

**PLANNING COMMISSION
MEETING**

**November 19, 2014
6:30 p.m.**

AGENDA



"Where Dreams Can Soar"

The City of Bonney Lake's Mission is to protect the community's livable identity and scenic beauty through responsible growth planning and by providing accountable, accessible and efficient local government services.

www.ci.bonney-lake.wa.us

Location: Justice & Municipal Center, 9002 Main Street East, Bonney Lake.

Planning Commission Members:

Grant Sulham – Chair
L. Winona Jacobsen – Vice Chair
David Baus
Brad Doll
Dennis Poulsen
Craig Sarver
Debbie Strous-Boyd

City Staff:

Jason Sullivan, Senior Planner
Debbie McDonald, Planning Commission Clerk

- I. Call to Order**
- II. Roll Call & Next Meeting Poll** (*December 3, 2014*)
- III. Approval of Minutes**
- IV. Public Comments and Concerns**
- V. Public Hearing**
- VI. New Business**
 1. City of Bonney Lake Market Analysis – Berk Consulting Presentation
 2. Comprehensive Plan Update – Environmental Conservation Element
- VII. Old / Continuing Business**
 1. Planning Commission Futures
- VIII. For the Good of the Order**
 - A. Correspondence
 - B. Staff Comments
 - C. Commissioner Comments
- IX. Adjournment**

Next Meeting: December 3, 2014

THIS PAGE INTENTIONALLY LEFT BLANK

**PLANNING
COMMISSION MEETING**

**NOVEMBER 5, 2014
6:30 p.m.**

DRAFTED MINUTES



"Where Dreams Can Soar"

The City of Bonney Lake's Mission is to protect the community's livable identity and scenic beauty through responsible growth planning and by providing accountable, accessible and efficient local government services.

www.ci.bonney-lake.wa.us

Location: Justice & Municipal Center, 9002 Main Street East, Bonney Lake.

I. Call to Order: The meeting was called to order at 6:30 P.M.

II. Roll Call: Planning Commissioners in attendance were Grant Sulham – Chair, Winona Jacobsen – Vice Chair, David Baus, Dennis Poulsen, Brad Doll, Debbie Strous-Boyd and Craig Sarver

Staff members in attendance were Senior Planner Jason Sullivan and Planning Commission Clerk Debbie McDonald

III. Approval of Minutes:

Motion was made by Vice-Chair Jacobsen and seconded by Commissioner Sarver to approve the minutes from the October 15, 2014 meeting as written.

Motion approved 7-0

IV. Public Hearing:

Senior Planner Sullivan asked for the Public Hearing on Ordinance D14-129 A/B be moved to after the Public Hearing on Ordinance D14-134 on the agenda. Traffic is delaying the public that wanted to provide comments.

Chair Sulham allowed for the Public Hearing order to be switched.

A. Continue Public Hearing: Resolution 2421 Bonney Lake Comprehensive Plan Update – Cultural Arts and Heritage Element

Chair Sulham continued the Public Hearing at 6:35 P.M.

Senior Planner Sullivan presented the Cultural Arts and Heritage Element to the Arts Commission. No changes came out of the presentation to the Arts Commission. Will take recommendations to the City Council Workshop on November 18th.

Chair Sulham opened the floor for public comments, having none closed the Public Hearing at 6:37 P.M.

Motion was made by Commissioner Doll and seconded by Commissioner Sarver to recommend that the City Council adopt Resolution 2421 stating the City Council's intent to adopt the Cultural Arts and Heritage Element as part of the Comprehensive Plan update.

Motion approved 7-0

B. Public Hearing: Ordinance D14-134: 2014 Comprehensive Plan Amendment – Old City Hall Site Land use Designation and Zoning Classification Amendment.

Chair Sulham opened the Public Hearing at 6:37 P.M.

Senior Planner Sullivan summarized the zoning changes. .

Chair Sulham opened the floor for public comments, having none closed the Public Hearing at 6:38 P.M.

Motion was made by Vice-Chair Jacobsen and seconded by Commissioner Doll to recommend that the City Council adopt Ordinance D14-134.

Motion approved 7-0

C. Public Hearing: Ordinance D14-129 A/B: Regulations of State Licensed Marijuana Businesses.

Chair Sulham opened the Public Hearing at 6:41 P.M.

Senior Planner Sullivan presented the options City Council asked the Commissioners for recommendations on. Option A is for an all-out ban. Option B would allow only for retail, no processing production sites.

