

**REGULAR MEETING OF THE  
NORTH BEND PLANNING COMMISSION  
Wednesday April 17, 2024, 6:30 PM  
City Hall, 920 SE Cedar Falls Way, North Bend, WA**

**AGENDA**

- 1) Call to order and roll call, Planning Commission**
- 2) Approval of minutes from April 3, 2024 meeting.**
- 3) Opportunity for public comment on non-agenda items (3 minutes per person)**
- 4) Utilities Element Recommendation- 2024 Comprehensive Plan Update Pg. 4**
- 5) 2021 King County Surface Water Design Manual Pg. 36**
- 6) Adjournment by 8:30 unless otherwise approved.**

**PLEASE NOTE:** Members of the public may choose to attend the meeting in person or by teleconference. Members of the public attending the meeting in-person will have an opportunity to provide public comment and if attending the meeting by teleconference may submit written comments via in-person drop off, mail, fax, or e-mail to [rdeming@northbendwa.gov](mailto:rdeming@northbendwa.gov). All written comments must be received by 4 p.m. on the day of the scheduled meeting and must be 350 words or less. If an individual requires an accommodation because of a difficulty attending the public meeting, the City requests notice of the need for accommodation by 3:30 p.m. on the day of the scheduled meeting. Participants can request an accommodation to be able to provide remote public comments by contacting the City by phone (425) 888-5633 or by e-mail to [rdeming@northbendwa.gov](mailto:rdeming@northbendwa.gov). No other remote public comment will be permitted.

Those wishing to access the meeting by teleconference will be required to have a registered Zoom account and display your full name to be admitted to the online meeting.

Zoom Meeting Information:

To Sign Up for a Zoom Account: <https://zoom.us/join>

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Meeting ID: 840 6934 5990

Passcode: 317193

Call In Phone Number: 1-253-215-8782

**REGULAR MEETING AND PUBLIC HEARINGS OF THE  
NORTH BEND PLANNING COMMISSION  
- ACTION MEETING MINUTES -  
Wednesday, April 3, 2024, 6:30 PM**

This meeting was held at City Hall, 920 SE Cedar Falls Way, North Bend, WA, and was also available online. A complete video recording of this meeting is available on the City of North Bend YouTube website, at [www.youtube.com](http://www.youtube.com), under “City of North Bend.”

**AGENDA ITEM #1: CALL TO ORDER**

The meeting was called to order at 6:30 PM.

**ROLL CALL**

Planning Commissioners present: Brian Fitzgibbon, Juliano Pereira, Sam White, James Boevers, Hannah Thiel, and Stephen Matlock.

Planning Commissioners absent: Olivia Moe.

City Staff Present: Rebecca Deming, Community & Economic Development Director, Mike McCarty, Principal Planner

**AGENDA ITEM #2: Approval of minutes from March 6, 2024 meeting**

Motion by Commissioner Fitzgibbon, seconded by Commissioner Matlock, to approve the March 6, 2024 meeting minutes. The motion passed unanimously.

**AGENDA ITEM #3: Opportunity for Public Comment on non-agenda items**

No one provided comment at the meeting. Of note, a written comment was received via email from Tim Cowan concerning a property he owns at 12600 South Fork Ave. SE and his interest in a rezone of the property. The email was provided by staff to the Planning Commissioners ahead of the meeting.

**AGENDA ITEM #4: Amendment to Non-Conforming Use Regulations, including Public Hearing and Planning Commission Deliberation.**

CED Director Rebecca Deming provided an introduction to the amendments proposed to the Non-Conforming Use Regulations in NBMC 18.30. Chair Thiel opened the public hearing at 6:33. No members of the public spoke for the public hearing, and the public hearing was closed at 6:33. The Planning Commission concurred with the amendments proposed. Motion by Commissioner White, seconded by Commissioner Fitzgibbon, to recommend approval of the draft amendments to NBMC 18.30. The motion passed unanimously.

**AGENDA ITEM #5: Utilities Element Update, including Public Hearing and Planning Commission Deliberation.**

Principal Planner Mike McCarty provided an introduction and summary of the draft updates to the Utilities Element, prepared as a part of the City’s 2024 Comprehensive Plan Update. Chair Thiel opened the public hearing at 6:50. Doug Lorenz, 4543 193<sup>rd</sup> Place SE, asked staff a question regarding sewer service, which staff addressed noting that sewer service planning will be addressed in the City’s Capital Facilities Element rather than the Utilities Element. Chair Thiel closed the public hearing at 6:52. The Planning Commission discussed and asked questions to staff regarding the draft update. Planning Commissioners made the following requests for edits to the draft:

1. Add a map of the boundary between Tanner Electric’s service area and Puget Sound Energy’s service area within North Bend.
2. Add a description of how electric power generally gets distributed from power generating stations to individual customers, similar to how is described under the natural gas section of the element.
3. Revise the name of the element to the Franchise Utilities Element.
4. Planning Commissioners identified additional grammatical edits through the draft.

1 Commissioner Pereira provided a motion, seconded by Commissioner White, to continue discussion on the draft  
2 Utilities Element at their next meeting on April 17. The motion passed unanimously. City staff noted they would  
3 address the Planning Commission's requests for edits in an updated draft for the April 17 meeting.  
4

5 **AGENDA ITEM #6: Adjournment by 8:30 PM unless otherwise approved by the Commission**

6 The Meeting was Adjourned at 6:58 PM. Commissioner White and Commissioner Thiel each informed the  
7 Commission that they would not be available to attend the April 17 Planning Commission meeting.  
8

DRAFT



## **Staff Report and Planning Commission Recommendation for Updates to the Utilities of the Comprehensive Plan**

**Meeting Date:** April 17, 2024

**Proponent:** City of North Bend

**Staff Recommendation:** A Motion to recommend City Council approval of the proposed updated Utilities Element of the Comprehensive Plan for adoption with the rest of the 2024 Comprehensive Plan Update.

### **I. Purpose of proposed amendments:**

The City of North Bend is proposing amendments to the Utilities Element of the Comprehensive Plan. Amendments are being prepared as a part of the broader 2024 periodic update to the North Bend Comprehensive Plan, as required under RCW 36.70A.

The Utilities Element has been revised to update outdated information and reflect current status of the facilities of franchise utility providers within the City, including electricity, natural gas, solid waste, recycling, and telecommunication services. Amendments to the infrastructure/facility inventory sections of the Element have been provided based on feedback and comments from franchise utility providers. Amendments to the Utilities policies have not been proposed.

A clean version of the draft is attached as Exhibit A of this staff report, and a redline version, showing all amendments and comments describing changes, is attached as Exhibit B.

### **II. Impacts of Proposed Amendment**

NBMC 20.08.070 and .080 requires that applications for Comprehensive Plan and municipal code amendments be evaluated for their environmental, economic, and cultural impacts, as well as impacts to surrounding properties. These impacts are evaluated below.

1. **Environmental Impacts.** Negative environmental impacts are not anticipated from adopting the updates to the Utilities Element. The Element is principally descriptive of franchise utility infrastructure and services to North Bend residents, and does not affect permitting requirements for such facilities and infrastructure. State Environmental Policy Act review will be conducted for the Comprehensive Plan update as a whole, which will provide opportunity for further consideration of environmental impacts of the Comprehensive Plan including this Element prior to its adoption.
2. **Economic Impacts.** The provision of franchise utility services by these providers to North Bend businesses and residents is an essential function of development and provides a positive economic impact.

3. **Cultural Impacts.** No significant cultural impacts are anticipated from the amendments. Specific future projects involving utility installation by utility providers within North Bend that are subject to City permitting requirements will be subject to cultural resource reviews as appropriate, which will plan for addressing potential cultural resource impacts. State Environmental Policy Act review will be conducted for the Comprehensive Plan which will provide opportunity for further consideration of cultural impacts of the Comprehensive Plan including this Element, prior to its adoption before the end of 2024.
4. **Impacts to Surrounding Properties.** The Elements apply City-wide and not specific to individual properties. Future projects that are located on and/or adjacent to specific properties will be subject to public notification and permitting requirements, which will include evaluation of potential impacts to such properties consistent with State Environmental Policy Act review and review against City development regulations at the time of application and review for such projects. Existing policies within the Utilities Element are provided to minimize impacts of utilities on surrounding properties, including undergrounding overhead lines, providing landscape screening, co-locating facilities, preserving vegetation, and conduit installation with roadway construction to reduce future disruptions.

### **III. Compatibility of Proposed Amendment with North Bend Comprehensive Plan**

In accordance with NBMC 20.08.080, Comprehensive Plan and development regulation amendments must be evaluated for compliance with the Comprehensive Plan. The proposed amendments are provided consistent with Multicounty Planning Policies and requirements of the Growth Management Act to describe the general locations and capacities of utilities within the City's Utilities Element of the Comprehensive Plan.

### **IV. Compatibility of Proposed Amendment with the North Bend Municipal Code (NBMC)**

In accordance with NBMC 20.08.080, Comprehensive Plan amendments must be evaluated for compliance with the North Bend Municipal Code. The proposed amendments are compatible with the North Bend Municipal Code and are being prepared consistent with the amendment procedures in NBMC 20.08.

### **V. Planning Commission Analysis:**

Pursuant to NBMC 20.08.100, the Planning Commission shall consider the proposed amendment against the criteria in NBMC 20.08.100(B). A staff analysis is provided in italics under each criterion below.

1. Is the issue already adequately addressed in the Comprehensive Plan?  
*The existing Utilities Element in the Comprehensive Plan dates to 2015 and needs to be updated consistent with state law (see below).*
2. If the issue is not addressed in the Comprehensive Plan, is there a need for the proposed change?  
*Yes. The proposed update is necessary to ensure consistency with requirements of the Growth Management Act (GMA) and Puget Sound Regional Council (PSRC), as a required component of the City's periodic major update to the Comprehensive Plan due in 2024. Consistency with the GMA and PSRC Vision 2050 is required for certification of the City's Comprehensive Plan by PSRC for eligibility for various state and federal grants, which the City may rely on to fund municipal projects.*

*Without such certification and use of grants, the City would need to fund a much larger share of the cost of these improvements.*

3. Is the proposed change the best means for meeting the identified public need?

*Yes.*

4. Will the proposed change result in a net benefit to the community?

*Yes. The amendments will provide current inventory information concerning franchise utilities and consistency with requirements for the Utilities Element.*

## **VI. Summary Findings:**

1. Pursuant to RCW 36.70A.106, the draft Elements was provided to the Department of Commerce - Growth Management Services via the Secure Access Washington portal.
2. State Environmental Policy Act Review will occur for the 2024 Comprehensive Plan updates as a whole, including this draft Utilities Element update, at a later date. SEPA Determination will be required prior to final adoption by Council of the Comprehensive Plan.
3. A public hearing was held by the Planning Commission on April 3, 2024. A notice for this Public Hearing was published in the Valley Record on August 4, 2023. No written comments were received for the public hearing.
4. The Planning Commission reviewed the draft amendments at their April 3 and April 17, 2024 meetings. Staff prepared revisions to the draft based on input from the Planning Commission at their April 3 meeting.
5. The proposed amendments are consistent with the procedures established in NBMC 20.08, *Comprehensive Plan and Development Regulations Amendment Procedures*.
6. The proposed amendments are consistent with and effectively carry out the policies of and requirements for the Comprehensive Plan.

