    a. Dry material and then haul away to the landfill, or
    b. Stabilize material in place within 14 days. Stabilization may include spreading and top seeding; covering with matting or straw; or other appropriate erosion prevention measures.
8. Re-seed drainage ditches and steep slopes above the Ordinary High Water Line, or install non-vegetative permanent erosion prevention measures.
9. Install and maintain temporary sediment control until vegetation is re-established.
10. After soil is stabilized and sediment has settled out of water, scoop sediment out from behind check dams, then remove sediment controls.

Emergency Maintenance

To restore and manage the sanitary and storm sewers in the event of emergencies.

BMPs:

1. Identify environmental concerns, notifying any regulatory agencies, coordinating technical needs and staff, and obtaining verbal approval or after-the-fact permits as required by the situation.
2. Avoid and/or minimize additional impacts to wetlands or waterbodies. Coordinate with the relevant agencies on required mitigation.
3. Provide, whenever possible, adequate sediment control or bank stabilization necessary to keep material from entering watercourses.
4. Maintenance and repairs should be carried out in such a manner that additional impacts to wetlands or streams are avoided.
5. Removed material is taken to the RVSS lagoon for drying and then disposed of at the landfill.

ROAD REPAIR

Pavement Repair and Resurfacing

Includes a variety of practices to seal the roadway surface, restore surface life, flexibility, skid resistance and restore roadway markings. These may include major and minor patching of intermittent potholes, small depressions, edge breaks, and any surface irregularities with asphalt concrete material. Preparation work may include grinding of existing surfaces in some areas. Methods include:

- *Slurry seal:*
  The process of slurry sealing involves mixing and placing a liquid emulsified asphalt and sand mixture over existing asphalt to seal and maintain the road surface. This activity also includes crack sealing prior to slurry seal.
- *Chip Seal:*
  Chip sealing generally involves applying a single layer each of liquid asphaltic material and aggregate to a paved roadway. Excess gravel is swept onto the shoulders after sealing.
- *Pavement overlays:*
  The process of pavement overlays involves placement and compaction of hot mix asphalt concrete (a uniform mixture of hot asphalt oil and fine aggregate that hardens by cooling) over existing asphalt surfaces. Preparation work may include grinding of existing surfaces in some areas.

<u>Best Management Practices (BMPs) for all pavement repair and resurfacing activities:</u>

1. Cover all storm drains within the work area and immediately downstream.
2. When possible, use a vacuum sweeper to prepare the site instead of flushing with water.
3. Use water, as needed, to reduce dust during sweeping.
4. After the activity is complete:
   a. Sweep up and remove excess material from the roadway surface
   b. Remove material accumulated in front of inlets
   c. Deposit excess material at approved disposal sites, such as the RVSS lagoons or landfill
   d. Remove inlet protections and properly dispose or store for reuse.

<u>BMPs for Saw cutting:</u>

1. When saw cutting, storm drains must be covered with an impermeable barrier, not a filter BMP.
2. Install impermeable booms or barriers at the downstream end of the work to trap saw cut slurry.
3. Use a vacuum either while cutting or immediately following work to suck up saw-cut slurry.

<u>BMPs for pavement repair, resurfacing and overlays:</u>

1. Avoid paving or asphalt applications during wet weather. Cold mix may be applied in wet weather.
2. When working near water bodies, install perimeter controls to reduce runoff to water bodies. Refer to the ODOT Erosion Control Manual for guidance on perimeter control BMP installation.

3. Crack sealing operations that require water for cooling should not use the flusher, use hand spray containers, or backpack water tanks to avoid runoff.
4. Collect and remove broken asphalt from the site and dispose of properly. Recycle old asphalt products.
5. Load asphalt emulsions at least 150 feet away from an Ordinary High Water Line.
6. Do not use diesel fuel as a releasing agent. Use environmentally sensitive releasing agents such as plant based release agents.
7. If using concrete in a roadway connected to a waterbody, use foam or a quickset material designed for use in water to plug the void prior to using concrete. The plug is needed to prevent concrete from entering the waterbody.
8. Capture and recycle or dispose of release agents and materials as directed by a Safety Data Sheet or as directed by the manufacturer.

