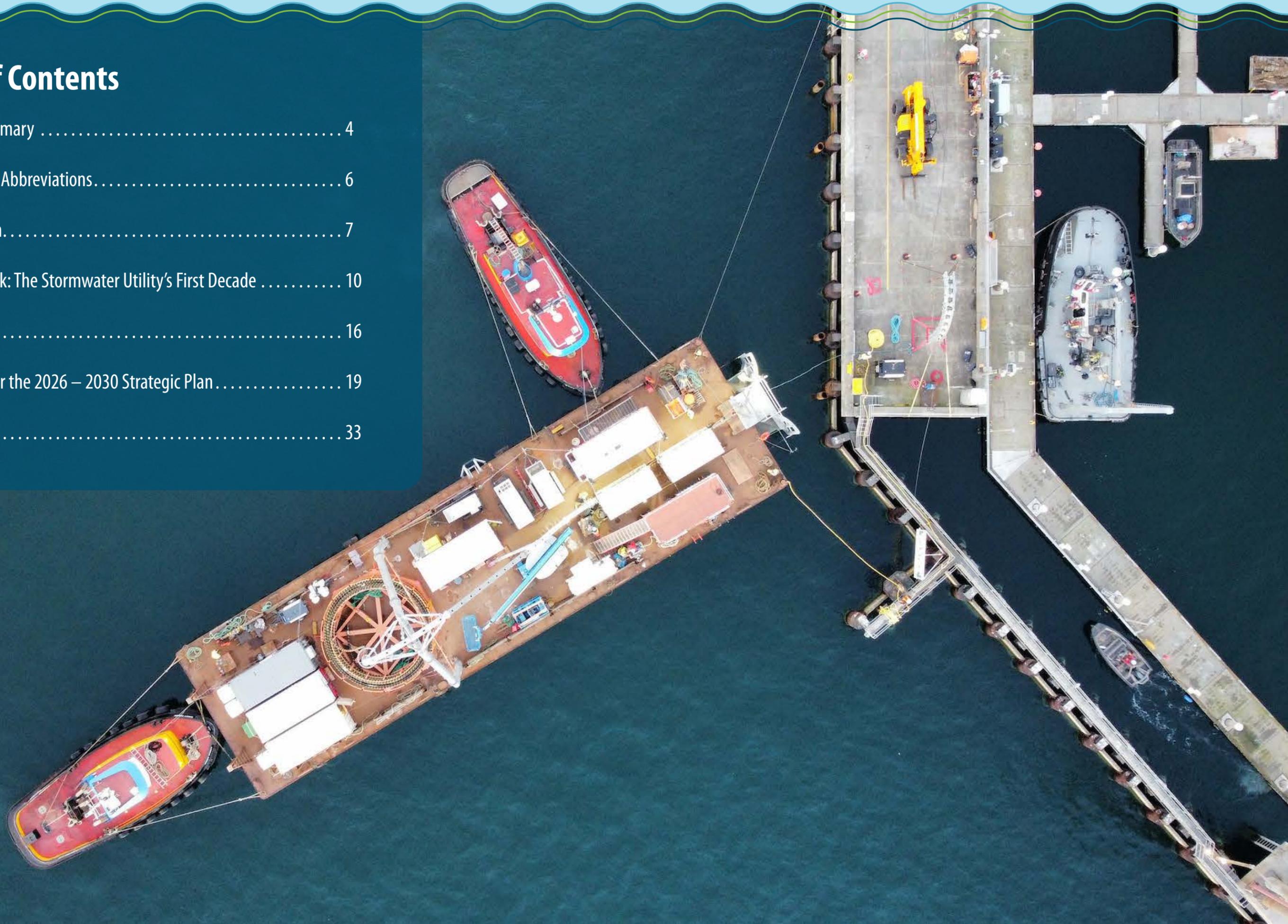


PORT OF SEATTLE

MARINE STORMWATER UTILITY 2026-2030 STRATEGIC PLAN

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EXECUTIVE SUMMARY

The Marine Stormwater Utility (Utility) of the Port of Seattle (Port) was created in 2014 and activated in 2016 to "... provide services, facilities, systems, and programs for surface water and stormwater management and pollution control to customers within the service area ..."¹ The intention of the Utility is to benefit regional water quality by improving stormwater leaving Port facilities. The first five years of the Utility focused on building the program's financial backbone, creating policies to document and guide the work, and assessing stormwater infrastructure to obtain baseline data and prioritize future work.

In 2021, the Utility's vision and mission statements, priorities, goals, and strategies were agreed upon and documented in the Utility's first Strategic Plan (2021-2025). Notable accomplishments included:

- » Completing a condition assessment of the Port's stormwater system
- » Conducting numerous infrastructure upgrades
- » Identifying and implementing innovative water quality technologies
- » Publishing inclusive communication materials and resources, and maintaining sustainability certifications

Drawing on lessons learned and stakeholder feedback, the Utility developed this updated strategic plan to refine the strategic framework and set a clear direction for the next five years. The Utility's 2026 – 2030 Strategic Plan (Strategic Plan) emphasizes five priority areas:

- » Resilient Infrastructure
- » Exceptional Value
- » Sustainability
- » Climate Change and Resiliency
- » Equity, Diversity, and Inclusion

This Strategic Plan defines the goals, expected outcomes, and strategies that will guide the Utility's work through 2030. The Utility will develop annual work plans with specific tasks to implement the strategies and track progress. This approach is based on the Utility's strategic planning framework designed to help use resources effectively, adapt strategies to shifting landscapes, and simplify tracking of progress and outcomes. The following table summarizes the goals and outcomes that make up this Strategic Plan. Section 4 includes strategies for achieving these goals and outcomes.



Ryan Calkins, Toshiko Hasegawa, Sam Cho, Hamdi Mohamed, Fred Felleman, and Stephen P. Metruck

¹ 2014, Port of Seattle, Stormwater Utility Charter, Section 1.3

GOAL 1: Reduce stormwater pollution leaving Port properties

- » Outcome 1: Increase percentage of Phase I Permit stormwater pollution prevention plans with updated best management practices
- » Outcome 2: Maintain Port-operated water quality treatment systems according to operation and maintenance plans
- » Outcome 3: Decrease percentage of spills that result in an illicit discharge to receiving waters
- » Outcome 4: Respond to reports of spills or illicit discharges immediately upon notification to Port personnel

GOAL 2: Maintain and improve stormwater infrastructure

- » Outcome 1: Increase percentage of stormwater assets rehabilitated
- » Outcome 2: Successful implementation of annual maintenance program

