

City of Bellevue Submittal Requirements	27a
ENVIRONMENTAL CHECKLIST	
11/4/15	
<p>If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is 425-452-4636.</p>	
BACKGROUND INFORMATION	
Property Owner:	N/A
Proponent:	City of Bellevue Utilities Department
Contact Person:	Douglas Lane, PE
Address:	Utilities Department City of Bellevue PO Box 90012 Bellevue, WA 98009-9012
Phone:	(425) 452-6865
Proposal Title:	City of Bellevue Draft Water System Plan
Proposal Location:	N/A

Give an accurate, brief description of the proposal's scope and nature:

1. General description:

The City of Bellevue Draft Water System Plan (the Plan) is an update to the City of Bellevue's 2006 Water Comprehensive Plan, as required by Washington Administrative Code WAC 246-290-100 and consistent with Bellevue's Comprehensive Plan Policy UT-12. The general purpose of the Plan is to evaluate the existing water system, identify current and future needs, and develop a plan to meet those needs. Additionally, the Plan is intended to:

- *Disseminate information and develop consensus among stakeholders*
- *Document water utility-specific policies*
- *Serve as a reference document for City of Bellevue staff and for partner utilities*
- *Comply with, and demonstrate conformance with applicable regulations*

The Plan benefits Bellevue's water utility ratepayers by documenting policies and procedures, by characterizing trends in population, employment, and water use, and by identifying problems and opportunities for the water system. The Plan also allows for coordination with neighboring utilities.

Failure to develop a water system plan would leave the City vulnerable to future water supply shortages, increase the risks of system failure, negatively impact public safety and homeowners insurance rates (through the Washington Surveying & Ratings Bureau), and violate Washington state law.

Numerous studies and evaluations were completed during Plan development:

- Review of system history, service area and assets
- Review of water utility general policies
- Review of water consumption patterns and system planning criteria;
- Revised service area population forecasts;
- Complete re-build and calibration of a water distribution system hydraulic model;
- Re-evaluation of system capacity and operating parameters;
- Evaluations to address specific issues:
 - LH520 Zone pressure alternatives
 - EOA-WOA Transmission Evaluation
 - SA270 Zone pressure and fire flow improvements
 - Location-specific analysis to improve fire flow and/or increase pressure
- System-Wide Storage Evaluation;
- Emergency Well Evaluation;
- Updated descriptions of water asset management and operational practices; and
- Updated recommendations for a 20-year planning horizon

As part of planning to meet current and future needs, the Plan recommends specific programs and projects. The limited, generalized information that is currently known about these projects and programs is presented below. More detailed information would become available for each project during preliminary design studies, and provided in separate SEPA documentation for each specific project.

Recommended water system improvements fall into three general categories:

- **Existing System Improvements.** These projects enhance emergency preparedness, improve system reliability, and/or address known deficiencies in the existing system.
- **System Capacity Expansion to meet Planned Growth.** These projects and programs add system capacity to meet the needs of forecasted future development.
- **Infrastructure Renewal and Replacement:** These projects and programs are intended to manage the number and severity of system failures due to age.

Within each of these categories, some projects are recommendations that are currently funded in the City's Capital Investment Program (CIP), while others are proposed new recommendations to address emerging issues. For each project, detailed information would be provided in a project-specific SEPA review at the appropriate time.

2. Acreage of site: *The service area covers over 37 square miles.*
3. Number of dwelling units/buildings to be demolished: *0*
4. Number of dwelling units/buildings to be constructed: *0*
5. Square footage of buildings to be demolished: *Not applicable (N/A)*
6. Square footage of buildings to be constructed: *N/A*
7. Quantity of earth movement (in cubic yards): *N/A*
8. Proposed land use: *The Plan is based on existing zoning and comprehensive land use.*
9. Design features, including building height, number of stories, and proposed exterior materials: *N/A*
10. Other:

Estimated date of completion of the proposal or timing of phasing:

Timing for the various recommended projects varies, but would be consistent with the City's existing and future Capital Investment Plans (CIPs).