Pavement Striping and Marking:

Includes centerline, shoulder line, intersection, and miscellaneous pavement painting activities utilizing paint, beads, etc. The process includes use of a grinder to remove old markings, graffiti, center and shoulder lines, and disposal of waste paint.

BMPs:

1. Use only federally approved, low volatile organic compound (VOC) paint.
2. Use shovels, brooms, buckets and vacuums to collect all grindings and other loose materials and dispose of properly. Note: Some thermoplastic grindings are to be treated as hazardous material and disposed of at an appropriate facility.
3. Clean up spills on site with absorbents, shovels, and buckets, dispose of properly.

Vacuum Sweeping:

Performed on roadways and parking areas to remove dirt, leaves, debris, and other loose material from construction activities, to keep it out of the stormwater system and waterways. Collected materials must be disposed of at an approved waste facility.

BMPs:

1. Use water, as needed, to reduce dust during sweeping.
2. If collected material will be stockpiled temporarily, follow stockpiling BMPs.
3. Deposit excess material at approved sites.

Gravel Road Work

Gravel road maintenance includes restoring gravel roadways slope, drainage, and grade by blading, reshaping, and smoothing existing surface materials using a grader to provide a suitable driving surface.

BMPs:

1. Maintain existing roadside vegetation for natural filtration of contaminants and capture of sediments.
2. If not possible to maintain vegetated buffer, install perimeter controls to keep rock, excess sediment, and foreign debris out of ditches, and streams.
3. When re-gravelling, install temporary check dams in the roadside ditch down gradient of the work. Remove any accumulated sediment from the upstream side of the temporary check dam and dispose of at an approved location. When work is completed, remove the temporary check dam.
4. Contain spills with a dike composed of natural materials until berms or absorbent materials can be set up.

Shoulder Blading and Rebuilding

Activity includes restoring and reshaping shoulder sections or gravel surfaces by hand or mechanical means to ensure adequate width, smoothness, and drainage. New material may be added under this activity. This work is done to correct rutting and buildup of materials; correct drop-offs; restore proper cross section shape; repair erosion; to maintain safety; and to maintain proper drainage to provide a safe surface for vehicle recovery; to provide an adequate clear zone, and to drain water away from the road.

BMPs:

1. Protect and maintain existing vegetation, when practicable.
2. Either install perimeter sediment controls, or maintain a clear buffer space from the edge of the road surface to the ditch to prevent material from entering waterways.
3. Install check dams in roadside ditches when there is no buffer space and it is not possible to install perimeter controls.
4. Evaluate the width of the blading activity and (if the site warrants) modify the width to minimize disturbance of vegetation.
5. Blade in dry weather while moisture is still present in soil and aggregate (to minimize dust) where possible.
6. Permanently stabilize disturbed soils using BMPs (seeding, plants, etc.) as conditions warrant.
7. Care should be taken not to over-steepen ditch slopes/channels or decrease ditch/channel capacity. These actions could result in slope failure and increase likelihood of erosion.

Dust Control (for roads and construction sites)

The application of dust palliatives to control dust generated during routine activities, including road or construction work and road maintenance. Dust palliatives create a hard, compact surface that resists potholing, rutting and loss of aggregate. In addition, control of road surface soils reduces the short-term, localized air quality hazards associated with unpaved roads. Dust palliatives may include water, calcium magnesium acetate, magnesium chloride, or lignin sulfonates, applied in a liquid form.

BMPs:

1. Construct gravel berms at the low shoulders of the roadway during preparation for application of dust palliatives to inhibit liquid palliatives from entering waters of the state, where appropriate.
2. Do not apply dust palliatives during rain.
3. Use water (whenever feasible) as a dust palliative.
4. Apply materials in a manner that is not detrimental to either water or vegetation. Apply materials in accordance with the manufacturers' recommendations.
5. Provide adequate spill containment materials onsite when palliatives are applied.
6. The rate of application should be low enough to prevent runoff of dust suppressant product into roadside ditches.
7. Dispose of excess materials per manufacturers' recommendations.

