



Section 11

Environmental Documentation

The SEPA checklist can be found on the following pages.



City of Yelm

Fee	_____
Date Received	_____
By	_____
File No.	_____

Community Development Department **ENVIRONMENTAL CHECKLIST**

Instructions:

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

This environmental checklist asks you to describe some basic information about your proposal. The City will use this checklist to determine whether the environmental impacts of your proposal are significant and require preparation of an EIS. You must answer each question accurately, carefully and to the best of your knowledge. Answer the questions briefly, but give the best description you can. In most cases, you should be able to answer the questions from your own observations or project plans without the need for experts. If you 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 delays later. If the space provided is too small, feel free to attach additional sheets.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the city staff 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. You may be asked to explain your answers or provide additional information for determining if there may be significant adverse impacts.

Nonproject Proposals Only:

Complete both the checklist (even though many questions may be answered "does not apply") and 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.

CITY OF YELM

ENVIRONMENTAL CHECKLIST

CITY USE ONLY

FEE: \$150.00

DATE REC'D

BY:

FILE NO.

A. BACKGROUND

1. Name of proposed project, if any:

City of Yelm 2012 General Sewer Plan

2. Name of applicant:

City of Yelm

3. Address, phone number and email address of applicant and of any other contact person:

Stephanie Ray, Project Manager
City of Yelm
105 Yelm Avenue W.
Yelm, WA 98597
(360) 458-8414

4. Date checklist prepared:

June 1, 2012

5. Agency requesting checklist:

City of Yelm

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

Yelm has developed the *2012 General Sewer Plan (Plan)* to identify future sewer and reclaimed water infrastructure projects, service policies, rate structures, and operation and maintenance (O&M) practices that are necessary to maintain reliability of the existing systems and serve future growth. The analysis in the Plan considers two growth scenarios that are defined based on the City either providing or not providing sewer service to the Thurston Highlands Master Planned Community (MPC). The timing and rate of Thurston Highlands development is unknown, but is assumed to begin in 2020. The anticipated schedule of capital projects to be constructed/implemented over the current 20-year planning period (2012 – 2032) is shown below in Table 1 (see response to A11).

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

Following the adoption and approval of the General Sewer Plan, a long term plan (Wastewater Facilities Plan) will be prepared that evaluates treatment capacity specific to the City's Water Reclamation Facility (WRF). The Wastewater Facilities Plan will identify WRF improvements required to serve long-term growth within the sewer service area. The Wastewater Facilities Plan will also evaluate and schedule reclaimed water infrastructure needs identified in the General Sewer Plan (but not scheduled for implementation).

Analysis of sewer service and reclaimed water production within Thurston Highlands will be documented in additional planning documents to be prepared (by the developer) prior to development of the MPC. A separate Wastewater Facilities Plan will be prepared for a satellite treatment facility that will serve the population of Thurston Highlands.

Yelm will continue to focus on programs and initiatives to address sewer and reclaimed water infrastructure and O&M needs and will periodically review and update the 2012 General Sewer Plan, as needed.

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

Thurston Highlands Master Planned Community Final EIS and Supporting Technical Reports, December 2008

Environmental Checklist and Determination of Nonsignificance for the Thurston County Comprehensive Plan Update as amended by Resolution number 14034 and Ordinance number 14035, November 2007.

Project specific environmental analyses will be prepared, if necessary, for the capital improvement projects identified in the Plan.

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.

Thurston Highlands Conceptual Master Plan Site Approval

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

The Washington State Departments of Ecology and Health must review and approve the General Sewer Plan. Thurston County will review the Plan for consistency with the City of Yelm Comprehensive Plan and Joint Plan with Thurston County (2009). The Yelm City Council must approve and adopt the Plan before the final approval of the Plan by Ecology and Health.

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.

The Capital Improvement Program (CIP) identified in the Plan includes some sewer collection system improvement projects, but for the most part is comprised of planning and O&M projects which are not directly related to sewer or reclaimed water infrastructure. The table below briefly identifies the individual projects, including the projected schedule for project implementation. Each project is described in detail in the General Sewer Plan.

