



**DETERMINATION OF NONSIGNIFICANCE**

Description of proposal: Adoption of the Cascade Water Alliance Transmission and Supply Plan. It is an update to the 2004 Cascade Transmission and Supply Plan and establishes Cascade's water service area, sources of supply, conservation policies and capital program. As with most major capital projects, these will generally require supplemental project-level SEPA review prior to final design and construction.

Proponent: Cascade Water Alliance

Location of proposal, including street address, if any: Includes the Cascade Water Alliance Service Area (which is the service area of its Members: the Cities of Bellevue, Issaquah, Kirkland, Redmond and Tukwila; the Covington Water District; and the Sammamish Plateau and Skyway Water and Sewer Districts); facilities Cascade owns (including the White River-Lake Tapps Reservoir Project (the Reservoir Project) and the Bellevue-Issaquah Pipeline; and the Place of Use associated with the Reservoir Project water rights (the combined service areas described in the most recent Water System Plans approved by the Washington State Department of Health for Cascade, the City of Seattle and the City of Tacoma).

Lead agency: Cascade Water Alliance

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030 (2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

There is no comment period for this DNS.

This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.

This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 14 days from the date of signature below. Comments must be submitted by: January 31, 2012

There is no agency appeal.

Responsible Official: Michael A. Gagliardo

Position/title: Director of Planning Phone: 425-453-0930

Address: 11400 SE 8<sup>th</sup> Street, Suite 440, Bellevue, WA 98004

Date: December 30, 2011

Signature



**CASCADE WATER ALLIANCE  
TRANSMISSION AND SUPPLY PLAN  
ENVIRONMENTAL CHECKLIST**

**A. BACKGROUND**

**1. Name of proposed project, if applicable:**

Cascade Water Alliance Transmission and Supply Plan

**2. Name of applicant:**

Cascade Water Alliance

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

11400 SE 8<sup>th</sup> Street, Suite 440  
Bellevue, WA 98004  
Phone: (425) 453-0930

Attn: Michael Gagliardo, Director of Planning

**4. Date checklist prepared:**

December 16, 2011

**5. Agency requesting checklist:**

Cascade Water Alliance

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

It is anticipated that the Transmission and Supply Plan (hereafter, "Plan") will be in effect for six years and will then be updated.

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

Cascade's transmission and supply needs and system components may change from time to time. Such revisions will be incorporated in future updates of the Plan.

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

Environmental information has been prepared previously for several projects described in the Plan. Examples include the Tacoma Second Supply Project (a.k.a. Regional Water Supply System), the Tacoma-Cascade Pipeline and the Lake Tapps – White River Reservoir. Documents are listed as follows:

**Cascade Water Alliance**

**Lake Tapps Reservoir Water Supply Project**

- Environmental Checklist and State Environmental Policy Act (SEPA) Mitigated Determination of Nonsignificance (MDNS) – February 22, 2008

**Cascade Water Alliance**

**Lake Tapps Reservoir, Issuance of New Municipal Water Rights and Change of Use for Existing Claim No.60822**

- Determination of Significance and Request for Comments on Scope of Environmental Impact Statement and Environmental Checklist – June 30, 2008

**Cascade Water Alliance**

**Lake Tapps Reservoir Water Rights and Supply Project**

- Draft Environmental Impact Statement – January 29, 2010
- Final Environmental Impact Statement – June 16, 2010

**Cascade Water Alliance**

**Cascade Regional Water Supply System, Tacoma-Cascade Pipeline**

- Determination of Significance and Request for Comments on Scope of Environmental Impact Statement and Environmental Checklist – July 21, 2006
- Draft Environmental Impact Statement – December 21, 2006
- Final Environmental Impact Statement – April 26, 2007

**City of Tacoma and King County, Washington**

**Pipeline No.5**

- Draft Environmental Impact Statement – August 1987
- Final Environmental Impact Statement – June 1988

**Tacoma Public Utilities**

**Second Supply Project (Pipeline No.5)**

- Draft Supplemental Environmental Impact Statement – August 10, 1994
- Final Supplemental Environmental Impact Statement – October 18, 1994
- Addendum to Supplemental Environmental Impact Statement – April 28, 1995

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.**

No specific applications for governmental approvals of other proposals are known at this time.

