

Washington State Ferries Sustainability Action Plan: 2021-2023



Washington State Ferries

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Executive Summary

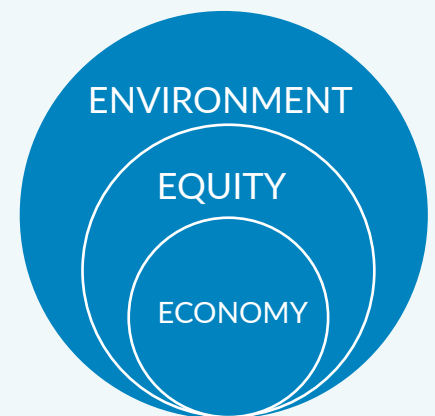
In 2019, Washington State Ferries (WSF) launched its first Sustainability Action Plan (SAP) as one effort to implement the sustainability recommendations, goals, and actions laid out in our 2040 Long Range Plan.¹ SAP 2019-2021² outlined the context for sustainability at WSF and set goals and actions to be accomplished under six primary focus areas during the 2019-2021 biennium. These focus areas were: Greenhouse Gas (GHG) Emissions; Air Quality; Biodiversity; Water; Waste; and Community Impacts and Engagement.

Over the last two years, WSF has made great strides in meeting our sustainability goals. During this time, WSF achieved almost all the goals set out in SAP 2019-2021 with the exception of not testing the stormwater treatment efficacy of a pervious pavement installation at the Vashon Terminal. The majority of goals and actions accomplished from 2019-2021 have set a baseline for WSF to make greater improvements in the next biennium.

Building on the success of SAP 2019-2021, this current Plan develops more action-oriented focus areas and applies the goal-setting tool of “Objectives and Key Results” (OKRs) to set “challenging, ambitious goals with measurable results.”³ In contrast to SAP 2019-2021, focus areas in SAP 2021-2023 emphasize achievement over measurement. For instance, the focus area of “GHG Emissions” from SAP 2019-2021 is “Take Climate Action” in SAP 2021-2023. Other new focus areas in SAP 2021-2023 are: Clean the Air; Clean the Water; Increase Biodiversity; Achieve Zero Waste; and Enhance and Support Thriving Communities.

As with the previous version, WSF considers SAP 2021-2023 to be a “living document” that will guide our sustainability efforts over the course of the next biennium. This Plan allows WSF to further implement the sustainability vision set out in the 2040 Long Range Plan and, in doing so, become the most sustainable ferry operator in the world.

WSDOT strives to build sustainability into all of the work that we do. For WSF, as a division of WSDOT, sustainability is an integral part of our mission, vision, and goals, and defines one of our agency’s six values, calling on each of us to “be resource stewards by supporting economic, environmental, and community need.” Some may wonder, what exactly is sustainability? At WSF, sustainability, defined simply, is considering the short- and long-term effects of all our decisions and actions on the “three E’s” of economy, environment, and equity.



¹ 2040 Long Range Plan, Washington State Ferries (WSF), <https://wsdot.wa.gov/sites/default/files/2020/09/16/WSF-LongRangePlan-2040Plan.pdf>

² Sustainability Action Plan 2019-2021, WSF, <https://wsdot.wa.gov/sites/default/files/2019/04/22/washington-state-ferries-sustainability-action-plan.pdf>

³ What is an OKR? Definition and Examples, What Matters, <https://www.whatmatters.com/faqs/okr-meaning-definition-example/>

Background and Results for Sustainability Action Plan 2019-2021

SUSTAINABILITY & RESILIENCE

In January 2019, WSF completed its 2040 Long Range Plan,⁴ which included “Sustainability and Resilience” as one of the four key themes. The 2040 Long Range Plan outlined recommendations to invest in infrastructure and operations to maintain reliable service in a changing climate and reduce the ferry system’s environmental impact. To implement these recommendations, WSF launched its first Sustainability Action Plan (SAP) on Earth Day of 2019. SAP 2019-2021⁵ focused on goals and actions for the 2019-2021 biennium, and as such, served as a “biennial bite” of the 2040 Long Range Plan. WSF chose a biennial cycle for the SAP to correspond with the agency’s budgeting cycle and the legislative funding cycle that is tied to its implementation.

SAP 2019-2021 presented WSF’s sustainability efforts within a context-based framework⁶ and organized these efforts into six focus areas derived from industry best practice. The focus areas were prioritized based on legislative mandates, executive orders, agency goals, and community concerns. These focus areas included: Greenhouse Gas (GHG) Emissions; Air Quality; Biodiversity; Water; Waste; and Community Impacts and Engagement. Within each focus area, the Plan set goals and associated actions to achieve those goals. Many of our initial goals allowed us to baseline current conditions with an eye toward improvement.

SAP 2019-2021 was implemented through a team approach with strong executive support. WSF developed a Sustainability Action Team (SAT) made up of representatives from each of its departments, appointed by the director of that department. Members of the SAT served as conduits to inform their departments of sustainability efforts. They also consulted with key members of their departments to help move the efforts forward. The SAT met monthly to discuss progress, obstacles, and the necessary help to accomplish our goals. The Executive Team comprised of each department director, the Chief of Staff, and the Assistant Secretary, were provided with quarterly updates of SAP implementation. These updates allowed engagement and accountability at an executive level.

During the implementation of SAP 2019-2021, WSF developed a dashboard reporting tool to easily assess the status and trends of each goal and action outlined in the Plan. This tool was updated and reviewed monthly by the SAT, and quarterly by the Executive Team. In late 2020, with a redesign of the WSF website, WSF published quarterly updates of the dashboard to increase transparency and accountability for the communities we serve, stakeholders, and the general public.⁷

Overall, the implementation of SAP 2019-2021 was very successful, meeting 22 of the 23 goals that were laid out in the Plan. Table 1 lists the goals set for the 2019-2021 biennium.

⁴ 2040 Long Range Plan, WSF, <https://wsdot.wa.gov/sites/default/files/2020/09/16/WSF-LongRangePlan-2040Plan.pdf>

⁵ Sustainability Action Plan 2019-2021, WSF, <https://wsdot.wa.gov/sites/default/files/2019/04/22/washington-state-ferries-sustainability-action-plan.pdf>

⁶ Context-based Sustainability, Center for Sustainable Organizations, <https://www.sustainableorganizations.org/context-based-sustainability-cbs/>