GENERAL MAINTENANCE

Building, Parking Lot, and Sidewalk Maintenance

The maintenance of buildings, parking lots, and sidewalks can include washing, sweeping, painting, and other activities. Street sweeping can prevent pollutants such as sediment particles, organics, oil, grease, trash, road salt, and trace metals from entering and plugging the stormwater system. Hot or polluted wash water may not be discharged to the stormwater system.

BMPs:

1. Prior to washing parking lots, sidewalks or driveways, use dry cleanup methods first (sweep, blow, vacuum).
2. Protect storm drains with filtering BMPs such as witch's hats or impervious BMPs such as drain covers/mats prior to any maintenance activity. **Wood chip bio-bags are not appropriate protection for washing and painting.**
3. Wastewater from washing is not permitted to flow into the stormwater system. When maintenance operations produce wash water, the wash water must be collected and disposed of in the sanitary sewer system or directed to a location where it can infiltrate into the soil.
4. Use biodegradable soap and cold water.
5. Follow EPA lead paint guidelines if pre-1978 era paint is involved.
6. Immediately clean-up spills of any pollutants, such as oil, diesel, and transmission fluids with absorbent materials.

7. Properly dispose of debris.

General Excavation

BMPs:

1. Develop a schedule for erosion prevention, sediment control and stormwater system BMP installation throughout the project.
2. Prior to ground disturbance, install all erosion prevention, sediment control and stormwater system BMPs.
3. If work is stopped for 14 days or more, stabilize soils through installation of temporary erosion prevention measures, such as straw or erosion control matting. See DEQ's Construction BMP manual for applicable measures and installation and inspection measures https://www.oregon.gov/deq/FilterPermitsDocs/BMPManual.pdf.
4. When work is complete, stabilize the site with permanent erosion prevention measures such as seeding, gravel, or bark mulch.

BMPs:

1. All portable toilets should be located on flat, secure locations where they are less likely to be knocked or blown over, and 30 feet from a stormwater inlet. Ensure routine maintenance and cleaning is conducted.

Material and Waste Storage, Transfer, and Disposal

Prevent or reduce the discharge of pollutants to stormwater from material storage leaks or spills by minimizing the storage of hazardous materials, by storing materials in a designated area, by installing secondary containment or control measures, by properly labeling all containers and piles and by conducting regular inspections. Activity covers:

- Material stockpiles
- Fertilizer, Pesticide, and Paint Storage
- Fuel, oil, pressurized gases, and solvent storage
- Building and Custodial supply storage
- Construction and repair supply storage

BMPs:

1. Sediment or debris removed from storm sewer inlets, detention ponds, or vehicle washing areas will be taken to the lagoons until dry and then transferred to the dump.
2. Designate and sign areas for material delivery and storage.
3. Keep an accurate, up-to-date inventory of materials delivered and stored on-site.
4. Label all containers and keep closed when not in use.

5. Try to keep products in their original containers, and/or keep them well labeled, especially if hazard warnings are appropriate. Never store hazardous or flammable materials in glass jars or breakable containers.
6. Keep areas clean, neat and well labeled. Use dry cleanup methods in the storage area. Periodically inspect material storage areas to ensure that all materials are properly stored when not in use. Properly dispose of unused materials.
7. Storage of reactive, ignitable, or flammable liquids must comply with fire codes. Have product identification placards posted and Safety Data Sheets (SDS's) available for products.
8. Avoid storing near drainage paths or waterways.
9. When feasible, keep stored materials covered to prevent precipitation washing onto them. If materials must be stored uncovered, they must be in a sealed container with **tight**-fitting lids and secondary containment.
10. Do not store chemicals, drums, or bagged materials directly on the ground. Place these items on a pallet and preferably in secondary containments, such as prefabricated containments for barrels and drums.
11. Store unfinished metal parts and materials under cover.
12. Large, non-metal and non-rubber materials such as piping can be stored outside without a protective covering.