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

The Plan will be submitted to King County and the Washington Department of Health (WDOH) for review under King County Code (Title 13.24) and Washington Administrative Code (WAC) 246-290, respectively.

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.)**

#### **Cascade Water Alliance**

The Cascade Water Alliance (Cascade) was created on April 1, 1999, through an Interlocal Agreement (Interlocal) among certain cities and special districts that own and operate public water systems (Members) in King County. Cascade was formed by its Members to jointly plan, develop and operate a water supply system for its Members. Each of these public water systems is authorized to provide water within its designated service area.

The Members of Cascade have entered into the Interlocal to enhance their ability to supply water to their respective service areas and the region by developing, owning, and operating regional water supply assets. Cascade serves solely as a regional supplier to its Members. Cascade does not serve water directly to the public, and does not plan to own or operate local distribution facilities. Cascade serves as an instrument of its Members by exercising certain essential governmental functions on their behalf as authorized by the Interlocal Cooperation Act (Chapter 39.34 RCW).

Members of Cascade include:

- ❑ City of Bellevue (Bellevue)
- ❑ City of Issaquah (Issaquah)
- ❑ City of Kirkland (Kirkland)
- ❑ City of Redmond (Redmond)
- ❑ City of Tukwila (Tukwila)
- ❑ Covington Water District (Covington)
- ❑ Skyway Water and Sewer District (Skyway)
- ❑ Sammamish Plateau Water and Sewer District (Sammamish Plateau)

Cascade is a non-profit corporation composed of municipal corporations and special purpose municipal corporations in King County that are party to an Interlocal Agreement entered into under the authority of the Interlocal Cooperation Act (Chapter 39.34 RCW) for the purpose of its Members working together to plan, develop and operate a water supply system and regional assets that will meet Cascade's Members' current and future drinking water needs.

The Interlocal identifies the purposes underlying the formation of Cascade, a few of which include:

- ❑ Provide a safe, reliable and high quality drinking water supply to meet the current and projected demands of its Members serving the Central Puget Sound Region and for non-Members as determined by Cascade, and to carry out this task in a coordinated, cost-effective and environmentally sensitive manner.
- ❑ Develop, contract for, manage, acquire, own, maintain, and operate water supply assets including, without limitation, surface water supplies, groundwater supplies, reclaimed water supplies and other water supply resources as determined by the Board;
- ❑ Contract with Seattle to transfer to Cascade and to modify Seattle's rights and duties with respect to Seattle Contract Purveyors;
- ❑ Contract for, or assume certain contractual rights and duties related to the Tacoma Second Supply Project;
- ❑ Purchase and provide water supply, transmission services, treatment facilities and other related services.

Cascade and its Members currently utilize a variety of water supply sources, including Members' independent supplies, wholesale water purchased by Cascade from Seattle Public Utilities (SPU), wholesale water purchased by Members from non-Member water purveyors, and a small amount of reclaimed water. Cascade has a wholesale purchase contract with Tacoma Public Utilities (TPU) but does not currently use water from this source. Cascade also holds water rights for the use of Lake Tapps, located in Pierce County, and anticipates developing Lake Tapps in the future for municipal water supply.

Cascade began providing wholesale water to its Members on January 1, 2004, via the wholesale agreement with SPU. Cascade will provide water to its Members through a combination of owned and contracted supply and transmission resources. Individual Members having ground water sources will continue to produce water to meet a portion of Cascade's needs. Together, these sources will provide supply for the immediate needs of Cascade Members. Over the long term, supply received from SPU will be partially replaced by other supplies such as wholesale purchases from TPU, water from Lake Tapps, reductions in demand from water conservation and/or other sources.

