

CITY OF ELLENSBURG



Stormwater Management Plan 2024/2025

Written by
Jon Morrow and Erin McGowan

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A. Introduction

On January 17, 2007, the City of Ellensburg was issued an Eastern Washington Phase II Municipal Stormwater Permit. In compliance with the provisions of the State of Washington Water Pollution Control Law, Chapter, 90.48 Revised Code of Washington, and The Federal Water Pollution Control Act (The Clean Water Act), the City formed the Stormwater Utility in 2009.

The City of Ellensburg adopted ordinances, created utility fees, and hired the necessary staff to develop and implement programs aimed at complying with the permit. Those programs and projects are captured each year in the annual report to Ecology and Stormwater Management Plan (SWMP).

In addition to the NPDES Permit requirements, the City wrote its own Stormwater Operation and Maintenance (O&M) Plan in 2010 and updated it in 2017. The plan was recently updated in 2022. The City trained all field staff from all departments on Best Management Practices and pollution prevention from 2010 to current. A copy of the 2022 O&M Plan is provided in the O&M section of this management plan.

The City of Ellensburg maintains approximately 2,503 catch basins and 346 manholes in the public right of way. The public storm system is comprised of 49.16 miles of underground pipe. The system discharges to approximately 90 outfalls in local streams. In addition, most of the newer parts of town infiltrate stormwater in bio-retention facilities (swales). The City's public storm system also receives runoff from private property, but not in all locations.

The SWMP outlines specific programs and projects aimed at improving water quality throughout the City. Public outreach/education, illicit discharge elimination, construction/post-construction runoff controls, public participation, operation maintenance, and LID stormwater retrofit projects are covered in detail with this plan.

B. S5 – Stormwater Management Program Components

1. Public Education and Outreach

The City's Public Education and Outreach Program is designed to increase awareness of stormwater pollution, encourage behaviors that minimize pollutants in runoff, and engage the community through educational events, hands-on activities, and volunteer opportunities. These activities help protect local creeks and enhance environmental stewardship. The following events, initiatives, and programs support this effort.

a. **Ellensburg Water Quality Grant Program: Ongoing**

In 2015, the City Council approved a grant program whereby stormwater utility funds are used to improve the health of local streams and the environment. Applicants who can demonstrate water quality health improvements within the city limits are encouraged to apply annually. Grant applications are scored and ranked by the Environmental Commission and those applicants that meet the funding guidelines are awarded. The utility awards up to \$10,000 annually out of the stormwater budget.

In 2024 the Mid-Columbia Fisheries Enhancement Group (MCFEG) was awarded grant funding from the City's Stormwater Utility to continue the operation of the Adopt-A-Stream program, backyard stream protection program, and a water in the classroom education program. Volunteer groups from the community planted trees and removed trash from local streams. The Ellensburg Stormwater Utility is happy to help fund this necessary program.



Mid Columbia's 2024 year-end report utilizing Ellensburg's grant funds is the link below.

[COE Final Report_1_7_2025.docx](#)

b. Earth Day Activities: 2024/2025

2024 Earth Day Activities were held on April 20th at Irene Rinehart Park from 9 am to 12 pm. The Stormwater Utility partnered with the Parks Department and Central Washington University's Student Leadership, Involvement and Community Engagement (SLICE) volunteers, to plant native plants and trees along the park trail. The volunteers also picked up trash and pet waste that had accumulated over winter. SLICE integrates education into the volunteer experience, enabling staff to educate volunteers about native plants in the riparian zone and highlight the impact of trash and pet waste on stormwater and the broader environment. **This event was well received by both staff and volunteers, leading the Stormwater Utility to partner with the Parks Department and SLICE again in 2025. The Earth Day volunteer event is scheduled for April 12th at Irene Rinehart Park from 9 am to 12 pm. This year, the project is expanding to include restorative planting in two areas of the park that were affected by fires in 2024.**



c. **Arbor Day Tree Giveaway: New 2024/2025**

Since 1982, the City of Ellensburg has offered an annual Street Tree Giveaway each April, traditionally funding tree planting in the City right-of-way through the Street Department. In 2024, using the City's new Urban Tree Canopy Assessment and Sustainability & Energy Plan, the Stormwater Utility expanded the program to include residential properties. Last year, the program provided 10 street trees and 13 residential trees, which help manage stormwater by reducing runoff, improving rainfall interception, and mitigating flooding. These trees also improve air quality and contribute to overall environmental health. **With a \$10,000 budget from the Stormwater Utility, the expanded program will continue in 2025, aiming to increase community participation in its second year.**

2024 ARBOR DAY

STREET TREE GIVEAWAY

City of Ellensburg

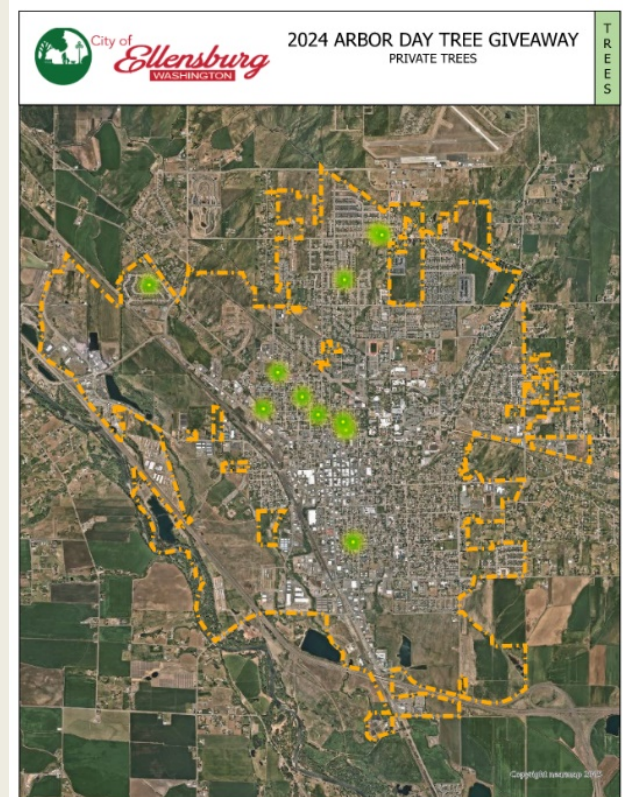
- Pick up an application from City Hall, starting **April 8th.**
- Please return your application by **April 24th.**
- Last day to pick up your tree is **May 2nd.**



One Arbor Day Tree is available per applicant; corner lots may be eligible for two trees, depending on demand. City Staff will approve the tree species and planting location of trees within the right-of-way. If there is not space available in the right-of-way to plant a tree, a limited number of trees are available for planting on private property.

Please contact the Public Works & Utility office at (509) 962-7230 for more information.





d. Interlocal Agreement Franklin County Conservation District (Drain Rangers) Ongoing

In 2024 the City renewed the Interlocal Agreement with Franklin County Conservation District and the Drain Rangers program. The Drain Rangers program focuses on educating students about stormwater runoff and its environmental impacts. Through hands-on lessons and interactive models like the EnviroScape, the curriculum teaches students about water pollution, engineering solutions, and watershed management. It equips them with problem-solving and communication skills to address stormwater issues, preparing them to make informed decisions that protect water quality. The program targets elementary students, with lessons aligned with Common Core and Next Generation Science Standards.

Below is the progress report from Drain Rangers for 2024.

| City of Ellensburg Jr. Drain Rangers, Drain Rangers & Wheat Week Report July – December 2024 | | | |
|--|------------|------------|--------------|
| Jr. Drain Rangers | # Students | # Teachers | # of Lessons |
| Ellensburg | 99 | 6 | 6 |
| Ellensburg Christian School | 39 | 3 | 3 |
| Ida Nason Aronica Elementary | 60 | 3 | 3 |
| Kittitas | 104 | 6 | 6 |
| Kittitas Elementary | 104 | 6 | 6 |
| Thorp | 75 | 7 | 4 |
| Thorp School | 75 | 7 | 4 |
| Grand Total | 278 | 19 | 16 |
| Drain Rangers | # Students | # Teachers | # of Lessons |
| Ellensburg | 193 | 13 | 10 |
| Ellensburg Christian School | 22 | 1 | 1 |
| Lincoln Elementary | 58 | 3 | 3 |
| Valley View Elementary | 113 | 9 | 6 |
| Thorp | 46 | 3 | 2 |
| Thorp School | 46 | 3 | 2 |
| Grand Total | 239 | 16 | 12 |
| Wheat Week | # Students | # Teachers | # Weeks |
| Ellensburg | 16 | 1 | 1 |
| Ellensburg Christian School | 16 | 1 | 1 |
| Thorp | 22 | 1 | 1 |
| Thorp School | 22 | 1 | 1 |
| Grand Total | 38 | 2 | 2 |
| Drain Rangers Virtual Teacher Workshops: | | | |
| October 21 – 3 Teachers | | | |
| December 11 – 7 Teachers | | | |
| Total students taught between July and December 2024: 555 | | | |
| Total teachers taught between July and December 2024: 37 | | | |

e. **Touch-A-Truck & Drain Rangers: 2024/2025 Ongoing**

Each year, the City hosts the popular Touch-A-Truck event, which has seen significant growth over the past decade. In 2024, the event took place on Tuesday, June 18th, right after school let out for the year. Drain Rangers partnered with staff at the Stormwater booth to teach kids the importance of putting "only rainwater down the drain." They also distributed free car wash coupons and educated parents on how washing cars in proper locations helps prevent wash water from entering the storm system. The City's Stormwater Utility featured the interactive EnviroScope to demonstrate how water pollution and runoff occur, and their impact on the stormwater system and surrounding watershed. Additionally, the utility showcased the new street sweeper and a vector truck, giving kids a chance to learn how these vehicles help protect water quality. The Stormwater Utility will once again partner with Drain Rangers for a booth at the event in 2025.



