Purpose of checklist:
Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:
This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:
Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:
For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements—that do not contribute meaningfully to the analysis of the proposal.
A. BACKGROUND
1. Name of the proposed project, if applicable:
   Dockton Bulkhead Removal Project

2. Name of Applicant:
   King County Department of Natural Resources and Parks
   Water and Land Resources Division

3. Address and phone number of applicant and contact person:
   Paul Adler, Ecologist
   King County Water and Land Resources Division
   201 South Jackson Street, Suite 600
   Seattle, WA 98104-3855
   Phone: 206-477-4606
   Fax: 206-296-0192
   Paul.adler@kingcounty.gov

4. Date checklist prepared:
   December 2019

5. Agency requesting checklist:
   King County Department of Natural Resources and Parks
   Water and Land Resources Division

6. Proposed timing or schedule (include phasing, if applicable):
   Project construction is planned for July-October 2020. All work below the Mean Higher
   High Water line will be accomplished during the work window specified by WDFW
   (August 1 to September 30).

7. Do you have any plans for future additions, expansion, or further activity related to or
   connected with this proposal? If yes, explain.
   No

8. List any environmental information you know about that has been prepared, or will be
   prepared, directly related to this proposal.
   Dockton Bulkhead Removal Feasibility Assessment, King County Water and Land
   Resources Division, July 2015.

   Dockton Seawall Removal Soil Sampling, King County Environmental Lab, 2015.

   Dockton Seawall Soil Laboratory Analytical Report, King County Environmental Lab,
   2015.
Dockton Seawall Soil Aggregate Data Analysis, King County Department of Transportation Material Laboratory, 2015.


Cultural Resources Investigations for the Dockton Heights Restoration Project, prepared by ICF International, February 2012;

Dockton Bulkhead Removal Project - Geomorphic Assessment, King County Water and Land Resources Division, October 2019.

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.

Yes. The Dockton Park Dock Rehabilitation Project, King County Department of Natural Resources and Parks, Parks Division proposes to repair or replace the existing pier and dock. This project is acquiring permits independently of the bulkhead removal project.

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

   • U.S. Army Corps of Engineers
     o Section 404 (Clean Water Act), Nationwide 27 Permit - Aquatic Habitat Restoration
     o Section 10 (Rivers and Harbors Act)
     o Section 7 (Endangered Species Act) compliance
     o Section 106 (Historic Preservation Act) compliance
   
   • Washington Department of Ecology
     o Section 401 (Clean Water Act) Water Quality Certification
     o Coastal Zone Management Act Concurrence
   
   • King County
     o Washington State Environmental Policy Act DNS (King County Lead Agency)
     o Washington State Shorelines Substantial Development Exemption (King County DLS)
     o Flood Hazard Certification (King County DLS)
     o King County Clearing and Grading Permit (King County DLS)
     o King County Parks Partnership Project Agreement (King County Parks)
   
   • Washington Dept. of Fish and Wildlife
     o Hydraulic Project Approval

11. Give a 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. (Lead agencies may modify this form to include additional specific information on the project description.)
The Dockton Bulkhead Removal project will remove up to 225 feet of bulkhead from the Puget Sound shoreline in Dockton Park on Maury Island. All concrete, non-native fill material will be removed from the site. Material suitable for beach nourishment will be left on-site and graded to match existing beach conditions to promote beach-forming processes and improve beach spawning fish habitat. Existing non-creosote large wood debris encountered during the bulkhead removal will be relocated during construction and placed on the beach or bluff within the project area for habitat.

The bulkhead to be removed is part of a larger bulkhead that extends to the southwest along the shoreline of Dockton Park. The bulkhead will be removed to a point about 5’ northeast of the pier where an existing concrete bulkhead return extends about 10 feet landward perpendicular to the shoreline. An additional 25-foot long section of bulkhead return will be constructed of rip rap extending the existing bulkhead return into the hillslope. This return is necessary to provide slope stability that will allow bulkhead removal to this point adjacent to the pier while protecting the existing pier and associated infrastructure. During construction the existing bulkhead return will be inspected and if it is not deemed to be structurally sound, any deficiencies in the existing structure will be addressed by placing ripraps at the toe of the existing return.