⁷ Environment, WSF, <https://wsdot.wa.gov/ferries/about-us/environment>

Table 1. Sustainability Action Plan 2019-2021 Focus Area / Goals

Greenhouse Gas (GHG) Emissions
<i>Reduce GHG emissions to 15 percent below 2005 levels by 2020.</i>
Air Quality
<i>Create and maintain an annual inventory of NOx, SOx, and PM by 2021. Set reduction goals for NOx, SOx, and PM based on inventory and industry benchmarks by 2021.</i>
Biodiversity: Southern Resident Killer Whale (SRKW) Recovery
<i>Complete a baseline noise inventory of its fleet to identify sources and solutions for noise levels and frequencies of concern by 2021. Set a strategy and timeline by 2021 to reduce underwater-radiated noise from fleet vessels within the frequencies of concern as identified in the baseline inventory.</i>
Biodiversity: Nearshore and Estuarine Habitat
<i>Create and maintain a habitat inventory of its 20 facilities in Puget Sound by 2021. Use its habitat inventory to propose and prioritize a list of projects by 2021 that enhance or restore habitat functionality.</i>
Water: Stormwater
<i>Create and maintain a complete inventory of its stormwater systems by 2021. Develop and implement a stormwater testing program by 2021 to identify issues and propose potential solutions.</i>
Water: Impervious Surfaces
<i>Create and maintain an inventory of the surfacing at its 20 facilities in Puget Sound by 2021. Use this inventory and study to propose and prioritize a list of projects, and/or integrate pervious solutions into existing projects by 2021. Complete a study of the effectiveness of pervious pavement at the Vashon Terminal by 2021.</i>
Water: Creosote Removal
<i>Create and maintain an inventory of the remaining creosote at its 20 facilities in Puget Sound by 2021. Use this inventory to develop a plan by 2021 for the removal of all of the creosote at its facilities.</i>
Water: Water Use
<i>Install high efficiency water fixtures at its existing facilities as part of a deep energy retrofit by 2021. Research high efficiency water fixtures for its fleet by 2021.</i>
Water: Prevention of Spills and Leakages (including oily water)
<i>Target a goal of zero for spills and leakages of oil and fuel, and continue to develop policies and procedures to attain that goal.</i>
Waste
<i>Complete a baseline waste inventory to understand the percent of waste that is currently diverted in its operations by 2021. Use this inventory to set incremental diversion goals by 2021 that target a zero-waste strategy. Develop a policy for environmentally preferred purchasing that sets goals based on a sustainable materials management approach by 2020.</i>
Community Impacts: Community Relations
<i>Identify new, or prioritize existing, focus areas, goals, and actions for engaging communities and customers on sustainability initiatives based on community engagement for the 2040 Long Range Plan.</i>
Community Impacts: Noise and Light Pollution
<i>Install high efficiency LED light fixtures that minimize light spillage at its existing facilities as part of a deep energy retrofit by 2021. Consult with local ferry-served communities to identify any specific concerns related to noise and light from WSF facilities by 2021.</i>

Of the 23 goals, only one goal was not met:

- Complete a study of the effectiveness of pervious pavement at the Vashon Terminal by 2021.

WSF planned to complete a study of the effectiveness of pervious pavement at the Vashon Terminal in collaboration with Washington State University. However, WSF was unable to secure the funding necessary to carry out this study. This testing effort has been included in a plan to test and address stormwater in the future and will be carried forward as part of the efforts in SAP 2021-2023.

Approach to Sustainability Action Plan 2021-2023

With a successful implementation strategy and a dashboard put in place to track our efforts, SAP 2019-2021 set a new course for WSF's sustainability efforts. Building on this strong foundation and baseline work, WSF is able to pivot toward a more visionary approach to SAP 2021-2023. Drawing upon the goal-setting tool of "Objectives and Key Results," SAP 2021-2023 sets a "north star" objective for each focus area and outlines the key results that will serve as stepping stones for the next biennium to keep us heading toward that objective.

Objectives and Key Results (OKRs) are "a collaborative goal-setting tool used by teams and individuals to set challenging, ambitious goals with measurable results. OKRs are how you track progress, create alignment, and encourage engagement around measurable goals."⁸ Objectives are significant, concrete, concise, actionable, and inspirational. They motivate and help to set an organizational alignment around what is important. Key results are measurable outcomes that will provide evidence of completion. They are the actions that need to happen to achieve an objective.

When done well, OKRs set a "north star" vision for an organization that is motivational and helps better manage, as all decisions can be measured in relation to the vision.⁹ As applied in SAP 2021-2023, WSF's objectives are aspirational. They stretch our organization. They are achievable but they are also audacious. They set a vision that goes beyond a single biennium and foresees where we are headed in the longer term. By taking this approach, we move beyond a task-oriented plan that outlines what everyone has to do and instead set a vision through which everyone can evaluate their actions and decisions.

While our objectives in SAP 2021-2023 are visionary, our key results set a clear and actionable path to reach that vision.¹⁰ Key results are measurable outcomes that, when successful, will allow for the achievement of an objective or progress towards that objective. They are specific and timebound, aggressive yet realistic, and measurable and verifiable. Key results help to prioritize work and define what success looks like. Done well, key results empower individuals to do their best work and have confidence knowing they are on the right track.

With this new approach in mind, SAP 2021-2023 has been reorganized to provide focus areas that are action oriented with an eye towards the primary purpose that we are hoping to achieve. The focus areas for 2021-2023 include:

- Take Climate Action
- Clean the Air
- Clean the Water
- Increase Biodiversity
 - Contribute to SKRW Recovery
 - Improve Nearshore and Estuarine Habitat
- Achieve Zero Waste
- Enhance and Support Thriving Communities

⁸ What is an OKR? Definition and Examples, What Matters, <https://www.whatmatters.com/faqs/okr-meaning-definition-example/>

⁹ Writing Your First Objective, What Matters, https://www.whatmatters.com/series_entries/2-1-how-to-write-okr-objectives/

¹⁰ The Science of Key Results, What Matters, https://www.whatmatters.com/series_entries/s3-1-key-result-definition-okrs/

- Increase Community Engagement and Cultivate Partnerships
- Create a Culture of Sustainability
- Become an Anti-Racist Organization

For the majority of these focus areas, WSF is building on equivalents from SAP 2019-2021. However, WSF has also added two objectives within “Enhance and Support Thriving Communities” that are new for this biennium: “Become an Anti-Racist Organization;” and, “Create a Culture of Sustainability.” Together, these focus areas build out a vision of what WSF is trying to accomplish rather than just measure.

Take Climate Action

Although there are several GHGs of particular concern, including methane, nitrous oxide, and fluorinated gases, carbon dioxide (CO₂) is the most prevalent GHG emitted into the atmosphere.¹¹ The primary effect of GHG is trapping heat within the planet's atmosphere and increasing global temperatures, leading to climate change. This has enormous effects on human health, ecosystem vitality, and our economy. CO₂ is also a primary driver of ocean acidification, which occurs as CO₂ is absorbed by oceans and transformed into carbonic acid.¹² Increased acidity has dramatic effects on calcifying species, such as oysters, clams, crabs, urchins, corals, planktons, and pteropods, which build shells and skeletons from calcium carbonate.¹³ The effects to pteropods, the small, swimming sea snails, which form the base of the food chain for salmon, are particularly troubling and threaten to further endanger the survival of salmon in our region.¹⁴ For Puget Sound, ocean acidification could lead to the demise of the shellfish and seafood industries, which contribute almost \$2 billion in revenue and account for over 45,000 jobs.¹⁵ Shellfish and seafood are also critical food, economic, and cultural resources for Puget Sound tribes, who have reserved treaty rights throughout Puget Sound.