## **CONCLUSION AND STAFF RECOMMENDATION:**

Based on findings above, Staff recommends approval of the proposed amendments to the Utilities Element of the Comprehensive Plan, attached as Exhibit A.

## **PLANNING COMMISSION RECOMMENDATION**

Based on the findings above and public comments received, the North Bend Planning Commission recommends **approval** of the proposed amendments to the Utilities Element of the Comprehensive Plan, attached as Exhibit A.

Exhibit A: Draft Utilities Element (Clean Version)

Exhibit B: Draft Utilities Element (Redline Version showing edits and comments)

## CHAPTER 5: FRANCHISE UTILITIES ELEMENT

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## CHAPTER 5: FRANCHISE UTILITIES ELEMENT



### INTRODUCTION

The Growth Management Act defines electricity, gas, telecommunications, and cable as utilities. It defines water and sewer systems separately as public facilities. Plans for water supply and sewer are found as separate elements of the Comprehensive Plan. Transportation and circulation-related facilities are addressed in the ~~transportation~~ Transportation Element. The Franchise Utilities Element has been developed in accordance with RCW 36.70A.070 of the Growth Management Act, ~~WAC 365-195-320 (Utilities Element Requirements)~~, and the King County Countywide Planning Policies. To fulfill the requirements set forth by the Washington Growth Management Act, ~~thea~~ utilities element must include the following information:

1. Inventory the general location of existing utilities.
2. Establish the location of proposed utilities.
3. Examine the capacity of existing and proposed utilities.

The Franchise Utilities Element also includes an evaluation of solid waste management in North Bend, focusing on landfill capacity and recycling issues.

King County Countywide Planning Policies (CWPPs) provide local direction to implement the GMA mandate for consideration of utilities needs including, but not limited to electrical, communications and natural gas. Following is a paraphrased listing of the CWPP's with direct applicability to North Bend in ~~2014~~ 2024. The policy number of each referenced policy is cited. Other CWPP's may be indirectly applicable to North Bend and the CWPP's may be revised in the future. The full list of CWPP's is available on the King County ~~DDES~~ Countywide Planning Policies website at <http://www.metrokc.gov/ddes/compplan/CPP-current.pdf> King County Countywide Planning Policies - King County, Washington

Commented [MM1]: This chapter has been rescinded.

Local jurisdictions are to identify the full range of urban services required as growth occurs and how they plan to provide them, while prioritizing historically underserved areas and addressing disparities (CO-1), and avoiding locating urban serving facilities in the Rural Area (PF-1, PF-17). Service providers shall manage resources efficiently through regional coordination, sharing facilities and conserving resources ~~(CO-2 and CO-3)~~. Aggressive conservation shall be implemented to address the need for adequate supply of electricity ~~(PF-15 CO-6)~~.

Unlike the Capital Facilities Element, levels of service and concurrency requirements do not apply to private utilities. They are required by state law to provide service to anyone requesting it who has the ability to pay for the extension. The Washington Utilities Transportation Commission (WUTC) requires that privately owned utilities demonstrate that existing rate payers are not subsidizing new customers. Privately owned utilities are not public facilities although they provide a public service. They are required to provide the same level of service to urban and rural customers. The WUTC regulates utility and transportation providers to ensure safe and reliable service to customers at reasonable rates. Most of Washington State's investor-owned gas, electric, water and telecommunications are regulated by the WUTC.

In addition, due to concerns such as the security of facilities and in keeping with competition practices, the specific locations and specific market needs are not identified. Instead, general locations and general capacities are included in this element.

### ***Financing of Utilities***

The principle source of revenue for utility capital financing is charges to customers for utility services provided. Such charges include utility rate charges, other customer charges, fees, and charges for the sale of water and energy to other utilities. Revenue from customer charges is used to finance capital projects on a pay-as-you go basis or through the issuance of revenue bonds. For revenue bonds, principal and interest payments are made with revenue from utility customer charges. The State of Washington statutes permit cities to issue unlimited tax (voter-approved) general obligation debt for utility purposes up to a limit of 2.5 percent of a City's assessed valuation.

#### ***Definitions, Abbreviations, and Acronyms***

- kV – kiloVolt, a unit of electric potential equal to a thousand volts
- PSE – Puget Sound Energy
- TEC – Tanner Electric Cooperative
- V – Volt, The unit for electric potential

### ***Provision of Utility Service***

This section discusses the provisions of utility service by the City and by private entities. Each utility section includes a discussion of the existing inventory, existing facility capacity, and an assessment of future facilities, although financial information for privately-owned entities is not included in this plan.

## **ELECTRIC SYSTEM**

### ***Description and Inventory***

Electricity is provided to North Bend by Puget Sound Energy (PSE) and Tanner Electric Cooperative (TEC). Puget Sound Energy (PSE) serves the majority of the electricity users within North Bend, with approximately 2,200 customers. ~~Tanner Electric Cooperative and Puget Sound Energy~~ PSE and TEC

#### Draft update 4-05-2024 – Redline Version

signed a boundary agreement to define their respective service territories in 2013, ~~which are shown within North Bend on Figure 5-1.e-----~~. The City of North Bend and the surrounding area will continue to be served by both PSE and ~~Tanner Electric Cooperative~~ TEC.

~~Puget Sound Energy~~ PSE is a large investor-owned utility that provides electric service to ~~more than 1.1 million~~ customers in eight predominantly Western Washington counties: Island, King, Kitsap, Kittitas, Pierce, Skagit, Thurston and Whatcom. North Bend has a franchise agreement with PSE for use of City rights-of-way for PSE's installation and maintenance of electricity and natural gas lines (Ord. 1795).

Contact PSE – Municipal Liaison Manager Brandon Leyritz:  
Brandon.Leyritz@pse.com  
(425)-417-5925

~~Tanner Electric Cooperative~~ TEC is a non-profit cooperative, or small utility, serving the electrical needs of its members. ~~Tanner Electric~~ TEC serves members in the Ames Lake area of King County and Anderson Island in Pierce County in addition to its service in and around North Bend. ~~In 2014 Tanner Electric served 4,638 meters overall and 2,037 in and around North Bend. Tanner Electric was formed in 1936 to serve areas deemed not to be economically feasible by the private (for profit) power company. Over the years other areas took advantage of the cooperatives form of business and services and facilities were expanded.~~

~~The North Bend/Snoqualmie area includes several hydroelectric generating plants owned by PSE and other power producers: Snoqualmie Falls (PSE), Cedar Falls (Seattle City Light), and Weeks Falls, Twin Falls and Black Creek (owned by Independent Power Producers).~~ North Bend has a franchise agreement with TEC for use of City rights-of-way for TEC's installation and maintenance of electricity lines (Ord. 1757).

Contact Tanner Electric:  
<https://www.tannerelectric.coop>  
(425) 888-0623

~~In 2002 Tanner Electric built~~ TEC operates its own power substation just west of North Bend ~~on Alm Way~~. The North Bend substation is a 12kV system and has a capacity of ~~5025MVA (6033MVA during winter peaks)~~. ~~The Tanner Electric load for 2014 is over 13MW.~~ The 115 kV transmission line serving the substation is owned by the Bonneville Power Administration and connected to the Puget Sound Energy transmission system in the Snoqualmie Ridge area. The areas served by ~~Tanner Electric~~ TEC inside the city limits of North Bend are almost exclusively fed by underground circuits including the ~~Factory Outlet~~ outlet mall, Forster Woods, Rock Creek Apartments and the south fork area.

Chapter 5 – Franchise Utilities Element  
Resolution 1677, Exhibit A

## BONNEVILLE POWER

### Puget Sound Energy and

Tanner Electric ~~are~~ a

customers of Bonneville

Power Administration (BPA).

BPA is a federal nonprofit

agency based in the Pacific

Northwest. It is self-funded

and covers its costs by selling

its products and services.

BPA markets wholesale

electrical power from 31

federal hydro projects in

Columbia River Basin, one

nonfederal nuclear plant and

several other nonfederal power

plants. The dams are operated

by the U.S. Army Corps of

Engineers and the Bureau of

Reclamation. About 1/3 of the

electric power used in the

Northwest comes from BPA.

**Commented [MM2]:** Deleting extraneous information that becomes out-dated.

**Commented [MM3]:** Duplicative of paragraph on NB/Snoqualmie electrical sub-area below.



The North Bend / Snoqualmie electrical sub-area is located east of Preston and between the Cedar River Watershed and the Tolt River Watershed. It includes the Fall City area, but not Carnation or Duvall. Within the sub-area, there are five hydroelectric developments. The generating plants within this area include the Snoqualmie Falls (owned by PSE), Cedar Falls (owned by Seattle City Light), and Weeks Falls, Twin Falls, and Black Creek (owned by independent power producers). Four distribution substations are located in the North Bend /

Snoqualmie sub-area.

### Existing Service

Power plants throughout the region generate electricity that is then delivered via the electrical grid to customers through transmission and distribution power lines. High-voltage transmission lines carry electricity over long distances from generating plants to distribution substations. Distribution substations then reduce voltage through transformers from 115 kV to 12 kV, which is Puget Sound Energy PSE and TEC's standard distribution voltage. From the distribution substations, the 12 kV feeders distribute the power from these distribution substations to the individual customers. In residential areas, which is the predominate user in North Bend, winter outage scenarios usually determine when new distribution capacity improvements are needed.

PSE and TEC are powered by two separate substations with their own dedicated 115kV transmission lines. From these substations, each respective utility powers their individual customers via both overhead and underground distribution power lines.

