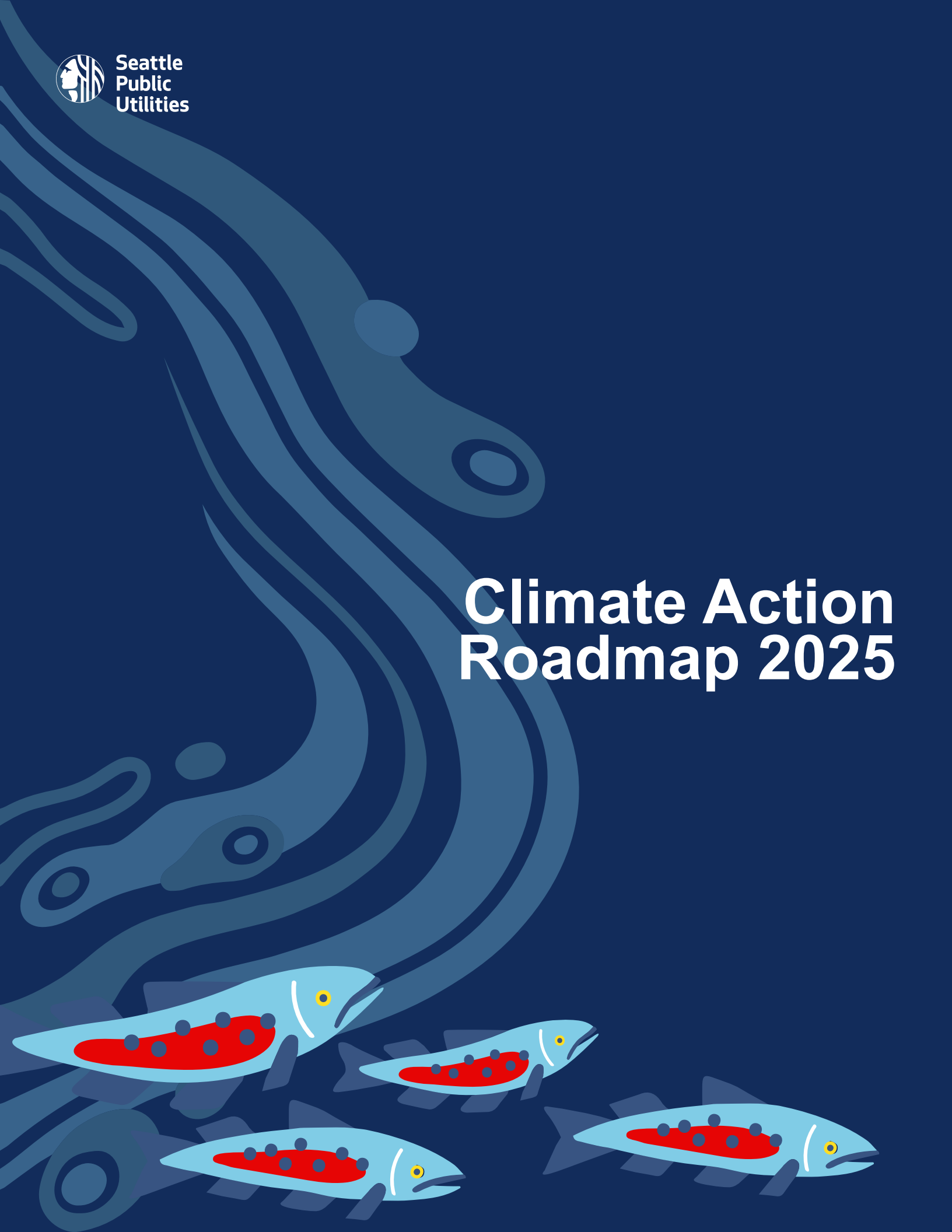
Seattle Public Utilities

Climate Action Roadmap 2025



SPU's Climate Action Roadmap (2025)

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Introduction

Worldwide, our environment and communities face heightened risks from climate change. In Seattle, more frequent and severe flooding, reduced snowpack in the Cascades, heat and smoke events, and shrinking salmon runs illustrate how warming temperatures directly affect SPU's infrastructure, operations, and programs. As is the case globally, these impacts are borne disproportionately in Seattle by low-income communities and communities of color.

At SPU, we are deliberately advancing high-impact strategies that advance climate adaptation, climate mitigation, and environmental justice. We have been incorporating climate science into water supply and stormwater planning since 2002 and have been advancing policies to reduce our operational greenhouse gas emissions since 2013. We are also contributing to citywide efforts to reduce waste and to prepare Seattle ecosystems and communities for climate impacts. Yet we need to move faster to match the pace at which climate impacts are happening and to meet the City's goal of carbon neutrality by 2030.

SPU's Climate Goals

SPU has five climate goals, which are described here and illustrated further in Figure 1.

1. Achieve net zero emissions in our operations by 2030 and reduce emissions in our supply chain
2. Reduce emissions city-wide through Waste Prevention and Diversion
3. Assess and integrate emerging climate science into planning and operations
4. Anticipate and respond to climate impacts with flexible, innovative, cost-effective, and equitable adaptation strategies
5. Transform SPU's essential service systems to be more resilient, multi-functional, and community-centered

Environmental justice underpins all of our climate goals: we are prioritizing the communities that are most at risk from the impacts of climate change. In our climate work, SPU has a chance to invest in, partner with, and support communities so they will not disproportionately bear the brunt of climate impacts. SPU is leading with racial justice, honoring communities' priorities to build resilience, and equitably serving Seattle neighborhoods.

Figure 1: SPU's climate goals

What is SPU's Climate Action Roadmap?

Our Climate Action Roadmap **identifies Utility actions to achieve our climate goals.** This report aims to outline and accelerate decarbonization and climate resilience efforts across the Utility. The roadmap guides how we leverage limited resources to most effectively reduce emissions and prepare for the impacts of climate change.

How are the Actions organized?

This roadmap includes actions that SPU is already pursuing or will pursue in order to achieve the Utility's climate goals. The actions are grouped into three categories:

1. Mitigation Actions: These actions reduce the greenhouse gas emissions associated with SPU's day-to-day operations, supply chains, or citywide.
2. Adaptation Actions: These actions aim to prepare SPU and Seattle communities for the impacts of climate change on the Utility's operations, infrastructure.
3. Capacity Building Actions: These are cross-cutting actions that build SPU's organizational capacity for smart, equitable, and effective climate action.

Within these three categories, our proposed actions are broken down into the following eight themes. Since some of the actions fit within multiple themes, the lead authors of this roadmap chose to highlight a primary theme for each action:

Building / Facility Energy	The use of fossil gas to heat SPU buildings was responsible for 739 metric tons of carbon dioxide emissions in 2021 (5.2% of SPU's total emissions in 2021). Purchased electricity represents the most significant source of SPU's carbon emissions. Reducing energy use and removing fossil fuel systems from buildings and facilities will reduce SPU's emissions.
Energy Generation	SPU's water and waste infrastructure represent potential sources of renewable energy. By constructing facility assets that can capture this energy - including solar, in-line hydropower, and sewer heat recovery systems - SPU can generate its own power, reduce its emissions, and decrease reliance on the power grid.
Fleets	SPU's fleet and contracted waste collection vehicles are the second-largest source of emissions. Transitioning fossil-fuel-based vehicles to electric, continuing to develop SPU's charging network, and reducing use of fossil fuels will reduce SPU's emissions. These efforts are also mandated by the City's Green New Deal for Seattle legislation.
Materials Management	SPU can manage materials more effectively in our own operations and through citywide programs. Waste prevention and diversion actions will reduce emissions associated with the production, consumption, and disposal of goods and food.
One Water	As both a drinking water and a stormwater/wastewater utility, SPU is uniquely well positioned to manage water holistically, as an interconnected resource. While the lines of business operate independently, there are opportunities to integrate a One Water philosophy into our operations where we consider the entire water cycle, from source to tap and back. This approach can reduce SPU's risk exposure, build resilience, and ensure access to clean water for all communities. This is a key step to continuing to provide essential water and waste services for years to come.
Nature-Based Approaches	SPU manages and stewards many types of natural assets throughout the Seattle region. They range from green stormwater infrastructure, such as bioretention and floodable open spaces, to aquatic resources and creeks, to forested urban areas and some 100,000 acres of forests in the water supply watersheds. These natural assets are a significant and under-reported part of the Utility's climate story. By prioritizing and investing in nature-based approaches, SPU can build climate resilience, reduce emissions, and contribute to more livable communities.
Capital Projects Design and Construction	SPU's capital projects are where the rubber meets the road. Our infrastructure and facilities are expected to perform for 50 to 75 years. By prioritizing capital projects in vulnerable neighborhoods, designing our facilities to withstand future climate conditions, and using sustainable materials, SPU has the opportunity to build better to serve Seattle communities well into the future.
Policy, Science, and Advocacy	Systemic change can spark substantial impacts. Mainstreaming climate science, advocating for legislative change, and setting policy are key moves to establish an enabling environment for climate action. These opportunities include pilot projects, research and monitoring, and legislative action. Such efforts will contribute to climate resilience and greenhouse gas emissions reductions.

The priority climate action list that follows details each action's current status, funding need, and agency lead.

- **Status: [Continuing | New | Accelerated]**
  Indicates whether an action is already in progress, a new action, or an acceleration of an existing action.

- **Funding Need: [Within Current Capacity |Additional]**
  Indicates whether the funding for an action has already been secured or whether it requires additional funding.

- **Partners: Branch or Division Owning the Effort**
  Defines which teams at SPU will be responsible for implementing this action.

Key Takeaways

In developing the Climate Action Roadmap alongside SMEs across the Utility, we have identified three key takeaways. These learnings will inform SPU's climate action going forward.

1. **SPU must significantly accelerate investments in emissions reductions and climate adaptation to achieve our climate goals.** Our deadline to be carbon neutral by 2030, which was set in 2020 through the Green New Deal Executive Order, is now less than 4 years away. The greenhouse gas emissions reduction actions currently underway do not generate sufficient reductions to achieve the 2030 goal. We have a number of additional tools available to further reduce our emissions, including generating our own renewable energy, which we must act on immediately. Adaptation investments are also urgent: Climate trends in Seattle, plus the uncertainty inherent in future rates of change, mean action must begin now for future preparedness.

2. **SPU must intentionally adopt a culture of innovation - we will not achieve our climate goals without it**. A culture of innovation includes rapidly testing and adopting new technologies and processes – such as battery storage, in-line hydropower, restoration techniques, or deployable stormwater sensors – as well as new 'ways of working' that improve how we work and make decisions – such as community-based public-private partnerships or private sector collaboration. We must be willing to take strategic risks, run infrastructure and policy pilots alike, and rapidly learn from these efforts. Implementing emerging technologies and policies allows SPU to continuously improve the utility's service delivery and provides SPU's workforce with expertise needed to support changes in process.

3. **All SPU employees are climate staff.** Given how tightly intertwined SPU's businesses are with the changing water cycle, public health and safety, natural resources, extreme weather events, and future uncertainty, all SPU employees contribute to and are needed for SPU's climate adaptation, mitigation, and justice work. In order to ensure that the utility can meet its goals and innovate along the way, climate action should be a component of every employee's workplan.

Acknowledgements

This roadmap is the result of a collaborative effort. Subject matter experts from across SPU's lines of business and branches provided essential strategies, feedback, input, and review. These contributors include:

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Summary of Climate Actions

This roadmap features 36 utility-wide climate actions that are needed for SPU to achieve our climate goals. This table showcases the actions, grouped by Focus Area, with Status, Funding Need, and Partners identified. In-depth summaries of each action can be found in the following section.