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 plan, 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 proposed project is located on the shoreline of Quartermaster Harbor on Maury Island, just southeast of the town of Dockton within Dockton Park. The address is 9500 SW Dock Street, Vashon, Washington 98070. The bulkhead to be removed is northeast of the existing pier in the park and is part of a larger concrete bulkhead structure that extends southwest to the Dockton Park parking lot and boat launch. The project site is in the NW quarter of Section 29, Township 22N, Range 02E.

**B. ENVIRONMENTAL ELEMENTS**

1. **Earth**

   a. *General description of the site (underline one): flat, rolling, hilly, steep slopes, mountainous, other.*

   The project site is located along the transition between gently sloping beach and steeply sloping hillside. Small, near vertical bluffs and scarpes are present along the shoreline and in isolated areas within the steep slopes. A relatively flat, artificial bench up to about 15 feet wide is present along the landward side of the bulkhead.
b. What is the steepest slope on the site (approximate percent slope)?

Vertical and near vertical slopes are present along low shoreline bluffs and in isolated areas within the sloped portion of the site. The remainder of the hillside slopes range from approximately 30%-50%.

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 prime farmland.

The soil behind the bulkhead is comprised of silt, sand, gravel and cobble fill. The beach is formed of gravel and sand with areas of silt and clay. The hillside is underlain by sand, silt and clay deposits.

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

The site is mapped as a steep slope and erosion hazard area due to steep slopes, history of nearby slope failures and presence of sand and gravel over less permeable silts and clays. Direct evidence, in the form of vertical or near vertical slopes, displaced and deformed trees, and shallow deposits of landslide debris are found throughout the site. Observed failures are typically shallow and confined to the weathered portion of the underlying silt and clay soils.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate the source of fill.

The purpose of the project is habitat enhancement of the marine shoreline. It is expected that the majority of material behind the bulkhead, estimated to be 500-1,000 cubic yards of native material, will be suitable for beach nourishment. This material will be placed at the toe of the slope and graded to match the existing beach. About 50 to 90 cubic yards of rip rap will be used to construct the extension of the bulkhead return and, if needed, the supplemental toe rock along the base of the existing bulkhead return. Any deleterious fill material (e.g. plastic, tires, creosote logs, and similar) not suitable for beach nourishment encountered behind the bulkhead will be removed from Puget Sound/Quartermaster Harbor and disposed of off-site. The quantity of these materials are estimated to be from 0 to 200 cubic yards. The bulkhead to be removed contains 100 to 150 cubic yards of concrete.

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

Yes, removal of the bulkhead will expose the base of the bluff to wave action and other natural erosional forces and restore the natural processes that form shoreline habitat. Over time, bulkhead removal will result in conditions similar to the unarmored shoreline immediately to the north. Increased landslide activity associated with bulkhead removal is likely throughout a zone that extends upslope approximately 50 feet from the back of the bulkhead, along the length of the bulkhead removal area and
approximately 15 feet north and south of the removal area. Given the limited aerial extent and the shallow nature of expected and potential landslides, there is no increase in risk to neighboring private property approximately 450 feet to the north, nor is there likely to be an increase to the public road upslope and approximately 220 feet to the southeast. Existing stability problems in both of those locations are thought to be related to fill placement and drainage and will not be impacted by the project actions.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The project will not create any additional impervious surfaces. Impervious surfaces will slightly decrease following construction due to the removal of the concrete bulkhead.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

The project will avoid and minimize adverse impacts during construction by timing the project actions and using construction best management practices (BMPs). All concrete and material not suitable for beach nourishment will be removed from the site.

