

CITY OF ALBANY

STORMWATER MANAGEMENT PLAN 2023

NPDES PHASE II MS4

Prepared by:
The City of Albany Public Works
Environmental Services Department

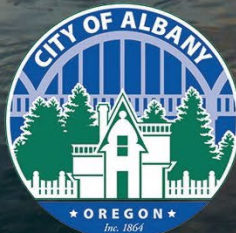


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List of Abbreviations

APD Albany Police Department

BMP(s) Best Management Practices

City The City of Albany

CMMS Computerized Maintenance Management System

CWA Clean Water Act

DEQ Department of Environmental Quality

EPA Environmental Protection Agency

EPSC Erosion Prevention and Sediment Control

ESRI GIS Geospatial Inventory Software

FOG Fats, Oils and Grease

ES Environmental Services Department

IDDE Illicit Discharge Detection and Elimination

MS4 Municipal Separate Storm Sewer System

NPDES National Pollution Discharge Elimination System

DEQ Oregon Department of Environmental Quality

O&M Operations and Maintenance

Permit NPDES MS4 Stormwater Phase II Discharge Permit

SMES Stormwater Management Engineering Standards

SOP(s) Standard Operating Procedures

SWMP Stormwater Management Plan

SWQ Stormwater Quality

TMDL Total Maximum Daily Load

WOTS Waters of the State

Section 1 Introduction and Overview

The City of Albany is subject to the Oregon Department of Environmental Quality's (ODEQ) National Pollution Discharge Elimination System (NPDES) Municipal Separate Storm Sewer Systems Permit (MS4). The Stormwater Management Plan (SWMP) describes the programs and activities the City of Albany utilizes to comply with the NPDES MS4 permit to reduce stormwater pollution. The 2023 SWMP is the City's first official iteration of this plan.

Albany is categorized as a "small" MS4 permittee and was issued the NPDES MS4 Phase II General Permit in June of 2021. The City submitted the first annual report on November 1st, 2021, and the first full permit term report on November 1st, 2022. The implementation deadlines in the permit for the stormwater program control measures were extended to February 28, 2024, for Albany.

In many municipalities, stormwater runoff can be a source of aquatic pollution. Unlike wastewater, stormwater is not directed to a water treatment facility. Instead, this water enters the separate stormwater sewer system and is conducted to nearby streams, rivers, and lakes. Albany plans to protect water quality by detaining stormwater and utilizing water quality facilities, eliminating illicit discharges, developing environmentally focused standard operating procedures (SOPs) and best management practices (BMPs), educating, and encouraging public involvement, and mitigating sediment runoff from construction activities. This SWMP is designed to reduce pollutants discharged from Albany's MS4 to the maximum extent practicable.

Stormwater plans, practices and BMPs are evaluated annually as part of the TMDL report and MS4 permit. As such, this SWMP will be an evolving document which will reflect the adaptive approach the City takes toward stormwater management.