In 2019, the Washington Department of Ecology (Ecology) completed a report for the Washington State Legislature that evaluated current Washington State GHG reduction requirements in light of recent climate science and emission reduction agreements.¹⁶ In 2020, the Washington State Legislature acted on the Ecology recommendations and amended existing state law requiring reduction of GHG emissions. State law now requires state agencies to reduce GHG emissions by:

- 15 percent below 2005 levels by 2020
- 45 percent below 2005 levels by 2030
- 70 percent below 2005 levels by 2040
- 95 percent below 2005 levels by 2050, with the additional requirement to be net zero overall¹⁷

In 2019, the fleet of WSF vessels produced about 180,000 metric tons (MT) of GHGs, which equated to approximately 73 percent of the GHG emissions for WSDOT as an agency. In addition to the vessels, operating the Eagle Harbor maintenance facility, terminals, and administration contributed about 700 MT of GHG per year, which was less than 1 percent of the emissions from the vessels



¹¹ Overview of Greenhouse Gases, Environmental Protection Agency (EPA), <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>

¹² Ocean Acidification: The Other Carbon Dioxide Problem, National Oceanic and Atmospheric Administration (NOAA), <https://www.pmel.noaa.gov/co2/story/Ocean+Acidification>

¹³ Acidification in Puget Sound, Ecology, <https://ecology.wa.gov/Water-Shorelines/Puget-Sound/Issues-problems/Acidification>

¹⁴ Ocean Acidification: A Wake-up Call in Our Waters, NOAA, <http://www.noaa.gov/ocean-acidification-high-co2-world-dangerous-waters-ahead>

¹⁵ Ocean Acidification in Washington State: From Knowledge to Action, Ecology, <https://fortress.wa.gov/ecy/publications/publications/1201017.pdf>

¹⁶ Washington Greenhouse Gas Emission Reduction Limits, Ecology, https://app.leg.wa.gov/ReportsToTheLegislature/Home/GetPDF?fileName=121919%20GHG%20limits%20report_55e111c9-2f7d-4e35-8b1b-9281ad5aca72.pdf

¹⁷ Greenhouse Gas Emission Limits for State Agencies, RCW 70A.045.050, <https://app.leg.wa.gov/RCW/default.aspx?cite=70A.45.050>

Additionally, with the signing of Executive Order 18-01,¹⁸ Governor Jay Inslee challenged WSF to reduce GHG emissions by beginning a transition to a zero-carbon-emission ferry fleet. Governor Inslee specifically cited “accelerated adoption of both ferry electrification and operational improvements” to achieve this ambitious goal. In 2020, Executive Order 18-01 was superseded by Governor Inslee’s issuance of Executive Order 20-01, which clarified some parts of the order.¹⁹

Based on our current long-range plan, WSF is on pace to exceed our state-mandated goals in 2030 and 2040, and with future planning efforts beyond 2040, has an opportunity to achieve the 2050 goal of a zero-carbon-emission ferry fleet.

OBJECTIVE

- Operate a zero-carbon-emission ferry fleet.

KEY RESULTS

By June 30, 2022, WSF will:

- Establish an interdepartmental team to provide collaborative management of the WSF electrification program across departments.
- Create a unified reporting dashboard to measure and manage fuel use and operational performance.
- Implement one new operational efficiency initiative.

By June 30, 2023, WSF will:

- Complete the retrofit of the *M/V Wenatchee* to be the first hybrid-electric vessel in the fleet.
- Complete contract advertisements for charging infrastructure upgrades at the Seattle and Bainbridge Island ferry terminals.
- Lay the keel of the first purpose-built hybrid-electric vessel in the fleet, the first of the Hybrid Electric Olympic (HEO) Class.
- Implement an additional new operational efficiency initiative.

Since the formation of its interdepartmental Operational Efficiency Working Group in 2017, WSF has implemented several strategies to increase efficiency in its vessel fleet, including the application of optimal speed guidance for vessels and properly managing vehicle loads to have vessels rest evenly in the water. Since the first initiatives were introduced in 2018, WSF has saved over 1,000,000 gallons of fuel due to these efforts.



Photo credit: Darrel Austin

¹⁸ Executive Order 18-01 “State Efficiency and Environmental Performance,” Washington State Governor Jay Inslee, https://www.governor.wa.gov/sites/default/files/exe_order/18-01%20SEEP%20Executive%20Order%20%28tmp%29.pdf

¹⁹ Executive Order 20-01 “State Efficiency and Environmental Performance,” Washington State Governor Jay Inslee, https://www.governor.wa.gov/sites/default/files/exe_order/20-01%20SEEP%20Executive%20Order%20%28tmp%29.pdf

Clean the Air

With the implementation of the System Electrification Plan,²⁰ which will transform the vessel fleet to 85 percent hybrid electric by 2040, WSF will reduce sulfur oxides (SO_x) emissions by 75 percent, nitrogen oxides (NO_x) emissions by 94 percent, and diesel particulate matter (PM) by 90 percent.

Poor air quality is the largest environmental health risk in the United States, with fine particulate matter pollution alone being responsible for more than 100,000 deaths each year.²¹ However, the effects of poor air quality are not evenly distributed throughout the population. Recent research in the Proceedings of the National Academy of Sciences developed a “pollution inequity metric” that demonstrated racial and ethnic disparities in air pollution exposure.²² Black and Hispanic minorities bear a “pollution burden” of 56 percent and 63 percent excess exposure when compared to non-Hispanic whites. For this reason, air quality is more than just an environmental health issue, it is also a critical environmental justice concern.²³



Photo credit: Denise Sharer

According to the Puget Sound Clean Air Agency (PSCAA), diesel exhaust represents 78 percent of the potential cancer risk from all air toxics in Puget Sound. Diesel exhaust has also been linked to respiratory problems, cardiovascular problems, and premature death.²⁴ According to the PSCAA, roughly 23 percent of the diesel exhaust in Puget Sound comes from the maritime sector.²⁵ Sulfur oxides (SO_x) and nitrogen oxides (NO_x) emissions lead to increases in nitrogen and sulfur compounds in the atmosphere that are transformed to sulfuric and nitric acid, which contribute to the acidification of aquatic and terrestrial environments, including the deterioration of buildings and other structures in the built environment.²⁶ NO_x also contributes to ground-level ozone formation, which leads to smog and has adverse effects on human health.²⁷

As part of SAP 2019-2021, WSF completed its first baseline inventory of fleet NO_x, SO_x, and diesel particulate matter (PM) emissions. This baseline was subsequently used to develop reduction goals based on the overall transition of the WSF fleet to hybrid-electric vessels. This transition of the fleet is the key to WSF’s commitment to reducing pollutants of concern and contributing to cleaner air throughout Puget Sound.

OBJECTIVE

- Operate a zero-emission ferry fleet.

KEY RESULTS

- Complete all Key Results in “Take Climate Action.”

²⁰ System Electrification Plan, WSF, <https://wsdot.wa.gov/sites/default/files/2021/01/13/WSF-SystemElectrificationPlan-December2020.pdf>

²¹ Black and Hispanic Americans Bear a Disproportionate Burden from Air Pollution, UW News, <https://www.washington.edu/news/2019/03/11/disproportionate-burden-from-air-pollution/>

²² Inequity in Consumption of Goods and Services Adds to Racial–Ethnic Disparities in Air Pollution Exposure, Tessum et al., <https://www.pnas.org/content/116/13/6001>

²³ Ibid.

