



**COMMISSION
AGENDA MEMORANDUM**

Item No. 11b

BRIEFING ITEM

Date of Meeting May 14, 2024

DATE: May 14, 2024

TO: Stephen P. Metruck, Executive Director

FROM: Sandra Kilroy, Senior Director, Environment & Sustainability
Jane Dewell, Senior Manager, Marine Stormwater Utility
Jeremy Webb, Environmental Program Manager, Aviation Environment & Sustainability
Tom Fagerstrom, Airport Noise Program Manager

SUBJECT: Sustainable Century and Fly Quiet Awards

EXECUTIVE SUMMARY

In honor of Earth Day (April 22, 2024), Port staff are pleased to announce winners of the Port's 2024 Sustainable Century Awards for the Aviation and Maritime Divisions. These awards recognize our customers, tenants, non-profits, and partners for outstanding accomplishments in the areas of environment and sustainability. Award winners serve as role models and demonstrate exceptional leadership in their operations or involvement with Port maritime facilities and Seattle-Tacoma International Airport (SEA). These businesses are key partners in helping the Port achieve our sustainability goals set forth in the Century Agenda.

Port staff also recognize winners of the Port's Fly Quiet Awards for airline efforts to reduce noise at SEA. The annual Fly Quiet Awards were developed by Port staff and a citizen advisory committee in 2005 to increase airline and pilot awareness of aircraft noise impacts on local communities.

This year's award winners include:

Sustainable Century Awards

- Maritime – Alaska Marine Lines, Fish Commission/Muckleshoot Indian Tribe, Quiet Sound and Stormwater Controls, LLC
- Aviation – Alaska Airlines, Condor Airlines, McDonalds, Concessions International, Delta Air Lines, Southwest Airlines, UBER (Honorable Mention)

Fly Quiet

- Air Canada
- Frontier Airlines
- Delta Air Lines

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MARITIME SUSTAINABLE CENTURY AWARDS

The Maritime Division received six nominations and recognizes four as award winners with the following key accomplishments:

Alaska Marine Lines (Environmental Performance Category)

This award recognizes Alaska Marine Lines (AML) for significant energy and emissions reductions associated with transport refrigeration. Their achievements include:

- Reduced diesel fuel use and air emissions by 75% and increased use of local clean electricity. To accomplish this, AML switched to Star Cool transport refrigeration units (TRUs or ‘reefers’) with modular timeshare electric panels, which allowed them to reduce from six to eight diesel generators (350 to 450 kWh) down to one to two diesel generators that support the TRUs.
- Energy reductions in 2023 amounted to 1,051,200 gallons of diesel, which equals 10,701 metric tons of carbon dioxide-equivalent emissions. This level of greenhouse gas reductions is equivalent taking 2,547 gas-powered cars off the road or the energy use of 1,396 homes annually.
- AML also replaced propane forklifts with electric forklifts, which now comprise 45% of the forklift fleet and 58% of total operating hours.
- Additional AML efforts included use of Hydra-Lift skags and a patented rack system that accommodate both railcars and shipping containers, supporting a highly efficient transfer of materials to the Alaska Railroad; using larger barges that accommodated 30% more load for the same fuel requirements; and partnering with *Alaskans for Litter Prevention and Recycling* to back-haul recyclables to Seattle on empty barges at no charge, improving the recycling rate for the state of Alaska.

Fish Commission/Muckleshoot Indian Tribe (Environmental Innovation and Equity, Diversity & Inclusion Categories)

This award recognizes the Muckleshoot Indian Tribe’s Fish Commission for their BLAST (Ballard Locks Adult Sockeye Transport) program, which has improved sockeye salmon survival in the Lake Washington and Ship Canal migration corridor. Their achievements include:

- Instituted BLAST in 2021, with repeats in 2022 and 2023, that resulted in reduction of pre-spawn mortality from 80% for salmon that follow natural transit through Lake Washington migration corridor down to 1% for salmon transported via BLAST to a hatchery in Issaquah, WA.
- The program transports fish by truck, avoiding the heat, disease, and other hazards of the Lake Washington watershed that has resulted in high pre-spawn mortality during natural transit from Puget Sound to the Cedar River. The salmon spawn in the Issaquah hatchery where eggs are reared, with salmonids released to the Cedar River to return to the wild.