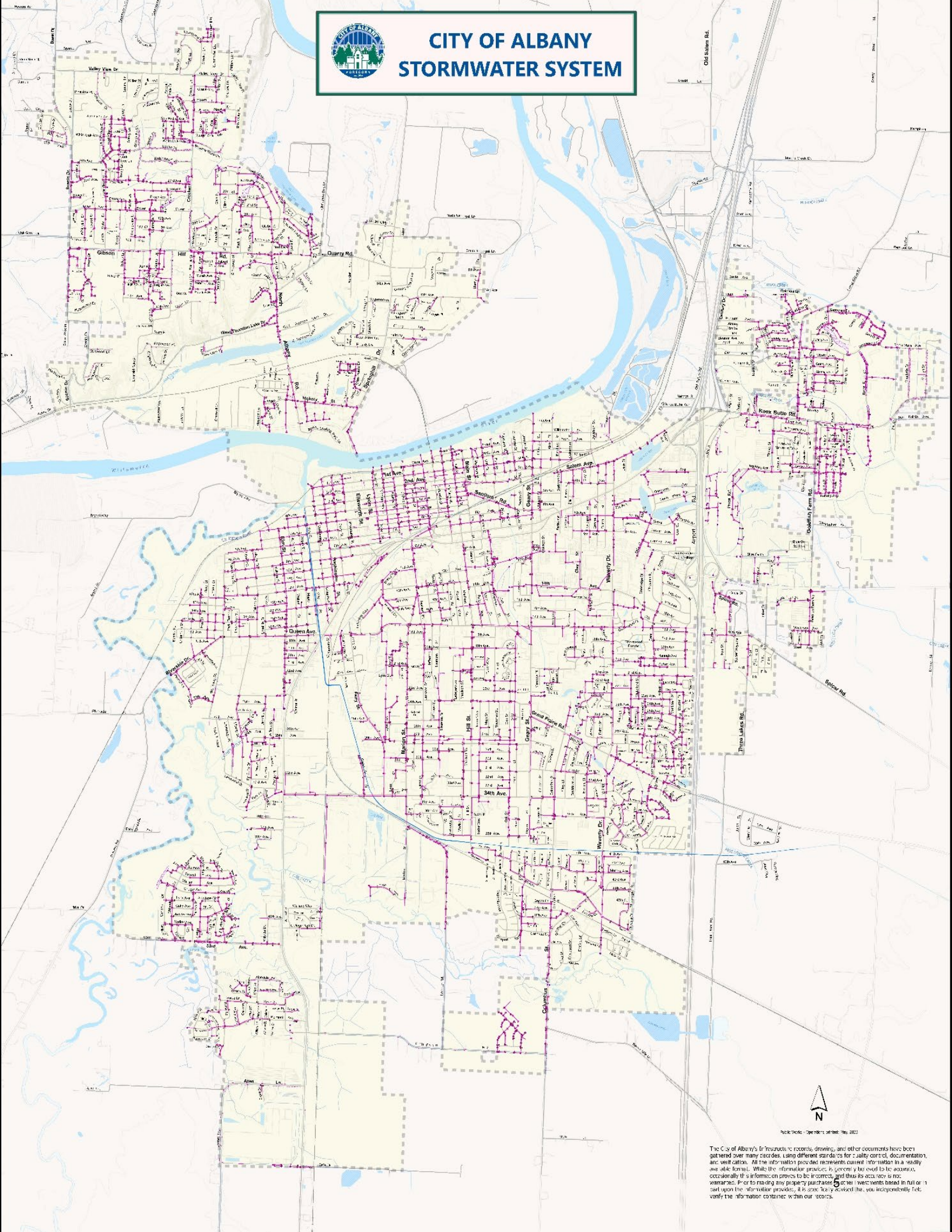
Coverage Area

The City of Albany encompasses nearly 18 square miles, with the largest land use type being residential followed by industrial. Park land and open space account for 887 acres of land within City limits, with more space under development. The population in Albany for 2022 was estimated to be 57,325.

Within City limits is the confluence of the Calapooia and Willamette Rivers. Along with these rivers, runoff in Albany drains to Periwinkle Creek, Cox Creek, Oak Creek, Burkhart Creek, and Truax Creek. The map below illustrates major waterbodies, the City stormwater network, and their relationship to City limits.



CITY OF ALBANY STORMWATER SYSTEM



Public Works - Operations, updated May 2023

The City of Albany's historical records, drawings, and other documents have been gathered over many decades, using different standards for quality control, documentation, and verification. All the information provided represents current information in a readily useable format. While the information provided is generally believed to be accurate, occasionally it is information in process to be corrected, and thus its accuracy is not guaranteed. Prior to making any property purchase or other investments based in full or in part upon the information provided, it is strongly advised that you independently verify the information contained within our records.

The City is responsible for stormwater management activities within City limits and will coordinate with county agencies if stormwater pollution within City limits originates in another jurisdiction.

Stormwater Program Implementation and Funding

Many departments throughout the City participate in SWMP program implementation. However, the Public Works Environmental Services Water Quality and Stormwater groups are primarily responsible for program coordination, administration, and tracking activities.

Other groups and departments which contribute to stormwater management and pollution reduction include:

- Wastewater Collections
- Engineering
- Street Maintenance
- APD Code Enforcement
- Planning
- GIS and Computerized Maintenance Management
- Communications
- Park and Building Maintenance
- Public Works Technical Services

The city periodically evaluates financial resources to determine the most efficient ways to comply with the permit requirements through the stormwater utility rate forecast. The adequacy and stability of the City's funding to support stormwater control measures and the resources required to maintain them is ultimately up to the City Council.

Every year the Council evaluates system needs, revenues, expenditures, and potential rate adjustments; sets goals; and considers options for meeting them over time. Each year's evaluation includes a 5-year forecast of anticipated rate adjustments. The Council sets revenue targets as part of the annual rate review.

Mapping

The City maintains a current MS4 map of outfalls, through ESRI GIS, which is updated annually. The digital MS4 inventory map contains information on:

- Geographical location
- Outfall ID
- Watershed and receiving waters
- Land use type
- Physical outfall data

The Computerized Maintenance Management System (CMMS) department continually updates stormwater infrastructure on City asset maps from new construction or as new information becomes available. This map includes additional stormwater information on:

- Collection and conveyance system
- Jurisdiction (City, County, State and privately owned)
- Location of stormwater quality facilities

Tracking and Reporting

Metrics used to track SWMP implementation control measures are evaluated as a part of the annual NPDES MS4 report to DEQ. The City of Albany submits an MS4 report to DEQ by November 1st of each year. Each annual report will be made available on the City's website for public input. All records and information related to the development, implementation, and tracking of the SWMP are retained for five years.

Connection to Total Maximum Daily Loads

Under the Clean Water Act, the City is subject to Total Maximum Daily Load regulations. A TMDL is used to set waste load allocations for pollutants entering waterbodies. All waters listed as impaired on Oregon's 303(d) list are required to have a TMDL developed. TMDLs act as a blueprint for restoring impaired or polluted waters from non-point source pollution. The City of Albany has been designated as a "management agency" for several pollutants in the Willamette River.

The DEQ has determined that the Willamette River does not meet water quality standards for temperature, bacteria, and mercury. This SWMP will address the City's approach to meeting performance benchmarks outlined in the TMDL, and ultimately reducing stormwater contribution for these pollutants. By staying in compliance with MS4 permit requirements, the City achieves the necessary TMDL allocations for point source stormwater discharges.

Section 2 Stormwater Control Measures

For MS4 Phase II communities there are six core elements in the management of stormwater. When the requirements of each minimum stormwater control measure are implemented together, a significant reduction in pollutants entering receiving waterbodies can be achieved. Specific requirements for each section can be found in schedule A.3 of the NPDES MS4 Phase II General Permit. This section will describe each program or BMP the City implements for each minimum control measure.

- I. **Public Education and Outreach:** Stormwater education materials and events are targeted at the public, local elected officials, land use planners, engineers, and construction site operators. This control measure is meant to raise awareness about stormwater and how individual actions and choices can impact water quality.
- II. **Public Involvement and Participation:** Provides an avenue for public comment on SWMP programs and development. Stormwater and water quality stewardship opportunities are a main element of this control measure.
- III. **Illicit Discharge Detection and Elimination:** Outlines the programs used to prohibit, detect and eliminate illicit discharges into the stormwater network. Elements of this control measure include strategies to proactively seek out pollution, creation of a system wide MS4 outfall map, development of municipal regulations, and illicit discharge reporting tools.
- IV. **Construction Site Stormwater Runoff Control:** Programs in this control measure are designed to limit erosion and runoff from construction activities. Key components include Erosion and Sediment Control Plans, construction site inspections and enforcement procedures for violations.
- V. **Post-Construction Stormwater Management in New Development and Redevelopment:** This control measure focuses on strategies to treat stormwater runoff from new or redevelopment. Major elements involve performance and treatment standards of stormwater controls, construction site runoff plan reviews, and operation and maintenance agreements.
- VI. **Pollution Prevention and Good Housekeeping:** The objective of this control measure is to reduce pollutants generated from municipal activities. Major components include cleaning and maintenance of stormwater controls, development of BMPs for municipal operations designed to limit pollution, staff training, and pollution disposal procedures.