²⁴ Air Pollution and Your Health, PSCAA, <https://www.pscleanair.org/161/Air-Pollution-Your-Health>

²⁵ Reducing Pollution from Maritime Engines, PSCAA, <https://www.pscleanair.org/249/Maritime>

²⁶ Environment at a Glance 2013: OECD Indicators, Organisation for Economic Cooperation and Development, <https://www.oecd-ilibrary.org/docserver/9789264185715-7-en.pdf?expires=1534345706&id=id&accname=guest&checksum=E9FBB475B291E8FDCC998C4740E36D52>

²⁷ Nitrogen Oxides (NO_x), Why and How They Are Controlled, United States Environmental Protection Agency, <https://www3.epa.gov/ttnatc1/dir1/fnoxdoc.pdf>

Clean the Water

An important component of water quality is effective stormwater management. Stormwater runoff is rain that falls on hardened or impervious surfaces, such as streets, parking lots, and rooftops, flowing directly into natural water bodies, such as rivers, lakes, or Puget Sound.²⁸ As this water flows, it picks up contaminants from these surfaces. Much of this water with its contaminants enters Puget Sound untreated. Given the higher presence of hardened or impervious surfaces in more densely populated areas, urban stormwater runoff is of particular concern.

Urban stormwater runoff contains a mix of heavy metals, pathogens, excess nutrients, and other toxins, which affect aquatic life and human health. For example, Coho salmon in urban watersheds experience a 60 percent to 100 percent die off prior to spawning.²⁹ This condition, known as “urban spawner mortality syndrome,” appears attributable to toxins within urban stormwater runoff.³⁰ Recent research has determined that this mortality is likely linked to a single compound, 6PPD-quinone, which is formed when a ubiquitous additive in vehicle tires, 6PPD, reacts with ozone in the environment.³¹ Increasing impervious surfaces leads to increased levels of stormwater runoff and therefore increased levels of toxic compounds entering Puget Sound.³²

From 1996 to 2006, the amount of impervious surfaces in the Puget Sound drainage basin increased from 3.7 percent of the total basin to 4.1 percent of the total basin.³³ Although the overall rate of increase has shown a decline from 2011 to 2016, the rate still approached 4 percent in many areas of Puget Sound.³⁴ Studies have shown that a 10 percent coverage of impervious surfaces within a watershed often leads to measurable and irreversible loss of ecosystem function.³⁵ Some watersheds within Puget Sound, notably the lower Snohomish watershed, already exceed this 10 percent coverage threshold.³⁶

During the construction of the new Mukilteo Ferry Terminal, WSF removed approximately 7,000 tons of creosote-treated piling from a former military fueling facility. This amount of creosote represented almost 4 percent of the estimated creosote remaining in Puget Sound at the time.



Mukilteo Ferry Terminal

²⁸ Stormwater Runoff Pollution and How to Reduce It, King County, <https://www.kingcounty.gov/services/environment/water-and-land/stormwater/introduction/stormwater-runoff.aspx>

²⁹ Recurrent Die-Offs of Adult Coho Salmon Returning to Spawn in Puget Lowland Urban Streams, Scholz et al., <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0028013>

³⁰ Interspecies Variation in the Susceptibility of Adult Pacific Salmon to Toxic Urban Stormwater Runoff, McIntyre et al., <https://www.sciencedirect.com/science/article/pii/S026974911734527X?via%3Dihub>

³¹ A Ubiquitous Tire Rubber-Derived Chemical Induces Acute Mortality in Coho Salmon, Tian et al., <https://science.sciencemag.org/content/371/6525/185>

³² Stormwater + Transportation, Washington Environmental Council, <https://wecprotects.org/stormwater-transportation/>

³³ Impervious Surfaces and Stormwater Runoff, Encyclopedia of Puget Sound, <https://www.eopugetsound.org/articles/stormwater-facts>

³⁴ 2020 State of Our Watersheds: A Report by the Treaty Tribes in Western Washington, NWIFC, <https://nwtreatytribes.org/2020-state-of-our-watersheds-more-restoration-projects-less-shoreline-armoring/>

³⁵ Consequences of Urbanization on Aquatic Systems—Measured Effects, Degradation Thresholds, and Corrective Strategies, Derek B. Booth and Lorin E. Reinelt, Proceedings Watershed '93: A National Conference on Watershed Management, pp.545-550, 1993.

³⁶ 2016 State of Our Watersheds: A Report by the Treaty Tribes in Western Washington, NWIFC, p.8, https://geo.nwifc.org/SOW/SOW2016_Report/SOW2016.pdf

WSDOT has been closely tracking urban spawner mortality syndrome research and its relation to highway facilities. In the last few years, we have learned that filtering stormwater through compost or biofiltration media reduces toxicity, which has been tied directly to 6PPD-quinone. Building on this research, WSF has incorporated several low-impact development (LID) strategies^{37,38} into recent work at the Seattle and Mukilteo Terminals.³⁹ These projects have implemented stormwater treatment, such as pervious pavement, vegetated filter strips, and proprietary bioretention units, that allow water to flow and naturally filter through soils and plants.

In actively maintaining its stormwater systems, WSF removes deposited sediment and accompanying pollutants, which prevents those contaminants from reaching nearby waterbodies and helps to ensure that stormwater controls work as intended. A large number of maintenance personnel are devoted to the task of annually inspecting and maintaining WSF's stormwater controls.

In addition to managing stormwater from impervious surfaces, WSF has other potential releases of toxins to the waters of Puget Sound, most notably in legacy creosote-treated wood. Creosote is a wood preservative made up of as many as 10,000 different chemicals, all of which break down slowly in the environment and are acutely toxic and/or carcinogenic to fish, birds, amphibians, and mammals. Compounds in creosote can accumulate in the tissues of mollusks and other invertebrates and have also been shown to negatively affect the development of salmon and of Pacific herring, which is an important forage fish in Puget Sound.⁴⁰

As part of the design of terminal preservation and improvement projects, WSF consistently removes creosote from its facilities. Currently, WSF removes creosote and replaces it with more environmentally-friendly materials, such as steel and concrete. To date, WSF has removed over 13,000 tons of creosote from the marine environment.

OBJECTIVE

- Provide treatment for stormwater from all impervious surfaces and remove all creosote at our facilities.

KEY RESULTS

By June 30, 2022, WSF will:

- Establish an interdepartmental team to provide collaborative management of stormwater for all WSF facilities.
- Complete drainage area mapping for all terminals and the Eagle Harbor shipyard.
- Develop a stormwater retrofit priority list based on drainage area, impervious surface area, and habitat quality.

By June 30, 2023, WSF will:

- Develop an opportunity-based stormwater retrofit procedure for all terminals and the Eagle Harbor shipyard.