Chair Sulham opened the floor for Public Comments:

Kim Nygard, 1503 Valley Ave, Sumner: Thanked the Commissioners for their ongoing care and concern for planning a safe community. She works in drug prevention with the Sumner School District. Spoke of concerns with marijuana and students using. There is data that came out about the black market, no sure how accurate the information is since it is being collected from the black market.

Chris Crew, 210 W. Main Street, Elma: Is the attorney representing the owners of the license for the one retail spot in Bonney Lake. Is in favor of option number two that will allow retail. Retail tax the one store would bring in is about \$100,000 a year. Will not give more access to drug dealers, instead will put them out of business. The marijuana is already here the retail is no going to bring more marijuana to the area. The owners are not going to risk their license to sell to a minor. A majority of the population has already approved marijuana with the vote.

Commissioner Strous-Boyd commented that the data collected can be altered with other information that effects the outcome.

Tammra Robinson, 6108 21 Ave NE, Tacoma: Works with the Sumner School District to help youth make healthy choices. When medical marijuana resulted in an increase in use by youth how will a retail store affect the use among youths? With the quantity a person can buy from the retailers they can roll into joints and sell them. Marijuana has a devastating effect on tea child's brain. She also presented brochures with information on dabbing with oils and edibles.

Valdali Tashulki 12515 224 Ave E, Bonney Lake: Uses marijuana for pain relief. Supports the retail option.

Cakaria Hazrat, 2224 SE 3rd St, Renton: Is one of the lottery winners for the retail location in Bonney Lake. He is college education and a commercial pilot. Very much a family man with his children being important to him and would not sell to anyone under 21.

Chair Sulham asked what precautions are there to make sure adults are not buying for children.

Mr. Hazrat responded he owns a convenience store where they have worked with the state to set up stings. They also have video cameras outside the store. Liquor control board has safety features in place.

Vice-Chair Jacobsen asked about the security monitoring.

Mr. Hazrat responded the store is being watched and recorded 24/7.

Mr. Crew also added the Liquor Control Board can watch the feed at any time. They also save recordings up to 45 days.

Saraujitt Bassi, 12519 224th Ave E, Bonney Lake: Is the other owner of the retail store for Bonney Lake. Is a family man with children and would not want children to have access to marijuana. The retail stores are already here, it is just down the road 4 miles in Buckley who are about to open their second store.

Samantha Yeun 4751 Silver Bow Rd NE, Tacoma: Works with the Coalition on Education Youth on marijuana use. Has distributed handouts and information to the Commissioners. Marijuana is finding a way into kid's hands.

Senior Planner Sullivan clarified the amount of sales tax the city receives and how the excise tax goes to the state. In Ordinance B there is one change to take out the signage verbiage since the states regulations are more stringent.

Chair Sulham closed the Public Hearing at 7:55 P.M.

Vice-Chair Jacobsen asked for an explanation on the tier system.

Senior Planner Sullivan explained that it was his understanding that the first tier was the allocation of the stores. The next tier would be a redraw if the ones chosen were unable to complete their retail. It does not add any more sites to Bonney Lake.

Motion was made by Commissioner Doll and seconded by Commissioner Sarver to take a 5 minute recess from 8:05-8:10.

Motion approved 7-0

Senior Planner Sullivan reminded Commissioners not to discuss the public hearing amongst themselves while on break.

Chair Sulham reconvened the meeting at 8:10 P.M.

Chair Sulham opened the discussion on Option A.

Commissioner Sarver is worried if the City approves Option A, it will open them up for a lawsuit.

Vice-Chair Jacobsen commented that the state had a vote that approved marijuana. Does not believe we should consider an outright ban.

Commissioner Strous-Boyd also agrees and with two retail stores just out in Buckley it is already here.

Commissioner Doll stands firm with an all-out ban. Does not see how a retail shop will benefit the community.

Chair Sulham opened the discussion for Option B.

Senior Planner Sullivan answered Commissioner questions.

Commissioner Baus would like to see a percentage of the tax collected from the retail shop go towards prevention.

Motion was made by Commissioner Sarver and seconded by Commissioner Doll to extend the Planning Commission meeting by 30 minutes.

Motion approved 7-0

Motion was made by Commissioner Sarver and seconded by Vice-Chair Jacobsen to recommend that the City Council not approve Ordinance D14-129A and adopt Ordinance D14-129B with stricken the sign language.