The education and outreach program is designed to address stormwater and water quality issues of significance within Albany. The city conducts ongoing education and outreach programs to inform the public, municipal decision makers, and construction site operators about the impact of stormwater discharges and the steps they can take to reduce pollutant runoff. The City's goal is to motivate positive public action and reduce behaviors which have an adverse effect on water quality by providing information on the consequences of stormwater pollution. A variety of outreach mediums are utilized to achieve outreach goals including social media, in-person events, and traditional advertising strategies. A public which is more knowledgeable about stormwater issues will ultimately be more supportive of the City's efforts to improve water quality.

Public Education and Outreach

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<h3>Albany Farmers Market Booth</h3>	<p>Responsible Parties: Environmental Services</p> <p>Frequency: 2-3 times annually</p> <p>Description: Hand out water quality and conservation information and promotional items, distribute native plants, and promote water related City initiatives during the Albany Farmers Market. Other topics include septic maintenance, illicit discharge reporting, and watershed awareness. Provide an avenue for citizens to ask Environmental Services staff in-person questions.</p> <p>Target Audience: General public, homeowners, school children</p>	<ul style="list-style-type: none"> ·Increase water quality and conservation awareness. ·Broaden advertisements for City water quality initiatives. <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Temperature ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Number of items distributed ·Number of in-person interactions
<h3>Social Media Water Quality Campaign</h3>	<p>Responsible Parties: Environmental Services, Communications</p> <p>Frequency: Ongoing</p> <p>Description: Create images, animations, cartoons, and specific water quality messaging campaigns for City of Albany social media accounts.</p> <p>Target Audience: General public, businesses, homeowners, school children</p>	<ul style="list-style-type: none"> ·Raise awareness of City water quality and conservation programs. ·Encourage water conservation and FOG and wipes down the drain prevention. <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Temperature ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Number of social media interactions
<h3>Big City Trucks</h3>	<p>Responsible Parties: Environmental Services, Various Public Works Departments</p> <p>Frequency: Annually</p> <p>Description: Distribute water quality and conservation materials to school children while displaying public works trucks and other machinery.</p> <p>Target Audience: General public, school children</p>	<ul style="list-style-type: none"> ·Raise awareness of Public Works efforts towards improving water quality. ·Encourage water conservation and good stewardship of water resources. <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Temperature ·Bacteria 	<ul style="list-style-type: none"> ·Number of items distributed ·Number of in-person interactions

Public Education and Outreach

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<p style="text-align: center;">KPTV "Clean Water, it's Our Future"</p>	<p>Responsible Parties: KPTV Frequency: Ongoing Description: Another collaborative approach to water quality and conservation messaging. This initiative uses a local news personality to create television ads which air during news broadcasts. Targets the cable television demographic throughout the Willamette Valley. Also has a static webpage which televised ads refer viewers to. Target Audience: General public, homeowners</p>	<p>·Promote season specific water quality content. ·Promote water quality and conservation to a larger and more diverse audience than individual municipalities are capable of. TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury</p>	<p>·Television metrics ·Webpage views</p>
<p style="text-align: center;">Stormwater Facility Doorhangers</p>	<p>Responsible Parties: Environmental Services, Natural Treatment Systems Frequency: Ongoing Description: Distribute doorhangers to homeowners in neighborhoods with streetside SWQ facilities which describe their function and importance. List encouraged activities, such as weeding, and prohibited activities like spraying herbicides. Target Audience: Homeowners</p>	<p>·Inform homeowners about the impact SWQ facilities have on water quality. ·Reduce maintenance and remediation needs with streetside facilities. TMDL Pollutants Addressed: ·Bacteria ·Mercury</p>	<p>·Number of doorhangers distributed</p>
<p style="text-align: center;">Stormdrain Marking</p>	<p>Responsible Parties: Environmental Services, Natural Treatment Systems Frequency: Ongoing Description: Mark stormdrains with "drains to river" placard. Target Audience: General public, homeowners</p>	<p>·Raise awareness that stormwater goes directly into creeks and rivers instead of undergoing treatment like wastewater. TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury</p>	<p>·Number of stormdrains marked</p>

Public Education and Outreach

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<p style="text-align: center;">After the Flush Presentation</p>	<p>Responsible Parties: Environmental Services Frequency: As requested Description: An interactive presentation describing the process of wastewater treatment once it leaves students homes. An element of this presentation is also focused on the differences between stormwater and wastewater, with an emphasis on stormwater going directly to rivers and lakes without being treated. Target Audience: School children</p>	<p>·Raise awareness about pollutants in stormwater and surface water quality. ·Raise awareness about the water treatment process. TMDL Pollutants Addressed: ·Bacteria</p>	<p>·Number of students presented to</p>
<p style="text-align: center;">Calapooia Watershed Council Outreach Partnership</p>	<p>Responsible Parties: Calapooia Watershed Council (CWC), Natural Treatment Systems, Greater Albany Public Schools Frequency: Throughout summer Description: Albany has partnered with the CWC to host several student outreach events. Elementary students practice hands-on science at local parks and wetlands including building a model to observe how wetlands filter water. A snorkel program introduces children to freshwater habitats and biology. During macroinvertebrate sampling, students collected small fish, crawfish, and other macroinvertebrates from the South Santiam River. Fifth grade students dissected salmon and took part in water quality sampling on the South Santiam River. Target Audience: School children</p>	<p>·Raise interest in wetland and environmental science, aquatic habitats, and natural resource careers. TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury</p>	<p>·Number of students participated</p>

