

# **Port of Seattle Environmental Report 2008-2009**



*Where a sustainable world is headed.*



Where a sustainable world is headed.

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# Port of Seattle Environmental Report

March 2009

Welcome to the first online and interactive Port of Seattle Environmental Report. Click the navigation above for background information about the Port’s initiative and goals, and browse other categories for features, project information, photos and video. Below is a quick-hit list to our top stories.

For a printed copy, download and print this PDF.

Going Green: How it all started

Keep on trucking...but how?

Rainy day blues: A big storm water solution

Something fishy in Miller Creek

Eco-advances in 2008

New park opens -- see the video!

CONTACT US

**CALENDAR**

**Sustainability Month  
April 1 – 30**

**Earth Day  
April 22**



8th Street Park at South Park features bridge gears as art – see the video



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## Our Green Port Story

In 2007, Port of Seattle CEO Tay Yoshitani challenged employees to set new standards in environmental stewardship and sustainable operations and practices.

To underscore this challenge as central to the Port’s identity, a new brand was established including the now-familiar three-bar logo representing air, land and sea – with green running through the middle of everything. In 2008, new targets were set, new ideas implemented, and much more activity is underway with an eye toward achieving excellence in all three realms.

Both Seattle-Tacoma International Airport and the Seaport completed significant inventories of air emissions that would serve as baselines against which we would measure our progress.

Since then, we have marked our results. At Sea-Tac, a project has been funded that will reduce engine emissions by providing pre-conditioned air to aircraft parked at gates. More efficient and environmentally-friendly management practices contributed to two national awards for the airport from aviation industry associations.

The Port of Seattle Commission adopted the Northwest Ports Clean Air Strategy, setting short- and long-term goals for reducing seaport-related air emissions, in cooperation with the Port of Tacoma and the Vancouver Fraser Port Authority. The Seaport also forged a new EcoPartnership with the Port of Dalian, China, and other organizations to examine things like marine terminal planning, construction management, railway transportation and oil spill response technologies.

The Port’s Sustainable Asset Management Policy continues to guide facility planning, construction and management, integrating environmentally and economically sustainable development in a comprehensive asset management program that focuses on the total cost of ownership.

And in all things, policies and oversight has been implemented to ensure accountability and transparency of decision-making, contracting and record-keeping.



“Our logo serves as a constant reminder of the Port of Seattle’s commitment to promoting sustainability in every aspect of our business.”  
-- Tay Yoshitani, CEO



Commission President Bill Bryant, outlook for 2009:

“This is a year for visionary initiatives that will cement the competitive position of Puget Sound’s ports in a rapidly changing world. This is a year for visionary partnerships that will restore Puget Sound’s natural vitality. This is a year for initiatives that will generate environmentally sustainable, trade related, family wage jobs, not just for this coming year, but for years to come.”





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2008 ACHIEVEMENTS:

## Advances in Sustainability

With a new brand identity centered on sustainability, the Port of Seattle set ambitious goals for 2008, to protect and improve the environment of the Puget Sound region. We are encouraged by the advances we've made during this year, specifically in the areas of water quality, air quality and the relationships we have developed with environmental partners and Port customers.

### Air Quality

Reducing greenhouse gas emissions took center stage at Sea-Tac during 2008, with the release of the airport's greenhouse gas emissions inventory and reduction strategies that will assist in identifying the greatest sources of emissions at the airport. In addition, the Port Commission asked for greater federal involvement in support of aircraft emission reduction.

The Port also partnered with the Port of Tacoma and the Vancouver (B.C.) Fraser Port Authority to create the Northwest Ports Clean Air Strategy, designed to reduce seaport-related air emissions at all three locations. Encouraged by input from stakeholders, citizens and environmental groups, the partnership also brought about a resolution aligning environmental goals between Seattle's and Tacoma's seaports.

### Water Quality

Thanks to our continued effort to manage the storm water issues as part of Sea-Tac Airport's multi-year expansion project, the Port was awarded the 2008 Environmental Achievement Award from Airports Council International.

One of the crowning achievements was the relocation and habitat restoration of Miller Creek [LINK TO FEATURE ON LAND PAGE]—and the subsequent spotting of salmon making their way back into waters that previously were clogged with garbage and debris. In addition, with the move of the cruise facility from Terminal 30, installation of two electrical hook-ups at the new Pier 91 cruise facility retains Seattle as one of the nation's two seaports with two such connections.

Ten of the Port's parks joined other urban Washington sites to be certified for water quality protection and salmon habitat. The recognition from Salmon-Safe, a Portland-based group that restores urban watersheds for salmon, shows the Port's deep commitment to safeguarding the Seattle waterfront's aquatic habitat.