GOAL 3: Strengthen customer, tenant, and community relationships

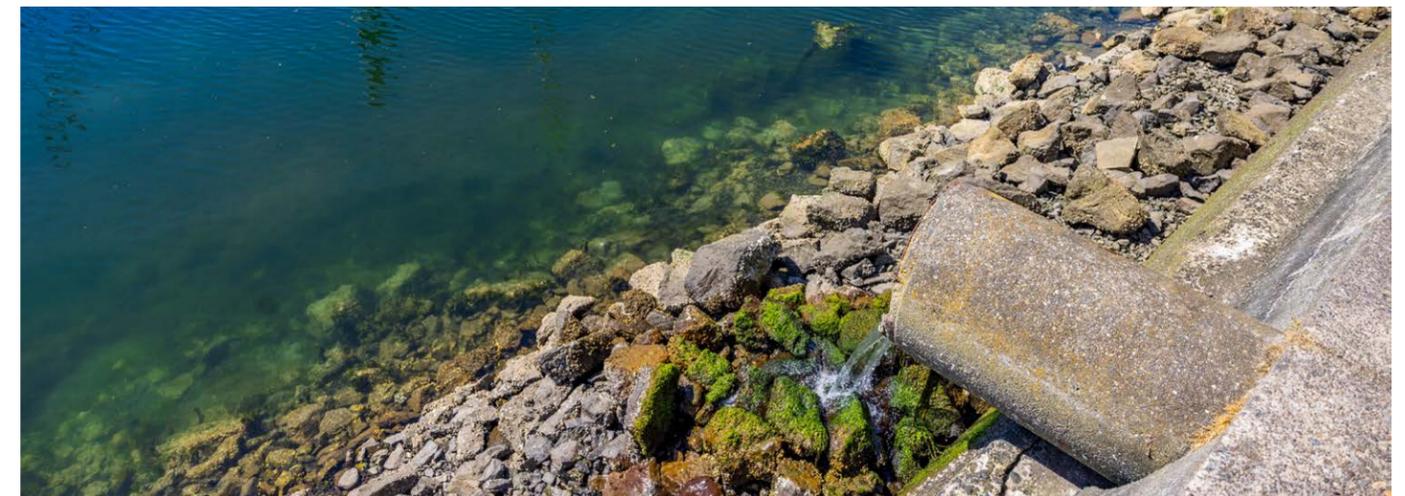
- » Outcome 1: Project implementation and repairs are more efficient
- » Outcome 2: Increase number of partners who recognize and understand the Utility's benefits

GOAL 4: Meet or exceed compliance with federal, state, and local stormwater regulations

- » Outcome 1: Maintain compliance with the Port's Phase I Permit
- » Outcome 2: Maintain compliance for Port-operated facilities covered under the Industrial Stormwater General Permits
- » Outcome 3: Decrease remedial actions at Port-held Industrial Stormwater General Permit properties
- » Outcome 4: Decrease remedial actions for construction projects

GOAL 5: Improve financial system processes to support rate transparency

- » Outcome 1: Utility fees are supported by verified budget and expense data
- » Outcome 2: Internal and external partners understand Utility priorities
- » Outcome 3: Utility regulatory and asset goals are reflected in annual Marine Maintenance expense budget



Stormwater outfall at Shilshole Bay Marina

ACRONYMS AND ABBREVIATIONS

BMP	Best management practice
Ecology	Washington State Department of Ecology
GHG	Greenhouse gas
GIS	Geographic information system
ISGP	Industrial Stormwater General Permit
NWSA	Northwest Seaport Alliance
O&M	Operation and maintenance
OEDI	Office of Equity, Diversity, and Inclusion
Phase I Permit	Phase I Municipal Stormwater Permit
Port	Port of Seattle
SEA	Seattle-Tacoma International Airport
SEF	Sustainable Evaluation Framework
SOP	Standard operating procedure
SPU	Seattle Public Utilities
Strategic Plan	Marine Stormwater Utility 2026 – 2030 Strategic Plan
Utility	Marine Stormwater Utility



1. INTRODUCTION

The Port of Seattle (Port) is a special purpose government district, which was founded in 1911 to promote economic opportunities and quality of life in the Puget Sound region. It does so by advancing trade, travel, commerce, and job creation in an equitable, accountable, and environmentally responsible manner. The Port owns and operates properties along the Duwamish waterway, Elliott Bay, and the Puget Sound, with some portions managed by the Northwest Seaport Alliance (NWSA).

UTILITY BACKGROUND

The Marine Stormwater Utility (Utility) was established in 2014 and activated in 2016 to "... provide services, facilities, systems, and programs for surface water and stormwater management and pollution control to customers within the service area ..." with the intention of benefiting regional water quality. The Utility provides services to Port and NWSA customers to meet strict local, state, and federal stormwater regulations in support of the Maritime industry. The NWSA is a port development-authority partnership between the ports of Seattle and Tacoma that manages the container, breakbulk, automobile, and some bulk terminals in Seattle and Tacoma.

UTILITY VISION AND MISSION

Vision: Leading the way to a clean, healthy, and sustainable Puget Sound

Mission: Supporting a sustainable maritime industry with innovative stormwater management that benefits local communities and marine life.

RELATIONSHIP WITH CITY OF SEATTLE

The idea of creating the Utility was formed in the late 2000s and resulted in its official creation on November 25, 2014, by Commission Resolution No. 3696. Much of the foundational work involved finances, legal issues, and coordinating with the City of Seattle (Seattle Public Utilities [SPU]) on separating what was to become two stormwater systems: one managed by the Port's Utility and the other by SPU. While the separation was not physical (i.e., some assets are connected and discharge to local waterbodies), significant time was spent identifying more than 120 connections between the two systems.

The Utility's rate categories mirror those of SPU, but at a lower fee, and are similar to categories across the industry. The Utility endeavors to provide essential stormwater services to customers at a better value than when the Port's system was a small part of the much larger SPU system. This is possible because there is now dedicated funding for the Port stormwater system's upkeep, rehabilitation, and operation and maintenance (O&M).

² 2014, Port of Seattle, Stormwater Utility Charter, Section 1.3

PURPOSE OF THIS STRATEGIC PLAN

The first strategic plan of the Utility was published in 2021 after gathering input from stakeholders within the Port, NWSA, and their tenants. Stakeholders developed and agreed upon vision and mission statements. Priorities, goals, and strategies were completed and documented in the 2021 – 2025 Strategic Plan. This Strategic Plan is intended to update and refine the earlier strategic plan, while outlining priorities, goals and outcomes for the Utility during the next five years (2026 – 2030).

ALIGNMENT WITH PORT'S KEY PERFORMANCE INDICATORS

Timing and communication with the Ports financial and operational planning cycles is critical for the Utility to reach its goals. Coordination with the annual operating budget and five-year capital plan and setting stormwater infrastructure rehabilitation priorities, ensures the strategies are funded and supported by internal Port partners. The [Century Agenda](#) is the guiding document for the entire Port. It was first established in 2012, then updated in 2017 and again in 2020 to incorporate goals related to greenhouse gas (GHG) emission reductions and Equity, Diversity, and Inclusion. The Port's Century Agenda goals are supported by Key Performance Indicators (KPIs) for measuring progress and success. The following KPIs are directly supported by the Utility:

Century Agenda Goal 4: Be the greenest and most energy-efficient port in North America

Objective 10: Meet or exceed agency requirements for stormwater leaving Port-owned or operated facilities



Non-infiltrating bioretention stormwater treatment at Terminal 106



UPDATED APPROACH: GOAL-DRIVEN STRATEGIC PLAN AND ANNUAL WORK PLANS

The Utility's first Strategic Plan guided its work between 2021 and 2025 in support of six key goals. The new 2026 – 2030 Strategic Plan builds on that foundation with a refined framework to help the Utility define success while allowing for adaptability.

The Utility will implement and track progress on the 2026–2030 Strategic Plan using annual work plans to regularly identify, evaluate, and adjust actions based on real-world efficacy. This approach is based on a strategic planning framework designed to help the Utility use its resources effectively, adapt strategies to shifting landscapes, and simplify tracking. It includes a feedback loop to allow the Utility to measure progress and adjust strategies as needed. The framework is based on a multi-step process:

Framework	Process
Goals	Identify achievements that the Utility is working together with partners to accomplish
Outcomes	Determine quantitative or qualitative results that can be measured to determine progress on achieving the Utility's goals
Strategies	Develop broad strategies, or types of activities, that the Utility will employ to achieve outcomes
Tasks	Within annual work plans, identify specific, measurable activities that align with the strategies
Feedback Loop	Regularly measure the outcomes to gauge progress towards each goal. If the outcomes indicate that the Utility is getting closer to its goals, then the strategies are working. If not, the Utility will re-evaluate the strategies and determine if they need to be adjusted

The Utility has continually engaged internal and external stakeholders throughout the strategic plan development and implementation process. Teamwork and collaboration are key elements of achieving the Utility's goals.