Public Education and Outreach

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<p style="text-align: center;">RUSLE2</p>	<p>Responsible Parties: Engineering Frequency: 2 times annually Description: Presentation on RUSLE2 software aimed at estimating erosion. Target Audience: Construction Site Operators</p>	<p>·Decrease sedimentation runoff from construction sites</p> <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Bacteria ·Mercury 	<p>·Number of presentations</p>



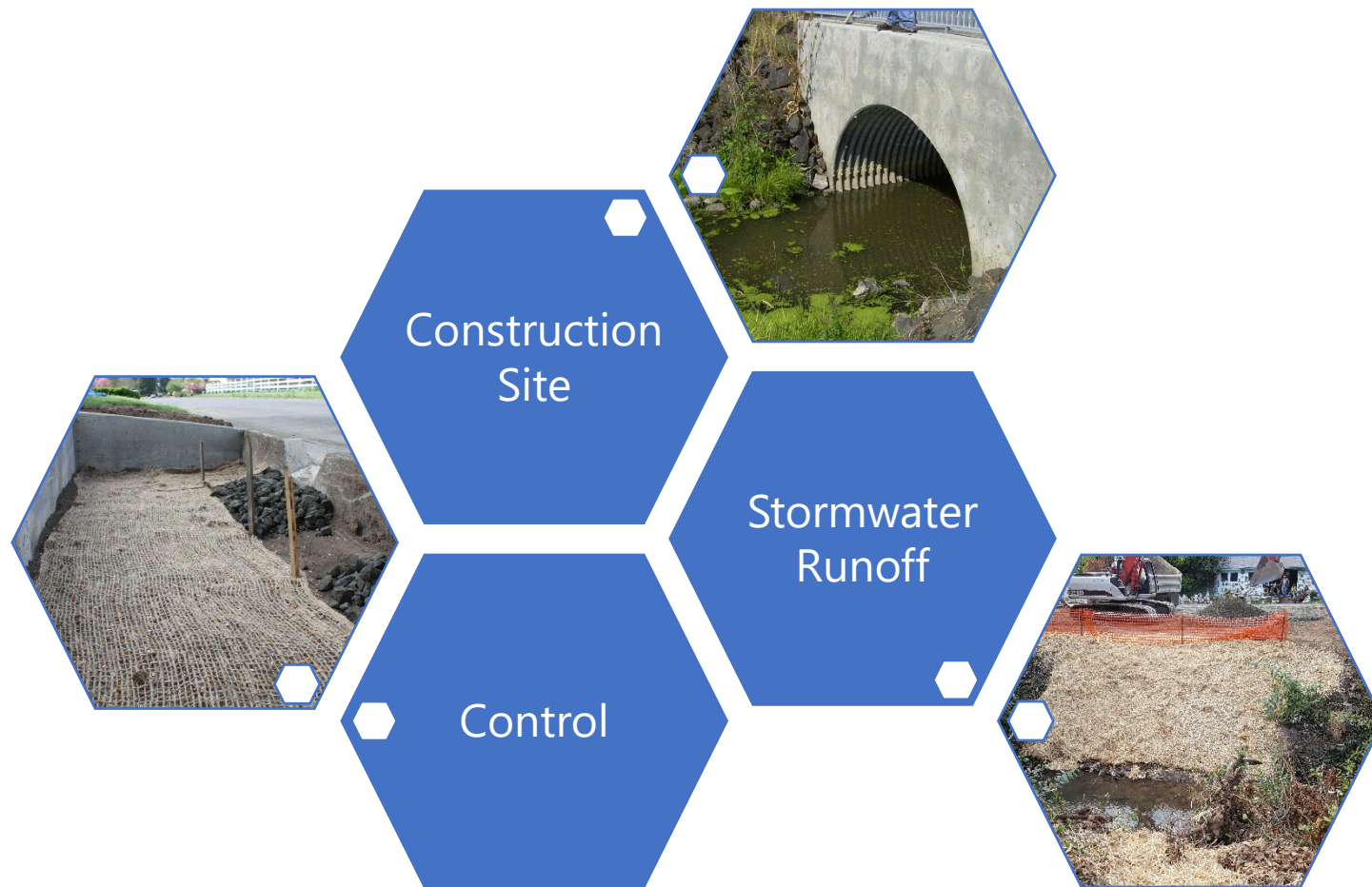
Partnerships are a key component of the City's approach towards the public involvement and participation stormwater control measure. Capitalizing on public interest and utilizing community input and knowledge can help the City more efficiently manage stormwater. Currently, City public participation events focus on improving riparian health in rivers, streams, and wetlands. Additionally, this SWMP will be made available on Albany's website for public input and comment. The City aims to continue to widen the audience and perspectives involved in public stormwater and water quality projects.