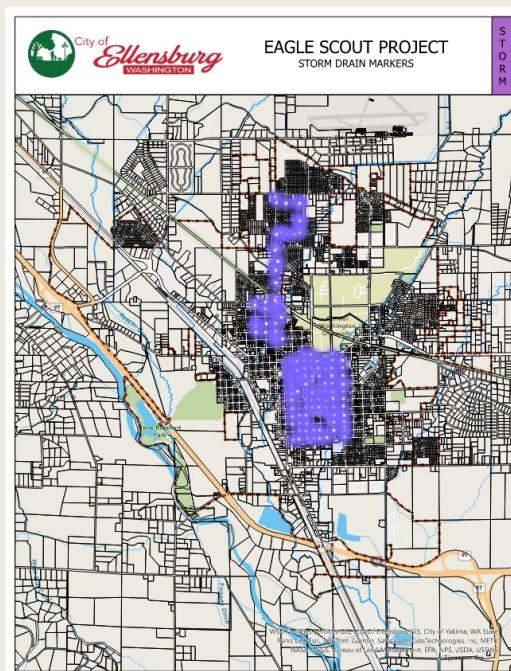
f. KEEN E3 Fair: 2024

The Stormwater Utility had a booth at the 2024 KEEN E3 Fair on Saturday, January 27th, focusing on the Gateway 1 and Gateway 2 stormwater retrofit projects. While the Stormwater Utility was eager to participate again in 2025, the event organizers have unfortunately decided to retire the fair after 13 years.



g. Storm Drain Markers: 2024 New

An Eagle Scout candidate approached the Stormwater Utility with a proposal to organize a Storm Drain Marker project. With the help of several troop members, they marked 247 previously unmarked drains and created a GIS map documenting all the catch basins their project marked. At the project's conclusion, they presented their work to the City Council. Stormwater staff provided safety training, instructions, and all necessary materials to support the effort.



h. Pet Relief Stations and Pet Waste Fliers: 2024/2025 New

In 2024, the Ellensburg Downtown Association (EDA) developed a new flyer to promote its downtown pet relief station. These stations play a vital role in protecting water quality by reducing pet waste pollution in stormwater runoff. The Stormwater Utility provides funding for the pet waste bags available at each location. By encouraging proper waste disposal, the pet relief stations help prevent contamination, keeping public spaces and water sources clean. **The Stormwater Utility has also been working with a consultant to update our pet waste outreach materials. The new content will be designed for flyers and social media and will be available in both English and Spanish. We plan to begin using the updated materials and launching social media campaigns in 2025.**



2. Public Involvement and Participation

The City encourages public participation in its stormwater program by providing opportunities to give input on utility program development, the NPDES permit, volunteer initiatives, and other related topics. Residents can use the City's stormwater webpage to report issues, share concerns, and stay informed about upcoming events. For inquiries, feedback, or volunteer opportunities, the Stormwater Utility Manager can be reached at 509-925-8619.

a. Utility Advisory Committee (UAC)

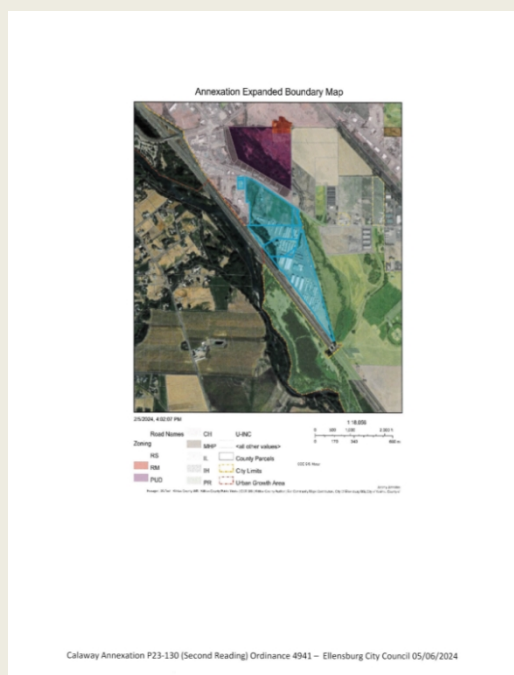
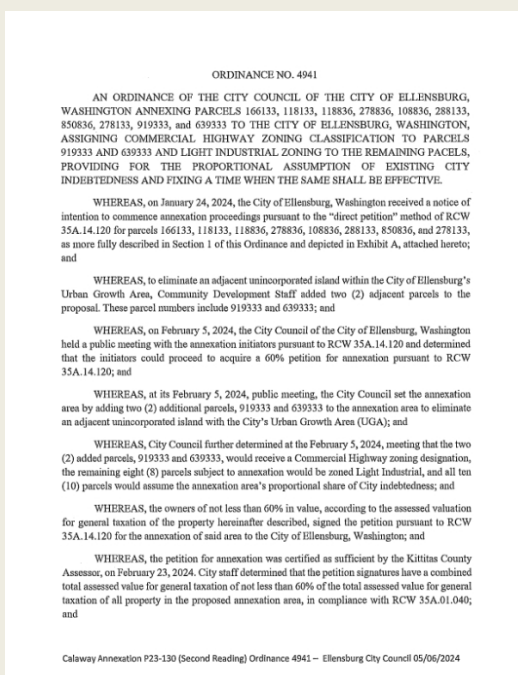
The City of Ellensburg Utility Advisory Committee (UAC) meets on the 3rd Thursday of the month from 3:30-5pm at City Hall and these meetings are open to the public. All committee meetings have stormwater agenda items and will remain to do so in the future. This plan goes before the UAC for public approval and is recommended by the UAC for City Council approval. Most items like SWMP, O&M, grants/projects and ordinances always are presented at the UAC first, then to City Council for authorization and public comment.

b. Environmental Commission

On the third Wednesday of each month, the City of Ellensburg's Environmental Commission holds its public meeting at 5:15 pm, at 501 North Anderson Street (City Hall). The meeting is open to the public. From time to time, the agenda will have stormwater items requiring SEPA that is reviewed by the committee.

c. Annexations

One annexation occurred in 2024. Annexation 4941, and the attached ordinance is below.



d. Administrative Hearing (Public Works Development Standards Update)

In 2025, the Stormwater Standards and Details will be updated as part of a broader revision to the Public Works Development Standards. These updates will incorporate links to the 2024 Stormwater Management Manual for Eastern Washington (SWMMEW), clarify and strengthen requirements for geotechnical assessments and reporting, and mandate the use of Low Impact Development (LID) design practices where feasible. The proposed updates will be presented to the Utility Advisory Committee (UAC) and City Council for approval and public comment. Additionally, an administrative hearing will be required, providing the public with another opportunity to comment on the proposed changes to the Stormwater Standards and Details.

3. Illicit Discharge Detection and Elimination (IDDE)

The 2024 Phase II Eastern Washington Municipal Stormwater Permit requires municipalities to establish legal authority to prohibit illicit discharges, maintain an updated MS4 map, and implement procedures for detecting, investigating, and eliminating unauthorized discharges. Staff training, public education, and community reporting are essential components of the program. Additionally, all IDDE activities must be documented, with annual reports submitted to the Washington State Department of Ecology to ensure compliance and protect water quality.

a. Legal Authority to Prohibit Discharge

A link is provided to the City's Municipal Code, which outlines prohibited discharges (Section 9.25.320), allowable discharges (Section 9.25.322), conditional discharges (Section 9.25.324), and prohibited illicit connections to the storm drainage system (Section 9.25.326).

https://library.municode.com/wa/ellensburg/codes/code_of_ordinances?nodeId=TIT9UT_CH9.25REREU_TSE_9.25.320PRDISTSE

The City implements an escalating enforcement procedure in accordance with Ordinance 4717, Chapter 1.80 of the Civil Violations and Penalties section of the City Code. This ordinance enables the City to enforce water quality and other stormwater regulations beyond an initial educational correction notice. The code applies to Illicit Discharge Detection and Elimination (IDDE), Post-Construction, and Construction compliance.

b. Stormwater Utility Map Updates

All permitted and documented modifications to stormwater infrastructure are tracked and mapped for both public and private stormwater systems that connect to or overflow into the MS4. Newly installed infrastructure is incorporated into inspection lists and schedules to ensure proper maintenance and compliance. Private stormwater systems that do not connect to the MS4 are also mapped. Mapping is conducted as needed and upon project completion. The maps are maintained in ESRI GIS and are accessible to staff and field crews through ESRI Field Maps and ArcGIS Online (AGOL).

c. Spill Reporting and Tracking

Stormwater complaints, drainage concerns, spills, flooding, and other water quality issues are documented and tracked in a spreadsheet. The Stormwater Utility operates on a complaint driven basis, enforcing storm drainage regulations by thoroughly investigating and addressing all reported issues until compliance is achieved or the matter is resolved. While public complaints remain anonymous, they are classified as public records.

A significant portion of reported spills originates from City crews, emphasizing the importance of internal monitoring and rapid response. Complaints involving violations of state water quality standards are reported to the Washington State Department of Ecology through the Environmental Reporting Tracking System (ERTS) and Portal.

To facilitate timely reporting and response, the City maintains a 24-hour spill response hotline. Residents can report spills by calling (509) 962-7230 during regular business hours or (509) 925-8534 after hours.

