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ENVIRONMENTAL CHECKLIST

Northwest Ports Clean Air Strategy (NWPCAS) 2020 Update

Port of Seattle SEPA File #2021-02

PURPOSE

The State Environmental Policy Act (SEPA), Chapter 43.21 RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. The purpose of this checklist is to provide information to help identify impacts from the proposal (and to reduce or avoid impacts, if possible) and to help the Port of Seattle (Port) to make a SEPA threshold determination.

A. Background

1. Name of proposed project, if applicable:
Northwest Ports Clean Air Strategy (Strategy) 2020 Update (2020 Strategy Update)

2. Name of applicant:
Laura Wolfe, Port of Seattle, Environmental Program Manager

3. Address and phone number of applicant and contact person:
Laura D. Wolfe, AICP, ENV SP
Port of Seattle
PO Box 1209
Seattle, WA 98111

4. Date checklist prepared:
January 19, 2021

5. Agency requesting checklist:
Port of Seattle

6. Proposed timing or schedule (including phasing, if applicable):
A decision by the Port of Seattle Commission and Northwest Seaport Alliance (NWSA) Managing Members on whether to adopt the *2020 Strategy Update* is expected in March 2021.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
The *Strategy* will be reviewed and or updated at least every five years, with an additional review of SEPA compliance to accompany each update. Participating ports committed to reporting progress toward the vision on an annual basis. Annual reports will consist of one set of joint metrics shared across all participating ports, that report ports' progress toward the overall vision and objectives. Ports will also develop separate port-specific implementation reports annually. Ports will continue to evaluate the advancement of new technology or other factors that could accelerate implementation of the objectives set in the *Strategy* and will report information on

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technology development or other factors as relevant, in each port's annual implementation reporting process. Any projects stemming from the *Strategy* will undergo project-specific SEPA review as part of the design and permitting process.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- 2005 Puget Sound Maritime Air Emissions Inventory, April 2007. Prepared by Starcrest Consulting Group, LLC.
- 2011 Puget Sound Maritime Air Emissions Inventory, September 2012. Prepared by Starcrest Consulting Group, LLC.
- 2016 Puget Sound Maritime Air Emissions Inventory, February 2018, updated October 2018. Prepared by Starcrest Consulting Group, LLC.
- Northwest Ports Clean Air Strategy, December 2007. Prepared by Ross and Associates Environmental Consulting, Ltd.
- 2005-2006 British Columbia Ocean-Going Vessel Emission Inventory.
- Port Metro Vancouver 2010 Landside Emissions Inventory, March 2012. Prepared by SNC-Lavalin.
- National Marine Emissions Inventory for Canada, March 2012 (available by request from Environment Canada). Prepared by SNC-Lavalin.
- 2012 Northwest Ports Clean Air Strategy Implementation Report, July 2013.
- Northwest Ports Clean Air Strategy 2013 Update, December 2013.
- 2013 Northwest Ports Clean Air Strategy Implementation Report, September 2014. Prepared by Pinna Sustainability, Inc.
- 2014 Northwest Ports Clean Air Strategy Implementation Report, October 2015. Prepared by Pinna Sustainability, Inc.
- 2015 Northwest Ports Clean Air Strategy Implementation Report, March 2017. Prepared by Pinna Sustainability, Inc.
- 2016 Northwest Ports Clean Air Strategy Implementation Report, November 2017. Prepared by Pinna Sustainability, Inc.
- 2017 Northwest Ports Clean Air Strategy Implementation Report, January 2019. Prepared by Pinna Sustainability, Inc.
- 2018 Northwest Ports Clean Air Strategy Implementation Report, December 2019. Prepared by Pinna Sustainability, Inc.
- 2019 Northwest Ports Clean Air Strategy Implementation Report, December 2020. Prepared by Pinna Sustainability, Inc.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

There are no known applications pending for governmental approvals of other proposals directly affecting the 2020 *Strategy Update*.

10. List any government approvals or permits that will be needed for your proposal, if known.

Adoption of the *2020 Strategy Update* will occur through a resolution and a combined action of Port of Seattle Commission, the Port of Tacoma Commission, and the Northwest Seaport Alliance (NWSA) Managing Members at the March 2021 NWSA Managing Members meeting and requires no other regulatory approvals or permits. The *2020 Strategy Update* will be presented to the Vancouver Fraser Port Authority Board in spring of 2021. More specific information on approvals or permits for projects anticipated under the *2020 Strategy Update* would be determined during project-level design, environmental review, and permitting. Such future projects may use all or part of this Environmental Checklist to satisfy the requirements of SEPA.

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11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.

The *2020 Strategy Update* is a collaborative effort between the Port of Seattle, Port of Tacoma, the Northwest Seaport Alliance, and the Vancouver Fraser Port Authority in British Columbia (the Ports). The *2020 Strategy Update* is the second update and builds upon past successes and strong partnerships forged over the last decade and moves forward the commitment of the Ports to reduce contributions to local air pollution and global climate change, while sustaining and improving their economic vitality and competitiveness. Recognizing the urgency of climate change and the need to reduce local air pollution, the *2020 Strategy Update* sets a new vision for the Ports to phase out seaport-related air and greenhouse gas emissions by 2050.

First adopted in 2008, the *Northwest Ports Clean Air Strategy* was the first of its kind: a multi-jurisdictional, voluntary, international agreement between port authorities to reduce their impacts on air quality and climate change. Since that time, the Ports updated the *Strategy* in 2013 and initiated the third iteration to develop the *2020 Strategy Update* in fall of 2018.

The Northwest Seaport Alliance is a marine cargo operating partnership of the ports of Seattle and Tacoma (home ports), created by the two ports in 2015 with the goal of increasing competitiveness. The NWSA manages properties and business relationships on behalf of the home ports in both the Seattle and Tacoma harbors. The NWSA became a NWPCAS partner port entity upon its formation. This SEPA checklist covers the NWPCAS update for the Port of Seattle and by extension, port related activities under the purview of NWSA that occur in the Seattle harbor. A separate SEPA checklist covers the NWPCAS update for the Port of Tacoma and by extension, port related activities under the purview of NWSA that occur in the Tacoma Harbor.

