

WAC 197-11-960 Environmental checklist.

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

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.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Amphibian and other water quality monitoring in Washington

2. Name of applicant: Aimee McIntyre, Wildlife Biologist, Science Division, Habitat Program

3. Address and phone number of applicant and contact person:

Washington Department of Fish and Wildlife

600 Capitol Way N, Habitat Program, Mailstop 43143

Olympia WA 98501-1091

(360) 902-2560

Aimee.McIntyre@dfw.wa.gov

4. Date checklist prepared: 5 November 2012

5. Agency requesting checklist: Washington Department of Fish and Wildlife

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

Timing of sampling is generally April through October, but limited sampling may occur outside of this window.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

There is the potential that we may expand sampling to include forested lands in eastern Washington (east of the Cascade crest).

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

Research culminates in written reports and/or publications in peer-reviewed journals, as well as public presentations at scientific conferences and other public venues. Research is conducted to inform current forest practices rules and regulations and/or policies in Washington State.

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.

These lands are timber lands actively managed for timber production, so in the general area, there are likely Forest Project Approvals for land maintenance and timber harvest activities, to name a few. In the study sites that we currently have, I am not aware of any pending government approvals. Once the SEPA and DNS have been granted and approved, we will be applying for an HPA to cover instream sampling.

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

We will be applying for an HPA to cover proposed instream sampling. We previously had an HPA (and a SEPA and DNS). The SEPA and DNS were granted in January 2007. A prior HPA was # 110496-1 that expired in October 2011.

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.)

General amphibian and water quality sampling conducted on forestlands throughout Washington State. At this time research is focused on western Washington (west of the Cascade crest) in headwater streams (generally orders 1 through 3), including both fish-bearing and non-fish-bearing waters on lands managed for timber production, including state (DNR), federal, and private. This research addresses amphibian and water quality sampling methods, the most stream disturbing of which involves removal and replacement of streambed materials (cobble, debris, large woody debris, sand, gravel) from randomly selected units (generally ranging in total length from 1-3 m of consecutive streambed). This method is conducted during the hydrologic low flow period. Another sampling method requires surveyors to walk in or along the stream channel turning only the surface layer of moveable cover objects in search of amphibians. Cover objects are returned to their original position. These methods are being used to quantify stream-associated amphibian presence and abundance, woody debris loading, and/or water quality as part of research studies designed to assess the effectiveness of Forests and Fish rules in protecting resources on managed landscapes in Washington State, or to inform other regulations and/or policies. Permanent monitoring stations may be installed at some sites. This may include installation of rebar for the purpose of holding periphyton tiles in water in order to quantify primary productivity through *chlorophyll a* and ash free dry mass analyses (approx. 8 rebars per stream). It may also include rebar installation along the valley wall (outside of the ordinary high water width) for permanent photo points. As these research studies are designed to evaluate the effectiveness of timber management regulations on managed forestlands, we make every attempt to minimize instream and site disturbance so that our research results are not confounded by study design (i.e., sampling methods). Our experience with the proposed sampling methods indicates that sampling activities result in minimal impacts to water quality. If a decline in water quality were observed (or measured) in association with our activities we would cease all sampling at all sites until the cause could be identified and addressed.

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.

We propose the described activities currently for headwater (typically 1st-3rd order) streams located on managed forestlands on state, federal and private ownerships in western Washington. Future funding may be obtained for like research in eastern Washington.

B. ENVIRONMENTAL ELEMENTS

1. Earth

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

Steep slopes, upland streams

b. **What is the steepest slope on the site (approximate percent slope)?** The average stream slope for our currently sampled stream locations ranges from 14 to 34% (8 to 19 degrees). Side slopes may be steeper. I would anticipate the range of slope conditions to be similar for any added sites.

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.**

Various. Currently competent geologies with large clast size substrates (cobble, boulder, with sand), however, may be expanded to include incompetent geologies including fines.

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

Generally, none. However, one current site has a history of slumping and overland movement of soils. For this current site, we placed our study area in a location that is one of the most stable in the vicinity. In the future, streams may be located in areas adjacent to unstable slopes, but again, since our research involves evaluation of the effectiveness of current forest practices, we make every attempt to minimize sampling impacts. Sampling would not be expected to impact side slope stability.

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

No filling or grading is involved.

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

Surveyors are required to walk or climb up and down valley walls, which could result in negligible soil erosion. In an effort to control for this we will keep sampling visits and the number of entry paths to a site to a minimum.

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

None. Does not apply.

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

Samplers will access sites in as few places as possible to minimize erosion of stream valley walls. In some places, trails will be installed in order to control for erosion. Number of visits to a site will be minimized.

2. Air

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

Vehicles are used to enter logging roads adjacent to headwater streams. Surveyors enter stream sites on foot.

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

No. Does not apply

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

None. Does not apply

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.**

Headwater streams (perennial and seasonal) and seeps located throughout Washington.

- 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.**

Amphibian surveys, and water quality and woody debris sampling will be conducted in stream channels and seeps. Rebar may be installed instream to secure sampling equipment.

- 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.**

Existing coarse material (cobble, gravel, boulders and woody debris) will be removed from small sections (1-3 m) of stream. Removed substrates will be returned to the stream channel once removal and sampling are completed. No offsite materials will be introduced into the system.