Additional information is available at <https://ci.ellensburg.wa.us/738/Stormwater-Division>



d. Outfall Inspection Program: 2024/2025

Annually, the City performs outfall screenings during the dry season and following rain events that exceed the 10-year, 24-hour storm threshold. In 2024, no recorded storm events surpassed this threshold, thus

no spot checks were necessary. The City conducted mapping of all outfalls to local streams in 2010 and again in 2013. There are approximately 90 discharge points (outfalls) within the 49.16-mile underground system. The following provides a breakdown of the underground pipe/outfall sizes (in inches of diameter) and the corresponding quantities of each pipe type within the system.

Pipe/culvert size diameter on the top row and the number of pipes/culverts that match that size on the bottom row.

| 48" | 42" | 36" | 30" | 24" | 18" | 16" | 12" | 10" | 8" | 6" | 4" |
|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|----|
| 15 | 6 | 3 | 4 | 82 | 129 | 137 | 1013 | 136 | 947 | 354 | 30 |



Below is the 2024 inventory of storm pipes that indicates the pipe make, type, length etc.

| Storm Pipe Inventory | | | | | | | | | | | | | | | | |
|-----------------------|--------------------------|-------|--------|--------|--------|-------|--------|-------|------|------|-------|-------|------------|-------------|---------|--|
| Dia. | Length (ft) by Material* | | | | | | | | | | | | Total Feet | Total Miles | % Total | |
| | CI | DI | CMP | HDPE | PVC | AC | CONC | TRUSS | VC | STL | OJ | UNK | | | | |
| 4" | | | 8 | 189 | 116 | | 175 | | | 60 | | 324 | 871 | 0.17 | 0.34% | |
| 6" | 83 | 22 | 3022 | 1094 | 3715 | 246 | 8478 | 75 | 217 | | 953 | 409 | 18,314 | 3.47 | 7.06% | |
| 8" | | 763 | 7017 | 13548 | 24651 | 770 | 16445 | 2626 | 609 | | 1981 | 3404 | 71,813 | 13.60 | 27.67% | |
| 10" | | | 684 | 3254 | 2473 | | 4076 | | | | | | 10,487 | 1.99 | 4.04% | |
| 12" | | 2571 | 6839 | 51464 | 28225 | 355 | 12599 | 5316 | 143 | | 3985 | 1571 | 113,068 | 21.41 | 43.56% | |
| 14" | | 39 | | | | | | | | | | | 39 | 0.01 | 0.01% | |
| 15" | | | | 10355 | 2314 | | 7697 | | | | | | 20,366 | 3.86 | 7.85% | |
| 18" | | 140 | 940 | 8502 | 1788 | | 2771 | | | | | | 14,141 | 2.68 | 5.45% | |
| 21" | | | 1749 | | 199 | | 611 | | | | | | 2,559 | 0.48 | 0.99% | |
| 24" | | | 1623 | 2941 | 1117 | | 1401 | | | | | | 7,082 | 1.34 | 2.73% | |
| 30" | | | 150 | | | | | | | | | | 150 | 0.03 | 0.06% | |
| 36" | | | | | | | 36 | | | | | | 36 | 0.01 | 0.01% | |
| 42" | | | | 344 | | | | | | | | | 344 | 0.07 | 0.13% | |
| 48" | | | 145 | | | | | | | | | | 145 | 0.03 | 0.06% | |
| Unknown/ Irregular | | | 136 | 2 | | | | | | | | | 139 | 0.03 | 0.05% | |
| Total Feet | 83 | 3,535 | 22,313 | 91,693 | 64,598 | 1,371 | 54,289 | 8,017 | 970 | 60 | 6,919 | 5,708 | 259,555 | 49.16 | 100% | |
| Total Miles | 0.02 | 0.67 | 4.23 | 17.37 | 12.23 | 0.26 | 10.28 | 1.52 | 0.18 | 0.01 | 1.31 | 1.08 | | | | |

CI = Cast Iron, DI = Ductile Iron, CMP = Corrugated Metal Pipe, HDPE = High Density Polyethylene, PVC = Polyvinyl Chloride, AC = Asbestos Concrete, CONC = Concrete, STL = Steel, ABS = Pressure Pipe, TRUSS = Thermoplastic Composite, Double-Walled Pipe, VC = Vitrified Clay, OJ = Open Joint, UNK = Unknown

*All pipe totals are manually entered and come from the most current GIS storm main totals. Verify totals each year as the map is updated.

Updated: EM 01/15/2025

*Only SubTypes 1,3,4,7 & 8 were used starting in 2017

| | |
|--------------|------|
| Catch Basins | 2503 |
| Manholes | 346 |

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Each outfall is identified by an ID number correlating with the City's GIS maps. Each outfall is screened for flow, odor, color, and any visible signs of pollution annually. Pictures were taken of every outfall. Each outfall inventoried has an NPDES dry weather field screening data form.

In 2024, City staff inspected 87 outfalls that discharge stormwater to local creeks (waters of the State).

Below is a portion of the outfall inspection spreadsheet.

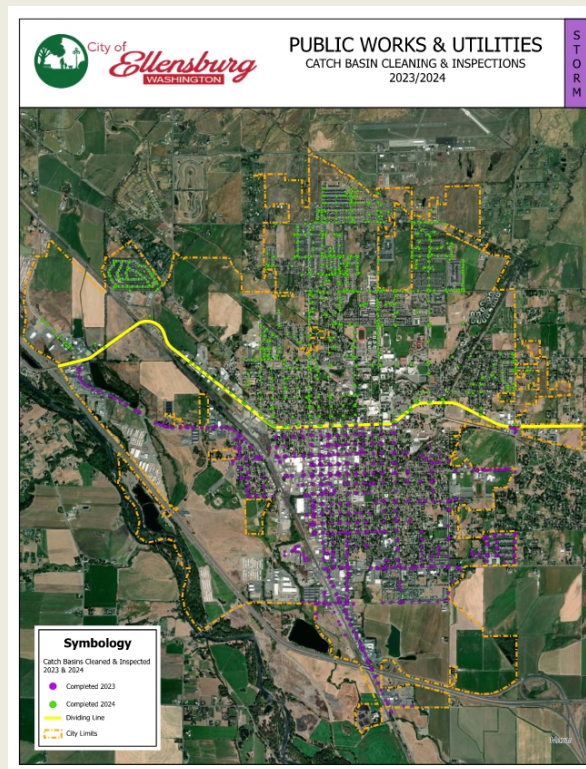
| Outfall ID | City ID # | Location | Discharge Comments | Stormwater | Flow Line | Flow Type | 2024 Inspection Date | 2024 Dry Screening | 2024 Comments | 2023 Inspection Date | 2023 Dry Screening | 2023 Comments |
|------------|-----------|---|--|-------------|---------------------------------------|-----------|----------------------|---------------------------|--------------------------|----------------------|------------------------|----------------------------------|
| Outfall 1 | 38-2000 | E of 8th St. S of Gregory St | No access to outfall, it is buried under fallen tree branches & roof debris. Discharge from Gregory St. and Main St. | Joint Creek | 8" From Gregory St. 2" CR on Main St. | Concrete | 10/26/2024 | No flow at upstream CR | CR dry | 10/26/2023 | No flow at upstream CR | |
| Outfall 2 | 48-6000 | W of Robert Ave. at road 4070 | overflow from house 170 from Main View plot | Light Creek | 10" | PVC | 10/26/2024 | No flow at upstream CR | | 10/26/2023 | No flow at upstream CR | standing water, no movement |
| Outfall 3 | 55-2000 | 1st Ave. and end of terrace with creek | overflow from 1st Ave. | Water Creek | 12" | HDPE | 10/27/2024 | No flow at upstream CR | | 10/27/2023 | No flow at upstream CR | Outfall pipe partially submerged |
| Outfall 4 | 55-1017 | 30th Ave. west of Main St. | overflow from 30th Ave. west of Main St. | Water Creek | 12" | Concrete | 10/27/2024 | No flow at upstream CR | | 10/26/2023 | No flow at upstream CR | |
| Outfall 5 | 55-2053 | 30th Ave. west of Main St. | overflow from 30th Ave. west of Main St. | Water Creek | 8" | AC | 10/27/2024 | No flow at upstream CR | Moisture at bottom of CR | 10/26/2023 | No flow at upstream CR | |
| Outfall 6 | 55-2057 | Main St. south of 7th Ave | CR at 7th & Main, overflow at culvert & wet visible | Water Creek | 8" | Concrete | 10/26/2024 | No flow at upstream CR | Moisture at bottom of CR | 10/26/2023 | No flow at upstream CR | |
| Outfall 7 | 55-2058 | 1st Ave. west of Main St. | Point of connection made correct - no visible | Water Creek | 8" | PVC | 10/26/2024 | No flow at upstream CR | standing water in CR | 10/26/2023 | No flow at upstream CR | |
| Outfall 8 | 55-2059 | Point of CR 2nd St. south of University Way | Point of connection made correct - no visible, 10" flow is visible on north of the abandoned road 4000 data in the University Way 100008 | Water Creek | 10" | Concrete | 10/26/2024 | No flow at upstream CR | CR dry | 10/26/2023 | No flow at upstream CR | |
| Outfall 9 | 55-2060 | University Way, west of Chicago | Point of connection made correct - no visible | Water Creek | 12" | Concrete | 10/26/2024 | standing water, no flow | Year-round groundwater | 10/26/2023 | No flow at upstream CR | Moisture at bottom of CR |
| Outfall 10 | 55-2061 | 11th & Water St. | Pipe from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | HDPE | 10/26/2024 | Internal visible of water | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 11 | 55-2062 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 12 | 55-2063 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 13 | 55-2064 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 14 | 55-2065 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 15 | 55-2066 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 16 | 55-2067 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 17 | 55-2068 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 18 | 55-2069 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 19 | 55-2070 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 20 | 55-2071 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 21 | 55-2072 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 22 | 55-2073 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 23 | 55-2074 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 24 | 55-2075 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 25 | 55-2076 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 26 | 55-2077 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |
| Outfall 27 | 55-2078 | 11th & Water St. | CR from 11th Ave & Columbia St. and discharge directed to the creek, 10" flow is visible | Water Creek | 12" | PVC | 10/26/2024 | standing water, no flow | | 10/26/2023 | No flow at upstream CR | dry upstream CR |

e. Catch Basin IDDE Inspections & Cleaning Program: 2024/2025

To facilitate Illicit Catch Detection and Elimination (IDDE) inspections, the Stormwater Utility uses a software program powered by ESRI Field Maps. Inspection crews are equipped with tablets to document data on each inspection and cleaning activity. Before cleaning, crews conduct a comprehensive assessment of each catch basin, manhole, and pipe, evaluating inlets and outlets for flow, odor, color, sheen, staining, and the presence of floatable materials. Any visible discharge from private sources inside laterals is also documented. Following the inspection, the lines are cleaned. Structural damage, if identified, is documented in the capital facilities plan. In cases where pollution-related issues are detected, staff is notified, and a source tracing investigation is conducted to address and mitigate the problem.