All work below the Mean Higher High Water (MHHW) line will be accomplished during the WDFW-specified fish window and during drier summer months when rain events are less frequent to reduce construction impacts. Demolition of the bulkhead will be timed during daily tidal work windows. The bulkhead will be demolished so that the concrete and material not suitable for beach nourishment will be removed from below MHHW within each tide cycle. With the exception of barge or boat mounted equipment, construction equipment including excavators and haulers will not be working in the water. Sediment fences or turbidity curtains will be available and installed, as needed, to minimize construction impacts.

2. Air

a. What types of emissions to the air would result from the proposal (for example, dust, automobile, odors, industrial wood smoke, greenhouse gases) during construction and when the project is completed? If any, generally describe and give approximate quantities, if known.

The project has the potential to generate construction related dust. Dust control will be performed on an as-needed basis by stabilizing construction access surfaces and watering. All loads of soil or other debris leaving the site will be covered.

The completed project will not emit gasses with the potential to negatively affect climate change.

Construction equipment, including a track hoe, tracked haulers, dump trucks, pick-up trucks, boats and/or marine equipment will be used during removal of the bulkhead. This equipment will emit gasses including carbon dioxide (CO₂), methane and nitrous oxide, as well as others in much smaller amounts. The global warming potential (GWP) of these compounds is measured in “carbon dioxide equivalents,” or CO₂e, which converts the GWP of various gasses into their equivalent in CO₂. The amount of CO₂e that may be
emitted as a result of constructing the proposed project has been estimated by computing the amount of fuel to be consumed by equipment used to construct the project or by estimating their hourly output of various greenhouse gases. Fuel consumed or hourly output is then converted into CO\(_2\)e emitted using formulae developed by the Energy Information Administration (EIA) of the U.S. Department of Energy. Construction of the proposed project will likely result in the discharge of approximately 5.4 tons of CO\(_2\)e to the atmosphere.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

c. Proposed measures to reduce or control emissions or other impacts to the air, if any:

Engines will not idle unnecessarily and will be kept in proper working order with all filters and other emission control devices functional.

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 the type and provide names. If appropriate, state what stream or river it flows into.

        Yes. The site is on the shoreline of Quartermaster Harbor in Puget Sound.

      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.

        Yes. Most of the project site and work proposed is within the tidal influence of Puget Sound and the majority of the work is within 200 feet of Puget Sound. The project will remove up to 225 feet of bulkhead from the Puget Sound shoreline.

        Demolition of the bulkhead and construction of the return will be timed during daily tidal work windows. The bulkhead will be demolished so that the concrete and material not suitable for beach nourishment will be removed from below MHHW within each tide cycle. With the exception of barge or boat mounted equipment, construction equipment including excavators and haulers will not be working in the water. Sediment fences or turbidity curtains will be available and installed, as needed to minimize construction impacts. All impacts to the marine shoreline of Puget Sound will be temporary or beneficial to habitat and natural processes in Puget Sound and along its shoreline.
3) Estimate the amount of fill and dredge material that could 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 dredging or fill will occur within wetlands.

About 50 to 90 cubic yards of rip rap will be used to construct the bulkhead return and the supplemental toe rock, if needed, along the base of the existing bulkhead return. This material will be placed landward of the existing MHHW, but in an area that may be below MHHW as the hillslope retreats over time.

It is expected that the majority of material behind the bulkhead, estimated to be 500-1,000 cubic yards of native material, will be suitable for beach nourishment and will be placed at the toe of the slope and graded to match the existing beach. Any deleterious fill material found behind the bulkhead, estimated to be 0 to 200 cubic yards, and 100 to 150 cubic yards of concrete bulkhead will be removed from Puget Sound/Quartermaster Harbor.

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

No, the project does not require surface water withdrawals or diversions.

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

Yes, the bulkhead and most of the project area is within the 100-year floodplain of Puget Sound.

