CASCADE WATER ALLIANCE

SEPA Environmental Checklist for 2025 IAVMP

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 proposed project, if applicable:**
   Adoption and Implementation of the Lake Tapps Reservoir Integrated Aquatic Vegetation Management Plan.

2. **Name of applicant:**
   Paula Anderson
   Program Manager
   Cascade Water Alliance

3. **Address and phone number of applicant and contact person:**
   11400 SE 8th St, Suite 400 Bellevue,
   WA 98004
   panderson@cascadewater.org
   (425) 283-4294

4. **Date checklist prepared:**
   12/18/24

5. **Agency requesting checklist:**
   Cascade Water Alliance

6. **Proposed timing of schedule (including phasing, if applicable):**
   Adoption of the Integrated Aquatic Vegetation Management Plan is expected to occur at a future meeting of the Cascade Board of Directors. Plan implementation will occur in the form of annual spring/summer aquatic plant management activities over the next ten years (2025-2034) per the attached 2025 Lake Tapps Reservoir Integrated Aquatic Vegetation Management Plan (hereafter "Lake Tapps Reservoir IAVMP"). Precise timing of management activities shall be based on climatic conditions and the growth status of the target plant species (including *Myriophyllum spicatum*, Eurasian watermilfoil).

7. **Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**
   No additional Board action is anticipated in relation to the adoption of the Lake Tapps Reservoir IAVMP. The aquatic plant management program does not include construction or development of land along shoreline areas. This program shall use adaptive management based on monitoring results and only isolated treatment activities are anticipated per the Lake Tapps Reservoir IAVMP (see document for further details).

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

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.**
   N/A (not applicable)

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

- Cascade Board of Directors, future adoption of Lake Tapps Reservoir IAVMP.
- Aquatic Plant and Algae Management General Permit, Washington Department of Ecology (permit valid through March 2026)
- Bonney Lake Shoreline Exemption (current exemption valid through July 2028)
- Pierce County Shoreline Exemption. (current exemption valid through July 2028)
- WDFW HPA Permit (current exemption valid through July 2028)

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. (Lead agencies may modify this form to include additional specific information on project description.)**
    Once adopted by the Cascade Board of Directors, the aquatic plant management goal for the Lake Tapps Reservoir IVAMP is to is to provide for a long-term, adaptive management strategy for aquatic plants in the Lake Tapps Reservoir that is cost effective, ecologically sustainable and maintains reservoir water quality. The Plan calls for annual chemical treatment of milfoil with specific locations to be determined each year.

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.**
    Lake Tapps Reservoir is east of Tacoma, Washington, near the City of Bonney Lake and Auburn in north central Pierce County, Washington and in the northwestern portion of the Puyallup/White River Water Resource Inventory Area (WRIA) 10. On December 18, 2009, Lake Tapps Reservoir was acquired from Puget Sound Energy (PSE) by Cascade Water Alliance (Cascade). Further details, including map, are provided in the Lake Tapps Reservoir IAVMP.

B. Environmental Elements

1. Earth

a. **General description of the site:**
   Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other:
   Lake Tapps Reservoir is a lake.

b. **What is the steepest slope on the site (approximate percent slope)?**
   N/A (activities are in-lake and will not affect riparian and upland slopes)

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.** N/A

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

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.** N/A

f. **Could erosion occur because of clearing, construction, or use? If so, generally describe.** N/A

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

h. **Proposed measures to reduce or control erosion, or other impacts to the earth, if any.** N/A

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.** N/A

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

c. **Proposed measures to reduce or control emissions or other impacts to air, if any:** N/A

3. Water

a. Surface:

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.**
   Please see section "Lake Tapps Reservoir Characteristics" in the Lake Tapps IAVMP. The flow from Lake Tapps to the White River is a fraction of that in the river channel.

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.**
   Please see the Lake Tapps Reservoir IAVMP for more information on the annual milfoil treatment.

   Note: no construction or structural modifications are planned.

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.** N/A

4. **Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.** N/A

5. **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**
   Yes, the project is within the lake shoreline and no treatment activities will affect structural characteristics of the lake.