³⁷ Low Impact Development (LID) Guidance, Department of Ecology, <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Stormwater-permittee-guidance-resources/Low-Impact-Development-guidance>

³⁸ Urban Runoff: Low Impact Development, US Environmental Protection Agency, <https://www.epa.gov/nps/urban-runoff-low-impact-development>

³⁹ With Input from Local Tribes, LMN's Washington Ferry Terminal is Optimized for Minimal Environmental Impact, Matt Hickman, <https://www.archpaper.com/2020/07/washington-ferry-terminal-optimized-for-minimal-environmental-impact/>

⁴⁰ Brief Science of Creosote, Washington Department of Natural Resources, https://www.dnr.wa.gov/publications/aqr_cleanup_creosote_brief.pdf

Increase Biodiversity

To help implement Governor Inslee's Executive Order 18-02 and the recommendations of the Washington State Southern Resident Killer Whale Task Force, WSF has served on the planning committee and as a founding member of "Quiet Sound," a collaboration between ports, government, industry, and others to reduce underwater noise levels from large commercial vessels in Puget Sound. Other founding members include:



- Port of Seattle
- Northwest Seaport Alliance
- Puget Sound Partnership
- Washington Maritime Blue
- Pacific Merchants Shippers Association
- Marine Exchange of Puget Sound
- US Coast Guard
- NOAA NMFS
- The Makah Tribe

CONTRIBUTE TO SRKW RECOVERY

Southern Resident Killer Whales (SRKWs) are a distinct population segment of killer whales that are listed as endangered under the Endangered Species Act in the United States⁴¹ and under the Species at Risk Act in Canada.⁴² In June 2018, the death of a member of the L Pod of SRKW (L92 "Crewser") brought the total number of SRKWs in the wild down to 75, which was the lowest population level since 1984.⁴³ In 2020, the total number was reduced further to 74 individuals despite two births that year.^{44,45} In early 2021, a new birth brought the number back up to 75 individuals.⁴⁶ A peer-reviewed article in *Scientific Reports* suggests that a decrease in ambient sound levels in the Salish Sea by 50 percent and an increase in prey availability by 15 percent would allow the population of SRKWs to attain a recovery target of 2.3 percent annual population growth.⁴⁷

In March 2018, Governor Inslee signed Executive Order 18-02 "Southern Resident Killer Whale Recovery and Task Force."⁴⁸ Executive Order 18-02 created a task force to focus on solutions to the three primary threats to SRKWs: prey availability; toxic contaminants; and disturbance from vessel noise and traffic. Key Results included within this Plan in "Take Climate Action," "Clean the Air," "Clean the Water," and "Improve Nearshore and Estuarine Habitat" will provide positive benefit to SRKWs in terms of helping to increase prey availability and lower toxins in their prey. However, Executive Order 18-02 specifically directed WSF to "develop strategies for quieting state ferries in areas most important to Southern Residents," and the primary focus of WSF's efforts in SRKW recovery is focused on the reduction of acoustic and physical disturbance.

⁴¹ Listing of Southern Resident Killer Whale Under the ESA, NOAA, <https://www.fisheries.noaa.gov/action/listing-southern-resident-killer-whale-under-esa>

⁴² Killer Whale (Northeast Pacific Southern Resident Population), DFO, <https://species-registry.canada.ca/index-en.html#/species/699-5>

⁴³ Death Brings Endangered West Coast Orca Population to Lowest in Decades, Center for Biological Diversity, https://www.biologicaldiversity.org/news/press_releases/2018/southern-resident-killer-whale-06-18-2018.php

⁴⁴ Southern Resident Killer Whale Population, Center for Whale Research, <https://www.whaleresearch.com/orca-population>

⁴⁵ Southern Resident Orca Community Demographics, Composition of Pods, Births and Deaths since 1998, Orca Network, https://www.orcanetwork.org/Main/index.php?categories_file=Births%20and%20Deaths

⁴⁶ L86's New Calf, L125, Center for Whale Research, <https://www.whaleresearch.com/l125>

⁴⁷ Evaluating Anthropogenic Threats to Endangered Killer Whales to Inform Effective Recovery Plans, Lacy et al., <http://www.nature.com/articles/s41598-017-14471-0>

⁴⁸ Executive Order 18-02 "Southern Resident Killer Whale Recovery and Task Force," Washington State Governor Jay Inslee, https://www.governor.wa.gov/sites/default/files/exe_order/eo_18-02_1.pdf

In 2019, the Washington State Legislature increased protections for SRKWs in relation to vessel behaviors in their vicinity.⁴⁹ The stricter regulations for SRKWs included:

- Not approaching a SRKW within one-quarter nautical mile;
- Not positioning the vessel to be in the path of or behind a SRKW at any point within one-quarter nautical mile;
- Disengaging the transmission of the vessel when it is within one-quarter nautical mile of a SRKW; and,
- Slowing to seven knots over ground when the vessel is located within one-half nautical mile of a SRKW.

Although these regulations are only applicable to SRKWs, WSF applied these stricter regulations for all cetaceans. These measures provide for the reduction of acoustic and physical disturbance to benefit all cetaceans, including gray whales and endangered humpback whales, not just SRKWs.

OBJECTIVE

- Contribute to the recovery of SRKWs.

KEY RESULTS

- Complete all Key Results in “Take Climate Action,” “Clean the Air,” “Clean the Water,” and “Improve Nearshore and Estuarine Habitat.”

By June 30, 2022, WSF will:

- Implement operational solutions, such as slowing in the vicinity of cetaceans, for all vessels to reduce underwater-radiated noise levels by 50 percent of normal operating condition in the known presence of cetaceans.
- Help to lead the expansion of the sighting network, which feeds real-time cetacean sightings to the Whale Report Alert System used by WSF to inform vessels of cetacean presence.
- Distribute and make mandatory the *Whales in Our Waters* training module⁵⁰ for all vessel crews.

By June 30, 2023, WSF will:

- Investigate propeller designs that are applicable to WSF vessels’ unique characteristics and reduce underwater-radiated noise levels.
- Apply knowledge gained on propeller designs to inform construction of future vessels and retrofit of existing vessels.

⁴⁹ Protection of Southern Resident Orca Whales, RCW 77.15.740, <https://apps.leg.wa.gov/rcw/default.aspx?cite=77.15.740>

⁵⁰ Whales in Our Waters, Port of Vancouver, BC Ferries, and Ocean Wise, <https://echolearn.portvancouver.com/>

IMPROVE NEARSHORE AND ESTUARINE HABITAT

In the “2020 State of Our Watersheds” report, the Northwest Indian Fisheries Commission (NWIFC) identified the continued loss or degradation of estuarine and nearshore habitat as a principal threat to salmon recovery in Puget Sound.⁵¹ One specific example of such degradation is the hard armoring of shoreline with bulkheads, rip rap or seawalls, which removes critical sources of sand and gravel that replenish beaches and provide spawning habitat for forage fish. Forage fish are an important food source for endangered salmon. Improving this food source would not only benefit salmon but would also help in the recovery of the SRKWs, as salmon are a critical part of their diet. “Of the Puget Sound’s 2,500 miles of shoreline, more than one quarter are currently armored.”⁵² From 2016 to 2020, armored shoreline was only reduced by one mile in Puget Sound, with another 6.7 miles of armoring currently permitted to be replaced. WSF manages nearshore habitat at all its 20 facilities across the Puget Sound estuary, and the San Juan Islands marine nearshore.

OBJECTIVE

- Improve nearshore and estuarine habitat at all WSF facilities.

KEY RESULTS

By June 30, 2022, WSF will:

- Complete habitat area mapping for all terminals, the Eagle Harbor shipyard, and relevant adjacent locations.
- Develop a habitat improvement priority list based on extent of armored shoreline, flexibility to address armored shoreline, and habitat quality, including water quality, forage fish presence, and nearby habitat connectivity.

By June 30, 2023, WSF will:

- Develop an opportunity-based habitat improvement procedure for all terminals and the Eagle Harbor shipyard.