Material Stockpiles

1. When siting a loose material stockpile: consider overall site drainage, locate piles away from storm drains and waterbodies.
2. Stockpiles shall not be located on public streets.
3. Install protection around any downstream stormwater inlets.
4. Consolidate loose material (gravel, mulch, etc.) and install a physical barrier such as a silt fence or berm around the perimeter of the pile.
5. If the stockpile will not be moved for 14 days or more, cover the pile with an erosion prevention measure, see DEQ's Construction BMP manual for applicable measures and installation and inspection measures: https://www.oregon.gov/deq/FilterPermitsDocs/BMPManual.pdf.

Spill Control

1. A supply of spill response materials is to be stored in a well-labeled location in the O and M shop.
2. Spill kits are to be kept in every RVSS vehicle.
3. Kits shall be checked on an annual basis to ensure they are stocked.
4. All field employees are to be trained on how to utilize spill kits.
5. Response to spills will follow RVSS SOP 14.12.

EQUIPMENT AND VEHICLE MAINTENANCE

Regular maintenance activities for equipment and vehicles including repairs and washing.

Equipment and Vehicle Washing

BMPs:

1. RVSS vehicles will only be washed at the following locations:
    - Wash bay in back of the O and M building where wastewater drains to the sanitary sewer
    - Wash area where wastewater drains to a pervious surface (turf, planted area, soil, etc.)
    - Commercial car wash
2. Use environmentally sensitive cleaning agents when cleaning equipment and vehicles.
3. Cleaning is limited to removal of snow, ice, mud, and dirt from the surface of the vehicles only.
4. Sediment removed from vehicle washing areas (sediment traps, etc.) may need to be characterized prior to disposal to ensure there is no contamination (petroleum or metals) that requires specialized handling and disposal. Any waste characterization should be documented.

Vehicle Storage

BMPs:

1. When possible, store vehicles and equipment and perform maintenance activities inside a building.
2. Equipment and vehicles at construction sites shall be parked more than 150 away from Ordinary High Water Line at the end of a workday, or in an approved location.
3. Monitor vehicles and equipment closely for leaks and use drip pans as needed until repairs can be performed.
4. When drip pans are used, check frequently to avoid overtopping and properly dispose of fluids.
5. Drain fluids from leaking or wrecked vehicles and from motor parts as soon as possible.
6. Recycle or dispose of all wastes properly and promptly.

Vehicle Maintenance

BMPs:

1. Vehicles requiring a Commercial Driver's license for operation are to be inspected every time they are driven to identify leaks, drips and potential maintenance needs.
2. Perform routine preventive maintenance to ensure heavy equipment and vehicles are operating optimally.
3. Vehicle maintenance and refueling shall occur at least 150 feet away from an Ordinary High Water Line, or in an approved containment area.
4. Recycle or dispose of all wastes properly and promptly.
5. Do not dump any liquids or other materials outside.

LANDSCAPE & VEGETATION MANAGEMENT AND MAINTENANCE

Organic material, soil, and sediment as well as chemicals can act as a pollutant in waterways so BMPs relate to keeping this material and other landscape materials from entering waterbodies.

General Landscaping

BMPs

1. Mulch or vegetate bare areas as soon as possible to minimize erosion.
2. Leave clippings on grassy areas or dispose of by composting.
3. Brush off mowers (reels and decks) and tractors over grassy areas or in contained washout areas. Do not brush or hose off mowers over paved areas that drain to the stormwater system.
4. Remove (sweep or shovel) materials such as soil, mulch and grass clippings from parking lots, streets, curbs, gutters, and sidewalks. Collect and dispose of trash.
5. Repair broken sprinkler heads as soon as possible and only irrigate at a rate that can infiltrate into the soil to limit run-off.

General Vegetation Management

If the jurisdiction has an Integrated Pest Management (IPM) or other plan, refer to that, otherwise use the BMPs outlined here.

Methods for vegetation removal:

- Mechanical: using equipment such as mowers, chain saws, brushers, etc.
- Biological: using a natural predator to control the noxious weed or unwanted vegetation.
- Cultural: incorporating native or more appropriate plant material to out-compete the unwanted vegetation.
- Chemical: applying herbicides in accordance with the label.
- Alternative: steam weeding

BMPs

1. RVSS typically uses mechanical means to remove unwanted vegetation.
2. Use chemical methods only when mechanical, biological, cultural and alternative methods are not effective or feasible.