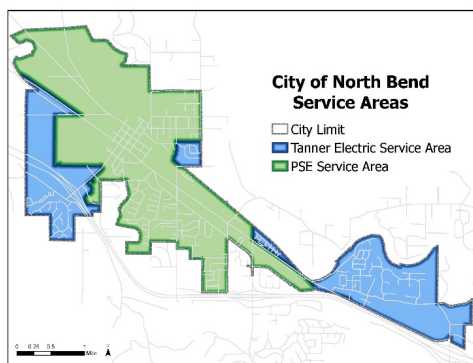


Figure 5-1

A 115 kV transmission-switching station (Snoqualmie Switch substation) is located adjacent to Snoqualmie Falls. This substation is considered a hub because it integrates the Snoqualmie Falls electric generation into the power system as well as providing an interconnection point for the power system. Two existing transmission lines connect to the Snoqualmie Falls generation complex; one line extends north to Fall City, one line extends south to North Bend continuing south to the Covington area, one line extends west to the Lake Tradition substation in Issaquah, and one line extends west to the Mount Si substation in Snoqualmie.

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## SNOQUALMIE FALLS HYDRO- ELECTRIC PROJECT

Puget Sound Energy's

Snoqualmie Falls Hydroelectric

Project is one of the oldest

hydropower plants in the United

States. The project contains a

small diversion structure just

upstream from the falls, and two

powerhouses. Built in 1898-99,

the first powerhouse is encased

in bedrock 260 feet beneath the

surface and was the world's first

underground power plant. The

second powerhouse was built in

1910 and is a quarter-mile

downstream from the falls. The

two powerhouses combined have

54 megawatts of generating

capacity (enough to meet the

peak electricity needs of about

25,000 households).

(<https://pse.com/inyourcommunity/king/Pages/Snoqualmie-1677-Exhibit-A-Falls.aspx>)

Chapter 5 – Franchise Utilities Element

y/king/Pages/Snoqualmie-1677-Exhibit-A-Falls.aspx)

~~The Mount Si Substation was built at Snoqualmie Ridge in 2012. It provides both distribution capacity and a connection point for the three transmission lines that intersect at that location. The substation provides improved reliability for PSE's customers in Snoqualmie and North Bend as well as Tanner's North Bend customers.~~

~~There are two additional distribution substations (Snoqualmie and North Bend substations) which serve the North Bend area. From these two substations there are six distribution circuits serving the customers in the City of North Bend.~~

### ***Future Demand***

The forecasted load for the next 30 years will require systems improvements which are listed in this section as construction projects that are in progress, or as plans for the future. A project is considered in progress if specific site selection, preliminary engineering, permitting, or construction activities are currently underway.

New projects can be developed in the future at any time due to:

- new or replacement of existing facilities to increase capacity due to new building construction, as well as conversion of existing homes and businesses to other preferred fuel types ~~(most typically from heating oil to natural gas);~~
- the need for replacement to facilitate improved maintenance of facilities;
- replacement or relocation of facilities due to municipal and state projects; and
- system upgrades required to accommodate third party interconnection of transmission or generation facilities.

Other system improvements may be needed within a 30 year horizon to serve forecasted load. PSE has two major substation projects planned in the 10 year horizon in the North Bend/Snoqualmie area. One near-term substation improvement project is anticipated to expand and upgrade PSE's existing North Bend substation to enable improved transmission connections. This will provide reliability improvements to customers served by the North Bend substation.

The other near-term substation improvement project is planned to expand PSE's existing Snoqualmie Switching Station to enable interconnection of a proposed small hydro project.

There are three possible long-range issues that need to be addressed in order to best serve the growth in the Snoqualmie/North Bend area:

1. ~~the e~~Existing ~~Cedar Falls Snoqualmie~~ 115 kV transmission lines may become inadequate to serve the projected load increases in the area;
2. the lack of capacity to get power into the area when local generation may become inadequate to serve the local load; and
3. the existing substations may become insufficient to supply adequate 115-12 kV substation transformer capacity.

**Commented [MM4]:** Recommendation to not include this specific information on the feeds and relative importance of the specific substations for security to help prevent attacks on critical infrastructure.

**Construction projects in progress / Plans for the future/Recently Completed**

*Tanner Substation and 115kV Transmission Line*

~~Tanner recently completed the construction of Tanner substation. In order to operate the substation, BPA built a transmission line tap (extension) from the existing Snoqualmie Lake Tradition line #1 to the substation. The line is connected from the Mt. Si Substation to the Tanner substation. In the near future, the line will be extended to the new Middle Fork substation.~~

*Middle Fork Substation and 115kV Transmission Line*

In 2020-2021, TEC completed the installation of a new 115kV Transmission Line through the existing utility corridor along the Snoqualmie Valley Trail. This transmission line runs to a new substation location along North Bend Way. TEC's Middle Fork Substation is to be built in 2024-2026 in order to better serve future growth on the East side of town as well as provide power supply redundancy for all TEC members.

*Additional Small Hydro*

There are numerous proposals for small hydroelectric generation plants in the North Bend/Snoqualmie area. Most of these are located on the North Fork of the Snoqualmie River and its tributaries, including Hancock Creek and Calligan Creek. In addition, there are possibilities for others along the Middle Fork and the South Fork of the Snoqualmie River. Puget Sound Energy may need to construct facilities to interconnect these generation plants to the electric transmission system. A possible interconnection substation to integrate new generation would be a Reinig Switching Station located near the Snoqualmie-Cedar Falls line to connect the existing system to new generation with a new 115 kV line.

*Transmission Line Rebuild*

The Cedar Falls-Snoqualmie 115 kV line contains low capacity wires. At some point this line will need to be rebuilt.

*Rattlesnake-Lake Tradition 230 kV Line*

The Rattlesnake-Lake Tradition transmission line is a planned new 230 kV line, which would connect the existing cross-Cascades transmission line near Rattlesnake Lake southeast of North Bend to the existing Lake Tradition substation near Issaquah. This line would allow power generation in Eastern Washington to be supplied to King County as well as strengthen the power system in the North Bend area and the rest of King County.

*Lantern Substation and 115 kV Transmission Line*

The planned Lantern substation, located south of North Bend at a site to be determined in the future, would provide electric power to customers in the Southeast North Bend area. This would provide a

possible interconnection point for existing and future transmission lines to improve reliability and capacity in the North Bend area.

#### *Future Distribution Substations*

At present, the timing of future distribution substations cannot be determined due to the uncertainty of load growth in this area, an island of urban development in a rural area. It is likely that the Snoqualmie/North Bend area may need an additional substation or an additional transformer in an existing substation ~~after 2020~~in the near future.

## NATURAL GAS

### *Description & Inventory*

Puget Sound Energy is an investor-owned natural gas utility that supplies natural gas to six Western Washington counties: Snohomish, King, Kittitas, Pierce, Thurston, and Lewis. Puget Sound Energy provides natural gas service to ~~more than 750,000~~ customers in six Western Washington counties: Snohomish, King, Kittitas, Pierce, Thurston, and Lewis. ~~It is estimated that PSE currently serves over 2,800 customers within the City of North Bend.~~

Natural gas is not an essential service. ~~However, PSE serves natural gas to many customers in North Bend that find that fuel essential for their space and water heat. The UTC requires PSE to maintain and serve natural gas as long as a demand remains, and, therefore, is not mandated to serve.~~ Extension of service is based on request and the results of a market analysis to determine if revenues from an extension will offset the cost of construction.

Natural gas comes from gas wells in the Rocky Mountains and in Canada and is transported through interstate pipelines by Williams Northwest Pipeline to Puget Sound Energy's gate stations.

Supply mains then transport the gas from the gate stations to district regulators where the pressure is reduced to less than 60 psig. The supply mains are made of welded steel pipe that has been coated and is cathodically<sup>1</sup> protected to prevent corrosion. They range in size from 4" to 20".

<sup>1</sup>Cathodic Protection (CP) is a technique used to control the corrosion of a metal surface by making it the cathode of an electrochemical cell.

### ***Definitions, Abbreviations, and Acronyms***

- Btu – British thermal unit, One Btu is the heat required to raise the temperature of one pound of water by one degree Fahrenheit.
- cf – Cubic feet
- Mcf – equals the volume of 1,000 cubic feet of natural gas.
- Natural Gas is a fossil fuel formed when layers of buried plants, gases, and animals are exposed to intense heat and pressure over thousands of years. The energy that the plants originally obtained from the sun is stored in the form of chemical bonds in natural gas.
- psig – pounds per square inch gauge measures a unit of pressure. Psig indicates that the pressure is relative to atmospheric pressure, opposed to psia (absolute) which is relative to a vacuum.
- PSE – Puget Sound Energy
- Therm – One therm equals 100,000 Btu, or 0.10 MMBtu.
- WUTC – Washington Utilities Transportation Commission

Distribution mains are fed from the district regulators. They range in size from 1-1/4" to 8" and the pipe material typically is polyethylene (PE) or wrapped steel (STW).

### ***Existing Service***

According to the PSE rate department, the average house (using natural gas for both heat and hot water) consumes about 1,000 therms per year. Ten therms equals approximately one ~~"mcf"~~ (thousand cubic feet) of gas so 1,000 therms per house equals approximately 100,000 cubic feet of gas per household per year.

Individual residential service lines are fed by the distribution mains and are typically 5/8" or 1-1/8" in diameter. Individual commercial and industrial service lines are typically 1-1/4", 2" or 4" in diameter.

### ***Future Demands***

When planning the size of new gas mains, PSE uses a saturation model, which assumes all new households will use natural gas since 99% of new homes constructed where builders have the choice are using natural gas. PSE forecasts customer additions using a forecast analysis calculation based on PSE's revenue report which is generated by town tax codes established in our Exception Billings Department and based on historical customer counts.

Minimum pressure delivery through distribution pressure mains from a design standard is approximately 15 psig. If design pressures fall below 15 psig, there are several methods of increasing the pressure in the line, including:

1. Looping the distribution and/or supply lines to provide an alternative route for the gas to travel to an area needing additional supply. This method often involves construction of supply mains district regulators, and distribution mains;
2. Installing mains parallel to existing mains to supplement supply of natural gas to a particular service area; and
3. Replacing/upsizing existing pipelines to increase volume.

New projects can be developed in the future at any time due to:

1. New or replacement of existing facilities due to increase capacity requirements due to new building construction and conversion from alternate fuel;
2. Main replacement to facilitate improved maintenance of facility; and
3. Replacement or relocation of facilities due to municipal and state projects.