Table 1. General Sewer Plan CIP Projects			
Project ID ¹	Name	Description	Year On-Line
C-1	Collection System Upgrades	Collection system upgrades necessary to address anticipated pressure issues, based on hydraulic modeling.	2020, 2030
WRF-1	Short Term Improvements:	Implement short term improvements described in Chapter 4: carbon addition, alkalinity system upgrade, I&C, blower modifications.	2013
		Carbon addition system	
		Alkalinity system upgrade	
		I&C upgrade (includes replacement of DO probes in each SBR basin, a new influent ammonia instrument, new effluent ammonia and nitrate instruments at the common effluent of the SBRs, and programming necessary for changes)	
WRF-2	Complete GSP	Costs to complete the General Sewer Plan in 2012	2012
WRF-3	WRF Capacity Study	Update process model to reflect most recent plant operations and identify short and long term WRF improvements to provide future capacity.	2012
RW-1	Expand Cochrane Park RIBs	Complete improvements to expand the capacity of the RIBs at Cochrane Park, including piping modifications, further investigation to determine capacity of RIBs, and placing the underground RIB into service.	2014
WRF-4	Facilities Plan	Prepare planning document conforming to WAC 173-240 for upgrades to WRF to increase treatment capacity.	2013

¹See General Sewer Plan for detailed project descriptions

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. You need not duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The City of Yelm is located about 17 miles southeast of Olympia, Washington near the eastern boundary of Thurston County. The Plan includes the entire City sewer service area, which currently serves a portion of the area within Yelm city limits. The City intends to expand sewer service to areas currently served by on-site septic systems and to new development within the Urban Growth Area (UGA). Existing and future service areas are shown on a map (Figure 1-2) included in the Plan. Individual project locations are shown on a map provided to support the CIP (Figure 11-1).

B. ENVIRONMENTAL ELEMENTS

1. Earth

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

Site topography for the service area is generally rolling in nature, with average grades of as much as 30 percent.

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

The maximum slope on project sites is not greater than 15 percent.

- 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 of Thurston County have been mapped and classified into 133 soil units by the United States Department of Agriculture, Soils Conservation Service (SCS). The majority of soils in the City of Yelm area are classified as either (1) Spanaway gravelly sandy or stony loam or (2) Everett very gravelly sandy loam. The characteristics of the soils have been grouped by the SCS as undulating and rolling, coarse and moderately coarse textured soils underlain by loose glacial outwash materials.

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

There are no known unstable soils in the vicinity of the projects identified in the Plan.

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

Excavation, back filling, and/or grading activity could occur in association with some collection system projects. In general, the amounts of grading and filling that would be required will be relatively modest. More specific information regarding quantities of filling and grading will be determined during project-level design. Where native materials are unsuitable for backfill, suitable materials will be imported from nearby sources.

All projects will comply with the applicable local, state, and federal regulations and permits required for grading and filling activities.

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

Sedimentation impacts will occur during construction; erosion control will be required and shown on construction plans and specifications.

- g. About what percent of the site will be covered with impervious surfaces after project construction such as asphalt or buildings?

Proposed projects will create minimal increases in impervious surfacing.

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

Construction of future projects will employ Best Management Practices (BMPs) to reduce or control potential project-specific erosion. BMPs could include temporary erosion and control measures, surface water pollution prevention plans, and spill prevention control and countermeasures plans. Other examples of typical BMPs include installing filter fabric fences or hay bales, covering exposed soils, using temporary soil covers such as mulch, diverting stormwater with temporary berms, and using settling ponds or grass-lined swales to prevent sediment from moving into receiving waters and storm drains. Site-specific erosion and sedimentation control provisions will be listed on individual construction plans and specifications. All future sewer system projects will comply with the applicable erosion control provisions of the local and state jurisdictions.

2. **Air**

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

Air emissions could result from some projects during construction. New facilities to be constructed under the proposal generally will not produce new/additional air emissions during operation. Temporary, localized emissions of fugitive dust and vehicle emissions could occur during construction of individual projects; however, these emissions are not anticipated to result in any significant impact on the overall ambient air quality in Yelm.

- 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 air, if any:

Projects will include construction mitigation measures in order to reduce construction emissions and will comply with the Olympic Region Clean Air Agency (ORCAA) regulations to minimize fugitive particulate matter. Site-specific measures to reduce construction emissions could potentially include spraying areas of exposed soil with water for dust control, regular street cleaning, and reducing exhaust emissions by minimizing vehicle and equipment idling. Construction activities will comply with ORCAA's requirements for reasonable precautions to minimize fugitive dust. Construction equipment also could include emission-control devices on gasoline and diesel engines to reduce carbon monoxide (CO) and particulate emissions.

3. **Water**

- a. Surface Water

- 1) Is there any surface water body or wetland on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds)? If yes, describe type and provide names. State what stream or river it flows into?

Water bodies in the vicinity of the Yelm sewer service area are shown in Figure 11-2.

Yelm Creek drains most of the Yelm prairie and discharges to the Nisqually River.

