

## **CHAPTER 4 – The Utilities Element**

### ***4.1 Introduction***

The Growth Management Act requires the City to include a Utilities Element in its Comprehensive Plan. It should consist “of the general location, proposed location, and capacity of all existing and proposed utilities, including, but not limited to, electrical lines, telecommunication lines, and natural gas lines.” This element includes the above mentioned private utilities as well as cable television and solid waste disposal.

Utility providers are typically responsible for planning for the future demands on the services they provide, however, this element gives the City the opportunity to work with utility providers for better efficiency of these services. This plan is intended to support the providers in offering utility service on demand to existing and future customers. By planning with these providers the city hopes to minimize any negative effects that might result from this provision.

Public utilities (water, sewer, stormwater) are covered in Chapter 5 The Capital Facilities Element.

### ***4.2 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 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.

#### ***4.2.1 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.

A majority of PSE's generating capacity comes from hydropower projects, including the Upper Baker dam in eastern Whatcom County. Other power-generating facilities in Whatcom County include 4 natural gas plants and 3 anaerobic digester plants on local dairy farms. Much of the region's overall power is transmitted from Canada and other parts of Washington on high-voltage lines largely owned by the Bonneville Power Administration. While PSE generates some of its own power, it also purchases power from other facilities.

PSE maintains an adequate level of service throughout Whatcom County and is continually maintaining and upgrading its service infrastructure as needs are perceived. At this time, no deficiencies exist or are expected to exist within the planning period.

Finally, PSE actively promotes energy conservation methods with its customers, it connects local customer-owned generation systems to its grid (ie. 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.

#### **4.2.2 Natural Gas**

Cascade Natural Gas (CNG) Corporation is an investor owned company that provides natural gas service to the City of Lynden. It is regulated by several agencies. The Washington Utilities and Transportation Commission regulates the rate and charges imposed on customers. CNG must also meet requirements established by the Natural Gas Policy Act of 1978 and alternative electricity generation policies of the Northwest Power Planning Council.

CNG is a customer driven utility so they expand their services based on current development needs. Their system fully meets existing demand. As Lynden grows, CNG is reactive to on-the-ground development. If upgrades or increased capacity needs are required as development occurs, they make those upgrades accordingly.

CNG is meeting the existing conditions and demands for natural gas. 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.

CNG is able to respond to increasing demands based on market factors. When a facility is reaching its capacity they may extend services by:

- 1) Increased distribution and supply pressure on existing lines
- 2) Adding new distribution and supply mains for reinforcement
- 3) Increasing existing distribution system capacity by replacing with larger mains
- 4) Adding district regulators from supply mains to provide sources for meeting the needs of new development

#### ***4.2.3 Internet Access and Telecommunications***

Based on the last 20 years, it is likely that no other private utility will see more changes in the next 20 years than internet 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.

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 wifi 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 more than 90% 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.

The popularity of mobile phones has resulted in a dramatic decline in land line phones. At the time of the last Comp Plan update in 2004, 90% of homes had land line phone service. In the decade since, that number has decreased to close to 50%. That number is sure to continue its decline.

#### ***4.2.4 Cable Television***

Cable television service is often provided by the same internet and phone providers. Comcast and Frontier Communications provide cable service, while DirectTV and Dish Network provide satellite television service. These companies provide service in a competitive environment and no deficiencies currently exist. In the next 20 years, these services will likely change in many ways reacting to customer demand and providing adequate levels of service to their customers.

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

NVD is a collection company with a dropbox/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 to proposed rules, policies and ordinances.

### ***4.3 Utility Goals and Policies***

**Goal U-1: Coordinate with private utility providers to ensure high-quality service for customers within the Lynden UGA and meet the demands of projected population growth.**

**Policies:**

- 1.1. The City should cooperate and maintain open communications and data sharing with private utility companies who provide utility service within the Lynden UGA.
- 1.2. The City will encourage residents to appropriately locate underground utilities prior to construction projects occurring.

**Goal U-2: Consider methods for increasing and improving access to high-speed internet service.**

**Policies:**

- 2.1. Consider developing public Wi-Fi networks that residents and businesses can access.
- 2.2. Consider development regulations that require new development to provide fiber-optic infrastructure in public rights-of-way.

**Goal U-3: Consider methods for the promotion of energy conservation and solid waste recycling programs.**

**Policies:**

- 3.1. Encourage the use of construction designs and materials that are consistent with energy efficiency standards.
- 3.2. Work with solid waste utility providers to offer an increasing number of recycling options that can help to decrease the amount of waste that ends up in the landfill.