WSF is currently replacing a failing concrete and creosote timber bulkhead at the Tahlequah Terminal with a “soft shore” solution that uses native materials to mimic the natural shoreline while still being engineered to control erosion at the location. Removal of this armoring will benefit forage fish and other marine species.

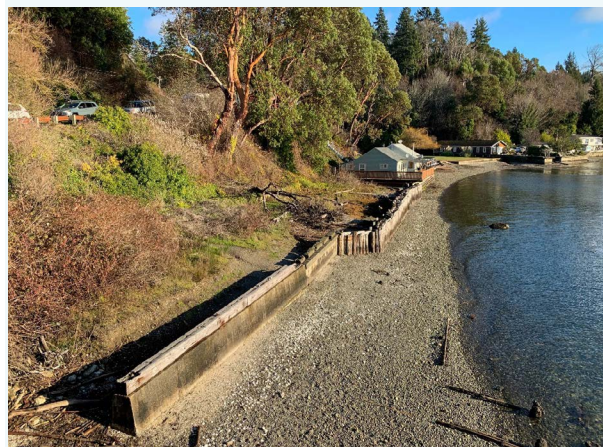


Photo credit: Hugh Shipman, Department of Ecology, 2019

⁵¹ 2020 State of Our Watersheds: A Report by the Treaty Tribes in Western Washington, NWIFC, <https://nwtreatytribes.org/2020-state-of-our-watersheds-more-restoration-projects-less-shoreline-armoring/>

⁵² First Salish Sea-wide Shoreline Armoring Study Shows Cumulative Effects on Ecosystem, UW News, <https://www.washington.edu/news/2016/04/18/first-salish-sea-wide-shoreline-armoring-study-shows-cumulative-effects-on-ecosystem/>

Achieve Zero Waste

Ecology is required by law to develop and regularly update the State of Washington's solid and hazardous waste plan.^{53,54} The current version of this plan, "Moving Washington Beyond Waste and Toxics,"⁵⁵ was published in 2015, and an update is currently in draft form and public review.⁵⁶ The plan shifts the state toward the use of a "sustainable materials management" approach, which focuses on the full life cycle of materials from production through use to eventual disposal. The emphasis is on reducing environmental impacts throughout this cycle. "The state plan is our strategic plan to support the waste management hierarchy established in the main solid and hazardous waste statutes, which identify waste reduction as the highest priority. The 30-year vision – to eliminate most wastes and toxics and use any remaining waste as resources – supports this hierarchy."⁵⁷



Ecology's vision for Washington State aligns with a "zero waste" goal that has been championed by agencies, communities, organizations, and businesses throughout the world. A commonly accepted definition of zero waste has been vetted and provided by the Zero Waste International Alliance (ZWIA).⁵⁸

"Zero Waste: The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health."⁵⁹

There are varying discussions on the practicality and potential of reaching zero waste. The international community has set out principles that target a 90 percent waste diversion rate followed by continual improvement to reach 100 percent. Though this goal of diversion may be difficult to achieve, the journey toward the goal will result in actual increases in waste diversion that can be measured and reported. As we find more ways to better manage waste, these numbers will increase over time and hopefully approach that ultimate goal.

Many agencies, communities, organizations, and businesses throughout the world have adopted a zero-waste goal, as well as the policies and practices that support that goal.⁶⁰ In Washington State, King County⁶¹ and Seattle Public Utilities⁶² have adopted zero waste goals, and their efforts have produced practical case studies with best

⁵³ Solid Waste Management – Reduction and Recycling, RCW 70.95, <https://app.leg.wa.gov/RCW/dispo.aspx?Cite=70.95>

⁵⁴ Hazardous Waste Management, RCW 70.105, <https://app.leg.wa.gov/RCW/dispo.aspx?cite=70.105>

⁵⁵ The State Solid and Hazardous Waste Plan: Moving Washington Beyond Waste and Toxics, Ecology, <https://fortress.wa.gov/ecy/publications/documents/1504019.pdf>

⁵⁶ The State Solid and Hazardous Waste Plan 2021-2026: First Draft Update, Moving Washington Beyond Waste and Toxics, Ecology, <https://apps.ecology.wa.gov/publications/documents/2004057.pdf>

⁵⁷ The State Solid and Hazardous Waste Plan: Moving Washington Beyond Waste and Toxics, p.4, Ecology, <https://fortress.wa.gov/ecy/publications/documents/1504019.pdf>

⁵⁸ Who is the Zero Waste International Alliance (ZWIA), ZWIA, <http://zwia.org/>

⁵⁹ Zero Waste Definition, ZWIA, <http://zwia.org/zero-waste-definition/>

⁶⁰ Zero Waste: 'Nil to Landfill' is Now a Practical Goal, Knowledge @ Wharton, Wharton School of Business, University of Pennsylvania, <https://knowledge.wharton.upenn.edu/article/zero-waste-nil-landfill-now-practical-goal/>

⁶¹ Zero Waste, King County, <https://kingcounty.gov/depts/dnrp/solid-waste/garbage-recycling/zero-waste.aspx>

⁶² Zero Waste, Seattle Public Utilities, <https://www.seattle.gov/utilities/about/plans/solid-waste/zero-waste>

practices to achieve that goal.⁶³ However, there remains considerable work to do to reach this goal in Washington State. Ecology reported that just under 50 percent of solid waste in Washington in 2015 was diverted from landfills through recycling or recovery.⁶⁴ BC Ferries, a comparable peer to WSF, reported a 40 percent diversion rate in 2018.⁶⁵

Based on the goals and actions accomplished in SAP 2019-2021, WSF completed its first waste inventory of maximum totals of waste potentially collected. These data indicate that in 2020, WSF diverted approximately 26 percent of its waste from landfills. To set a path to achieve zero waste, WSF will evaluate solid waste from vessels, terminals, and its shipyard to increase diversion through conventional means. At the same time, reductions in food packaging and diversion of compostable waste will increase this percentage. For hazardous waste, WSF will continue to work with Ecology's Hazardous Waste and Toxics Reduction Program⁶⁶ to identify waste reduction goals as part of our pollution prevention plan, which will be tracked separately given the particular challenges with hazardous waste streams.

OBJECTIVE

- Become a "Zero Waste" organization.

KEY RESULTS

By June 30, 2022:

- Create a waste inventory system for vessels, terminals, and the Eagle Harbor shipyard to track types and amounts of waste generated.

By June 30, 2023:

- Complete a Waste Management Plan that uses the waste inventory data to develop strategies, best practices, and incremental diversion goals, as well as measures to track success towards a "Zero Waste" objective.