City crews inspect and clean half of the town each year from April 1 to October 1. In the spring, summer, and fall of 2024, they cleaned and inspected 1,250 catch basins in the north half of town, while the south half was completed in 2023.

Below is the 2023/2024 Catch Basin Cleaning & Inspection Map



f. Bacteria Monitoring: 2024/2025

The Stormwater Utility conducts bacteria monitoring at five locations along Wilson Creek, from the northern city limits to the southern interchange. As part of the Illicit Discharge Detection and Elimination (IDDE) and Total Maximum Daily Load (TMDL) programs, monitoring occurs twice weekly from March through December. A one-milliliter sample is plated using Coliscan Easygel and incubated for 24–36 hours at the Wastewater Treatment Facility to measure bacteria levels in colony-forming units per milliliter (CFU/mL).

Ellensburg began collecting data to assess bacteria loading as Wilson Creek entered the city and to determine concentrations as it exited. Early results indicated a significant dilution effect as the creek moved through town. Data collected by the Washington State Department of Ecology confirmed that most of the bacteria loading originated outside the city limits. By the time Wilson Creek reached Berry Road and Umptanum Road, concentrations had significantly decreased. In 2012, the City collaborated with the County Fairgrounds to eliminate all storm drains discharging into Wilson Creek, further reducing potential contamination sources.

Data trends continue to show higher bacteria concentrations in the northern portion of Wilson Creek, with levels decreasing as the water flows through Ellensburg. If unusually high bacteria levels are detected and cannot be attributed to factors such as low water flow or high temperatures, the utility investigates

potential sources through nearby outfalls. Since the program's implementation in 2010, several illicit discharges have been detected and eliminated.

Bacteria monitoring data is recorded in a centralized spreadsheet, documenting sample collection date, time, and bacteria levels in coliform units per 100 milliliters. While the collection and analysis method is certified for detecting coliform presence, it does not use the EPA-certified Standard Method, membrane filtration. This monitoring effort enhances the City's IDDE program by identifying and addressing potential sources of contamination.

In 2024 staff conducted 260 tests of streams from March thru December. These tests are used to detect coliform bacteria in Wilson Creek.

| Date sample taken | Wilson @ Sanders cfu/mL | Wilson above Fairgrounds @ 8th & Alder cfu/mL | Wilson @ 5th w of Poplar cfu/mL | Wilson @ Mtn. View south side cfu/mL | Wilson @ Comfort Inn cfu/mL | Precip past 24 hrs | comments |
|-------------------|-------------------------|---|---------------------------------|--------------------------------------|-----------------------------|--------------------|----------|
| 1/8/2024 | 500 | 0 | 0 | 100 | 200 | 0 | |
| 1/10/2024 | 1000 | 0 | 0 | 0 | 100 | 0.33 | |
| 3/4/2024 | 2200 | 0 | 0 | 0 | 0 | trace | |
| 3/6/2024 | 5200 | 0 | 100 | 0 | 0 | 0 | |
| 3/13/2024 | 1000 | 0 | 100 | 0 | 0 | 0 | |
| 3/18/2024 | 1000 | 0 | 0 | 0 | 0 | 0 | |
| 3/20/2024 | 800 | 0 | 0 | 0 | 0 | 0 | |
| 3/26/2024 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4/1/2024 | 300 | 200 | 100 | 0 | 0 | 0 | |
| 4/3/2024 | 200 | 0 | 0 | 0 | 0 | 0 | |
| 4/16/2024 | 100 | 0 | 200 | 100 | 0 | 0 | |
| 4/17/2024 | 300 | 100 | 0 | 0 | 100 | 0 | |
| 4/23/2024 | 400 | 100 | 100 | 0 | 100 | 0.1 | |
| 4/29/2024 | 100 | 0 | 0 | 0 | 200 | 0 | |
| 5/7/2024 | 500 | 200 | 300 | 200 | 300 | trace | |
| 5/14/2024 | 200 | 200 | 300 | 300 | 0 | 0 | |
| 5/21/2024 | 0 | 100 | 200 | 100 | 100 | 0 | |
| 5/29/2024 | 100 | 100 | 0 | 0 | 0 | 0 | |
| 6/4/2024 | 700 | 400 | 200 | 300 | 100 | 0.05 | |
| 6/11/2024 | 200 | 600 | 900 | 300 | 200 | 0 | |
| 6/21/2024 | 600 | 200 | 600 | 600 | 100 | 0 | |

g. ORP, Temperature, and pH Monitoring: 2024/2025

Staff conducts weekly ORP, temperature, and pH monitoring at eight sites from March to December. This program assesses water quality in creeks by tracking pollution levels, detecting chemical and thermal changes, and evaluating potential impacts on Whisky, Wilson, and Mercer Creeks.

In 2024, staff recorded 286 ORP, temperature, and pH measurements, a decrease from 2023 due to the mid-season failure and replacement of the ORP meter, which temporarily stopped data collection. This program will continue in 2025.

Below is an example of the ORP data spreadsheet.

| | Site 2 Mercer | Mercer Cr. @ RR Ave | | | | | | |
|-------------|------------------|---------------------|-------------------|--------------|-------|--------------|-------------|-------------------|
| sample date | pH | mV | sample temp C. | Conductivity | TDS | Resist. (MΩ) | Resist. (Ω) | sample temp F. |
| 7/10/2024 | 7.64 | -59.9 | 19.4 | 157.2 | 78.5 | 0.006 | 6.00 | 66.9 |
| 7/16/2024 | 7.95 | -67.7 | 17.8 | 179.6 | 89.5 | 0.005 | 5.00 | 64.0 |
| 7/18/2024 | 8.10 | -75.3 | 18.3 | 174.2 | 87.1 | 0.006 | 6.00 | 64.9 |
| 7/22/2024 | 7.85 | -65.4 | 18.4 | 166.0 | 82.9 | 0.006 | 6.00 | 65.1 |
| 7/24/2024 | 8.02 | -73.0 | 18.4 | 191.2 | 95.7 | 0.005 | 5.00 | 65.1 |
| 7/29/2024 | 7.91 | -65.3 | 17.0 | 202.7 | 101.0 | 0.005 | 5.00 | 62.6 |
| 8/1/2024 | 8.11 | -75.6 | 18.2 | 170.0 | 85.0 | 0.006 | 6.00 | 64.8 |
| 8/19/2024 | 8.05 | -72.6 | 17.7 | 155.6 | 77.9 | 0.006 | 6.00 | 63.9 |
| 8/21/2024 | 8.04 | -73.3 | 16.2 | 231.7 | 116.0 | 0.004 | 4.00 | 61.2 |
| 9/4/2024 | 7.78 | -59.5 | 16.3 | 190.4 | 95.2 | 0.005 | 5.00 | 61.3 |
| 9/12/2024 | 8.33 | -87.0 | 16.8 | 170.7 | 85.4 | 0.006 | 6.00 | 62.2 |
| 9/16/2024 | 8.19 | -81.0 | 16.0 | 201.9 | 101.0 | 0.005 | 5.00 | 60.8 |
| 9/23/2024 | 8.33 | -88.0 | 16.0 | 148.5 | 74.3 | 0.007 | 7.00 | 60.8 |
| 9/24/2024 | 8.16 | -78.3 | 16.3 | 149.1 | 74.6 | 0.007 | 7.00 | 61.3 |
| 10/1/2024 | 8.19 | -80.1 | 13.5 | 155.1 | 77.6 | 0.006 | 6.00 | 56.3 |

4. Construction Site Stormwater Runoff Control

The City has established a program to minimize pollutants in stormwater runoff from construction activities and projects before they enter the MS4. This program applies to both public and private developments, including City led projects. The following section outlines the City's ongoing efforts to ensure thorough project review, inspections, and compliance with stormwater regulations.