Mitigation Actions

	Action	Focus Area	Status	Funding Need	Partners
M1	**Deliver Building Electrification Strategy**		Continuing	Within current capacity	Logistics
M2	**Partner with Puget Sound Energy (PSE) Toward Decarbonization**		New	Within current capacity	CPP
M3	**Improve Energy Efficiency Practices**		Continuing	Within current capacity	Logistics / CPP
M4	**Generate Renewable Energy**		Accelerated	Additional	CPP / LOBs
M5	**Address Fugitive Emissions**		New	Additional	Logistics
M6	**Transition Fleet to Electric Vehicles (EVs)**		Continuing	Additional	Logistics
M7	**Transition to Fossil-Fuel-Free Fuels**		Completed	Within current capacity	Logistics
M8	**Prioritize Fuel-Efficient Fleet Operations**		Continuing	Within current capacity	LOBs / Logistics
M9	**Require Collection Truck Emissions Reductions**		Continuing	Additional	SW
M10	**Establish Carbon Offset Protocols**		New	Within current capacity	CPP
M11	**Implement Sustainable Purchasing Policy**		New	Additional	Contracts & Procurement / CPP
M12	**Define SPU's Role in Mitigating Wastewater Emissions**		New	Additional	DWW / CPP
M13	**Reduce Embodied Carbon in New Construction**		New	Additional	PDEB / CPP
M14	**Advance Zero Waste Policies and Practices for SPU Operations**		New	Additional	SW / CPP
M15	**Advance High Emissions Impact Waste Prevention Efforts Across Seattle**		Continuing	Within current capacity	SW

Adaptation Actions

	Action	Focus Area	Status	Funding Need	Partners
A1	**Develop and Implement Adaptive Management Approach for Water Supply (Water Supply Alternatives Plan)**		Continuing	Within current capacity	Water
A2	**Develop Climate Resilient Plan for Drainage and Wastewater (Shape Our Water)**		Continuing	Within current capacity	DWW
A3	**Develop Water Reuse Roadmap**		New	Additional	DWW / Water / CPP
A4	**Invest in North One Water Operations Facility**		New	Within current capacity	DWW / Water
A5	**Lead Duwamish Valley Water Resilience Planning and Implementation**		Accelerated	Additional	DWW
A6	**Develop Climate Resilient Design Guidance for Capital Projects**		Continuing	Within current capacity	DWW / PDEB / CPP
A7	**Establish Water Efficiency Policies and Practices for SPU Operations**		Continuing	Within current capacity	Logistics / CPP
A8	**Revise and Reinvest in Water Conservation Across Seattle (Water Conservation 2.0)**		Accelerated	Within current capacity	Water
A9	**Accelerate Action to Slow and Adapt to Ocean Acidification**		New	Additional	CPP
A10	**Advance and Prioritize Green Infrastructure and Other Nature-Based Approaches to Stormwater Management**		Continuing	Within current capacity	DWW
A11	**Invest in Watershed Resilience and Implement Watershed Forest Management Plan**		Continuing	Within current capacity	Water
A12	**Improve Aquatic Ecosystem Health and Habitat Conditions from Urban Creeks to Puget Sound**		Continuing	Within current capacity	DWW / Water
A13	**Invest in Urban Forests**		Continuing	Within current capacity	DWW

Capacity Building Actions

	Action	Focus Area	Status	Funding Need	Partners
C1	**Develop Climate-Specific Natural Resource Inventory and Management Plan**		New	Additional	Water / DWW / CPP
C2	**Foster a Forum for SPU Climate Leadership and Collaboration**		Continuing	Within current capacity	CPP
C3	**Invest in Climate Resilient Workforce Pathways**		Continuing	Within current capacity	CPP
C4	**Integrate Climate Action into SPU Education and Outreach Programs**		Continuing	Additional	LOBs / CPP
C5	**Develop SPU Climate Change Resource Hub**		New	Within current capacity	CPP
C6	**Develop Funding and Financing Strategies for Climate Action**		New	Within current capacity	CPP / GR
C7	**Develop and Implement SPU's Climate Communications Plan**		Continuing	Additional	Community Affairs / CPP
C8	**Embed Climate Action into Legislative Priorities and Regulatory Requirements**		Continuing	Within current capacity	GR / LOBs / CPP

Section 1: Climate Mitigation Actions

Actions in this section include those that reduce emissions related to our own operations and supply chain as well as the support of SPU programs that result in emissions reductions citywide.

Our core business – involving the treatment of water, the conveyance of stormwater, and the collection of solid waste – inherently requires consuming electricity and liquid fuels. Using these resources releases greenhouse gas emissions, ultimately contributing to the warmer climate that threatens our infrastructure and communities. SPU has been tracking the greenhouse gas emissions from its operations ("Scope 1 and 2 emissions[1]") since 2019. SPU strives to reduce its emissions by adopting renewable energy and electrified equipment, and we aim to quickly and equitably transition away from relying on resources that contribute to climate change.

SPU's purchasing, procurement, and contracting also result in the production of emissions ("Scope 3 emissions"[2]) – for example, emissions generated through solid waste collection or the emissions associated with the materials in our infrastructure.

SPU also facilitates and supports waste prevention and diversion, and many of these programs result in emissions *reductions*. For example, our food waste prevention, food rescue, and food waste diversion efforts all help reduce the emissions associated with our food system.

[1] Scope 1 emissions refers to any emissions that SPU releases directly into the atmosphere (e.g., emissions from our fleet). Scope 2 emissions refers to the emissions associated with the electricity that SPU purchases.
[2] Refers to emissions that SPU indirectly creates through our supply chain or the activities of our employees.

Action M1: Deliver Building Electrification Strategy

Electrify SPU's 15 buildings and facilities by 2042.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	Logistics

Description: Eliminate the use of fossil fuel systems in SPU's 15 buildings and facilities by 2042. Heat pumps will replace gas- or oil-powered heating systems.

The City of Seattle's Green New Deal Executive Order mandates this action.

Estimated Impact: The use of fossil gas to heat SPU buildings was responsible for 5.2% of SPU's total emissions (732 mtCO2) in 2021. Transitioning the buildings to all electric systems will eliminate most of these emissions. Electrification can also make our facilities more prepared to support electric vehicles and equipment.

Budget and Costs: $14 million. $8.5 million with partial funding for the retrofit work is in SPU's 2025–2030 Strategic Business Plan. We also project that electricity rates will rise, which in turn will likely raise operation and maintenance (O&M) costs as we electrify compared to using natural gas heaters.

Ownership: SPU's Workforce Facilities Planning and Management. This series of projects has some work included in the 2024 Workforce Facility Master Plan Update recommendations.

Equity Considerations: A reduction in fossil gas use reduces both carbon emissions and particulate pollution as a result of combustion. Improvements will reduce pollution exposure in the communities where our facilities are located.

Electrification of our facilities can also help protect our employees against climate shocks and increase workforce resilience. For example, installing heat pumps will both heat and cool our facilities, which will insulate against extreme cold and heat events.

Prioritization and Recommended Time Frame: This action is underway and is planned to be completed by 2040. In order to adhere to SPU's 2030 carbon neutrality goal, we recommend accelerating this work to be completed by 2030.

Action M2: Partner with Puget Sound Energy (PSE) Toward Decarbonization

Collaborate with PSE to reduce the emissions associated with the electricity we purchase from them.

Focus Area	
Status	New
Funding Need	Within current capacity
Lead	CPP

Description: SPU has numerous facilities in the PSE service area. PSE's electricity represents the most significant source of SPU's carbon emissions: Just 40% of SPU's total electricity is supplied by PSE, but 97% of SPU's purchased electricity emissions can be traced to PSE. This action aims to explore ways we can collaborate with PSE to reduce the emissions associated with the electricity we purchase from them. This includes:

- Entering into a clean power purchasing agreement with PSE
- Advocating for further renewable energy development throughout PSE's service area
- Co-developing renewable energy sources on SPU properties, including community solar projects

Estimated Impact: PSE's electricity was responsible for 5,983.54 metric tons in 2021, equivalent to 42% of SPU's 2021 operational emissions. If successful, this action could result in eliminating that entire amount of emissions from SPU's portfolio. It is important to note that PSE has already pledged to have a carbon-neutral electric system and company operations by 2030, and 100% clean electricity by 2045.[3] As PSE's electric system and supply get "cleaner," the emissions associated with SPU's electricity will fall.

Budget and Costs: The cost of this action depends on which aspects of a partnership SPU pursues. If SPU were to purchase green power credits from PSE to offset the electricity it purchased in 2022, we believe it would add an additional $138,183 to the expenses we pay to PSE. Other potential partnerships – such as community solar projects or negotiations relating to electricity credits – could have de minimis impacts on SPU's budget. In these cases, PSE would shoulder the cost of improvements, and it would require allocating SPU staff members to negotiations.

Ownership: Early partnership efforts will be assigned to Corporate Policy & Planning staff.

Equity Considerations: Certain outcomes from a partnership with PSE – like the expansion of community solar projects or renewable energy generation – could provide communities with ways to reduce their reliance on carbon-intensive energy supplies.

Prioritization and Recommended Time Frame: SPU could initiate this action in 2027. A clean power purchasing agreement with PSE could be considered in 2029 in order to achieve our carbon neutrality goal.

[3] https://www.pse.com/en/pages/greenhouse-gas-policy

Action M3: Improve Energy Efficiency Practices

Encourage energy efficiency and awareness across our facilities.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	Logistics / CPP

Description: SPU is taking part in energy efficiency programs to identify low- or no-cost energy efficiency opportunities and capital investment projects. SPU has already analyzed efficiency opportunities at the Operations Control Center (OCC), Transfer Stations, and drinking water pump stations that sought to improve the efficiency of HVAC, insulation, and lighting at each facility and identified additional opportunities for efficiency. By analyzing how SPU consumes energy, the Utility can reduce our overall consumption, in turn quickly reducing greenhouse gas emissions. This action recommends a continued focus on energy efficiency and awareness across our facilities, including documenting and celebrating gains in efficiency.

Estimated Impact: Emissions reductions related to energy efficiency can vary; any facilities that use Seattle City Light (SCL) electricity (e.g., Transfer Stations and OCC) will have minimal emissions reductions, but these efforts are still critical to being an energy efficient utility. However, Water LOB emissions reductions (with facilities and infrastructure using PSE electricity) could lead to about 195 metric tons of emissions reductions annually, representing a 1.4% reduction in total greenhouse gas emissions.

Budget and Costs: Many of the improvements have limited or no costs associated with them. Where investments are required, the costs are eventually recovered. For example, in 2019, SPU worked with the City's Office of Sustainability & Environment to perform a building tune-up for the OCC that resulted in the implementation of HVAC, insulation, and lighting improvements. The cost of the improvements is estimated to be recovered within two years due to reduced energy costs. SPU has identified improvements that could reduce $27,845 of electricity expenditures annually for the Solid Waste LOB, with little to no costs associated with these improvements. SPU also identified $32,200 worth of savings related to Water LOB operations, most of which also had similarly low costs. If additional investments are required, the Sustainable Operations & Innovations capital budget could be used.

Ownership: While Corporate Policy has conducted the initial analysis work – in collaboration with consultants, SCL, and PSE – implementation falls to SPU's Fleets and Facilities team and LOBs.

Equity Considerations: Pursuing energy efficiency is part of SPU's mandate to be fiscally responsible, and lower operational costs support our objective to keep our rate path affordable. Energy efficiency practices could also help improve workplace conditions for our workforce; e.g., HVAC upgrades result in better indoor air quality and comfort, and LED lighting upgrades can provide better visibility.

Prioritization and Recommended Time Frame: Many of the proposed improvements to the solid waste and water operations that do not compromise the life of infrastructure or safety practices have already been implemented. SPU completed participation in PSE and SCL's energy efficiency programs in 2025. Documentation and sharing of the results should be completed by the end of 2026, which can inform energy efficiency projects moving forward. We recommend incorporating energy efficiency as a key performance indicator for facility management.

Action M4: Generate Renewable Energy

Conduct a renewable energy assessment and develop renewable energy pilots by 2030.

Focus Area	
Status	Accelerated
Funding Need	Additional
Lead	CPP / LOBs

Description: SPU can invest in renewable energy production on our facilities, at pump stations, and other land parcels. This will further support our transition to clean electricity, offset the expenses of purchasing electricity, and increase our operational resilience. This action proposes that SPU conduct a renewable energy assessment of SPU's facilities and infrastructure and invest in renewable energy pilots. The renewable energy assessment will identify which of SPU's facilities, pump stations, and land parcels are most suitable for renewable energy development. In parallel, SPU will invest in small-scale renewable energy projects where opportunities have already been identified, such as in-line hydropower, rooftop and carport solar installations, and sewer waste-heat recovery systems.

Estimated Impact: This action will reduce electrical consumption and the associated carbon emissions. When paired with battery storage, renewable energy generation could also improve resilience throughout our infrastructure. The impact of this action will depend on the level of renewable energy investments made by SPU: Estimates show that installing solar panels on the Operations Control Center could generate up to 376,000 kwh annually; an in-line hydropower pilot project could generate between 550,000 and 950,000 kwh of electricity, depending on the site selection and formatting used; and installing solar panels on the Midway landfill could potentially generate 7.5 million kwh of electricity annually.

Budget and Costs: SPU has currently allocated a $350,000 capital budget for sustainable operations and innovations that could support and seed renewable energy pilots. Additional capital funding will be required from LOBs to supplement these investments, and additional O&M funding (up to $500,000) will be required to conduct the renewable energy assessment. The cost of any given project varies significantly: The Lake Forest Park In-Line Hydropower project is projected to have a cost of $1million to $2 million, while the OCC solar installations are projected to have a cost of around $935,000. Renewable energy projects, by their nature, will likely pay for themselves over the life of the project.

Ownership: CPP will evaluate and select projects in coordination with the Fleets and Facilities team and relevant representatives from each LOB. Renewable energy projects will also require coordination with SCL, to establish electrical interconnections and power purchase agreements.

Equity Considerations: Renewable energy generation intersects with many environmental justice priorities. Renewable energy projects could support our emergency response systems; enable facility and fleet electrification, which in turn would reduce particulate pollution from SPU operations; could increase the resilience of our workforce facilities; and could reduce SPU's energy expenses. SPU could also work with women- and minority-owned business enterprises (WMBE) to install renewable energy projects, or site projects where they might directly benefit underserved communities.

Prioritization and Recommended Time Frame: The RFP for a renewable energy assessment, contracting, and compilation of final results will likely take about 18 months. We recommend this process be prioritized in 2026. Individual pilot projects could have an implementation interval ranging from 18 months to three years, depending on complexity.