PSE makes an effort to coordinate construction work with municipal projects in order to minimize cost and impacts to the surrounding community. Due to franchise agreements, PSE is required to relocate existing facilities when construction projects require upgrades.~~Due to the growing popularity of natural gas in the North Bend and surrounding areas, PSE will continually evaluate the necessity of the above projects and alternatives. Changes in project route, construction schedule and detail could occur as they are dependent on budgets and WUTC cooperation.~~

## TELECOMMUNICATION, CABLE & INTERNET

Telecommunication is a branch of technology that allows communication over a distance by transmission of electrical impulses, electromagnetic waves, or optical pulses, such as telephone, radio, television, or computer network. These services are provided by private firms and are often provided as packages.

### Telephone

The local telephone service is provided by CenturyLink/Quantum Fiber, which currently serves North Bend, Fall City, Carnation and surrounding areas. The system consists of a network of copper and fiber optic cables, and copper and other equipment facilities including central office and remote switches that support the fiber and copper infrastructure, which are located throughout the area.

To meet North Bend's future needs, CenturyLink/Quantum Fiber follows the policy of extending its lines to serve customer needs within its territory boundary in accordance with its tariffs as filed under the WUTC. The City has a master use permit with Century Link/Quantum Fiber for use of City rights-of-way for installation and maintenance of their lines.

Contact Quantum Fiber: [quantumfiber.com](http://quantumfiber.com), (833) 250-6306.

### Cable Broadband, Television, and Internet

As telecommunication technologies have evolved, convergence of these technologies has occurred, resulting in multiple communication services migrating into consolidated networks. This typically involves the convergence of previously distinct media, such as internet, telephone, video and data communications being transmitted over fiber optic or other infrastructure. Internet and cable services are offered by multiple providers with North Bend, including Comcast/Xfinity, Century Link/Quantum Fiber, T-Mobile Home, and others. Land-line cable television service is offered through Comcast, which has a franchise agreement with the City of North Bend (Ord. 1081) for their use of City rights-of-way for maintenance and operation of their cable network. Internet service is provided by both CenturyLink and Comcast. CenturyLink supplies DSL services and Norstar (telephone key systems for business accounts). Comcast is a global media and technology company as well as the nation's largest video, high-speed Internet and phone provider to residential customers. The system consists of a combination of fiber cable and coaxial cable.

Comcast plans to expand its facilities to new residential subdivisions as they develop throughout the City. Comcast is committed to evolving advanced broadband services to meet the future needs and desires of our cable customers. These advanced services include more digital and high-definition television signals, interactive television like Video on Demand and Digital Video Recorders that allow customers to watch what they want in the timeframe that is best for their schedules, and faster Internet speeds.

#### Definitions, Abbreviations, and Acronyms

- KCCSWMP – King County Comprehensive Solid Waste Management Plan prepared by the Solid Waste Division of the Department of Natural Resources and Parks in accordance with Washington State law. It presents proposed strategies for managing King County's solid waste over the next 6 years with consideration of the next 20 years.
- WUTC – Washington Utilities Transportation Commission

**Commented [MM5]:** Simplified language provided to reflect the convergence of many telecommunications services by multiple private providers. It is no longer just the cable company and the phone company.

## **SOLID WASTE & RECYCLING**

The ~~2013~~ King County Comprehensive Solid Waste Management Plan<sup>2</sup> guides solid waste disposal in King County. The current version of this plan was adopted in 2019. The ~~Management~~ Plan proposes strategies for managing the solid waste over the next six years, with consideration of the next 20 years. This is the first management plan that looks at ways to address climate change. The core mission of the KCCSWMP is to ensure the citizens of the county have access to safe, reliable, efficient, and affordable solid waste handling and disposal services.

### ***Description and Inventory***

North Bend, like most cities in King County, has signed an Interlocal Agreement with King County to provide solid waste planning within the City. The terms of the Solid Waste Interlocal agreement are in effect from March 19, 2013 through December 31, 2040. A number of responsibilities are designated to the County and cities in order to implement the King County Solid Waste Management Plan. The plan identifies that cities need to provide for collection of solid waste and ensure the provision of the minimum levels of collection service for recyclables and yard waste. Cities are also directed to implement requirements for new construction to accommodate recycling collection systems such as the following: a procurement policy (a policy favoring the use of ~~reeycles products and~~ recyclable products and materials), variable can rates and a monitoring program. Cities are also asked to enforce City litter control ordinances. The cities are authorized under the plan to regulate and plan for the collection of special waste, to adopt and implement the solid waste plan, and to participate in the Solid Waste Advisory Committee and Regional Policy Committee.

### ***Existing Service***

Under the Interlocal Agreement, King County is responsible for solid waste management, planning, and technical assistance to cities. North Bend is responsible for solid waste collection. ~~Republic Services~~ Recology is under contract with North Bend for weekly solid waste and curbside recyclable collection, and for every other week, collection of yard debris/~~compostables for~~ disposal/recycling, as well as for collection of public garbage and recycling from public street receptacles and at city parks and facilities and at certain City-sponsored special events.

Contact Recology: North Bend – Recology King County  
(425) 448-6220.

Toxic and hazardous wastes are disposed of at facilities in South Seattle and Bellevue. Waste collected in North Bend that cannot be recycled is transported by ~~Republic Services~~ Recology to King County's Factoria Transfer Station in Bellevue ~~or to their own Transfer Station in Seattle.~~ King County ~~and Republic Services~~ then trucks the garbage to the Cedar Hills landfill; this facility received all of the mixed municipal solid waste (MMSW) generated in King County.

### ***Future Demand***

The City of North Bend and King County will continue offering service to existing and new residents meeting the standards found in the KCCSWMP. Refer to the most recent edition of King County Comprehensive Solid Waste Management Plan for additional information regarding County inventory and policy.

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<sup>2</sup>~~At the time of this publishing the 2013 King County Comprehensive Solid Waste Management Plan is in the process of being updated.~~

## CEDAR HILLS LANDFILL

Cedar Hills is the only landfill still operating in King County. King County was able to extend the life of Cedar Hills from the expected closure in 2012 to ~~2025~~ 2028 (lifespan depends on a variety of factors, including tonnage received). The ~~2013~~ 2019 Solid Waste Plan recommends exploring a range of emerging technologies for future disposal other than exporting waste to a distant landfill when max capacity is reached at Cedar Hills. ~~In 2009 Cedar Hills began operating a gas-to-energy process that burns gas created by the decomposition of waste into pipeline quality gas for the energy market. Bio Energy (Washington) LLC, owner and operator of this facility, has determined that the annual reduction in environmentally harmful carbon dioxide is the equivalent to 22,000 average passenger cars. The facility was generating enough energy to heat approximately 30,000 homes and sales of gas were expected to generate more than \$1 million annually for the division. This will help fund future green disposal of waste in King County. (2011 King County Comprehensive Solid Waste Management Plan)~~

Chapter 5 – Franchise Utilities Element  
Resolution 1677, Exhibit A

## RECYCLING

### *Description and Inventory*

*“King County and the entire Puget Sound region are recognized for successful efforts to collect recyclable waste. Continuing to reduce and reuse waste will require concerted and coordinated efforts well in the future. It is important reduce the waste stream going into area landfills. This can be done by promoting recycling practices.” (2013 King County Comprehensive Solid Waste Management Plan)*

North Bend is served by ~~Republic Services~~ Recology for recycling needs. ~~Republic Services is an American company that was incorporated in 1998. Through a series of mergers and acquisitions, they became one of the largest waste and recycling companies in the United States. Republic Services serves 1,595 residential customers and 389 commercial customers in the City of North Bend. In 2013 Republic Services processed 1,053 tons of recycling repurposed into new products and converted 760 tons of organic waste to compost. Recology serves communities throughout California, Nevada, Oregon, and Washington.~~

Recology Contact: North Bend – Recology King County (425) 448-6220.

~~In addition, in an effort to reduce wastes, Republic Services implements a variety of public education programs. These programs include distributing flyers and brochures on reducing waste as well as monitoring garbage in order to advise customers on what can be recycled.~~

### *Existing Service*

Refer to Figure 1: Existing Facility Service for Republic Service’s synopsis of the year 2013 and services provided. Under the City’s contract with Recology, recycling is collected weekly as a part of garbage service collection.

### *Future Demand*

The City of North Bend and ~~Republic Services~~ Recology will continue offering service to existing and new residents meeting the standards found in the KCCSWMP. Refer to ~~Republic Services~~ Recology for additional information about existing and future goals and policies.

## GOALS AND POLICIES

***Utility - Goal 1: Provide utilities needed to accommodate growth and development according to adopted plan policies.***

**Policies:**

- U - 1.1 Continue to serve all customers that request utility service in the service area.
- U - 1.2 Maintain the integrity of the utility infrastructure system to provide service to customers as a high priority for utility capital expenditures.
- U - 1.3 Work to ensure communication providers are capable of providing advanced communication services utilizing the most current technology.

***Utility - Goal 2: Cooperate with utility suppliers in the development, siting, maintenance, and repair of utilities.***

**Policies:**

- U - 2.1 Provide timely and effective notice to utilities of the construction, maintenance, or repair of streets or other facilities, and coordinate such work with utilities to ensure their needs are met.
- U - 2.2 Require utilities notify the City before utility work is done to discuss the best means to preserve vegetation from utility work.
- U - 2.3 Review utility permits simultaneously with development proposals requesting service.

***Utility - Goal 3: Work with citizens, other jurisdictions, and utility providers to ensure cooperation in the siting of utilities and to ensure that reliable and cost effective suppliers of energy are available to meet increasing demands.***

**Policies:**

- U - 3.1 Encourage the multiple use of corridors for trails, transportation right-of-way and utilities.
- U - 3.2 Encourage the consolidation of utility facilities and communication facilities by prohibiting duplication of electrical substations, above ground electrical transmission lines and communication antenna structures within one mile of another similar facility.
- U - 3.3 Require installation of fiber optic conduit at locations approved by City Engineer when roads are built or substantially reconstructed to facilitate future construction of local area fiber optic communications networks.

***Utility - Goal 4: Ensure the compatibility of and minimize the environmental impacts associated with the siting, development, and operation of utility services and facilities on adjacent properties.***

**Policies:**

- U - 4.1 Work with the utilities to eliminate existing overhead power lines in the Urban Growth Area, with an emphasis on the downtown commercial zoning district.
- U - 4.2 Develop regulations for siting and landscape requirements for utility meter cabinets, terminal boxes and similar above ground utility features.
- U - 4.3 Where feasible, require installation of new power and communication lines to be placed underground.