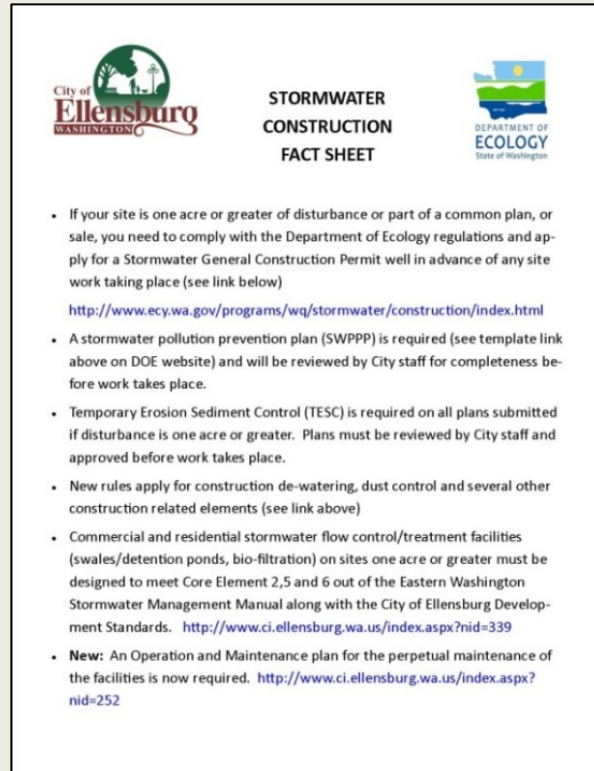
a. Regulatory Erosion, Sediment, and Pollution Mechanisms

The City of Ellensburg has established regulatory mechanisms to ensure compliance with stormwater management requirements for construction projects. All site operators, civil engineers, city staff, and private developers must adhere to the City's Stormwater Development Standards when designing and constructing projects. <https://ci.ellensburg.wa.us/339/Development-Standards>

Under the 2019 Phase II Eastern Washington Municipal Stormwater Permit, only sites one acre or greater were required to develop a Stormwater Pollution Prevention Plan (SWPPP). However, the 2024 stormwater permit lowers this threshold to include single-family lots beginning in 2027. The Stormwater Utility reviews SWPPPs, along with Operation & Maintenance (O&M) plans and temporary erosion and sediment control (TESC) plans, for completeness. Civil plans and geotechnical reports are also evaluated by both the Stormwater Manager and Stormwater Technician to ensure compliance with the core elements of the 2024 Stormwater Management Manual for Eastern Washington (SWMMEW).

To ensure developers are aware of stormwater requirements, the Stormwater Construction Fact Sheet and O&M Template are provided at every pre-application meeting. These documents outline the need for sites one acre or larger to develop a SWPPP and TESC plan, obtain a Construction General Permit from

the Washington State Department of Ecology, and implement an O&M plan. Future updates to the City's standards will incorporate the new permit language regarding single-family lot requirements in 2027. Both the O&M Template and Fact Sheet are also available on the City's Stormwater webpage, <https://ci.ellensburg.wa.us/738/Stormwater-Division>



To further protect water quality, the City has adopted ordinances prohibiting construction-related pollutants such as silt, sediment, and concrete slurry from entering the public storm system (City Code Sections 9.25.320, 322, 324, and 326).

https://library.municode.com/wa/ellensburg/codes/code_of_ordinances?nodeId=TIT9UT_CH9.25REREU_TSE_9.25.320PRDISTSE

These ordinances, along with the adoption of the Eastern Washington Stormwater Manual, the City's Development Standards, SWPPP requirements, site plan reviews, and field inspections, work together to ensure compliance with the stormwater permit requirements.

In 2024, the City held approximately 35 pre-application meetings.

b. Development/Redevelopment Plan Review

The City of Ellensburg's Stormwater Development Standards include a dedicated section on Low Impact Development (LID) and site design. As part of the 2025 City Stormwater Standards update, LID will be the required design approach wherever feasible. The update will also incorporate links to the 2024 SWMMEW and clarify that a SWPPP must be submitted, reviewed, and approved by City staff before any permits are issued or land disturbing activities begin.

During the development and redevelopment review process, key project details including project number, title, applicant, reviewer, comments, plan approval, and status are evaluated. The comments section specifically documents the status and completeness of TESC plans and SWPPPs.

Since the issuance of the 2007 Phase II Eastern Washington Municipal Stormwater Permit, records for all construction projects disturbing one acre or greater are maintained by the City of Ellensburg. The permit requires construction records to be retained for at least five years after project completion. However, the City archives all records related to public and private development indefinitely.

Under the Stormwater Development Standards, staff must review all site plans for plats, commercial property improvements, and parking lost to ensure compliance with treatment and flow control requirements and inspect all stormwater Best Management Practices (BMPs) and erosion control measures, regardless of whether the project meets the one-acre disturbance threshold.

In 2024, staff reviewed 14 proposed projects and approved 11 for construction.

Below is an example of the 2024-2025 Plan Review Spreadsheet.


| PW Project # | Project Title | Applicant | Reviewer | prelim storm review | Comments | Checked BMP selection and Calcs (added 3-17-18) |
|--------------------------|--|-----------------|----------|---------------------|--|---|
| In P/W Review | | | | | | |
| 2021-126 | Foster Plat North - Ph 2 | | JM & EM | | | |
| 2021-080 | Sparks 12 Lot Plat | Sparks | JM & EM | 12/19/22 | Update storm calcs, SWPPP, maintenance language in O&M plan, test pit locations, infiltration/perc rates, use COE zoning code not KC | |
| 2021-084 | Bull Ranch - Bull Rd & Umptanum Rd | Lathrop | JM & EM | 8/15/22 | | |
| 2021-105 | Katie Meadows Plat PH 2 | Glahn | JM | 10/24/24 | The amended compost eliminates the need for five feet of separation and using the native soils. On that front they are good to go. The Mirafi fabric is ok with me. I still need a TESC and O&M plan. They can keep it as simple as marking up the plan sheet and showing silt socks, silt fence, dewatering plan (if needed) etc. No actual O&M plan, they just referenced out code and the manual No actual TESC plan, they just address it in a paragraph The permit required from Ecology is not mentioned The geo tech acknowledges they have a shallow water table and don't have the 5 feet of separation on most of the test pits They will need to provide treatment before infiltrating to ground, shallow swales behind curb gutter, amended compost etc. They're flow control and treatment numbers check out ok. | |
| 2022-114 | PIERCE PLAT - AIRPORT ROAD (POOYA ROOHANI) | Pooya Roohani | JM | 10/7/24 | | |
| 2021-101 | Warehouse Facility - Anderson Road/N of Umptanum | WinCo Foods | HLA | | | |
| Projects underway | | | | | | |
| 2024-071 | 2708 Triple L Loop - Starbucks | Starbucks | JM & EM | 1/8/25 | The applicant will need to provide a full geotechnical analysis that was completed within the last 5 years. The site exploration should consist of test pits or borings in area of the proposed stormwater facilities. The applicant will need to provide a SWPPP before stormwater can approve the permit. Before we can complete the review of the proposed plat the drainage report from 2016 needs to be updated to meet the requirements of the 2019 Stormwater Management Manual for Eastern Washington and the current City of Ellensburg Stormwater Standards. Below are some additional comments after a cursory review. •We will need a maintenance agreement between the Park Green Homeowner's Association and Sanders Mill LLC for the stormwater pond at 2410 N Alder Street. The maintenance agreement should clearly identify the responsibilities of each organization for the ongoing maintenance of the storm pond. This agreement will need to be recorded with the County and a copy will be provided to the City's Public Works Department. •This project will also require a SWPPP and O&M plan. | Approved 2/6/2025 |
| 2024-057 | CBP Short Plat - Dandelion Lane Extension | Willard | JM & EM | 10/2/24 | | Approved 11/1/2024 |
| 2024-094 | Ellensburg Flats Phase 2 | Lathrop | JM & EM | | No Comments | Approved 7/15/2024 |
| 20-100 | 503 E Helena Ave - 15 Unit Apartments | Pooya | JM & EM | 5/15/24 | •Havedrain does not provide treatment of the parking lot runoff. Please add a treatment element to this area. | Approved 7/10/2024 |
| 23-087 | Kittitas County Transfer Station | Kittitas County | JM & EM | 10/2/23 | Initially, we're going to need the engineer to certify that the two detention ponds are functioning the way they were intended on the plans/drainage report. They're full of water and we'll need to find out if they're working properly. In addition to Jon's comment, they need to provide a SWPPP. I see the O&M plan was provided when the swales and detention ponds were originally built. | Approved 6/3/2024 |
| 23-124 | 101 W Washington - Duplex Apartments | Stalder | JM & EM | 2/16/24 | Remove (UIC) reference on drainage report | Approved 5/30/2024 |

c. Construction Site Inspections and Enforcement

Once a construction permit is issued and work begins, staff conduct inspections to verify that BMPs are implemented in accordance with the approved TESC and SWPPP plans. The City's construction inspector maintains a daily log, known as the Inspector's Daily Report (IDR), to document site conditions, erosion and sediment control issues, and any corrective actions taken to ensure compliance.

In 2024, the City's inspector for private development projects conducted inspections on approximately 20 active construction sites.

Below is an example of an IDR.


