



2024 ANNUAL REPORT

Environmental Affairs

The mission of the Snohomish County PUD is to deliver affordable power and water to our customer-owners in a safe, environmentally sustainable and reliable manner while successfully navigating complex changes in our industry.

The Environmental Affairs Department exists to help fulfill this mission.



Environmental Affairs

Protecting our environment, serving our community

Mission – why do we exist?

As industry leaders, we provide expertise to advocate for and facilitate environmental excellence in utility operations.

Vision – what do we do?

Be the department that collaborates and consistently inspires environmental stewardship in Team PUD and the greater community.

Strategy – how do we do it?

- Interaction with others
- Team relations
- Clarity of purpose
- Continual improvement
- Communication
- Transparency
- Inclusive
- Engaged
- Adaptive

Core Values – who are we as a team?

- **Customer focused** – Proactively anticipating internal and external customer needs by communicating consistently. We are generous with our time and available to delight customers. Our goal is to make their lives easier while providing services to solve problems.
- **Leadership** – Setting the example by leading with empathy, fearlessness and competence.
- **Excellence** – Exhibiting behaviors and ethics that set gold standards.
- **Accountability** – See it, own it, solve it, share it.
- **Respectful support** – Appreciating and valuing all contributions. Creating a safe environment where mistakes are met with grace and are as deeply valued as successes for learning opportunities.

The Environmental Affairs Department is responsible for a wide range of environmental programs, including:

Regulatory agency interaction

Strategic Planning

Spill response and remediation

Waste material management

Electromagnetic field information

Environmental health

Land use and permit assistance

Pollution prevention

Other project support

This report summarizes and highlights activities the Environmental Affairs Team accomplished to accomplish our mission.

Regulatory Agency Interactions

Inspections, Reporting and Permitting

A number of routine and non-routine interactions occurred with regulatory personnel in 2024. Environmental Affairs team members regularly coordinate with representatives from the Department of Ecology and local jurisdictions for spill response, permit compliance, and assisting with project planning. The District also worked with the United States Fish and Wildlife Service associated with several wildlife incidents involving electrical equipment.

In 2024, Environmental Affairs prepared, submitted and maintained numerous programmatic reports and permits, including.

- 109 Tier II reporting under Section 312 of The Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA).
- Dangerous Waste Annual Reports for 3 sites.
- Data concerning the District's greenhouse gas emissions across all utility operations have been collected since 2010. This information includes emissions from direct sources (e.g. vehicles, generators, etc.) and indirect sources (electricity use), as well as emissions calculated by projects. The District continues to track emission sources and evaluate updates to emission factors as well as changes in regulatory and reporting requirements.
- Monthly monitoring and annual water quality analyses reports were provided to the City of Everett in compliance with our Discharge Authorization. This permit allows wastewater from the Operations Center Pump & Clean facility to discharge into Everett's sanitary sewer.
- Regional regulation considerations affecting the operation and maintenance activities for existing electrical infrastructure were discussed with local jurisdictions such as Snohomish County Planning and Public Works staff, representatives from cities throughout our service area, state agencies, and tribal authorities.
- Spill incidents were reported to the Department of Ecology. Spill incidents involving a discharge to waters of the state were additionally reported to the National Response Center. Follow-up written confirmation reports were submitted to the Department of Ecology with final cleanup and restoration information.

FOCUS ON THE FUTURE

2023-2027 STRATEGIC PLAN

Strategic Planning

The District's 2023 – 2027 Strategic Plan includes a priority to “Build a sustainable future with our communities”. The Environmental Affairs Team is heavily involved in Strategic Initiative 4.1 of this priority: “Responsibly minimize and mitigate our environmental impacts.”

2024 saw continued progress on developing and implementing the District's Strategic Objective 4.1 – Responsibly minimize and mitigate our environmental impacts. A comprehensive list of environmental topics that apply to the District has been created, and our efforts to establish a baseline are well underway.

To advance Strategic Initiative 4.1, as well as tie in our activities to the remaining initiatives, in 2024 we created the first Environmental Affairs Operating Plan, focusing our efforts to align with District priorities.