***Utility - Goal 5: Promote conservation through cooperative efforts of regulations, programs, and educational literature.***

**Policies:**

- U - 5.1 Work with the County and utility suppliers to develop public education and information materials that promote conservation.
- U - 5.2 Handle and dispose of solid waste in ways that minimize pollution and protects the public health.
- U - 5.3 Work with the City's solid waste collection agencies to establish cost-effective policies and regulations designed to minimize waste generation and meet King County's adopted waste reduction goals.
- U - 5.4 Encourage utility providers to convert to cost effective and environmentally compatible alternative technology and energy sources.
- U - 5.5 Require the provision of recycling opportunities in new construction projects.
- U - 5.6 Encourage utility providers to develop outage reduction plans, develop initiatives to lower energy costs, create clean power sources and reduce greenhouse gas emissions.

## **APPENDIX A:**

### ***Definitions, Abbreviations, and Acronyms***

- Btu – British thermal unit, One Btu is the heat required to raise the temperature of one pound of water by one degree Fahrenheit.
- cf – Cubic feet
- DSL services – digital subscriber line (originally digital subscriber loop) is a family of technologies that are used to provide internet access by transmitting digital data over telephone lines.
- KCCSWMP – King County Comprehensive Solid Waste Management Plan prepared by the Solid Waste Division of the Department of Natural Resources and Parks in accordance with Washington State law. It presents proposed strategies for managing King County’s solid waste over the next 6 years with consideration of the next 20
- kV – kiloVolt, a unit of electric potential equal to a thousand volts
- Mcf –equals the volume of 1,000 cubic feet of natural gas.
- Natural Gas is a fossil fuel formed when layers of buried plants, gases, and animals are exposed to intense heat and pressure over thousands of years. The energy that the plants originally obtained from the sun is stored in the form of chemical bonds in natural gas.
- Optical fiber cable is a cable containing one or more optical fibers that are used to carry light. The optical fiber elements are typically individually coated with plastic layers and contained in a protective tube.
- PSE – Puget Sound Energy
- psig – pounds per square inch gauge measures a unit of pressure. Psig indicates that the pressure is relative to atmospheric pressure, opposed to psia (absolute) which is relative to a vacuum.
- TEC – Tanner Electric Cooperative
- Therm – One therm equals 100,000 Btu, or 0.10 MMBtu.
- V – Volt, The unit for electric potential
- WUTC – Washington Utilities Transportation Commission

# ***CHAPTER 5: FRANCHISE UTILITIES ELEMENT***

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# ***CHAPTER 5: FRANCHISE UTILITIES ELEMENT***



## **INTRODUCTION**

The Growth Management Act defines electricity, gas, telecommunications, and cable as utilities. It defines water and sewer systems separately as public facilities. Plans for water supply and sewer are found as separate elements of the Comprehensive Plan. Transportation and circulation-related facilities are addressed in the Transportation Element. The Franchise Utilities Element has been developed in accordance with RCW 36.70A.070 of the Growth Management Act and the King County Countywide Planning Policies. To fulfill the requirements set forth by the Washington Growth Management Act, a utilities element must include the following information:

1. Inventory the general location of existing utilities.
2. Establish the location of proposed utilities.
3. Examine the capacity of existing and proposed utilities.

The Franchise Utilities Element also includes an evaluation of solid waste management in North Bend, focusing on landfill capacity and recycling issues.

King County Countywide Planning Policies (CWPPs) provide local direction to implement the GMA mandate for consideration of utilities needs including, but not limited to electrical, communications and natural gas. Following is a paraphrased listing of the CWPP's with direct applicability to North Bend in 2024. The policy number of each referenced policy is cited. Other CWPP's may be indirectly applicable to North Bend and the CWPP's may be revised in the future. The full list of CWPP's is available on the King County Countywide Planning Policies website at [King County Countywide Planning Policies - King County, Washington](#)

Local jurisdictions are to identify the full range of urban services required as growth occurs and how they plan to provide them, while prioritizing historically underserved areas and addressing disparities , and avoiding locating urban serving facilities in the Rural Area (PF-1, PF-17). Service providers shall manage resources efficiently through regional coordination, sharing facilities and conserving resources.

Aggressive conservation shall be implemented to address the need for adequate supply of electricity (PF-15.

Unlike the Capital Facilities Element, levels of service and concurrency requirements do not apply to private utilities. They are required by state law to provide service to anyone requesting it who has the ability to pay for the extension. The Washington Utilities Transportation Commission (WUTC) requires that privately owned utilities demonstrate that existing rate payers are not subsidizing new customers. Privately owned utilities are not public facilities although they provide a public service. They are required to provide the same level of service to urban and rural customers. The WUTC regulates utility and transportation providers to ensure safe and reliable service to customers at reasonable rates. Most of Washington State's investor-owned gas, electric, water and telecommunications are regulated by the WUTC.

In addition, due to concerns such as the security of facilities and in keeping with competition practices, the specific locations and specific market needs are not identified. Instead, general locations and general capacities are included in this element.

### ***Financing of Utilities***

The principle source of revenue for utility capital financing is charges to customers for utility services provided. Such charges include utility rate charges, other customer charges, fees, and charges for the sale of water and energy to other utilities. Revenue from customer charges is used to finance capital projects on a pay-as-you go basis or through the issuance of revenue bonds. For revenue bonds, principal and interest payments are made with revenue from utility customer charges. The State of Washington statutes permit cities to issue unlimited tax (voter-approved) general obligation debt for utility purposes up to a limit of 2.5 percent of a City's assessed valuation.

#### ***Definitions, Abbreviations, and Acronyms***

- kV – kiloVolt, a unit of electric potential equal to a thousand volts
- PSE – Puget Sound Energy
- TEC – Tanner Electric Cooperative
- V – Volt, The unit for electric potential

### ***Provision of Utility Service***

This section discusses the provisions of utility service by the City and by private entities. Each utility section includes a discussion of the existing inventory, existing facility capacity, and an assessment of future facilities, although financial information for privately-owned entities is not included in this plan.

## **ELECTRIC SYSTEM**

### ***Description and Inventory***

Electricity is provided to North Bend by Puget Sound Energy (PSE) and Tanner Electric Cooperative (TEC). PSE serves the majority of the electricity users within North Bend. PSE and TEC signed a boundary agreement to define their respective service territories in 2013, which are shown within North Bend on Figure 5-1. The City of North Bend and the surrounding area will continue to be served by both PSE and TEC.

PSE is a large investor-owned utility that provides electric service to customers in eight predominantly Western Washington counties: Island, King, Kitsap, Kittitas, Pierce, Skagit, Thurston and Whatcom. North Bend has a franchise agreement with PSE for use of City rights-of-way for PSE's installation and maintenance of electricity and natural gas lines (Ord. 1795).

Contact PSE – Municipal Liaison Manager Brandon Leyritz:  
Brandon.Leyritz@pse.com  
(425)-417-5925

TEC is a non-profit cooperative, or small utility, serving the electrical needs of its members. TEC serves members in the Ames Lake area of King County and Anderson Island in Pierce County in addition to its service in and around North Bend.

North Bend has a franchise agreement with TEC for use of City rights-of-way for TEC's installation and maintenance of electricity lines (Ord. 1757).

Contact Tanner Electric:  
<https://www.tannerelectric.coop>  
(425) 888-0623

TEC operates its own power substation just west of North Bend. The North Bend substation is a 12kV system and has a capacity of 50MVA (60MVA during winter peaks). The 115 kV transmission line serving the substation is owned by the Bonneville Power Administration and connected to the Puget Sound Energy transmission system in the Snoqualmie Ridge area. The areas served by TEC inside the city limits of North Bend are almost exclusively fed by underground circuits including the outlet mall, Forster Woods, Rock Creek Apartments and the south fork area.

The North Bend / Snoqualmie electrical sub-area is located east of Preston and between the Cedar River Watershed and the Tolt River Watershed. It includes the Fall City area, but not Carnation or Duvall. Within the sub-area, there are five hydroelectric developments. The generating plants within this area include the Snoqualmie Falls (owned by PSE), Cedar Falls (owned by Seattle City Light), and Weeks Falls, Twin Falls, and Black Creek (owned by independent power producers). Four distribution substations are located in the North Bend / Snoqualmie sub-area.

### ***Existing Service***

Power plants throughout the region generate electricity that is then delivered via the electrical grid to customers through transmission and distribution power lines. High-voltage transmission lines carry electricity over long distances from generating plants to distribution substations. Distribution substations then reduce voltage through transformers from

## **BONNEVILLE POWER**

Puget Sound Energy and

Tanner Electric are customers

of Bonneville Power

Administration (BPA). BPA is

a federal nonprofit agency

based in the Pacific

Northwest. It is self-funded

and covers its costs by selling

its products and services.

BPA markets wholesale

electrical power from 31

federal hydro projects in the

Columbia River Basin, one

nonfederal nuclear plant and

several other nonfederal power

plants. The dams are operated

by the U.S. Army Corps of

Engineers and the Bureau of

Reclamation. About 1/3 of the

electric power used in the

Northwest comes from BPA.

115 kV to 12 kV, which is PSE and TEC's standard distribution voltage. From the distribution substations, 12 kV feeders distribute the power to the individual customers. In residential areas, which is the predominate user in North Bend, winter outage scenarios usually determine when new distribution capacity improvements are needed.

PSE and TEC are powered by two separate substations with their own dedicated 115kV transmission lines. From these substations, each respective utility powers their individual customers via both overhead and underground distribution power lines.

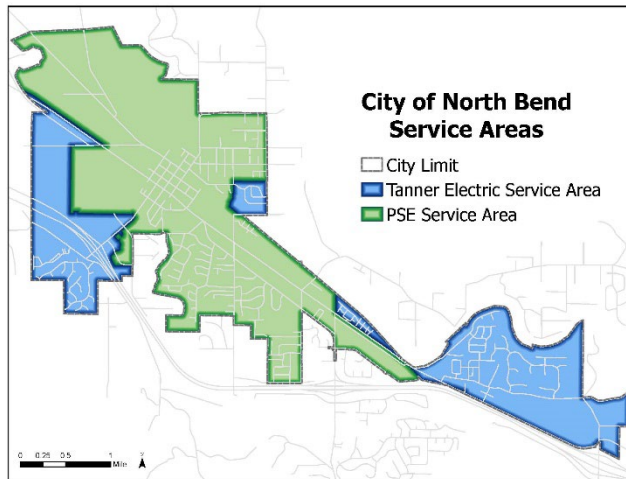


Figure 5-1

### ***Future Demand***

The forecasted load for the next 30 years will require systems improvements which are listed in this section as construction projects that are in progress, or as plans for the future. A project is considered in progress if specific site selection, preliminary engineering, permitting, or construction activities are currently underway.