Extensive inter-port collaboration and engagement with representatives across industry, community groups, governments, federal and state agencies and non-governmental organizations shaped the *2020 Strategy Update* and created momentum to set a bold vision for a zero-emissions future. Similar to previous versions of the *Northwest Ports Clean Air Strategy*, the *2020 Strategy Update* is structured around six sectors of port activity – oceangoing vessels, cargo-handling equipment, trucks, harbor vessels, rail, and port administration and tenant facilities. The *Strategy* sets sector-specific joint objectives to transition to zero-emission operations by 2050 and a set of shared actions that each of the Ports commits to implementing to advance the vision and objectives. Each of the Ports will also develop a port-specific implementation plan.

Progress toward Port-specific implementation actions and shared actions across the Ports will be tracked and reported on annually. Every five years, the Ports will update their air emissions inventories and analyze progress toward Port-specific greenhouse gas reduction targets and the *2020 Strategy Update* vision, relative to the baseline year (2005).

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The geographic area covered by the *2020 Strategy Update* includes shoreline, marine, and upland areas within the Georgia Basin-Puget Sound Airshed (See Figure I). In general, the marine areas include the Strait of Juan de Fuca, the greater Puget Sound area, the Strait of Georgia, Haro Strait, Boundary Pass, Rosario Strait, and other relevant regional waterways. The uplands include rail yards, railways, and freight corridors within the Georgia Basin-Puget Sound Airshed that are used for the transportation of port-related cargo.

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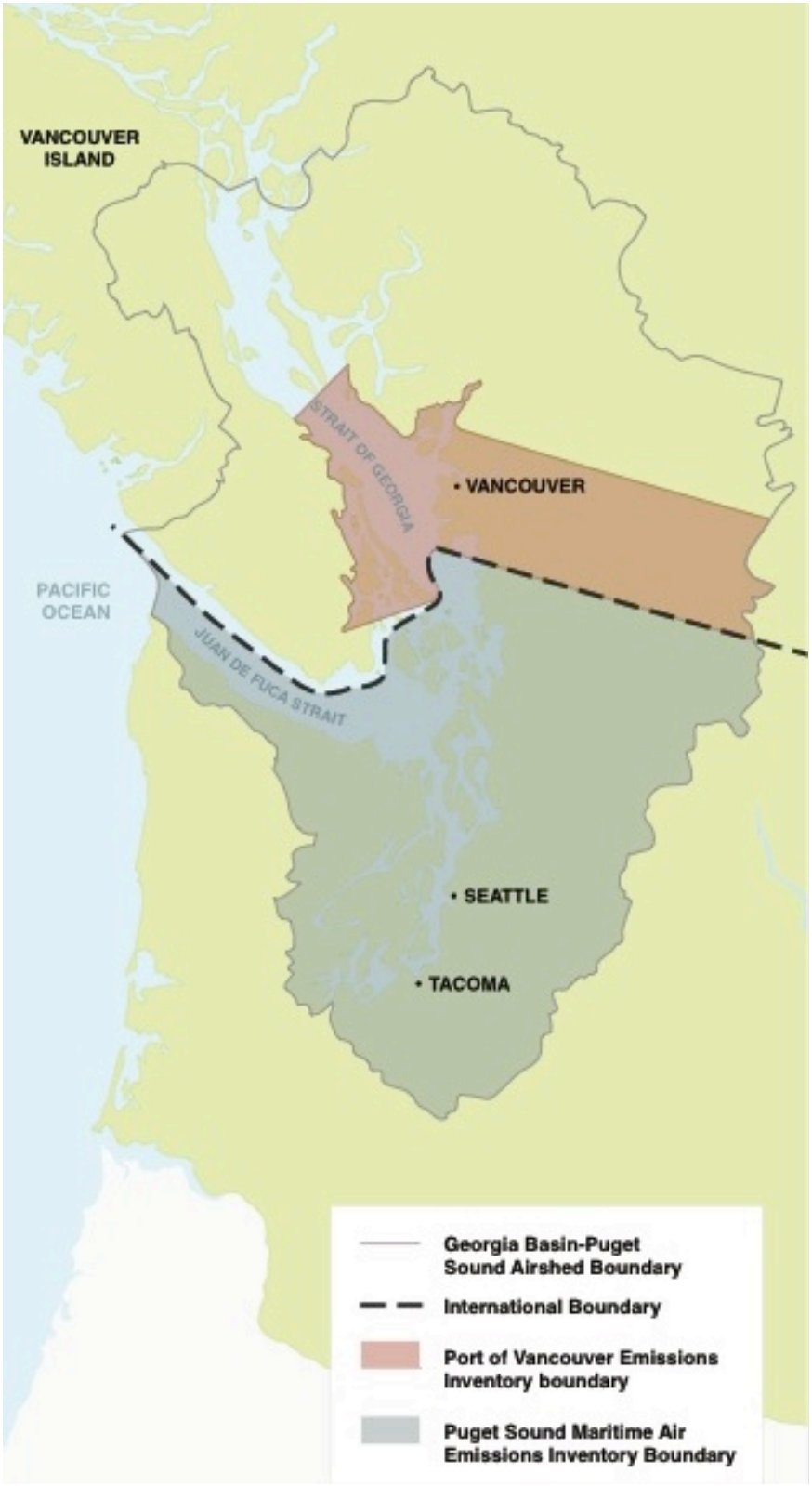
Figure 1. Map of Northwest Ports Clean Air Strategy Geographic Boundaries



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B. Environmental Elements

1. *Earth*

a. General description of the site:

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _____

The *2020 Strategy Update* planning area does not include information concerning specific site descriptions. In general, port areas include uplands along the shoreline and shoreline areas. More specific information on the site topography and soil stability would be determined during the design, environmental review and permitting of individual projects and activities.

b. What is the steepest slope on the site (approximate percent slope)?