The Centralia Power Canal is a man-made diversion used to generate electrical power for the City of Centralia. Surface water is diverted from the Nisqually River, used to power electrical generators at a power generation facility located near the western edge of the Yelm City limits and discharged back to the Nisqually.

Thompson Creek drains the western edge of the Yelm prairie before discharging to the Nisqually River about one-half mile downstream of the Yelm Creek discharge.

The Nisqually River, sourced by the Nisqually Glacier on Mount Rainier, is located northeast of the City and flows into Puget Sound at the Nisqually Delta, about 10 miles northwest of Yelm.

The Deschutes River, located about 6 miles southwest of the City, has headwaters in the Cascade foothills and flows into Budd Inlet of Puget Sound in Olympia.

- 2) Will the project require any work over, in, or adjacent to (within 300 feet) the described waters? If yes, please describe and attach available plans.

No.

- 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.

Fill and/or dredge activity are not anticipated in association with the proposed projects. Additionally, there are no planned river or creek crossings that would require in-water work, and new facilities will be sited so that fill and dredge activities are not required.

- 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 elevation on the site plan.

There are floodplains located within the service area. However, projects described in the CIP do not lie within any 100-year floodplains.

- 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 waste materials will be directly discharged to surface waters.

b. Groundwater:

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

Dewatering may be required for construction of sewer collection system facilities. The CIP also includes increasing the groundwater discharge at Cochrane Park. Prior to completing this project, additional environmental investigation, including hydraulic modeling, would be completed to determine impacts.

- 2) Describe the underlying aquifer with regard to quality and quantity, sensitivity, protection, recharge areas, etc.

Proposed projects will not impact the underlying aquifer.

- 3) Describe waste material that will be discharged into or onto the ground from septic tanks or other sources, if any (such as domestic sewage; industrial byproducts; agricultural chemicals).

Proposed projects will not directly discharge waste materials from animals, humans, or its operational activities to groundwater. The Plan recommends sewer collection system improvements to serve growth and replace existing on-site septic systems.

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.

Construction activities could temporarily increase runoff, and associated erosion and sedimentation could affect water quality in the short term.

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

No untreated waste materials will enter ground or surface waters as a result of properly operated sewer conveyance, treatment, and disposal facilities. Construction activities could temporarily discharge materials, which will be controlled with site-specific BMPs and other mitigation measures.

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

Construction activities will include measures to reduce potential surface water, groundwater, and runoff impacts, such as BMPs and other temporary erosion controls. Yelm will prepare required plans for stormwater pollution control and spill prevention.

All future projects will be designed, constructed, and operated to meet applicable local, state, and federal regulatory requirements to protect water resources. All Yelm projects will obtain the necessary permits and approvals concerning surface water, groundwater, and storm water runoff. Future projects will comply with applicable local storm water and drainage codes of the appropriate permitting jurisdictions.

4. **Plants**

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

- ☒ deciduous tree: alder, maple, oak, aspen, other
- ☒ evergreen tree: fir, cedar, pine, other
- ☒ shrubs
- ☒ grasses
- ☐ pasture
- ☐ crops or grains
- ☒ wet soil plants: cattail, buttercup, bulrush, 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?

Vegetation could be affected in association with some projects. Some infrastructure projects would occur in developed areas, and the amounts of vegetation to be removed or altered likely would be relatively small, localized, and mostly limited to urban-type vegetation. Some vegetation removal will be required in the vicinity of infrastructure projects in undeveloped areas. Vegetation on or adjacent to project sites, where present, could be disturbed by construction activities.

If areas of vegetation are removed or altered, vegetation will be restored following construction.

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

As part of the Thurston Highlands EIS effort, a comprehensive query of the U.S. Fish and Wildlife Service (USFWS) website was conducted for documentation of any Listed or Proposed Endangered and Threatened Species and Critical Habitat, Candidate Species and Species of Concern occurring within a 1.5-mile radius of the project area. In addition, a thorough search was conducted of the National Marine Fisheries Service, Northwest Regional Office, Office of Protected Resources web pages. Both of these websites were accessed October 4, 2006. No Federally-listed species or critical habitat records were found for the Thurston Highlands property. The prevalence of low-diversity, replanted, mostly young Douglas fir forest does not afford preferred habitat conditions for listed species that could potentially occur, such as Northern spotted owl (*Strix occidentalis*). Furthermore, the absence of prairie habitat conditions within Thurston Highlands eliminates the potential for listed plant and animal species associated with this habitat type to occur. The only potential Federally-listed species that might occur within Thurston Highlands is an aquatic plant, water howellia (*Howellia aquatilis*), that could occur within the sphagnum bog habitat associated with the Wetland A complex.