New projects can be developed in the future at any time due to:

- new or replacement of existing facilities to increase capacity due to new building construction, as well as conversion of existing homes and businesses to other preferred fuel types;
- the need for replacement to facilitate improved maintenance of facilities;
- replacement or relocation of facilities due to municipal and state projects; and
- system upgrades required to accommodate third party interconnection of transmission or generation facilities.

Other system improvements may be needed within a 30 year horizon to serve forecasted load. PSE has two major substation projects planned in the 10 year horizon in the North Bend/Snoqualmie area. One near-term substation improvement project is anticipated to expand and upgrade PSE's existing North Bend substation to enable improved transmission connections. This will provide reliability improvements to customers served by the North Bend substation.

The other near-term substation improvement project is planned to expand PSE's existing Snoqualmie Switching Station to enable interconnection of a proposed small hydro project.

There are three possible long-range issues that need to be addressed in order to best serve the growth in the Snoqualmie/North Bend area:

1. Existing 115 kV transmission lines may become inadequate to serve the projected load increases in the area;
2. the lack of capacity to get power into the area when local generation may become inadequate to serve the local load; and
3. the existing substations may become insufficient to supply adequate 115-12 kV substation transformer capacity.

### **Construction projects in progress / Plans for the future/Recently Completed**

#### *Middle Fork Substation and 115kV Transmission Line*

In 2020-2021, TEC completed the installation of a new 115kV Transmission Line through the existing utility corridor along the Snoqualmie Valley Trail. This transmission line runs to a new substation location along North Bend Way. TEC's Middle Fork Substation is to be built in 2024-2026 in order to better serve future growth on the East side of town as well as provide power supply redundancy for all TEC members.

#### *Additional Small Hydro*

There are numerous proposals for small hydroelectric generation plants in the North Bend/Snoqualmie area. Most of these are located on the North Fork of the Snoqualmie River and its tributaries, including Hancock Creek and Calligan Creek. In addition, there are possibilities for others along the Middle Fork and the South Fork of the Snoqualmie River. Puget Sound Energy may need to construct facilities to interconnect these generation plants to the electric transmission system. A possible interconnection substation to integrate new generation would be a Reinig Switching Station located near the Snoqualmie-Cedar Falls line to connect the existing system to new generation with a new 115 kV line.

#### *Transmission Line Rebuild*

The Cedar Falls-Snoqualmie 115 kV line contains low capacity wires. At some point this line will need to be rebuilt.

#### *Rattlesnake-Lake Tradition 230 kV Line*

The Rattlesnake-Lake Tradition transmission line is a planned new 230 kV line, which would connect the existing cross-Cascades transmission line near Rattlesnake Lake southeast of North Bend to the existing Lake Tradition substation near Issaquah. This line would allow power generation in Eastern Washington to be supplied to King County as well as strengthen the power system in the North Bend area and the rest of King County.

#### *Lantern Substation and 115 kV Transmission Line*

The planned Lantern substation, located south of North Bend at a site to be determined in the future, would provide electric power to customers in the Southeast North Bend area. This would provide a

possible interconnection point for existing and future transmission lines to improve reliability and capacity in the North Bend area.

#### *Future Distribution Substations*

At present, the timing of future distribution substations cannot be determined due to the uncertainty of load growth in this area, an island of urban development in a rural area. It is likely that the Snoqualmie/North Bend area may need an additional substation or an additional transformer in an existing substation in the near future.

## NATURAL GAS

### ***Description & Inventory***

Puget Sound Energy is an investor-owned natural gas utility that supplies natural gas to six Western Washington counties: Snohomish, King, Kittitas, Pierce, Thurston, and Lewis. Puget Sound Energy provides natural gas service to customers in six Western Washington counties: Snohomish, King, Kittitas, Pierce, Thurston, and Lewis.

Natural gas is not an essential service. However, PSE serves natural gas to many customers in North Bend that find that fuel essential for their space and water heat. The UTC requires PSE to maintain and serve natural gas as long as a demand remains. . Extension of service is based on request and the results of a market analysis to determine if revenues from an extension will offset the cost of construction.

Natural gas comes from gas wells in the Rocky Mountains and in Canada and is transported through interstate pipelines by Williams Northwest Pipeline to Puget Sound Energy's gate stations.

Supply mains then transport the gas from the gate stations to district regulators where the pressure is reduced to less than 60 psig. The supply mains are made of welded steel pipe that has been coated and is cathodically<sup>1</sup> protected to prevent corrosion. They range in size from 4" to 20".

Distribution mains are fed from the district regulators. They range in size from 1-1/4" to 8" and the pipe material typically is polyethylene (PE) or wrapped steel (STW).

<sup>1</sup>Cathodic Protection (CP) is a technique used to control the corrosion of a metal surface by making it the cathode of an electrochemical cell.

### ***Definitions, Abbreviations, and Acronyms***

- Btu – British thermal unit, One Btu is the heat required to raise the temperature of one pound of water by one degree Fahrenheit.
- cf – Cubic feet
- Mcf –equals the volume of 1,000 cubic feet of natural gas.
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### ***Existing Service***

According to the PSE rate department, the average house (using natural gas for both heat and hot water) consumes about 1,000 therms per year. Ten therms equals approximately one “mcf” (thousand cubic feet) of gas so 1,000 therms per house equals approximately 100,000 cubic feet of gas per household per year.

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### ***Future Demands***

When planning the size of new gas mains, PSE uses a saturation model, which assumes all new households will use natural gas since 99% of new homes constructed where builders have the choice are using natural gas. PSE forecasts customer additions using a forecast analysis calculation based on PSE’s revenue report which is generated by town tax codes established in our Exception Billings Department and based on historical customer counts.

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2. Installing mains parallel to existing mains to supplement supply of natural gas to a particular service area; and
3. Replacing/upsizing existing pipelines to increase volume.

New projects can be developed in the future at any time due to:

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3. Replacement or relocation of facilities due to municipal and state projects.

PSE makes an effort to coordinate construction work with municipal projects in order to minimize cost and impacts to the surrounding community. Due to franchise agreements, PSE is required to relocate existing facilities when construction projects require upgrades.

## **TELECOMMUNICATION, CABLE & INTERNET**

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- Optical fiber cable is a cable containing one or more optical fibers that are used to carry light. The optical fiber elements are typically individually coated with plastic layers and contained in a protective tube.
- WUTC – Washington Utilities Transportation Commission

### ***Telephone***

The local telephone service is provided by CenturyLink/Quantum Fiber, which currently serves North Bend, Fall City, Carnation and surrounding areas. The system consists of a network of copper and fiber optic cables, and other equipment facilities including central office and remote switches that support the fiber and copper infrastructure, which are located throughout the area.

To meet North Bend's future needs, CenturyLink/Quantum Fiber follows the policy of extending its lines to serve customer needs within its territory boundary in accordance with its tariffs as filed under the WUTC. The City has a master use permit with Century Link/Quantum Fiber for use of City rights-of-way for installation and maintenance of their lines.

Contact Quantum Fiber: [quantumfiber.com](http://quantumfiber.com), (833) 250-6306.

### ***Cable Broadband, Television, and Internet***

As telecommunication technologies have evolved, convergence of these technologies has occurred, resulting in multiple communication services migrating into consolidated networks. This typically involves the convergence of previously distinct media, such as internet, telephone, video and data communications being transmitted over fiber optic or other infrastructure. Internet and cable services are offered by multiple providers with North Bend, including Comcast/Xfinity, Century Link/Quantum Fiber, T-Mobile Home, and others. Land-line cable television service is offered through Comcast, which has a franchise agreement with the City of North Bend (Ord. 1081) for their use of City rights-of-way for maintenance and operation of their cable network.

## **SOLID WASTE & RECYCLING**

The King County Comprehensive Solid Waste Management Plan guides solid waste disposal in King County. The current version of this plan was adopted in 2019. The Plan proposes strategies for managing the solid waste over the next six years, with consideration of the next 20 years. This is the first management plan that looks at ways to address climate change. The core mission of the KCCSWMP is to ensure the citizens of the county have access to safe, reliable, efficient, and affordable solid waste handling and disposal services.

### ***Description and Inventory***

North Bend, like most cities in King County, has signed an Interlocal Agreement with King County to provide solid waste planning within the City. The terms of the Solid Waste Interlocal agreement are in effect from March 19, 2013 through December 31, 2040. A number of responsibilities are designated to the County and cities in order to implement the King County Solid Waste Management Plan. The plan identifies that cities need to provide for collection of solid waste and ensure the provision of the minimum levels of collection service for recyclables and yard waste. Cities are also directed to implement requirements for new construction to accommodate recycling collection systems such as the following: a procurement policy (a policy favoring the use of recyclable products and materials), variable can rates and a monitoring program. Cities are also asked to enforce City litter control ordinances. The cities are authorized under the plan to regulate and plan for the collection of special waste, to adopt and implement the solid waste plan, and to participate in the Solid Waste Advisory Committee and Regional Policy Committee.

## CEDAR HILLS LANDFILL

Cedar Hills is the only landfill still operating in King County. King County was able to extend the life of Cedar Hills from the expected closure in 2012 to 2028 (lifespan depends on a variety of factors, including tonnage received). The 2019 Solid Waste Plan recommends exploring a range of emerging technologies for future disposal other than exporting waste to a distant landfill when max capacity is reached at Cedar Hills.

### ***Existing Service***

Under the Interlocal Agreement, King County is responsible for solid waste management, planning, and technical assistance to cities. North Bend is responsible for solid waste collection. Recology is under contract with North Bend for weekly solid waste and curbside recyclable collection, and for every other week, collection of yard debris/compostables for disposal/recycling, as well as for collection of public garbage and recycling from public street receptacles and at city parks and facilities and at certain City-sponsored special events.

Contact Recology: [North Bend – Recology King County](#) (425) 448-6220.

Toxic and hazardous wastes are disposed of at facilities in South Seattle and Bellevue. Waste collected in North Bend that cannot be recycled is transported by Recology to King County's Factoria Transfer Station in Bellevue. King County then trucks the garbage to the Cedar Hills landfill; this facility received all of the mixed municipal solid waste (MMSW) generated in King County.

### ***Future Demand***

The City of North Bend and King County will continue offering service to existing and new residents meeting the standards found in the KCCSWMP. Refer to the most recent edition of King County Comprehensive Solid Waste Management Plan for additional information regarding County inventory and policy.

