

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 proposal, if applicable: **WDFW WIND POWER GUIDELINES 2009**
2. Name of proposer: **Washington Department of Fish and Wildlife (WDFW)**
3. Address and phone number of applicant and contact person: **600 Capitol Way North - Olympia, WA 98501-1091 / 360-902-2390 (Travis Nelson)**
4. Date checklist prepared: **February 26th, 2009**
5. Agency requesting checklist: **WDFW**
6. Proposed timing or schedule (including phasing, if applicable): **Does not apply**
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal?
If yes, explain. **The WDFW Wind Power Guidelines 2009 will be reviewed and updated as needed after five years.**

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

Anderson, R.L., M.L. Morrison, K. Sinclair, M.D. Strickland. 1999. *Studying wind energy/bird interactions: a guidance document*. National Wind Coordinating Committee Avian Subcommittee.

Clean Energy Group. 2007. *Summary of the National Research Council Report on Environmental Impacts of Wind-Energy Projects*. Memo from Mark Sinclair, Clean Energy Group, to Clean States Alliance Members.

Government Accountability Office [GAO]. 2005. *Wind power: impacts on wildlife and government responsibilities for regulating development and protecting wildlife*. U.S. Government Accountability Office 05-9006, Washington, D.C., USA.

Johnson, D.H. and T.A. O'Neil, eds. 2001. *Wildlife-habitat relationships in Oregon and Washington*. Oregon State University Press, Corvallis, OR.

Morrison, M.L., W.M. Block, M.D. Strickland, and W.L. Kendall. 2001. *Wildlife study design*. Springer-Verlag New York, Inc., New York, NY. 210 pp.

The National Academies. 2007. *Environmental Impacts of Wind Energy Projects*

Schroeder, Michael A., Derek Stinson, and Michelle Tirhi. 2004. Sage grouse (*Centrocercus urophasianus*). In E. M. Larsen, J. M. Azerrad, and N. Nordstrom, editors. *Management Recommendations for Washington's Priority Species, Volume IV: Birds*. http://wdfw.wa.gov/hab/phs/vol4/sage_grouse.pdf

Washington Department of Fish and Wildlife. 2005. *Washington's Comprehensive Wildlife Conservation Strategy*. 780pp. <http://wdfw.wa.gov/wlm/cwcs/cwcs.htm>

Washington Department of Fish and Wildlife. 2008. *Priority Habitat and Species List*. Olympia, Washington. 172 pp. http://wdfw.wa.gov/hab/phs/phs_list_2008.pdf

Good references for designing survey protocols are the National Wind Coordinating Collaborative Guidance Documents (www.nationalwind.org), listed below. Please note that these documents undergo frequent revisions.

Anderson et al. 1999. *Studying Wind Energy/Bird Interactions: A Guidance Document on Metrics and Methods for Determining or Monitoring Potential Impacts On Birds At Existing And Proposed Wind Energy Sites*.

National Wind Coordinating Committee

http://www.nationalwind.org/publications/wildlife/avian99/Avian_booklet.pdf

Anderson et al. 2003. *The Proper Use of "Studying Wind Energy/Bird Interactions: A Guidance Document"* (addendum to the 1999 document). National Wind Coordinating Committee. http://www.nationalwind.org/publications/proper-use_mm.pdf

Kunz et al. 2007. *Assessing Impacts of Wind Energy Development on Nocturnally Active Birds and Bats: A Guidance Document*. National Wind Coordinating Committee. http://www.nationalwind.org/pdf/Nocturnal_MM_Final-JWM.pdf

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 guidelines are intended to provide permitting agencies and wind project developers with certainty of what considerations are made by WDFW in the review of wind energy project proposals.**

10. List any government approvals or permits that will be needed for your proposal, if known. **This WDFW Wind Power Guidelines document is intended to provide guidance in the issuance of County Conditional Use Permits and State Energy Facility Site Evaluation Council (EFSEC) site certifications.**

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.) **WDFW has developed guidance for wind power developers and permitting authorities to avoid, minimize and mitigate impacts to fish and wildlife resources as these relate to the development of wind derived energy facilities in Washington State. The guidelines are divided**

into six chapters; Baseline and Monitoring Studies, Minimization of Wildlife Impacts, Operational Monitoring, Research Oriented Studies, Habitat Mitigation, and Habitat Types. WDFW Wind Power Guidelines is a non-regulatory document focused upon habitat protection for wildlife; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.