Use and Storage of Pesticides and Fertilizers

Fertilizers and pesticides over-applied on impervious surfaces or vegetation, or when a rain event is likely to occur in the following 24 hours, can be transported in stormwater runoff, so it is important to properly store, handle, apply, and clean up all fertilizers, and pesticides. When pesticide application is needed, RVSS will contract a licensed pesticide applicator who will follow the following protocols:

BMPs:

1. It is recommended that the jurisdiction identify buffer limits for areas around water resources, or required only aquatic approved pesticides to be used adjacent to water bodies.
    a. Site-specific minimization/avoidance measures may be developed.
2. Consider establishing spray setbacks from impervious surfaces.
3. Over-spray guards may be used to avoid spraying water bodies or impervious surfaces.
4. Prior to application, check the local weather to ensure there is a low likelihood of windy conditions or a rainfall event occurring in the 12 to 24 hours following application.
    a. Do not apply product in windy conditions, or if rain is predicted within the next 24 hours.
5. Follow label directions when applying, storing, handling, mixing, recycling, and disposing of chemicals and empty containers. Never perform these activities near stormwater inlets.
6. Have spill cleanup materials available in case of a spill.
7. Clean up chemicals promptly using dry methods, if possible.
8. Apply pesticides and fertilizers in accordance with the manufacturer's recommended application rates.
9. Application equipment should be checked on at least a monthly basis during the period of active use to ensure the equipment is applying the material at the prescribed rate.
10. In all cases, application should be limited to the minimum amount of product required to achieve the required results (i.e., avoid over-application of product).
11. Chemicals should be stored inside when not in use.
12. Recycle or dispose of all spent or excess chemicals properly and promptly.

DEFINITIONS:

Ordinary High Water Line (**OHWL)**: A line on the bank or shore to which high water ordinarily rises each year. Generally, the line can be determined by examining a bank or shore and visually estimating the point below which upland vegetation does not occur.

Integrated Pest Management Plan (IPM): IPM is a strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and non-target organisms, and the environment. (edited from *University of California Agriculture and Natural Resources IPM Program*)

ATTRIBUTIONS:

Environmental Services Division Water Resource Section, 2010, *Evaluation Report For Stormwater Management Plan Minimum Control Measure #6 BMP OM1 Pollution Control Manuals for City Operations*, Springfield, Oregon, City of Springfield

Environmental Services Division Water Resource Section, 2017, *City of Springfield Pollution Control Manual For Routine Maintenance Activities Pollution Control Best Management Practices (PC BMPs) and Control Measures (CMs),* Springfield, Oregon, City of Springfield

Oregon Department of Transportation Maintenance and Operations Branch, Revised 2020, *Routine Road Maintenance Water Quality and Habitat Guide Best Management Practices Revised 2020*, (Blue Book) Salem, Oregon, State of Oregon

Marion County Department of Public Works, 2014, *Best Management Practices for Clean Water 2014 Crew Manual*, *Salem*, Oregon, Marion County

Road Services Division/Water Quality Program Department of Community Services Multnomah County, *Multnomah County Road Services Road Maintenance and Operations Manual 2015,* 2015, Portland, Oregon, Multnomah County

Tierra Group International LTD, 2018, *Standard Operating Procedures for Municipal Operations Douglas County*, Castle Rock, Colorado, Douglas County Public Works Engineering

APPENDIX:

FORMS to record data for reporting purposes:

STORMWATER MAINTENANCE REPORT FORM
SUGGESTED FIELDS

DATE REPAIRS/MAINTENANCE ACTIVITY COMPLETED: TIME Start Finish

EMPLOYEES COMPLETING WORK:

ADDRESS/LOCATION OF REPAIR:

PROBLEM DESCRIPTION:

DESCRIPTION OF REPAIR/MAINTENANCE ACTIVITY:

LOCATES CALLED IN? YES NO

DESCRIBE MATERIAL REMOVED: SEDIMENT TRASH OTHER (DESCRIBE)

AMOUNT OF MATERIAL REMOVED: CUBIC FEET

AMOUNT/SIZE/TYPE OF PIPE REPLACED

EQUIPMENT USED

NOTES

Appendix G: Section 4.0 Monitoring

Question 145. RVSS Outfall Monitoring Data

TABLE 2 Raw Water Quality Data

Precision classifications are calculated automatically ODEQ Data Quality Matrix Version 5.0.