⁶³ Zero Waste Case Study: Seattle, US Environmental Protection Agency, <https://www.epa.gov/transforming-waste-tool/zero-waste-case-study-seattle>

⁶⁴ Material Recovery and Disposal Data in Washington, Ecology, <https://ecology.wa.gov/Asset-Collections/Doc-Assets/Solid-waste/Solid-waste-recycling-data/MaterialRecoveryandDisposal-2015>

⁶⁵ BC Ferries' Journey Towards Sustainability, BC Ferries, https://www.bcferries.com/web_image/hf5/h8b/8798823677982.pdf

⁶⁶ Hazardous Waste & Toxics Reduction, Ecology, <https://ecology.wa.gov/About-us/Get-to-know-us/Our-Programs/Hazardous-Waste-Toxics-Reduction>

Enhance and Support Thriving Communities

SUSTAINABILITY & RESILIENCE 

INCREASE COMMUNITY ENGAGEMENT AND CULTIVATE PARTNERSHIPS

Community and stakeholder engagement is a crucial part of developing and maturing a sustainability journey. It is also a focus area that impacts all other aspects of this Plan. Development of the 2040 Long Range Plan included an extensive community engagement effort that continues. WSF consistently engages Ferry Advisory Committees, community members, customers, taxpayers, tribes, elected officials and others in decisions that affect ferry service, the communities we serve, and our environment. In doing this, WSF seeks to be transparent with the public and provide meaningful ways to shape our projects and programs. We also recognize that there is no single “public” and proactively find ways to engage the many “publics” in Washington State, particularly historically underrepresented and underserved communities. Robust community engagement ensures that the options we consider and the decisions we make are the right fit for the communities we serve.

In addition, engaging technical advisors and partnering with a variety of organizations greatly aids in the success of our sustainability efforts. WSF engages technical advisors for our sustainability initiatives through several organizations and peer groups in which we participate. WSF is a member of Washington Maritime Blue,⁶⁷ which envisions that “Washington State will be home to the nation’s most sustainable and competitive maritime industry by 2050.”⁶⁸ WSF is also a certified member of Green Marine,⁶⁹ a voluntary environmental certification program for the North American maritime industry, and a member of the Vancouver Fraser Port Authority’s Enhancing Cetacean Habitat and Observation (ECHO) Program,⁷⁰ an initiative to better understand and mitigate the potential threats to endangered whales from shipping activities. In December 2020, WSF joined the Institute for Sustainable Infrastructure⁷¹ as an “Envision Supported Agency,” currently employing five Envision Sustainability Professionals.⁷²

In addition to these organizations, WSF has led the development of peer working groups, bringing together members of the maritime industry at the regional, national, and international level. Through quarterly meetings,

From Tacoma in the south to Friday Harbor and Sidney, British Columbia in the north, WSF has spent more than 70 years working with the communities we serve. Community participation is at the core of decision-making at WSF, and we are proud to be active in listening to and playing a positive role in communities across Puget Sound and the San Juan Islands.



Former WSF Assistant Secretary Amy Scarton, foreground, chats with Island County Commissioner Helen Price Johnson during the open house

⁶⁷ Washington Maritime Blue, <https://maritimeblue.org/>

⁶⁸ What is Blue?, Washington Maritime Blue, <https://maritimeblue.org/what-is-blue/>

⁶⁹ Green Marine, <https://green-marine.org/>

⁷⁰ Vancouver Fraser Port Authority, ECHO Program, <https://www.portvancouver.com/environment/water-land-wildlife/echo-program/>

⁷¹ Institute for Sustainable Infrastructure, <https://sustainableinfrastructure.org/>

⁷² Envision Supported Agencies, Institute for Sustainable Infrastructure, <https://sustainableinfrastructure.org/membership/envision-supported-agencies/>

WSF has engaged with public ports in Puget Sound as well as the United States Navy to collaboratively address environmental issues. WSF also founded a quarterly working group made up of members of the maritime industry in California, Oregon, Washington, and British Columbia to help each other implement more sustainable infrastructure practices. Currently, WSF is working with Green Marine to launch a working group of North American ferry operators to implement continuous improvement in sustainability.

By continuing to engage and strengthen these relationships, WSF creates and maintains a “social license to operate” with our employees, the communities we serve, and the public.⁷³

OBJECTIVE

- Enhance the social, economic, and environmental well-being of the communities we serve.

KEY RESULTS

By June 30, 2022, WSF will:

- Incorporate sustainability into community engagement plans for all projects.
- Identify and equitably engage historically underserved and underrepresented populations.
- Increase virtual community engagement efforts, connecting more WSF staff with the communities we serve, and those communities with each other.

By June 30, 2023, WSF will:

- Assess the effectiveness of key results completed by June 30, 2022 and use this analysis to undertake improvement efforts.

In early 2021, WSF led the formation of a West Coast Maritime Envision Working Group, focused on the implementation of the Institute for Sustainable Infrastructure’s Envision Sustainable Infrastructure Framework within the maritime sector.

This group includes:

- | | |
|---|-------------------------|
| • The Institute of Sustainable Infrastructure | • Port of San Francisco |
| • Northwest Seaport Alliance | • Port of Portland |
| • Vancouver Fraser Port Authority | • Port of Seattle |
| • Port of Long Beach (California) | • Port of Tacoma |
| • Port of Los Angeles | |



⁷³ Social License to Operate, Will Kenton, <https://www.investopedia.com/terms/s/social-license-slo.asp>

CREATE A CULTURE OF SUSTAINABILITY

Recognizing that it is people who drive sustainability efforts within an organization, a key focus for WSF is cultivating a culture of sustainability within our organization. “Effecting transformation into a sustainable organization begins with senior management support but requires embedding a culture of sustainability within the organization so that it becomes part of every employee’s daily function, mindset, and actions.”⁷⁴ Daily actions by individuals within WSF can change the organizational culture and, in doing so, positively influence the communities we serve. A mature organizational culture will prioritize sustainability as a key component of all the decisions made and actions taken.

WSF culture will be transformed with a focus on both learning and action. Through focused sustainability trainings, all WSF staff will be introduced to or reminded of the focus areas and OKRs that comprise SAP 2021-2023. This will allow individuals to understand the role they play within our organization and become internal change agents. At the same time, these individuals will also become ambassadors within the communities we serve as they share the work that we are accomplishing.

In addition to targeted training, WSF will also implement sustainable measures into how we work, and how we design, construct, and maintain our facilities. Leveraging an opportunity presented by the COVID-19 pandemic, WSF will implement WSDOT’s goal of an average of 40 percent of eligible employees teleworking every day, which will result in reduction of emissions attributable to employee commuting. WSF will also begin its implementation of the Institute for Sustainable Infrastructure’s Envision Sustainable Infrastructure Framework, which will help WSF design, construct, and maintain more sustainable infrastructure projects.⁷⁵

With the onset of COVID-19 and mandatory telework for many staff, WSF faced a challenge in adapting our culture. Many departments took this challenge as an opportunity to transform how they deliver value to their fellow employees. An example of this was WSF’s Risk Management and Safety Systems, which began to remotely hold hearing loss counseling sessions with staff. This change allowed an increase in sessions from 2 to 3 per day in person to 14 to 15 per day remotely throughout the fleet. In addition to an increase in service, the switch to remote sessions allowed a reduction of approximately 20 vehicle roundtrips per year.

OBJECTIVE

- Consider the “three E’s” of economy, environment, and equity in all our decisions and actions.

KEY RESULTS

By June 30, 2022, WSF will:

- Develop a sustainability training based on the biennial Sustainability Action Plan.
- Support at least 6 additional staff members in the completion of training and certification as Envision Sustainability Professionals through the Institute of Sustainable Infrastructure.
- Achieve an average 40 percent of eligible employees teleworking every day.