Action M5: Address Fugitive Emissions

Enhance monitoring of fugitive emissions and shift to lower-emission refrigerants and compatible equipment.

Focus Area	
Status	New
Funding Need	Additional
Lead	Logistics

Description: The operation of air conditioning systems in facilities and motor vehicles requires refrigerants, most of which are extremely potent greenhouse gases. The refrigerant R134a, for example, is 1,430 times more powerful of a greenhouse gas than carbon dioxide. While these refrigerants are utilized in minimal amounts, many pieces of air conditioning equipment leak small amounts of the gases over the lifetime of their use. This action aims to address the fugitive emissions by:

- Improving monitoring techniques in both facility and vehicle air conditioning systems
- Transitioning to refrigerants with lower emissions factors when possible (taking safety into account)
- Replacing existing equipment as it is retired – or when it begins to leak material – with equipment that can utilize new refrigerants with less harmful emissions profiles

Estimated Impact: We estimate that fugitive emissions are responsible for the equivalent of 534 metric tons of CO2e emissions annually (about 80% of which can be attributed to our fleet). Fugitive emissions account for 3.7% of SPU's 2021 emissions profile. The numbers likely overstate the true impact of refrigerants on SPU's total emissions profile due to the shortcomings of our current monitoring systems and the estimation methods utilized in our inventory.

Budget and Costs: The initial upfront costs to set up a monitoring protocol will be minimal. After inventorying and tracking protocols are in place, SPU will need to undertake regular maintenance of HVAC and MVAC systems to repair leaks. It's unclear at this time if this will require additional costs associated with maintenance and repairs.

Ownership: The SPU Fleets and Facilities team will work with Finance and Administrative Services (FAS) to identify ways to track the amount and type of refrigerant lost more precisely. This could require a citywide initiative to support better refrigerant use (which Corporate Policy & Planning could assist with) or could also be implemented as a narrower project mainly focusing on the utilities.

Equity Considerations: As refrigerants are generally considered safe, and are released in small volumes, this will likely have a minimal impact on the surrounding community. However, it should be noted that r1234yf (a refrigerant with a lower emissions profile) in the atmosphere can degrade into trifluoroacetic acid, which is a corrosive chemical – raising the risk that unplanned releases could harm communities. [4]

Prioritization and Recommended Time Frame: While a new monitoring protocol could be developed relatively quickly, it will likely take a few months to record accurate data. Once monitoring is in place, SPU can pursue transitioning to refrigerants with lower emissions factors.

[4] https://pubs.acs.org/doi/10.1021/acs.est.7b05960

Action M6: Transition Fleet to Electric Vehicles (EVs)

Replace light-duty vehicles that are at the end of their useful life with electric alternatives and continue to invest in the development of our EV charging network.

Focus Area	
Status	Continuing
Funding Need	Additional
Lead	Logistics

Description: SPU's fleet represents the Utility's second-largest source of emissions. The fleet consists of light-duty and medium-duty vehicles (sedans, SUVs, small vans, and light trucks) and heavy-duty vehicles (larger vans and trucks, construction equipment, vactors). SPU estimates that of the 800 vehicles and equipment in the Utility's fleet, 523 use fuel and may be eligible for electrification. There are 85 all-electric vehicles, 11 plug-in hybrid-electric vehicles, and 22 traditional hybrid vehicles. Many of the light-duty vehicles have suitable electric replacement options. There are currently limited electric vehicle options that meet our business needs for medium- and heavy-duty vehicles.

This action aims to replace light- and medium-duty vehicles that are at the end of their useful life with electric alternatives. To support fleet electrification, SPU will also need to continue to build out a robust charging network across all SPU facilities. This action also aligns with the numerous executive orders, including the 2022 Transportation and Climate Justice Executive Order, mandating municipal fleet electrification or fossil fuel-free.

Estimated Impact: On our current trajectory, we expect an emissions reduction of between 30 and 200 metric tons each year.

Budget and Costs: The purchase of most electric vehicles comes with a cost premium compared to their current gas-powered counterparts. SPU's Fleet team estimates that we will need an additional 139 level 2 chargers and six level 3 chargers, with an additional cost of $3,760,000 (including initial investment and cost of ownership). Operating a fleet with EVs could also reduce total ownership costs through decreased maintenance costs, downtime, and fuel costs compared to traditional internal combustion engine vehicles.

Ownership: Fleet Management, in coordination with FAS.

Equity Considerations: Electric vehicles will reduce local particulate and noise pollution in the neighborhoods our fleet operates in, and charging-network needs could create new job opportunities for electricians.

Prioritization and Recommended Time Frame: SPU is implementing a strategy that replaces vehicles as they are retired, which means some combustion engine vehicles purchased after 2020 will continue operation into the 2030s. Charging infrastructure improvements are an ongoing effort that will continue beyond 2030.

Action M7: Transition to Fossil-Fuel-Free Fuels

Maintain SPU's transition to low-carbon, fossil-fuel-free liquid fuels and conduct further analysis on future fuel options and impact measurement.

Focus Area	
Status	Completed
Funding Need	Within current capacity
Lead	Logistics

Description: As identified in Action 6, heavy-duty electric vehicles are still in their nascency; SPU has only recently begun to see some viable EV alternatives to heavy-duty fleet operations, such as the electric "yard goats" already in operation at SPU's Transfer Stations. While it is likely that more options will continue to become available as the market matures, SPU will need to rely on a fleet powered by traditional liquid fuels for heavy-duty operations in the immediate future.

Washington State's clean-fuel standard requires the transition of fleets to fuels that have lower carbon intensities, and the City of Seattle has also required a transition to renewable fuel sources as part of its larger green fleet strategy for heavy fleet vehicles.

As of mid-2023, SPU has transitioned its fleet to low-carbon, fossil-fuel-free liquid fuels, specifically a form of renewable diesel (R99). This action will advocate for the continuing support of the low-carbon fuel transition, evaluate potential future fuel options as they become more economically feasible (including, but not limited to hydrogen or electrofuels) and conduct further analysis that gives us a more complete picture of the emissions impact of this transition.

Estimated Impact: The FAS/Fleet team estimates that R99 will reduce life-cycle vehicle emissions by 20% to 40% compared to the B20 diesel fuel mixture previously used. This will equate to an emissions reduction between 785 mtCO2e and 1,570 mtCO2e compared to the 2021 status quo.

Budget and Costs: The current premium cost of R99 is $0.30 to $0.80 more per gallon than the B20 diesel fuel. The additional fuel costs related to this transition are estimated at $60,000 to $160,000 annually excluding any offset from electrified heavy-duty vehicles.

Ownership*:* Fleets Management, in coordination with FAS.

Equity Considerations: This action is unlikely to address any environmental justice concerns compared to the status quo. Renewable fuels are still hydrocarbons that combust in traditional internal combustion engines, and will still generate localized pollution and from vehicle operation.

Prioritization and Recommended Time Frame: This action has been completed. Further actions include monitoring the efficacy of the fuels in operations and for more affordable supply as they emerge to market.

Action M8: Prioritize Fuel-Efficient Fleet Operations

Prioritize fuel-efficient operational practices.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	LOBs / Logistics

Description: Reducing vehicle emissions requires a comprehensive strategy that includes transitioning to electric vehicles, right-sizing the fleet and individual vehicles, using cleaner fuels, and making operational changes to prioritize fuel efficiency. This action focuses on efforts to promote fuel-efficient practices. Currently, this includes anti-idling, idle mitigation systems, an automatic vehicle locating system to efficiently dispatch nearby vehicles for emergency response, and a telematics system that will provide consistent and reliable data showing how vehicles are operating.

Since 2013 SPU has had an anti-idling procedure in place (FFM-200.1), and all vehicle and heavy equipment operators are required to comply. SPU has also been installing idle mitigation systems in certain vehicles to support the reduction in vehicle idling.

In 2024, FAS began implementing a new telematics system for SPU's light fleet, which expanded to include the utility's heavy-duty fleet in 2025. Telematics provide information on fuel economy, EV battery state of charge, charging patterns, vehicle usage, mileage, idle time, vehicle health, and load weight. This information will improve efforts to implement fuel efficiency strategies.

Estimated Impact: Implementing changes that improve fuel efficiency will result in reduced emissions, albeit at a much smaller rate compared to fleet electrification or the transition to renewable fuels. With the deployment of new telematics technologies, we will be able to gather more accurate data on the efficacy of fuel conservation methods.

Budget and Costs: Some items identified in this action can be implemented with no- or low-cost changes to business operations, and some have already been earmarked for implementation. Rolling out a robust telematics system will incur additional costs to install the necessary hardware in existing vehicles and the monthly subscription fee. Equipping about 700 vehicles will cost roughly $140,000 upfront and $117,600 annually, though some of this will be offset by retiring the current automated vehicle location system. The improved data from telematics will help identify vehicles for electrification, reduce downtime, and streamline fleet operations, including enabling paperless inspections for heavy-duty vehicles.

Ownership: Fleets Management, in coordination with FAS.

Equity Considerations: It is very likely that this action will lead to notable benefits to the communities we operate in: Anti-idling actions will reduce air pollution and unnecessary noise and disturbance.

Prioritization and Recommended Time Frame: Components of this action have already begun to be implemented by our Fleet and Facilities team, including efforts to reduce idling. In addition, significant progress has been made in the past year to roll out a citywide telematics system. This progress includes the development of a citywide telematics policy.

Action M9: Require Collection Truck Emissions Reductions

Revisit requirements on collection truck emissions reductions when existing contracts are up for renewal in 2029.

Focus Area	
Status	Continuing
Funding Need	Additional
Lead	SW

Description: SPU's solid waste collection stream is managed through a combination of SPU-owned facilities as well as collection and conveyance services contracted to WM and Recology.

This collection, transfer, and conveyance to a final landfill site generates emissions: The solid waste collection fleet – managed by WM and Recology – generated the equivalent of 7.3 thousand metric tons of carbon dioxide in 2019, representing a larger source of emissions than our own fleet activities.

Existing contracting language requires WM and Recology to utilize alternative fuels as part of their fleet provisions, establishing a precedent for leveraging the contracting process to encourage emissions reductions. However, any additional emissions reductions mandates will increase the cost of solid waste collections, which will inevitably be passed on to SPU and, in turn, to ratepayers.

These contracts are up for renewal in 2029, at which point SPU will have a chance to solicit new RFPs. As part of this process, SPU should revisit requirements on collection truck emissions reductions, with the ultimate aim of requiring any contractor providing collection for SPU to have a carbon-neutral fleet, eliminating the emissions and particulate pollution associated with these systems.

Estimated Impact: Theoretically, this action could result in the reduction of 7.4 thousand metric tons of CO2 emissions from collection trucks alone, assuming that the entire fleet was transitioned to carbon-neutral solutions. However, due to cost and rate-path constraints, the total amount of emissions abated through this action will likely be considerably less.

Budget and Costs: Conditioning a contract with more stringent emissions reductions requirements will almost certainly increase the cost of the contract, with some emissions mandates – such as requiring collection fleet electrification – imposing a cost increase that could be incompatible with SPU's budget expenditures and rate path.

Ownership: The Solid Waste Code and Contracts team will implement, and Corporate Policy & Planning can help provide analytical and research support.

Equity Considerations: These trucks routinely operate within residential neighborhoods, and generate particulate pollution as well as carbon pollution. They also frequently travel between residential neighborhoods and our Transfer Stations, exposing neighborhoods in the vicinity of our facilities to higher-than-average heavy equipment noise and traffic. While this action is unlikely to result in traffic reductions, it can likely reduce particulate and carbon pollution. This action could theoretically generate new contracting opportunities for emerging firms, although SPU is currently unaware of any WMBE or BIPOC-run firms that could offer solid waste collection.

Prioritization and Recommended Time Frame: Implementation of will not be able to start until the renewal date approaches in 2029.

Action M10: Establish Carbon Offset Protocols

Establish a verifiable, reliable, and credible protocol for SPU to utilize to purchase and retire carbon offsets.

Focus Area	
Status	New
Funding Need	Within current capacity
Lead	CPP

Description: While SPU can make enormous progress toward reducing carbon emissions by 2030, it's unlikely that we will be able to completely eliminate all sources of operational greenhouse gas emissions within that time frame. As such, SPU will likely need to explore ways to purchase offsets for our emissions in order to be considered carbon neutral.

This action aims to establish a verifiable, reliable, and credible protocol for SPU to purchase and retire carbon offsets. This will allow SPU to achieve carbon neutrality using carbon offsets while we continue to pursue broader carbon reductions.

Estimated Impact: Theoretically, SPU could offset the entirety of its emissions through this action – a total in 2021 of 14.4 thousand metric tons of carbon offsets. However, this would be unrealistic in practice. Offsets are expensive, and abating our entire emissions profile each year would require paying large amounts of money to someone else to sequester our own emissions. It would also raise significant questions about the reliability of our emissions reductions, opening SPU up to scrutiny and criticism.