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

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the *affected geographic area* (circle one): Flat, rolling, hilly, steep slopes, mountainous, other
All land types found in Washington State

b. What is the steepest slope on the *affected geographic area* (approximate percent slope)? **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

c. What general types of soils are found on the *affected geographic area* (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. **Does not apply**

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill. **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

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

Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.

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

Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.

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. **Does not apply as no emissions are generated from the regular operations of wind turbines**

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. **Does not apply**
- c. Proposed measures to reduce or control emissions or other impacts to air, if any: **Does not apply**

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the *affected geographic area* (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.

Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.

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. **Does not apply specifically to land use regulations ; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

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. **Does not apply**

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. **Does not apply**

5) Does the proposal lie within a 100-year floodplain? If so, note location on the *affected geographic area* plan. **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

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. **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. **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. **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. **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

2) Could waste materials enter ground or surface waters? If so, generally describe. **Does not apply**

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any: **Does not apply**

4. Plants

a. Check or circle types of vegetation found in *affected geographic area*:

- 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

b. What kind and amount of vegetation will be removed or altered? **Does not apply**

c. List threatened or endangered species known to be on or near the *affected geographic area*. **All T&E species found in Washington**

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

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 *affected geographic area*:

birds: hawk, heron, eagle, songbirds, other: All birds and bats found in Washington
mammals: deer, bear, elk, beaver, other: All mammals found in Washington
fish: bass, salmon, trout, herring, shellfish, other: All fish found in Washington

b. List any threatened or endangered species known to be on or near the *affected geographic area*. **All T&E species found in Washington.**

c. Is the site part of a migration route? If so, explain. **Migration routes through Washington may be associated with wind power development. It is the intent of the WDFW WIND POWER GUIDELINES 2009 to provide alternatives the result in avoidance and minimization of impacts to terrestrial and aquatic species.**

d. Proposed measures to preserve or enhance wildlife, if any: **The WDFW WIND POWER GUIDELINES 2009 provides conservation alternatives that result in avoidance and minimization of impacts to terrestrial and aquatic species.**

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. **Does not apply**

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

- 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: **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. **The WDFW WIND POWER GUIDELINES recommend fire protection plans for every wind derived energy facility.**

- 1) Describe special emergency services that might be required. **Does not apply**
- 2) Proposed measures to reduce or control environmental health hazards, if any: **The WDFW WIND POWER GUIDELINES 2009 provides conservation alternatives that result in avoidance and minimization of impacts to terrestrial and aquatic species.**

b. Noise

- 1) What types of noise exist in the area which may affect your proposal (for example: traffic, equipment, operation, other)? **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**
- 2) What types and levels of noise would be created by or associated with the proposal on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the *affected geographic area*. **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**
- 3) Proposed measures to reduce or control noise impacts, if any: **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

8. Land and shoreline use

- a. What is the current use of the *affected geographic area* and adjacent properties?

Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.

- b. Has the site been used for agriculture? If so, describe. **Does not apply**
- c. Describe any structures on the site. **Does not apply**
- d. Will any structures be demolished? If so, what? **Does not apply**
- e. What is the current zoning classification of the site? **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**
- f. What is the current comprehensive plan designation of the *affected geographic area*? **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

g. If applicable, what is the current shoreline master program designation of the site? **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

h. Has any part of the *affected geographic area* been classified as an "environmentally sensitive" area? If so, specify. **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

i. Approximately how many people would reside or work in the completed proposal? **Does not apply**

j. Approximately how many people would the completed project displace? **Does not apply**

k. Proposed measures to avoid or reduce displacement impacts, if any: **The WDFW WIND POWER GUIDELINES 2009 provides conservation alternatives that result in avoidance and minimization of impacts to terrestrial and aquatic species.**

