

ENVIRONMENTAL CHECKLIST

Charting the Course to Zero: Port of Seattle's Maritime Climate and Air Action Plan (MCAAP) Port of Seattle SEPA File #2021-07

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:

Charting the Course to Zero: Port of Seattle's Maritime Climate and Air Action Plan (MCAAP)

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, WEDG
Port of Seattle
PO Box 1209
Seattle, WA 98111

4. Date checklist prepared:

September 7, 2021

5. Agency requesting checklist:

Port of Seattle

6. Proposed timing or schedule (including phasing, if applicable):

The *MCAAP* is Port of Seattle's implementation plan for the *Northwest Ports Clean Air Strategy (NWPCAS)*. The Port of Seattle Commission adopted the *NWPCAS* in April 2021. The Commission will decide on whether to adopt the *MCAAP* as the Port's implementation plan in November 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 *MCAAP* will be reviewed and or updated at least every five years in coordination with updates to the *NWPCAS*, with an additional review of SEPA compliance to accompany each update. Port of Seattle commits to reporting progress toward implementations of the strategies and actions on an annual basis, including reporting

on the performance metrics in the *MCAAP*. The Port will continue to evaluate the advancement of new technology or other factors that could accelerate implementation of the strategies and actions set in the *MCAAP* and will report information on technology development or other factors as relevant during annual reporting. Any projects stemming from this plan 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.
- 2020 Northwest Ports Clean Air Strategy, 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 *MCAAP*.

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

Adoption of the *MCAAP* will occur through a resolution and action of Port of Seattle Commission in November 2021 and requires no other regulatory approvals or permits. More specific information on approvals or permits for projects anticipated under the *MCAAP* 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.

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.

Charting the Course to Zero: Port of Seattle's Maritime Climate and Air Action Plan (the [MCAAP](#)) is a comprehensive plan to address climate change and air pollution from maritime sources. It charts the course to achieve the Port's 2030 [Century Agenda](#) greenhouse gas (GHG) reduction target to reduce GHG emissions 50% from the baseline and implement the [2020 Northwest Ports Clean Air Strategy](#) (NWPCAS) vision.

The NWPCAS 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 completed a second update of the NWPCAS in 2020. Recognizing the urgency of climate change and the need to reduce local air pollution, the MCAAP sets a new vision for the Ports to phase out seaport-related air and greenhouse gas emissions by 2050. As part of the 2020 NWPCAS update, each port committed to develop a port-specific implementation plan detailing how the port will advance the vision and objectives within its unique emissions and business portfolios. The MCAAP is Port of Seattle's port-specific implementation plan for the 2020 NWPCAS.

The MCAAP identifies strategies and actions that can reduce maritime-related emissions, focused on actions ahead of 2030. It covers emissions sources related to internal operations of the Port's Maritime and Economic Development Divisions, such as energy used in port buildings, fuel used in fleet vehicles and equipment, and emissions associated with employee commuting and solid waste transportation and disposal. It also covers emissions sources from Port Maritime tenants and the maritime supply chain, such as cruise sailings, grain terminal operations, commercial fishing, and recreational marinas. In addition to emission reduction opportunities, the plan encompasses the future carbon sequestration potential of the Port's shoreline restoration programs.

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 MCAAP includes shoreline and upland areas of maritime facilities owned by Port of Seattle (see Figure 1). It also includes shoreline, upland, and marine areas within the U.S. portion of the Georgia Basin-Puget Sound Airshed (See Figure 2). 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.