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- The 2021 cohort will be returning in 2024, which will allow the first opportunity to understand the effectiveness of this method in contributing to migrating salmon populations in the region.
- The BLAST program is a cooperative effort between the Muckleshoot Tribe, Washington state, and federal partners to support a sustainable salmon harvest.
- Salmon are a cultural and subsistence element of the Muckleshoot Tribe and other indigenous and minority populations in Washington, and efforts to preserve and enhance salmon runs are critical in addressing environmental sustainability, equity, and justice goals in the state and region.
- As stated in the award application: *"This is not only a sustainability story, but one where a historically marginalized community (Muckleshoot Indian Tribe) is the leading voice to co-manage a resource for the universal common good."*

Quiet Sound (Environmental Education & Outreach Category)

This award recognizes Quiet Sound for success in working across public and private sectors to institute an effective voluntary slow-down of large commercial vessels through Admiralty Inlet, between Whidbey Island and the Olympic Peninsula, that helps to reduce underwater noise. Their achievements include:

- Reduced underwater noise in Puget Sound, a problem recognized as a key impediment to the survival of Southern Resident Killer Whales (SRKW) in the Salish Sea, in addition to low availability of Chinook salmon and poor water quality.
- Data showed that 70% of vessel transits through the slowdown area decreased their speed, resulting in a 45% reduction in sound intensity (2.8 dB reduction).
- SRKW were present in the slowdown area for 36 days of the 80-day slowdown, and the slowdown had minimal impacts on maritime trade and no safety impacts.
- The success of this program is due largely to the engagement plan and thoughtful integration into existing institutions that manage vessel traffic in Puget Sound.
- This industry engagement demonstrates a systems approach that recognizes the roles of diverse stakeholders and motivates voluntary change to benefit the local environment. That the program had such successful outcomes based on voluntary compliance speaks to the teams' deep understanding of these systems and well-developed messages and implementation.
- Partners in this effort include federal, state and tribal governments, conservation organizations, and private companies with the goal of reducing underwater noise that impairs the SRKW's ability to communicate, hunt, forage, and mate.
- In addition, multilingual handouts were produced and distributed for international mariners (English, Greek, Tagalog, Russian, Simplified Chinese, Traditional Chinese).

Stormwater Controls LLC (Small Business and Environmental Innovation Categories)

This award recognizes Stormwater Controls as a small business and inventor and distributor of a modular stormwater filtration product called Retain Drain. Their achievements include:

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- Invented and manufacture the Retain Drain in the Pacific Northwest, a system that uses coconut coir filters in a high-quality metal frame to remove litter and other contaminants from stormwater before it enters the Salish Sea.
- Stormwater is recognized as a major source of pollution in the Salish Sea that contributes to the decline of important marine species such as salmon and SRKW.
- On August 1, 2017, the U.S. Patent Office granted Stormwater Controls, LLC, a Utility Patent on its “Modular Stormwater Filtration.”
- Stormwater Controls data show as much as 95% reduction of organic matter, solids, and trash in stormwater after passing through Retain Drain.
- Retain Drain is a durable stormwater treatment system that fits typical catch basins, can be adapted to other types of stormwater inlets, and is easy and fast to maintain.
- The filters are made of a renewable resource, coconut coir, that has proved effective in capturing heavy metals, petroleum products, and suspended solids. As a natural fiber it does not contribute to plastic or microplastic pollution.