2. LOOKING BACK: THE STORMWATER UTILITY'S FIRST DECADE

The Utility maintains and improves stormwater infrastructure and implements the Port's Stormwater Management Program, which has an objective of reducing polluted stormwater leaving Port properties, thereby improving regional water quality. From 2016 to 2019, the Utility focused on building a financial foundation, creating policies to guide operations, and conducting stormwater infrastructure assessments to establish baseline data and prioritize future work. This period was critical to establish the Utility within the larger Port organization, the NWSA, and among Port tenants and regional stormwater regulators.

In 2020, the Utility developed its first Strategic Plan with input from stakeholders, including Port and NWSA staff, and customers. From 2020 to 2025, the Utility transitioned from planning and formation to implementation, execution, and performance. The Utility developed policies and procedures, completed numerous capital improvements, installed innovative and green stormwater technologies, and strengthened collaboration within the Port, the NWSA, customers, and regulatory agencies. It has evolved into a mature program that effectively serves tenants and the maritime industry while advancing cost-effective asset management of stormwater systems, which improve Puget Sound water quality. Figure 1 illustrates major Utility milestones over the past few years.

Figure 1: Major Milestones Timeline



2020 – 2025 REVIEW: NAVIGATING CHALLENGES, ADVANCING STRATEGIC GOALS, AND DELIVERING EXCEPTIONAL VALUE TO CUSTOMERS AND THE COMMUNITY

Over the past five years, the Utility demonstrated resilience while advancing strategic goals and delivering exceptional value to Port customers and the regional community. The COVID-19 pandemic posed substantial disruptions to Port and tenant operations and impacted the Utility's revenue and operations. In August 2024, a cyberattack targeting the Port hindered operations and the ability to conduct normal business. Despite these disruptive events and turbulent conditions, the Utility provided steady support to its customers, ensuring stormwater needs were met while maintaining robust regulatory compliance.

STORMWATER REGULATORY COMPLIANCE

To balance operational needs of the maritime industry with regulatory changes aimed at improving regional water quality critical to salmon and other marine species, the Utility collaborated with Washington Public Ports Association, NWSA, the Washington State Department of Ecology (Ecology), and City of Seattle on stormwater codes and permits updates.

Throughout this period, the Utility supported the Port in meeting or exceeding regulatory compliance with stormwater permits³ by reviewing and commenting on the following:

- » 2019 and 2024 Phase I Municipal Stormwater Permits (Phase I Permits)
- » 2021 City of Seattle Stormwater Codes and Manual, and
- » 2020 and 2025 Industrial Stormwater General Permits (ISGP)

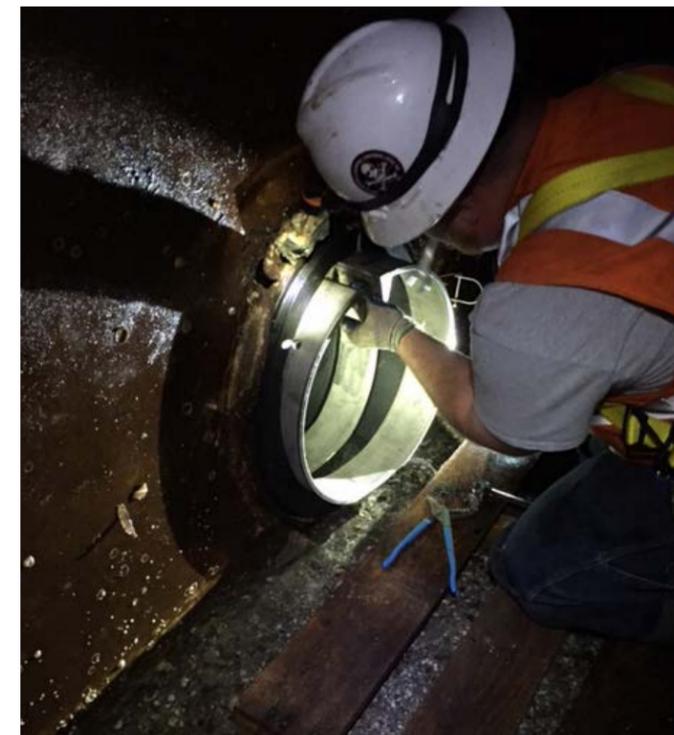
Ensuring that new Port staff receive timely environmental training was challenging during COVID-19. To meet this challenge, the Utility created online training sessions using the internal Learning Management System platform. New staff, including project managers and construction inspectors, were trained in best management practices (BMPs), spill response and notification procedures, and environmental requirements associated with Port operations and project construction. This training continues in a variety of formats including in-person, live virtual, and recorded media.



³ As a secondary permittee in the City of Seattle, the Port meets requirements of the Washington State Department of Ecology (Ecology) Phase I Municipal Stormwater (Phase I) Permit, the Ecology Stormwater Management Manual for Western Washington, and City of Seattle Stormwater Code and Manuals.



In 2019, the Utility completed an important milestone by conducting a full “condition assessment” of the Port stormwater system and establishing a baseline to identify priorities for asset repair and rehabilitation. This condition assessment included cleaning the system, capturing videos, evaluating stormwater infrastructure condition, and updating the stormwater geographic information system (GIS) map. The GIS map includes asset location, drainage basin delineation, and outfalls. In addition, the GIS map supports the Port’s Stormwater Management Program by including location of tenant and Port stormwater permit types, drainage basins, treatment systems, and source tracing for spill response. The stormwater GIS map is also used by Port departments during capital project development, permitting, and project review.



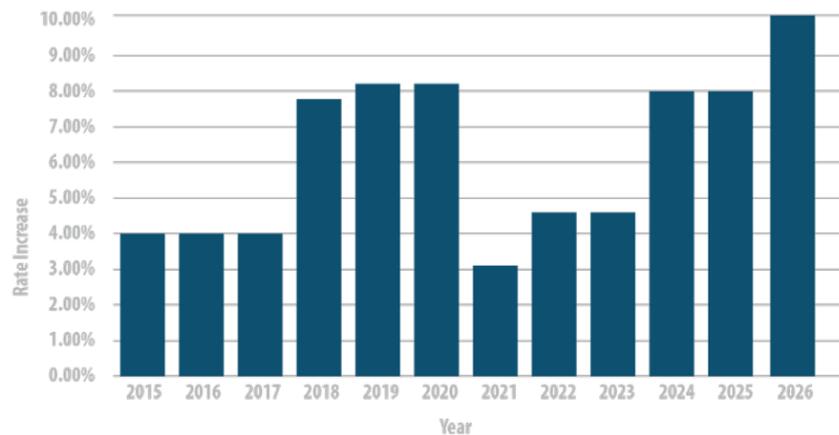
Installing and maintaining tide gates in stormwater outfalls

DEMONSTRATED VALUE TO CUSTOMERS

Since the Utility was established in 2014, the Port has effectively controlled rate increases and kept rates below those of the City of Seattle. The Port strives to maintain competitive stormwater utility rates through efficient use of its resources. As a result, funds generated from the utility fees are directly invested into Port stormwater programs and infrastructure. The Utility's asset management policies anticipate maintenance and capital needs and reduce emergency situations that can be costly and impact operations. The 2025 forecasted revenue of \$8.26 million pays for approximately 20 full-time personnel; specialized consultant services; three to eight Capital Projects; and all material, equipment, and construction costs for approximately 1,400 work orders executed by the Marine Maintenance team each year.

Figure 2 shows annual rate increases since the Utility's formation. Utility annual rate review and proposed increases are vetted by an executive advisory group, including the NWSA, and approved by the Port of Seattle Commission, who are elected leaders of the Port. Between 2021 and 2023, the Utility supported customers and bolstered recovery from the COVID-19 pandemic by lowering planned annual increases below the projected five-year rate forecast.

