

RCW 197-11-960 Environmental Checklist

FERNDALE WATER SYSTEM PLAN

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 on 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.

City of Ferndale Water System Plan, including recommendations for new facilities, including a storage reservoir, booster pump stations and various water main upgrades/additions.

2. Name of applicant:

City of Ferndale Public Works Department

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

City of Ferndale

P.O. Box 936

Ferndale, Washington 98248

Phone: (360) 384-4006

Attn: Bob Cecile, Public Works Director

4. Date checklist prepared:

December 2006.

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5. Agency requesting checklist:

City of Ferndale Department of Public Works.

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

The Water System Plan is anticipated to be submitted to the Washington State Department of Health in December of 2006. Approval should occur in April or May of 2007. Improvements to the Water System, as recommended in the plan, will begin within 6 months of said approval.

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

This Water System Plan is submitted in accordance with WAC 246-290 and is scheduled to be updated each time the water system plans substantial expansion/ renovation or every six (6) years, whichever time period is shorter. Actual improvements detailed or recommended in the plan will be the subject of future environmental checklists as necessary.

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

None known.

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.

None known

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

It is anticipated that the following governmental approvals will be required for the adoption of this comprehensive water plan:

Washington State Department of Health

Review and approval of the Water System Plan.

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Whatcom County

Review and approval of the Water System Plan.

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.)

This updated Water System Plan for City of Ferndale's Water System has been prepared in accordance with the Washington State Department of Health guidelines as presented in WAC 246-290. The purpose of this plan is to provide a comprehensive overview of the existing water system facilities currently operated and maintained by the City, project growth in accordance with the City's Comprehensive Plan, project future water use, plan for extending water service into newly developed areas and improve existing deficient facilities. The plan covers the following topics:

- X *system owner/operator information*
- X *growth projections and water use projections*
- X *description of existing and proposed water system facilities*
- X *description of existing and future distribution facilities and requirements*
- X *discussion of standards, operation and maintenance*
- X *discussion of present and future development alternatives impacting the City*

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.

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This Water System Plan covers all water facilities owned and operated by the City of Ferndale Public Works Department (City). The City serves the area generally described as north of Slater Road, east of Olson Road, west of Northwest Road, and south of Grandview Road.

B. ENVIRONMENTAL ELEMENTS

1. Earth

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

The topography in Ferndale's Service Area varies from flat and rolling land with hills, gullies and a few steep slopes.

- b. What is the steepest slope on the site (approximate percent slope)?**

25%

- 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 soils in the Service Area are generally classified as silt loams and sandy loams, with some clay (Source: Soil Survey of Whatcom County Area, Washington. U.S.D.A., Soil Conservation Service, issued May 1992). Some existing farmland and forest land is within the City's Service (Urban Growth) Area.

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

None known.

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

Does not apply

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

Does not apply

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

Does not apply

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

Does not apply

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.

Does not apply

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

No.

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

None.

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.**

The City's Service Area is divided by the Nooksack River. This river flows southwest toward Bellingham Bay. Other water bodies are Schell Creek, Schell Ditch, and Whiskey Creek.

- 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.**

The City operates, maintains, repairs, and extends its system, some portions of which lie in the above shorelines..

- 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.**

None.

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

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The City's water supply comes from the Nooksack River. Withdrawals are made by PUD No. 1 and pumped to the City for treatment and distribution. A contract between the City and the PUD allows for a maximum of 4.5 million gallons per day to be withdrawn.

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

Low areas of the City along the Nooksack River are within the 100 year floodplain. These areas are generally zoned as Floodway and are shown on the Zoning Map in Chapter 1 of the Water System Plan.

- 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.

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.

The City has Water Wells that are currently used only for emergency purposes. The wells and their use are described in the Water System Plan.

- 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

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expected to serve.

Does not apply

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.

Does not apply.

- 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:**

None.

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

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

None.

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

There are no known threatened or endangered plant species in the areas covered by this comprehensive water plan. A list of known threatened plant species can be found in Rare Plants and Wetlands in Bellingham and Whatcom County. This document is available at the Whatcom County Planning Department.

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

None.

5. Animals

- a. Circle (or underline) 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

mammals: deer, bear, elk, beaver, other

fish: bass, salmon, trout, herring, shellfish (possibly), other

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

Bald eagles may habitat the areas covered by this plan, but; no specific locations are known. Salmon and bull trout may be found in the Nooksack River. There are no other known threatened endangered animal species in areas covered by this comprehensive water plan. A list of endangered and threatened species can be found in Significant Wildlife Areas in Whatcom County. This document is available at the County Planning Department.

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

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The area is part of the Pacific Flyway bird migration route. Geese, swans and other waterfowl winter in the area.

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

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.**

Electricity is used to power water pumps and water treatment plant equipment.

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:**

Energy saving variable frequency drive pumps are recommended for some of the pumping facilities. Water conservation methods are recommended by the plan, which will result in energy conservation.

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.