The *2020 Strategy Update* planning area does not include information concerning specific slopes. In general, port areas include slopes that are typically steepest along the shoreline, with relatively narrow structurally stabilized slopes. More specific information on the site topography and soil stability would be determined during the design, environmental review and permitting of individual projects and activities.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The *2020 Strategy Update* planning area does not include information concerning soil types. In general, much land in port areas is comprised of fill in former shoreline or shallow water/ tideland/ marsh area. Fill materials come from a wide variety of sources, including materials from re-grades and from waterway dredging. Sands, gravels, and silts are variously present. No impact to agricultural soils is anticipated as a result of the update. More specific information on the site topography and soil stability would be determined during the design, environmental review and permitting of individual projects and activities.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

The *2020 Strategy Update* planning area does not include information concerning soil stability in the vicinity of the program boundaries. The Puget Sound region is situated in a moderately active earthquake region where the Juan de Fuca plate is thrust beneath the North American plate along the toe of the continental slope (Galster and Laprade, August 1991). The Uniform Building Code (1997 Edition) places the Puget Sound area within Seismic Zone 3, which indicates significant seismic risk. The design level earthquake for this zone is magnitude 7.0 to 7.5 with peak ground acceleration of about 0.3g. Liquefaction zones are also found within the study area. In particular, tilled former shoreline and near shore aquatic areas are subject to liquefaction due to earthquake shaking. Local government districts implement specific development controls in liquefaction-prone areas. More specific information on the site topography and soil stability would be determined during the design, environmental review and permitting of individual projects and activities.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

No filling or grading is proposed as part of the *2020 Strategy Update*. More specific information on the site topography and soil stability would be determined during the design, environmental review and permitting of individual projects and activities.

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f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
No erosion is expected to result from the *2020 Strategy Update*. More specific information on the site topography and soil stability would be determined during the design, environmental review and permitting of individual projects and activities.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?
The *2020 Strategy Update* planning area does not include information concerning impervious surface coverage. Most of the sites in developed port areas are currently covered with impervious surfaces (streets, parking areas, terminal yards, etc.) or buildings. Exceptions include recreational public use areas or other landscaped areas. More specific information on the site topography and soil stability would be determined during the design, environmental review and permitting of individual projects and activities.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
The *2020 Strategy Update* does not include measures to reduce or control erosion. More specific information on impacts the earth from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.
This programmatic review does not identify any air emissions that would result from the *2020 Strategy Update*. The goal of the cooperative *2020 Strategy Update* is to reduce emissions. Construction activities from projects resulting from the *2020 Strategy Update* may create short-term, intermittent increases in dust and emissions. These effects will likely be temporary in duration, minimal in nature, and limited to the immediate construction equipment and activities and would be evaluated in a future project-specific SEPA review. No significant negative air quality impacts are anticipated as a result of the *2020 Strategy Update*. More specific information on project emissions from projects proposed to reduce air emissions identified as a result of the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
The *2020 Strategy Update* provides information about the nature and volume of off-site air pollutant and greenhouse gas emissions. The offsite emissions sources considered are ocean-going vessels, locomotives, on road trucks, and tug boats that participate in moving port cargo. The *2020 Strategy Update* also contains strategies to reduce relevant off-site emissions.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:
The *2020 Strategy Update* establishes a new vision to phase out air and greenhouse gas emissions by 2050: "Phase out emissions from seaport-related activities by 2050, supporting cleaner air for our local communities and fulfilling our shared responsibility to help limit global temperature rise to 1.5°C."

In addition to the 2050 vision, the *2020 Strategy Update* sets joint objectives within each sector to transition to zero emission operations. While specific to each sector, the objectives follow three themes:

- Continually improve efficiency and reduce emissions
- Install sufficient infrastructure to support zero-emissions equipment by 2030
- Demonstrate and adopt of zero-emission equipment by 2050

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Table 1 lists the updated objectives for each sector covered by the *2020 Strategy Update* and describes why past targets have been changed. Each Port will develop programs to achieve these objectives.

For any construction project, equipment will be maintained in proper working order and within compliance with State regulations for vehicle emissions. During construction, the site will be watered as necessary to reduce fugitive dust emissions.

Table 1. Summary of Actions and Performance Targets by sector

Sectors and Objectives (2013 update)	Past Targets	Current Status *(as of the 2019 Implementation Report)*	*2020 Strategy Update* Objectives and Targets	Justification for Change	Reduces	
					GHG	DPM
Ocean Going Vessels (OGV)						
OGV-1 **Vessels surpass Emission Control Area (ECA) requirements**	**2015:** Early compliance with 2015 ECA 0.1% fuel-sulfur level (or equivalent while hoteling before 2015 **2020:** Port track number of vessels with Tier 3 marine engines, shore power use, use of cleaner fuel, or other emission-reduction technologies	**Target met.** 4 of 4 ports track these vessels. In 2019, 32% of vessel calls (85 of 269 calls) at Port of Seattle (POS) and 5% of vessel calls (99 of 1,774 calls) at the NWSA were made by either a Tier 3 vessel and/or a ship that connected to shore power.	Continually increase vessel efficiency and decrease emissions from vessel operations	Target was met ahead of 2020. ***2020 Strategy Update* updates this target** into two new objectives to focus on increasing vessel efficiency as an interim step toward transitioning to zero-emission technologies and on installing shore power, a proven technology for OGVs to minimize emissions at berth.	x	x
			By **2030**, install shore power at all major cruise and container berths		x	x
OGV-2 **Ports and vessels participate in port-designed or third-party certification** programs that promote continuous improvement (such as Environmental Ship Index, Green Marine, Clean Cargo Working Group, or others)	**2015:** Ports and 10% of vessel calls **2020:** Ports and 40% of vessel calls	**Target met by NWSA, not met by POS.** 3 of 4 ports, including POS and the NWSA, participate in Green Marine. 66% of vessel calls across the 4 ports participated in third-party certification programs. 83 of 269 (31%) vessel calls at POS and 1,049 of 1,774 (59%) vessel calls at NWSA terminals were made by vessels participating in at least one third-party certification program, including ESI or RightShip (verified data only).	Support international efforts toward phasing out emissions from vessels	The intent of this objective—to encourage efficiency and environmental performance improvements in vessels calling at POS and the NWSA—is continuing in the *2020 Strategy Update*. ***The 2020 Strategy Update shifted*** from certification programs that are focused on increasing vessel efficiency to supporting international efforts that are working toward the development of zero emission vessels, which aligns better to the new vision.	x	x