The overall goal of the Plan is to provide secure and reliable water supplies to Cascade Members through at least year 2050, in a fiscally responsible fashion. The Plan builds on the existing water supply management planning efforts included in the individual Members' water system plans and the King County Comprehensive Plan. The Plan is updated periodically (typically every six years) in accordance with state requirements for water system planning at Chapter 246-290-100 RCW.

### **Cascade Planning Process**

The Plan is focused on specific goals for water supply and water resource management, while seeking to foster regional water planning partnerships. The primary steps in the Plan development process included:

- ❑ Develop planning objectives.
- ❑ List potential supply options.
- ❑ Screen for "fatal flaws."
- ❑ Evaluate remaining source options.
- ❑ Prepare 50-year demand forecast.
- ❑ Select options for further consideration.
- ❑ Assemble and evaluate combinations of sources (portfolios).
- ❑ Select preferred supply portfolio.

The planning process has included Cascade's Board committees, technical, financial and management staff from the Members, Cascade staff, and consultants retained to assist in the process. Cascade also convened the Cascade Connections Working Group comprised of a range of stakeholders, to provide input for Cascade's development of the Plan. The Working Group met six times during 2009 and 2010 to review Plan elements and provide input.

The Plan is a Non-Project Action under SEPA. Project Actions referenced by the Plan that have environmental impacts associated with the construction, maintenance, and operation of those site-specific projects either have been or will be evaluated under SEPA during the project review process.

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 location covered by the Plan includes the Cascade Water Alliance Service Area (which is the service area of its Members: the Cities of Bellevue, Issaquah, Kirkland, Redmond and Tukwila; the Covington Water District; and the Sammamish Plateau and Skyway Water and Sewer Districts); facilities Cascade owns (including the White River-Lake Tapps Reservoir Project (the Reservoir Project) and the Bellevue-Issaquah Pipeline; and the Place of Use associated with the Reservoir Project water rights (the combined service areas described in the most recent Water System Plans approved by the Washington State Department of Health for Cascade, the City of Seattle and the City of Tacoma).

**TO BE COMPLETED BY APPLICANT**

**EVALUATION FOR  
AGENCY USE ONLY**

**B. ENVIRONMENTAL ELEMENTS**

The proposed adoption of Cascade’s Plan is a Non-Project Action under SEPA, which includes decisions on policies, plans and programs, and is intended for long term planning purposes. The Plan refers to the development and utilization of transmission and water supply projects that either are, or may become components of the Cascade water supply system in the future.

Project Actions referenced by the Plan that have environmental impacts associated with the construction, maintenance, and operation of those site-specific projects either have been or will be evaluated under SEPA during the project review process.

Section B, Environmental Elements, which applies to specific Project Actions is not applicable to the proposed adoption of Cascade’s Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

**1. Earth**

- a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other .....**
- b. What is the steepest slope on the site (approximate percent slope)?**
- 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.**

- d. **Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**
- e. **Describe the purpose, type, and approximate quantities of any filling or grading proposed.  
Indicate source of fill.**
- f. **Could erosion occur as a result of clearing, construction, or use? If so, generally describe.**
- g. **About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**
- h. **Proposed measures to reduce or control erosion, or other impacts to the earth, if any:**

Sections 1(a) through 1(h) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

## 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.**
- b. **Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.**
- c. **Proposed measures to reduce or control emissions or other impacts to air, if any:**

Sections 2(a) through 2(c) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

## 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.**
  - 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.**
  - 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.**
  - 4) **Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.**
  - 5) **Does the proposal lie within a 100-year floodplain? If so, note location on the site 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**
- 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.**
  - 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.**
- 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.**

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

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

Sections 3(a) through 3(d) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

#### **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**

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

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

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

Sections 4(a) through 4(d) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

#### **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:**

**mammals: deer, bear, elk, beaver, other:**

**fish: bass, salmon, trout, herring, shellfish, other:**

- b. **List any threatened or endangered species known to be on or near the site.**
- c. **Is the site part of a migration route? If so, explain.**
- d. **Proposed measures to preserve or enhance wildlife, if any:**