CITY OF ELLENSBURG
 Public Works Department
 Inspector's Daily Report

| | |
|--|-------------------------------|
| Project: 21-061 - 1100 Dry Creek Rd Foster Pl | Date: 8/19 |
| Weather AM: 60 degrees | Weather PM: 90 degrees |
| Location: Dry Creek Rd | |
| Contractor: GCX | Representative: Tyrel Sullens |
| Sub Contractors: | |
| Equipment: Dumptruck (2), Excavator (1), Dozer | |
| Labor: (1) foreman | |

| Item Of Work | In-Progress | Complete | Erosion Control | Required | Installed | Approved |
|-------------------|-------------|----------|-----------------|----------|-----------|----------|
| Saw Cutting | | | EC Plan | | | |
| Clearing/Grubbing | x | | SWPP | x | x | x |
| Excavation & Haul | x | | Tire Wash | | | |
| Storm Sewer | | | Silt Fence | x | x | x |
| Utilities | | | Wattles | | | |
| Water | | | Wattles | | | |
| Sidewalks | | | Check Dams | | | |
| HMA Patch | | | Drain Filter | | | |
| Signage | | | Seeding/Sod | | | |
| Punch List | | | Sed. Ponds | | | |
| Sewer | x | | | | | |
| Paving | | | | | | |

| | | | | | |
|-------------------------|-----|----|----------------------------|-----|-----|
| Traffic Control Needed? | Yes | No | Traffic Control Installed? | Yes | N/A |
|-------------------------|-----|----|----------------------------|-----|-----|

Foster continues to be a struggle. Pretty sure none of the task items listed by Ecology have been inacted. Wendy called and I mentioned this to her, but she felt that they were making some progress. Crews began working on 15th Ave and Dry Creek Rd on 8/15. Saw cutting and potholing done the first two days. Dug around SSMH 65-292 on 8/16 and had some issues coring into the manhole. Concrete base had been poured above the bottom of the manhole which made it more difficult to do. Pipe installed into manhole, but was a bit off of original location. Had to straighten pipe a couple inches to get to surveyed marks through next 3 pipe installs. On 8/18, hit irrigation line running N/S across 15th Ave. Irrigation Line was already severely damaged from corrosion and I believe it has already been abandoned as rust and dirt were filling it up already. I told crews to leave irrigation line in place, but that they didn't need to repair it. If it does need to be repaired, the entire culvert across the road needs to be replaced. Traffic control has not been stellar for this week and I've had to contact Tyrel several times about meeting their TCP. Also, socks in the storm drains were not installed on 15th Ave and I had to remind Tyrel of installing those. Crews were able to install about 230' of gravity sewer lines into the SSMH-20 (new). Lots of work needs to be completed next week on the force main sewer, in order for GCX to meet their deadlines on paving 15th Ave & Dry Creek Rd. Still have turmoil between members of the crew. Sounds like one was let go this week and Tyrel informed me on 8/19, that he'll be most likely leaving the project in Sept to go to Texas. Not really sure who will be in charge of the project, but hoping that change in leadership will be a positive item. Hydroseed was placed on site on 8/18 to help with dust issues, but it looks pretty light and hopefully doesn't get blown away.

d. Internal Staff Training

All employees involved in operations and maintenance, plan review, construction inspection, and stormwater management receive stormwater pollution prevention training and hold Certified Erosion and Sediment Control Lead (CESCL) certification. Staff renew their CESCL accreditation every three years to ensure continued compliance and up to date knowledge of best practices.

In 2024, the Stormwater Utility funded three new CESCL certifications and three recertifications.

e. Construction Site Operator Outreach

All construction site operators, developers, and engineers receive information on erosion control training, proper installation of BMPs, and compliance with Appendix 1 of the Phase II Eastern Washington Municipal Stormwater Permit. Guidance is provided on selecting and applying BMPs as outlined in Chapter 7 of the 2024 Stormwater Management Manual for Eastern Washington.

Private contractors have access to statewide CESCL training, informational flyers and pamphlets available on the City's website, and printed materials distributed during pre-construction meetings. Capital Improvement Projects are held to the same standards as private developments, undergoing thorough permitting, erosion control review, plan evaluation, field inspections, and compliance monitoring.

To further support erosion control efforts, the Stormwater Utility developed a flyer aimed at educating contractors on implementing erosion control measures on all sites, regardless of size. This flyer is distributed at pre-development meetings, available online, and provided in the Building Department at City Hall.

In 2024, the City held approximately three pre-construction meetings for private development and approximately ten for Capital Improvement Projects.



5. Post-Construction Stormwater Management for New Development and Redevelopment

The City ensures long-term stormwater management by requiring Low Impact Development (LID) techniques, runoff treatment, and flow control for new development and redevelopment projects. The Stormwater Development Standards continue to adopt new practices in order to protect water quality and reduce pollutants. Through plan reviews, inspections, and maintenance requirements, the City enforces compliance and promotes sustainable stormwater practices.

a. Regulatory Post-Construction Stormwater Management Mechanisms

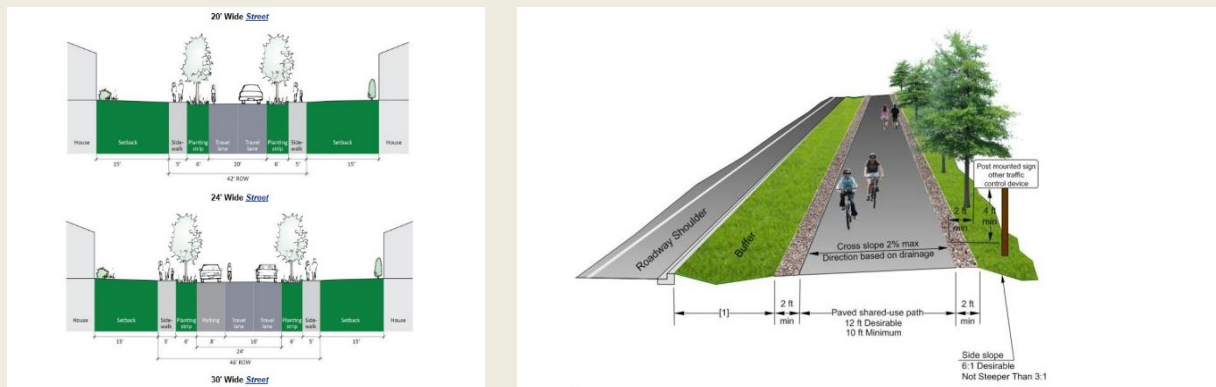
“Permanent stormwater control facilities shall be maintained and operated in compliance with Chapter 9.100 ‘Storm Drainage and Surface Water Management Utility’ of the Ellensburg Municipal Code and the

current Stormwater Management Manual for Eastern Washington. Stormwater control facilities include manmade stormwater control facilities that combined constitute the city's stormwater control facility."

Cited above is an excerpt from the City of Ellensburg Storm Drainage Standards. It references the code Chapter 9.100. The ordinance requires that owners (private or public) of stormwater facilities that were constructed after the effective date of this permit be required to maintain their facilities in accordance with the standards and details to which they were constructed.

b. Low Impact Development (LID) and Site Design

The City of Ellensburg has adopted street standards that prioritize Low Impact Development (LID) practices to improve stormwater management. As part of these updates, all frontage improvements must now provide infiltration for street runoff rather than connecting to the existing storm system. The new standards also narrow street widths and require vegetated or rock-lined planter strips to manage runoff, integrating stormwater treatment directly into the streetscape. Examples of these new street standards, as outlined in the City Code, are pictured below.



Since 2020, most developers, builders, and engineers have moved away from centralized storm ponds, opting instead for roadside rock-lined or compost-amended swales. This shift allows for more efficient land use, enabling developers to build additional homes while eliminating the need for large, under-maintained detention ponds that often fall into disrepair due to absent HOAs or unclear maintenance responsibilities. By treating and controlling stormwater at the source developments eliminate the need for large detention facilities on separate parcels, reducing future maintenance concerns.

In both private and public projects, large stormwater holding facilities are being replaced with rock-lined swales (xeriscaping) in the right-of-way, making them visible and accessible for maintenance. Xeriscaping swales are increasingly popular in Ellensburg due to their low cost, minimal maintenance needs, and ability to blend with the native landscape. Unlike traditional stormwater ponds, these swales do not require watering, providing an additional water conservation benefit.



To ensure proper treatment, pre-treatment BMPs must be implemented to treat the first half-inch of rainfall. The Stormwater Management Manual for Eastern Washington provides options such as 60/40 bio-soil retention media, grassy strips, downturn elbows, and other BMPs, allowing design engineers to select the most appropriate solution for each site.

Additionally, the Department of Ecology now requires that for all sites greater than one acre of disturbance (or part of a common plan or sale), builders must submit an Operations & Maintenance (O&M) plan to the local jurisdiction. This plan must outline how maintenance will be performed, the financial mechanism to support it, and the responsible party.

To assist private property owners, a stormwater maintenance flyer was created in 2020 and is distributed at pre-construction meetings. This flyer, which remains in use through 2024/2025, provides guidance on how to properly maintain private stormwater facilities.



c. Stormwater Treatment and Flow Control

The link below references the Stormwater Design standards and details for the City of Ellensburg. All projects (public and private) that disturb one acre or more, and from projects of less than one acre that are part of a larger common plan of development or sale, adhere to the Stormwater Management Manual of Eastern Washington. Ellensburg Stormwater Standards require at a minimum all applicants use the

Stormwater Management Manual for Eastern Washington when designing treatment and flow control facilities. The design storm shall treat the first ½ inch of rainfall in 24 hours (6-month, 24-hour storm event) for all pollution-generating impervious surfaces.

<https://ci.ellensburg.wa.us/339/Development-Standards>

Flow control shall be designed based on the 10-year 24-hour storm event and if detention is proposed, it shall be based on the first 1.6 inches of rain in 24 hours (25-year storm event). The City maintains an annually updated inventory of private BMPs that discharge to ground or surface waters, ensuring they are properly mapped and documented. Below are examples of public and private post-construction flow control and treatment BMPs within Ellensburg.



d. Plan Review and Approval

Staff reviews all projects that disturb one acre or greater and records comments on a spreadsheet (See review comments spreadsheet excerpt on page 22). In addition, staff reviews all stormwater pollution prevention plans (SWPPPs), temporary sediment erosion control plans (TESC), and operation & maintenance plan (O&M) for completeness.

e. Post-Construction Inspections and Maintenance

The City of Ellensburg receives approximately 8.89 inches of annual precipitation, primarily as snow. Located in a high desert/shrub-steppe region, the City faces ongoing challenges with maintaining post-construction stormwater facilities. Many of these facilities are privately owned and were built before the 2007 Phase II Eastern Washington Municipal Stormwater Permit, and often without clear maintenance responsibilities. As a result, many have fallen into disrepair, becoming overgrown, clogged, and used as dumping sites.