Public Involvement and Participation

Program Name	Implementation	Goals and TMDL	Tracking Metrics
Riparian Plantings and Invasive Species Removal	<p>Responsible Parties: Parks and Recreation</p> <p>Frequency: 2 times annually</p> <p>Description: The City coordinates a riparian invasive species removal and native planting event.</p> <p>Target Audience: General public, homeowners</p>	<p>·Remove invasive species and encourage the reestablishment of native riparian vegetation.</p> <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Temperature 	<ul style="list-style-type: none"> ·Quantity of vegetation removed ·Number of native plants planted ·Number of volunteer participants
Periwinkle Wade	<p>Responsible Parties: Parks and Recreation</p> <p>Frequency: Annually in summer</p> <p>Description: An event which targets reaches of Periwinkle creek for invasive riparian species removal and riparian storm damage pruning.</p> <p>Target Audience: General public</p>	<p>·Remove invasive species and encourage the reestablishment of native riparian vegetation.</p> <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Temperature ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Quantity of vegetation removed ·Number of volunteer participants
Adopt-a-Park	<p>Responsible Parties: Parks and Recreation</p> <p>Frequency: Ongoing</p> <p>Description: Individuals, families, groups, or businesses can adopt one of Albany's 36 parks, trails, or natural areas. Activities include reporting of problems, invasive riparian species removal, plantings, cleanup, and graffiti removal.</p> <p>Target Audience: General public, businesses</p>	<p>·Foster involvement in park and greenspace health.</p> <p>·Remove invasive riparian species and encourage the reestablishment of native riparian vegetation.</p> <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Temperature ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Number of program participants

Public Involvement and Participation

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<h3>Watershed Council Funding</h3>	<p>Responsible Parties: S. Santiam Watershed Council, N. Santiam Watershed Council, Calapooia Watershed Council, City of Albany Water Quality</p> <p>Frequency: Ongoing</p> <p>Description: Funds projects aimed at watershed habitat restoration which include riparian plantings, instream log placement, and drinking water source protections.</p> <p>Target Audience: General Public</p>	<ul style="list-style-type: none"> ·Improve salmonid spawning and rearing habitats in upper Willamette Watershed. ·Remove invasive riparian species and encourage the reestablishment of native riparian vegetation. <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Temperature ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Annual contribution
<h3>Presentation to City Council</h3>	<p>Responsible Parties: Public Works</p> <p>Frequency: Annually</p> <p>Description: A presentation to City Council on water rates and programs.</p> <p>Target Audience: Elected Officials</p>	<ul style="list-style-type: none"> ·Inform decision makers on water quality topics. ·Provide an opportunity for public involvement and comment on water quality topics. <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Temperature ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Number of presentations
<h3>Publicly Accessible Website</h3>	<p>Responsible Parties: Public Works, Communications</p> <p>Frequency: Ongoing</p> <p>Description: Provide a website containing the SWMP, TMDL, MS4, illicit discharge complaint form, stormwater City ordinances, and contact information for City staff.</p> <p>Target Audience: Elected Officials and general public</p>	<ul style="list-style-type: none"> ·Make the SWMP available for public comment. ·Provide an avenue for public involvement in water quality policy development. <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Temperature ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Number of website visits



Albany's Construction Site Stormwater Runoff Control program was established to protect local water ways and the City's stormwater system from pollution generated by ground disturbing activities. When land is disturbed at a construction site, the soil erosion rate accelerates dramatically. The Erosion Prevention and Sediment Control (EPSC) program is designed to prevent sediment from leaving construction sites through planning and design for approved Best Management Practices (BMPs), plan review and permitting, construction site inspections, enforcement procedures, training, education, and tracking. The EPSC program has been developed to support the objectives of City municipal code Title 12, which are to "provide for the health, safety, and general welfare of the citizens of the City of Albany and to protect and enhance the water quality and natural functions of watercourses and water bodies through the regulation of stormwater discharges; to set forth uniform requirements for direct and indirect contributors to the stormwater system; and to enable the city of Albany to comply with applicable state and federal laws." Additional information on the EPSC program can be found in Albany's EPSC Manual developed to provide technical guidance for the design, installation, maintenance, and inspection of temporary and permanent EPSC BMPs.

Construction Site Runoff Control

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<p style="text-align: center;">Erosion Prevention and Sediment Control Education</p>	<p>Responsible Parties: Public Works Engineering Frequency: Ongoing Description: ·Conduct Erosion Prevention and Sediment control Workshop for local developers, engineers, and contractors. ·Facilitate training to ensure engineering and inspection staff receive Certified Erosion and Sediment Control lead Training (CESCL) within 6 months of employment. Target Audience: Developers, Engineers, Contractors</p>	<p>TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury</p>	<p>·Number of participants ·Number of staff with CESCL</p>
<p style="text-align: center;">Erosion Prevention and Sediment Control Manual</p>	<p>Responsible Parties: Public Works Engineering Frequency: Update by February 28, 2024 Description: Update EPSC manual to be compliant with current MS4 permit: ·Develop EPSC template specific to Albany to incorporate into EPSC Manual. ·Review and update protocols for repeat violations, escalating enforcement, timelines for compliance, and specific factors for response procedures. ·Develop method to qualitatively summarize annually how BMPs have been functioning for construction site controls for tracking and assessment. Target Audience: Developers, Engineers, Contractors</p>	<p>TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury</p>	<p>·Completion of updates to EPSC manual ·Completion of EPSC escalating enforcement protocol ·Completion of tracking and assessment summary</p>

Construction Site Runoff Control

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<p style="text-align: center;">Erosion Prevention and Sediment Control Plan Review and Inspection</p>	<p>Responsible Parties: Public Works Engineering Frequency: Update by February 28, 2024 Description: ·Review and update in-house checklist used for erosion control plan reviews to ensure consistency with NPDES MS4. ·Continue to require EPSC Plans and issue permits for developments that meet or exceed threshold area requirement of 2,000 square feet or more of all land disturbing activities. ·Continue to inspect construction sites in accordance with the City’s Construction Site Inspection procedures. Target Audience: Developers, Engineers, Contractors</p>	<p>TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury</p>	<p>·Completion of EPSC Plan Review checklist ·Number of EPSC plans reviewed and permits issued. ·Number of erosion control inspections performed.</p>



As a community grows, so does the amount of surface area covered by parking lots, roads, and rooftops. Rainfall cannot soak through these impervious surfaces; instead, the rainwater flows quickly across them – picking up pollutants along the way – and enters ditches or storm drains, which usually empty directly and without treatment into local water ways. Albany’s Post-Construction Site Runoff Control program was established in January of 2015 to retain rainwater and encourage it to soak into the ground where possible, filter out pollutants, and slow the rate of runoff flow. The Stormwater Management Engineering Standards (SMES) was updated at the same time and focuses on sizing requirements for approved stormwater quality facilities and drainage standards to address new and redevelopment projects and require treatment but not retention of the design storm with a target removal of 80 percent TSS from captured runoff. Stormwater management is an important part of Albany’s efforts to improve water quality, protect fish habitat, and protect properties and infrastructure from flooding.