By June 30, 2023, WSF will:

- Make sustainability training a mandatory biennial requirement for all WSF staff.
- Develop a procedure to integrate the use of Envision programmatically into all project life cycles through planning, programming, design, construction, and maintenance.

⁷⁴ Becoming a Sustainable Organization: A Project and Portfolio Management Approach, Kristina Kohl, p.xiv.

⁷⁵ Envision, Institute for Sustainable Infrastructure, <https://sustainableinfrastructure.org/envision/use-envision/>

BECOME AN ANTI-RACIST ORGANIZATION

“Being antiracist results from a conscious decision to make frequent, consistent, equitable choices daily. These choices require ongoing self-awareness and self-reflection as we move through life. In the absence of making antiracist choices, we (un)consciously uphold aspects of white supremacy, white-dominant culture, and unequal institutions and society. Being racist or antiracist is not about who you are; it is about what you do.”⁷⁶

In 2020, the murder of George Floyd by a Minneapolis police officer sparked outrage and protest across the country, the likes of which had not been witnessed in the United States in 40 years. For many people, Floyd’s death served as a wake-up call. For others, particularly members of the Black, Indigenous, and People of Color (BIPOC) community, the murder further amplified the acute impacts of systemic racism in the United States, through continuous economic, social, environmental, and physical violence in their communities. As a nation, we continue to be reminded of this injustice, inequity, and racism aimed at more and more BIPOC individuals, resulting in an almost ceaseless rise in attacks – sometimes fatal, but always traumatic – that cause lasting damage to themselves and their loved ones. A recent study published in the Proceedings of the National Academy of Sciences reported that the use of force by police is one of the leading causes of death for men of color between the ages of 20 and 35 years old, with as high as 1 in 1000 expected to die at the hands of the police.⁷⁷

Racist violence is not limited to young men of color, however. Looking at the issue through the lens of intersectionality demonstrates that, in the words of Kimberlé Crenshaw, “all inequality is not created equal.”⁷⁸ In coining the term “intersectionality,” Crenshaw reminded us that “We tend to talk about race inequality as separate from inequality based on gender, class, sexuality or immigrant status. What’s often missing is how some people are subject to all of these, and the experience is not just the sum of its parts.”⁷⁹ In the first seven months of 2020, this fact was cruelly laid bare when the United States witnessed the eclipse of the 2019 murder total for transgendered people, the majority of these victims being Black and Latina women.⁸⁰

To fight the long standing and systemic intersectional racist oppression in the United States, it is necessary to be more than “not racist.” It requires a commitment to be “anti-racist.” As Ibram Kendi stated, “There is no such thing as a non-racist idea, only racist ideas and anti-racist ideas.”⁸¹ In making this statement, Kendi concluded that there is no neutrality when it comes to race and that each of us must examine our own beliefs and actions to see if we are in fact supporting or dismantling the racism that permeates our society.

WSDOT Secretary’s Executive Order E 1119.00 makes clear that our own agency has never been “not racist” and instead has instituted policies and projects that have furthered racist ideas and actions. Even closer to home for WSF, we are reminded that BIPOC individuals were once not even allowed to leave the car decks and use the restroom facilities in our passenger cabins. As employees of WSDOT, we must implement Executive Order E 1119.00 by “identifying and dismantling racism in our agency’s practices and policies, ... [leading and supporting] employees to increase understanding of their responsibility to play an active role in ending racism and inequality, ...

⁷⁶ Talking about Race: Being Antiracist, National Museum of African American History & Culture, <https://nmaahc.si.edu/learn/talking-about-race/topics/being-antiracist>

⁷⁷ Risk of Being Killed by Police Use of Force in the United States by Age, Race–Ethnicity, and Sex, Edwards et al., <https://www.pnas.org/content/116/34/16793>

⁷⁸ Intersectional Feminism: What It Means and Why It Matters Right Now, UN Women, <https://www.unwomen.org/en/news/stories/2020/6/explainer-intersectional-feminism-what-it-means-and-why-it-matters>

⁷⁹ She Coined the Term ‘Intersectionality’ Over 30 Years Ago. Here’s What It Means to Her Today, Katy Steinmetz, <https://time.com/5786710/kimberle-crenshaw-intersectionality/>

⁸⁰ Fatal Violence Against the Transgender and Gender Non-Conforming Community in 2020, Human Rights Campaign, <https://www.hrc.org/resources/violence-against-the-trans-and-gender-non-conforming-community-in-2020>

⁸¹ How to Be an Antiracist, Ibram X. Kendi, p.20.

[and continuing] to advance anti-racist practices and policies.”⁸² In doing so, we will not only transform our agency but also be a positive force for change within the communities we serve.

OBJECTIVE

- Become an anti-racist organization.

KEY RESULTS

By June 30, 2022, WSF will:

- Develop and make public statistics concerning the horizontal and vertical representation of BIPOC individuals within WSF.
- Develop internal communications strategies, such as newsletters, speaker series, trainings, and discussion groups, to help implement a culture of anti-racism within WSF.
- Develop external communications strategies to reach out to underserved communities, including Disadvantaged Business Enterprises, schools, colleges, and non-governmental organizations, with the purpose of listening to and addressing their needs through changes in our policies and practices.
- Review existing WSF policies as well as relevant WSDOT, state, and federal policies to identify racist policies.

By June 30, 2023, WSF will:

- Use the statistics gathered by June 30, 2022 to address racist policies and practices in recruitment, hiring, training, and retention, and implement anti-racist policies and practices to increase diversity and inclusion within WSF.
- Use the review completed by June 30, 2022 to revise WSF policies identified as racist and provide recommendations to WSDOT as well as state and federal partners concerning their policies that have also been identified as racist.

⁸² Executive Order E 1119.00 “Anti-Racism Policy and Diversity, Equity, and Inclusion Planning,” Secretary of Transportation Roger Millar, <https://wwwi.wsdot.wa.gov/publications/policies/fulltext/1119.pdf>

Conclusion

Washington State Ferries created this Sustainability Action Plan to fulfill our agency's commitment to sustainability,⁸³ achieve the ambitious goals set out in Governor Inslee's Executive Order 20-01,⁸⁴ and implement our commitment to sustainable practices and environmental stewardship outlined in our 2040 Long Range Plan.⁸⁵ Keeping in mind our definition of sustainability as considering the short- and long-term effects of all our decisions and actions on the "three E's" of economy, environment, and equity, we believe SAP 2021-2023 is the next step in our journey to be a worldwide leader in the maritime transportation industry, and in that way, to do our part in serving the needs of the present while preserving those of the future.



Photo credit: WSDOT Flickr, woodleywonderworks

⁸³ Secretary's Executive Order E1113.00 "Sustainability," WSDOT, <https://wsdot.wa.gov/sites/default/files/2020/09/22/WSDOT-ExecutiveOrder-111300.pdf>

⁸⁴ Executive Order 20-01 "State Efficiency and Environmental Performance," Washington State Governor Jay Inslee, https://www.governor.wa.gov/sites/default/files/exe_order/20-01%20SEEP%20Executive%20Order%20%28tmp%29.pdf

⁸⁵ 2040 Long Range Plan, WSF, <https://wsdot.wa.gov/sites/default/files/2020/09/16/WSF-LongRangePlan-2040Plan.pdf>

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