Figure 1. Map of Port of Seattle Maritime Facilities

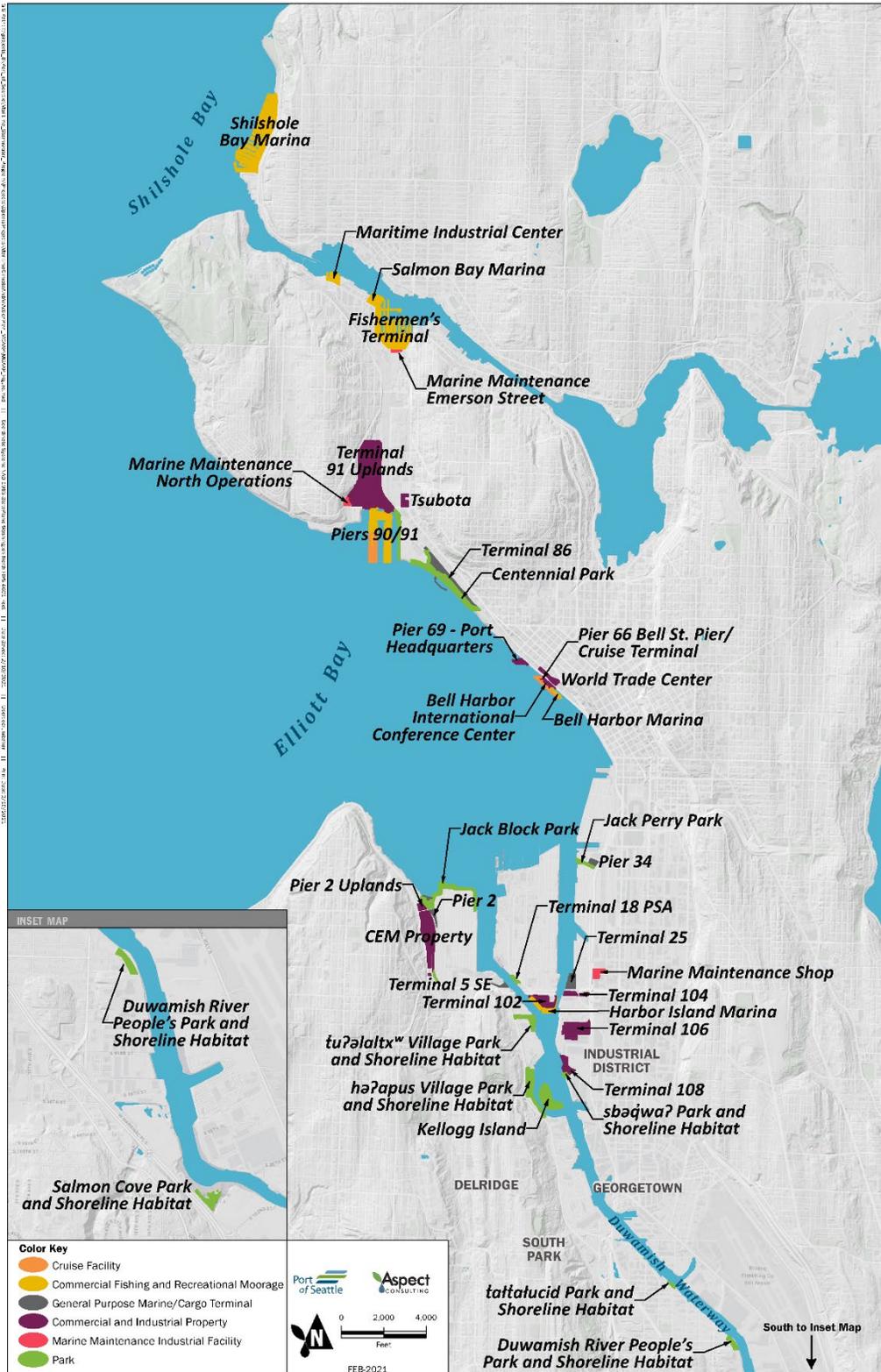


Figure 2. Map of the Georgia Basin-Puget Sound Airshed



B. Environmental Elements

1. Earth

a. General description of the site:

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

The *MCAAP* 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 *MCAAP* 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 *MCAAP* 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 *MCAAP* 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 *MCAAP*. 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.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No erosion is expected to result from the *MCAAP*. 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 *MCAAP* planning area does not include specific 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. The *MCAAP* includes actions to continue restoring shoreline habitat, which has the potential to reduce current amount of impervious surfaces on Port properties. 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 *MCAAP* does not include measures to reduce or control erosion. More specific information on impacts the earth from projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 *MCAAP*. The goal of the *MCAAP* is to reduce emissions. Construction activities from projects resulting from the *MCAAP* 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 *MCAAP*. More specific information on project emissions from projects proposed to reduce air and GHG emissions identified as a result of the *MCAAP* 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 *MCAAP* 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, trucks and buses that support cruise and fishing operations, commercial harbor vessels, recreational vessels. It also covers offsite emissions from port-owned fleet vehicles, the transport and disposal of solid waste, and emissions from employees commuting to work. The *MCAAP* 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 *MCAAP* focuses on actions to reduce GHG emissions and improve air quality, focusing specifically on Port of Seattle's source of maritime emissions. In addition to GHG emissions, the *MCAAP* focuses specifically on diesel particulate matter (DPM) as DPM is the leading source of toxic air pollution in the Puget Sound¹ and of high concern for near-port communities.

¹ <https://pscleanair.gov/DocumentCenter/View/143/Fact-Sheet-on-Air-Toxics-PDF?bidId=>

The *MCAAP* proposes strategies and actions to reduce maritime-related GHG and DPM emissions through 2030 to meet the Port of Seattle’s Century Agenda GHG reduction target of a 50% reduction in GHG emissions by 2030 and to chart the course toward the *NWPCAS* vision to phase out seaport-related emissions by 2050. While the *MCAAP* is focused on the Port of Seattle’s 2030 GHG reduction targets, it recommends the Port consider accelerating its 2050 targets as follows:

1. Accelerate the Port’s scope 1 and 2 emission reduction efforts by 10 years to be net-zero or better by 2040 instead of carbon neutral by 2050.
2. Increase the magnitude of the Port’s scope 3 reduction goal to be carbon neutral or better by 2050 instead of an 80 percent reduction below 2007 by 2050.

Table 1 lists the emission reduction strategies for each sector covered by the *MCAAP* and the estimated GHG emission reduction potential of each strategy.

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 Emission Reduction Strategies by *MCAAP* Sector and estimated GHG Emission Reduction Potential by 2030

Port Maritime Administration Strategies	
Building and Campus Energy (BC)	GHG Scopes: 1, 2, 3
GHG Reduction Strategies	Approximate Annual MT CO ₂ Reduction Potential by 2030
BC1: Eliminate fossil natural gas	1,400
BC2: Implement energy audit conservation measures	330
BC3: Install energy efficient lighting and controls	140
BC4: Reduce plug loads and upgrade controls	25
BC5: Maximize use of renewable energy	50
BC6: Advance energy data management and planning	critical to other efforts
BC7: Apply high performance lease terms	
BC8: Strengthen energy conservation communication and education	

Fleet Vehicles and Equipment (FV)	GHG Scope: 1
GHG Reduction Strategies	Approximate Annual MT CO ₂ Reduction Potential by 2030
FV1: Use drop-in renewable fuels	330
FV2: Deploy electric vehicle charging across Port waterfront	Critical to other efforts
FV3: Transition to electric vehicles	250
FV4: Right-size vehicles and fleet	75
FV5: Use technology to gather data and improve efficiency	critical to other efforts
FV6: Educate Port drivers on eco-driving and fleet use practices	

Employee Commuting (EC)	GHG Scope: 3
GHG Reduction Strategies	Approximate Annual MT CO ₂ Reduction Potential by 2030
EC1: Encourage use of flexible work arrangements	350
EC2: Update employee commute benefits for low-emission commutes	210
EC3: Expand employee communication and education	60
EC4: Continue to advocate for better transportation access	60