The Draft Biological Assessment prepared for the SR 510/Yelm Loop Highway Corridor (WSDOT, May 2007) investigated the presence of threatened and endangered species within the same general project area as the Yelm sewer system service area. Within the project area, it was determined that listed fish species included Puget Sound Chinook salmon and bull trout. Designated critical habitat for the Puget Sound Chinook salmon evolutionarily significant unit (ESU) occurs in portions of the mainstem Nisqually River and the lowest reaches of Yelm Creek (river mile [RM] 0.0 to 0.7). The closest designated critical habitat for the Coastal-Puget Sound bull trout distinct population segment (DPS) is in the Nisqually River. Puget Sound steelhead, proposed for listing as a threatened species, may also occur in the project vicinity. There are no known listed plant species identified in the

project; however, a federal species of concern (*Aster curtus*, white-top aster) may occur in the project vicinity. Bald eagles were the single wildlife species addressed in this BA.

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

Projects will be designed to minimize potential impacts on vegetation. Where necessary to remove or alter areas of vegetation, vegetation will be restored following construction. Areas will be restored, where possible, with plantings of native species and other appropriate vegetation. Where appropriate, Yelm will prepare a landscaping plan for individual projects, consistent with Yelm development guidelines.

5. **Animals**

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

☒ birds: hawk, heron, ducks, eagle, songbirds, other: Passerine species, raptors, woodpecker, jays, crows

☒ mammals: deer, bear, elk, beaver, other: Cougar

☒ fish: bass, salmon, trout, shellfish, other:

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

Puget Sound Chinook Salmon and bull trout

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

No

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

None, no impacts anticipated.

6. **Energy and Natural Resources**

- a. What kinds of energy (electric, natural gas, gasoline, heating oil, wood, solar etc.) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, transportation, etc.

The programs and future projects described in the Plan will not require any major increase in regional long-term energy use. The Plan includes the construction of sewer facilities which will require pumping and power. The existing electrical infrastructure within the vicinity of the existing sewer facilities is adequate to handle future loads.

Construction of future projects will require energy for construction equipment and vehicles, which would temporarily use electricity and gasoline/diesel fuel. Energy

use during construction would be short term and would have a negligible impact on regional energy supplies. Necessary equipment will consist of standard construction equipment.

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

The Plan does not involve building large, new structures or planting vegetation that would block access to the sun for adjacent properties.

- 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:

Construction activities and operation of Yelm facilities will include measures to conserve energy, such as selection of energy-efficient equipment and implementation of energy-efficient operational practices, where applicable.

7. **Environmental Health**

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

No new chemicals besides those already in use by the City (such as chlorine gas for disinfection) at existing sewer and reclaimed water facilities are proposed. Toxic and/or hazardous substances are not anticipated to be discharged to the sewer collection system. Hazardous materials that do enter the collection system are expected to be dilute and the result of accidental spills.

Construction of individual projects to implement the Plan could occasionally release environmental hazards due to leaks and spills from construction equipment. Small amounts of materials likely to be present during construction could include gasoline and diesel fuels, hydraulic fluids, oils, lubricants, solvents, paints, and other chemical products. A spill of one of these chemicals could potentially occur during construction as a result of either equipment failure or worker error. Construction activities would be subject to applicable spill containment and cleanup procedures.

Fire risk is present, but is minimized by using non-combustible construction materials and following NFPA 820 Standard for Fire Protection in Wastewater Treatment and Collection Facilities, 2008 Edition.

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

Emergency services could be required to clean up spills or respond to worker injuries during construction and, possibly, during the operation and maintenance of completed facilities. However, operation of future infrastructure anticipated under the Plan likely would not require special emergency services.

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

Site-specific hazardous material and spill control plans have been developed to provide a response plan in the event of a hazardous chemical spill at the existing WRF.

A Construction Contingency Plan and a Health and Safety Plan will be required of the contractor before work commences.

b. Noise

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

Projects planned for implementation as part of the Plan will take place at various locations within the planning area, most in areas with little or no noise sources. The existing noise sources would not affect projects identified the Plan.

- 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.

Construction of future projects could result in localized construction noise, which would be a short-term impact and would be reduced with project-specific mitigation measures. The design and operation of new facilities would comply with any applicable local noise ordinances.

Potential construction noise would be most noticeable at residences, institutions, and park/public open spaces near construction activities. Short-term noise from construction equipment would be limited to the allowable maximum noise levels established by City code, or the applicable noise codes of other local jurisdictions where projects are located.