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.** N/A

b. Ground:

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 a general description, purpose, and approximate quantities if known.** N/A

2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (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.** N/A

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.** N/A

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

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

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

4. Plants

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

- ☐ **deciduous tree: alder, maple, aspen, other**
- ☐ **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**
- ☐ **other types of vegetation**

b. What kind and amount of vegetation will be removed or altered?
See the Lake Tapps Reservoir IAVMP; the plan is to control invasive aquatic plants, such as Eurasian watermilfoil.

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

None within the reservoir. For a complete area map, please see the Lake Tapps Reservoir IAVMP.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.
Natural reestablishment of native aquatic plants is anticipated after control of Eurasian watermilfoil.

e. List all noxious weeds and invasive species known to be on or near the site.
Eurasian watermilfoil is classified as a class B noxious weed under WAC 16750—11. Under RCW 17.10.140, the property owner shall perform or cause to be performed those acts as many be necessary to control and prevent the spread of all class B noxious weeds.

5. Animals

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

- **Birds: hawk, heron, eagle, songbirds, other:**
- **Mammals: deer, bear, elk, beaver, other:**
- **Fish: bass, salmon, trout, herring, shellfish, other:**

Cascade reviewed the 16 township sections that intersect the extent of the Lake Tapps Reservoir boundaries on the WDFW Priority Habitat Species ("PHS") mapping tool for priority habitat and species. Priority habitats identified within these sections included Freshwater Emergent Wetlands, Freshwater Forested/Shrub Wetland, Freshwater Pond, and Riverine priority habitat areas. Priority species identified include the Pileated Woodpecker, Dolly Varden/Bull Trout, Sockeye, Fall Chum, Bull Trout, Chum, Pink Salmon Odd Year, Winter Steelhead, Coho, Fall Chinook, Chinook, Pink, Spring Chinook, Steelhead, Resident Coastal Cutthroat, Cutthroat, and Western Toad species. None of these species are listed as endangered or threatened by the State of Washington. The Western Toad is listed as a candidate species.

The following species of fish have been observed in the Lake Tapps Reservoir: Common Carp, Largescale Sucker, Rock Bass, Smallmouth Bass, Tiger Musky, Yellow Perch, Black Crappie, Mountain Whitefish, Sculpin, Red-side Shiner, and Bluegill. The following birds have been observed in the vicinity of Lake Tapps: Barn Swallow, Violet-green Swallow, Tree Swallow, Osprey, Mallard, Common Crow, Belted Kingfisher, Canada Goose, Killdeer, various Gulls, and various sparrow.

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

Bald eagles are currently federally listed as sensitive (delisted from the federal list of threatened and endangered species in 2007). Bald eagles and their nests are protected by the federal Bald and Golden Eagle Protection Act, the Migratory Bird Treaty Act, and Pierce County title 18E, Development Regulations-Critical Areas. Lake Tapps is identified by WDFW as a PHS Breeding Area for this species and nests are known to be present.

USFWS does not expect this project would measurably disrupt bald eagle nesting in the Lake Tapps area (L. Wright email correspondence[1]). Although some of the work may occur within 660 ft of an active nest, USFWS expects that bald eagles nesting in the area are likely acclimated to the current level of human presence and associated sounds. Further, USFWS does not expect that the project would prevent them from feeding and/or adequately provisioning their young, nor that it would result in disturbance that would result in them abandoning their nesting attempt.

Osprey are currently listed as a state monitor species and protected under the Migratory Bird Treaty Act and Pierce County Title 18E. WDFW finds no impact of this project on nesting osprey on and around Lake Tapps (M. Tihri email correspondence[2]).

Regardless of these findings by the USFWS and WDFW regarding bald eagles and osprey, efforts will be made to not impact these species or their active nests.

A further review of the WDFW PHS mapping tool did not identify any other known threatened or endangered species on the site.

c. **Is the site part of a migration route? If so, explain.**
The Lake Tapps Reservoir is an artificial waterbody that is located close to several surrounding cities and is mostly fringed by a human altered landscape. Human access to the reservoir is readily available and disturbance from boating and other water-related activities is common. To some extent, the lake itself is utilized by migrating waterfowl despite only providing limited supporting habitat features such as shallow water marshes and undisturbed loafing areas. The reservoir is listed by WDFW as an area of PHS Waterfowl Concentration, suggesting importance to migration.

d. **Proposed measures to preserve or enhance wildlife, if any.**
The proposed milfoil control activities will be conducted in accordance with the Washington Department of Fish and Wildlife's Aquatic Plants and Fish pamphlet (publication #APF-198). A copy of this pamphlet will be kept onsite during treatment activities.