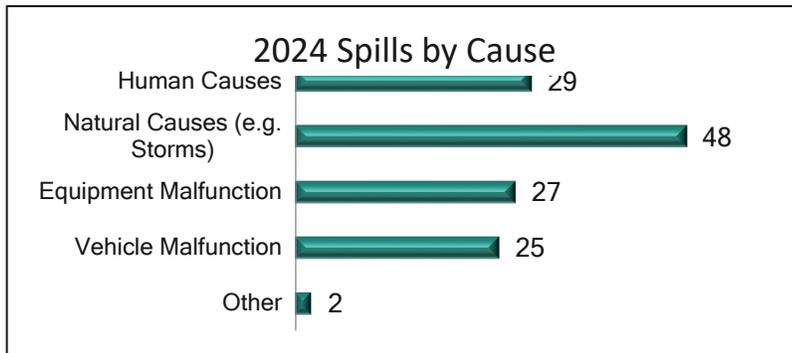
In addition to the creation of the Environmental Sustainability Action Plan, team members are involved in separate initiatives that exist to implement this objective and others under the Strategic Plan.

Build a Sustainable Future With Our Communities

OBJECTIVES	KEY INITIATIVES AND ACTIVITIES
Responsibly minimize and mitigate our environmental impacts Strengthen our focus on reducing our greenhouse gas emissions, reducing waste across our business activities, and reducing our environmental impacts.	Develop an environmental sustainability action plan that establishes clear goals, priorities, and roadmaps. Institute key metrics and implement tracking and reporting systems.
	Implement plans and actions to reduce our greenhouse gas emissions and minimize electricity and water waste.
	Develop and support a culture of environmental stewardship through education and engagement. Incorporate environmental value into decision making practices.

Emergency Response and Preparedness

Spill Cleanups, Training and Planning



Environmental Affairs responded to 129 spill incidents in 2024. Approximately 1024 gallons of transformer oil, 16 gallons of hydraulic oil, and 5 gallons of coolant spilled to the surrounding areas due to these incidents. On average, the District experiences approximately 100 spills per year.

Training occurs annually to refresh or orient District staff on emergency response, oil spill cleanups and other important environmental issues. This training is needed to maintain and further develop competencies for performing the wide range of work encountered by District personnel. For example:

- Hazardous Waste Operations and Emergency Response (HAZWOPER) certification refresher training was provided to 89 District employees in 2024.
- To more efficiently respond to spills that may be associated with storm events, EA updated the spill response awareness orientation to Crew Guides as part of annual storm season training.

Planning for spill response is in part accomplished through the preparation of Spill Prevention Control and Countermeasures (SPCC) Plans, a federal requirement for any facility that stores in excess of a defined volume of hazardous substances onsite.

In addition to the recurring training for spill and storm response, the Environmental Affairs Team oversaw the final decommissioning of a vanadium redox flow battery energy storage system. This complicated project involved coordination with other departments throughout the District, contractors and the Department of Ecology. Specific training to safely and properly accomplish this project were conducted by the Environmental Affairs Team.



Pollution Prevention

Preventing Waste and Other Sources of Pollution

Environmental Affairs collaborated with other District departments, outside agencies and the private sector on a number of projects in 2024 to reduce waste, prevent pollution and improve District operations. Ongoing institutionalized procedures to recycle insulating oil, return serviceable products, such as partially used aerosol cans or road flares to stock, change out solvent tanks before they become heavily contaminated and move toward operational processes that generate less or no waste also continued. Projects and programs like these successfully reduce the volume of hazardous waste and other pollutants generated by the District.



The challenge of addressing the presence and potential environmental release of polychlorinated biphenyls, or PCBs, from District electrical equipment has been an ongoing effort for many years. The District has now removed all distribution and substation transformers suspected to contain 50 or more parts per million (ppm) PCBs through both targeting and attrition, although transformers with higher PCB concentrations (greater than 50 ppm) are occasionally discovered. By evaluating in-service distribution transformers using PCB oil sample results from tested units, as well as other commonalities, EA identifies electrical equipment suspected to contain PCBs and works with other groups to schedule those units for removal and proper disposal. The current focus is on replacing all in-service equipment that may have any amount of PCB contamination as a result of pre-1980 manufacturing practices.

In 2024, through targeting and attrition, the District tested and removed 591 distribution transformers.

Testing confirmed PCB contamination (<50 ppm) in 39 transformers. One substation-class bushing tested above 500 ppm PCB. All articles were properly processed for disposal at permitted facilities.

The District continues to be actively involved in the State Commute Trip Reduction Program which, among other benefits, reduces traffic, air pollution and greenhouse gas emissions. In 2021, COVID-19 shifted the nation's commuting habits from ridesharing to telecommuting and working from home. Through most of 2024 there were approximately 1222 District employees, of which 954 who reported to work at the Electric building/Annex and the Operation Center. The number of employees reporting to the Electric Building/Annex and the Operation Center represent those that work at a Commute Trip Reduction (CTR) affected work site. 242 employees worked full and part time from home and 408 worked full and part time hybrid schedules.