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1) Describe special emergency services that might be required.

None.

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

None.

b. Noise

1) What types of noise exist in the area which 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 a long term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

None.

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

None.

8. Land and Shoreline Use

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

The City's water system covered by this plan services residential, commercial and industrial areas.

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

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Areas of the current City were agricultural. Other undeveloped areas within the Urban Growth Areas are agricultural.

c. Describe any structures on the site.

The existing city is comprised of various residential, commercial, institutional and industrial structures.

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

No existing structures will be demolished as a result of this plan.

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

Current zoning designations for the area covered by this plan are: Central Business District, Floodway, General Commercial, Highway Commercial, Light Industrial, Manufacturing, and Residential.

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

Zoning is in conformance with the City's Comprehensive Plan.

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

There are shorelines within the Ferndale Water Service Area. The City's Shoreline Master Program and maps are available at the City Planning Department.

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

There are shorelines and wetlands within the Ferndale Water Service Area.

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

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Population served by the City's water system is estimated to increase from slightly over 10,000 current residents to slightly under 20,000 within the next 20 year period. These populations are based upon the City's growth projections.

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

k. Proposed measures to avoid or reduce displacement impacts, if any:
None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
This Water System Plan was developed from existing City of Ferndale's land use plans.

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.
None.

c. Proposed measures to reduce or control housing impacts, if any:
None.

10. Aesthetics

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- 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.

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

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.

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

Does not apply

12. Recreation

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

Designated Recreational Opportunities: City parks.

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Informal Recreational Opportunities: Because of the rivers and streams in the area covered by this comprehensive water plan and the undeveloped nature of most of the surrounding landscape, the following are some of the informal recreational opportunities available in the area; biking, hiking, boating, fishing, and nature watching.

There is no anticipated impact to the above outlined recreational activities as a result of this proposal.

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

No.

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

None.

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.

Does not apply.

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

Does not apply

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

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None

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?

Yes. Whatcom Transit Authority provides bus service within the City of Ferndale.

- 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).

No.

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

No

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

None.

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

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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.**

Does not apply

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

None.

16. Utilities

- a. **Circle (or underline) utilities currently available at the site:** electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

- 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.**

Electricity is supplied by Puget Sound Energy.

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: *Carl F. Reichhardt*

Carl F. Reichhardt, P.E.

Date Submitted: December 12, 2006

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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?**

The proposed Water System Plan outlines future plans by the City for improvements to the current water system as well as the construction of new facilities such as transmission lines, pumping stations, and storage tanks. Improvement and expansion of the City's Water System is required to support planned growth. Discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise may occur as a result of such growth, but not directly as a result of this project.

Proposed measures to avoid or reduce such increases are:

During the final planning stage for each proposed construction project, the City will develop plans specially tailored to each project to minimize the disruptive effects the construction will have on the surrounding area.

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

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The proposed Water System Plan outlines future plans by the City for improvements to the current water system as well as the construction of new facilities such as transmission lines, pumping stations, and storage tanks. Improvement and expansion of the City's Water System is required to support planned growth. Plants, animals, fish or marine life may be affected as a result of such growth, but not directly as a result of this project.

Proposed measures to avoid or reduce such effects are:

During the final planning stage for each proposed construction project, the City will develop plans specially tailored to each project to minimize the disruptive effects the construction will have on the surrounding area.

3. **How would the proposal be likely to deplete energy or natural resources?**
No depletion of energy or natural resources is anticipated by the approval of this proposal. Improvement and expansion of the City's Water System is required to support planned growth. Depletion of energy or natural resources may occur as a result of growth, but not directly as a result of this project.
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, floodplain, or prime farmlands?**

The proposed Water System Plan outlines future plans by the City for improvements to the current water system as well as the construction of new facilities such as transmission lines, pumping stations, and storage tanks. Improvement and expansion of the City's Water System is required to support planned growth. Environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness,

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wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplain, or prime farmlands maybe affected as a result of such growth, but not directly as a result of this project.

In addition, adoption of this proposal does not waive the requirement for the City to evaluate each new renovation or construction project for excessive adverse impacts to environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection.

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?**

This proposal seeks to establish a detailed comprehensive water plan for the existing water facilities owned and operated by the City. Currently the City provides water service in a manner compatible with existing land use plans. Any future renovations and/or new construction outlined in this proposal would provide service only to zoned land uses within Ferndale or to zoned land uses outside Ferndale but within the City's Urban Growth Areas.

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

Careful evaluation of project-specific proposals and final construction plans which will incorporate mitigation measures if necessary.

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

Population increases, which increase demands on transportation and public services, will occur as growth proceeds in accordance with the City's

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comprehensive plan, zoning and building regulations. The water system is one of the services that will have increased demands placed on it because of growth. Improving the Water System itself will not cause increased demands on transportation and public services.

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

No conflicts with local, state, or federal laws or requirements for the protection of the environment are anticipated with the approval of this proposal.