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, the project does not involve any discharges of waste materials to surface waters.

Native material suitable for beach nourishment will be placed at the toe of the slope and graded to match the existing beach. This material will be mobilized by tidal action during or shortly after construction. This is beneficial and an intended outcome of this project.

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.

No groundwater will be withdrawn and none will be discharged to groundwater.
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.**

None.

c. **Water Runoff (including storm water):**

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.**

The completed project will generate no storm water runoff in excess of present conditions.

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

No waste materials will enter groundwater. The finished project will not generate any waste material.

During construction, waste materials will be isolated from Puget Sound waters. Work will be completed during low tide and all concrete and material not suitable for beach nourishment will be moved above the Mean Higher High Water line (MHHW) during each tide cycle.

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

The project will have minimal impacts to drainage. The existing bulkhead interrupts surface water from the hillslope and channels it into drainage holes in the bulkhead. Removal of the bulkhead will reestablish natural drainage patterns.

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

The project will avoid and minimize adverse impacts during construction by timing the project actions during the summer months and using construction best management practices (BMPs). All work will be overseen by a Certified Erosion and Sediment Control Lead. Demolition of the bulkhead will be timed during daily tidal work windows. The bulkhead will be demolished so that the concrete and material not suitable for beach nourishment will be removed from below MHHW within each tide cycle. With the exception of barge or boat mounted equipment, construction equipment including excavators and haulers will not be working in the water. Sediment fences or turbidity curtains will be available and installed, as needed to minimize construction impacts.
4. **Plants**
   a. **Check or underline types of vegetation found on the site:**
      - Deciduous trees: alder, maple, aspen, other
      - Evergreen trees: fir, cedar, pine, other
      - Shrubs
      - Grass
      - Pasture
      - Orchards, vineyards or other permanent crops
      - Wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
      - Water plants: water lily, eelgrass, milfoil, other
      - Other types of vegetation

      The hillslope above the bulkhead to be removed is dominated by red alder, big leaf maple, and Douglas fir, with sword fern, beaked hazelnut, oceanspray, Indian plum and salmonberry.

   b. **What kind and amount of vegetation will be removed or altered?**
      Ten to fifteen mature red alder trees (*Alnus rubra*) on the terrace behind the bulkhead will be removed as part of the bulkhead removal. The alders will be relocated during construction and replaced on the bluff and/or beach to improve habitat.

   c. **List threatened or endangered species known to be on or near the site.**
      No threatened or endangered plant species are in the project area.

   d. **Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:**
      The project will have minimal impact on the existing vegetation. Clearing limits will be established to protect the existing vegetation. Because the purpose of the project is to reestablish natural beach-forming processes, including sediment delivery to the beach, the toe of the slope and the hillslope above the bulkhead will not be revegetated. Areas of the hillslope adjacent to the bulkhead return extension will be revegetated with native shrubs.

   e. **List all noxious weeds and invasive species known to be on or near the site.**
      Invasive species including Himalayan blackberry and ivy are present but aren’t prevalent. These will be controlled within the project area.

5. **Animals**
   a. **Check or underline any birds or animals that have been observed on or near the site, or are known to be on or near the site:**
      - Birds: hawk, heron, eagle, songbirds, other
      - Mammals: deer, bear, elk, beaver, other
      - Fish: bass, salmon, trout, herring, shellfish, other
Other species of note that may utilize the site include purple martins (which nest in boxes attached to pilings in the intertidal areas), sand lance, surf smelt and other beach-spawning forage fish.

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

ESA-listed Chinook salmon and steelhead trout, as well as coho salmon, likely use the nearshore areas during certain stages in their life cycles. Stellar sea lions and killer whales are not known to regularly use Quartermaster Harbor, but it is accessible to them and their use of waters adjacent to the project site is possible.

Pacific herring, a state candidate species of concern, are documented to spawn in the nearshore areas adjacent to the project site.