An intended outcome of this project is to improve habitat for fish species, which should likewise improve habitat conditions for piscivorous predators such as the bald eagle and osprey. No additional preservation or enhancement measures are proposed.

e. **List any invasive animal species known to be on or near the site.**
Asian clam (*Corbicula fluminea*) is found in scattered populations in Lake Tapps.

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.** N/A

[1] Wright, Lindsy. United States Fish and Wildlife Service, Lacey, WA.

[2] Tihri, Michelle. Washington Department of Fish and Wildlife, Lakewood, WA.

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

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.** N/A

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 because of this proposal? If so, describe.**

Federally- and state-approved aquatic herbicides will be applied by a licensed applicator according to herbicide label specifications.

1. **Describe any known or possible contamination at the site from present or past uses.**
   None known

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.** N/A

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.**
   Federally- and state-approved aquatic herbicides will be applied by a licensed applicator according to herbicide label specifications.

4. **Describe special emergency services that might be required.**
   None anticipated; however, the licensed applicator will provide necessary PPE during application, as required by the herbicide label.

5. **Proposed measures to reduce or control environmental health hazards, if any.** None anticipated; however, the licensed applicator will provide necessary PPE during application, as required by the herbicide label.

b. Noise

1. **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?** N/A

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)?** N/A

3. **Proposed measures to reduce or control noise impacts, if any:** N/A

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.**

Residential and recreational, along with one commercial property. The proposal will not impact current land uses.

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 because 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?** No

    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

c. **Describe any structures on the site.**
N/A; the site is a reservoir (in-reservoir structures include docks)

d. **Will any structures be demolished? If so, what?** No

e. **What is the current zoning classification of the site?**
Zoning of the reservoir is Rural 10 (“R10”) per Pierce County zoning maps.

f. **What is the current comprehensive plan designation of the site?**
Water supply and recreation

g. **If applicable, what is the current shoreline master program designation of the site?** The Lake Tapps Reservoir is subject to the shoreline master programs of two different jurisdictions; designated “Aquatic” by Pierce County Shoreline Master Program and “Aquatic Environment” by City of Bonney Lake Shoreline Master Program

h. **Has any part of the site been classified as a critical area by the city or county? If so, specify.** No

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.** N/A

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

m. **Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:** N/A

9. Housing

a. **Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.** N/A

b. **Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.** N/A

c. **Proposed measures to reduce or control housing impacts, if any:** N/A

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?** N/A

b. **What views in the immediate vicinity would be altered or obstructed?** N/A

c. **Proposed measures to reduce or control aesthetic impacts, if any:** N/A

11. Light and glare

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

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

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

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

12. Recreation

a. **What designated and informal recreational opportunities are in the immediate vicinity?**
Water contact, boating, and recreational fishing

b. **Would the proposed project displace any existing recreational uses? If so, describe.**
The project is anticipated to enhance recreational uses by reducing the density of Eurasian watermilfoil.

c. **Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:**
Any control measure will not limit recreational activities beyond the day of treatment.

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.** N/A

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.** N/A

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.** N/A

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.** N/A

14. Transportation

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

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?** N/A

c. **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).** N/A

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

e. **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?** N/A

f. **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.** N/A

g. **Proposed measures to reduce or control transportation impacts, if any:** N/A

15. Public services

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

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

16. Utilities

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

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.** N/A

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.

Type name of signee: Paula Anderson

Position and agency/organization: Program Manager, Cascade Water Alliance

Date submitted: 12/18/2024

D. Supplemental sheet for nonproject actions

Do not use this section for project actions.

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

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?** N/A

    - **Proposed measures to avoid or reduce such increases are:** N/A

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

    - **Proposed measures to protect or conserve plants, animals, fish, or marine life are:** N/A

3. **How would the proposal be likely to deplete energy or natural resources?** N/A

    - **Proposed measures to protect or conserve energy and natural resources are:** N/A

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?** N/A

    - **Proposed measures to protect such resources or to avoid or reduce impacts are:** N/A

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?** N/A

    - **Proposed measures to avoid or reduce shoreline and land use impacts are:** N/A

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

    - **Proposed measures to reduce or respond to such demand(s) are:** N/A

7. **Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.** None known