Waste Management

Recycling and Disposal of Hazardous Waste and Contaminated Materials

A total of 1025 obsolete or damaged distribution transformers and 3 substation transformers were sold by the District for recycling in 2024. Oil with PCBs was treated by a chemical de-chlorination process, destroying the PCBs. Metals and oil from obsolete electrical equipment were recycled, yielding approximately \$205,950 in revenue for the District.

The district recycled approximately 20,958 gallons of bulk waste oil (<50 ppm PCBs) from substation electrical equipment and the underground storage tank located at the Operations Center, yielding approximately \$9431 in revenue for the District.

The District's "conventional" hazardous waste stream, although not large in volume, is quite varied. Aerosol cans that are punctured and drained are now considered scrap metal that can be recycled, approximately 1279 pounds, fluids from non-functioning capacitors, waste parts washer solvent (if contaminated), old road flares and other miscellaneous hazardous waste resulting from



different projects and processes. Overall, a total of approximately 1720 lbs. of hazardous waste were generated by the District and recycled or disposed of in 2024. Of this waste, previously a number of pounds of unused and outdated sodium fluoride was disposed of. This non-recurring waste was a water treatment product that was unusable as it had passed its shelf life and no longer met District specifications. In 2024, the Environmental Affairs team successfully implemented a comprehensive hazardous waste minimization project targeting the sodium fluoride waste stream. Through the utilization of alternative disposal methods, we achieved the elimination of over a thousand pounds of hazardous waste this year, with the anticipation of an annual reduction of two thousand pounds in waste generation.

The amount and timing over which this waste was produced allowed the District to maintain its status as a small quantity generator throughout the year. A similar volume of hard-to-handle but not necessarily hazardous waste such as latex paint was also generated and properly managed.

The District also generates waste computer monitors, CPUs, televisions, segregated circuit boards and other electronic wastes which may contain heavy metals and are regulated as a special type of hazardous waste. EA coordinated the recycling of these materials and in 2024, 407 varies types of

monitors, CPUs and laptops, 982 lbs. of circuit boards and 2270 lbs. of miscellaneous electronic waste were recycled through this program.

A total of approximately 5120 lbs. of batteries, counting substation or vehicle batteries managed through separate programs, were collected from District facilities for recycling or disposal by EA in 2024. Other battery chemistries recycled included alkaline and carbon-zinc batteries (206 lbs.), rechargeable nickel-cadmium, nickel metal hydride and lithium-ion batteries (70 lbs.), and other batteries such as lithium primary and lead-acid (4794 lbs.) and universal waste batteries (25 lbs).

Approximately 136 high pressure sodium (HPS) street light lamps, which contain a small amount of mercury, were generated and collected for recycling in 2024. Historically, District streetlights used these types of lamps, however, the District finished with a multi-year project to change over all HPS street light lamps to LED technology, which last much longer and are more energy efficient. A District contractor recycles the outdated HPS fixtures that are generated.

Waste fluorescent lights, which also contain a small amount of mercury, as well as ballasts generated from the routine maintenance of District facilities, are likewise collected for recycling. In 2024, approximately 4924 linear feet of fluorescent lamps and 356 lbs. of ballasts were recycled during the year. A total of 995 pounds of compact fluorescent and U-tube lamps were also collected from District facilities and recycled.

District Waste Summary (2024)

Conventional Hazardous Waste

- 1720 lbs of hazardous waste recycled or disposed, while maintaining small quantity generator status (need to generate under 220 lbs each month)
 - Some common waste streams include paint related material, capacitor oil, road flares, gasoline/diesel mixes, flammable gases
- Waste Reduction Efforts:
 - Eliminated 1000+ lbs of hazardous waste through alternative disposal methods, with expected ongoing reduction of 2000 lbs annually
 - Implemented recycling program for punctured aerosol cans as scrap metal
 - Properly managed non-hazardous but hard-to-handle waste (latex paint)
 - Reduced sodium fluoride waste stream through improved management practices

Electronic Waste Recycling

- 407 various types of monitors/CPUs/laptops recycled
- 2270 lbs miscellaneous electronics
- 982 lbs circuit boards

Battery Recycling

- 5120 lbs recycled including sources from substation and vehicle batteries
 - 4794 lbs lithium primary/lead-acid
 - 206 lbs alkaline/carbon-zinc
 - 70 lbs rechargeable (Ni-Cd, NiMH, Li-ion)
 - 25 lbs universal waste batteries

Light Bulb Recycling

- 136 high pressure sodium street light lamps
- 4924 linear feet of fluorescent lamp tubes
- 356 lbs of ballasts
- 995 lbs of compact/U-tube fluorescents

The District collected 33 drums (2580 lbs.) of waste spill pads, booms and other non-PCB petroleum contaminated debris generated from oil spill response and maintenance efforts in 2024. These were shipped to a permitted waste-to-energy facility for incineration.