Purple martins, a candidate for state threatened or endangered status, nest in artificial nesting boxes attached to pilings near the public pier.

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

Many anadromous salmonids, such as Chinook and coho salmon, cruise the shorelines of Puget Sound after migrating out of their natal rivers and streams and before migrating to the open ocean, and may migrate past the project site. Pacific herring, surf smelt and sand lance may also use the nearshore areas adjacent to the project site.

The project site is also on the Pacific Flyway and may serve as a resting area for migrating birds.

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

The purpose of this project is to enhance habitat quality. Removal of the bulkhead will improve natural beach processes by allowing for movement and supply of sediment and organic material including invertebrates, leaf litter, and wood. The beach is expected to eventually become wider, which should allow for additional wood retention and provide additional beach habitat for spawning fish and foraging salmonids. Nourishing the beach with additional sediment will also improve spawning habitat for beach-spawning fish such as herring, surf smelt and sand lance, which are prey fish for salmon and other threatened and endangered species.

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

None

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.

The finished project will require no energy.
b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

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:

Not applicable.

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.

Construction equipment could leak diesel gas, oil, or hydraulic fluid onto the site.

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

The site is within the plume of the historic Asarco Company copper smelter in Tacoma. Air pollution from the smelter settled on the surface soil of more than 1,000 square miles of the Puget Sound basin depositing arsenic, lead, and other heavy metals in the soil. The sediments behind the bulkhead were tested and the levels of these contaminants are consistent with surrounding areas and do not warrant removal. The fill behind the bulkhead will left on site as beach nourishment.

The sediments behind the bulkhead were sampled and tested for total solids, arsenic and lead. In each of the five test pits, aliquots of soil were collected at one-foot intervals from the surface until reaching the approximate native soil elevation at the base of the bulkhead footing. Only one test pit slightly exceeded the arsenic remediation goal (21.1 mg/kg measured, remediation goal 20 mg/kg). These levels are below the marine sediment cleanup objective for arsenic (57 mg/kg dry weight, WAC 173-204-562, Table III).

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.

The presence of arsenic in the soil is a known hazard which has been analyzed and determined to be below the marine sediment cleanup objective. No other hazardous chemicals or conditions exist in the project area.

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.

Construction equipment will use diesel, gas, oil, and hydraulic fluid.
4) Describe special emergency services that might be required.

A spill response plan will be prepared, and an emergency spill kit will be kept on the site at all times to respond to the potential loss of diesel, gas, oil, or hydraulic fluid from construction machinery.

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

The completed project will not create any environmental health hazards. The environmental health hazards of construction will be minimized by the use of construction Best Management Practices (BMPs). All machinery will be inspected for leaks prior to entering the site and inspected on a daily basis to determine if there are leaking seals or gaskets that require replacement. All construction equipment will be refueled at a designated fueling area. When feasible, biodegradable hydraulic fluid will be used. A spill response plan will be prepared, and an emergency spill kit will be kept on the site at all times to respond to the potential loss of diesel, gas, oil, or hydraulic fluid from construction machinery.

b. Noise:

1) What types of noise exist in the area that may affect your project (for example, traffic, equipment, operation, other)?

None.

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example, traffic construction, equipment operation, other)? Indicate what hours noise would come from the site.

The completed project will not create noise.

Bulkhead removal will generate some noise due to the use of excavators, haulers, trucks and other construction equipment. This work is expected to take three weeks and will likely be limited to hours between 6:30 am and 7:30 pm concentrated in August and September. The project site is in a remote area where impacts of noise are expected to be minimal.

3) Proposed measures to reduce or control noise impacts, if any:

Use of heavy equipment to construct the project will be mostly limited to the hours between 6:30 am to 7:30 pm.

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

Dockton Beach Park is a twenty-three-acre King County park containing a pier, boat launch, picnic area, restrooms, swimming beach, and moorage, and hiking trails. The majority of the park and facilities are for day-use. The overnight moorage and the
facilities on the pier are currently closed for repair. Residential areas are northeast of the park. The project will not affect current land uses on nearby or adjacent properties.