AVIATION SUSTAINABLE CENTURY AWARDS

The Aviation Division received seven nominations and selected four winners and one Honorable Mention recognition. The Aviation division also award two airlines for efforts to reduce emissions using SEA ground power and pre-conditioned air systems, and highly fuel-efficient aircraft, based SEA measured operational data. Key accomplishments of awardees include:

Alaska Airlines (Environmental Performance/Innovation Categories)

This award recognizes Alaska’s elimination of single-use plastic cups in onboard food and beverage service and an innovative program allowing passengers to offset emission impacts of their air travel. Their achievements include:

- Replaced all single-use plastic cups for with environmentally preferable, compostable, and PFAS-free paper cups, becoming the first U.S. airline to make the change and eliminating >55 million plastic cups annually. Combined with their adoption of paper boxed water the year before, these actions reduce roughly 2.2 million lbs. of plastic waste annually, equivalent to the weight of 24 Boeing 737's;
- Partnered with climate-tech company CHOOOSE to offer passengers a new and convenient carbon offset program to reduce their travel emission impacts. The program offers passengers options to purchase Sustainable Aviation Fuel (SAF) credits or offsets from certified natural climate projects directly through Alaska’s flight reservation webpage. Program promotion also included rewarding guests with 500 Elite Qualifying Miles for every \$100 in SAF credits purchased, generating the sale of ~515,000 gallon-equivalents of SAF credits (5x more than predicted) with estimated reductions of 4,334 metric tons of CO2-equivalent emissions;
- While Alaska’s SAF credit program did not result in direct usage of SAF at SEA airport, we applaud Alaska’s partnership with CHOOOSE for the demand signal it sends to help grow the SAF industry. We are also particularly impressed with the way Alaska promoted SAF

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credits to passengers as an alternative to year-end flying to achieve elite status. This not only helped reduce what is commonly known as “mileage running” or flying just to achieve status, but also provided an excellent SAF education opportunity for Alaska’s most frequent fliers.

Condor Airlines (Environmental Performance Category)

This award recognizes Condor Airline’s for their industry-leading accelerated fleet transition to modern fuel-efficient aircraft that reduce emissions and noise. As a small carrier at SEA, their annual operations (~426 flights) are well below the threshold (5,000 operations) for eligibility in our measurement-based award in this category. However, their rapid fleet modernization as a key sustainability strategy is an impressive example that other airlines can emulate. While some smaller airlines have modernized their fleet in a relatively short time span, the scale and pace of Condor’s wide-body fleet renewal is incredibly impressive. Their achievements include:

- Condor announced their fleet modernization plan in 2021 and began taking delivery of A330-900neos between December 2022 and January 2024. By April 2024, over the span of less than two years, the airline will fully retire their entire Boeing 767 fleet through purchase and replacement of 16 aircraft across their entire long-distance or wide-body fleet; Condor also plans to replace the remaining short and medium-haul fleet with modern airbus A320neos and A321neos, including 41 aircraft in total;
- Condor transitioned the bulk of its SEA fleet to modern and highly efficient Airbus A330-900neos in 2023; Operational data shows Condor went from 0% use in 2022 to 81% of 2023 flights at SEA airport using these new aircraft, which consume 20% less fuel, produce 20% less carbon emissions, and 50% less noise pollution.

McDonalds (Environmental Performance Category)

This award recognizes McDonald’s voluntary transition to a fully electric-powered restaurant during their 2023 mid-term SEA restaurant refurbishment. By replacing natural gas cooking and heating equipment with electric alternatives, McDonald’s eliminated all natural gas emissions. Their achievements include:

- Replaced four HVAC gas units, two gas grills, two gas fryers, and one gas hot water tank with electric alternatives that use predominantly hydropower generated electricity;
- This transition to electric equipment eliminated annual consumption of ~10,700 THERMS of natural gas, equal to 57 metric tons of CO2-equivalent emissions;
- The timing of McDonald’s “pioneering” renovation inspired confidence in SEA’s Airport Dining & Retail group to apply a similar approach in food and beverage plans for SEA’s Concourse C Expansion project, requiring all electric cooking at future Concessions in the new facility.

