

The Port of Portland has established an Environmental Management System to continuously improve our environmental performance. We set 20 environmental targets for our staff to work toward in the 2011-2012 program year. Similar to previous years, we pursued our targets by calling upon the resources and expertise of Port staff and external partners. While we did not meet all our targets, we came close, and we are dedicated to areas where we still have work to do. As always, your questions, comments and suggestions on these and future targets are welcome.



Air Quality

Objective: Minimize impacts to air quality

Target: Reduce diesel particulate matter from Port-controlled operations by 25% from 2000 baseline levels by 2015. This is a multi-year target.

Over the last year, our main focus has been planning for repowering the Dredge Oregon. Construction of higher efficiency engines has already begun and we expect that this will reduce particulate matter emissions from the Dredge Oregon by greater than 80%. The repowering will begin later this fall and occur in two phases to allow the dredge to continue operating during the critical dredging season.

Progress: This multi-year target is 10% complete.

Target: Reduce Port direct and indirect greenhouse gas emissions 15% below 1990 baseline levels by 2020.

Completing the Port-wide Carbon Footprint Reduction and Energy Management Strategy and Master Plan allowed us to quantify our 1990 baseline levels and identify and evaluate energy conservation opportunities that will help the Port reach this ambitious goal. Currently we meet this goal through the indirect carbon offsets associated with the purchase of Renewable Energy Credits. The repowering of the Dredge Oregon will contribute to future direct greenhouse gas offsets, as the more efficient engines will reduce greenhouse gases substantially.

Progress: This multi-year target is 100% complete.



Target: Complete a Port-wide Carbon Footprint Reduction and Energy Management Strategy Master Plan.

Last year, we achieved a major step in working towards our long-term carbon footprint reduction goal. We completed a Port-wide Carbon Footprint Reduction and Energy Management Strategy Master Plan, which identifies specific opportunities for energy generation, efficiency, conservation and greenhouse gas emissions reductions in Port facilities, mobile fleets and vessels. The study also resulted in the development of a dynamic software tool that allows us to evaluate options through a comparative analysis of costs and portfolios of carbon reducing actions.

Progress: This target is 100% complete.

Target: Purchase certified Renewable Energy Credits equivalent to 100% of Port-wide electric energy.

We continued to uphold our three-year commitment to 100% renewable power by purchasing 75,000 Renewable Energy Credits last year.

Progress: This target is 100% complete.

Target: Reduce Port-wide energy consumption by at least 500,000 kilowatt hours over the course of the year.

We exceeded our target, achieving a reduction of almost 480,000 kilowatt hours through simple energy conservation projects such as lighting adjustments to airport displays and signage in the elevators and ticket lobby in the PDX terminal building. An additional 4.5 million kilowatt hour savings can be attributed to the multi-year baggage system improvements project. Energy savings for this project were independently verified this year through the Energy Trust of Oregon

Progress: This multi-year target is 100% complete for this year.



Natural Resources

Objective: Minimize impacts and seek opportunities to enhance natural resources

Target: Conduct egg mass surveys of northern red-legged frogs and northwest salamanders at four Port wetland areas.

Port natural resources staff monitored four Port-owned sites for northern red-legged frogs and long-toed salamanders to determine if certain species breed on the properties to better inform land management and future development decisions. We conducted egg mass surveys during prime breeding season from January to March 2012. We found egg masses-and adults in some cases-at all four sites, including egg masses and other amphibian species of interest such as long toed salamanders.

Progress: This target is 100% complete.

Target: Establish engineering and ecological habitat roof standards and requirements for industrial buildings that would focus on Streaked Horned Lark habitat.

Design standards will include the engineering requirements for the retrofit of an industrial building. This project will be completed in coordination with OSU, Metro, City of Portland, US Fish and Wildlife Service and others. The project has been deferred to the 2012-2013 program year.

Progress: This target is 0% complete.

Target: Complete milestones for phase one of a multi-year, multi-phase target: prepare for the establishment of a 50-acre upland grassland mitigation site on Government Island.

We completed the first year of a multi-year, multi-phase project to establish an upland grassland mitigation site on Government Island. The advanced mitigation project is a result of the Airport Futures process, designed to offset the development and dedicated aviation use in the open areas on the west end of PDX. The first year included site selection, completing a site-specific mitigation plan, coordination with the City of Portland and the start of monitoring and site preparation.

Progress: The annual milestones for this multi-year target are 100% complete.

Target: Conduct follow-on work to convert a reed canary grass-dominated herbaceous wetland to a native scrub/shrub environment.

Planting for a pilot project at the Portland International Center occurred at a .6-acre reed canary grass-dominated herbaceous wetland in January 2011. We are pleased to report that through monitoring conducted in the last year, the plants have established themselves and are doing quite well. We will continue to monitor the site every June to evaluate the time it takes for the willow and dogwood plants to get large enough to reduce the reed canary grass.

Progress: The annual milestones for this multi-year target are 100% complete.

Target: Complete milestones for a 25-year plan to seek out and fund projects that promote habitat enhancements to the Columbia Slough and improvements to the City of Portland's urban tree canopy.

During our first year, we completed canopy enhancements through Friends of Trees in January 2012 and we gained approval and funding for the Cully Community Park North Slope Restoration Project in April 2012. This target is another product of the Airport Futures planning process.

Progress: The annual milestones for this multi-year target are 100% complete.

Target: Extend Partnership with Friends of Trees by sponsoring and participating in tree plantings in neighborhoods adjacent to or near Port facilities.

We were pleased to continue our partnership with Friends of Trees for a fifth consecutive year with a \$10,000 sponsorship and staff participation in a neighborhood planting event near PDX.