After completion of the future projects, occasional noise from equipment and vehicles used for on-going routine maintenance and repair may occur. Such noise would be limited to daytime hours, except for noise associated with responses to certain unanticipated emergencies and the operation of the standby generator at the existing WRF site.

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

Construction of projects will include reasonable mitigation measures, as appropriate, to reduce potential site-specific construction noise impacts. Reasonable construction mitigation could include restrictions on nighttime construction activities, mufflers and enclosures for equipment, turning off idling equipment, and locating equipment farther away from receptors. All construction work will be performed in compliance with the applicable local noise ordinances. Prior to the start of construction, Yelm will coordinate construction activities with affected businesses, institutions, and residences that may be sensitive to construction-related noise, dust, or traffic.

Construction work will be conducted during normal business hours and all future facilities will be located, designed, and operated within applicable local noise ordinance standards.

8. **Land and Shoreline Use**

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

In general, the planning area is characterized by urban uses in the central Yelm area, and undeveloped uses in the outskirts of the Yelm City limits. Existing land uses include single-family and multifamily residences, commercial, industrial, recreation, and open space. Land use and zoning maps are provided in the Plan.

- b. Has the site been used for mineral excavation, agriculture or forestry? If so, describe.

Some properties in the vicinity of potential projects, specifically the southwest portion of the City UGA, have been managed for commercial forestry in the past

- c. Describe any structures on the site.

The Yelm urban area is developed with a wide range of structures, ranging from single-family residences to commercial businesses to large industrial structures. Undeveloped areas in west Yelm have fewer structures. The WRF includes treatment basins and single-story structures housing treatment equipment or for the support of operations staff. Sewer and reclaimed water conveyance pipelines are generally below ground.

No new above ground structures are proposed as part of the CIP in the Plan.

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

No

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

The Yelm sewer service area encompasses numerous zoning classifications as shown by land use and zoning mapping in the Plan. Zoning around the existing WRF is “industrial” while reclaimed water facilities are generally located in “parks/open space” areas. Sewer and reclaimed water conveyance pipelines are generally located in public right-of-ways.

Project-specific zoning issues will be described during future design phases.

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

The Yelm sewer service area encompasses numerous zoning classifications as shown by land use and zoning mapping in the Plan. Zoning around the existing WRF is “industrial” while reclaimed water facilities are generally located in “parks/open space” areas. Sewer and reclaimed water conveyance pipelines are generally located in public right-of-ways.

Project-specific zoning issues will be described during future design phases.

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

Not applicable.

- h. Has any part of the site been classified as a "natural resource", "critical" or "environmentally sensitive" area? If so, specify.

The entire City is located in a critical aquifer recharge area. Although the City of Yelm has designated environmentally sensitive areas, projects identified in the Plan will be sited outside of these areas.

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

The Plan identifies four additional staff for operations and maintenance of sewer and reclaimed water facilities as a result of growth.

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

None.

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

Not applicable.

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

Prior to construction of any future projects, Yelm will apply for and obtain the applicable land use permits and approvals. Design, construction, and operation of the individual facilities will follow local zoning and development standards for mitigating potential impacts on adjacent land uses. Future individual permits would include site-specific conditions or mitigation measures to meet the requirements of the applicable land use, zoning, and shoreline codes and policies.

The City has prepared and adopted Yelm's *Comprehensive Plan*, which was last updated in 2007. The *Comprehensive Plan* contains policies on utilities and identifies areas for future growth, which have been sources of direction for the Yelm's sewer planning. The Plan is consistent with the goals and the policies of the Utilities Element of the *Comprehensive Plan*. Any population growth facilitated by implementation of the Plan generally would occur in areas identified for future development in Yelm's *Comprehensive Plan* and in the comprehensive plans of other local jurisdictions.

The Plan is consistent with the requirements of the Growth Management Act (GMA) and local and regional land use plans. The City has also updated its Comprehensive Plan in 2009 to adopt population projections consistent with the Thurston County Comprehensive Plan.

9. **Housing**

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

None

- 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:

Not applicable.

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?

No new above ground structures are proposed as part of the CIP in the Plan.

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

None

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

Not applicable.

11. **Light and Glare**

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

Implementation of the Plan would not introduce major new sources of light or glare.

Construction activities could be short-term sources of light and glare; however, because most construction activities would be limited by the local noise ordinances to avoid nighttime hours, most construction would occur during daytime hours. The lighting requirements for future individual projects would be determined during the design phase to comply with current lighting standards and local codes.