Figure 2 : Annual Utility Percent Rate Increases



2015-2017 rates defined in Charter
 2018 on, rates analyzed, reviewed by Advisory Group, approved by Commission
 2021 reduced rate due to COVID-19 impacts
 2022-2023 continued lower rates during COVID-19 economic recovery
 2024-2026 accounting for high inflation, labor and construction costs

In August of 2024, a cyberattack on the Port information technology systems impacted all Utility and Port operations. Throughout this unprecedented and challenging situation, the Utility's well-established systems were tested. While access to electronic systems was limited, the Utility relied on experienced personnel and procedures to maintain permit compliance, provide timely spill response, and continue asset inspection and maintenance.

STORMWATER INFRASTRUCTURE

After completing initial assessment of an approximately 72 miles of stormwater lines, the Utility completed numerous infrastructure upgrade projects to rehabilitate the stormwater conveyance system. Since its inception in 2016, the Utility accomplished 85 urgent repairs, such as sinkholes and pipe collapses, with more than half of these repairs finished since 2021. Pipe repairs consist of point repairs, trenchless slip-lining, and full removal and replacement of substandard pipes. Many of the pipes were replaced with ductile iron for increased strength and longevity.

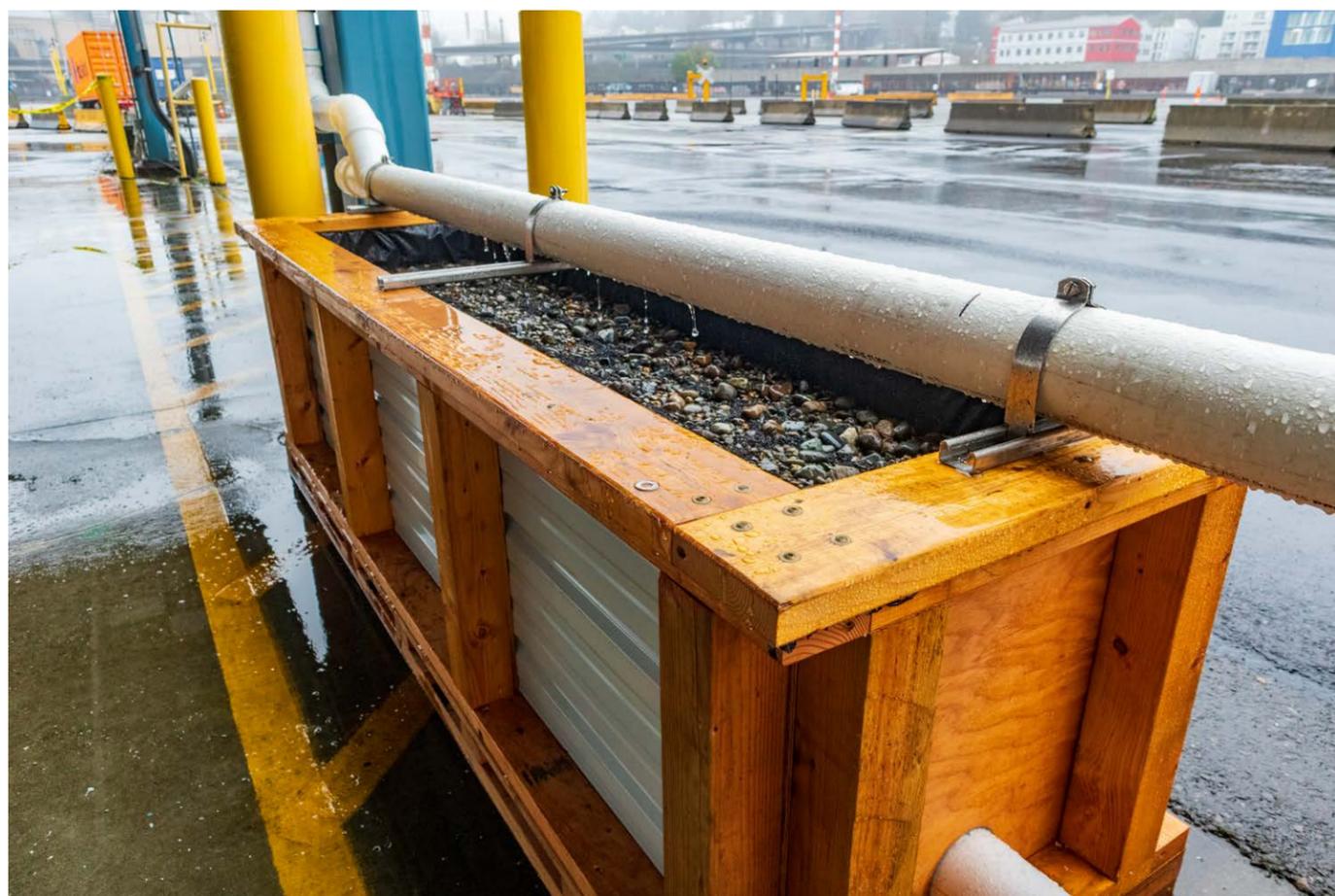
In 2021, the Utility purchased a grout trailer that is regularly used to seal and improve water tightness at connection points between pipes and drainage structures. In addition to rehabilitating stormwater pipes, the Utility installed tide valves on outfalls to prevent saltwater intrusion into the system, which can damage water quality treatment structures. In addition, tide valves help ensure worker safety during high tides and storms, when saltwater intrusion may inundate structures upstream of outfalls.

Rehabilitation projects completed by the Utility span multiple Port properties, including Terminals 5, 18, 46, 25 South, 91, 115; Fishermen's Terminal; and Shilshole Bay Marina. Large-scale capital projects to improve storm-drainage conveyance and outfalls have been completed or are underway at Terminal 18, Maritime Industrial Center, Centennial Park, Terminal 106 South Nevada Street, and Terminal 91 Elliott Bay Trail. Figure 3 provides a snapshot of a typical year of work for the Utility.

The Utility's Marine Maintenance team is continually improving methods to minimize land disturbance, reduce carbon emissions, and improve efficiency. The team uses cure-in-place pipe repair technique, where possible; a trenchless slip-lining method for pipe upgrades; and has trained key maintenance personnel on implementation. The team also created a media washing machine, which is used to clean oyster shells for stormwater treatment, and converted the machine from diesel to electric power. In addition, the Utility has piloted innovative water quality treatment technology throughout the Port to evaluate the effectiveness of technologies such as oyster shell treatment barrels, Splash Boxx, Retain Drain, Flogard trench treatment, and Hula Bug.

Figure 3: A Typical Year for Stormwater Utility





Grattix Box stormwater treatment system

STAKEHOLDER OUTREACH AND COORDINATION

Utility staff interact extensively with stakeholders to support regulatory compliance and asset improvements. The Phase I Permit requires education and outreach, and the Utility has a robust program that includes tenant site visits and translations for non-English speakers.

The Utility launched a [public website](#) with updates for customers. Resources include translated guidance on BMPs and a [video highlighting innovations](#). Languages for [targeted materials](#) include Chinese, Khmer, Somali, Spanish, Tagalog, and Vietnamese.

The Utility coordinates closely with NWSA Stormwater and Real Estate staff on tenant communication and stormwater permit compliance. For example, the Utility, NWSA, and Washington Public Ports Association collaborated on review of the draft Washington 2025 ISGP, resulting in numerous substantive comments being submitted to Ecology. This coordination strengthens the feedback mechanism to Ecology to ensure business and workforce interests are balanced with water quality improvement initiatives.