Budget and Costs: Offsets can have a wide range of costs. Our colleagues at Seattle City Light quoted that many offsets can be purchased for $7 to $15 per ton, with some offsetting purchases as high as $25 to $30 per ton. At a cost of $25 per offset, it would cost $357,500 per year to offset our entire carbon footprint. All of these costs would be in addition to the cost of staff time and coordination. This would likely require significant involvement from the CPP and Government Relations teams, potentially over multiple years of advocacy and lobbying.

Ownership: Primarily Corporate Policy & Planning, with the support of Government Relations, the General Manager's Office, and SMEs throughout the Utility.

Equity Considerations: Offsets can either support environmental justice or worsen existing inequities. Some projects provide real local benefits – such as replacing oil furnaces with heat pumps, preserving green spaces, or expanding community solar – while others are unreliable or channel resources away from Seattle without helping nearby residents. Although registries such as the Climate Action Reserve or VERRA now require more information about local impacts, concerns remain that relying on offsets shifts SPU's climate responsibilities and benefits away from the communities it serves.

Prioritization and Recommended Time Frame: Implementing an offsetting protocol will be a multiyear effort, with legislative, administrative, and financial components to address. We recommend that this effort begin in 2027, as it will likely take several years – potentially to 2030 – before SPU is able to purchase offsets.

Action M11: Implement Sustainable Purchasing Policy

Develop a Green Procurement Implementation Plan, sustainable procurement pilots, and a strategy for end-of-life asset management.

Focus Area	
Status	New
Funding Need	Additional
Lead	Contracts & Procurement / CPP

Description: As identified in SPU's Purchasing & Contracting Inventory, actions to address emissions in our purchasing and contracting represent a significant opportunity to reduce our Scope 3 emissions impacts.

The City of Seattle has already created – with the input of SPU staff – a Sustainable Purchasing Policy that is intended to guide all City departments. However, this policy has not been enacted into an ordinance, and SPU has not yet allocated staffing to implement it. This action proposes the development of a Green Procurement Implementation Plan that will outline how SPU will come into compliance with the established policy and other ordinances or municipal codes that pertain to green purchasing and contracting.

This action also proposes the development of sustainable procurement pilots in three areas across the Utility:

- SPU purchases (from office supplies to flatware used for meetings/events to office furniture)
- Citywide blanket contracts
- Capital projects and programs (the materials going into our infrastructure and construction processes)

This action also proposes the development of a strategy for end-of-life asset management; i.e., what happens to our equipment, infrastructure, and buildings when they reach end of life.

Estimated Impact: While the total impact of implementing a sustainable purchasing policy is currently unknown, this action could lay the groundwork for significant emissions impacts in our supply chain. Impacts could include reduced embodied emissions associated with our purchases, and professional and construction service contracts.

Reductions to embodied carbon emissions (Action M13) and a better understanding of SPU's contribution to wastewater treatment (Action M12) have also been specifically called out as separate actions within the supply chain emissions topic that merit their own initiatives.

Budget and Costs: The analysis and project management of the strategy/framework development will not have costs associated with it beyond the cost of staffing requirements allocated. Implementation costs will vary greatly depending on decisions made based on the procurement strategy. If investments are required, the Sustainable Operations & Innovations capital budget could be used.

Ownership: A coordinated effort between Corporate Policy & Planning, SPU and FAS Purchasing & Contracting, and SMEs across the Utility.

Equity Considerations: The Green Procurement strategy should be tied to SPU's broader WMBE and Equity in Contracting frameworks.

Prioritization and Recommended Time Frame: As the policy for this action has been written, we recommend prioritizing implementation starting in 2026.

Action M12: Define SPU's Role in Mitigating Wastewater Emissions

Quantify and better understand emissions from our wastewater treatment and define our role in mitigating these emissions.

Focus Area	
Status	New
Funding Need	Within current capacity
Lead	DWW / CPP

Description: As identified in SPU's Purchasing & Contracting Inventory, our wastewater treatment contract with King County is a significant source of Scope 3 emissions. This action recommends assessing and defining SPU's role in mitigating the climate impacts of wastewater treatment.

This action's primary goal is to quantify and better understand SPU's wastewater emissions, and identify further potential actions that SPU could pursue to reduce emissions.

King County's Wastewater Treatment Division (KC WTD) is currently updating its Regional Wastewater Services Plan, and that effort could be an avenue through which to further this action.

Estimated Impact: While the total impact of this action is currently unknown, addressing emissions from wastewater treatment was identified as one of the top opportunity areas of the SPU Purchasing & Contracting Inventory. This could significantly outweigh the impacts of many of SPU's Scope 1 and 2 actions.

Budget and Costs: The initial action required is to initiate a dialogue with KC WTD to further our exploration, which will primarily require staff time and resources to initiate discussion.

Ownership: The initial action required is to initiate a dialogue with KC WTD. This will be led by Corporate Policy & Planning, alongside the DWW Code, Policy, and Regulatory team.

Equity Considerations: Unknown.

Prioritization and Recommended Time Frame: We recommend an initial discussion with King County DNRP early next year, with the primary objective focused on understanding SPU's role and contribution to wastewater emissions in the region. Further conversations can focus on better understanding how to mitigate those emissions and support regional decarbonization in the wastewater treatment space.

Action M13: Reduce Embodied Carbon in New Construction

Develop internal policies that set embodied carbon standards in key construction materials used by SPU, such as cement, concrete, and metals.

Focus Area	
Status	New
Funding Need	Additional
Lead	PDEB / CPP

Description: As identified in SPU's Purchasing & Contracting Inventory, actions to reduce embodied carbon in materials used in the construction and repair of SPU's buildings and infrastructure represent a significant opportunity to reduce our Scope 3 emissions impacts. SPU's purchases of concrete in particular have a sizable carbon footprint due to the emissions intensity of cement production.

This action recommends the development of internal policies that set embodied carbon standards in key construction materials, such as cement, concrete, and metals, resulting in the use of lower-carbon cement blends or alternative less-carbon-intensive materials (including reused materials) in our buildings and infrastructure projects. SPU can initiate this effort independently or in conjunction with other City departments.

Estimated Impact: Further analysis is needed to better understand the volume of concrete/cement that SPU is currently purchasing, and the potential impacts of low-carbon cement blends and feasible alternative materials. We do know that the emissions impacts of this action could significantly outweigh the impacts of many of SPU's Scope 1 and 2 actions. Analysis from one potential supplier suggests that low-carbon concrete can reduce between 50 to 60 kg of CO2e for each square meter of concrete poured.

Budget and Costs: The analysis and project management of the policy development will not have costs associated with it beyond the cost of staffing requirements allocated. Implementation costs will vary greatly depending on decisions made based on the embodied carbon standards and the scale of the projects. We anticipate that low-carbon cement blends and alternative materials will have an initial cost premium, due to limited numbers of suppliers with limited inventories, although these will likely decrease as more companies offer low-carbon mixes.[5] The Sustainable Operations & Innovations capital budget could be used to offset this cost premium.

Ownership: A coordinated effort between Corporate Policy & Planning, Purchasing & Contracting, and the Project Delivery & Engineering Branch – especially the Materials Lab. More widespread adoption of low-carbon concrete will require collaboration with representatives from SDOT and SCL to ensure that low-carbon concrete use is congruent with their specifications and use cases.

Equity Considerations: In addition to the climate benefits of enacting a policy on embodied carbon, there are potential benefits to communities impacted by cement production or located near cement plants. Hazardous pollutants, including air pollutants and mercury, are released in both fuel-related and process-related emissions for cement.[6] This action also has the potential to create new jobs in sustainable development throughout the region, representing a significant green economy opportunity.

Prioritization and Recommended Time Frame: We believe that we can identify a pilot case in the next 18 to 24 months. However, a widespread policy utilizing low-carbon concrete will likely take three to five years to implement.

[5] https://rmi.org/low-carbon-concrete-in-the-northeastern-united-states/
[6] https://www.nrdc.org/bio/veena-singla/cut-carbon-and-toxic-pollution-make-cement-clean-and-green

Action M14: Advance Zero Waste Policies and Practices for SPU Operations

Conduct a zero-waste assessment of SPU operations to identify opportunities to advance our zero waste goals.

Focus Area	
Status	New
Funding Need	Additional
Lead	SW / CPP

Description: Source reduction of waste is the best way to reduce greenhouse gas emissions associated with the production of new goods. To advance toward zero waste, Seattle looks at the whole life cycle of how products and packaging are made to eliminate waste and toxics, prevent pollution, reduce carbon emissions, and conserve natural resources from the start. However, zero waste policies and practices have not yet been established for SPU itself.

This action proposes to establish zero waste policies and practices for SPU operations, such as drafting and implementing utility-wide guidance requiring use of durable food service ware in lieu of single-use items at SPU meetings and events. A first step would be to conduct a zero waste assessment of SPU operations to identify additional opportunities to optimize diversion (recycling and composting), reduce material usage, increase reuse and repair, and increase waste prevention. Depending on the results of the assessment, SPU could choose to pursue TRUE (Total Resource Use and Efficiency) Zero Waste Certification for certain facilities.

This action is also linked to Action M11: Implement Sustainable Purchasing Policies.

Estimated Impact: While the total impact of this action is currently unknown, this action could lay the groundwork for significant emissions impacts associated with our material usage, and serve as an opportunity for the City to actively model how to operate on a zero waste basis. Impacts could include:

- Reduced emissions associated with our use of disposable and single-use items
- Reduced emissions associated with increased diversion, upcycling, sharing, reuse, donation, and repair practices

Budget and Costs: The analysis and project management of the policy development will require staff time and resourcing. This action could potentially include hiring a consultant with expertise in conducting zero waste assessments of facilities. We estimate that a consultant could cost between $75,000 and $150,000. Implementation costs will vary depending on decisions made based on the zero waste policies and audits. If additional investments are required, the Sustainable Operations & Innovations capital budget could be used. Implementation of this action will likely save SPU money over the long term from reduced expenditures on disposable and single-use items, reduced disposal costs, and increased product longevity.

Ownership: A coordinated effort between Corporate Policy & Planning, Purchasing & Contracting, Facilities and Fleets Management, and the Solid Waste LOB leadership and SMEs.

Equity Considerations: Zero waste policies and practices should be tied into SPU's broader procurement frameworks related to WMBE and social impact, as relevant.

Prioritization and Recommended Time Frame: Implementation time will depend on whether we decide to pursue this effort solely within SPU or citywide; if the former, we anticipate that a policy/strategy like this could take approximately two years to implement.

Action M15: Advance High Emissions Impact Waste Prevention Efforts Across Seattle

Continue to advance high emissions impact waste prevention and diversion efforts across Seattle – specifically in the areas of food waste and construction & demolition waste.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	SW

Description: SPU's Solid Waste LOB programs on waste prevention and diversion – specifically those focused on food waste and construction & demolition waste – result in significant emissions reductions citywide. This action supports the continued advancement and acceleration of these programs.

Greenhouse gas emissions are produced in all aspects of our food system – from food production (agriculture), logistics (transport, storage, and processing), and landfilling. Food loss and waste is currently responsible for about 8% to 10% of annual greenhouse gas emissions[7], and food is the single largest material in Seattle's waste stream despite being banned from the garbage. SPU helps reduce emissions from our food systems by working with residents and businesses to prevent food waste, diverting edible food waste to rescue and the food insecure, and diverting inedible food waste from landfill to compost.

Building construction and operations make up almost 40% of climate emissions globally.[8] The emissions associated with manufacturing new building materials are substantial: cement manufacturing alone produces 2.2 billion tons of CO2 each year, 8% of global emissions.[9] For this reason, the best approach is to reuse existing buildings and retrofit if needed. If that's not possible, the next best thing is to maximize reuse of building materials and to recycle what can't be reused. SPU reduces the landfilling of materials used for buildings and encourages the reuse of these same materials by requiring building salvage assessments for all demolition projects and larger alterations projects, and supporting deconstruction incentives. Recycling is promoted by banning specific recyclable building materials from being landfilled.

A number of other high emissions impact efforts will be identified in SPU's upcoming Waste Prevention Strategic Plan. Examples of waste prevention initiatives beyond food waste and construction & demolition include eliminating unnecessary single-use packaging items and promoting the reuse, repair, and sharing of goods.

Estimated Impact: In addition to lowering Seattle's consumption-based emissions, these efforts conserve natural resources, expand job opportunities, increase food availability for residents who don't have sufficient access, and increase community cohesion through the sharing of goods and knowledge.

Budget and Costs: Existing Solid Waste LOB budgets currently fund these programs.

Ownership: Solid Waste LOB PPM SMEs lead this action, with CPP staff collaboration as needed.

Equity Considerations: The waste prevention and diversion policies and practices should be tied into SPU's broader procurement and planning frameworks related to WMBE and social impact, including the Seattle Food

[7] Project Drawdown
[8] United Nations Environment Programme [UNEP] 2022 Building Materials and the Climate: Constructing a New Future
[9] Chatham House

Action Plan, One Seattle Plan Comprehensive Plan Update (2025), and the Waste Prevention Strategic Plan, as relevant.

Prioritization and Recommended Time Frame: These are continuing bodies of work.