- 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?

Future Yelm projects under the Plan would not be affected by other existing off-site sources of light or glare.

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

Not applicable.

12. Recreation

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

The City of Yelm maintains public parks throughout city limits, including Cochrane Park, City Park, and Longmire Park.

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

Proposed projects are not anticipated to interfere with recreational opportunities.

- c. Proposed measures to reduce or control impacts or provide recreation opportunities:

Not applicable.

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.

Because the planning area is located within an area used by Native American Tribes in the past, there is a possibility of discovering cultural materials. Infrastructure construction is generally related to previously developed areas and for existing collection system upgrades (upsized to increase capacity) where new evidence of historical or cultural artifacts would not be expected.

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

Communications with staff representatives of the Nisqually Indian Tribe during the preparation of the permitting documents for the Thurston Highlands MPC did not indicate significant likelihood of former Native American use of the site or vicinity.

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

If it is determined that there is a potential for cultural, historic, or archaeological sites to be encountered during construction, a plan will be included in construction contract documents. This plan would require that if any cultural, archaeological, or

historic resources were encountered during excavation, Yelm would immediately consult with the state and local historic preservation offices and with affected Tribes regarding site-specific mitigation measures. Work in that immediate area would be suspended, and the find would be examined and documented by a professional archaeologist or historian. Decisions regarding appropriate mitigation measures and further action would be made before construction in the area of discovery was allowed to resume.

14. **Transportation**

- a. Identify sidewalks, trails, public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Figure 11-1 shows proposed project locations as well as public streets, highways, and trails in the City.

- b. Is site currently served by public transit? By what means? If not, what plans exist for transit service?

Not applicable.

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

None

- d. Will the proposal require any new sidewalks, trails, roads or streets, or improvements to existing sidewalks, trails, roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

Sewer pipelines often run within public rights-of-way, and pipeline construction or maintenance could occasionally result in temporary disruptions to local traffic and access to businesses or homes. To reduce construction impacts, individual projects will include appropriate measures to minimize traffic disruptions and maintain accesses. Roads that are impacted will be restored per City of Yelm standards.

- 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.

Installed sewer conveyance pipelines would not require vehicular trips. Operation of future WRF improvements would not generate additional vehicular trips as compared to existing facility operation.

Construction activities would temporarily generate vehicle trips for workers and hauling materials. The number of construction vehicles is anticipated to be relatively small compared to traffic on local roadways.

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

Construction of individual projects will include measures to reduce short-term impacts on affected roadways and other transportation facilities. Access to affected residences and businesses from local roadways will be maintained during the construction periods as much as possible. Vehicular travel along local roadways also will be maintained to allow passage of emergency service vehicles. For example, construction contracts would stipulate that contractors use flaggers and traffic controls to maintain vehicle access if lanes were temporarily closed during construction.

Traffic control plans for individual projects will ensure continued circulation and access during construction. Plans potentially could include provisions to address worker parking, such as requirements that workers carpool to the job site or that the contractor provide worker shuttles from off-site parking locations. Construction activities will be coordinated with affected landowners, local businesses, emergency service providers, transit services, other local jurisdictions, and the local jurisdictions.

15. **Public Services**

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

No

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

Not Applicable.

16. **Utilities**

- a. Check utilities currently available at the site:

<input type="checkbox"/> None	<input checked="" type="checkbox"/> electricity	<input checked="" type="checkbox"/> natural gas
<input checked="" type="checkbox"/> water	<input checked="" type="checkbox"/> refuse service	<input checked="" type="checkbox"/> telephone
<input checked="" type="checkbox"/> sanitary sewer	<input type="checkbox"/> septic system	<input checked="" type="checkbox"/> other:

The utilities available at the proposed construction sites vary by location. Currently, areas in within Yelm are equipped with the utilities checked above.

- 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.

Infrastructure improvements will not require any additional utility service.

C. **SIGNATURE**

The above answers are true and complete to the best of my knowledge. I understand that the City of Yelm is relying on them to make its decision.

Signature: _____

Date Submitted: _____

SUPPLEMENTAL ENVIRONMENTAL CHECKLIST FOR NONPROJECT ACTIONS

(Do not use this sheet for project actions.)

When answering these questions, be aware of the extent of 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?

It will not

Proposed measures to avoid or reduce such increases are:

N/A

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

It will not

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

N/A

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

It will not have a significant impact

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

N/A

4. How would the proposal be likely to use or affect critical or 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 natural resource areas?

It will not

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

N/A

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?