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Sectors and Objectives (2013 update)	Past Targets	Current Status *(as of the 2019 Implementation Report)*	*2020 Strategy Update* Objectives and Targets	Justification for Change	Reduces GHG	Reduces DPM
Harbor Vessels						
Harbor-1 ***Strategy* partners conduct annual outreach** to port-related harbor vessel companies and **recognize best practices and/or engine upgrades**	**2015:** Partners conduct outreach and 50% of harbor vessel companies report best practices and/or engine upgrades **2020:** Partners conduct outreach and 90% of harbor vessel companies report best practices and/or engine upgrades	**All ports conducted outreach events in 2019, but 90% target for reporting not yet met.** 28% of harbor vessels companies reported information and 44% performed engine upgrades and best practices.	Continually advance vessel efficiency and turnover of old high emitting vessels	The intent of this objective—to replace older engines with newer, cleaner technology—is continuing with updated language. POS and NWSA will continue to work with partners to replace older vessel engines and improve fuel efficiency.	x	x
Harbor-2 **Ports and harbor vessels participate in port- designed or third-party certification** programs that promote continuous improvement (such as Environmental Ship Index, Green Marine, Clean Cargo Working	**2015:** Port and 10% of harbor vessels **2020:** Port and 40% of harbor vessels	**Target met.** 3 of 4 ports, including POS and NWSA, participate in Green Marine. 40% of harbor vessels across the 4 ports participate in certification programs.	By **2030**, sufficient infrastructure is in place to enable adoption of zero-emission harbor vessels By **2050**, zero-emission harbor vessels are adopted	**Target to be updated in *2020 Strategy Update*** into two new objectives that focus on the transition to zero emission operations in alignment with new *Strategy* vision to phase out emissions.	x	x
Cargo Handling Equipment (CHE)						
CHE-1 **CHE meets Tier 4 interim** (T4i) emission standards or equivalent	**2015:** 50% of equipment **2020:** 80% of equipment	**Target met by POS, still in progress for NWSA** and other ports. POS met 100% tier 4 equipment. 50% of CHE at NWSA managed terminals met Tier 4 standards.	Continually advance equipment efficiency and decrease emissions from CHE	The intent of this objective—to replace older equipment with newer, cleaner technology—is continuing with updated language. POS and NWSA will continue to work with marine terminal operators to replace older equipment.	x	x
CHE-2 **Ports and terminals have fuel-efficiency plans** in place that promote continuous improvement	**2015:** Ports and 50% of terminals **2020:** Ports and 100% of terminals	**Target not met.** 2 of 3 ports[1], including POS, have fuel efficiency plans and only 23% of terminals have fuel efficiency plans. Port of Seattle	By **2030**, sufficient infrastructure is in place to begin transition to zero emission CHE	**Target to be updated in *2020 Strategy Update*** into two new objectives that focus on the transition to zero emission operations in alignment with new *Strategy* vision to	x	x

[1] Includes Port of Seattle, Vancouver Fraser Port Authority, and Northwest Seaport Alliance. Port of Tacoma's cargo-handling equipment is accounted for under Northwest Seaport Alliance.

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Sectors and Objectives (2013 update)	Past Targets	Current Status *(as of the 2019 Implementation Report)*	*2020 Strategy Update* Objectives and Targets	Justification for Change	Reduces GHG	Reduces DPM
		terminal operators did not have fuel efficiency plans in place for CHE in 2019. 2 of 13 NWSA terminals had fuel efficiency plans in 2019.	By **2050**, zero-emission CHE is adopted	phase out emissions. POS and NWSA will continue to work with tenants on fuel efficiency.	x	x
Trucks						
Truck-1 **Trucks meet or surpass U.S. EPA emission standards** or equivalent for model year 2007	**2015:** 80% of trucks **2020:** 100% of trucks (by 2017)	**In progress:** 82% of trucks across the 4 ports meet the standard. The standard has been achieved by the NWSA in 2019 by trucks visiting international terminals. 85% of trucks meet this at domestic terminals. Overall, 98 of trucks calling NWSA container terminals met the standard. The Vancouver Fraser Port Authority is still working on this target. Port of Tacoma and POS do not have drayage trucks in their emissions profile.	Continually advance vehicle efficiency and decrease emissions from existing trucks	The intent of this objective—to replace older trucks with newer, cleaner technology—is continuing with updated language. The NWSA will continue its clean truck program, with support from POS, working towards removing all remaining pre 2007 trucks from the fleet serving domestic terminals.	x	x
Truck-2 **Ports, terminals, and trucks have fuel- efficiency plans** in place that promote continuous improvement	**2015:** Ports **2020:** Ports, terminals, and 50% of trucks	**Target not yet met.** 0 of 2 ports with trucks[2] and 2 of 10 terminals at one port had fuel efficiency plans in place for trucks.	By **2030**, sufficient infrastructure is in place to begin transition to zero emission trucks	**Target to be updated in *2020 Strategy Update*** into two new objectives that focus on the transition to zero emission operations in alignment with new *Strategy* vision to phase out emissions.	x	x
			By **2050**, zero-emission trucks are adopted		x	x

[2] Includes only Vancouver Fraser Port Authority and Northwest Seaport Alliance. POS and Port of Tacoma do not have drayage trucks in their emission profiles. Drayage trucks that serve container terminals in Seattle and Tacoma are covered by Northwest Seaport Alliance.