RECOGNITION FOR ENVIRONMENTAL SUSTAINABILITY

The Port maintains two Salmon-Safe certifications: one for Seattle-Tacoma International Airport (SEA) achieved in 2016 and the other for maritime parks achieved in 2008. “Salmon-Safe provides high value insight and independent verification for water quality protection practices advancing climate resiliency.”⁴ To maintain Salmon-Safe certification, which is renewed every five years, the Port of Seattle commits to improving habitat restoration, stormwater quality, water conservation, and landscape practices including planting native flora. Complementing these initiatives, the Port contracted Pure Blue/Aqualyst to research stormwater treatment technologies in North America and abroad. This involved meeting with U.S. ports and interviewing international ports, reviewing over 130 treatment technologies, and identifying pilot stormwater treatment projects to consider on Port properties. These efforts demonstrate the Port’s commitment to environmental sustainability through practical improvements and innovative solutions.

Since 2013, the Port is “Green Marine” certified, a voluntary and international industry initiative. Green Marine aims to guide the shipping industry toward environmental excellence, and addresses issues specific to maritime transportation, such as air, water and soil quality, protection of biodiversity, and community relations.





3. PRIORITIES

The Utility’s 2026 – 2030 Strategic Plan prioritizes five areas:

- » Resilient Infrastructure
- » Exceptional Value
- » Sustainability
- » Climate Change and Resiliency
- » Equity, Diversity, and Inclusion

RESILIENT INFRASTRUCTURE

The Utility’s essential functions include improving stormwater assets and meeting Washington State’s rigorous water quality regulations. The Phase I Permit applies to all Port properties, and the ISGP applies to one maintenance yard. In addition, tenants either hold their own ISGP, boatyard, or another stormwater permit, or are covered under the Port’s Phase I Permit. Utility staff support permit compliance with state and City of Seattle codes by reviewing capital projects, inspecting tenant operations, and providing BMP information in many formats, including some non-English languages.

The Utility focuses on improving stormwater assets, which includes reducing flooding and improving water quality from Port facilities to receiving waters. Between 2016 and 2019, the Utility completed a comprehensive assessment and data gathering to understand the stormwater system, including pipe locations, characteristics, and conditions. Work between 2020 and 2025 targeted system rehabilitation via pipe repairs and replacement, installation of green stormwater infrastructure, and innovative treatments to reduce stormwater pollutants leaving Port properties. In this Strategic Plan, the Utility will continue to focus efforts on system rehabilitation, sponsor capital projects to that end, and partner with other maritime projects on advancing the stormwater system.

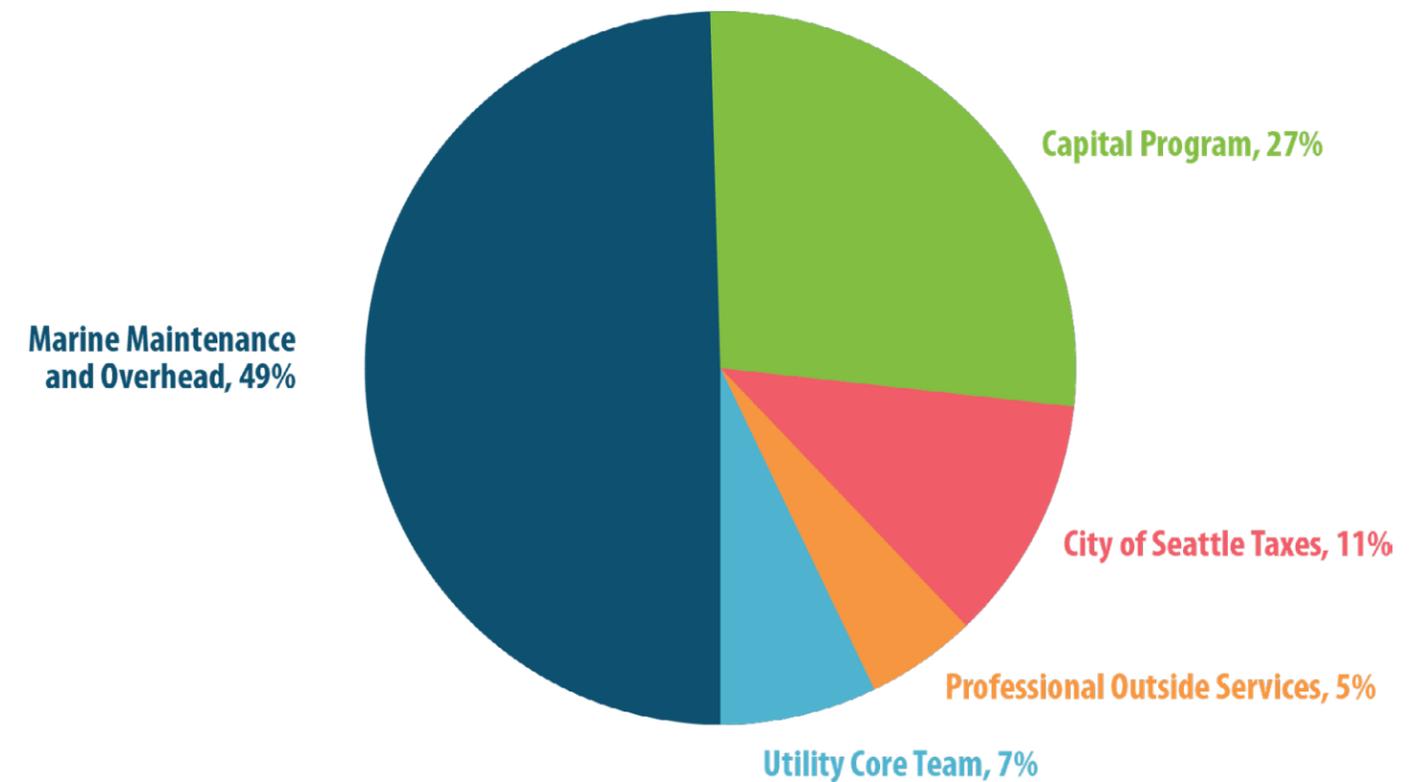
The Utility maintains and manages its own capital program with an average annual budget of approximately \$2 million. These investments cover a range of projects and programs, such as planning and feasibility studies, stormwater infrastructure improvements, new infrastructure installations, and water quality treatment retrofits. The Utility collaborates with Port departments to review capital projects and identify opportunities to integrate improved stormwater infrastructure, ensuring alignment with broader Port objectives.

EXCEPTIONAL VALUE

The Utility conducts an annual rate analysis based upon administration, operations, and capital budget costs; develops a five-year rate forecast; and presents the proposed annual rate change to the Commission each fall. Working with an executive advisory committee that includes Port and NWSA directors, the Utility communicates upcoming rate changes to all tenants before the end of each year. Rate increases have ranged from 3% during COVID-19 impact years to 8.2% during high-inflation years. The Utility has maintained rates below those of Seattle’s Public Utility by an average of 13 to 21% since 2020.

The Utility monies are used only for stormwater infrastructure and regulatory programs, as required under state utility policies and laws. The annual Utility budget is published for public review and comment each fall along with the Port operational and capital budgets. See Figure 4 for a breakdown of where Utility money is spent.

Figure 4: Utility Budget Summary



SUSTAINABILITY

In 2020, the Port adopted the Sustainable Evaluation Framework (SEF) that integrates sustainable design into all capital improvement projects. The SEF supports transparent and data-driven decisions on integrating sustainability into building and operating Port facilities. The SEF is employed in evaluating capital projects on potential sustainability and equity opportunities, including stormwater. Utility staff participate in SEF evaluations to guide stormwater management opportunities, including volume reduction and water quality treatment that may exceed code and regulatory requirements.

CLIMATE CHANGE AND RESILIENCY

Climate change is the defining challenge for the 21st century. This demands urgent, multi-sector response across local, regional, and global scales to mitigate potentially devastating impacts. The Port and the Utility are actively planning for climate change impacts on Port operations and properties, including rising sea levels, more frequent and intense storms, changes in resource allocation and supply chains, and complex global social and natural-system impacts. The Ports multi-pronged approach for adaptation includes building coastal resiliency, shoring up stormwater infrastructure, and phasing out GHG emissions, a primary driver of global climate change.

