UTILITIES APPENDIX

Private Utility Services

There are a number of private utility operators in Lynden. Puget Sound Energy is the main purveyor of electrical power. Cascade Natural Gas provides natural gas in the city. Phone, internet and cable TV services are primarily provided by Frontier and Comcast. Wireless phone service is provided by a variety of carriers.

Because these are customer driven private utilities, they are responsible for their own planning to keep up with demand. The City of Lynden works with these utilities to ensure efficient infrastructure and protection of the environment as these services are provided. Investor-owned utilities in the State of Washington are regulated by the Washington Utilities and Transportation Commission (WUTC). Utilities under the jurisdiction of the WUTC must provide suitable facilities to supply service-on-demand. State law regulates the rates and charges, services, facilities and practices of utilities. Any change in policy regarding customer charges or the provision of services requires WUTC approval.

i Edits made to this section are from PSE.

ELECTRICAL SYSTEMS

The City of Lynden holds a franchise agreement with Puget Sound Energy (PSE) which gives the authority to provide electrical power to its customers within Whatcom County and specifically, in Lynden's UGA. It provides for the transmission, distribution and sale of electrical energy for power, heat, and lighting.

PSE has nearly 100,000 customers in Whatcom County, more than 1,100 miles of overhead distribution lines, 700 miles of underground lines, and more than 200 miles of high-voltage transmission lines. There are 35 distribution substations and 9 transmission substations in Whatcom County.

Electricity is transmitted into Whatcom County by high voltage lines from Canada and Skagit County, much of it on lines owned by the federal <u>Bonneville Power Administration (BPA)</u>. PSE purchases electricity from BPA, private sources, and also generates some of its own.

The "Bulk Transmission System" is operated by the BPA, which operates a region wide, interconnecting, transmission system that supplies electric power to utilities from federal hydroelectric projects east and west of the Cascades. The primary service BPA provides to PSE is wheeling energy around the region. These lines supply power into the electrical distribution system and provide connections to customers countywide. The electricity is distributed through Whatcom County via high voltage transmission lines which connect to distribution substations. These substations reduce the voltage levels for distribution to local levels.

Commented [RC1]: To do:

Identify and include information and **contact information** about all public entities, including special purpose districts that own utility systems.

Update general location, proposed location, and capacity of existing and proposed utilities, including telecommunications.

PSE maintains an adequate level of service throughout Whatcom County and is continually maintaining and upgrading its service infrastructure as needs are perceived. PSE has planned expansions at Berthusen (BHS) and Lynden (LYN) substations that serve customers in the area. These projects will add substation capacity and distribution infrastructure to address capacity needs and improve reliability of the electric grid.

Finally, PSE actively promotes energy conservation methods with its customers. It connects local customer-owned generation systems to its grid (i.e., rooftop solar). Many of its customers participate in its Green Energy Program, which provides grants for high-visibility solar projects in the region. PSE also sponsors educational programs that advocate for energy efficiency and conservation and a continual increase in renewable energy opportunities.

As customers move toward increased renewable energy, local renewable energy generating resources may result in additional infrastructure required to deliver energy to the grid in a safe, effective, and reliable manner. Additionally, energy storage, both on a residential and utility scale, will have the potential of providing additional benefits for renewable energy sources and benefits to the community.

A transition to electric vehicles will require increased infrastructure to ensure there is a safe, reliable, and effective source of energy for charging. Infrastructure modifications may include replacing existing transmission and distribution equipment, such as modifications to existing substations, or the addition of new distribution and transmission equipment to meet customer needs.

† This whole section was replaced with updated text from Cascade Natural Gas.

NATURAL GAS

Natural gas is distributed throughout Whatcom County by Cascade Natural Gas Corporation (CNG). Natural gas is a fuel provided to homes and businesses through underground piping. It is colorless, odorless, flammable, and lighter than air. Gas is odorized to make leaks more perceptible.

CNG provides natural gas to the City and surrounding communities through a network of interconnecting supply and distribution mains. Extension of service is based on a customer's request and infrastructure required is determined based upon the customer's end use needs. The cost to the customer will be based on the current Extension of Distribution Facilities tariff on file with the Washington Utilities and Transportation Commission (WUTC).