It will have no impact

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

N/A

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

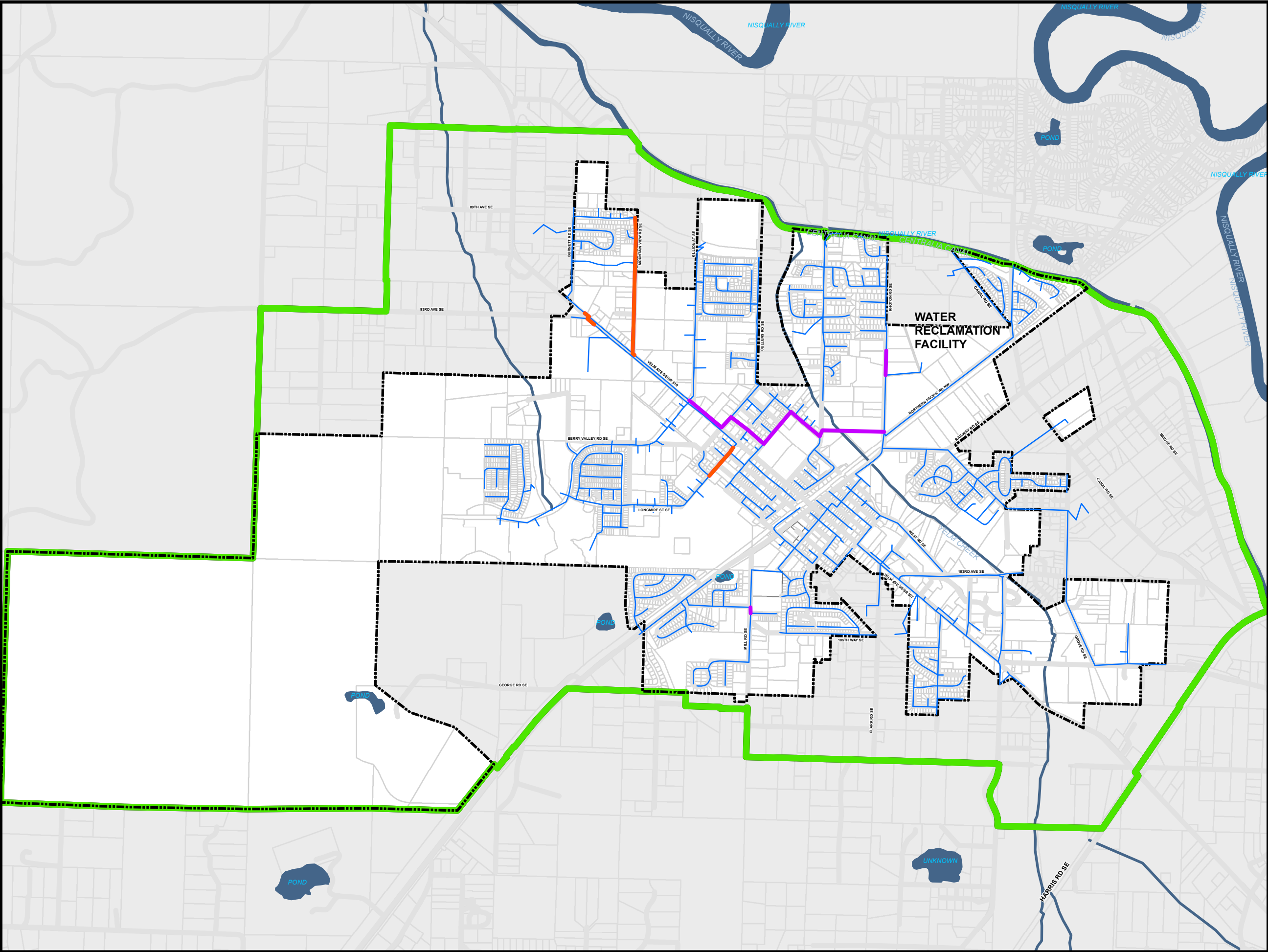
It will not

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

N/A

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

It will not conflict



- Legend**
- Yelm City Limits
 - Urban Growth Area
 - 2020 Upsized Pipe
 - 2030 Upsized Pipe
 - Existing Sewer System
 - Streams