Solid Waste (SW)	GHG Scope: 3
GHG Reduction Strategies	Approximate Annual MT CO ₂ Reduction Potential by 2030
SW1: Maximize diversion of common recyclables and organics	60
SW2: Minimize solid waste generation	60
SW3: Expand specialized items recycling	15
SW4: Enhance communications with employees and tenants	critical to other efforts

Habitat Restoration and Carbon Sequestration (HR)	GHG Scope: 3
GHG Reduction Strategies	Approximate Annual MT CO ₂ Reduction Potential by 2030
HR1: Complete Smith Cove Blue Carbon Benefits Study	To be determined
HR2: Continue shoreline restoration projects	

Maritime Activity and Cross-Sector (XS) Strategies	GHG Scope: 3
GHG and DPM Reduction Strategies	Approximate Annual MT CO ₂ Reduction Potential by 2030
XS1: Facilitate cross-industry clean energy planning	critical to other efforts
XS2: Leverage green lease terms	
XS3: Advocate for local, state, and federal policy and funding	
XS4: Engage with community, industry, and government	

Waterside: Ocean-going Vessels (OGV) and Harbor Vessels (HV)	GHG Scope: 3
GHG and DPM Reduction Strategies	Approximate Annual MT CO ₂ Reduction Potential by 2030
OGV1: Install shore power at all major cruise berths by 2030	13,000
OGV2: Support international efforts to phase out emissions from OGV	To be determined
OGV3: Support OGV efficiency improvements and emission reductions	To be determined
HV1: Provide infrastructure for zero-emission HV by 2030	critical to other efforts
HV2: Support accelerated turnover of HV to zero-emission models	To be determined
HV3: Support HV efficiency improvements and emission reductions	

Landside: Cargo-handling equipment (CHE), Trucks (TR), and Rail (RR)	GHG Scope: 3
GHG and DPM Reduction Strategies	Approximate Annual MT CO ₂ Reduction Potential by 2030
CHE1: Provide infrastructure for zero-emission CHE by 2030	critical to other efforts
CHE2: Support adoption of zero-emission CHE by 2050	To be determined
CHE3: Support CHE efficiency improvement and emission reductions	
TR1: Provide infrastructure for zero-emission trucks by 2030	critical to other efforts
TR2: Support adoption of zero-emission trucks by 2050	To be determined
TR3: Support truck efficiency improvements and emission reductions	
RR1: Provide infrastructure for zero-emission on-terminal rail by 2030	critical to other efforts
RR2: Support adoption of zero-emission rail by 2050	To be determined
RR3: Support rail efficiency improvements and emission reductions	

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 *MCAAP* 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.

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 *MCAAP*, although projects to reduce air and GHG emissions may be implemented in the future. More specific information on impacts to surface water from projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 *MCAAP*. More specific information on impacts to surface water from projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 and GHG emissions identified in the *MCAAP* 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 and GHG emissions identified in the *MCAAP* 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 *MCAAP*. Reduced airborne pollution from actions planned in the *MCAAP* 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 and GHG emissions identified in the *MCAAP* 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 *MCAAP* 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 and GHG emissions identified in the *MCAAP* 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 *MCAAP*. More specific information on impacts to ground water from projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 *MCAAP*. More specific information on impacts to ground water from projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 *MCAAP*. Reduced airborne pollution from actions planned in the *MCAAP* would reduce the amount of waste entering the surface waters through airfall deposition. The *MCAAP* also includes strategies and actions focused on increasing diversion of common recyclable and compostable materials from the waste stream and reducing the amount of solid waste generated.

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 and GHG emissions identified in the *MCAAP* 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 *MCAAP*. More specific information on impacts to drainage patterns from projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 *MCAAP* 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 and GHG emissions identified in the *MCAAP* 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:

- deciduous tree: alder, maple, aspen, other:** ornamentals
- evergreen tree: fir, cedar, pine, other**
- shrubs**
- grass**
- pasture**
- crop or grain**
- orchards, vineyards or other permanent crops.**
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other**
- 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?