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

Yes. Future recommended activity is described in Chapter 9 of the Plan and in the City's water CIP. Although other specific areas of expansion or timing cannot be precisely identified, in general the system would expand (1) for additional capacity to accommodate future growth as required by the City's Comprehensive Plan policies, (2) to address system deficiencies as required by applicable regulations and/or City policy, and (3) ongoing system renewal & replacement.

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

Geotechnical reports, wetlands evaluations, and other environmental information will be prepared for applicable projects, but are not yet available for most projects. These will be available as part of the project-specific SEPA process for all projects. Some information pertinent to emergency well development is provided in Appendix N.

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

Permit applications are not yet available, but will be available as part of the project-specific SEPA process for all projects.

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

Future government approvals will be required for each recommended project. The type of approvals will generally be permits related to construction work such as building, right-of-way use and clearing and grading permits. Some projects in environmentally sensitive areas may require additional permits such as critical areas land use permits, shoreline substantial development permits and/or a range of state and federal permits for work below ordinary high water in streams and hydraulically connected wetlands, etc.

Please provide one or more of the following exhibits, if applicable to your proposal. (Please check appropriate box(es) for exhibits submitted with your proposal):

- Land Use Reclassification (rezone) Map of existing and proposed zoning

N/A. The Draft Water System Plan supports the land use adopted as part of the City of Bellevue Comprehensive Plan.

- Preliminary Plat or Planned Unit Development
Preliminary plat map

N/A. No plats or planned unit developments are proposed as part of the Plan.

- Clearing & Grading Permit
Plan of existing and proposed grading
Development plans

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

- Building Permit (or Design Review)
Site plan
Clearing & grading plan

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

- Shoreline Management Permit
Site plan

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

A. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site: Flat Rolling Hilly Steep slopes Mountains Other

The Draft Water System Plan covers Bellevue's 37 square mile water service area.

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

Limited portions of the Bellevue water service area naturally exceed 40 percent grade. Most portions of the service area are flat to gently rolling.

- c. What general types of soil are found on the site (for example, clay, sand, gravel, peat, and muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

A variety of soils are found throughout Bellevue's water service area. Information on specific sites would be gathered as part of early project planning, and would be provided in project-specific SEPA documentation.

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

There are very limited areas of both unstable soils and coal mine hazards. Environmental review of projects designed to implement the Water System Plan, when adopted, would consider soil conditions during the early design phase.

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

Unknown (would be provided in project-specific SEPA checklists and grading permits)

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

Yes. Erosion potential would generally be minimal and limited to water main flushing for maintenance. For pipeline construction in road rights-of-way, ground disturbance is typically in paved areas with established stormwater controls, where erosion potential would be limited. Specific projects may have erosion potential, however (project-specific SEPA would provide additional detail not known at this time). All significant water system projects are subject to erosion and sedimentation control measures and include a Construction Storm Water Pollution Prevention Plan, CSWPPP.

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

N/A. The Plan applies to the entire water service area. Where applicable, information would be provided in project-specific SEPA documentation for specific project sites.

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

Water utility staff are trained to use stormwater and erosion control best management practices (BMPs) during water main flushing and maintenance activities. In general, each pipeline construction project would (1) implement stormwater BMPs, (2) restrict wet-season excavation work, (3) include spill response plans in case of accidental discharge, and (4) follow all applicable regulations and permit conditions. All significant water system projects are subject to erosion and sedimentation control measures and include a Construction Storm Water Pollution Prevention Plan, CSWPPP.

2. AIR

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

Permanent Impacts: *Some increased diesel emissions (to air) would be likely as a result of adding standby generators at pump stations that do not already have them, and at well pumps if applicable. These emissions would only occur during periodic maintenance and testing, and continuously during electrical power outages.*

Temporary Impacts: *Some temporary increases in air pollution could occur during construction projects. Air pollution could result from diesel emissions from construction equipment.*

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

No

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

None. Impacts to air are generally minimal or temporary, and would typically only be created with the goal of increasing the reliability of critical water supply infrastructure. The City of Bellevue Utilities includes requirements in construction projects to use well maintained equipment and to turn off idling equipment when not in use. Dust control is required where appropriate.