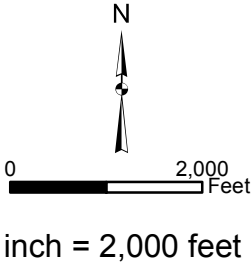
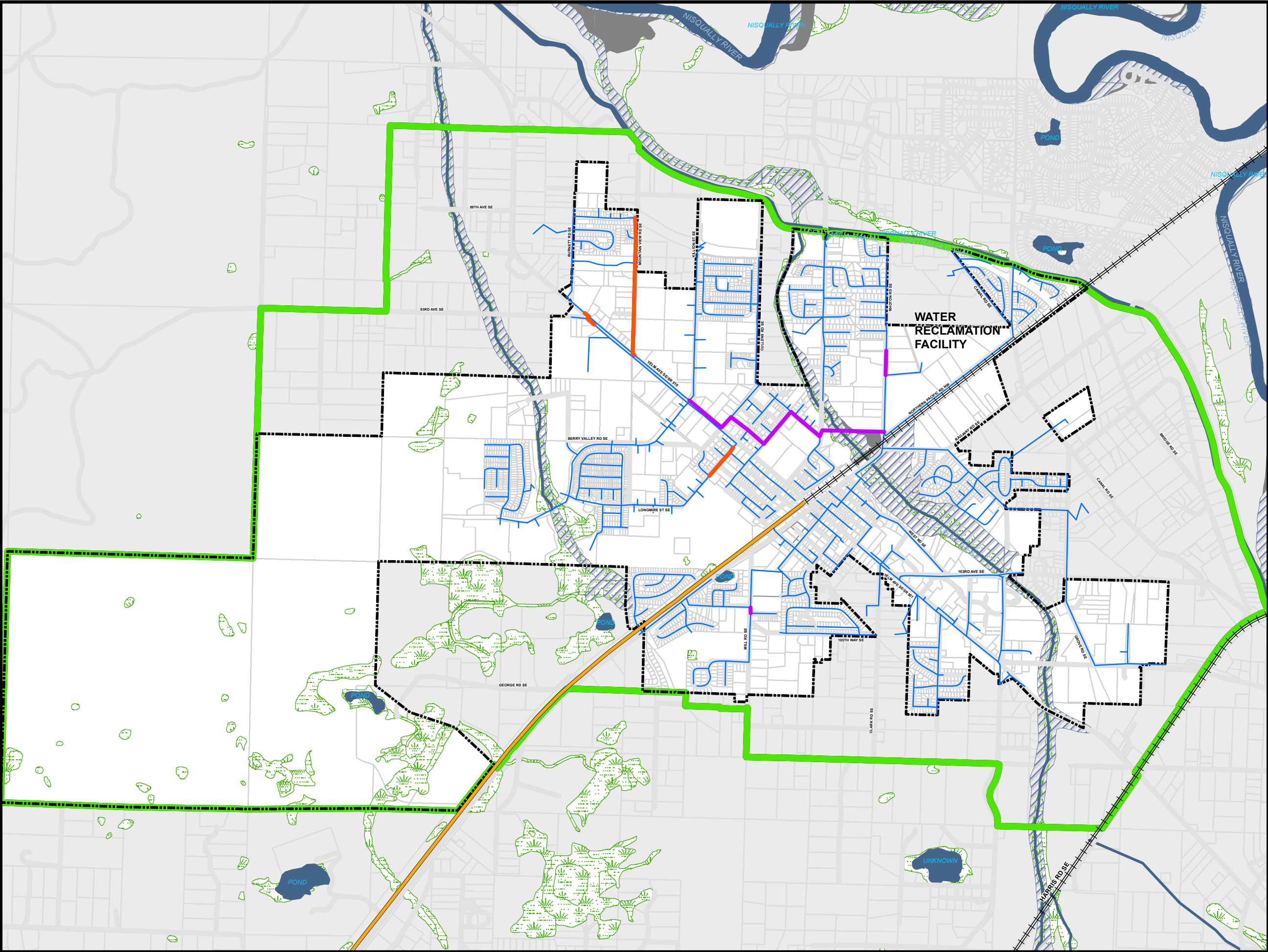


Figure 11-1.
City of Yelm
Proposed Improvement
Locations



Brown and Caldwell



Legend

- Yelm City Limits
- Urban Growth Area
- 2020 Upsized Pipe
- 2030 Upsized Pipe
- Existing Sewer System
- Streams
- Wetlands
- 100-yr Flood Zone
- 500-yr Flood Zone
- Trail
- Railroads

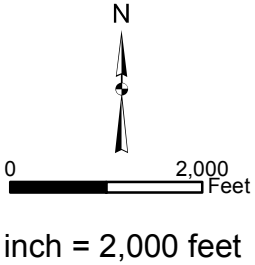


Figure 11-2.
City of Yelm
Environmental Features



Brown and Caldwell