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Sectors and Objectives (2013 update)	Past Targets	Current Status *(as of the 2019 Implementation Report)*	*2020 Strategy Update* Objectives and Targets	Justification for Change	Reduces	
					GHG	DPM
Rail						
Rail-1 **Switcher locomotive owners/operators participate in a fuel-efficiency program**	**2015:** 100% of owners/operators institute a program **2020:** 100% of owners/operators achieve performance objectives of chosen program	**Target not yet met.** 3 of 22 rail owner/operators across the 4 ports achieved performance standards. 1 of 4 operators serving NWSA Terminals achieved performance standards. The switcher owner/operated at POS did not participate in a fuel efficiency program but does employ an anti-idle device and use 20% biodiesel fuel.	By **2030**, sufficient infrastructure is in place to enable adoption of zero-emission on-terminal rail	**Target to be updated in *2020 Strategy Update*** into two new objectives that focus on the transition to zero emission operations in alignment with new *Strategy* vision to phase out emissions.	x	x
			By **2050**, zero-emission on-terminal rail is adopted		x	x
Rail-2 **Switcher locomotive owners/operators upgrade or replace unregulated engines** (engine replacements will be Tier 2 or better)	**2015:** 10% of unregulated locomotive engines **2020:** 20% of unregulated locomotive engines	**Target not yet met.** 0% of switcher locomotives serving POS terminals were upgraded. 6% of switcher locomotives (2 of 31) serving NWSA terminals were upgraded.	Continually advance vehicle efficiency and turnover of old-high emitting engines.	The intent of this objective—to replace older locomotives with newer, cleaner technology—is continuing with updated language. POS will continue to work with rail operators and tenants to upgrade and replace unregulated engines.	x	x
Port administration and tenant facilities						
Admin-1 **Ports own and operate cleaner vehicles and equipment and have fuel-efficiency plans** in place that promote continuous improvement	**2015:** Ports report use of cleaner vehicles and other relevant information **2020:** Ports increase use of cleaner vehicles and equipment	**In progress;** 26% of on-road vehicles and 50% of non-road vehicles across all 4 ports use non-conventional fuels. At POS, 35% of the on-road fleet and 70% of the nonroad fleet use alternative fuels. The NWSA does not have its own fleet.	Continually advance efficiency in port authority fleets, facilities, and lighting	**Target updated in *2020 Strategy Update* into three new objectives** focused on increasing efficiency in fleets, facilities, and lighting and transitioning to zero-emission fleet in alignment with new *Strategy* vision to phase out emissions.	x	x
			By **2030**, port authority passenger fleet is zero-emission vehicles or uses renewable fuels		x	x
			By **2050**, port authorities have adopted		x	x

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Sectors and Objectives (2013 update)	Past Targets	Current Status *(as of the 2019 Implementation Report)*	*2020 Strategy Update* Objectives and Targets	Justification for Change	Reduces	
					GHG	DPM
			zero-emission vehicles, equipment and vessel fleets			
Admin-2 **Ports apply clean construction standards** to engines used on port-led construction projects (such as American Association of Port Authorities, U.S. EPA Best Practices for Clean Diesel Construction, or equivalent best management practices)	**2015:** Ports institute clean construction best practices for port-led projects including idle-reduction and Tier 2 engine emission requirements **2020:** Ports apply clean construction best practices for port-led projects including idle reduction and Tier 4 emission requirements	**In progress;** 3 of 3 ports,[3] including POS, have clean construction practices but no ports require Tier 4 non-road engines.	By **2050**, zero-emission building and high efficiency lighting are in place	**The *2020 Strategy Update u*pdates these targets** in a new objective that focuses on transitioning to zero emission building energy and operations in alignment with the new *Strategy* vision to phase out emissions.	x	x
Admin-3 **Ports facilitate energy studies and conservation projects** at port-operated and/or tenant facilities to identify and address energy conservation opportunities in building systems, operations, and yard lighting	**2015:** Each port conducts 3 energy studies **2020:** Each port completes 3 energy conservation projects	**Target met.** 3 of 3 ports, including POS, have completed at least 3 energy conservation projects.			x	x

3. Water

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The geographic area covered by the *2020 Strategy Update* includes the land and waters within the Georgia Basin Puget Sound Air-shed. In general, the marine areas include the Strait of Juan de Fuca, the greater Puget Sound area, the Strait of Georgia, Haro Strait, Boundary Pass, Rosario Strait, and other relevant nearby waterways.

[3] Includes Port of Seattle, Vancouver Fraser Port Authority, and Port of Tacoma. Port administration targets in the Northwest Ports Clean Air Strategy are not applicable to Northwest Seaport Alliance because it is operated out of Port of Seattle and Port of Tacoma facilities.

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2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Port facility improvements or development actions typically involve work in the shoreline zone. No specific physical improvements are planned by the *2020 Strategy Update*, although projects to reduce air emissions may be implemented in the future. More specific information on impacts to surface water from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No fill or dredge is proposed as part of the *2020 Strategy Update*. More specific information on impacts to surface water from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No surface water withdrawals or diversions are proposed. More specific information on impacts to surface water from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Port facility improvements or development actions typically involve work in or near the 100-year floodplain. More specific information on impacts to surface water from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No discharge of waste materials to surface waters is proposed as part of the *2020 Strategy Update*. Reduced airborne pollution from actions planned in the *2020 Strategy Update* would reduce the amount of waste entering the surface waters through airfall deposition. More specific information on impacts to surface water from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

The *2020 Strategy Update* does not anticipate the need for any ground water withdrawal or discharge to groundwater. More specific information on impacts to ground water from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material is proposed to be discharged as part of the *2020 Strategy Update*. More specific information on impacts to ground water from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

We do not anticipate changes in water runoff or storm water practices to result from the *2020 Strategy Update*. More specific information on impacts to ground water from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No waste materials are expected to enter ground or surface waters as part of the *2020 Strategy Update*. Reduced airborne pollution from actions planned in the *2020 Strategy Update* would reduce the amount of waste entering the surface waters through airfall deposition. Construction of a potential project has the potential to spill fluids or diesel onto the ground or into the adjacent waterbody due to equipment failure. A contractor will be required to prepare and implement a Spill Prevention, Control, and Countermeasures Plan. More specific information on impacts to ground water from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

We do not anticipate changes in drainage patterns to result from the *2020 Strategy Update*. More specific information on impacts to drainage patterns from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

The *2020 Strategy Update* does not include measures to reduce or control surface, ground and runoff water impacts. More specific information on impacts to ground water from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

4. Plants

a. Check the types of vegetation found on the site:

_X_ deciduous tree: alder, maple, aspen, other: ornamentals
_X_ evergreen tree: fir, cedar, pine, other