## RECYCLING

### ***Description and Inventory***

*“King County and the entire Puget Sound region are recognized for successful efforts to collect recyclable waste. Continuing to reduce and reuse waste will require concerted and coordinated efforts well in the future. It is important reduce the waste stream going into area landfills. This can be done by promoting recycling practices.” (2013 King County Comprehensive Solid Waste Management Plan)*

North Bend is served by Recology for recycling needs. Recology serves communities throughout California, Nevada, Oregon, and Washington. Recology Contact: [North Bend – Recology King County](#) (425) 448-6220.

***Existing Service***

*Under the City's contract with Recology, recycling is collected weekly as a part of garbage service collection.*

***Future Demand***

The City of North Bend and Recology will continue offering service to existing and new residents meeting the standards found in the KCCSWMP. Refer to Recology for additional information about existing and future goals and policies.

## GOALS AND POLICIES

***Utility - Goal 1: Provide utilities needed to accommodate growth and development according to adopted plan policies.***

**Policies:**

U - 1.1 Continue to serve all customers that request utility service in the service area.

U - 1.2 Maintain the integrity of the utility infrastructure system to provide service to customers as a high priority for utility capital expenditures.

U - 1.3 Work to ensure communication providers are capable of providing advanced communication services utilizing the most current technology.

***Utility - Goal 2: Cooperate with utility suppliers in the development, siting, maintenance, and repair of utilities.***

**Policies:**

U - 2.1 Provide timely and effective notice to utilities of the construction, maintenance, or repair of streets or other facilities, and coordinate such work with utilities to ensure their needs are met.

U - 2.2 Require utilities notify the City before utility work is done to discuss the best means to preserve vegetation from utility work.

U - 2.3 Review utility permits simultaneously with development proposals requesting service.

***Utility - Goal 3: Work with citizens, other jurisdictions, and utility providers to ensure cooperation in the siting of utilities and to ensure that reliable and cost effective suppliers of energy are available to meet increasing demands.***

**Policies:**

U - 3.1 Encourage the multiple use of corridors for trails, transportation right-of-way and utilities.

U - 3.2 Encourage the consolidation of utility facilities and communication facilities by prohibiting duplication of electrical substations, above ground electrical transmission lines and communication antenna structures within one mile of another similar facility.

U - 3.3 Require installation of fiber optic conduit at locations approved by City Engineer when roads are built or substantially reconstructed to facilitate future construction of local area fiber optic communications networks.

***Utility - Goal 4: Ensure the compatibility of and minimize the environmental impacts associated with the siting, development, and operation of utility services and facilities on adjacent properties.***

**Policies:**

- U - 4.1 Work with the utilities to eliminate existing overhead power lines in the Urban Growth Area, with an emphasis on the downtown commercial zoning district.
- U - 4.2 Develop regulations for siting and landscape requirements for utility meter cabinets, terminal boxes and similar above ground utility features.
- U - 4.3 Where feasible, require installation of new power and communication lines to be placed underground.

***Utility - Goal 5: Promote conservation through cooperative efforts of regulations, programs, and educational literature.***

**Policies:**

- U - 5.1 Work with the County and utility suppliers to develop public education and information materials that promote conservation.
- U - 5.2 Handle and dispose of solid waste in ways that minimize pollution and protects the public health.
- U - 5.3 Work with the City's solid waste collection agencies to establish cost-effective policies and regulations designed to minimize waste generation and meet King County's adopted waste reduction goals.
- U - 5.4 Encourage utility providers to convert to cost effective and environmentally compatible alternative technology and energy sources.
- U - 5.5 Require the provision of recycling opportunities in new construction projects.
- U - 5.6 Encourage utility providers to develop outage reduction plans, develop initiatives to lower energy costs, create clean power sources and reduce greenhouse gas emissions.

## APPENDIX A:

### *Definitions, Abbreviations, and Acronyms*

- Btu – British thermal unit, One Btu is the heat required to raise the temperature of one pound of water by one degree Fahrenheit.
- cf – Cubic feet
- DSL services – digital subscriber line (originally digital subscriber loop) is a family of technologies that are used to provide internet access by transmitting digital data over telephone lines.
- KCCSWMP – King County Comprehensive Solid Waste Management Plan prepared by the Solid Waste Division of the Department of Natural Resources and Parks in accordance with Washington State law. It presents proposed strategies for managing King County’s solid waste over the next 6 years with consideration of the next 20
- kV – kiloVolt, a unit of electric potential equal to a thousand volts
- Mcf – equals the volume of 1,000 cubic feet of natural gas.
- Natural Gas is a fossil fuel formed when layers of buried plants, gases, and animals are exposed to intense heat and pressure over thousands of years. The energy that the plants originally obtained from the sun is stored in the form of chemical bonds in natural gas.
- Optical fiber cable is a cable containing one or more optical fibers that are used to carry light. The optical fiber elements are typically individually coated with plastic layers and contained in a protective tube.
- PSE – Puget Sound Energy
- psig – pounds per square inch gauge measures a unit of pressure. Psig indicates that the pressure is relative to atmospheric pressure, opposed to psia (absolute) which is relative to a vacuum.
- TEC – Tanner Electric Cooperative
- Therm – One therm equals 100,000 Btu, or 0.10 MMBtu.
- V – Volt, The unit for electric potential
- WUTC – Washington Utilities Transportation Commission



**Staff Report and Planning Commission Recommendation  
To Amend Municipal Code the North Bend Municipal Code to Adopt the 2021 King  
County Surface Water Design Manual**

**Meeting Date:** April 17, 2024

**Proponent:** City of North Bend

**Staff Recommendation:** A Motion to recommend City Council approval of the proposed Ordinance amending the North Bend Municipal Code to Adopt the 2021 King County Surface Water Design Manual

**I. Purpose of Proposed Municipal Code Amendments:**

North Bend Municipal Code (“NBMC”) Sections 14.16.030, 14.16.060, 14.16.070, and 14.16.075 adopt by reference the 2005 King County Surface Water Design Manual (“SWDM”). NBMC 14.16.060 states, “The 2005 King County Surface Water Design Manual, including the 2008 amendments thereto, is hereby adopted by the City of North Bend and is hereinafter referred to as the ‘manual.’” Combined, this is also referred to as the “2009 SWDM.”

**II. Proposed Amendments**

NBMC Sections 13.36.085, 14.06.030, 14.07.040, 17.04.140, and 20.12.060 reference to the 2009 SWDM or make incomplete reference to an undated SWDM.

The SWDM is primarily used to address and mitigate impacts from development/land use projects. Professional civil engineers use the SWDM to design their projects. Many King County cities have adopted updated versions of the SWDM, including the 2016 SWDM and now the 2021 SWDM. The City’s Public Works Department Staff believe it is prudent to amend the NBMC to adopt the 2021 SWDM for the following reasons:

- The 2021 SWDM is deemed equivalent by Washington State Department of Ecology (“DOE”) to DOE’s Stormwater Management Manual for Western Washington.
- The 2021 SWDM is considered to be the best available science.
- Errata identified in earlier SWDM versions has since been corrected.
- There is consistency amongst the engineers, development reviewers and inspectors, which helps City staff be more efficient.
- Use of the 2021 SWDM could result in an improved Community Rating System (“CRS”) which ultimately may lead to slightly lower flood insurance rates for property owners.
- There is increased flexibility on water quality treatment system options in the 2021 SWDM through “treatment train” order and facility design parameters.

The 2021 SWDM contains standards that render NBMC Chapter 18.50 (Low Impact Development Demonstration Projects) superfluous.

Updating to the 2021 SWDM requires an amendment to NBMC 13.36.085 (Runoff Quality Treatment Calculation), NBMC 14.06.030 (Critical Wetland Areas – Alterations), NBMC 14.07.040 (Performance Standards), NBMC 14.16.030 (Definitions) and NBMC 14.16.060 (Manual adopted), NBMC 14.16.070 (Stormwater BMPs), NBMC 14.16.075 (Type C – Conveyance), NBMC 17.04.140 (Engineered preliminary drainage plan), and NBMC 20.12.060 (Level of Service standards).

Updating to the 2021 SWDM also requires repeal of NBMC Chapter 18.50 (Low Impact Development Demonstration Projects). These code amendments and repeal are reflected in the attached Ordinance Exhibit A.

#### **IV. Impacts of Proposed Amendment**

NBMC 20.08.070 and .080 requires that applications for municipal code amendments be evaluated for their environmental, economic, and cultural impacts, as well as impacts to surrounding properties. These impacts are evaluated below.

- 1) **Environmental Impacts.** No environmental impacts are anticipated from amending NBMC cited above. The proposed code is primarily used to address and mitigate impacts from development/land use projects.
- 2) **Economic Impacts.** The proposed changes protect the Economic Impact by incorporating requirements equally.
- 3) **Cultural Impacts.** No significant cultural impacts are anticipated from the amendments. All proposed projects must plan for protecting cultural resources.
- 4) **Impacts to Surrounding Properties.** The proposed changes protect the integrity of surrounding uses by incorporating requirements equally.

#### **V. Compatibility of Proposed Amendment with North Bend Comprehensive Plan (NBMP)**

In accordance with NBMC 20.08.070 and .080, applications for municipal code amendments must be evaluated for compliance with the Comprehensive Plan. The proposed amendments are in compliance with the Comprehensive Plan.

#### **VI. Compatibility of Proposed Amendment with the North Bend Municipal Code (NBMC)**

In accordance with NBMC 20.08.070 and .080, applications for municipal code amendments must be evaluated for compliance with the North Bend Municipal Code. The proposed amendment is compatible with the North Bend Municipal Code.

#### **VII. Planning Commission Findings and Analysis**

Pursuant to NBMC 20.08.100, the Planning Commission shall consider the proposed amendment against the criteria in NBMC 20.08.100 (B). A staff analysis is provided in italics under each criterion below.

1. Is the issue already adequately addressed in the Comprehensive Plan?

*The Comprehensive Plan does not address the proposed amendment.*

2. If the issue is not addressed in the Comprehensive Plan, is there a need for the proposed change?

*Yes, updates to outdated regulations are needed.*

3. Is the proposed change the best means for meeting the identified public need?

*Yes.*

4. Will the proposed change result in a net benefit to the community?

*Yes, the updated code is primarily used to address and mitigate impacts from development/land use projects.*

#### **VIII. Summary Findings:**

1. The Planning Commission will consider the proposed amendments and hold a public hearing on the draft regulations at their April 14, 2024 meeting.
2. Following consideration of public comment received, the Planning Commission will vote to approve the draft amendments.
3. Pursuant to RCW 36.70A.106, the draft regulations were forwarded to Commerce - Growth Management Services on March 25, 2024.
4. The proposed amendments are consistent with the procedures established in NBMC 20.08, *Comprehensive Plan and Development Regulations Amendment Procedures*. The Planning Commission finds that the proposed amendments are consistent with the criteria in NBMC 20.08.100(B) and would result in a net benefit to the community.