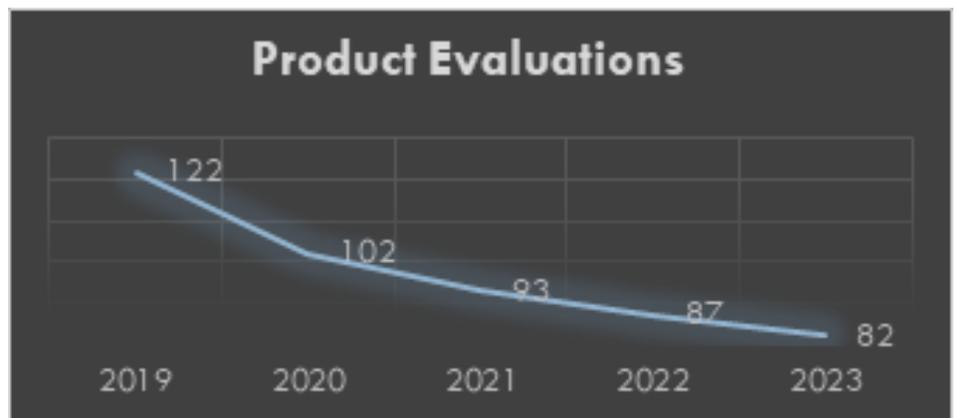
Approximately 651 tons of petroleum contaminated soil from District oil spill cleanups was removed and disposed of at a permitted facility.

Environmental Health & Industrial Hygiene

Supporting a Healthy Workplace

Environmental Affairs collaborated with several different operational areas in 2024 to address environmental health and industrial hygiene issues. This included issues related to spill response, chemical product management and occupational health exposures. Some examples of work in this area included:

- Evaluating chemical products to be used in day-to-day operations and capital projects.
- Performing hazardous materials surveys including bulk asbestos sampling prior to renovation or demolition work.
- Participation in a cross-departmental team focused on HazCom continual improvement for teams across the District. Performing chemical product evaluations to identify hazardous conditions that may be associated with using various products, investigating the use of less-hazardous alternative products when necessary and helping to structure projects to minimize chemical exposures to District employees. This program also helps to eliminate hazardous waste generation and long-term risk that may be associated with using a particular product. Safety Data Sheets and supporting documents such as EPA registration labels (for pesticides) and technical data sheets were evaluated for 41 different chemical products in 2024.



Land Use & Permit Assistance

Critical Areas, Wildlife, Stormwater and SEPA Support

Environmental Affairs continues to work with District project leaders to help them successfully integrate compliance with critical area, floodplain, wildlife, cultural resource, and stormwater regulations. This support effort included outreach across the District, training sessions for District staff, and individual project permit analysis to help determine when projects trigger different construction site stormwater requirements and help selecting various best management practices to employ to prevent erosion and sediment discharge.

In 2024, the District managed the Migratory Bird Special Purpose Utility Permit administered by the U.S. Fish and Wildlife Service. The permit allows specified District staff to transport and/or dispose of migratory birds injured or killed by District equipment. In 2024, District or State wildlife personnel discovered 32 bird deaths associated with District powerlines and equipment. These incidents were reported to the U.S. Fish and Wildlife Service. Distribution and Engineering Services staff inspected each bird incident site and assessed each location for avian protection modifications. Several locations were identified for additional insulation or flight diverters. These projects should help prevent future injuries to birds that may perch on or collide with District equipment.