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__X__ **shrubs**
__X__ **grass**
____ **pasture**
____ **crop or grain**
____ **orchards, vineyards or other permanent crops.**
__X__ **wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other**
__X__ **water plants: water lily, eelgrass, milfoil, other:** non-native milfoil, marine algae and phytoplankton
____ **other types of vegetation**

b. What kind and amount of vegetation will be removed or altered?
No vegetation is proposed for removal or alteration as part of the *2020 Strategy Update*. More specific information on impacts to plants from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

c. List threatened and endangered species known to be on or near the site.
Threatened or endangered plant species may exist within the geographic study area of the *2020 Strategy Update.* More specific information on impacts to plants from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
No landscaping or measures to preserve or enhance vegetation are proposed as part of the *2020 Strategy Update*. More specific information on impacts to plants from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

e. List all noxious weeds and invasive species known to be on or near the site.
Noxious weeds and invasive species may exist within the geographic study area of the *2020 Strategy Update.* More specific information on impacts due to noxious weeds and invasive species from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

__X__ **birds: hawk, heron, eagle, songbirds, other:** falcon, osprey, resident and migration waterfowl
__X__ **mammals: deer, bear, elk, beaver, other:** harbor seals, rodents, small mammals
__X__ **fish: bass, salmon, trout, herring, shellfish, other:** bottom fish; sole, rockfish, cod

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b. List any threatened and endangered species known to be on or near the site.

Threatened and endangered species are known to occur on or near the Port properties. These include:

Species	Federal Status	Action Areas	Critical Habitat Within Action Area
Puget Sound Chinook salmon *Oncorhynchus tshawytscha*	Threatened	All aquatic areas (freshwater, estuarine and marine)	All areas waterward of OHW or HTL
Puget Sound steelhead *Oncorhynchus mykiss*	Threatened	All aquatic areas (freshwater, estuarine and marine)	All areas waterward of OHW or HTL
Coastal-Puget Sound bull trout *Salvelinus confluentus*	Threatened	All aquatic areas (freshwater, estuarine and marine)	All areas waterward of OHW or HTL
Killer whale: Southern Resident *Orcinus orca*	Endangered	Marine only	All waters in Puget Sound deeper than 20 ft (6.1 m)
Humpback whale *Megaptera novaeangliae*	Endangered (Central America), Threatened (Mexico)	Marine only	No critical habitat has been designated for the humpback whale
Marbled murrelet *Brachyramphus marmoratus*	Threatened	Marine only	No critical habitat designated within the action areas. Marine environments were not designated.
Eulachon *Thaleichthys pacificus*	Threatened	Marine only	No critical habitat designated within the action areas.
Bocaccio *Sebastes paucispinis*	Endangered	Marine/Estuarine only	Nearshore and deepwater habitat
Yelloweye rockfish *Sebastes ruberrimus*	Threatened	Marine only	Deepwater habitat (>30 m)

More specific information on impacts to threatened or endangered species from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

c. Is the site part of a migration route? If so, explain.

Some waters in the port areas are important migratory routes for anadromous salmonids. The Puget Sound area is a part of the Pacific Flyway. More specific information on impacts to threatened or endangered species from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

d. Proposed measures to preserve or enhance wildlife, if any:

The *2020 Strategy Update* does not include specific measures to preserve or enhance wildlife impacts. The program's goals to reduce emissions and decrease air pollution will improve water quality from reduced introduction of contamination via airfall deposition, reducing impacts to listed marine species.

More specific information on impacts to threatened or endangered species and wildlife from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

e. List any invasive animal species known to be on or near the site.

Invasive animal species exist within the geographic study area of the *2020 Strategy Update.* More specific information on impacts due to invasive animal species from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

At present, future energy requirements associated with achieving the Strategy's vision, objectives, and actions are unknown. It is expected that to meet future zero-emission energy needs new infrastructure, such as cold-ironing (shore power) or charging stations for equipment, may be required to support the transition to zero emission fuels and equipment. Simultaneously, energy efficiency improvements in buildings, equipment, and operations are expected to reduce overall energy demand and the associated air and greenhouse gas emissions needed to produce energy.

Port-related activities are heavily reliant on fossil fuels and electricity to move cargo and passengers and to heat and power buildings and facilities. The *2020 Strategy Update* includes activities that encourage use of renewable and zero-emission energy sources instead of fossil fuels and that improve energy efficiency. The Strategy emphasizes three main themes for phasing out emissions from port-related activities: policies to continually improve efficiency and reduce emissions, infrastructure to support zero tail-pipe emission equipment and demonstration and adoption of zero tail-pipe emission equipment.

More specific information on impacts to energy and natural resources from future projects proposed to reduce air pollutant and greenhouse gas emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review, and permitting of individual projects and activities.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

The *2020 Strategy Update* anticipates no impact to potential use of solar energy by adjacent properties. The program establishes energy conservation and efficiency strategies which may or may not include renewable energy components. More specific information on impacts to energy and natural resources from future projects proposed to reduce air pollutant and greenhouse emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Energy conservation is one of the three main themes overarching the objectives in the *2020 Strategy Update*: port authorities will continue to advance policies that promote efficiency and phase out old, high emitting equipment in favor of new equipment. Under this objective, the Port of Seattle will focus on reducing fuel and energy use across the sectors to reduce air and greenhouse gas emissions. Additionally, actions within the Port Administration section promote energy conservation. These actions include continually advancing efficiency in port authority fleets, facilities and lighting, as well as setting an objective to have zero emission buildings and high efficiency lighting in place by 2050.

More specific information on impacts to energy and natural resources from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

No environmental health hazards are expected to occur from implementation of the *2020 Strategy Update*. Anticipated air emission reductions from implementation of the *2020 Strategy Update* would provide a public health benefit. More specific information on impacts to environmental health from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

1) Describe any known or possible contamination at the site from present or past uses.

Some sites in the port areas are contaminated from past uses. More specific information on impacts due to disturbing contaminated sites from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

Some sites in the port areas have underground storage tanks and transmission lines. More specific information on impacts due to disturbing hazardous chemicals/conditions from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

No toxic or hazardous chemicals will be stored, used, or produced as part of the *2020 Strategy Update.* More specific information on the use of any toxic or hazardous chemicals that might be stored, used, or produced from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

4) Describe special emergency services that might be required.