The *MCAAP* identifies strategies and actions to restore habitat as a way to sequester carbon from the atmosphere. Actions include shoreline and aquatic habitat restoration. More specific information on impacts to plants from projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 *MCAAP*. More specific information on impacts to plants from projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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:

The *MCAAP* identifies strategies and actions to restore habitat to maximize its carbon sequestration potential. . Actions include shoreline and aquatic habitat restoration. Aquatic habitat restoration includes the planting and propagation of kelp and eelgrass in Elliott Bay. Shoreline restoration initiatives focus on large habitat restoration projects, floating wetland island, and utilizing alternative bankline techniques, such as large woody debris and native plants, when maintaining existing armored shorelines.

More specific information on impacts to plants from projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 *MCAAP*. More specific information on impacts due to noxious weeds and invasive species from projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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

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 <i>Oncorhynchus tshawytscha</i>	Threatened	All aquatic areas (freshwater, estuarine and marine)	All areas waterward of OHW or HTL
Puget Sound steelhead <i>Oncorhynchus mykiss</i>	Threatened	All aquatic areas (freshwater, estuarine and marine)	All areas waterward of OHW or HTL
Coastal-Puget Sound bull trout <i>Salvelinus confluentus</i>	Threatened	All aquatic areas (freshwater, estuarine and marine)	All areas waterward of OHW or HTL
Killer whale: Southern Resident <i>Orcinus orca</i>	Endangered	Marine only	All waters in Puget Sound deeper than 20 ft (6.1 m)

Species	Federal Status	Action Areas	Critical Habitat Within Action Area
Humpback whale <i>Megaptera novaeangliae</i>	Endangered (Central America), Threatened (Mexico)	Marine only	No critical habitat has been designated for the humpback whale
Marbled murrelet <i>Brachyramphus marmoratus</i>	Threatened	Marine only	No critical habitat designated within the action areas. Marine environments were not designated.
Eulachon <i>Thaleichthys pacificus</i>	Threatened	Marine only	No critical habitat designated within the action areas.
Bocaccio <i>Sebastes paucispinis</i>	Endangered	Marine/Estuarine only	Nearshore and deepwater habitat
Yelloweye rockfish <i>Sebastes ruberrimus</i>	Threatened	Marine only	Deepwater habitat (>30 m)

More specific information on impacts to threatened or endangered species from projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 and GHG emissions identified in the *MCAAP* 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 *MCAAP* 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. The *MCAAP* identifies strategies and actions to restore habitat, which can enhance wildlife opportunities. More specific information on impacts to threatened or endangered species and wildlife from projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 *MCAAP*. More specific information on impacts due to invasive animal species from projects proposed to reduce air and GHG emissions identified in the *MCAAP* would be determined during the design, environmental review and permitting of individual projects and activities.

6. **Energy and Natural Resources** [\[help\]](#)

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 strategies and action in the *MCAAP* are not yet known. 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 *MCAAP* proposes strategies that will increase energy efficiency through the implementation of energy audit measures, energy efficient lighting, and reduced plug loads. The *MCAAP* also includes a commitment to eliminating the use of fossil natural gas and maximizing renewable energy.

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 *MCAAP* 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 *MCAAP* 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 *MCAAP* 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 main strategy focuses in the *MCAAP* (see Table 1): For Maritime Activity sectors, Port of Seattle will continue to advance policies that promote efficiency and phase out old, high emitting equipment in favor of new equipment, focusing on reducing fuel and energy use across the sectors to reduce air and GHG emissions. Additionally, actions within the Port Maritime Administration section promote energy conservation, transitioning from fossil fuels, and maximizing the use of renewable energy.

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

7. **Environmental Health** [\[help\]](#)

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 *MCAAP*. Anticipated air emission reductions from implementation of the *MCAAP* would provide a public health benefit. More specific information on impacts to environmental health from future projects proposed to reduce air and

GHG emissions identified in the *MCAAP* 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 and GHG emissions identified in the *MCAAP* 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 and GHG emissions identified in the *MCAAP* 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 *MCAAP*. 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 and GHG emissions identified in the *MCAAP* 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 *MCAAP*.
- 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 *MCAAP*. 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 and GHG emissions identified in the *MCAAP* would be determined during the design, environmental review and permitting of individual projects and activities.