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 project area is not a working farmland or working forest land and will not impact farmlands or forestland. Dockton Park is adjacent to Dockton Forest which includes 86 acres of working forestland natural area. The project will not impact this area.

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:

No, the project will not impact farm or forest operations.

c. Describe any structures on the site.

Dockton Park contains a picnic shelter, floating dock and pier. A bulkhead, that will remain, runs from the parking lot to the pier and the bulkhead proposed to be removed continues past the pier. On the pier are restrooms, a marine pumpout and the floating dock. These are closed due to deterioration and weather damage.

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

The bulkhead northeast of the pier will be removed.

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

The site is zoned RA-5.

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

RA (Rural Area).

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

Rural.

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

Critical areas in the project area include 100-year floodplain, erosion hazard, and landslide hazard.
i. Approximately how many people would reside or work in the completed project?
   None.

j. Approximately how many people would the completed project displace?
   None.

k. Proposed measures to avoid or reduce displacement impacts, if any:
   Not applicable.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
   The property is owned by King County and will not alter the existing or projected land uses.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:
   The project will not impact agriculture or forest lands.

9. Housing
   a. Approximately how many units would be provided, if any? Indicate whether high-, middle-, or low-income housing.
      None.

   b. Approximately how many units, if any, would be eliminated? Indicate whether high-, middle-, or low-income housing.
      None.

   c. Proposed measures to reduce or control housing impacts, if any:
      Not applicable.

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?
      The project will remove a bulkhead and create a natural shoreline that will be an aesthetic improvement. An approximately 25’ long section of riprap bulkhead return will be constructed landward of the existing bulkhead. The return will initially be at or below existing grade. As the hillslope retreats over time, the return may be exposed and occupy 20 feet along the shoreline, and be up to 6’ in height.

   b. What views in the immediate vicinity would be altered or obstructed?
      None.
c. Proposed measures to reduce or control aesthetic impacts, if any:
The project will enhance the aesthetics of the site by removing an existing bulkhead.

11. Light and Glare
a. What type of light or glare will the proposal produce? During what time of day would it mainly occur?
None.

b. Could light or glare from the finished project be a safety hazard or interfere with views?
No.

c. What existing off-site sources of light or glare may affect your proposal?
None.

d. Describe proposed measures to reduce or control light and glare impacts, if any.
None.

12. Recreation
a. What designated and informal recreational opportunities are in the immediate vicinity?
The site is within a developed King County park, which contains a playground, restrooms, a dock and a boat launching ramp. The site itself is used for informal recreational opportunities, such as bird watching and picnicking.

b. Would the proposed project displace any existing recreational uses? If so, describe.
The completed project will not displace any recreational uses. The existing bulkhead is used as an informal social trail. However, this is not an intended use nor is this a maintained park trail. The two-acre Dockton Park contains 0.75 mile of formal trails that connect to 9 miles of trails on King County Parks land.

A portion of the park will be closed to the public during construction, estimated to last 3 weeks. A public meeting and signs will inform the public of these temporary closures.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
The completed project will not displace any recreational uses.
13. **Historical 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.

   The bulkhead to be removed is a portion of Washington Department of Archaeology and Historic Preservation (DAHP) Site # 679109 Dockton Park Bulkhead. It has been determined not eligible for listing by DAHP and the King County Historic Preservation Program (KCHPP) concurs. No above ground action or mitigation is required by DAHP to remove it.

   Dockton Park is on the site of the historic Pankratz lumber mill (45-KI-1110) and pilings from the mill are less than 50 meters from the Project Area. These will not be impacted by the project.

   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.