Sections 5(a) through 5(d) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

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

Sections 6(a) through 6(c) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

**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.**

- 1) Describe special emergency services that might be required.
- 2) Proposed measures to reduce or control environmental health hazards, if any:

**b. Noise**

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
- 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.
- 3) Proposed measures to reduce or control noise impacts, if any:

Sections 7(a) through 7(b) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

**8. Land and shoreline use**

- a. What is the current use of the site and adjacent properties?
- b. Has the site been used for agriculture? If so, describe.
- c. Describe any structures on the site.
- d. Will any structures be demolished? If so, what?
- e. What is the current zoning classification of the site?
- f. What is the current comprehensive plan designation of the site?
- g. If applicable, what is the current shoreline master program designation of the site?
- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
- i. Approximately how many people would reside or work in the completed project?

- j. Approximately how many people would the completed project displace?**
- k. Proposed measures to avoid or reduce displacement impacts, if any:**
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:**

Sections 8(a) through 8(l) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

**9. Housing**

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**
- c. Proposed measures to reduce or control housing impacts, if any:**

Sections 9(a) through 9(c) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

**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?**
- b. What views in the immediate vicinity would be altered or obstructed?**
- c. Proposed measures to reduce or control aesthetic impacts, if any:**

Sections 10(a) through 10(c) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

**11. Light and Glare**

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?**
- b. Could light or glare from the finished project be a safety hazard or interfere with views?**
- c. What existing off-site sources of light or glare may affect your proposal?**
- d. Proposed measures to reduce or control light and glare impacts, if any:**

Sections 11(a) through 11(d) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

**12. Recreation**

- a. What designated and informal recreational opportunities are in the immediate vicinity?**
- b. Would the proposed project displace any existing recreational uses? If so, describe.**
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:**

Sections 12(a) through 12(c) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

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

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

Sections 13(a) through 13(c) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

**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.**
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**
- c. How many parking spaces would the completed project have? How many would the project eliminate?**
- 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).**
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**
- g. Proposed measures to reduce or control transportation impacts, if any:**

Sections 14(a) through 14(g) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

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

Sections 15(a) through 15(b) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

**16. Utilities**

- a. Circle 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.**

Sections 16(a) through 16(b) do not apply to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

**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: Michael A. Gagliardo  
Michael Gagliardo, Director of Planning

**Date Submitted:** December 30, 2011

TO BE COMPLETED BY APPLICANT

EVALUATION FOR  
AGENCY USE ONLY

**D. SUPPLEMENTAL SHEET FOR NON-PROJECT 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.**

The Transmission and Supply Plan ("Plan") is a Non-Project Action under SEPA. Project Actions referenced by the Plan that have environmental impacts associated with the construction, maintenance, and operation of those site-specific projects either have been or will be evaluated under SEPA during the project review process. The following paragraphs discuss potential impacts in a very general manner.

**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 construction of some of the proposed components of Cascade's water supply system may involve the creation and discharge of construction stormwater. Effects on surface waters during construction could include increased runoff volumes and increased peak flows. The construction of some facilities may also result in the creation of impervious surfaces and the associated runoff.

Impacts to air quality due to the construction of water system facilities could include temporary increases in particulate emissions that would depend on the level and type of activity, soil characteristics, weather, and equipment employed; carbon monoxide and oxides of nitrogen in the exhaust of construction equipment powered by gasoline and diesel engines; increases in the levels of carbon monoxide and oxides of nitrogen emitted from vehicles that are delayed while transiting through the work areas; and fugitive dust. Diesel or gasoline-driven emergency electrical generation equipment located at some facilities would produce emissions to the air as well, but only intermittently during routine testing or non-routine emergency events.

The production and release of toxic or hazardous substances is not anticipated. There would, however, likely be some storage and use of chemicals associated with the operation of water treatment facilities.

The construction, maintenance, and operation of proposed components of Cascade's water supply system would result in the production of noise.