The SMES were developed in anticipation of NPDES MS4 Permit issuance and Albany applied for coverage under the permit in June 2021. Subsequently, the city completed a gap analysis between the 2021 MS4 Permit and its existing Stormwater Program and identified updates required to fully comply including: development of a site performance standard based on a Numeric Stormwater Retention Requirement (NSRR) to target natural surface or predevelopment hydrologic function to retain rainfall onsite and minimize the offsite discharge of precipitation utilizing structural stormwater controls that infiltrate, capture and/or evapotranspirate stormwater; development of review criteria for determining when the NSRR cannot be met and establishing guidelines for written technical justification; update the minimum parcel size triggering application of post-construction stormwater standards; modifications to exemptions in Title 12.45 of the municipal code to be consistent with permit requirements; and outreach to the public, staff and policy makers on the implementation and enforcement of the new requirements and design methodologies, to provide education and collect feedback.

Post Construction Stormwater Management

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<p>Post Construction Stormwater Quality Education</p>	<p>Responsible Parties: Public Works Engineering Frequency: Ongoing Description: ·Distribute educational materials on Stormwater Management Engineering Standards (SMES) to developers and engineers. ·Conduct training for staff that is responsible for design and/or design review of structural stormwater controls required to meet treatment standards. ·Provide outreach workshop for development, engineering, and design community about changes in the Post Construction Stormwater standards. Target Audience: Developers, Engineers, Contractors</p>	<p>TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury</p>	<p>·Number of participants</p>
<p>Low Impact Development Code & Standards Review</p>	<p>Responsible Parties: Public Works Engineering Frequency: Update by February 28, 2024 Description: ·Identify barriers to using low impact development and green infrastructure as strategies for stormwater management. ·Prepare a LID Code and Standards Review technical memorandum. ·Update code and standards to remove barriers identified in LID Code and Standards Review. Target Audience: Developers, Engineers, Contractors</p>	<p>TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury</p>	<p>·Completion of review ·Completion of technical memorandum ·Status of updates to code and standards</p>

Post Construction Stormwater Management

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<p style="text-align: center;">Post Construction Runoff Criteria and Stormwater Design Standards</p>	<p>Responsible Parties: Public Works Engineering Frequency: Update by February 28, 2024 Description: Review Municipal Code, Stormwater Design Standards, Construction Specifications, and related documents to identify modifications that are necessary to incorporate requirements from Schedule A.3.e.ii through vi including: ·Require stormwater controls for projects that create or replace 5,000 SF of impervious surface. ·Adopt NSRR, treatment standards, alternative compliance standards, and offsite stormwater mitigation options consistent with Schedule A.3.e.iv. ·Establish feasibility criteria and design standards for infiltration-based stormwater management facilities. ·Develop updated stormwater design standards and related codes and ordinances to incorporate the identified changes. Target Audience: Developers, Engineers, Contractors</p>	<p>TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury</p>	<p>·Propose and adopt updates to Code, Design standards, and related documents. ·Identify NSRR and alternative compliance standards. ·Update Offsite Stormwater Program</p>



An illicit discharge is defined as any discharge into the stormwater network that is not entirely constituted of precipitation, unless an exemption is granted under Albany Municipal Code Title 12. In an urban setting, illicit discharges into the stormwater network have the potential to be a significant source of water pollution. These discharges can originate from commercial, industrial, or residential sources. The goal of the IDDE program is to detect and eliminate harmful pollutants from being introduced into City waterways. The City actively searches out illicit discharges through dry weather screening, high priority screening inspections, and area explorations as well as promptly responding to citizen pollution concerns. Additionally, Industrial Pretreatment staff conduct visual stormwater inspections of all permitted industrial facilities within the City.

Illicit Discharge Detection and Elimination

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<p style="text-align: center;">Illicit Discharge Complaint Response Program</p>	<p>Responsible Parties: Environmental Services, Communications, Collections, APD Code Enforcement</p> <p>Frequency: Available all hours and days</p> <p>Description: <i>Citizen Reporting Tools:</i> A phone number, email address, and website form are available to report stormwater pollution and other environmental concerns. During non-work hours an Environmental Services staff member is on-call to respond to complaints.</p>	<ul style="list-style-type: none"> ·Provide a way for citizens to report stormwater pollution. ·Respond to complaints the same business day. ·Track all complaints and investigations. <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Temperature ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Number of illicit discharge investigations ·Number of illicit discharges discovered and eliminated
	<p><i>Enforcement Escalation Plan:</i> An Enforcement Escalation Plan has been developed to make enforcement procedures equitable, effective, and transparent. This plan considers factors such as amount and type of pollutant discharged, prior violations, intent or economic benefit of discharge, and level of threat to the environment and human health. See matrix below.</p>		
	<p><i>Complaint and Investigation Tracking:</i> Tracking of IDDE complaints and investigations occurs through the City's computerized maintenance management system that includes time and date of incident and initial investigation, complainant information, violation description, enforcement response, photos, and next steps and/or closing the request.</p>		