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: **The WDFW WIND POWER GUIDELINES 2009 provides conservation alternatives that result in avoidance and minimization of impacts to terrestrial and aquatic species.**

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. **Does not apply**

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. **Does not apply**

c. Proposed measures to reduce or control housing impacts, if any: **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 specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

b. What views in the immediate vicinity would be altered or obstructed? **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

c. Proposed measures to reduce or control aesthetic impacts, if any: **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur? **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

b. Could light or glare from the finished project be a safety hazard or interfere with views? **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

c. What existing off-site sources of light or glare may affect your proposal? **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

d. Proposed measures to reduce or control light and glare impacts, if any: **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity? **Does not apply**

b. Would the proposal displace any existing recreational uses? If so, describe. **Does not apply. The WDFW WIND POWER GUIDELINES 2009 provides conservation alternatives that result in avoidance and minimization of impacts to terrestrial and aquatic species.**

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the proposal or proposer, if any: **Does not apply. The WDFW WIND POWER GUIDELINES 2009 provides conservation alternatives that result in avoidance and minimization of impacts to terrestrial and aquatic species.**

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 *affected geographic area*? If so, generally describe. **The WDFW WIND POWER GUIDELINES 2009 provides conservation alternatives that result in avoidance and minimization of impacts to terrestrial and aquatic species.**

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the *affected geographic area*. **The WDFW WIND POWER GUIDELINES 2009 provides conservation alternatives that result in avoidance and minimization of impacts to terrestrial and aquatic species.**

c. Proposed measures to reduce or control impacts, if any: **The WDFW WIND POWER GUIDELINES 2009 provides conservation alternatives that result in avoidance and minimization of impacts to terrestrial and aquatic species.**

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? **Does not apply**

c. How many parking spaces would the completed project have? How many would the project eliminate? **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). **The WDFW WIND POWER GUIDELINES 2009 provides conservation alternatives that result in avoidance and minimization of impacts to terrestrial and aquatic species.**

e. Will the proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. **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. **Does not apply**

g. Proposed measures to reduce or control transportation impacts, if any: **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. **Does not apply**

b. Proposed measures to reduce or control direct impacts on public services, if any. **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. **Does not apply**

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

Date Submitted: February 26th, 2009

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? **Does not apply**

Proposed measures to avoid or reduce such increases are:

2. How would the proposal be likely to affect plants, animals, fish, or marine life? **The WDFW WIND POWER GUIDELINES 2009 provides conservation alternatives that result in avoidance and minimization of impacts to terrestrial and aquatic species.**

Proposed measures to protect or conserve plants, animals, fish, or marine life are: **See Chapter 2 Minimization of Wildlife Impacts and Chapter 5 Habitat Mitigation for specific protection measures for fish and wildlife.**

3. How would the proposal be likely to deplete energy or natural resources? **The WDFW WIND POWER GUIDELINES 2009 provides conservation alternatives that result in avoidance and minimization of impacts to terrestrial and aquatic species.**

Proposed measures to protect or conserve energy and natural resources are: **See Chapter 2 Minimization of Wildlife Impacts and Chapter 5 Habitat Mitigation for specific protection measures for fish and wildlife.**

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?

The WDFW WIND POWER GUIDELINES 2009 provides conservation alternatives that result in avoidance and minimization of impacts to terrestrial and aquatic species.

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

The WDFW WIND POWER GUIDELINES 2009 provides conservation alternatives that result in avoidance and minimization of impacts to terrestrial and aquatic species.

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? **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**

Proposed measures to avoid or reduce shoreline and land use impacts are: **See Chapter 2 Minimization of Wildlife Impacts and Chapter 5 Habitat Mitigation for specific protection measures for fish and wildlife.**

6. How would the proposal be likely to increase demands on transportation or public services and utilities? **Does not apply**

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. **Does not apply specifically to land use regulations; therefore land use decisions and other requirements are determined by entities with jurisdictional authority related to the development of land-based wind facilities.**