Section 2: Climate Adaptation Actions

Climate change is exacerbating current challenges and adding new risks to already complex utility practices. According to the National Oceanic and Atmospheric Administration (NOAA), 2024 was the hottest year on record globally since 1850.[10] 2024 also produced the second-highest number of climate- and weather-related disasters with losses exceeding $1 billion each (27 events), second only to 2023 (28 events).[11]

Actions in this section aim to foster climate resilience and preparedness at SPU. All of SPU's lines of business are vulnerable to climate impacts, including, but not limited to, extreme heat events, sea level rise, a changing water cycle, shifting precipitation patterns, reduced snowpack, and increased likelihood of wildfire and smoke intrusion events.

SPU's climate adaptation work focuses on assessing vulnerabilities, anticipating and responding to the impacts of climate change, and transforming our essential service systems to be more resilient, multifunctional, and community centered. SPU facilitates water-related adaptation actions in Utility operations and citywide. This includes operational and infrastructure investments as well as supporting education, public-private collaboration, green infrastructure, non-potable water reuse innovation, and urban forestry initiatives that build resilience for Seattle communities and ecosystems.

What is climate resilience?

Resilience is the ability of individuals, communities, and social, economic, and environmental systems to withstand and adapt to climate events, trends, and impacts while maintaining their core identities, functions, and structures. (Adapted from the 5th IPCC Assessment Report)

[10] NOAA National Centers for Environmental Information, "Monthly Global Climate Report for Annual 2024," 2025.
[11] NOAA National Centers for Environmental Information, "U.S. Billion-Dollar Weather and Climate Disasters," 2025.

Action A1: Develop and Implement Adaptive Management Approach for Water Supply (Water Supply Alternatives Project)

Use an adaptive management approach in order to right-size supply system investments amid a constrained fiscal environment and future uncertainty.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	Water

Description: This action – which is already underway – is to better equip SPU to plan for water supply and to make smart water supply investments at the right time. This represents a shift in how SPU carries out water supply planning, to a scenario-based approach that accounts for planning amid deep uncertainty. This approach is being developed (as of December 2025) in the Water Supply Alternatives Project and involves developing a range of plausible future scenarios to represent various futures, based on growth and development, climate, and the economy. The scenarios will form the basis of SPU's future water supply planning and will provide information that SPU can use to make investments in future water supply development. There is crossover in this action as well with other planning processes, including DWW's Shape Our Water plan (Action A2), the proposed Water Reuse Roadmap (Action A3), and the citywide Climate Action Plan.

Estimated Impact: This action will help measurably strengthen our water planning process and increase our ability to make good investment decisions to ensure sufficient water supply for people and fish far into a warmer future.

Budget and Costs: The Water LOB is already funding this action, as it is a core business function. There is no new cost.

Ownership: Water Planning and Program Management Division, with input and guidance from a steering committee representing other sections, branches, and LOBs.

Equity Considerations: The process of adaptively managing SPU's water supply overlaps with Tribal treaty rights and may have implications for affordability. Depending on where the additional water supply investments are made and whether they are in-city or within the watersheds, there could be construction and operational impacts for communities.

Prioritization and Recommended Time Frame: The Water Supply Alternatives Plan development is scheduled to be complete in 2026. It will inform the 2029 update of the Water System Plan.

Action A2: Develop Climate Resilient Plan for Drainage and Wastewater Infrastructure (Shape Our Water)

Complete a 50-year plan for resilient drainage and wastewater infrastructure by 2026, with a particular focus on climate, growth, and development impacts.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	DWW

Description: DWW is completing a 50-year integrated drainage and wastewater system plan, Shape Our Water, focused on how future investments in drainage and wastewater systems can accommodate climate change, growth, and development. The objective of Shape Our Water is to plan for making equitable and environmentally sound drainage and wastewater investments that take care of our natural waters and the people who rely on them for the next 50 years and beyond. The effort began in 2019 and is expected to be complete in 2026.

Estimated Impact: This action will strengthen our drainage and wastewater systems' climate resilience and minimize the impacts of flooding and sewer backups, protect water quality, improve aquatic health, and reduce combined sewer overflows to benefit all life that relies on our local water bodies.

Budget and Costs: The Drainage and Wastewater LOB is already funding this action, as it is a core business function.

Ownership: Drainage and Wastewater System Planning team, with input from internal and external stakeholders, partners, and community members.

Equity Considerations: The Shape Our Water Community Vision documents Seattle community members' goals for community and environmental health, resilience, multibenefit investments, and community-centered partnerships. It is the guiding document for the Shape Our Water plan and will ensure that future investments especially benefit neighborhoods that have experienced historical disinvestment.

Prioritization and Recommended Time Frame: The Shape Our Water plan is scheduled to be complete in 2026.

Action A3: Develop Water Reuse Roadmap

Develop a Water Reuse Roadmap to advance and test a suite of tools and pilot opportunities for rainwater capture and on-site non-potable water reuse.

Focus Area	
Status	New
Funding Need	Additional
Lead	DWW / Water / CPP

Description: A One Water approach is an integrated, holistic way of managing all water resources, including drinking water, wastewater, stormwater, and groundwater, as an interconnected system. It emphasizes that all water has value and can be managed sustainably to meet community and ecosystem needs. In the 2024 Strategic Business Plan Update, SPU committed to identifying and prioritizing One Water approaches to water management and underscored the inherent link between the DWW and Water LOBs. On-site, non-potable water reuse or district-scale water reuse exemplifies this approach by reducing stress on SPU's drainage and wastewater systems, supplementing the potable water supply, and delivering multiple benefits to communities. As a One Water strategy, water reuse also supports climate resilience and adaptation by mitigating the impacts of longer, more frequent droughts and lessening the burden on centralized infrastructure.

While both DWW and Water LOBs have an interest in reuse, the Utility has not yet developed a cross-LOB, One Water assessment and shared strategy to guide water reuse as part of our service delivery portfolio. Reuse is being evaluated as part of the Demand Reduction Potential Assessment (DRiP), and that process will help the Water LOB to decide the extent to which SPU will continue to invest in water reuse strategy development. Assuming it will move forward through that process, the key objectives of the Water Reuse Roadmap will be to:

- Summarize a suite of innovative tools for advancing reuse, which may include technologies, policies and regulations, or programs.
- Identify and evaluate reuse strategies that have the most potential to serve *both* DWW and Water system needs as well as reuse strategies that serve only DWW *or* Water system needs.
- Align SPU's water reuse approach with the needs of other City departments that may have a role as either a water user or policy and implementation partner.
- Propose a project short-list to test most-promising water reuse tools and technology through partnerships with other City departments and/or the private sector.

Estimated Impact: This action could be transformational for the Utility and could increase the resilience of both SPU's DWW and Water LOBs.

Budget and Costs: The main costs will be staff time. While reuse is a component of the DRiP and the Water Supply Alternatives Project (Action A1), there is currently no budget to work on a Seattle-specific water reuse strategy or pilot.

Ownership: CPP, in partnership with planning staff from DWW and Water. Current planning efforts within the LOBs, including the DRiP, Water Supply Alternatives Project, and Shape Our Water, will inform this effort. The Water Reuse Roadmap will set the stage for cross-LOB collaboration by identifying joint actions that reflect the unique needs of each LOB and support opportunities for One Water collaboration.

Equity Considerations: Water reuse can help keep customers' bills as low as possible by avoiding or delaying SPU's need to invest in large capital projects to add system capacity. Individual customers can also benefit from lower potable water usage and water and sewer bills.

Prioritization and Recommended Time Frame: This project is contingent on identifying funding and staff. Given the substantial long-term planning happening within the Water LOB, developing a parallel plan for water reuse is an important near-term step.

Action A4: Invest in a North One Water Operations Facility

Invest in a north operations facility to support Drainage and Wastewater and Water LOBs and to increase resilience of SPU's workforce and operations to both acute and long-term stressors.

Focus Area	
Status	New
Funding Need	Within current capacity
Lead	DWW / Water

Description: The existing North Operations Center and Haller Lake facilities are emergency-critical SPU workforce facilities. Located outside of known seismic, flood, and landslide-hazard zones, the facilities have the potential to remain functional and support sustained, in-person operations within 24 hours of an earthquake emergency. The facilities are out-of-date and require significant updates to meet frontline workforce needs.

A new North One Water Operations Facility will replace both facilities with a unified operations complex in North Seattle that supports both the DWW and Water LOBs. This multibenefit investment addresses a significant need and positions the Utility to better support our workforce and customers through more resilient facilities. This action is a highlighted investment in SPU's 2025-2030 Strategic Business Plan. The project could also be an opportunity to test out and pilot innovative greenhouse gas emissions reductions, energy and water conservation, and system efficiency improvements, which can be considered during the project delivery.

Estimated Impact: The North One Water Operations Facility will be designed to support Water and DWW workforce crews and customers amid the city's growth and development, and through extreme storms, flooding events, and wildfire smoke. The facility will reduce SPU crews' vehicle miles traveled, will have the capacity to support additional crews and resources in a continuous manner, and will operate as a central response facility during shock events, increasing SPU's resiliency to both acute and long-term stressors.

Budget and Costs: The North One Water Operations Facility was approved in the 2025-2030 Strategic Business Plan Update. The complex is expected to cost between $120 million and $170 million between 2024 and 2033.

Ownership: DWW / Water, with support and contributions from PDEB, construction management, and logistics.

Equity Considerations: SPU's workforce facilities investments reflect the Utility's commitment to support its workforce equitably, reduce its environmental impact, and enhance the communities SPU serves. Investments in resilient workforce facilities are critical to SPU's climate resilience goals, workforce recruitment/retention, and worker health and safety.

Prioritization and Recommended Time Frame: It is expected that a new operations complex will take approximately 10 years to complete. In the 2025-2030 business planning period, the project is expected to move through land acquisition, pre-design, design, and begin construction.

Action A5: Lead Duwamish Valley Water Resilience Planning and Implementation

Develop and implement a holistic approach to flood mitigation, water quality, salmon habitat improvement, and climate resilience in Georgetown and South Park.

Focus Area	
Status	Accelerated
Funding Need	Additional
Lead	DWW

Description: Historically, the industrial area of South Park has experienced flooding in the public rights-of-way and private properties due to flat topography, limited drainage infrastructure, overtopping of the Duwamish River during extreme high tides, and low elevations with portions of the basin located within the Federal Emergency Management Agency floodplain. As sea level rises, this flooding will become more frequent and is expected to episodically inundate up to 63 acres in South Park by 2070 or sooner. This action brings together flood mitigation, water quality, and climate resilience, via the following workstreams:

- **Near-Term Solutions to Flooding:** Since the December 2022 flooding emergency, SPU has led preparedness and response activities in South Park to help the residents and businesses most at risk of flooding. SPU will continue to facilitate drainage improvements in the area and to prepare for and respond to high-tide and stormwater flooding.
- **Long-Term Solutions to Sea Level Rise:** SPU will lead the next phase of water resilience planning in the South Park and Georgetown neighborhoods, including leading the planning and implementation of adaptation to sea level rise; leading interdisciplinary collaboration; and seeking funding and financing for the work.
- **Sediment Cleanup:** SPU will continue to lead planning, design, and construction of federally mandated Superfund site cleanups of the Lower Duwamish Waterway, East Waterway, Terminal 108, and Gas Works Park.

Estimated Impact: This work will address some of the environmental injustices that residents in the area face, with a particular emphasis on alleviating disparities related to water and sediment pollution, sea level rise, and coastal flooding.

Budget and Costs: SPU estimates that this effort will cost – as part of the 2025-2030 budget cycle – $93 million for DWW infrastructure in the area, combined with an additional $83 million allocated toward Lower Duwamish Waterway sediment remediation. These amounts have been allocated via the DWW fund. The work outside of SPU's nexus (e.g., sea level rise adaptation) has not yet been costed and will need external funding (see Action C6).

Ownership: DWW Duwamish Valley Water Resilience, in collaboration with Corporate Policy & Planning, Urban Watersheds, DWW Logistics, and Government Relations, as well as Seattle Office of Sustainability and Environment's Duwamish Valley Program, plus South Park and Georgetown-based community organizations.

Equity Considerations: The Duwamish Valley is a microcosm of where the combined impacts of climate change, racial inequities, and health disparities disproportionately affect Black, Indigenous, people of color (BIPOC), and low-income families. The work within this investment will advance environmental justice and equitable development in the area, reducing the recurrent damage and expense to this historically disinvested community.

Prioritization and Recommended Time Frame: The workstreams within this action will have staggered timelines. DWW capital projects will be complete or in construction by 2030. Adaptation features that are connected to

those projects will be complete or near completion by that time. Additional adaptation work, and partnerships with private property owners to develop adaptation solutions on their land, is expected to be an ongoing effort spanning beyond 2030.