Statewide, maintaining post-construction stormwater facilities is a common challenge, especially when homeowner associations fail to form or developers abandon responsibility. In Ellensburg, 12 to 14 stormwater detention ponds built before 2007 have been effectively abandoned, lacking both HOA oversight and legal maintenance requirements. In 2024, the City had to intervene and provide emergency repairs after one of these facilities failed, posing a public hazard. The Stormwater Utility is actively exploring a new program to refurbish and maintain these facilities, potentially funded through stormwater grants.

For City-owned facilities, staff conduct inspections following any rain event exceeding the 10-year, 24-hour storm threshold (1.2-1.4 inches, depending on location). **In 2024, no recorded storm events exceeded 1.3 inches in 24 hours.** When facilities show signs of damage, they are added to a Capital Facilities Improvement List for necessary repairs. Additionally, in 2025, staff will inspect all City-owned BMPs to assess maintenance needs. The Phase II Permit (S5.B.6.i.ii.a) requires inspections every two years or as needed for 95% of treatment and flow control facilities.

The City contracts a private company to maintain public stormwater swales, while City staff handle catch basin cleaning. A comprehensive inventory of post-construction BMPs, both public and private, has identified 475 systems citywide, the majority of which are privately owned and predate 2007. The City inspects private post-construction BMPs every two to four years, focusing on those built after 2007.

City staff inspected 31 owned and maintained swales in 2024. Private swales were inspected in 2023 and are scheduled to be inspected again in 2025.

Below is an example of the City Maintained Swale Inspection Spreadsheet

| Annual City Maintained Swale Inspection | | | | | | |
|---|--|-----------|---------------------------|----------------|--------------|-------------------|
| Swale ID | Maintenance notes | Project # | Plot / Dev. Name | Street | X Street | inspected 2024 |
| 36 | no issues - maintained by homeowner | 2002-075 | Kayla/Mylissa short plats | Ridgeview Ln | | |
| 63 | still works, but excess vegetation | 2002-080 | Helena Ave Impr. | Helena Ave. | Chestnut St. | |
| 64 | still works, but excess vegetation | 2002-080 | Helena Ave Impr. | Helena Ave. | Chestnut St. | |
| 65 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Willow St. | 9/24/24 |
| 99 | still works, but excess vegetation | 2002-080 | Helena Ave Impr. | Helena Ave. | Alder St. | |
| 134 | no issues - grass maintained by city contract | 2007-049 | Alliance SP | Enterprise Way | Dolarway | 9/24/24 |
| 135 | no issues - grass maintained by city contract | 2007-049 | Alliance SP | Enterprise Way | Dolarway | 9/24/24 |
| 139 | no issues - grass maintained by city contract | 2006-080 | Dolarway Rd. Impr project | Dolarway Rd. | Prospect St | 9/24/24 |
| 205 | still works, but excess vegetation | 2003-055 | Water St Impr project | Manitoba | Water | |
| 212 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Ruby St. | 9/23/24 |
| 213 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Ruby St. | 9/23/24 |
| 214 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Ruby St. | 9/23/24 |
| 215 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Ruby St. | 9/23/24 |
| 216 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Ruby St. | 9/23/24 |
| 217 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Whitman St. | 9/23/24 |
| 219 | constant groundwater drainage, leads to excess vegetation at inlet | 1997-029 | Water St Impr project | Water St. | 11th Ave | 9/24/24 |
| 220 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Chestnut St. | 9/23/24 |
| 221 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Chestnut St. | 9/23/24 |
| 222 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Chestnut St. | 9/23/24 |
| 223 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Chestnut St. | 9/23/24 |
| 224 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Chestnut St. | 9/23/24 |
| 225 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Chestnut St. | 9/23/24 |
| 226 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Chestnut St. | 9/23/24 |
| 227 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Chestnut St. | 9/23/24 |
| 228 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Chestnut St. | 9/23/24 |
| 229 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Chestnut St. | 9/23/24 |
| 230 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Willow St. | 9/23/24 |
| 231 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Willow St. | 9/23/24 |
| 232 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Willow St. | 9/23/24 |
| 233 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Willow St. | 9/23/24 |
| 287 | grass maintained by city contract | 2005-127 | Mtn View Improvements | Mountain View | Chestnut St. | 9/23/24 |
| | standing water in swale bottom, from groundwater flow into upstream storm drains | 1997-066 | Aspen Grove MHP | Umptanum Rd | Chestnut St. | 10/13/24 |
| 307 | | | | | | |
| 325 | no issues - grass maintained by Parks Dept | 2006-080 | Dolarway Rd. Impr project | in Rotary Park | 5th Ave | |
| 334 | no issues | 1997-029 | Water St Impr project | PTC Trail | 15th Ave | |
| 417 | standing water in swale bottom | 2010-083 | PTC Trail extension | Sanders Rd | Alder St | |

f. Post-Construction Record Keeping

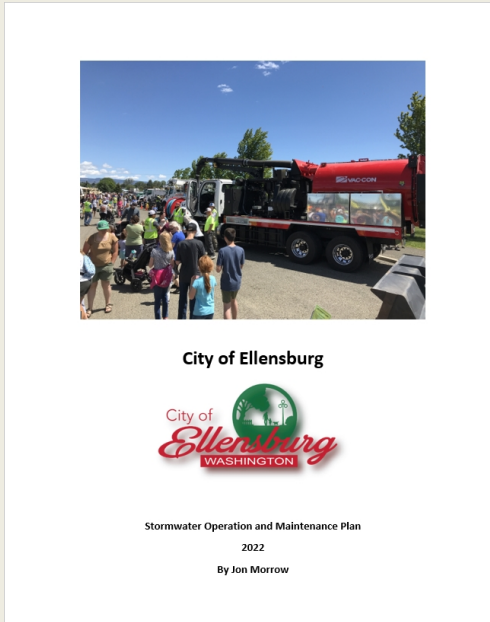
The City maintains comprehensive records for public and private developments, including civil design plans, drainage reports, and O&M plans. Starting in 2027, the City will retain records in accordance with the new threshold requirements outlined in Appendix 1. The City also tracks all maintenance activities, enforcement actions, and staff training to ensure compliance with stormwater regulations and support long-term stormwater management efforts.

6. Municipal Operations and Maintenance

The City's Operations and Maintenance (O&M) Program minimizes stormwater pollution from city-owned facilities, streets, and storm systems. Compliance is achieved through regular inspections, maintenance, and pollution prevention practices, including catch basin cleaning, street sweeping, and stormwater facility upkeep. City staff receive stormwater pollution prevention training, ensuring BMPs are followed. The O&M Plan is regularly updated to meet permit requirements.

a. Operations and Maintenance Plan

The City of Ellensburg wrote its own O&M Plan in 2010. The Utility updated that plan in 2017 to meet the permit requirement S5 6a. The Plan was again updated in 2022 and a copy of it is attached in the link below. All City staff are trained on Best Management Practices (BMPs) and pollution prevention every permit cycle.



Operation and Maintenance Plan 2022 Update link Below

<https://ci.ellensburg.wa.us/DocumentCenter/View/23832/Ellensburgs-Operations--Maintenance-Plan-2022>

As previously mentioned in the IDDE section, the vacuum truck is outfitted with a software tool that tracks inspection, cleaning, and jetting. The 2024 map on page 18, shows the north half of town was cleaned and inspected for IDDE and O&M in 2024.

b. City Shop Stormwater Pollution Prevention Plan (SWPPP)

In 2023/2024 the utility wrote its first ever SWPPP. Up until this time Ecology accepted the management plan in place of a SWPPP. In 2023/2024 Ecology thought it would be a good idea if the city wrote a SWPPP for the shop. Attached below is a copy of the SWPPP for the city shop.

<https://ci.ellensburg.wa.us/DocumentCenter/View/23828/Stormwater-Pollution-Prevention-Plan-SWPPP-2023>

c. Ecology's 2024 City Shop Inspection

Subsequently following submittal of the SWPPP, the Industrial Program out of Ecology scheduled a shop inspection. Copied below is the inspection form from Ecology.

<https://ci.ellensburg.wa.us/DocumentCenter/View/23831/Ecology-Shop-Inspection-2024>

d. Street Sweeping Program

The city has always had a sweeping program, but it has been largely undocumented and never tracked. In 2014 the city applied for a grant to the Department of Ecology and was awarded funds to purchase two new regenerative air sweepers. The grant required tracking the broom down time, engine miles and tonnage, but did not request route tracking. The city generates 750 tons of solids each year with the street sweeping and catch basin cleaning program. The new storm permit will require a sweeping program by 2027 that will track tonnage, miles swept, and by street type. Arterial, collector and local access are the three major street types, and each will have to have its own sweeping frequency.



C. S7 – Compliance with Total Maximum Daily Load (TMDL) Requirements

The City has implemented programs to support compliance with Total Maximum Daily Load (TMDL) limits for impaired waterbodies. Wilson Creek, which flows through Ellensburg, is subject to a TMDL for fecal coliform, requiring the City to reduce pollutant loads and improve water quality. To meet these requirements, the City utilizes BMPs, conducts public outreach, and implements stormwater infrastructure improvements all aimed at reducing fecal coliform levels in Wilson Creek and ensuring alignment with TMDL goals.