Electric and Magnetic Fields

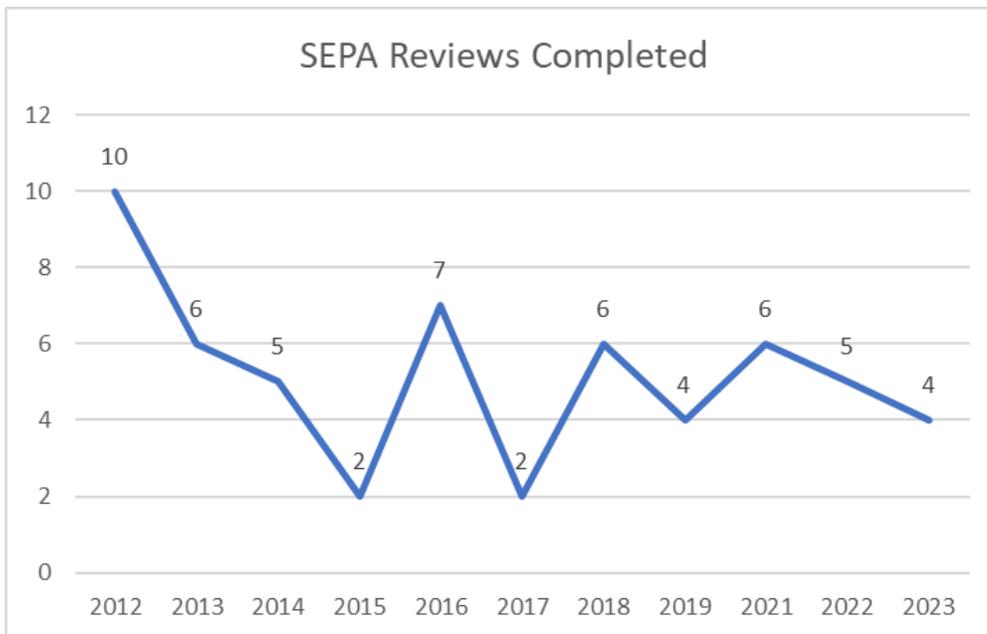
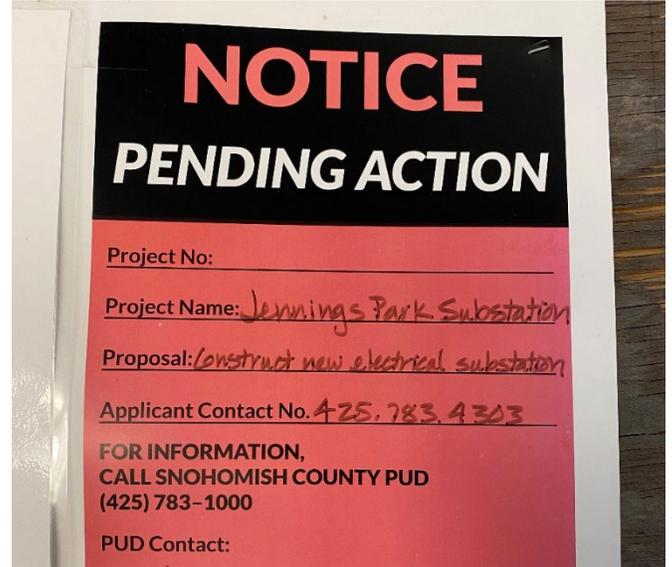
Responding to Customer Concerns

Electromagnetic fields (EMF) are generated by the flow of electric current, including the flow of electricity through equipment operated by the District. The District provides customers who are concerned about the possible health effects of EMF with information and conducts EMF field demonstrations and measurements upon request. In 2024, EA responded to 10 customer requests for EMF information and provided 4 magnetic field demonstrations.

State Environmental Policy Act (SEPA)

Responsibly minimizing environmental impacts

The District completed three environmental evaluations and one addendum under the State Environmental Policy Act (SEPA) in 2024. Completing SEPA procedures is a multidisciplinary effort between project leaders, Environmental Affairs, Natural Resources, and oftentimes consultants. The SEPA process identifies current conditions and possible project-related impacts, outlines procedures or designs to avoid or reduce adverse consequences and evaluates its overall significance. SEPA also provides a succinct platform for public notice and comment on environmental issues related to a project. Additionally, greenhouse gas emissions associated with a project are included in the evaluation process. The District consistently strives to incorporate impact reduction into project proposals before a final threshold determination and outline these measures in the appropriate public SEPA documents.



Other Project Support

Environmental Sustainability and Compliance Assistance

Environmental Affairs participates in the planning, design and execution of a variety of District projects to promote environmentally responsible utility operations throughout the lifecycle of facilities and programs. In 2024 these projects included substation rebuilds, facility operations and maintenance projects, hazardous materials management planning, greenhouse gas emissions, property cleanups, the development of future District facilities, final decommissioning of an obsolete energy storage system, permit support for the development of a new 25 MW energy storage system, providing training to District employees at the annual Safety Days event, as well as participating in the planning and staffing of the District's Energy Block Party.

Summary

In collaboration with other District departments, Environmental Affairs' efforts have successfully met District goals to reduce pollution, ensure worker health and safety, comply with applicable regulations, reduce financial liability and promote sustainable utility operations. Continuing to address these issues collaboratively within the District and with regulatory agencies through planning, training and design will continue to produce the greatest gains for pollution prevention and environmental risk management at the least possible cost.