No special emergency services are expected to be required as part of the *2020 Strategy Update.*

5) Proposed measures to reduce or control environmental health hazards, if any:

No measures to reduce or control environmental health hazards are proposed for implementation of the *2020 Strategy Update*. Anticipated air emission reductions from implementation of the Strategy Update will be an environmental and public health benefit. More specific information on impacts to environmental health from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

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b. Noise

1) **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**
Port areas are highly industrialized and are affected by a wide range of noise sources, such as traffic, trucks, cargo handling equipment, and vessels. The *2020 Strategy Update* or its subsequent projects will not be affected by the surrounding noise sources.

2) **What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.**
No noise is expected to be created or associated with implementation of the *2020 Strategy Update*. There is the potential for short-term, temporary noise impacts due to construction equipment for future projects related to the *2020 Strategy Update*. Switching from internal combustion engines to electric drive-trains in port equipment, trucks, and vessels would likely lead to an overall, long term reduction in operational noise. More specific information on impacts to the noise environment from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

3) **Proposed measures to reduce or control noise impacts, if any:**
No measures to reduce or control noise impacts are proposed through implementation of the *2020 Strategy Update*. More specific information on impacts to the noise environment from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.
The uses of port land typically range widely and may include uses such as public parks, retail and commercial establishments, manufacturing and heavy industry, cargo terminals, tank farms, intermodal rail facilities, marinas, fishing vessel moorage and maintenance, cruise ship terminals, and grain terminals. Residential areas may be adjacent to some port properties.

No impacts to current land uses are expected to occur from implementation of the *2020 Strategy Update*. More specific information on impacts to current land uses from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?
The Port areas are not known to have been the site of significant agricultural use during the past eighty years.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

The *2020 Strategy Update* will not be affected by working farms or forestland. No impacts to working farm or forest land are expected to occur from implementation of the *2020 Strategy Update*. More specific information on impacts to working farm or forest land from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

c. Describe any structures on the site.

Numerous structures are located within the typical port areas including warehouses, offices, restaurants, manufacturing buildings, shipyards, cargo piers, grain terminal silos, cargo transfer machinery, and streets and bridges.

d. Will any structures be demolished? If so, what?

No structures are proposed for demolition at this time as a result of implementation of the *2020 Strategy Update*.

e. What is the current zoning classification of the site?

The *2020 Strategy Update* encompasses a large region with separate local, state and federal jurisdictions. Each port site includes a variety of zoning classifications. Port of Seattle properties are mostly zoned industrial commercial, general industrial and downtown harborfront.

f. What is the current comprehensive plan designation of the site?

The *2020 Strategy Update* encompasses a large region with separate local, state and federal jurisdictions. Each port site includes a variety of comprehensive plan designations. The City of Seattle 2035 Comprehensive Plan, where most Port properties are located, has Port properties designated as commercial/mixed use areas, manufacturing/industrial center, and urban center.

g. If applicable, what is the current shoreline master program designation of the site?

The *2020 Strategy Update* encompasses a large region with separate local, state and federal jurisdictions. Each port site includes a variety of shoreline master program designations. Shoreline designations from Seattle Department of Construction and Inspection include Urban Maritime, Urban Commercial, Urban Industrial, Conservancy Management, Conservancy Recreation, Conservancy Preservation, and Urban Harborfront.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

The *2020 Strategy Update* encompasses a large region with separate local, state and federal jurisdictions. Each port site includes a variety of critical area classifications. Most Port facilities are in liquefaction zones and have steep slope areas, flood prone areas, and are adjacent to aquatic wildlife habitat.

i. Approximately how many people would reside or work in the completed project?

Implementation of the *2020 Strategy Update* is not anticipated to result in any change in number of residents or office workers on port sites.

j. Approximately how many people would the completed project displace?

No displacement of residents or workers is expected as a result of the *2020 Strategy Update*.

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k. Proposed measures to avoid or reduce displacement impacts, if any:
No measures to avoid or reduce displacements are proposed for implementation of the *2020 Strategy Update*.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
The *2020 Strategy Update* is intended to be consistent with existing and projects land uses and plans. No measures to ensure compatibility are proposed for implementation of the *2020 Strategy Update*.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:
No measures to reduce or control impacts to agricultural and forest lands are proposed for implementation of the *2020 Strategy Update*. More specific information on impacts to agricultural and forest lands from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
No housing is proposed as a result of the *2020 Strategy Update*.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
No housing is proposed to be demolished as a result of the *2020 Strategy Update*.

c. Proposed measures to reduce or control housing impacts, if any:
No measures to reduce or control housing impacts are proposed for implementation of the *2020 Strategy Update*.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?
Structures may result as part of the *2020 Strategy Update* implementation. More specific information on impacts to views and aesthetics from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

b. What views in the immediate vicinity would be altered or obstructed?
No views are anticipated to be altered or obstructed as a result of the *2020 Strategy Update*.

c. Proposed measures to reduce or control aesthetic impacts, if any:
No measures to reduce or control impacts to aesthetics are proposed for implementation of the *2020 Strategy Update*. More specific information on impacts to aesthetics from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

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11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The Port of Seattle is committed to maximizing renewable energy and meeting any new energy demand with renewable energy in implementation of the *2020 Strategy Update*. The Port will explore the installation of solar panels and high efficiency lighting. These and other potential sources of differing glare or other light pollution would be evaluated for each project during the design, environmental review, and permitting of individual projects and activities.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Solar panels and LED lighting could create a source of light or glare. LED lighting would likely replace existing light sources. No significant light or glare impacts are expected as a result of projects planned under the *2020 Strategy Update*. More specific information on impacts from light and glare from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

c. What existing off-site sources of light or glare may affect your proposal?