Progress: This target is 100% complete.



Water Resources

Objective: Minimize impacts to water resources

Target: Research and assess the potential materials and technologies that support efforts to more efficiently use pavement deicer at Portland International Airport.

Although we have an enhanced deicing collection and treatment system, we still want to be as efficient as we can in the types, how much, and where and how we use deicers. Last year, we expanded on an earlier deicing technology study we completed in 2006. The study identified several promising technologies and a modeling analysis allowed us to determine the costs and benefits of some of the technologies.

Progress: This target is 100% complete.

Target: Update Irrigation Design Standards and Specifications.

It may seem as though abundant water sources are all around us, but we take water conservation at our facilities seriously. We worked with staff across all our operating areas to update our irrigation specifications so that we can install systems with the most optimal use of water. In the process, we engaged in critical conversations about how we go about designing, constructing and maintaining our landscapes.

Progress: This target is 100% complete.

Target: Partner with airport rental car companies to improve infrastructure and establish a maintenance program for the PDX rental car Quick Turnaround Facility (QTA) with the goal of reducing water use at the facility by 20% per vehicle.

The rental car Quick Turnaround Facility (QTA), a wash facility used by the PDX terminal rental car agencies, is one of the Port's largest water users. We partnered with airport rental car companies to implement water conservation measures to achieve a minimum of 20% reduction in annual water use. We sought conservation recommendations for infrastructure and maintenance program improvements and included them in our new contract with the rental car agencies. We will continue to monitor the effectiveness of these improvements over the next year.

Progress: This target is 100% complete.

Target: Evaluate the effectiveness and durability of using asphalt sealcoat products that contain no or low PAHs (polycyclic aromatic hydrocarbons) for potential use at Port marine and industrial facilities.

The project was initially delayed due to weather, but in June 2012, we applied a test material at Terminal 6 in a high-use area. Sampling and analysis of the material will be ongoing and the area will continue to be monitored for its integrity compared to adjacent areas where the current sealcoat product was recently applied. The durability of the test product will determine its application to larger areas.

Progress: This target is 95% complete.

Target: Develop education and outreach materials for Port tenants and targeted public audiences to promote water conservation as part of the Port's Water Management and Conservation Program.

Stormwater is a critical area of responsibility for the Port and its tenants. We embarked on an effort to create more comprehensive education and outreach tools to address water quality issues, above and beyond our usual inspections for spill prevention and stormwater issues. The target also included developing education and outreach materials to promote water conservation as part of the Port's Water Management and Conservation Program. Initial steps towards a stormwater education and outreach program include a survey of Port tenants to inform how to best design the tools and materials. We will continue to push the effort forward in the coming year.

Progress: This target is 25% complete.

Target: Conduct a water quality monitoring pilot project to evaluate the feasibility and effectiveness of using buoy-based monitoring instead of crew-based monitoring for Clean Water Act compliance during dredging and other in-water projects.

The timing and planned maintenance dredging projects scheduled during the fiscal year did not present the opportunity to complete this project. The project was postponed and will be completed in conjunction with an appropriate future maintenance dredging project.

Progress: This target is 0% complete.



Target: Complete a waste audit of Port Navigation.

In past years, we have conducted waste audits at almost all of our facilities. Last year, we focused on the navigation base and the Dredge Oregon. The audit identified waste minimization opportunities - such as increased recycling - and we are currently working on implementing those opportunities, which will reduce costs as well as volume of waste going to landfill.

Progress: This target is 100% complete.

Target: Become a Zero Waste facility at headquarters by 2013.

We continue to strive toward becoming a Zero Waste facility at headquarters by 2013, which requires us to divert 90% or more of our waste from landfills. This year we completed the first year of a two-year target to reach Zero Waste and we increased our waste diversion rate from 76% to 82%. Outreach and signage to employees and a durable cup awareness and promotion campaign contributed to the increase in the diversion rate.

Progress: This target is 91% complete.

Target: Develop a chemical product procurement program at PDX.

Over the last year, we also worked towards developing a chemical product procurement program at PDX to improve our environmental safety and compliance performance and reduce management costs for products purchased by the Port of Portland that require a Material Safety Data Sheet. The effort resulted in a new chemical procurement policy. The policy is in the adoption process and parts of the program are already being implemented.

Progress: The target is 95% complete.

Awards

We were honored to be recognized for a variety of efforts related to our environmental programs in the last year. We have been an active partner in the Sustainable Aviation Fuels Network since it launched in July 2010. The network was honored with an Environmental Achievement Award from Airports Council International-North America in October 2011 for our collaborative efforts to investigate the use of alternative fuels in aviation. The network was further recognized as Eco-Partnership of the Year in June 2012 by Air Transport World magazine in its inaugural presentation of their Eco-Aviation Awards.

We continued to gain recognition for managing the environmental elements of our aviation operations with our expanded deicing treatment facility. The Daily Journal of Commerce ranked our treatment facility third in their annual regional listing of 2012 Top Projects for the Public Works-Infrastructure and Transportation category. The new 12,000-square foot on-site deicing treatment facility collects and monitors stormwater runoff on the airport's 2,000 acres, nearly doubling its capacity for housing and treatment. It also features anaerobic fluidized bed biological reactors to help break down deicing material.

While it is an honor to be recognized within the construction and transportation industry, we also care quite a bit about being a good neighbor in our community. We have enjoyed a strong relationship with Friends of Trees over the last several years, and were thrilled when they named us as Community Partner of the Year at their annual Leadership Award Luncheon in 2012. We look forward to continuing our support as Friends of Trees works toward another record-breaking planting season.