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Concessions International (Environmental Performance/Innovation Categories)

This award recognizes Concessions International (CI) and their partner's voluntary achievement of U.S. Green Building Council's Leadership in Energy and Environmental Design (USGBC LEED) certification at Salty's at the SEA and Brewtop Social construction in 2023 at SEA airport. Both are the first SEA restaurants to achieve LEED certification. In designing both restaurants, CI worked to integrate sustainable design and use as little energy as possible through conservation and efficiency. Concessions International is also a minority and woman-owned family business with origins as a Disadvantaged Business Enterprise (DBE). Their achievements include:

- Both projects achieved LEED certification with 42 points and were ranked in the top 93% of all US retail and top 75% of all WA based USGBC LEED projects. Both units were awarded 11 pts. for energy and atmosphere, 10 pts. for indoor environmental quality, and 6 pts for materials and resources plus others;
- Key certification features include finishes from sustainable sources, all energy-efficient LED lighting, building materials using post and pre-consumer content, Chlorofluorocarbon (CFC) free HVAC systems, green cleaning policy supporting good indoor air quality, and dedicated waste diversion programs to reduce landfill bound waste through recycling;
- Performance benefits include a 47% reduction in lighting power, 72% of installed equipment is Energy-Star rated, provided Environmental Product Declarations and product ingredients for 20 weighted building products, 17% of materials use recycled content, diverted 57% of construction waste through seven material streams; and use of low-emitting materials (paints and coatings 89%, adhesives and sealants 85%, flooring 100%, ceilings 100%, insulation 100%).

UBER (Honorable Mention - Environmental Performance/Innovation Categories)

This recognition celebrates UBER's continued improvement advancing electric vehicle (EV) use and driver access to EV's at SEA. While electrifying TNCs is a key Port sustainability strategy to reduce SEA ground transportation emissions, and UBER is key partner in that effort, the panel notes they received an award last year for substantially the same actions but acknowledge their strong 2023 performance. Their achievements include:

- Lowered their 2023 e-KPI score by 11% reducing 2.4M lbs. of incremental CO2 emissions compared to 2022 performance. Noting a Q4 e-KPI score that was 25% lower than Q1;
- Zero Emission Vehicles (ZEV) trips at SEA increased 180% in 2023, with 76% of trips to or from SEA completed using either hybrid or ZEV's. In the Seattle market area, ZEV trips increased to 15.6% in Q4, almost double the 8.5% ZEV share in Q4 of 2022;
- Although application focus is on SEA performance, UBER notes Terminal 91 (maritime cruise) share of ZEV trips doubled from 4% in 2022 to 8.4% in 2023, and ZEV rides increased by 110%;

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- Continued growth of electrified ride options including Comfort Electric (ZEV ride option) and UBER Green (EV and hybrid ride option) increased 62.8% at SEA YOY;
- Mileage driven per ReMatch pickup program decreased by ~83% putting SEA in top 5 of 30 largest U.S. and Canadian airports for ReMatch use in 2023;
- Other initiatives include adding new app features to boost user awareness of sustainability impacts, political partnership to expand EV use and charging at airports, more efficient mapping methods, partnerships with Avis and Ford to expand availability/affordability of ZEVS to drivers, and more.

The Aviation division also award two airlines for efforts to reduce emissions using SEA ground power and pre-conditioned air systems, and highly fuel-efficient aircraft.

Southwest Airlines (Greatest use of airport ground power and pre-conditioned air systems):

- **Ground Power:** 94% of operations connect to system, longest connectivity while at gate (77% of turn time), and fastest time to connect (2 minutes avg.);
- **Pre-conditioned Air:** 56% of operations connect to system; 2nd longest connectivity while at gate (72% of turn time), and fastest time to connect (7 minutes avg.).

Delta Air Lines (Highest percentage use of fuel-efficient aircraft):

- Of Delta's 2023 SEA operations, 40% were completed with highly fuel-efficient aircraft (up from 25% last year) using Airbus A321Neos, A220s, A330neos, and A350s compared to the next highest performer who achieved 28%.