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

No. Does not apply.

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

Current site locations are well outside of the typical 100-year floodplain associated with larger rivers. The sites do experience seasonal fluctuations in water level but are not included in those typically included in the definition of floodplain. I suppose there exists some chance that a future desired site location could fall within the 100-year floodplain, I would think it would be unlikely.

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.

None. Does not apply.

b. Ground:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

No. Does not apply.

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. Does not apply.

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.

None. Does not apply

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

No. Does not apply

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

None. Does not apply

4. Plants

a. Check or circle 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
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

Sites include forested stands in Washington State. Coniferous trees including Douglas fir, Pacific silver fir, western hemlock, and western red cedar among others dominate upland areas. Deciduous trees including red alder and maple often dominate riparian areas along streams. Presence of shrubs varies among sites. Often, riparian areas include vine maple, willow species, and Devil's club. Forest understory for some sites is sparse, while at other sites may be densely covered with species including salal and huckleberry. Herbaceous cover varies among sites, but often includes ferns (e.g., sword fern and maidenhair fern), buttercup, and skunk cabbage. Various grasses, lichens and mosses are also present at most sites.

b. What kind and amount of vegetation will be removed or altered?

Vegetation may be disturbed as surveyors walk adjacent to or in the stream channel. Branches may be removed from shrubs and/or trees while making access trails, but plants will never be purposely removed in their entirety.

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

No threatened or endangered plant species have been observed at current sites, but extensive plant surveys have not been conducted.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

None. Does not apply.

5. Animals

a. **Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:**

birds: hawk, heron, eagle, songbirds, other: **all apply** sites are dispersed throughout Washington and it is possible that most species could occur in, or at least pass through or near, at least one sampled stream.

mammals: deer, bear, elk, beaver, other: **all apply** sites are dispersed throughout Washington and it is possible that most species could occur in, or at least pass through or near, at least one sampled stream.

fish: bass, salmon, trout, herring, shellfish, other: generally sampling is restricted to headwater streams, so species encountered include trout, salmon, and sculpin (no bass, herring, or shellfish).

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

Northern spotted owl has been observed in the vicinity of some current site location, but never within. Marbled murrelet may be a likely candidate, but no sightings in or near current site locations. Our activities would not be anticipated to interfere with any threatened or endangered species.

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

Forested areas are typically included in some bird migration routes, and are frequently used as corridors by ungulates such as elk and deer, and other large species (potentially bear, etc.).

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

Research will inform current Forest Practices rules and or policies or management in Washington State, including buffer length and configuration for non-fish-bearing streams.

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.**

None. Does not apply.

b. **Would your project affect the potential use of solar energy by adjacent properties?**

If so, generally describe.

No. Does not apply.

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:

None. Does not apply.

7. Environmental health

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

No. Does not apply.

1) **Describe special emergency services that might be required.**

None.

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

None. Does not apply.

b. Noise

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

None. Does not apply.

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.**

Vehicles use to study sites (generally one or two vehicles for several days a year).

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

None. Does not apply.

8. Land and shoreline use

a. **What is the current use of the site and adjacent properties?**

Private timber harvest or public lands (both State and Federal), including recreational opportunities (e.g., hunting) in the area.

b. **Has the site been used for agriculture? If so, describe.**

No. Does not apply.

c. **Describe any structures on the site.**

None. Does not apply.

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

No. Does not apply.

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

Forestlands

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

Rural areas

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

None. Does not apply.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No. Does not apply.

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

None. Does not apply.

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

None. Does not apply.

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

None. Does not apply.

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

Permission to conduct research at all sites (private, State and Federal lands) has been granted. Landowners are cooperative partners in research.

9. Housing

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

None. Does not apply.

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

None. Does not apply.

c. Proposed measures to reduce or control housing impacts, if any:

None. Does not apply.

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?**

Does not apply.

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

None. Does not apply.

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

None. Does not apply.

11. **Light and glare**

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

None. Does not apply.

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

No. Does not apply.

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

No. Does not apply.

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

None. Does not apply.

12. **Recreation**

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

Depending on landowner, activities like hiking, biking, hunting, ATV riding, etc. Any recreational activities that are allowed by the landowner to the general public.

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

No. Does not apply.

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

None. Does not apply.

13. Historic and cultural preservation

- a. **Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.**

None known.

- b. **Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.**

None known.

- c. **Proposed measures to reduce or control impacts, if any:**

None. Does not apply.

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.**

Does not apply.

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

No. Does not apply.

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

None. Does not apply.

- 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. Does not apply.

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

No. Does not apply.

- f. **How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

The only reason for vehicular traffic to study sites for the purpose of the project would be by us. Sites are not visited on a daily basis. Several people will access each site on multiple occasions throughout the year (generally April – October).

- g. **Proposed measures to reduce or control transportation impacts, if any:**

None. Does not apply.

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. Does not apply.

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

None. Does not apply.

16. Utilities

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

None. Does not apply.

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.

None. Does not apply.

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: Amiel M. Lopez

Date Submitted: 26 NOV 12

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(do not use this sheet 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?

Proposed measures to avoid or reduce such increases are:

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

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

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

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

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?

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

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?

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

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

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

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