And with the recent addition of Fishermen's Terminal, all four Port of Seattle marinas including Bell Harbor, Harbor Island and Shilshole Bay, have been named King County "Envirostars" for their innovative recycling and waste reduction practices.

### Partnerships

Seattle and Tacoma ports also convened two special joint commission sessions in 2008 to discuss regional air quality cooperation, among several other topics.

And in a broad-reaching move, The Port of Seattle and the Port of Dalian, China have agreed to work with other public and private sector partners on an EcoPartnership to advance environmental and economic sustainability. The EcoPartnership will last a minimum of three years and will include examinations of marine terminal planning, construction management, liner development, railway transportation, oil spill response technologies and more.

These partnerships are just part of the Port's ongoing efforts to increase customer and partner participation in sustainable practices. Other 2008 opportunities included:

- A first-of-its-kind trawl net recycling program offering free or minimal-cost net and metal recycling for commercial fishing vessels moored at Fisherman's Terminal. Free "Clean and Safe" seminars also were offered for boatyards, uplands tenants, net locker and monthly moorage customers, and commercial marine and fishing companies.
- An incentive program at Sea-Tac Airport to recycle off-aircraft trash, projected to save airlines who participate more than \$250,000 a year by reducing waste sent to landfills. In another incentive program, airlines like SkyWest, Horizon Air and Car-golux were recognized for reducing noise as winners of the 2007 Fly Quiet Awards.



Sea-Tac air emissions inventory completed



Miller Creek relocation successful



Fishermen's Terminal wins Envirostar rating



Port joins Ecopartnership with Dalian, China



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# AIR

## The Greenest Port Starts with the Bluest Skies

### Seaport: Keep on trucking...but how?

As a leading member of the Puget Sound Maritime Air Forum, a partnership of maritime agencies and industry, the Port of Seattle has made great strides toward reducing the toxic risks in our region’s air that result from diesel-fueled sources.

“The maritime industry has many different players, so one of our challenges was to figure out how much diesel in the area is from maritime sources,” said Stephanie Jones-Stebbins, senior manager of the Seaport Environmental Program. “We found that 28 percent in the area comes from maritime sources, such as ships, trains, tugboats and trucks.” [READ MORE...](#)

At-berth Clean Fuels (1st vessel here; incentives)

**Climate Registry:** The Port of Seattle is one of four Ports in the US to join The Climate Registry as a founding reporter. By committing to inventory and share our carbon emissions with the nonprofit registry, the Port is providing meaningful information to reduce greenhouse gas emissions. As a founding member, the Port is demonstrating our environmental leadership by supporting the Climate Registry in its initial formation.

**First Greenhouse Gas Inventory:** In 2008, Sea-tac Airport made available the nation’s first comprehensive airport greenhouse gas inventories, accounting for all airport related emissions, including aircraft, ground transportation, and port sources. The inventory will inform future greenhouse gas reduction efforts and the airport’s Climate Action Plan. In a precedence setting move, the port Commission directed staff to work with airport stakeholders on developing voluntary greenhouse gas emission reduction goals.

**Banking first emission reduction credits in US:** The airport has just “banked” its first emission reductions credits with the Puget Sound Clean Air Agency for establishing a fuel hydrant system; thus replacing fuel tanker trucks with a fuel pipeline to the gates. By taking responsibility associated with fuel system emissions, Sea-Tac was able to document the voluntary emission reductions for the suite of traditional pollutants, as well as carbon dioxide. In the first year, the CO<sub>2</sub> emissions banked was nearly 1,000 tons.

**Third Runway Emission Savings:** The achieved goal of reducing aircraft delays, both in the air and on the ground, has brought with it the co-benefit of reducing air emissions. Emission savings attributed to the Third Runway’s opening are significant. Reducing delays by half will mean 50,000 tons less of carbon dioxied every year. That’s like taking 10,000 cars off the road. It also means there’s less of the traditional pollution too; helping to keep our region’s air clean.

Bio-fuels, CNG

**Energy Harvesting:** Sea-Tac is investigating how to use the resources we have to harness the natural energy around us. We are in the process of installing several wind turbines on the airport office building. This pilot program will evaluate the feasibility of harnessing wind energy at the airport. Studies have been made looking at geo-thermal and solar projects too. When the technologies are available to make use of our natural resources for energy in an efficient and responsible manner, we will be ready. In the mean time, we continue to invest in renewable energy (25% of our electricity is renewable) to supplement the 97 percent hydro-based energy purchased by the airport.

Sea-Tac believes that supporting alternate fuels and efficient use of equipment are necessary for greening our vehicle fleets. Once again, we have dispensed over a million gallons of compressed natural gas (CNG). Low CO<sub>2</sub> emitting CNG is used to





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LAND

HEADLINE HERE, IN 18 PT.