Action A6: Develop Climate Resilient Guidance for Capital Projects

Consistently incorporate climate information about future precipitation and sea level rise into capital project design and delivery.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	DWW / PDEB / CPP

Description: SPU's Design Standards and Guidelines (DSG) include engineering requirements, details, specifications, policies, and procedures for all new CIPs managed and delivered by SPU's Project Management and Engineering Division. Currently, the DSG incorporates historic weather data to determine how to design for today's conditions. (There is stand-alone policy guidance for incorporating sea level rise into DWW capital projects; however, it is applied inconsistently.) Historic data does not accurately represent the projected severity and frequency of future storms, sea level rise, and precipitation. The climate is already changing and will continue to change in significant ways over the full useful life of facilities designed today, threatening to undermine capital investments and impede critical services if they are not designed for future conditions.

SPU is in the midst of developing guidance specific to rain projections and sea level rise projections. The policy guidance and design standards will complement the use of historic data in existing standards by providing a consistent methodology for engineers, planners, and other SPU staff, as well as their consultants, to design facilities that are resilient to changing climate conditions.

The goals of this action are:

1. Developing and drafting SPU's climate resiliency policy guidance and design standards for future precipitation and sea level rise for CIPs
2. Updating the SPU Design Standards and Guidelines during the 2026 update to include climate resiliency policy guidance and design standards

Estimated Impact: The benefits associated with this action will translate to reduced CSO events, improved water quality and security, increased readiness to extreme weather events, and the mitigation of urban flooding – all of which will improve climate resilience throughout the Utility's operations.

Budget and Costs: This action includes consultant support to update precipitation projections and to draft policy.

Ownership: CPP and DWW Capital Portfolio Management. They will rely on a core group of SPU staff from PDEB, Water, DWW Policy, and DWW Modeling.

Equity Considerations: Climate resilient DSG are expected to provide an improved level of service to Seattle communities, and to reduce CSOs, urban flooding, and sewer backups. While these affect many Seattle communities, they are often concentrated in low-income neighborhoods that have a history of disinvestment.

Prioritization and Recommended Time Frame: The establishment of climate resilient guidelines will take one to two years, although work already underway can provide a foundation for this action. The modeling of the updated climate perturbed rainfall series, for example, was developed for the Long-Term Control Plan Update, which DWW is leading.

Action A7: Establish Water Efficiency Policies and Practices for SPU Operations

Identify opportunities to conserve water in our own facilities and operations.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	Logistics / CPP
Partners	Water

Description: SPU is a leader in water conservation efforts. The Seattle region uses the same amount of water today that it did in the late 1950s – despite having more than doubled in population. However, water conservation practices and policies have not yet been established for SPU's own facilities and operations.

SPU will identify ways to conserve water at our facilities and in our operations. A first step will be to identify the highest-water-use facilities SPU owns and operates and select top priority sites for water-use assessments. Following the assessments, SPU could identify high-priority water efficiency interventions in our facilities.

Estimated Impact: While the total impact of this action is currently unknown, this action would lay the groundwork to ensure SPU's own operations are resilient and contribute to water conservation and serve as an opportunity for the city to actively model how to conserve water.

Budget and Costs: This effort will initially require staff time. It could also include the purchase of flow monitoring devices that can be temporarily placed in buildings for more granular information about water use and leak detection. A consultant would conduct Level 1 water-use assessments, which could potentially be provided under the Saving Water Partnership regional conservation program. This action would include hiring a consultant to conduct water-use assessments, which could cost approximately $2,000 per facility. Implementation costs will vary depending on the water conservation opportunities identified in the assessment. Implementation of this action will likely save SPU money over the long term from reduced water expenses.

Ownership: Facilities team, with support from Corporate Policy & Planning and the Water Efficiency team.

Equity Considerations: Once developed, water efficiency policies can be tied into SPU's broader procurement frameworks related to WMBE and social impact.

Prioritization and Recommended Time Frame: This effort will begin in 2026 and will be prioritized alongside other facilities efficiency efforts. Identifying and hiring a consultant will take six to nine months.

Action A8: Increase Resilience Through Regional Water Conservation Planning (Water Conservation 2.0)

Revise and reinvest in water conservation programming across Seattle in order to further reduce per capita water use.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	Water – Water Efficiency Team

Description: Through the Saving Water Partnership (comprised of 19 water utilities that share a common water source), SPU offers tips, tools, and rebates to help people preserve our region's water for future generations.

SPU has made significant investments in customer conservation programs, rate structures, and system-side efficiency measures since the early 1980s. Along with code changes, these long-term investments have been very successful in reducing our region's annual water demand.

However, the impact of SPU's conservation programs has decreased over the years. At the same time, we expect the impacts of climate change to add new challenges to managing our water demand and supply.

The next steps for SPU's water efficiency program are still undefined. As SPU gears up for its 2029 Regional Water Conservation Plan, the Utility is working to better understand the impacts of climate change on our water supply and the potential for additional water conservation programming to bolster our system's resilience. In addition to the Water Supply Alternatives Project (Action A1), some specific next steps are:

1. **The Demand Reduction Potential Assessment:** Currently in progress, this assessment will help define the potential for water conservation programming to increase water supply resiliency.
2. **Water Conservation 2.0:** The next Regional Water Conservation Plan will pivot the program to reorient SPU's regional water conservation efforts toward current and future opportunities.
3. **Water Shortage Preparedness:** As part of our supply resiliency efforts, the Water Efficiency team is working to update their approach to water shortage preparedness and curtailment, including, strategies to help build trust with communities through transparency and engagement about how the water system works.

Estimated Impact: This action will help the Utility continue to make smart investments in water conservation programming that help address climate change impacts and increase resiliency.

Budget and Costs: This is primarily a regional planning effort that is funded by SPU and the 18 wholesale customers that participate in the Saving Water Partnership. The Water Planning and Program Management budget covers some SPU-specific components.

Ownership: Water Efficiency team, with support from Water LOB and the Saving Water Partnership.

Equity Considerations: Investments in water conservation programming can help keep our rates affordable by delaying the need to expand our drinking water supply. The Water Efficiency team aims to design and deliver programs that lead to equitable outcomes for the communities we serve.

Prioritization and Recommended Time Frame: The Demand Reduction Potential Assessment and the Water Supply Alternatives Project are underway and expected to be completed by the end of 2026. These efforts will

inform the 2029 Regional Water Conservation Plan and the program goals, budget, and strategic direction set by the Seattle Water Supply Operating Board.

Action A9: Accelerate Action to Slow and Adapt to Ocean Acidification

Invest in and promote solutions to protect Seattle's marine life and coastal waters from acidification.

Focus Area	
Status	New
Funding Need	Additional
Lead	CPP

Description: Ocean acidification (OA) is the result of human-induced climate change. As a result of absorbing massive amounts of atmospheric CO2, the chemistry and pH balance of ocean water are changing, particularly near the surface, creating a more acidic environment. These changes harm marine animal species, particularly shellfish and phytoplankton, which affects the entire food web. Puget Sound is experiencing substantial impacts from OA, negatively affecting Seattle's shellfish industry and local populations of salmon and orca.

SPU, in partnership with other City departments, can take steps to curb our contributions to OA, including the following:

- **Reduce carbon emissions:** The actions laid out in the mitigation section of this roadmap, in addition to the actions being developed in the 2025 update of the City's Climate Action Plan, are critical action items to slow OA.
- **Reduce local land-based contributions to OA:** Nitrogen and phosphorous in stormwater runoff exacerbate OA in nearshore areas. SPU's stormwater management and wastewater conveyance are important components of Seattle OA action strategy. Strategies include distributed solutions like GSI (See Action A10) and prioritizing public investment in critical creek watersheds and CSO basins (See Action A2).
- **Increase ability to adapt to and remediate the impacts of OA:** "Blue carbon" projects are in-water habitat efforts including seagrasses, eelgrass, kelp, marshlands, or other submerged aquatic vegetation to sequester carbon and buffer pH in local waters. There are opportunities to partner with the Port of Seattle, King County, Seattle Aquarium, and other entities on these efforts. The City's contribution may include strategies ranging from establishing permitting processes for these projects to active contributions in their development. This area represents the greatest opportunity for new actions to mitigate OA impacts.

Estimated Impact: SPU and the City of Seattle can make a material contribution to Puget Sound health by focusing on ocean acidification action. This will generate positive impacts for marine species including local salmon and orca populations.

Budget and Costs: The cost, at this stage, is staffing resources. There is no budget currently.

Ownership: CPP, in collaboration with DWW. This work is also supported through partnerships with OSE, the OA Alliance, and the Marine Resources Advisory Council.

Equity Considerations: Reducing carbon emissions is the main approach to slow OA. These efforts will also contribute to improved air quality in some of Seattle's most overburdened neighborhoods.

Prioritization and Recommended Time Frame: Dependent on how OA shows up in the City's updated Climate Action Plan and to what degree there is citywide momentum to invest in OA solutions.

Action A10: Advance and Prioritize Green Infrastructure and Other Nature-based Approaches to Stormwater Management

Prioritize GSI and floodplain restoration to prevent flooding and water pollution, improve quality of life with nearby nature and health benefits, and help increase resilience.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	DWW

Description: Pollution from stormwater runoff is the biggest threat to water quality in Puget Sound. Green stormwater infrastructure (GSI) uses nature-based approaches like rain gardens, floodable open space, creek floodplain improvements, and stormwater capture and reuse to mimic how native forests manage rainfall and to complement and improve our underground pipe and tank structures. Working together, these infrastructure tools help prevent flooding, sewer backups, and water pollution, improve the quality of life in our neighborhoods with nearby nature and health benefits, and help increase resilience to the long-term impacts of climate change.

Seattle has been using GSI for more than two decades and in 2024 achieved an ambitious milestone to manage 700 million gallons of stormwater annually with GSI. SPU is continuing to strategically evolve GSI and broader nature-based programs to build on this success. Shape Our Water (Action A2) is SPU's primary mechanism to plan future investments in these tools, which will include a combination of the following:

- **Grow Partnerships:** Accelerate "beyond code" innovations with developers and other private entities to construct multifunctional green spaces, distributed water infrastructure, and other nature-based approaches to stormwater management.
- **Evolve the Toolbox:** Build on the success of RainWise, Natural Drainage System Partnering, RainCity Partnerships, Urban Village Program, and stormwater code requirements to normalize new project types like floodable open space, upstream solutions like creek floodplain reconnection, and new delivery models to grow the pie for GSI funding, design, construction, asset management, and maintenance.
- **Support Project Longevity:** Employ asset management to ensure that GSI and all nature-based projects are inspected, operated, and maintained for long-term success.
- **Remove Barriers:** Improve internal capacity for GSI and broader nature-based project delivery and develop external policies that help overcome barriers to design, delivery, and long-term stewardship. This includes win-win policy approaches that create more flexible conditions for private development to meet code requirements and help SPU leverage private dollars where and when development is happening.
- **Prioritize Community:** Lead with community-defined priorities like affordable housing, public health and wellness, and workforce development to determine how SPU can help meet those needs with our system investments.

Estimated Impact: GSI and other nature-based approaches help prevent flooding, sewer backups, and water pollution, improve the quality of life in our neighborhoods with nearby nature and health benefits, and help increase resilience to the long-term impacts of climate change, like increased occurrence and severity of flooding.

Budget and Costs: SPU's Green Stormwater Infrastructure is funded via ongoing programs and includes a component of CSO reduction within uncontrolled basins and GSI to decrease polluted runoff entering Seattle's water bodies. It is funded via combination of O&M, CIP, grants, agency partnerships, community partnerships, and private developer partnerships. There are supporting efforts that include GSI in SPU's 2025-2030 Strategic

Business Plan, such as the Field Engineering Improvements Program and Upstream Legislative Strategies to Reduce Pollution and Waste.

Ownership: DWW Planning and Program Management, Source Control & Pollution Prevention, System Management, and System Maintenance.

Equity Considerations: SPU's GSI and nature-based projects and programs are pioneering approaches to design, contracting, public engagement and shared decision-making, delivery, and maintenance that center the leadership, goals, narrative, and strategies of our most impacted communities. All GSI and nature-based projects and programs achieve community-driven benefits beyond stormwater management, such as improved community capacity for self-determination, traffic calming and improved pedestrian environment, nearby connections to green space and water bodies, wealth building, and workforce training/development.

Prioritization and Recommended Time Frame: GSI investments are in progress and continuing.

Action A11: Invest in Cedar/Tolt Watershed Resilience and Implement Watershed Forest Management Plans

Invest in watershed resilience in the Cedar and South Fork Tolt Watersheds to adapt to climate impacts and insulate SPU from climate threats.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	Water

Description: Seattle's two mountain watersheds, the Cedar River Municipal Watershed and South Fork Tolt River Municipal Watershed provide high-quality drinking water to 1.6 million residents in the region. In addition to water supply, the watersheds provide critical habitat and an array of ecosystem services. This action builds on existing initiatives to protect the source supply watersheds and management while identifying additional benefits that insulate SPU from the threats of reduced snowpack, drought, extreme precipitation events, and wildfire impacts.

The Cedar River Watershed Forest Management Plan (2023) supports water cycle regulation, old forest protection and development, climate resilience, tribal wildlife habitat objectives, and wildfire risk reduction. The forest restoration programs in the South Fork Tolt Watershed Management Plan and the Cedar River Watershed Habitat Conservation Plan are also key climate adaptation moves. These plans, together, outline how SPU works to manage the collective lands of the watersheds in environmentally sustainable ways that supply reliable water for both people and fish. They also outline potential threats to the watersheds – including climate-influenced impacts – and how SPU plans to mitigate or adapt to those threats.