Typically, natural gas used in Whatcom County flows from Canada, through Sumas, then west to Cherry Point and south and east to various cities and towns. The primary pipelines for Lynden run south on Depot Road, south on Northwood, into town from west on Hampton Road, and east on Main from Berthusen Road. Distribution lines are also in place throughout the city and gas is delivered to homes and businesses through smaller pipelines within the network. For calendar year 2022, the City of Lynden consumed 8,469,674_ccf (hundreds of cubic feet) of natural gas. In 2023, Lynden consumed 8,057,489_ccf of natural gas. Washington State's efforts to combat greenhouse gas emissions, such as the 2021 WA

State Energy Code, have resulted in a decline in overall natural gas usage. This trend is likely to continue throughout the planning period as electrification efforts are emphasized across the state. It is likely that demand for natural gas will continue to increase during the planning period as it is considered a "cleaner" heat source than other fossil fuel sources. As the region works to deal with the impacts from a changing climate, the demand for natural gas will likely increase.

Cascade Natural Gas continually assesses demand on the distribution system. Consequently, CNG may install additional infrastructure to support residential, commercial, and industrial customers in response demand. The methods for increasing supply to a particular area include installing new distribution pipelines, replacing existing pipelines with larger ones, and installing higher pressure pipelines.

Cascade's Integrated Resource Plan (IRP) describes the two- to four-year and twenty-year expectation of how Cascade expects to safely serve customers' energy needs at the lowest reasonable and safe cost. The analyses in this 12-18-month process includes existing and potential new pipelines and natural gas supply contracts (among others) as well as benefits of energy efficiency to customers. The IRP provides comprehensive and transparent insight into how Cascade plans for customers' energy future. Cascade's IRP is located at www.cngc.com.

This section needs additional review by the city.

INTERNET ACCESS AND TELECOMMUNICATIONS

Since Lynden's original 1995 Comprehensive Plan, the internet has radically impacted daily life. High speed internet service is now an essential utility for both business and residential life, especially as more many residents work from home, more often.

Currently, there are several options for residents to subscribe to internet service and much of it is based on customer choice to meet their own needs. Many municipalities are still considering the most effective way to ensure that their residents have affordable access to high-speed internet. During this planning period, Lynden will need to consider additional methods for increasing and improving access. One method that some municipalities are using is offering public Wi-Fi networks that residents and businesses can access. Furthermore, Lynden should consider development regulations that require new development to include fiber-optic infrastructure within the public right of way and then replace or add that infrastructure to old right of ways as street improvements occur.

Mobile phone devices were relatively rare in 1995. Today around 98% of American adults own a mobile phone and a large majority of those are "smart phones" which are able to access the internet. Mobile phone devices are now ubiquitous and the next 20 years are sure to bring many changes to these devices.

SOLID WASTE DISPOSAL

The City of Lynden does not possess its own solid waste disposal facility; however, it is serviced by Nooksack Valley Disposal (NVD) under a franchise agreement with the city. NVD Commented [RC2]: Info needs to be updated.

Commented [RC4]: Info needs to be updated.

CITY OF LYNDEN UTILITIES APPENDIX

is located at 250 Birch Bay-Lynden Road and services the city's UGA. NVD follows the plan laid out by the Whatcom County Comprehensive Solid and Hazardous Waste Management Plan (2023) which was a cooperative effort between Whatcom County and several of the cities within the County.

NVD is a collection company with a drop box/transfer facility that provides garbage, recycling, and yard waste pickup for its customers. NVD delivers its garbage collection to Recycling and Disposal Services, Inc, a transfer facility in Ferndale, WA. From there it gets transferred to a landfill in Arlington, Oregon where the climate is suitable for a solid waste landfill. The traditional recycling material (paper, cardboard, glass, cans and plastic) is delivered to Northwest Recycling in Bellingham for processing. The yard waste pickup is delivered to Green Earth Technology, just outside of Lynden where they make a high-quality mulch product.

NVD is meeting the current solid waste disposal demands and has room for the expected population increase. As with other private utilities, NVD is customer driven and meets demand as development occurs. NVD currently serves 3,650 homes with garbage and recycling pickup. Just over 40% of those also subscribe to their yard/food waste service. In 2015, Lynden customers disposed of 2,620 tons of waste, recycled 660 tons of traditional materials and recycled 1,411 tons of yard/food waste. From this info, the average Lynden household disposes 119 lbs of garbage and recycles 95 lbs per month.

The City of Lynden maintains a seat on the county-wide Solid Waste Executive Committee (SWEC). This committee was established in 1991 by interlocal agreements between the county and cities and its members are the County Executive and the Mayor of each city. They meet at least once per year to review, comment and approve solid waste budgets, plans, policies and operations. In the past, Lynden has been represented on the Solid Waste Advisory Committee (SWAC) which was established by RCW 70.95.165. SWAC is an advisory committee made up of local citizens, public interest groups, business, the waste management industry, and local public officials. It assists in the development of programs and policies concerning solid waste handling and disposal, and to review and provide comment on proposed rules, policies and ordinances.