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 *MCAAP* 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 *MCAAP*. There is the potential for short-term, temporary noise impacts due to construction equipment for future projects related to the *MCAAP*. 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 and GHG emissions identified in the *MCAAP* 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 *MCAAP*. More specific information on impacts to the noise environment from future projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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.

The *MCAAP* identifies strategies and actions to restore habitat to maximize its carbon sequestration potential. Actions include shoreline and aquatic habitat restoration. The project may include the conversion of some adjacent upland areas to bankline habitat or the establishment of kelp and eelgrass on aquatic lands. The overall land uses on nearby or adjacent properties will not be affected. More specific information on impacts to current land uses from future projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 *MCAAP* 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 *MCAAP*. More specific information on impacts to working farm or forest land from future projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 *MCAAP*.

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

The *MCAAP* 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 *MCAAP* 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 *MCAAP* 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 *MCAAP* 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 *MCAAP* 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 *MCAAP*.

k. Proposed measures to avoid or reduce displacement impacts, if any:

No measures to avoid or reduce displacements are proposed for implementation of the *MCAAP*.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The *MCAAP* is intended to be consistent with existing and projects land uses and plans. No measures to ensure compatibility are proposed for implementation of the *MCAAP*.

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 *MCAAP*. More specific information on impacts to agricultural and forest lands from future projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 *MCAAP*.

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 *MCAAP*.

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 *MCAAP*.

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 *MCAAP* implementation. More specific information on impacts to views and aesthetics from future projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 *MCAAP*.

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 *MCAAP*. More specific information on impacts to aesthetics from future projects proposed to reduce air and GHG emissions identified in the *MCAAP* would be determined during the design, environmental review and permitting of individual projects and activities.

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 *MCAAP*. 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 *MCAAP*. More specific information on impacts from light and glare from future projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 *MCAAP* projects or programs. More specific information on impacts from light and glare from future projects proposed to reduce air and GHG emissions identified in the *MCAAP* 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 and GHG emissions identified in the *MCAAP* 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 *MCAAP*. Proposed habitat restoration projects could potentially provide additional recreational opportunities. More specific information on recreational sites will be provided during the design, environmental review and permitting of individual projects and activities.

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 *MCAAP*.

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 and GHG emissions identified in the *MCAAP* 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 *MCAAP*.

- 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 *MCAAP*. More specific information to reduce or control impacts to historic, archaeological or cultural importance from future projects proposed to reduce air and GHG emissions identified in the *MCAAP* would be determined during the design, environmental review and permitting of individual projects and activities.

14. Transportation [\[help\]](#)

- 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 *MCAAP* does not involve the creation or elimination parking spaces.

- 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 *MCAAP* 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?

The MCAAP includes strategies centered on employee commute trip reduction. Strategies include flexible work arrangements, expanding lower-emission commute options, advocating for more multimodal transportation options. The strategies for employee commute trip reduction aim to reduce drive-alone trips to the Port of Seattle's Pier 69 headquarters from 53% to 20% to meet the City of Seattle's target drive-alone rate.

As a programmatic document, the *MCAAP* 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 and GHG emissions identified in the *MCAAP* 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 *MCAAP* 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:

The MCAAP includes strategies centered on employee commute trip reduction. Strategies include flexible work arrangements, expanding lower-emission commute options, advocating for more multimodal transportation options. The strategies for employee commute trip reduction aim to reduce drive-alone trips to the Port of Seattle's Pier 69 headquarters from 53% to 20% to meet the City of Seattle's target drive-alone rate.