This action has two objectives:

1. Implement forest management plans with a focus on investing in climate adaptation and mitigation efforts, including through wildfire risk reduction projects, habitat protection and restoration, and biodiversity expansion.
2. Invest in watershed protection, wildfire risk management, and forest ecosystem management, with a focus on adapting SPU's watersheds to climate impacts we are experiencing.

Estimated Impact: Adaptive forest management in SPU's watersheds is a critical operational resilience investment in SPU's water service delivery.

Budget and Costs: This effort is a Key Investment in SPU's 2025-2030 Strategic Business Plan. It is funded via O&M, CIP, and grants.

Ownership: Water LOB's Watershed Management Division, in partnership with the Muckleshoot Indian Tribe, US Fish and Wildlife Service, King County, University of Washington, community-based organizations, and various federal/state agencies.

Equity Considerations: These efforts address inequity in two ways:

1. Maintaining affordable essential services by preventing and/or reducing the risk of high consequence events that could present costly rehabilitation and restoration efforts
2. Protecting and stewarding watershed ecosystems that provide resources of ecological and cultural significance to Tribes

Prioritization and Recommended Time Frame: Implementation of the Cedar River Watershed Forest Management Plan will begin in 2025-2027 and continue through 2050. The implementation is described in the program's business case.

Action A12: Improve Aquatic Ecosystem Health and Habitat Conditions from Urban Creeks to Puget Sound

Continue to restore critical salmon habitat in Seattle water bodies and water supply watersheds, and to monitor Puget Sound ecological health.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	Aquatic Resources / DWW / CPP

Description: This action is a combination of in-city creek investments and water supply watershed investments, contributing to a broad swath of aquatic ecosystems. Seattle's extensive development over the past 150 years has drastically altered the city's urban watersheds, and climate change is exacerbating the challenges. Water resource degradation from urbanization, and associated riparian and aquatic habitat loss, stems from drastically altered stream hydrologic and sediment dynamics that have negatively impacted water and sediment quality. The changes have shown up as increased peak flows, flooding, and sediment delivery during the wet season; decreased base flows in the dry season; and diminished in-stream and riparian habitat conditions for fish and wildlife. Climate change impacts including higher greenhouse gas emissions, warmer temperatures, and heavy rains are leading to acidification of Puget Sound, warmer water temperatures, and decreased water quality. In combination, these urbanization and climate impacts disrupt the ecological function of Seattle's water bodies, including Elliott Bay and Puget Sound, and cause sensitive aquatic life to decline in abundance or disappear completely.

SPU's service delivery is intimately connected to Puget Sound, via the stormwater and CSO systems, pollution prevention and source control, aquatic resources investments, and effective sediment management. SPU both impacts and relies on the health and ecosystems of Puget Sound.

These actions – some already underway – advance urban creeks, lakes, and Puget Sound ecosystem health in several ways, including:

- Coordinating watershed health assessment/monitoring, planning, funding, and implementation to align with entities like NOAA, King County, Water Resource Inventory Areas, and the Puget Sound Partnership
- Prioritizing habitat investments in creek watersheds and floodplains, and the Duwamish River, where near-shore habitat improvement can provide both ecosystem and flood mitigation benefits
- Pivoting SPU's maintenance approach for in-line (in-creek) sediment ponds from periodic dredging to supporting watershed health and salmon recovery
- Optimizing both landscape planting and riparian forest improvements to focus on highest greenhouse gas sequestration species and a diversity of climate-appropriate species, e.g., native conifers, providing a value-added long-term source for aquatic and riparian downed wood that serves as a critical element in creek capital restoration and rehabilitation projects
- Using Low-Tech Process Based Restoration techniques when feasible, piloted in Lower Taylor Creek in 2025
- Acquiring strategic creek watershed floodplain property for future ecosystem improvement
- Encouraging passive land preservation via development setbacks

Estimated Impact: SPU's investments and priorities can make a measurable contribution to critical ecosystems in Puget Sound and Seattle water bodies.

Budget and Costs: The scope of this effort is very broad, and draws on cross-LOB efforts in Water and DWW. This work is in SPU's 2025-2030 Strategic Business Plan and is funded through a combination of O&M, CIP, and grants. The budget and costs for particular strategies will depend on which facets of this work gain purchase and opportunistically proceed.

Ownership: DWW / Water - Aquatic Resources / CPP. This action includes both in-city work in urban creeks and the Duwamish River with work in the Cedar and Tolt Watersheds, so includes both DWW and Water investments and programming. An extensive network of partners is involved in this work, including King County, WSDOT, DNR, Port of Seattle, Tribal Nations, nonprofits, neighboring cities, and many others.

Equity Considerations: Focus work will take place in equity priority watersheds of Duwamish River and Longfellow, Mapes, and Taylor Creeks.

Prioritization and Recommended Time Frame: The scope of this effort is still being refined. This is a high-priority action, particularly where SPU is lead (such as Taylor Creek and Longfellow Creek Watersheds and the water supply watersheds). In areas where action depends on community and regional collaboration (such as the Duwamish River and Mapes Creek), action will be slower.

Action A13: Invest in Urban Forests

Continue to invest in Seattle's urban forests to support drainage, riparian habitat, ecosystem restoration, and climate resilience goals.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	DWW

Description: Seattle's urban forest consists of the trees and associated understory plants, and the ecosystem value they provide. The urban forest extends across public property, private property, and rights-of-way including parks and natural areas, as well as trees along streets and in yards.

SPU maintains trees on SPU properties, and actively plants trees to meet drainage, capital project, and riparian habitat needs. SPU supports several programs that promote healthy urban forests, including the Trees for Neighborhoods program, Green Seattle Partnership, and the Green Stormwater Infrastructure program. SPU is committed to focusing urban forestry efforts in environmental justice priority communities. Priority urban forestry actions include:

- **Tree Planting**: The Trees for Neighborhoods program helps residents to plant 1,000 trees a year on private property and provides ongoing establishment and technical support to ensure the trees' survival. Trees for Neighborhoods is open to all city residents, and efforts to enroll participants are focused on low-canopy neighborhoods.
- **Cedar City Urban Tree Nursery:** Established in 2025, this space supports the Trees for Neighborhoods planting program by stabilizing tree supply, improving tree availability and varieties, and increasing availability of climate resilient species. It also provides opportunities for community engagement and workforce development.
- **Volunteer Engagement:** SPU partners with other departments to engage volunteers in caring for trees and understory plants in public spaces, including SPU land, Seattle City Light land, rights-of-way, and (through the Green Seattle Partnership) on Parks property. SPU uses volunteer events as a way to teach residents skills to care for the trees at their homes.
- **Ecosystems Value Inventory and Quantification:** SPU is working to develop a detailed method for quantifying carbon sequestration, stormwater management, and water-quality benefits for individual trees and trees in forested parklands based on canopy, species, location, etc. This is further detailed in Action C1 – Develop a Climate-Specific Natural Resource Inventory and Management Plan.
- **Stormwater Rates:** SPU considers land cover in its calculation of stormwater rates for larger property owners, creating incentives for owners to invest in trees.

Estimated Impact: The urban forest is an important part of the City's green infrastructure network, improving air and water quality, slowing rain runoff, sequestering carbon, providing terrestrial habitat, and cooling sidewalks and buildings.

Budget and Costs: Funding for citywide urban forestry investments comes from SPU, SCL, SDOT funds, and the General Fund. The SPU-specific activities described in this action are in the SPU DWW budget with support from the General Fund.

Ownership: Led by DWW Source Control & Pollution Prevention Group, with support from DWW Planning and Program Management Division. Urban forestry work exists within an extensive network of partners, including the Urban Forestry Commission, Trees for Seattle, Seattle Parks and Recreation, Seattle Office of Sustainability and Environment, and many community-based organizations and businesses.

Equity Considerations: Focus work will take place in environmental justice priority communities that currently have low canopy and are associated with higher temperatures.

Prioritization and Recommended Time Frame: Activities are in progress.

Section 3: Capacity Building Actions

Capacity building lays the foundation for climate action. In order to foster durable programs and lasting change, SPU staff must develop the skills and resources to support the work. This includes strengthening collaborative frameworks, building political will, improving coordination, and empowering partners.

These actions build up SPU's organizational capacity for smart, equitable, and effective climate action.

Action C1: Develop a Climate-Specific Natural Resource Inventory and Management Plan

Generate an inventory of SPU's natural assets to track GHG emissions sinks and sources and to identify opportunities to enhance community/ecosystem benefits within SPU's watersheds and urban green spaces.

Focus Area	
Status	New
Funding Need	Additional
Lead	DWW / Water / CPP

Description: SPU's natural assets are a significant and under-reported part of the Utility's climate story. Forests, urban creeks, and green spaces act as carbon sinks that offset a portion of SPU's carbon emissions. Reservoirs can release methane through the decomposition of organic matter in the reservoir, actually generating greenhouse gas emissions.

Identifying sinks and sources provides an opportunity for SPU to improve resource management for better outcomes. This could mean amplifying carbon sequestration through improvements to degraded green spaces and properties that SPU owns, both within our watersheds as well as throughout urban parcels. It could also mean improvements to SPU natural areas and ornamental landscapes to generate additional benefits for surrounding communities and ecosystems. DWW System Management has begun a Landscape and Habitat Asset Management Plan, which includes all SPU natural areas and grounds within the urban boundary, and which will form the foundation of this action.

This inventory will provide SPU staff with additional information on how to leverage and utilize green spaces for social and environmental benefit. Key data points this assessment will likely generate include:

- A comprehensive register of SPU's collective natural assets – encompassing watersheds, green spaces, and aquatic resources – as well as the ecosystem services these assets provide or could provide with further preservation or restoration
- A quantification of the greenhouse gas emissions SPU could generate or save by developing or restoring a natural asset
- Asset management plans to deliver additional community and ecosystem benefits within SPU's watersheds and urban green areas

Estimated Impact: This action will deliver the information needed for SPU to increase its ability to mitigate or sequester carbon emissions and better measure and mitigate SPU's carbon emissions. Seattle Parks and Recreation, for instance, through a study focused on urban forestry, estimated that its natural assets could sequester as much as 12,000 metric tons of carbon dioxide annually – enough to potentially make SPR a carbon-negative department.

Budget and Costs: This action requires staff time, consultant support, and resourcing.

Ownership: DWW System Management / Watershed Management / CPP.

Equity Considerations: This action will help us understand how SPU's green infrastructure and green spaces can be leveraged to better benefit local communities.

Prioritization and Recommended Time Frame: Early discussions – especially on the relevancy of emerging emissions quantification protocols and their usefulness to SPU – should begin in 2026. This action could become a longer-term action as scientific and technical literature evolves.

Action C2: Foster a Forum for SPU Climate Leadership and Collaboration

Activate the Climate Community of Practice to provide a platform for SPU staff to share and foster awareness and collaboration on climate-related initiatives.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	CPP

Description: Since 2020, Corporate Policy & Planning has hosted the Climate Community of Practice to convene climate staff from across the Utility to learn from one another, build relationships, and foster collaboration and awareness about climate-related work at SPU.

Estimated Impact: A platform and regular convening will increase awareness of and collaboration on climate action across the Utility.

Budget and Costs: Staff time only.

Ownership: Corporate Policy & Planning.

Equity Considerations: We should explore both virtual and in-person opportunities and different times of day to engage the broadest possible set of staff in the Climate Community of Practice.

Prioritization and Recommended Time Frame: The Climate Community of Practice began its quarterly meetings again in Q1 2026.

Action C3: Invest in Climate Resilient Workforce Pathways

Advance climate resilient workforce pathways via Seeds of Resilience and the USWA Equitable Water Workforce Pilot Project.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	CPP

Description: SPU has two primary vehicles for advancing climate resilient workforce pathways: The first is the Seeds of Resilience program and the second is the US Water Alliance (USWA) Equitable Water Workforce Pilot Project in partnership with the Duwamish River Community Coalition (DRCC), Lake City Collective (LCC), and Seattle Jobs Initiative (SJI).

Seeds of Resilience is SPU's impact investment fund/program that aims to advance equity and environmentally sustainable waste and water management activities in private sector markets that have a business nexus with SPU. The program operates by identifying a business need for SPU, such as more service providers who can clean restaurant grease traps at an affordable price (which benefits DWW), or more workers trained with deconstruction skills (which benefits SW). SPU then reaches out to partners in the private sector who can help us generate these outcomes, center equity in the design of the project, use a variety of contracting and procurement vehicles, and measure outcomes.

The USWA Equitable Water Workforce Pilot Project aims to introduce frontline community members to career opportunities across the water sector, including jobs internal to SPU as well as water-related jobs in the private sector. This program is still being shaped and will launch in 2026.

Estimated Impact: Every project funded by Seeds of Resilience has a positive impact on environmental sustainability. This is a requirement of the program, in terms of project criteria that must be met for every funded project. This often has a positive impact on climate mitigation or adaptation, though climate is not the only environmental benefit considered for projects.