No existing off-site sources of light or glare are expected to adversely affect the *2020 Strategy Update* projects or programs. More specific information on impacts from light and glare from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

d. Proposed measures to reduce or control light and glare impacts, if any:

Proposed solar panels will have an anti-glare coating. Proposed systems will be designed so that glare is not directed toward adjacent buildings or public views to the extent practicable. If concerns are identified during project design, a solar glare hazard analysis will be conducted to ensure the system will be designed and installed to minimize glare and/or direct it away from public view. Lighting will follow City of Seattle Code. More specific information on impacts from light and glare from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Numerous recreational activities take place within or near the port study areas. Port facilities include numerous parks and public access sites, such as those located at T-108, Turning Basin 3, T5, T18, Pier 69, South Riverside Drive, T86 Centennial Park, Jack Block Park, Jack Perry Memorial Shoreline, T-105 Public Park, T-107 Public Park, and South Park 8th Avenue South. More specific information on recreational sites will be provided during the design, environmental review and permitting of individual projects and activities.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No displacement of existing recreational uses is anticipated as a result of the *2020 Strategy Update*.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No measures are expected to be necessary as a result of the *2020 Strategy Update*.

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13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

This programmatic document does not specify particular sites for development. There are numerous buildings over 45 years of age on Port properties. Areas developed for maritime transportation are often located in areas known to be historical places of work, living, and food gathering for indigenous populations.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

This programmatic document does not specify particular sites for development. Port facilities are built in industrial areas, mostly over and within historic fill. More specific information to reduce or control impacts to historic, archaeological or cultural importance from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

More specific information on the location of historic, archaeological or cultural importance would be determined during the design, environmental review and permitting of individual projects and activities performed under the *2020 Strategy Update*.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

No impact to resources is expected as a result of the *2020 Strategy Update*. More specific information to reduce or control impacts to historic, archaeological or cultural importance from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

The study area includes many public streets and highways.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Some Port facilities are currently served by public transit.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

The *2020 Strategy Update* does not involve the creation or elimination parking spaces.

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d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No changes to roads or streets or improvements to existing roads or streets are proposed.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The *2020 Strategy Update* study area is in vicinity of existing water, rail, and vehicle transportation. The proposal does not directly use water, rail, or air transportation.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

As a programmatic document, the *2020 Strategy Update* does not include information concerning future traffic volumes or vehicle trips associated with new development. New developments may result in a temporary increase of truck traffic during construction. More specific information on impacts to traffic patterns from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

The *2020 Strategy Update* will not interfere with or be affected by the movement of agricultural and forest products on roads or streets in the study area.

h. Proposed measures to reduce or control transportation impacts, if any:

No measures are expected to be necessary as a result of the *2020 Strategy Update*. Included in the *2020 Strategy Update* are planning-related and project implementation actions in which the Ports agree to work with regional transportation entities and air agencies to obtain further emissions reductions within the maritime transportation sector. These actions include identification of improvements with the objective of moving freight on roads and rail facilities more quickly and efficiently. More specific information on impacts to traffic patterns from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

The *2020 Strategy Update* would not result in an increased need for public services.

b. Proposed measures to reduce or control direct impacts on public services, if any.

No measures are expected to be necessary as a result of the *2020 Strategy Update*.

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16. Utilities

a. Circle utilities currently available at the site:
electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other stormwater utilities, commercial and solid waste collection

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

It is anticipated that changes in the existing utility routes or levels of service may be required for some greenhouse gas or air emission reduction projects. The Port is working closely with agencies, including Seattle City Light, to identify utility constraints and opportunities. More specific information on impacts to utilities from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____
Name of signee Laura D. Wolfe, AICP
Position and Agency/Organization Environmental Program Manager, Port of Seattle
Date Submitted: January 26, 2021

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D. Supplemental sheet for nonproject actions

The *2020 Strategy Update* describes a programmatic, non-project approach to reducing air emissions. Future and present undetermined actions taken under the *2020 Strategy Update* will undergo specific environmental review, as appropriate. The responses to Items D (1) through (6) below draw from the environmental checklist. Items A. Background and B. Environmental Elements.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Adoption of the *2020 Strategy Update* is expected to result in positive air quality effects. Projects implemented under the *2020 Strategy Update* can decrease the likelihood of emissions to air during Port operations and reduce the amount of waste entering the surface waters through airfall deposition. There is the potential for temporary impacts during construction of projects. More specific information on impacts to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise from projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

Proposed measures to avoid or reduce such increases are:

See Section A.2.c of the Environmental Checklist for measures to reduce or control emissions or other impacts to air. More specific information on impacts from future projects proposed to reduce air emissions identified in the *2020 Strategy Update* would be determined during the design, environmental review and permitting of individual projects and activities.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Adoption of the *2020 Strategy Update* would not directly result in impacts on plants, animals, fish, or marine life.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

No measures are expected to be necessary as a result of the *2020 Strategy Update*.

3. How would the proposal be likely to deplete energy or natural resources?

Adoption of the *2020 Strategy Update* may result in positive effects on energy or natural resources coincident with reductions in air emissions. The plan may increase the use of alternative energy options such as electricity or renewable fuels. Examples include the use of shore power or electricity for ships while in port, or operation of cargo handling equipment with renewable diesel. The *2020 Strategy Update* encourages more efficient use of energy.

Proposed measures to protect or conserve energy and natural resources are:

Projects envisioned by the *2020 Strategy Update* would make use of energy efficient equipment and technologies and renewable energy sources.

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4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

Adoption of the *2020 Strategy Update* would not directly result in adverse effect on environmentally sensitive areas or areas designated for governmental protection. The *2020 Strategy Update* is intended to result in cleaner air in the region including environmentally sensitive areas and areas designated tor governmental protection.

Proposed measures to protect such resources or to avoid or reduce impacts are:

No measures are expected to be necessary as a result of the *2020 Strategy Update.*

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

No impact on land and shoreline use is expected as a result of the *2020 Strategy Update*.

Proposed measures to avoid or reduce shoreline and land use impacts are:

No measures are expected to be necessary as a result of the *2020 Strategy Update.*

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

No increased demands on transportation or public services and utilities are expected as a result of the *2020 Strategy Update*. The plan could increase the use of alternative energy options such as electricity and natural gas. At the time, such strategies would be considered and utility companies would be consulted.

Proposed measures to reduce or respond to such demand(s) are:

No measures are expected to be necessary as a result of the *2020 Strategy Update.*

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

The *2020 Strategy Update* is intended to be consistent with local, state, and federal laws and requirements for protection of the environment.