#### **Staff Recommendation:**

Based on the findings above and pending consideration of public input to be provided for and at the Public Hearing, staff recommends approval of the draft regulations as provided herein, attached Exhibit A.

#### **Planning Commission Recommendation**

DRAFT: Following consideration of the Comprehensive Plan and Development Regulation Amendment process in NBMC 20.08.070 through 20.08.110 and public comment received at the public hearing, the Planning Commission recommends approval/denial of the draft regulations as provided herein, attached Exhibit A.

Exhibit A – Ordinance

Exhibit B – Public Comment (If received)

# ORDINANCE

**AN ORDINANCE OF THE CITY OF NORTH BEND, WASHINGTON, RELATING TO ADOPTION OF THE 2021 KING COUNTY SURFACE WATER DESIGN MANUAL; AMENDING NBMC SUBSECTION 13.36.085(B); AMENDING NBMC SUBSECTION 14.06.030(C); AMENDING NBMC SUBSECTION 14.07.040(G); AMENDING NBMC SECTIONS 14.16.030, 14.16.060, AND 14.16.070, SUBSECTION 14.16.075(B); AMENDING NBMC SECTION 17.04.140; AMENDING NBMC SUBSECTION 20.12.060(A); REPEALING NBMC CHAPTER 18.50 REGARDING LOW IMPACT DEVELOPMENT DEMONSTRATION PROJECTS; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE**

**WHEREAS**, the City of North Bend (“City”) has adopted the best management practices from the King County Surface Water Design Manual (“SWDM”) to regulate the design, construction, inspection and maintenance of stormwater facilities in order to prevent pollution, flooding, and other dangers related to stormwater and drainage problems; and

**WHEREAS**, King County Council adopted a new edition of the SWDM in early 2021; and

**WHEREAS**, the City desires to adopt by reference the most current edition of the King County SWDM adopted in 2021, and to amend references to the SWDM throughout North Bend Municipal Code (“NBMC”) Titles 13, 14, 17, and 20 to refer to the current edition of the King County SWDM adopted in this Ordinance or as hereafter amended by King County; and

**WHEREAS**, the new edition of the King County SWDM contains provisions that render NBMC Chapter 18.50 superfluous, and therefore the City desires to repeal NBMC Chapter 18.50;

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF NORTH BEND, WASHINGTON, DOES HEREBY ORDAIN AS FOLLOWS:**

**Section 1. NBMC Subsection 13.36.085(B) (Runoff Quality Treatment Calculation), Amended:** North Bend Municipal Code Subsection 13.36.085(B) (Runoff Quality Treatment Calculation) is hereby amended to read as follows:

B. Runoff Quality Treatment Calculation. The quality treatment adjustment is only applicable when treatment facilities are constructed in accordance with the current edition of the King County Surface Water Design Manual to treat all applicable on-site impervious areas. The adjustment is expressed mathematically as follows:

$$A = F \times 0.1$$

**Section 2. NBMC Subsection 14.06.030(C) (Critical Wetland Areas - Permitted alterations), Amended:** North Bend Municipal Code Subsection 14.06.060(C) (Permitted alterations) is hereby amended to read as follows:

C. Trails. Public and private trails may be allowed within wetland buffers where it can be demonstrated in a critical area report that the wetland and wetland buffer functions and values will not be degraded by trail construction or use, and that the location of the trail provides educational benefit to multiple users. Trail planning, construction, and maintenance shall adhere to the following criteria:

1. Permeable surface trail alignment generally shall be parallel to the perimeter of the wetland, located only in the outer 25 percent of the wetland buffer area, except as needed to access viewing platforms which may be located in the outer 50 percent of the wetland buffer, or as needed to cross the wetland. Trails may be placed on existing levees, railroad grades, or road grades within these limits;

2. Trails and associated viewing platforms shall be constructed of pervious materials no more than five feet in width for pedestrian use only, unless impervious surfaces are necessary for conformance to the Americans with Disabilities Act. Raised boardwalks utilizing nontreated pilings and decking may be acceptable for wildlife viewing platforms of no more than eight feet in width and totaling no more than 60 square feet of footprint, and for wetland crossings. The trail surface shall be limited to minor crossings having no adverse impact on water quality, and meet all other requirements, including water quality standards set forth in the current edition of the King County Surface Water Design Manual; and

3. Trail alignment shall avoid removal of trees to the greatest extent feasible, and shall provide mitigation for all unavoidable impacts.

**Section 3. NBMC Subsection 14.07.040(G) (Performance Standards – Commercial Vehicle Repair and Servicing), Amended:** North Bend Municipal Code Subsection 14.07.040(G) (Performance Standards - Commercial Vehicle Repair and Servicing) is hereby amended to read as follows:

G. Commercial Vehicle Repair and Servicing. Commercial vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur. Proper capture and treatment of runoff per the current edition of the King County Surface Water Design Manual, or as revised, should occur prior to discharge either off site or into infiltration systems.

**Section 4. NBMC Section 14.16.030 (Definitions - Manual), Amended:** The definition for “Manual” set forth in North Bend Municipal Code (“NBMC”) 14.16.030 (Definitions) is amended to read as set forth below. All other definitions set forth in NBMC 14.16.030 shall remain in full force and effect as currently adopted or hereafter amended.

“Manual” means the current edition of the King County Surface Water Design Manual, as adopted or hereafter amended by King County.

**Section 5. NBMC Section 14.16.060 (Manual adopted), Amended:** North Bend Municipal Code Section 14.16.060 (Manual adopted) is hereby amended to read as follows:

The current edition of the King County Surface Water Design Manual is hereby adopted by reference.

**Section 6. NBMC Section 14.16.070 (Stormwater best management practices (BMPs)), Amended:** North Bend Municipal Code Section 14.16.070 (Stormwater best management practices (BMPs)) is hereby amended to read as follows:

Stormwater and drainage features should incorporate low impact development techniques that mimic predevelopment hydrologic conditions, when technically feasible. BMPs shall be used to control runoff flows and treat stormwater for all projects. Approved BMPs are contained in the manual.

The city has also adopted by reference the current edition of the King County Stormwater Pollution Control Manual (BMP manual) as now in effect or as subsequently amended. The BMP manual applies to existing facilities and activities and to new development activities not covered by the King County Surface Water Design Manual. The BMP manual describes the types of regulated activities, the types of contaminants generated by each activity, the contaminant's effect on water quality, the required source control BMPs, and the available treatment BMPs. The BMP manual includes information on design, maintenance, allowable use of alternative BMPs, and a schedule for BMP implementation.

**Section 7. NBMC Subsection 14.16.075(B) (Type C – Conveyance), Amended:** North Bend Municipal Code Section 14.16.075(B) (Type C – Conveyance) is hereby amended to read as follows:

B. Type C waters are regulated for the values they provide for conveyance, infiltration, water quality treatment, and flow attenuation of surface waters. It is encouraged that Type C waters be maintained in their existing natural channels to provide these functions. However, subject to conformance to all floodplain management regulations, such channel courses may be altered, piped or realigned, so long as sufficient mitigation is provided that maintains:

1. One-hundred-year conveyance capacity;
2. Infiltration capacity equivalent to that provided by the original channel either within the altered, piped, or realigned system or together with other infiltration accomplished elsewhere on the site; and
3. Comparable water quality treatment per the Manual either within the altered, piped or realigned system or together with other aboveground water quality measures provided for the on-site development that are accomplished elsewhere on the site.

**Section 8. NBMC Section 17.04.140 (Engineered preliminary drainage plan), Amended:** North Bend Municipal Code Section 17.04.140 (Engineered preliminary drainage plan) is hereby amended to read as follows:

“Engineered preliminary drainage plan” means a preliminary plan, consistent with the current edition of the

King County Surface Water Design Manual, that shows the locations, types and approximate sizes of the proposed drainage and conveyance facilities, including any required bioswales, wetponds or other water quality facilities.

**Section 9. NBMC Subsection 20.12.060(A) (Level of service standards), Amended:**  
North Bend Municipal Code Subsection 20.12.060(A) (Level of service standards) is hereby amended to read as follows:

A. In conducting the concurrency test, the city shall use the following level of service standards for public facilities:

1. Roads and streets (city of North Bend): level of service “D.”

2. Sewer.

a. Waste Water Treatment Plant. Monthly maximum carbonaceous biochemical oxygen demand (five-day) of influent in pounds/day;

b. Pump Station. Criteria for Sewage Works Design, Washington State Department of Ecology, 1992;

c. Conveyance. Criteria for Sewage Works Design, Washington State Department of Ecology, 1992.

3. Water.

a. Water Supply. Water rights certificates and/or permits issued by Washington State Department of Ecology;

b. Conveyance. Group A Public Water System Waterworks Standards, Washington State Department of Health, 1999, and Recommended Standards for Water Works, 1992 (“Ten State Standards”);

c. Storage. Waterworks Standards, Washington State Department of Health, 1996.

4. Stormwater.

a. Current edition of the King County Surface Water Design Manual.

**Section 10. NBMC Chapter 18.50 (Low Impact Development Demonstration Projects), Repealed:** North Bend Municipal Code Chapter 18.50 (Low Impact Development Demonstration Projects) is hereby repealed in its entirety.

**Section 11. Severability:** Should any section, paragraph, sentence, clause or phrase of this ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this ordinance be pre-empted by state or federal law or regulation, such decision or pre-emption shall not affect the validity of the remaining portions of this ordinance or its application to other persons or circumstances.

**Section 12. Effective Date:** This ordinance shall be published in the official newspaper of the City, and shall take effect and be in full force five (5) days after the date of publication.

**ADOPTED BY THE CITY COUNCIL OF THE CITY OF NORTH BEND, WASHINGTON, AT A REGULAR MEETING THEREOF, THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2024.**

**CITY OF NORTH BEND:**

**APPROVED AS TO FORM:**

\_\_\_\_\_  
**Mary Miller, Mayor**

\_\_\_\_\_  
**Kendra Rosenberg, City Attorney**

**ATTEST/AUTHENTICATED:**

Published:  
Effective:

\_\_\_\_\_  
**Susie Oppedal, City Clerk**