Calculated cells

Conditionally required field

	StartDate	BACTERIA_RESULT	BACTERIA_DUP
COUNT =	96	97.0	81.0
MAXvalue=	08/19/21	2419.6	2419.6
MIN value=	06/27/13	0.0	0.0

Precision Criteria	
A ≤	0.6
B ≤	0.8
C >	0.8
E - NA	

SITE DESCRIPTION (Location)	LATITUDE (decimal degrees)	LONGITUDE (decimal degrees)	*LAT/LONG SOURCE*	LASAR_ID	StationID	StartDate	StartTime	SampleDepth	SampleMedium	SampleColMthd	*SampleColEquip*	BACTERIA_RESULT	BACTERIA_DUP	BACTERIA_PREC	BACTERIA_ACC	BACTERIA_DQL	BACTERIA_METHOD	BACTERIA_COMMENTS	SITE COMMENTS	SAMPLE COLLECTOR(S)
Wagner Creek	42.22688	-122.79315	WGS84		WA20	07/09/20	9:27	OF	water	grab	bottle	38.4	52.9	A	A					Frances Oyung
Wagner Creek	42.231433	-122.79276	WGS84		WA19	07/09/20	9:59	OF	water	grab	bottle	>2419.6	1553.1	A	A					Frances Oyung
Wagner Creek	42.241727	-122.78289	WGS84		WA12	07/09/20	10:35	OF	water	grab	bottle	99.0	80.9	A	A					Frances Oyung
Wagner Creek	42.243427	-122.78273	WGS84		WA10	07/09/20	11:05	OF	water	grab	bottle	1.0	1.0	A	A					Frances Oyung
Wagner Creek	42.243745	-122.78162	WGS84		WA08	07/09/20	11:25	OF	water	grab	bottle	18.5	23.5	A	A					Frances Oyung
Bear Creek	42.382138	-122.8996	WGS84		BE03	07/16/20	8:20	OF	water	grab	bottle	59.8	63.1	A	A					Frances Oyung
Bear Creek	42.376481	-122.897	WGS84		BE06	07/16/20	9:06	OF	water	grab	bottle	142.1	165.8	A	A					Frances Oyung
Bear Creek	42.288659	-122.8251	WGS84		BE12	07/16/20	10:00	OF	water	grab	bottle	123.4	108.6	A	A					Frances Oyung
Bear Creek	42.279658	-122.8194	WGS84		BE14	07/16/20	10:43	OF	water	grab	bottle	<1	<1	A	A					Frances Oyung
Bear Creek	42.272463	-122.8128	WGS84		BE16	07/16/20	10:59	OF	water	grab	bottle	12.1	8.6	A	A					Frances Oyung
Bear Creek	42.248583	-122.7843	WGS84		BE23	07/16/20	11:16	OF	water	grab	bottle	328.2	275.5	A	A					Frances Oyung
Bear Creek	42.238092	-122.7707	WGS84		BE35	07/23/20	11:10	OF	water	grab	bottle	19.7	13.4	A	A					Frances Oyung
Bear Creek	42.245484	-122.7766	WGS84		BE27	07/23/20	11:30	OF	water	grab	bottle	3.1	6.3	A	A					Frances Oyung
Bear Creek	42.213189	-122.7088	WGS84		BE50	07/23/20	10:00	OF	water	grab	bottle	328.2	344.1	A	A					Frances Oyung
Bear Creek	42.212559	-122.7079	WGS84		BE51	07/23/20	10:30	OF	water	grab	bottle	344.1	436.0	A	A					Frances Oyung