An initial planning effort was published in the 2015 Climate Change Adaptation Plan for Port of Seattle Waterfront Properties that identifies rising sea levels and intensifying storms, and the Port's role as a steward of the environment and maritime industry. One vulnerability was that many maritime facilities cannot handle projected long-term (20- to 75-year) sea level rise impacts. The Port, including Utility staff, are working with AdaptSEA, a regional initiative planning for regional resiliency.

In addition, the Commission set goals to cut GHG emissions in half by 2030, be net-zero or better by 2040, and achieve carbon neutrality by 2050. In 2021, the Port adopted Charting the Course to Zero: Port of Seattle's Maritime Climate and Air Action Plan, a comprehensive plan to address climate change and air pollution from maritime sources. The Maritime Climate and Air Action Plan charts the course to achieve the Port's GHG reduction targets and implement the [2020 Northwest Ports' Clean Air Strategy](#) to phase out seaport-related emissions by 2050. The Utility supports these goals through fleet vehicle electrification and minimizing their operational carbon footprint.



Repairing a stormwater pipe

EQUITY, DIVERSITY, AND INCLUSION

The Port established an Office of Equity, Diversity, and Inclusion (OEDI) in 2019. OEDI staff develop resources and programs to better understand Port-related impacts to historically marginalized communities within the King County region and how the Port can support and improve conditions in these communities. Utility staff collaborate with the OEDI team to ensure that equity is incorporated into stormwater infrastructure work and water quality improvements, and that non-English speakers and minority populations have access to the benefits of the Utility and can understand and employ BMPs for pollution prevention.

Excavation for stormwater pipe replacement



4. ROADMAP FOR THE 2026 – 2030 STRATEGIC PLAN

This Strategic Plan defines the goals, expected outcomes in working toward these goals over the next five years and targeted strategies the Utility will implement to accomplish these outcomes. Annual work plans will be developed with specific tasks to implement the strategies that have been identified as most likely to achieve the outcomes desired in the next five years.

GOALS: Achievements the Utility is working with partners to accomplish

OUTCOMES: Quantitative or qualitative results that can be measured to determine progress on achieving the Utility's goals

STRATEGIES: Categories or types of activities (not specific tasks) that the Utility will employ to achieve the outcome



Splash Boxx bioretention treatment system

GOALS, OUTCOMES, AND STRATEGIES

The five goals described in this section were developed to address input from stakeholders. Each goal has a set of measurable outcomes and possible strategies to support progress toward achieving the goal during the five-year timeframe of this Strategic Plan.

GOAL 1: Reduce stormwater pollution leaving Port properties

A primary priority of the Utility is to improve the quality of stormwater discharging from Port properties. By 2030, these are the expected outcomes:

Outcome 1: Increase percentage of Phase I Permit stormwater pollution prevention plans (tenant, NWSA, and Port) with updated BMPs

By 2030: Achieve 100% updated stormwater pollution prevention plans
 Current status: 90%; there are some that need updating due to tenant changes
 Strategy: Strategies A, B, and D

Outcome 2: Maintain Port-operated water quality treatment systems according to O&M plans

By 2030: Maintain 100% compliance with O&M plan maintenance schedules and requirements
 Current status: 100% O&M compliance for Port-operated systems
 Strategy: Strategies A and C

Outcome 3: Decrease percentage of spills that result in an illicit discharge to receiving waters

By 2030: Achieve zero % of spills resulting in an illicit discharge to receiving waters
 Current status: 11.5% for 2024
 Strategy: Strategies A, B, C, and D

Outcome 4: Respond to reports of spills or illicit discharges immediately upon notification to Port personnel

By 2030: Reduce response time after each report to minimize impact of spill
 Current status: Researching amount of time it takes to respond to spills and evaluating methods to reduce response time
 Strategy: Strategies C and D



STRATEGIES FOR REDUCING STORMWATER POLLUTION LEAVING PORT OF SEATTLE PROPERTIES

Strategies to support outcomes under Goal 1 are listed below:

Strategy A: Continue to actively manage permit compliance within Phase I Permit areas

The Utility is responsible for managing Port activities and supporting tenant activities related to stormwater within areas subject to Phase I Permits. The Utility will continue actively supporting increased use of BMPs and decrease illicit discharges to receiving waters. Example tasks to implement this strategy may include:

- » Site visits with tenants and Port staff to review and supplement BMPs for specific operations
- » Develop concise handouts for field & online information highlighting BMPs for specific operations

Strategy B: Increase stormwater treatment including innovative, green, and new technologies

The Utility intends to implement proven stormwater treatment methods (systems approved by the City of Seattle and Ecology) and use creative technological solutions to help improve the quality of stormwater leaving Port properties. As part of this strategy, the Utility will explore the potential to incorporate new technologies into its overall portfolio of stormwater infrastructure by identifying, researching, and testing innovative technologies to determine which are most effective in reducing stormwater pollution from Maritime operations. Example tasks to implement this strategy may include:

- » Use established stormwater treatment approaches proven to be effective for targeted activities/operations
- » Conduct pilot tests of new stormwater treatment technologies
- » Incorporate appropriate stormwater treatment technologies into maintenance and capital projects

Strategy C: Develop, communicate, and implement standard operating procedures

Well implemented standard operating procedures (SOPs) to manage activities/operations with the potential to impact stormwater runoff are essential to supporting the overall goal of reducing stormwater pollution leaving Port properties. Examples include SOPs that help achieve effective, timely, and efficient spill prevention and response; identification and management of illicit connections and illicit discharges; and well-executed maintenance of stormwater infrastructure. While the Port's Stormwater Management Program has a suite of existing SOPs, the Utility will look to develop new SOPs and update existing SOPs and then communicate and implement these procedures to proactively manage stormwater runoff. Example tasks to implement this strategy may include:

- » Train partners on how to conduct source tracing investigations and complete the source tracing investigation form
- » Evaluate if the source tracing investigation form provides the necessary data to support reduction of pollution leaving Port properties, and update the form as necessary
- » Conduct monthly sweeping at Port-operated facilities
- » Provide spill kits in areas with highest potential for spills to occur
- » Provide signs on spill kits with instructions on how to report spills and use spill response materials
- » Ensure routine inspections and restocking of spill kits are conducted by responsible party (e.g., marina, property or facility manager)

Strategy D: Increase training, communications, and outreach

The Utility has identified the need to increase the frequency and types of training, communications, and outreach tools made available to tenants, NWSA staff, and Port staff, to facilitate the proactive management of stormwater runoff from their operations. This strategy is also intended to increase understanding of how to access the Utility or its partners as part of the overall goal to reduce stormwater pollution leaving Port properties. Example tasks to implement this strategy may include:

- » Conduct five BMP training courses each year with varied target audiences and stormwater topics
- » Post updates to BMPs and spill response procedures/handouts to external website and communicate to target audiences
- » Translate BMP documents and outreach tools to reach non-English audiences
- » Conduct tenant outreach and site visits to provide stormwater technical assistance and BMP education
- » Understand and address barriers to BMP implementation

GOAL 2: Maintain and improve stormwater infrastructure

The structural condition and cleanliness of the Utility's stormwater conveyance system is essential to support the Utility's goal of decreasing stormwater pollution from maritime properties and providing reliability that minimizes the potential for flooding. By 2030, these are the expected outcomes:

Outcome 1: Increase percentage of stormwater assets rehabilitated

By 2030: Increase percentage of stormwater assets rehabilitated

Current status: 73% rehabilitated

Strategy: **Strategies A, B, and C**

Outcome 2: Successful implementation of annual maintenance program

By 2030: Maintain 100% implementation of annual maintenance

Current status: 100% implemented

Strategy: **Strategies A, B, and C**

STRATEGIES FOR MAINTAINING AND IMPROVING STORMWATER INFRASTRUCTURE

Strategies to support outcomes under Goal 2 are listed below:

Strategy A: Analyze and prioritize repair and decommissioning of stormwater assets

The Utility conducted a baseline condition assessment of stormwater pipes and has actively worked to address the most critical repairs over the past five years. At this stage, the Utility has identified the need to programmatically evaluate the status and condition of existing stormwater assets and prioritize repairs based on need. This will support the Utility in efficiently achieving the goal of maintaining and improving stormwater infrastructure in a systematic manner. Example tasks to implement this strategy may include:

- » Update infrastructure assessment and reassessment status in GIS map database twice per year
- » Use Stormwater Infrastructure and Asset Management System to prioritize asset repair and replacement projects using established criteria
- » Decommission non-functional pipes
- » Survey the invert elevations of 18-inch diameter and larger Port-owned outfalls to identify at-risk storm drainage networks
- » Conduct a backwater analysis of potential flooding for selected outfall and storm networks, including collection of observations and anecdotal evidence of flooding during storm events and high tides
- » Collaborate with Port Planning teams and regional efforts on sea level rise and resiliency studies and master plans for maritime properties

Strategy B: Increase implementation of infrastructure improvements

The Utility will implement improvements to stormwater infrastructure based on the analysis and prioritization of assets. These improvements may be completed through projects led by the Utility or integrated into projects led by other Port Maritime Business Units. Example tasks to implement this strategy may include:

- » Protect stormwater outfalls from high tides and wave action
- » Disconnect stormwater systems from combined sewer systems
- » Use expense projects to improve stormwater infrastructure
- » Collaborate with Waterfront Project Management to incorporate stormwater infrastructure improvements into planned Capital projects
- » Allocate Utility budget each year for Small and Large Capital Projects

Strategy C: Strengthen coordination and communication with tenants

To fully implement Strategies A and B, the Utility will coordinate with tenants to facilitate timely repairs to stormwater infrastructure on Port properties. This will support efficient use of Port resources to rehabilitate stormwater assets and implement the annual maintenance program. Example tasks to implement this strategy may include:

- » Identify methods to streamline maintenance activities to minimize impacts to tenant operations
- » Facilitate access to infrastructure for maintenance within tenant leaseholds
- » Clearly communicate planning, progress, and accomplishments of stormwater asset repair, replacement, upgrades, and maintenance to tenants
- » Share accomplishments, such as infrastructure improvements via communication channels



Closed-circuit video camera for pipe inspections





GOAL 3: Strengthen customer, tenant, and community relationships

The Utility works closely with internal and external partners to plan and implement stormwater projects. Strengthening relationships with customers, tenants, and community members is essential to achieving the Utility's goals. By 2030, these are the expected outcomes:

Outcome 1: Project implementation and repairs are more efficient

By 2030: Bi-annual assessment of partners shows increased satisfaction with Utility timeliness and communication addressing asset repairs
Current status: 2024 assessment showed challenges regarding access related to stormwater infrastructure repair work within tenant leaseholds
Strategy: **Strategies A and D**

Outcome 2: Increase number of partners who recognize and understand the Utility's benefits

By 2030: Bi-annual assessment of partners shows high understanding of Utility benefits
Current status: 2024 assessment showed confusion about the Utility among partners and tenants
Strategy: **Strategies A, B, C, and D**

STRATEGIES FOR STRENGTHENING RELATIONSHIPS WITH CUSTOMERS, TENANTS & COMMUNITY

Strategies to support outcomes under Goal 3 are listed below:

Strategy A: Enhance internal and external communications

Focusing on communications with other Port staff, tenants, community members, and other interested parties both internally and externally will strengthen relationships and support key stormwater initiatives. Strengthening communications will also help improve collaboration to proactively manage stormwater runoff on Maritime properties and increase understanding of the Utility's structure and work. Example tasks to implement this strategy include:

- » Identify and submit applications for awards and certifications to increase external awareness
- » Work with Port External Relations and Port OEDI to measure benefits of BMPs in areas with disadvantaged populations
- » Submit content for Port-wide communications and highlight up to three stormwater successes on the Utility website or Port communication channels each year
- » Use social media and Port website and newsletters to highlight how the Utility is supporting local communities (e.g., Duwamish Tribal Organization) and being proactive in community benefits (e.g., Salmon-Safe certification for parks and public access sites)

Strategy B: Increase accessibility of stormwater guidance and outreach materials

The Utility serves and works with diverse populations, including those who predominantly speak languages other than English. As part of the approach for strengthening relationships with these communities, the Utility has identified a need to translate key materials into languages other than English to facilitate proper implementation of BMPs and increase understanding of the Utility's structure and work. Example tasks to implement this strategy may include:

- » Translate materials online and at events for specific populations (e.g., truckers, local multi-lingual community)
- » Provide translation of key documents (Strategic Plan, educational materials, and BMPs) for targeted demographics
- » Ensure translated languages reflect target audience needs and materials are accessible in hardcopy and electronic formats



Marine maintenance team installing stormwater infrastructure

Strategy C: Increase participation in presentations and events

The Utility has identified a need to participate in presentations and other events that support relationships with colleagues, community, and other interested parties. Increased participation will facilitate sharing of ideas and collaboration on regional efforts to improve water quality and increase understanding of the Utility's structure and work. Example tasks to implement this strategy may include:

- » Present on stormwater programs at a minimum of two local or regional conferences
- » Participate in at least three community outreach events per year

Strategy D: Strengthen partnerships

The Utility values partnering with internal and external groups on projects or initiatives that benefit from collaboration. Developing mutually beneficial partnerships will help strengthen community relationships and support the Utility's stormwater goals. Increased partnering opportunities will achieve mutual regional water quality objectives and increase understanding of the Utility's structure and work. Example tasks to implement this strategy may include:

- » Identify and prioritize networking and partnering opportunities with external organizations and groups to share information and achieve common goals
- » Organize or participate in "meet and greet" opportunities with internal Port partners
- » Participate in local and state agency work groups that focus on regional water quality, utility operations, or stormwater management and treatment approaches
- » Partner with external relations to develop an approach for gauging community understanding of the environmental benefits from Utility operations



GOAL 4: Meet or exceed compliance with federal, state, and local stormwater regulations

The Utility's work to improve the quality of stormwater leaving Port properties aligns with the objectives of regulations from federal, state, and local levels. The Utility is committed to meeting or exceeding compliance with applicable stormwater regulations through implementation of BMPs and proactive stormwater management in areas under the Port's functional control. By 2030, these are the expected outcomes:

Outcome 1: Maintain compliance with the Port's Phase I Permit

By 2030: Zero violations
 Current status: Zero violations
Strategy: Strategies A, B, D, E, and F

Outcome 2: Maintain compliance for Port-operated facilities covered under the ISGP

By 2030: Zero violations
 Current status: Zero violations
Strategy: Strategies A, B, C, D, E, and F

Outcome 3: Decrease remedial actions at Port-held ISGP properties

By 2030: 10% or less of monthly inspections require remedial action
 Current status: In 2024, remedial actions were required in 25% of monthly inspections
Strategy: Strategies B, C, E, and F

Outcome 4: Decrease remedial actions for construction projects

By 2030: 15% or less of inspections require remedial action
 Current status: Not currently tracking
Strategy: Strategies B, D, E, and F



STRATEGIES FOR MEETING OR EXCEEDING COMPLIANCE WITH FEDERAL, STATE, AND LOCAL STORMWATER REGULATIONS

Strategies to support outcomes under Goal 4 are listed below:

Strategy A: Continue to allocate resources required to maintain stormwater compliance

The Utility uses its resources to maintain compliance with the Phase I Permit and ISGP. Example tasks to implement this strategy may include:

- » A proportion of Utility staff's time is allocated for permit compliance activities, such as field inspections and education and outreach as defined in stormwater permits
- » Marine Maintenance staff implement work orders to conduct required and supplemental tasks that support stormwater permit compliance

Strategy B: Increase training for Port staff to support stormwater compliance

Meeting stormwater regulations require awareness and buy-in from all staff who work on relevant projects and conduct operations on Port properties. The Utility has identified a need for compliance training to support staff and contractors' understanding of protocol. Example tasks to implement this strategy may include:

- » Complete compliance training for Marine Maintenance, Port Construction Services, and construction contractors working on active construction projects on Port properties
- » Stormwater review training for Port staff supporting construction projects, associated with operations on Port properties, or who work with tenants

Strategy C: Implement BMPs to meet ISGP quarterly sampling benchmarks

BMPs are designed to decrease stormwater pollution, as measured by ISGP quarterly sampling benchmarks. The Utility will continue to support BMPs that maintain compliance and decrease remedial actions at Port-held ISGP properties. Example tasks to implement this strategy may include:

- » Monthly inspections and follow-up at ISGP facilities to check all appropriate BMPs are employed
- » Work with operations staff to improve BMPs or treatment when water quality issues arise during quarterly monitoring

Strategy D: Continue to review Maritime projects for stormwater compliance

The Utility's review of Maritime projects is a key element of ensuring that required construction and post-construction stormwater requirements are met. These could include implementation of construction stormwater BMPs and installation of stormwater infrastructure to manage stormwater runoff from the site after project completion. Example tasks to implement this strategy may include:

- » Collaborate with project proponents and stakeholders to provide input early in the project planning process for: 1) stormwater infrastructure required by City of Seattle Stormwater Code and Manual and 2) opportunities to incorporate stormwater infrastructure repairs or upgrades into a given project
- » Complete construction and post-construction stormwater reviews for capital projects
- » Complete construction stormwater field inspections for capital projects

Strategy E: Provide input on stormwater regulations and permits to government agencies

The Utility's work is guided by stormwater regulations issued by federal, state, and local agencies. The Utility intends to work with these agencies to share on-the-ground knowledge to facilitate implementation of regulations that are mindful of operations and protective of the environment. Example tasks to implement this strategy may include:

- » Participate in working groups for the development of draft stormwater regulations
- » Submit comments on draft regulations at local and state levels
 - Local: City of Seattle Stormwater Code and Manual
 - State: Phase I Permit, ISGP, and Stormwater Management Manual of Western Washington

Strategy F: Identify and act on opportunities to exceed compliance with stormwater regulations and permit requirements

The Utility has identified the need to act on opportunities to exceed compliance with applicable stormwater regulations. Documenting this work will facilitate communication with partners and local communities and demonstrate how the Port is a leader in the stormwater community. Example tasks to implement this strategy may include:

- » Document work that supports exceeding compliance
- » Document when and where improvements or strategies result in exceeding stormwater permit compliance
- » Continue to invest in voluntary stormwater quality retrofit projects and improvements
- » Use tools to automate the tracking process

GOAL 5: Improve financial system processes to support rate transparency

Ratepayers, including tenants that operate on Port maritime property, fund the Utility. To ensure continued responsible use of Utility funds, we have identified updates to our financial systems to support transparent communication with ratepayers. By 2030, these are the expected outcomes:

Outcome 1: Utility fees are supported by verified budget and expense

By 2030: Utility rates remain competitive with regional utilities
 Current status: Research underway to track and compare with rates of regional utilities
Strategy: Strategies A and B

Outcome 2: Internal and external partners understand Utility priorities

By 2030: Assessment of partners shows high understanding of spending
 Current status: 2024 assessment showed partners found rates beneficial compared to City of Seattle rates
Strategy: Strategies A, B, and C

Outcome 3: Utility regulatory and asset goals are reflected in annual Maintenance expense budget

By 2030: Annual maintenance expense budget demonstrates regulatory and asset goals
 Current status: Expense budget reflects regulatory requirements and maintenance goals
Strategy: Strategies A, B, and C



Rain garden for stormwater treatment at Centennial Park

STRATEGIES FOR IMPROVING THE PORT OF SEATTLE FINANCIAL SYSTEM PROCESSES TO SUPPORT RATE TRANSPARENCY

Strategies to support outcomes under Goal 5 are listed below:

Strategy A: Improve access to financial data

The Utility has identified a need for staff to access up-to-date financial data to gain a clearer and timely financial picture of stormwater work. This strategy will be implemented to gain access to financial data to help the Utility keep projects on budget, justify utility fees, share priorities with partners, and ensure budgets accurately reflect reality. Example tasks to implement this strategy may include:

- » Partner with Maritime Environmental Finance to gain clear and efficient access to financial data for analysis, tracking and budgeting, and communication
- » Ensure that the annual budget and expense summary is provided to the Utility

Strategy B: Track quarterly expense data to support annual budgeting and Utility financial analysis

The Utility will track financial data to understand and analyze current spending and to support forward-looking financial planning. This strategy will be implemented to support annual budgeting, expenditure tracking, and financial analysis that will help the Utility keep projects on budget, justify utility fees, share priorities with partners, and ensure budgets maintain flexibility to incorporate changes in regional economic impacts. Example tasks to implement this strategy may include:

- » Conduct annual rate analysis based upon five-year projection and current year budget proposal
- » Develop annual budget that shows support for goals of the Utility
- » Coordinate with Environmental Finance to obtain quarterly reports on budgeted versus actual spending and income statements
- » Coordinate with Marine Maintenance to obtain quarterly reports on budgeted versus actual spending
- » Analyze quarterly budget spending to identify under or overspending and reallocate
- » Complete capital plan for five- and 10-year horizons to reflect and support long-term Utility investments and justification for capital budget
- » Audit the Utility billing system (i.e., properties, buildings, financial codes, and common area) to ensure accuracy and transparency for collecting income

Strategy C: Communicate with key partners within the Port

The Utility has identified a need to deepen internal communications regarding finances to ensure transparency and accurate budgeting. This strategy will support partners in understanding Utility priorities and ensure budgets accurately reflect reality. Example tasks to implement this strategy may include:

- » Share current year and five-year projected Utility rates to provide rate transparency
- » Brief Advisory Committee on rates, income, expenses
- » Frequently and in a timely manner, communicate with capital project managers on status of capital projects

5. CONCLUSION

Partnerships and stakeholder relationships are central to the Utility's success. Engagement with stakeholders throughout the development of this Strategic Plan highlighted the importance of maintaining strong relationships, fostering collaboration and communication, and supporting effective infrastructure and financial management. This Strategic Plan outlines the Utility's direction for the next five years, advancing priorities in resilient infrastructure; exceptional value; sustainability; climate change and resiliency; and equity, diversity, and inclusion.

The Plan establishes five goals supported by measurable outcomes and strategies that provide a practical, measurable, and flexible framework for achieving results. Each year, the Utility will prepare an annual work plan that aligns with Strategic Plan goals and outcomes, and identifies specific tasks for implementation. Progress will be tracked and evaluated on an ongoing basis, with strategies adjusted as needed to ensure resources are used effectively. Regular updates on progress and lessons learned will be shared with partners to maintain transparency and strengthen opportunities for collaboration.

The Stormwater Utility Team is honored to present this Strategic Plan, which serves as a roadmap for the next five years of responsible, inclusive, and future-focused stormwater management. Through this work, the Utility is committed to delivering lasting benefits for stakeholders, the environment, and the broader community.



Stormwater Utility team



Spill cleanup with vacuum truck in background



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