1. Public Education and Outreach

The City's education and outreach program under the TMDL requirements informs the public about pollution sources affecting impaired waterbodies and actions to reduce them. Efforts focus on fecal coliform pollution in Wilson Creek and may include educational materials, public events, and direct community engagement to promote best management practices.

a. Pet Waste Program

The City is required to maintain pet waste stations at all public parks, city properties, and open spaces to help reduce stormwater contamination. In 2024, several new pet relief stations were installed in downtown Ellensburg, providing free waste bags funded by the Stormwater Utility. City staff regularly maintain all pet waste stations, and Parks staff recently ordered a two-year supply of waste bags, funded through the 2024 Capacity Grant. Additionally, pet waste education flyers were distributed at the 2024 KEEN Winter Fair and the City of Ellensburg's National Night Out Snow Cone Booth to raise awareness about proper waste disposal and its impact on water quality.

A consultant is currently developing new outreach materials, which are expected to be distributed in 2025.



b. Feeding Waterfowl Education & Outreach

The requirement to distribute waterfowl education materials under S5.B.1 in Appendix 2 of the previous NPDES permit has been removed. As a result, the City did not distribute waterfowl education flyers in 2024, and no future outreach efforts are planned at this time.

2. Enhanced IDDE Program in Wilson Creek 2025 NEW

Beginning in March 2025, City staff will start an enhanced IDDE program to support the Wilson Creek TMDL. This program will exceed the Appendix 2 requirements by conducting monthly sampling at four outfall locations along Wilson Creek from March to December. Samples will be collected using the same method as the standard IDDE program, where a one-milliliter sample is plated using Coliscan Easygel and incubated for 24–36 hours at the Wastewater Treatment Facility to measure bacteria levels in colony-forming units per milliliter (CFU/mL). Results from this enhanced sampling will be reported separately from the standard IDDE data.

D. S8 Monitoring and Assessment

Section S8 of the 2024 Phase II Eastern Washington Municipal Stormwater Permit requires the City to monitor and assess stormwater impacts to evaluate program effectiveness. This includes tracking pollutant levels, assessing BMP performance, and reporting findings annually. The permit provides multiple options for compliance, allowing permittees to select the most effective approach to meet these requirements.

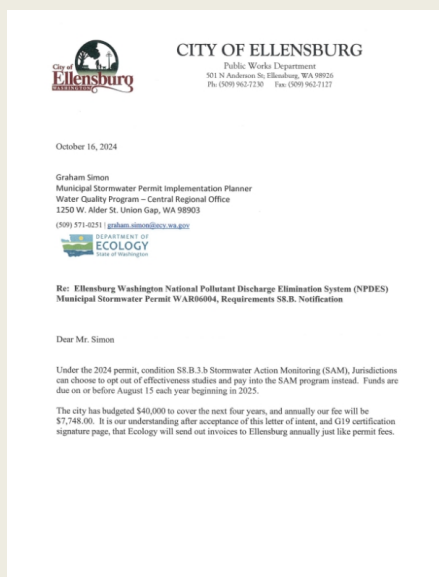
1. Tree Canopy for Stormwater Management

The City completed a Urban Tree Canopy Assessment and a street tree re-inventory, in 2023-2024. The City has secured funding through the 2024 Washington Community Forestry Assistance Grant to develop an Urban Forest Management Plan (UFMP) and update the tree ordinance. This work will establish long-term tree canopy goals, improve tree protection policies, and ensure future urban forestry efforts support stormwater management. Additional initiatives include conducting a park tree inventory, updating street tree development standards, and expanding public education efforts. These actions will help the City enhance stormwater infiltration, reduce runoff, and ensure compliance with regulatory requirements while strengthening the urban tree canopy.

The park tree inventory and UFMP are scheduled to be completed in 2025.

2. Payments into the Stormwater Action Monitoring Collective Fund

To meet the requirements of Section S8 of the Phase II Eastern Washington Municipal Stormwater Permit, the City has opted to participate in the Stormwater Action Monitoring (SAM) Program. By contributing to SAM, the City supports regional stormwater research and effectiveness studies rather than conducting independent monitoring. This collaborative approach provides valuable data on stormwater impacts, BMP performance, and overall water quality trends.



E. Achievements and Planned Activities

This section highlights the City's accomplishments in stormwater management over the past year and provides an overview of ongoing projects and grant opportunities. These efforts contribute to regulatory compliance, infrastructure improvements, public engagement, and water quality protection. Moving forward, the City remains dedicated to enhancing stormwater programs and securing funding to support long-term goals.

1. Gateway II Stormwater Retrofit Project Update: WQC-2020 EllePW-00053

The city was successful in obtaining grant funding from the Department of Ecology to design, permit and construct Gateway II. Gateway II is the same identical project as Gateway I in scope and size, just on the opposite end of town. The agreement between Ecology and the City is fully executed. In October 2021, a consultant was hired to begin designing the project. Below is an artist rendition of what the project might look like when finished on one side of the street. The project will be constructed on both sides of the street.

Currently the project is at 60% design. The project has been held up for one entire calendar year because of a fish screen/de-regulation issue surrounding East Branch Lyle Creek. The grant runs out July 1, 2025. In a recent meeting with the Department of Ecology we are moving forward with the permitting and installation of the fish screen. The sixty percent design report is being submitted with the East Branch Lyle changes to Ecology. All of this is in hopes of getting an extension to the grant.



2. Reecer/Currier Floodplain Project

The City has been working on flood management projects with regards to West Ellensburg and Reecer Creek since 2010. Phase I re-located a section of Reecer Creek into a new channel that supported fish habitat and constructed a setback levee. Phase II bonded five million dollars to acquire 56 acres of land, extend the setback levee up to the Burlington Northern Railway, build a new fish passable 35-foot bridge on Dolarway and three contiguous flood swales.

Phase I was completed in Spring of 2023. Phase II extending the levee and flood swales up to the Burlington Northern Railway will go out to bid Spring/Summer 2025 to seek completion to this project. The project had been held up for two years with a cultural resource issue and that has since been rectified. Funding has also been an issue, but those issues are being worked out and the hope is to go to bid spring/summer 2025.

Before 2022-2023



After 2024



3. Flood Planning Assistance Grant (FCAAP) From the Department of Ecology

The city submitted an application to the Department of Ecology's Floodplain by Designs group (FbD) and was awarded \$400,000.00 to model the City's storm system. In addition to modeling the entire system, it will be re-mapped in its entirety. The data collected will help support an urban flood model where Lidar cannot pick up the first few inches of water on city streets. The reason for this is the storm system picks up the first few inches and conveys the water to nearby outfalls for certain size storm events. This data will be compared with the County's 2D model which only picks up Lidar images in a rural setting. Comparing the two will add another dimensional layer and create a 3D model. That model will re-evaluate the current flood maps for Ellensburg and take a closer look at how the storm system plays a role in reducing urban flooding with small events. The project will also help determine where the system is undersized and look at long-term capital projects aimed at culverts and outfalls. The work is 90% complete and the project will be finished before June 30, 2025.

4. FbD Land Acquisition Grant

The City's Utility submitted a grant application to potentially purchase two properties on the western edge of town. The properties combined are 52 acres in size. Both properties are in the 100-year floodplain, and both have Whiskey Creek running through them. Whiskey Creek has become the focal point among Fisheries, Tribe, and County Flood District to introduce Steelhead into the Naneum Canyon. The connection would be through Reecer Creek, which is tied to Achievements and planned activities #2 above. As the city goes out to bid to extend the levee up to the BNSF railway, a flood swale next to the levee could someday become the Whiskey channel. Above the railway on University Way is accomplishment #1, Gateway. Gateway would then connect to the levee and provide a recreation trail, then possibly extend up to the Cascade Palouse trail via the two properties. The properties would serve multiple uses among flood protection and fish passage on Whiskey Creek. Final applications were due May 1, 2024.

This land acquisition grant was not funded in the initial award announcement, but the City has been collaborating with local legislators to secure its inclusion in the funding package.

5. Stormwater GPSing Project – Capacity Grant

The City hired a consultant to conduct a stormwater asset data collection project as part of the Urban Flood Modeling and Analysis Project, funded through the FCAAP Grant. This project will update the City's stormwater model and improve floodplain mapping for Whiskey and Mercer Creeks. As part of the project, approximately 3,311 stormwater catch basins and manholes were GPS-located to document rim elevations, pipe diameters, and materials. Additionally, drainage basins will be mapped to define outfall areas, enhancing stormwater modeling and regulatory compliance. Running from April to December 2024, this project strengthens the City's ability to track, manage, and maintain stormwater infrastructure, improving flood mitigation and long-term planning.

6. 2024 Washington Department of Natural Resources Community Forestry Assistance Grant

Stormwater staff secured \$272,500 through the 2024 Washington Department of Natural Resources Community Forestry Assistance Grant to develop a comprehensive Urban Forest Management Plan & Ordinance Update, modernizing urban forestry practices, and strengthening tree protections. This project will establish a strategic framework for tree care, expand canopy coverage, and enhance stormwater management by reducing runoff, improving water retention, and mitigating flood risks. A key component is a park tree inventory, assessing approximately 6,000 trees in city parks to guide long-term management. The initiative also includes the creation of a new municipal tree ordinance, replacing outdated policies with clear, sustainable regulations that reflect community values. Additionally, street tree development standards will be introduced, providing guidelines for species selection, placement, and maintenance to enhance public spaces and further support stormwater mitigation efforts. To foster community engagement, the project will feature bilingual outreach materials, public meetings, and an interactive field guide for Irene Rinehart Riverfront Park. With a strong emphasis on equity and environmental justice, improvements will be prioritized in underserved areas, ensuring all residents benefit from a well-managed urban forest. The project is set for completion by June 2027.

Appendices:

Stormwater Utility Budget

<https://ci.ellensburg.wa.us/DocumentCenter/View/23822/2025-2026-Biennial-Budget---Stormwater-Utility>