Miller Creek: An Airport Success Story

When Sea-Tac’s third runway opened for business on November 20, 2008, part of the Port’s \$4.2 billion capital improvement program, all eyes were on Alaska Airlines’ Flight 674 to Denver, the runway’s inaugural commercial flight.

But those who knew of the many projects leading up to this opening also were applauding the wetland mitigation and storm water management programs, which were key to the airport’s multi-year expansion project and to the runway’s construction. [READ MORE...](#)

**Reduce / reuse / recycle:** Sea-Tac Airport’s waste reduction and recycling activities minimize contributions to landfill, reduce demand for natural resources, and reduce operating costs. The airport offers financial incentives to tenants that encourage recycling and promote sustainable material stewardship. Airport tenants, passengers, and employees divert recyclable paper, plastics, aluminum, scrap-metal, wood, and glass; compost food scraps, coffee grounds, and other organic material; donate leftover food to local food-banks; recycle used cooking oil into bio-diesel; and divert universal waste. In 2008, Sea-Tac diverted 1,300 tons of waste from landfill (21% of annual total), and reduced year-over-year annual tons of waste generated by 5% or 270 tons.

Airlines continue to implement onboard recycling programs to control costs and reduce negative environmental impacts. In 2008, Alaska airlines, initiated an onboard recycling program to divert recyclable material from de-planed waste. In 2009, Sea-Tac will install a centralized network of recycling and trash compactors on the airfield to accept deplaned waste and recyclable material.



Sea-Tac recycles coffee grounds to compost. [See the video!](#)

Stormwater management (video)

Parks landscaping (feature new 8th St Park in video)

noise remedy video screen  
shot here

**Sea-Tac Airport’s Noise Programs:** Working closely with the Federal Aviation Administration, the airlines, and local communities to monitor existing noise programs and develop new ways of reducing airport and aircraft noise, the Noise Programs Office is part of the Community Development Department. In 2008, Noise Programs sound-insulated two homes, participated in the reconstruction of one Highline School and one Highline Community College building, continued acquisition and relocation of the final Mobile Home Park and homes located in the North Approach Transition Zone, and awarded the Fly Quiet Award to SkyWest, Horizon, and Cargolux. We are currently continuing to manage these programs, and anticipate starting a new Part 150 Noise Study in late 2009. Visit the Noise Web page and watch the short video. [<http://www.portseattle.org/community/environment/noise.shtml>]

[See how Sea-Tac manages noise in this short video.](#)

**Sustainable Asset Management:** In 2008, the port adopted a Sustainable Asset Management Policy, to guide its decisions related to the planning, design, construction, operation, maintenance, renewal, and demolition of its airport, seaport and other facilities. This approach integrates environmentally and economically sustainable development by maintaining a focus on the total cost of ownership and implementing a comprehensive asset management program. Several projects are in design that will incorporate sustainable design elements, including the airport Consolidated rental Car facility, the Bus maintenance Facility and the Maintenance Warehouse.

Miller Creek: An Airport Success Story  
[THIS STORY JUMPS TO ANOTHER PAGE, WITH VIDEO ON THAT PAGE]  
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# SEA

Shore power (T-91)

**Lower Duwamish River Habitat Restoration Plan:** The purpose of this plan is to identify suitable locations for environmental restoration projects that can be built on Port-owned property along the shoreline of the river. The public process will help develop a master plan that ensures identified restoration sites and the commerce that relies on the waterway for navigation can all coexist. This effort commenced in early 2008 and the plan is due for Commission approval in spring 2009.

**Seaport Shoreline Plan:** The Washington State Department of Ecology has mandated updates of Shoreline Master Programs by city agencies. In response, the Port of Seattle created a Seaport Shoreline Plan. This document, approved by Commission in February 2008, provides agencies and the public the port's outlook regarding port operations and facilities affected by shoreline management goals and regulatory requirements. It identifies existing and appropriate future sites for port facilities and development, habitat mitigation, and public access at each of the Port's shoreline properties. It also presents the Port's policy and operational needs related to Shoreline Master Program administrative procedures, permitting, and relationships to other regulatory programs affecting port shoreline areas.



Nature and industry co-exist along the Duwamish River. [View the short video.](#)

Stormwater mapping (?)Duffner

**Des Moines Creek Partnership:** In **Month**, Port Commissioners joined local mayors and elected officials to celebrate the grand opening of the Des Moines Creek Basin Planning project. The Basin Plan is a partnership between local cities, the port and state department of transportation, and allows for cooperative solutions to the problems in this urban creek. The plan constructed a regional detention facility, high flow bypass to the Puget Sound, replacement of a bridge and creek buffers and habitat improvements.