FLY QUIET AWARDS

Port staff developed the annual Fly Quiet awards in 2002, with input from a citizen advisory committee, to increase airline and pilot awareness of aircraft noise impacts on local communities. Fly Quiet was included as a continuing noise program measure in the most recent Part 150 Noise Study update completed in 2014.

Fly Quiet recognizes airlines based on the following criteria: 1) the sound levels of their operations using four of the Port's noise monitors, 2) success at flying within the noise abatement flight procedures, 3) adhering to SEA's ground maintenance engine run-up regulations, and 4) limiting noise levels during late-night hours at SEA. Using these scoring criteria, two airlines are recognized as the highest achieving carriers, and a third airline is recognized as having made a significant improvement over the previous year.

Air Canada

- Top scoring Fly Quiet airline for operations in 2023.
- Remarkably low takeoff noise utilizing a modern fleet of quiet Airbus A220 and Boeing 737MAX aircraft.
- Fly the established Noise Abatement flight procedures at SEA very accurately.
- Second consecutive year with an award

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Frontier Airlines

- High scoring airline with consistently lower noise levels than other domestic carriers.
- Operate the quiet Airbus A320neo at SEA.
- Consistently strong performer in Fly Quiet each year.
- Fifth Fly Quiet Award overall

Delta Air Lines

- Recognized for undertaking significant improvements to their aircraft fleet in 2023.
- In 2022, 24% of Delta’s operations included modern and quiet Airbus A220, A321neo, and A330neo aircraft.
- In 2023, this percentage increased to 40% of their total operations.
- Significant commitment to updating fleet and limiting noise to local communities.
- Continuing, valuable contributions to noise reduction at StART

ADDITIONAL BACKGROUND

The Port has recognized environmental excellence among its business partners as early as 2010 with the Aviation Environmental Excellence and the Maritime Green Gateway awards. Under the Sustainable Century Awards, both divisions accept nominations for projects, processes, or actions that promote sustainability leadership in the following categories:

- Environmental Performance
- Environmental Education & Outreach
- Environmental Innovation
- Equity, Diversity & Inclusion

A panel of Port staff review nominations and determine award winners using established criteria for each nomination-based category. Awards in each category depend on the strength and quantity of nominations received. The Aviation division also awards airlines for efforts to reduce greenhouse gas emissions by relying on measured use of SEA ground power and pre-conditioned air systems, and flight operations data. Ground power and pre-conditioned air detection systems are not available at all SEA gates (unavailable at A & S gates) and measurements are based on available data. Airlines with more than 5,000 flight operations at SEA in 2023 were included in the highest percentage of fuel-efficient aircraft use category, as they represent more than 80% of fuel load.

Port staff will host a celebratory luncheon for award winners on May 30, 2024, from 12:00-1:30 PM at the Airport’s International Conference Center. Staff host the event and invite Port Commissioners and leaders to attend and present winners with commemorative awards, learn about their accomplishments, and celebrate with attendees.

Concurrent with award announcement, Port staff will launch a publicity campaign acknowledging this year’s award winners through Port media outlets (i.e., website, social, digital publications).

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ATTACHMENTS TO THIS BRIEFING

- (1) Presentation

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

April 18, 2023 – Announced 2023 award winners (item #11a)

Sustainable Century Awards:

Maritime: Lineage Logistics, ECOSS, Seattle Aquarium

Aviation: HMS Host, UBER, Southwest Airlines, Delta Air Lines

Fly Quiet: Air Canada, Frontier Airlines, Alaska Airlines

April 26, 2022 – Announced 2020-2021 award winners (Item #11b)

Sustainable Century Awards:

Maritime: Fishermen’s Finest, SSA Marine/Carrix, WHOOSHH Innovations

Aviation: Bellair Airporter Shuttle, Southwest Air Lines, Delta Air Lines

Fly Quiet: Spirit Airlines, Frontier Airlines, EVA Airways