Enforcement Escalation Plan Matrix

Illicit Discharge Matrix			
Enforcement Level	Nature of Discharge	Enforcement Action	Implementation Steps
1	<ul style="list-style-type: none"> · First time violator (Minor threat to environment/human health/City infrastructure) · Isolated incident. · Violator lacks knowledge or awareness. · Easily and immediately correctable or preventable with BMP. 	<ul style="list-style-type: none"> · Verbal and/or written warnings and notice of corrective actions. 	<ul style="list-style-type: none"> · Maintain documentation of incident. · Recommend BMPs to correct or prevent future violations. · Conduct follow-up to ensure reasonable steps have occurred to achieve compliance.
2	<ul style="list-style-type: none"> · First time violator (Moderate threat to environment/human health/City infrastructure). · Isolated incident or reasonable suspicion of past or ongoing discharge. · Failure to comply with level 1 enforcement BMPs leading to illicit discharge. 	<ul style="list-style-type: none"> · Coordinate with Code Enforcement officers to issue citations. 	<ul style="list-style-type: none"> · Maintain documentation of incident. · Remediation is required to be completed by violator, contractor, or City staff. · Deadline for compliance will be issued by City staff. · Re-inspect within 10 days or prior to forecasted rain to ensure compliance. · Add incident site to chronic illicit discharge ArcGIS layer for priority screening.
3	<ul style="list-style-type: none"> · First time violator (Severe threat to environment/human health/City infrastructure). · Multiple violations of a similar nature (any severity). · Failure to comply with level 2 enforcement corrective action. · Economic benefit of non-compliance. · Willful negligence leading to illicit discharge. · Violator is uncooperative or unwilling to follow corrective action. 	<ul style="list-style-type: none"> · Coordinate with Code Enforcement officers to issue citations. · Refer incident to APD for potential criminal investigation. · Contact DEQ or other outside agencies as necessary. 	<ul style="list-style-type: none"> · Maintain documentation of incident. · Immediate cessation of activities causing pollutants to enter stormwater or WOTS. · Remediation is required to be completed by violator, contractor, or City staff. · If abatement is inadequate or incomplete, the City may conduct or contract cleanup activities at the cost of violator. · Re-inspect within 10 days or prior to forecasted rain to ensure compliance. · Add incident site to chronic illicit discharge ArcGIS layer for priority screening.

Illicit Discharge Detection and Elimination

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<p>Dry Weather Outfall Reconnaissance Inventory</p>	<p>Responsible Parties: Environmental Services Frequency: Annually, June through September Description: Continue to screen MS4 outfalls, during dry weather, looking for illicit discharges. Conduct surveys of outfalls which include a unique identifier, information on location, chemical characteristics of discharges, physical pipe information, and photos.</p>	<ul style="list-style-type: none"> ·Screen at least 20% of MS4 outfalls annually. ·Detect, track, and eliminate illicit discharges. ·Develop priority screening locations. ·Update outfall locations on MS4 map using survey grade receiver. <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Temperature ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Number and percent of outfalls surveyed ·Number of outfalls added to priority screening list
<p>Chronic Illicit Discharge and Priority Screening Visits</p>	<p>Responsible Parties: Environmental Services Frequency: Ongoing Description: Through site visits, land use, area drained, and illicit discharge history, a map of priority screening locations will be developed. From this map, priority locations will be frequently screened.</p>	<ul style="list-style-type: none"> ·Re-examine areas to ensure illicit discharge relapse does not occur. ·Catch illicit discharges before they enter the stormwater pipe system. <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Temperature ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Number of priority locations screened ·Number of illicit discharges identified and eliminated
<p>Random Area and Site Exploration</p>	<p>Responsible Parties: Environmental Services Frequency: Ongoing Description: Albany conducts exploration of random areas throughout the City checking for current or potential illicit discharges. An emphasis is placed on conducting these visits during wet weather to complement dry weather inventory screening.</p>	<ul style="list-style-type: none"> ·Proactively seek out previously unknown illicit discharges. <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Temperature ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Number of illicit discharges identified and eliminated

Illicit Discharge Detection and Elimination

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<p style="text-align: center;">Pollutant Parameter Action Levels</p>	<p>Responsible Parties: Environmental Services Frequency: Ongoing Description: Pollutant parameter action levels have been established to trigger water quality investigations during field sampling.</p>	<p>·Establish pollutant exceedance levels for investigation purposes. TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury</p>	<p>·Number of illicit discharges identified and eliminated</p>
<p style="text-align: center;">IDDE Training</p>	<p>Responsible Parties: Environmental Services Frequency: Annually Description: Provide training on spill response and cleanup, enforcement procedures, and illicit discharge investigation and reporting for all relevant staff.</p>	<p>·Annual training for staff. ·New hire training within the first 30 days. TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury</p>	<p>·Number of trainings and participants</p>



Proper operation and maintenance of stormwater infrastructure, along with environmentally focused BMPs, can reduce the introduction of pollutants into the stormwater network. Keeping pollutants out of surface waters is more cost efficient and environmentally beneficial than post-contamination remediation. Municipal activities which contribute to this goal include many departments throughout the City from Public Works, Parks and Recreation, and the Albany Police Department. Albany is currently in the process of evaluating and updating municipal water quality BMPs to meet MS4 schedule requirements.