With the USWA Equitable Water Workforce Pilot Project, the goal is introduce 10 frontline community members from the Duwamish Valley and Lake City to career opportunities in the water sector, provide on-the-job training with living-wage stipends, and offer career navigator support services to help them figure out what jobs might be the best fit for their future goals and skills.

Budget and Costs: Seeds of Resilience has $600,000 in annual ongoing funding from Utility ratepayer dollars. The USWA Equitable Water Workforce Pilot Project with DRCC, LCC, and SJI is projected to run approximately $176,000.

Ownership: CPP, in partnership with LOBs, and partners including the US Water Alliance, DRCC, LCC, and SJI.

Equity Considerations: Seeds of Resilience and the USWA Equitable Water Workforce Pilot Project actively center social and economic equity in the design of the work that is funded through these programs. That means that for both programs, SPU is advancing economic opportunities for frontline community members and small businesses.

Prioritization and Recommended Time Frame: Ongoing.

Action C4: Integrate Climate Action into SPU Education and Outreach Programs

Integrate climate action into SPU's stormwater, solid waste, and water education and outreach programs.

Focus Area	
Status	Continuing
Funding Need	Additional
Lead	Stormwater Ed and Outreach / Water Ed and Outreach / Solid Waste Ed and Outreach / CPP

Description: This action involves incorporating climate action into SPU's extensive education programs. SPU is already incorporating climate into our outreach efforts in several areas, including Stormwater Engagement and the Cedar River Education Center programs, where the changing water cycle and Seattle's changing rain are common topics of discussion. But there are opportunities to weave climate messaging into our outreach efforts in a more consistent way, including at our Transfer Stations, in Recycling & Waste Reduction outreach, and in programs such as the Master Composter/Sustainability Stewards program, Water Conservation school education program, and Stormwater in the Schools.

While many education and outreach programs are driven by compliance requirements (e.g., Stormwater MS4 permits require extensive stormwater education activities), integrating climate information more intentionally across the Utility's programs will benefit SPU system reliability and Seattle communities. Target audiences for these programs include school-age children, college/university and trade students, overburdened communities, and businesses. This is an opportunity for SPU to further build community awareness about climate change in Seattle.

Estimated Impact: Currently, there is no coordinated effort to integrate climate change information or messages into SPU education and outreach. It is happening on a program-by-program basis, but there could be economies of scale if more consistent messaging and an organized approach were developed. This project will provide up-to-date and accessible climate information for SPU staff to incorporate into education and outreach curricula and programs for different ages and audiences.

Budget and Costs: This action will require an additional staff person or graduate intern, as limited staff capacity has been a barrier to achieving this in the past. We estimate it will likely take one year of work from one staff member to set up, which could be completed either through the work of a graduate intern or an existing FTE. From there, it will require ongoing maintenance and updating.

Ownership: Education and Outreach staff, with CPP support.

Equity Considerations: Highlighting the experiences of Seattle's environmental justice communities and continuing to focus outreach in those communities will enhance the equity impact of this effort. High-income households in Seattle also have a disproportionate impact on Seattle's Consumption Based Emissions, and should therefore also be included in outreach that encourages behavioral changes.

Prioritization and Recommended Time Frame: This effort is already underway but is constrained by staff capacity. Work will continue with existing staff and will accelerate when additional staff support is secured.

Action C5: Develop an SPU Climate Change Resource Hub

Develop a SharePoint-based climate resource hub to host SPU's climate data and presentations to increase accessibility, consistency, and transparency for employees.

Focus Area	
Status	New
Funding Need	Within current capacity
Lead	CPP

Description: This action involves establishing a climate resource hub that hosts SPU's climate data, information, and presentations to increase accessibility, consistency, and transparency for employees. This includes:

- SPU's greenhouse gas emissions and projections
- Projections and data pertaining to future climate impacts, including precipitation, air temperature, and sea level rise
- Climate presentations and slides for use by employees in presentations and internal/external education
- Fact sheets and materials about SPU's climate-related work
- SPU and citywide climate plans

Estimated Impact: Currently, there is no coordinated resource that provides a standard reference for SPU climate data and information. This project will provide up-to-date, consolidated, and accessible climate information for SPU staff to incorporate into their work. A central climate information hub will be a clearinghouse for climate-related materials to increase awareness and consistency across the Utility.

Budget and Costs: This action has no direct cost but will require staff time to compile materials and build and maintain a SharePoint site. We estimate it will likely take six months of work from one staff member to set up, which could be completed either through the work of a graduate intern or an existing FTE. From there, it will require ongoing maintenance and updating.

Ownership: CPP, in partnership with LOBs and branches.

Equity Considerations: A climate resource hub will likely include information on environmental justice issues that are relevant to SPU's operations and strategic planning.

Prioritization and Recommended Time Frame: This effort will take place in 2026, assuming staffing resources can be secured.

Action C6: Develop Funding and Financing for Climate Action

Pursue and secure funding and financing solutions for climate adaptation and mitigation investments.

Focus Area	
Status	New
Funding Need	Within current capacity
Lead	CPP / GR / Finance

Description: SPU actively seeks external funding opportunities to help keep rates stable, achieve community priorities, and foster collaborations that advance SPU's mission. Implementation of the climate adaptation and mitigation measures outlined in this plan will need to be funded in part or in whole through a diverse strategy that complements ratepayer revenue. In addition to traditional approaches, such as local, state, and federal grants and low-interest loans, this may include funding from private sources, financing mechanisms, or revenue partnerships. The Utility will also need to develop a strategy to receive and spend revenues that SPU collects through the sale of renewable energy and credits from the Clean Fuel Standard.

Investing in climate solutions in the near term will likely be less expensive over time than incurring repeated financial, environmental, and social costs of disasters and emergency responses resulting from undersized infrastructure or infrastructure that is ill-suited for climate impacts. In the case of mitigation measures, such as electrification, energy efficiency, renewable energy, and low-carbon alternatives, there is currently a significant cost premium to installing such technologies, even though they will likely result in operational savings, as they pay for themselves over time and/or lower energy or fuel costs.

Moreover, there is the challenge of addressing sea level rise. With the exception of its impacts on urban flooding and wastewater systems, sea level rise adaptation infrastructure falls outside of SPU's ratepayer nexus and thus requires other types of funding and collaboration.

Estimated Impact: From supporting adaptation and mitigation-related capital improvement projects and operational improvements to empowering community capacity-building for climate resilience, SPU's funding and financing efforts will result in agency readiness to act on emerging opportunities. In addition to enhancing existing funding for SPU priority needs, the impact of this action will result in moving projects forward that otherwise would stall for lack of funding. As we begin to quantify the benefits associated with these projects, this effort will also help to build a business case for climate adaptation and mitigation investments.

Budget and Costs: Staff time and potential consultant support.

Ownership: Corporate Policy & Planning, Government Relations, and Finance.

Equity Considerations: SPU will align funding opportunities with climate adaptation and mitigation projects to benefit overburdened communities and those most vulnerable to the impacts of climate change.

Prioritization and Recommended Time Frame: Implementation is ongoing and will complement the other actions described in this roadmap.

Action C7: Develop and Implement SPU's Climate Communications Plan

Implement climate communications to highlight success stories and weave climate change into SPU's education and outreach.

Focus Area	
Status	Continuing
Funding Need	Additional
Lead	Community Affairs / CPP

Description: Climate change is impacting communities and their utility services, and our ratepayers are funding our climate adaptation, mitigation, and justice actions. We need to effectively share SPU's climate story. To do this, we need a comprehensive communications plan that aligns work across the Utility, empowers all staff as climate communicators, builds awareness of SPU's actions and outcomes, and increases community and customer trust in SPU.

Estimated Impact: A comprehensive climate communications plan increases employees' ability to operationalize climate actions and behaviors.. It's also an opportunity to make the connection between climate change and SPU's essential services.

Budget and Costs: Funding to pilot one external climate campaign.

Ownership: Community Affairs, in close collaboration with Corporate Policy & Planning.

Equity Considerations: All communication materials should consider accessibility, using a variety of channels to reach the broadest possible group of SPU employees and a diverse set of our customers.

Prioritization and Recommended Time Frame: SPU's climate communications plan will be updated in 2026, and will result in ongoing work.

Action C8: Embed Climate Action into Legislative Priorities and Regulatory Requirements

Embed SPU's climate priorities into legislative priorities and regulatory requirements in order to establish an enabling environment for climate action.

Focus Area	
Status	Continuing
Funding Need	Within current capacity
Lead	GR / LOBs / CPP

Description: This action focuses on embedding climate change into regulatory requirements and legislative priorities to help contribute to an operating environment within which SPU can build resilience. High-priority areas include:

- **Sea Level Rise Adaptation + Contamination Remediation:** SPU's Government Relations strategy, including the state legislative agenda, will seek opportunities to incorporate adaptation challenges and objectives. Because SPU is one of many contributors in this space, and because adaptation is multifaceted and uncertain, it is challenging to pinpoint advocacy opportunities. However, as funding and regulatory needs related to floodplain management, sea level rise adaptation, and land acquisition for restoration become clearer, so do the windows of opportunity for an adaptation-inclusive legislative agenda. This includes continuing to work toward **MTCA Remedial Action Grant Program Funding** and partnering with the **Washington State Department of Ecology** to develop support and funding for contamination remediation that incorporates sea level rise adaptation.
- **Regulatory Requirements:** Regulatory policies and strategies should incorporate the changing climate, but this is not always the case. SPU needs to work with its regulators to ensure that climate is being considered when goals and targets are established. For example:
    - **The Cedar River Watershed Habitat Conservation Plan** is a great example of a plan that has adaptively accounted for climate change. However, the **Landsburg Mitigation Agreement (LMA)** has not accounted for a changing climate, and SPU's sockeye mitigation in the LMA has been drastically impacted by changes in Lake Washington due to climate change, which has made compliance very difficult.
    - **CSO Compliance:** Changing rain is making compliance with EPA and Ecology regulations difficult for the CSO system. Overflows must be limited to the control standard of 1x CSO/year on a 20-year rolling average. SPU will need to continue conversations with Ecology about adaptive management taking into account the shifting seasonality of heavy rains.
    - **Stormwater Code:** As the owner of the stormwater code, SPU itself is a regulator with oversight on stormwater management for new development. This is an area where SPU will need to integrate climate priorities into regulatory requirements with sufficient engagement from and signaling to stakeholders.
- **Materials Reuse by SPU:** By donating, reusing, and repurposing construction materials and compost, SPU could significantly reduce its Scope 3 emissions. SPU should study potential avenues for limited reform of gift-of-public-fund laws, focused on allowing the donation of specific materials that could be used again to avoid landfill disposal. Potential materials include the donation of compost to support plant and agricultural growth in specific areas and the donation of construction materials to organizations or individuals for reuse.

- **Legislative Priorities Identified in Waste Prevention Plan:** SPU's Waste Prevention Plan will identify a set of legislative priorities for citywide action (on reusable dishware, deconstruction, and food waste) that all have positive climate impacts.

Estimated Impact: Regulatory amendments and regulatory requirements that integrate climate adaptation and mitigation will establish a more functional enabling environment for SPU to build resilient infrastructure, operate our water and waste systems in a changing climate, and reduce our carbon footprint.

Budget and Costs: This action's cost will initially be limited to appropriating staff time.

Ownership: Government Relations with support from the LOBs and CPP.

Equity Considerations: All of SPU's legislative priorities aim to support the Utility's execution of its One Water, Zero Waste, and Community Centered vision, which aims to support undoing historical injustices in our built environment and build resiliency among lower-income communities most at risk from the impacts of climate change. The sustainability priorities in this action are very much aligned with these efforts, with a focus on adapting to sea level rise and reducing contamination in the Duwamish waterway – efforts that will support community health and resilience in the South Park neighborhood.

However, the legislative environment at the state and federal levels can shift quickly, depending on federal policy changes, state budget needs, and changes in the composition of legislative bodies due to elections. As such, while SPU will always prioritize the Utility's commitment to equitable service, whether the sustainability initiatives outlined in this action will be considered to be SPU legislative priorities for a given legislative session will depend on the circumstances of that session.

Prioritization and Recommended Time Frame: The Government Affairs and Corporate Policy & Planning teams should initiate discussions in 2026, beginning with the 2026 WA legislative session.

Roadmap Updates and Future Progress

SPU's Climate Action Roadmap is intended to be an ongoing tool for prioritization and decision-making. Because climate science, Seattle's policy landscape, and technology solutions continue to evolve rapidly, we expect that new areas for climate action will emerge over time, while some of our existing actions may become less relevant or shift in priority.

The roadmap will be updated every two years. Future updates will assess how much progress we have made on actions identified in the roadmap and assess whether these actions are effectively advancing SPU's stated goals. Additionally, SPU will undertake SME engagement and outreach activities to solicit new action items that have emerged in the interim two years and ensure that the roadmap aligns with SPU's staff experience and learnings.

Roadmap updates will be presented in subsequent reports and will help inform future strategic planning. We are aiming to align our next update with the next SPU Strategic Business Plan update, which will be completed in 2028.