Included in the *MCAAP* are planning-related and project implementation actions in which the Port agrees 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 and GHG emissions identified in the *MCAAP* would be determined during the design, environmental review and permitting of individual projects and activities.

15. Public Services [\[help\]](#)

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 *MCAAP* would not result directly in an increased need for public services. As part of the *MCAAP*, the Port of Seattle is advocating for more accessible multimodal transportation options for Port maritime worksites. To secure additional transportation options, the Port will continue to coordinate with regional transportation agencies.

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 *MCAAP*.

16. Utilities [\[help\]](#)

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 and GHG emissions identified in the MCAAP 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, ENV SP, WEDG
Position and Agency/Organization Environmental Program Manager, Port of Seattle
Date Submitted: 10/1/2021

D. Supplemental sheet for nonproject actions [\[HELP\]](#)

The *MCAAP* describes a programmatic, non-project approach to reducing air emissions. Future and present undetermined actions taken under the *MCAAP* 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 *MCAAP* is expected to result in positive air quality effects. Projects implemented under the *MCAAP* 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 and GHG emissions identified in the *MCAAP* 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 and GHG emissions identified in the *MCAAP* 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?

The *MCAAP* identifies strategies and actions to restore habitat to maximize its carbon sequestration potential. Actions include shoreline and aquatic habitat restoration. Aquatic habitat restoration includes the planting and propagation of kelp and eelgrass in Elliott Bay. Shoreline restoration initiatives focus on large habitat restoration projects, floating wetland island, and utilizing alternative bankline techniques, such as large woody debris and native plants, when maintaining existing armored shorelines. These restoration efforts and enhance current wildlife opportunities.

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

See Section A.4.d and A.5.d of the Environmental Checklist for measures to preserve or enhance plants and wildlife. More specific information on impacts to plants and wildlife from future projects proposed to reduce air and GHG emissions identified in the *MCAAP* would be determined during the design, environmental review and permitting of individual projects and activities.

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

Adoption of the *MCAAP* 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 *MCAAP* encourages more efficient use of energy.

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

Projects envisioned by the *MCAAP* would make use of energy efficient equipment and technologies and renewable energy sources. More specific information on impacts to energy and natural resources from future projects proposed to reduce air and GHG emissions identified in the *MCAAP* would be determined during the design, environmental review and permitting of individual projects and activities.

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 *MCAAP* would not directly result in adverse effect on environmentally sensitive areas or areas designated for governmental protection. The *MCAAP* is intended to result in cleaner air in the region including environmentally sensitive areas and areas designated for governmental protection. The *MCAAP* also identifies strategies and actions to restore habitat to maximize its carbon sequestration potential. Actions include shoreline and aquatic habitat restoration. Aquatic habitat restoration includes the planting and propagation of kelp and eelgrass in Elliott Bay. Shoreline restoration initiatives focus on large habitat restoration projects, floating wetland island, and utilizing alternative bankline techniques, such as large woody debris and native plants, when maintaining existing armored shorelines.

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

See Section A.4.d and A.5.d of the Environmental Checklist for measures to preserve or enhance plants and wildlife. More specific information on impacts to environmentally or culturally sensitive areas from future projects proposed to reduce air and GHG emissions identified in the *MCAAP* would be determined during the design, environmental review and permitting of individual projects and activities.

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?

The *MCAAP* identifies strategies and actions to restore habitat to maximize its carbon sequestration potential. Actions include shoreline and aquatic habitat restoration. The project may include the conversion of some adjacent upland areas to bankline habitat or the establishment of kelp and eelgrass on aquatic lands. The overall land uses on nearby or adjacent properties will not be affected and are compatible with existing plans.

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

No measures are expected to be necessary as a result of the *MCAAP*.

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 direct result of the *MCAAP*. 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. The Port of Seattle also is advocating for more accessible multimodal transportation options for Port maritime worksites. To secure transportation additional transportation options, the Port will continue to coordinate with regional transportation agencies.

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

No measures are expected to be necessary as a result of the *MCAAP*.

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

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