Pollution Prevention and Good Housekeeping

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<p style="text-align: center;">Big Pickup, Hazardous Waste Collection, Material Recycling Events</p>	<p>Responsible Parties: Environmental Services, Albany Police Department, Collections Frequency: Annually Description: The city provides a location and dates to drop off garbage, hazardous waste and recycling materials which may be too large or numerous for traditional disposal methods. These events are used by APD Code Enforcement to provide an opportunity for citizens in violation of City municipal code to achieve compliance on their property. Target Audience: General public, homeowners</p>	<p>·Remove potential waste and garbage before it can end up in stormwater, surface water or groundwater. TMDL Pollutants Addressed: ·Bacteria ·Mercury</p>	<p>·Tons of refuse collected</p>
<p style="text-align: center;">Callout Debriefs and Scenario Training</p>	<p>Responsible Parties: Environmental Services Frequency: Quarterly Description: Team meetings discussing callout incidents and responses. An emphasis is placed on lessons learned from callout events. Scenario training focuses on hypothetical scenarios and how staff would respond.</p>	<p>·Prepare staff for future callout situations. ·Convey lessons learned during individual callouts to rest of staff. TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury</p>	<p>·Number of callout debriefs per year</p>
<p style="text-align: center;">Storm System Inspection and Maintenance</p>	<p>Responsible Parties: Collections, Streets Frequency: Ongoing Description: Cleaning and TV'ing of stormwater infrastructure is conducted on a basin centric schedule. High debris storm basin areas are on shorter maintenance schedules. Ditch maintenance is completed as needed, or whenever flow is obstructed.</p>	<p>·Remove sediment and obstacles in catch basins and pipes to ensure adequate operation. ·50% of catch basins and inlets cleaned and inspected every 5 years. TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury</p>	<p>·Miles of conveyance system inspected ·Number of catch basins inspected/cleaned</p>

Pollution Prevention and Good Housekeeping

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<h3>Street Sweeping</h3>	<p>Responsible Parties: Streets</p> <p>Frequency: Ongoing</p> <p>Description: Street sweeping is conducted on a monthly schedule to remove pollutants and debris before they enter stormwater infrastructure. Removed materials are transported to a local landfill. In the winter, rock is put down to help commuters with winter conditions. This rock is collected by street sweepers as soon as practicable. City owned parking lots are swept as needed. Street sweepers assist with leaf removal in the fall.</p>	<ul style="list-style-type: none"> ·Remove pollutants and sediment from roadways before they enter the stormwater network. ·Decrease sediment loading of catch basins. <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Miles of roadway swept ·Mass of materials removed
<h3>Integrated Pest Management</h3>	<p>Responsible Parties: Natural Treatment Systems, Parks and Recreation, Streets</p> <p>Frequency:</p> <p>Description: A plan focusing on the proper application and storage of pesticides and herbicides. All employees and contractors applying pesticides and herbicides must undergo training and maintain certification.</p>	<ul style="list-style-type: none"> ·Limit pesticide and herbicide use when possible. ·Prevent pesticides and herbicides from entering waterways. <p>Maintain required certification.</p> <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Mercury 	<ul style="list-style-type: none"> ·Employees certified
<h3>Asset Management and Infrastructure Mapping</h3>	<p>Responsible Parties: Computerized Maintenance Management Systems Group, Environmental Services</p> <p>Frequency: Ongoing</p> <p>Description: Maintain a digital inventory of all stormwater controls. Update inventory as new controls are constructed or discovered.</p>	<ul style="list-style-type: none"> ·Have accurate mapping data on the stormwater network to efficiently trace illicit discharges. <p>TMDL Pollutants Addressed:</p> <ul style="list-style-type: none"> ·Temperature ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Number of outfalls updated in inventory

Pollution Prevention and Good Housekeeping

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<p style="text-align: center;">Stormwater Quality Facility Inspection and Maintenance</p>	<p>Responsible Parties: Natural Systems Treatment, Environmental Services Frequency: Ongoing Description: Every public water quality facility is visited annually. Priority is placed on high sediment load and high visibility areas. Corrective action letters are sent to owners of private facilities and technical assistance is provided when necessary.</p>	<ul style="list-style-type: none"> ·20% of private SWQ inspected annually. ·Ensure private stormwater quality facilities are operating correctly and adequately treating stormwater. TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Number/percentage of public and private facilities inspected ·Number of work orders completed
<p style="text-align: center;">1200-Z Airport Permit</p>	<p>Responsible Parties: Environmental Services Frequency: Ongoing Description: The City operates a 1200-Z permit for a municipal airport. Stormwater quality testing, pollution control, and facility operations and maintenance inspections are key components of this permit.</p>	<ul style="list-style-type: none"> ·Reduce discharge of pollutants from airport into stormwater. TMDL Pollutants Addressed: ·Temperature ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Number of facility inspections ·Water quality testing
<p style="text-align: center;">Litter Control</p>	<p>Responsible Parties: Parks and Recreation, Environmental Services, APD Frequency: Ongoing Description: The City is developing an SOP for cleanup of abandoned campsites. The City also conducts or requires post event litter cleanups.</p>	<ul style="list-style-type: none"> ·Reduce discharge of litter into stormwater system and surface water. TMDL Pollutants Addressed: ·Bacteria ·Mercury 	<ul style="list-style-type: none"> ·Annual review/update

Pollution Prevention and Good Housekeeping

Program Name	Implementation	Goals and TMDL	Tracking Metrics
<p>Municipal Stormwater Pollution Control Plan</p>	<p>Responsible Parties: Environmental Services Frequency: Ongoing Description: The City has individual SOPs, ordinances, and other pollution prevention strategies aimed at reducing stormwater pollution.</p>	<p>·Reduce discharge of pollutants into the stormwater system and surface water from municipal operations. TMDL Pollutants Addressed: ·Bacteria ·Mercury</p>	<p>·Annual review/update</p>
<p>Pollution Prevention Training</p>	<p>Responsible Parties: Public Works Frequency: Annually and Ongoing Description: Staff undergo trainings in hazardous and universal waste management and sanitary sewer overflow response.</p>	<p>·Reduce discharge of pollutants into stormwater system and surface water from municipal operations. TMDL Pollutants Addressed: ·Bacteria ·Mercury</p>	<p>·Number of trainings</p>