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.

Yes. The City's water service area borders Lake Washington and Lake Sammamish. The service area also includes Mercer Slough, approximately 82 miles of streams within the Bellevue city limits alone (not including neighboring cities in Bellevue's water service area), and 3 small lakes (Larsen Lake, Lake Bellevue, and Phantom Lake).

- (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.

Yes, the Plan identifies likely projects that would be within 200 feet of these water bodies. Each of these projects is subject to applicable local, state and federal permit reviews and conditions.

- (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 material. fill

N/A

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

No.

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

There are 100-year floodplains within the Utility service area and known infrastructure in those floodplains. Any actions within the floodplains would be covered under individual project specific SEPA actions. No known projects would lie within the 100-year floodplain.

The vast majority of water infrastructure is not close to the 100-year floodplain. Some existing water lines are located in stream, wetland and shoreline areas subject to inundation during a one-hundred year event. Work would only occur in the flood plain if one of these existing mains were to break, requiring emergency repairs.

- (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.

Yes. The Draft Water Plan supports continued water main flushing performed routinely by operations and maintenance staff results in direct, clean water discharges to storm drains, following dechlorination and implementation of stormwater best management practices (BMPs).

b. Ground

- (1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description.

No. The Plan does recommend perfecting existing water rights, however that would only occur after a master plan was developed with its own SEPA process and individual projects were developed from that Plan, each with their own permitting and SEPA process.

- (2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.) Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None.

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.

N/A. Any proposed projects would be constructed in conformance with current stormwater code requirements, and would undergo a project-specific SEPA review.

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

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

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

Stormwater BMPs and dechlorination are used to reduce or eliminate impacts to surface water during water main flushing.

Each construction project would undergo its own separate project-specific SEPA process. During that process, more detailed and specific information would be provided.

4. Plants

- a. Check or circle types of vegetation found on the site:

- deciduous tree: alder, maple, cottonwood, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
- water plants: water lily, , milfoil, other
- other types of vegetation

A wide range of plants are found in the city.

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

Individual construction projects that may come out of the plan recommendations would be subject to applicable local, state and federal permit review that will identify impacts and mitigation measures in the SEPA checklist for each project. Vegetation retention and replacement are subject to the requirements of the City of Bellevue landscape code and codes of adjacent cities within the Utilities service area.

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

The Draft Water Plan service area is within the range of three threatened or endangered fish species including Chinook, Steelhead and Bull Trout. Prior to any project within lakes or streams, potential impacts on resident populations are considered and subject to review through local, state and federal permit agencies.

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

None for this Plan. Projects identified in the Draft Water System Plan are subject to the landscape code of each of the cities within the service area. Additionally, projects within sensitive wetland, stream or lakes is subject to native vegetation planting requirements.

5. ANIMALS

a. Check or 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, beaver, raccoon other:

Fish: bass, salmon, trout, other:

Most or all of the species listed are found in the City, except bear which only occasionally enter the City from wildlands outside of the City.

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

Bellevue is within the range of Chinook Salmon, Steelhead, and Bull Trout.

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

Migration routes of anadromous fish and wildfowl exist within the City.

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

None at this time. Project-specific SEPA documents with this information will be prepared when appropriate. Construction timing (work windows) and vegetation replacement are required to mitigate impacts of specific projects constructed consistent with the Draft Water System Plan.

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 need? Describe whether it will be used for heating, manufacturing, etc.

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

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 the proposal? List other proposed measures to reduce or control energy impacts, if any:

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

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.

None.

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

There are no known emergency services that would be required by the Plan.

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

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

b. Noise

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

There are no known noises that would affect the water utility.

- (2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example, traffic, construction, operation, other)? Indicate what hours noise would come from the site.

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

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

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

8. Land and Shoreline Use

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

There is a variety of land uses throughout Bellevue's water service area, including multiple densities of residential, commercial and industrial use, as well public spaces such as parks and schools.