   A prehistoric shell midden, Burke Museum reported site #1040, has been reported within the Project Area but this resource is not recorded within the DAHP database. Additionally, precontact shell midden 45-KI-783 is in or near the Project Area. This site is probably the same as Burke site 1040. As noted above, pilings associated with the historic Pankratz lumber mill (45-KI-1110) are adjacent to the project site.

   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.

   Several pre-project archaeological investigations have been completed in the project vicinity by professional archaeologists, and initial consultation with DAHP and affected tribes has been initiated. The project is subject to Section 106 of the National Historic Preservation Act with the Army Corps of Engineers being the lead agency for consultation.

   There have been two archaeological investigations in the project area, both for the current project. Environmental Science Associates (ESA) conducted a pedestrian reconnaissance survey and monitoring in 2015 (Lockwood and Hoyt 2015). Archaeologist Bryan Hoyt conducted a pedestrian reconnaissance, beachward of the bulkhead, and on the toe of slope inland of the bulkhead. Two pieces of fire modified rock (FMR) were observed on the beach north of the bulkhead and an additional piece of FMR was observed pile along the toe of slope above the bulkhead. The three pieces of FMR observed at the ground surface were not recorded as an archaeological site because they lacked context and possibly were non-cultural. No other precontact
cultural materials were noted. Hoyt conducted archaeological monitoring of five exploration test pits mechanically excavated along the landward side of the bulkhead, with depths reaching up to 7 feet (2.1 meters) below surface. No precontact cultural materials were noted.

King County Professional Archaeologist Philippe D. LeTourneau, PhD conducted a subsurface investigation and pedestrian reconnaissance survey in October 2019 (report in prep). He determined that precontact site 45KI783, previously mapped 40 m to the west, is present in the project area. More work is necessary to determine if the site is intact.

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.

WLRD will have a professional archaeologist determine if the archaeological deposits in the project area are intact and will evaluate the eligibility of the site for inclusion in the National Register of Historic Places. WLRD will then coordinate with USACE, DAHP, and the Affected Tribes to determine options for avoidance or mitigation as necessary. WLRD will also have an archaeological monitor on site to observe ground disturbing activities in areas that are not accessible for pre-construction survey. WLRD staff trained on recognizing culturally significant material will be present during construction.

14. Transportation
   a. Identify public streets and highways serving the site and describe proposed access to the existing street system. Show on-site plans, if any.

      Access to the site is from SW Dock Street into Dockton Park.

   b. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

      The nearest public bus stop is about 3,000 feet away on SW 264th Street at 99th Avenue SW.

   c. How many parking spaces would the completed project have? How many would the project eliminate?

      This project will neither add nor reduce available parking.

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

      No.
e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The project is located in a King County park with a boat ramp and dock and marina that are currently closed for repair and are not likely to open prior to bulkhead removal. Long term, the project will not impact 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?

None.

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

None

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

None.

15. Public Services

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

No.

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

None.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

Utilities may be shut down for a portion of the construction, but no permanent modification will result from the project.

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 that might be needed.

None.
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: _______________________

Title: Ecologist

Date Submitted: December 27, 2019
**Greenhouse Gas (GHG) Emissions Worksheet**

**Project Name:** Dockton Bulkhead Removal Project  
**Project Manager:** Jo Wilhelm  
**Assessment Completed by:** Paul Adler  
**Date of completion:** 9/27/2019

**Project Description:** Remove 215 feet of bulkhead from the Puget Sound shoreline in Dockton Park on Maury Island.

### Construction-related Greenhouse Gas Emissions

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<th>Emissions from fuel-burning activities (in CO2e):</th>
<th>Pounds</th>
<th>Metric tons</th>
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<table>
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<tr>
<th>Emissions from embedded materials (in CO2e):</th>
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<th>Emissions resulting from site impacts (in CO2e):</th>
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**Total Emissions (in CO2e):** 11967 5.42983

### Project-Related Carbon Sequestration

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**Years Required for Carbon Sequestration to Equal Total CO2e Emissions:** 21