**Proposed measures to avoid or reduce such increases are:**

Minimization of impacts to surface waters would be achieved through implementation of applicable BMPs and compliance with regulatory requirements and permit conditions (e.g. NPDES Construction Stormwater Permit).

Minimization of impacts to air quality would be achieved by keeping exposed soil damp by spraying with water, covering all truck loads, using wheel washers, removing particulate matter deposited on public roads, covering dirt and debris piles, properly maintaining equipment, and communications and coordination with the proponents of other projects and appropriate local jurisdictions regarding the scheduling and routing of construction truck traffic to help eliminate or reduce delays encountered by local traffic. Such mitigation and coordination are usually facilitated by the local jurisdiction through traffic management and mitigation plans, haul road agreements, and other permitting requirements.

Any necessary chemical storage would be designed to meet required safety and environmental regulatory requirements including secondary containment, leak detectors, alarms, and the use of plans for the prevention, containment, and clean-up of any spills.

Cascade would comply with applicable noise regulations.

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

Transmission and water supply system components would not affect marine life. However, plants, animals, or fish could be affected by certain facilities depending on their location and function. Because buried transmission pipelines would comprise the majority of the system, the impacts would be temporary and limited to the construction period. For above-ground facilities such as pump stations and water treatment facilities, effects could extend beyond the construction period.

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

The siting and design of system components would emphasize avoidance of impacts to plants, animals, and fish. Where complete avoidance was not possible, the principal of minimization would be stressed. Impacts would be mitigated and enhancement measures implemented, as appropriate. Generally, these protective provisions are set forth in land use codes, laws and regulations, permit conditions, and memoranda of agreement with local jurisdictions.

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

Transmission and water supply system components would consume, but not deplete, energy and natural resources.

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

System components would be sited, designed, constructed, maintained, and operated to be as efficient as possible.

**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?**

None of the transmission and water supply system components are or would be located on prime farmlands, wild and scenic rivers, or wilderness. It is possible that some components could be located near or on, or traverse, environmentally sensitive areas. Pipelines could be routed through wetlands or floodplains. Parks, endangered species habitat, and historic or cultural sites would be avoided whenever possible.

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

System components would be sited with the intent of avoiding all environmentally sensitive areas. If use of an environmentally sensitive area were necessary, the “footprint” and construction impacts of the component would be minimized. For example, in the case of a pipeline traversing a wetland, the following measures would be utilized to minimize impacts:

- Minimize trench width
- Minimize construction vehicle impact areas
- Segregate excavation spoils keeping topsoil separate
- Restore the disturbed wetland areas after pipeline installation
- Improve or enhance wetland vegetation, as appropriate
- Comply with work windows established by the resource agencies if working in the vicinity of the habitat of a threatened or endangered species.

Additional measures include, avoiding the construction of above-ground facilities in floodplains, using trenchless technologies for crossing significant fish-bearing water

courses, and observing “fish windows” set by fish agencies for work below the ordinary high water mark.

**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?**

Transmission and water supply system components would neither affect land and shoreline use nor allow or encourage land or shoreline uses incompatible with existing plans.

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

System components would comply with existing land use and shoreline management plans. The majority of the system would consist of underground water transmission pipelines that would be located in existing rights-of-way. When a pipeline alignment required passing through or in the vicinity of a shoreline, measures would be implemented to minimize construction impacts and to ensure proper restoration of the affected area. Construction of above-ground facilities in shoreline areas would be avoided whenever possible.

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

The construction, maintenance, and operation of transmission and water supply system components identified in the Plan would, to varying degrees depending on the specific facility and location, increase the demands on transportation, public services, and utilities. The increases should be insignificant, with the possible exception of the need for electrical power associated with the operation of pumps and water treatment equipment.

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

Power consumption would be one criterion in selecting equipment. Also, to the extent possible, transmission system alignments would be chosen that would maximize the use of gravity flow and minimize the need for pumps to move water in the system.

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

Transmission and water supply projects identified in the Plan do not and will not conflict with local, state, or federal laws or requirements for the protection of the environment.