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

Bellevue's water service area no longer includes significant agriculture, except for the Mercer Slough and Larsen Lake Blueberry Farms.

- c. Describe any structures on the site.

Above-grade structures pertinent to Bellevue's existing and proposed water facilities typically include reservoirs, pump stations and on-site generator enclosures. Below-grade structures include vaults for pressure reducing valves, meters, and other underground equipment.

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

Five existing reservoirs are recommended for evaluation for demolition. Until site specific evaluations are conducted, demolition of existing structures cannot be certain. Each project will undergo its own site specific permit and SEPA process.

A small number (0-3) of City-owned pump station buildings may be demolished, however this not known at this time. Each project would undergo its own separate project-specific SEPA process.

At this time, there are no known dwelling units that would be demolished as a result of the Plan.

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

There is a variety of zoning classifications throughout Bellevue's water service area.

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

There is a variety of comprehensive plan designations throughout Bellevue's water service area.

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

There is a variety of shoreline designations throughout Bellevue's water service area.

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

A variety of areas in Bellevue are classified as environmentally sensitive, particularly critical areas including streams, wetlands, steep slopes, shorelines and flood hazard areas.

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

No housing is proposed at any water system structures or properties. Each reservoir or pump station site is typically visited by 2-3 utility staff on a weekly basis for routine maintenance, and as needed for repair or in response to alarms.

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

None.

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

N/A

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

The City of Bellevue’s policies require the Utilities Department to support proposed land use and the City’s Comprehensive Plan. The Plan is compatible with the City’s Comprehensive Plan, as required by the City Council. See Comprehensive Plan policies UT-4 and ED-21.

9. Housing

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

Zero units would be provided. However, system expansion would occur to support development by others, in accordance with City Comprehensive Plan policies.

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

None known at this time.

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

The only known impacts of the Plan on housing are positive (no known negative impacts). The Plan provides for adequate water supply for current and future housing.

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?

The Plan recommends replacing three reservoirs: Horizon View 1, Horizon View 2 and Pikes Peak. Although the height of replacement tanks is not known at this time, the tallest of these existing tanks is Horizon View 1, at less than 40-feet tall. Each replacement would be required to conduct a project level SEPA where the full description of impacts and mitigation would be detailed.

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

N/A

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

The City makes each project known to the surrounding neighborhood, and considers community input for design of above-grade structures.

11. Light and Glare

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

N/A

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

Unknown. Project-specific SEPA documents with this information will be prepared when appropriate.

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

Unknown. Project-specific SEPA documents with this information will be prepared when appropriate.

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

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

12. Recreation

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

There is a variety of recreational opportunities throughout Bellevue's water service area.

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

No. As individual projects are developed, project specific SEPA documentation would identify all impacts and mitigation measures.

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

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

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.

There is a variety of historic resources throughout Bellevue's water service area.

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

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

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

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

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.

The water service area encompasses all of the City of Bellevue, Clyde Hill, and Medina, the Towns of Hunts Point and Yarrow Point, and small portions of the City of Issaquah (South Cove Area), the City of Kirkland (east of Watershed Park) and unincorporated King County.

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

There is a variety public transit routes throughout Bellevue's water service area.

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

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

- 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).

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

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

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

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

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

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

N/A. Project-specific SEPA documents with this information will be prepared when appropriate.

15. Public Services

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

No

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

Not applicable

16. Utilities

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

A variety of utility facilities are available throughout Bellevue's water service area.

- 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.

Water services would be provided by the Plan to customers in Bellevue's water service area.

Electricity would be required for reservoir, pump station, meters, wells, and other facilities, provided by Puget Sound Energy.

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.....*11/4/2015*

SUPPLEMENTAL SHEET FOR NONPROJECT ACTION

Continuation of the Environmental Checklist

4/18/02

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment (see Environmental Checklist, B. Environmental Elements). 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. If you have any questions, please visit or call Development Services (425-452-6800) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Assistance for the hearing impaired: Dial 711 (Telecommunications Relay Service).

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 Water System Plan (the Plan) would not directly increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise. The Plan does identify water system deficiencies and recommends further evaluation and/or projects to address known concerns. For each project, detailed information on environmental impacts would be provided in a project-specific SEPA review at the appropriate time.

Proposed measures to avoid or reduce such increases are:

None.

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

The Water System Plan (the Plan) would not directly impact plants, animals, fish, or marine life. Most water infrastructure is buried (pipes, manholes, etc), so the system components typically have negligible effect on plants, animals, fish and marine life.

Some temporary impacts to plants, animals, fish and marine life could potentially occur during construction projects. Most water projects occur in public rights-of-way, which are already impacted by streets and roads and do not support plant or animal habitat. Other projects are located on City-owned property that is already developed.

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

For each project, detailed information on measures to protect or conserve plants, animals, fish, or marine life would be provided in a project-specific SEPA review at the appropriate time. Capital projects developed to meet the Water System Plan would be subject to appropriate local, state and federal permits. Projects with impacts are subject to mitigation requirements including follow-on monitoring.

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

The Plan itself would not likely deplete energy or natural resources. Ongoing operations & maintenance activities use fossil fuels in vehicles to transport maintenance crews and equipment to system infrastructure. Spare parts and/or replacement piping are used when needed for maintenance. Operation of reservoirs, pump stations and wells require electricity.

Construction projects would require fossil fuels to operate construction vehicles, as well as for the manufacture and delivery of construction materials. Construction materials themselves would require natural resources such as minerals (concrete additives, etc), rubber (pipe gaskets, tires, etc) metals (ductile iron pipe), petroleum products for plastics (PVC, paints, epoxies, etc), graded aggregate (sand, gravel, etc), and others.

Some water system components, when installed, such as water pumps and emergency backup generators, would require energy during the life of those water system components.

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

The Plan Volumes 2, 3 and 4 will only be printed in hard copy on request, to conserve resources.

Operations & maintenance vehicles are well-maintained at Bellevue's Service Center to avoid leaks and optimize fuel economy. Maintenance crews only drive where needed to perform maintenance activities. Pumps are appropriately sized to provide reasonable efficiency in the pertinent operating conditions. The recommended pump station rehabilitations would improve efficiency to conserve energy.

The water utility uses efficient pumps with advanced controls to minimize energy use. Regular maintenance of the equipment reduces energy use over the life time of the equipment.

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 majority of the plan would have no effect on environmentally sensitive areas or areas designated for governmental protection..

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

First, alternatives that avoid impacts to environmentally sensitive areas including parks, would be considered. Where project impacts to sensitive areas or parks become necessary, design features would be included to reduce impacts such as directional drilling. Project-specific SEPA documentation will detail this information as appropriate.

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?

The Water System Plan is designed to support the land use plan of the jurisdictions within the service area. The adopted land use plans are required to be consistent with the State Growth Management Act.

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

Water system projects needed to support the land use plan in shoreline and other environmentally sensitive parts of the jurisdictions within the service area would first consider alternatives that do not include impacts to shorelines or other sensitive areas. Second, water system projects needed to support the densities and use within the GMA land use plans would consider design options that limit impacts to these same shoreline and other sensitive areas.

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

The Plan itself would not increase demands on water utilities, wastewater utilities, or on Public Services (Police, Fire, etc). In general the Plan is intended to respond to and alleviate increased demands on water utilities, and also to improve fire protection services.

Construction projects would temporarily increase demands on the local and regional transportation networks, to allow for delivery of construction materials and equipment and for travel of construction workers.

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

Consider project alignments and construction techniques that reduce impact on transportation networks during construction and for access to the water system facilities for ongoing maintenance.

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

The Water System Plan has been developed to support and be consistent with the adopted GMA compliant land use plans of the jurisdictions within the service area. All construction projects needed to implement the plan and provide adopted water service levels are required to comply with applicable local, state and federal \ laws and permit requirements. Construction contracts for specific projects would require compliance with local, state, or federal laws or requirements for the protection of the environment.