Commissioner Poulsen wanted to thank those for coming out to speak. Whether City Council approves or denies the ordinance they are still business owners.

Motion approved 6-1

Commissioner Doll Voting No

Senior Planner Sullivan asked if Commissioners would like to add language to the recommendation memo that the City Council should adopted an ordinance that would direct that a portion of the taxes collected from the marijuana retail shop go towards drug prevention or to programs that encourage youth to live healthy lifestyles.

Motion was made by Commissioner Baus and seconded by Commissioner Sarver to collect a portion of the taxes earned from the marijuana retail shop go towards youth education and healthy activities.

Motion approved 7-0

Senior Planner Sullivan commented the recommendations will go to the Council workshop on Dec 2nd. If more than 4 Commissioners wish to attend please let him know so the proper notice can be distributed.

V. Public Comments and Concerns: NONE

VI. New Business:

A. Planning Commission Futures: Tabled till December meeting.

VII. Old/Continuing Business: NONE

VIII. For the Good of the Order:

A. Correspondence: NONE

B. Staff Comments: NONE

C. Commissioner Comments: NONE

IX. Adjournment

Motion was made by Commissioners Sarver and seconded by Commissioner Poulsen to adjourn.

Motion approved 7-0

Meeting adjourned at 8:49

Debbie McDonald Planning Commission Clerk

THIS PAGE INTENTIONALLY LEFT BLANK



Bonney Lake Economic Development Plan

Planning Commission Presentation

Purpose & Process



Project Purpose & Scope

- Draft the Economic Development Element for 2015 Comprehensive Plan Periodic Update
- Create communications materials

Project Process

- Staff work sessions
- Conducted 13 key stakeholder interviews
- Did targeted market analysis to supplement the *2015 Comprehensive Plan Periodic Update Community Profile*
- Developing strategies for discussion
- Will present Draft Element to City Council on December 9

Guidelines for this Discussion

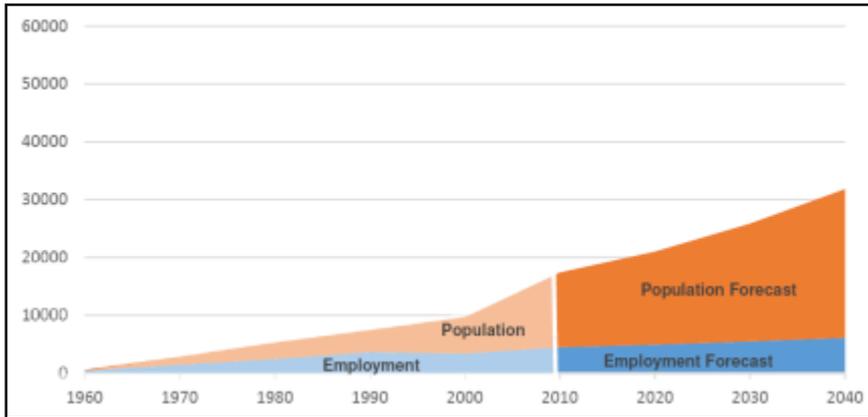
- While we're going to move quickly through a lot of content, we're looking for your questions, feedback, and ideas.
- Please let us know if what we show you confirms your experience and understanding or seems inaccurate.
- Please respond to targeted questions.

Regional Context

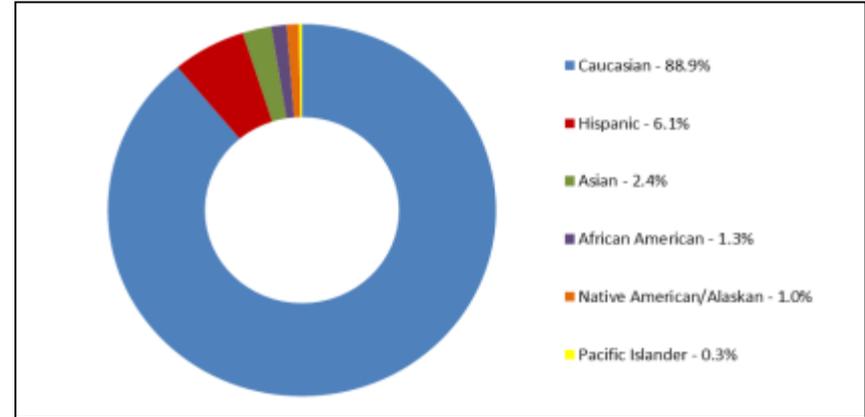


Demographics

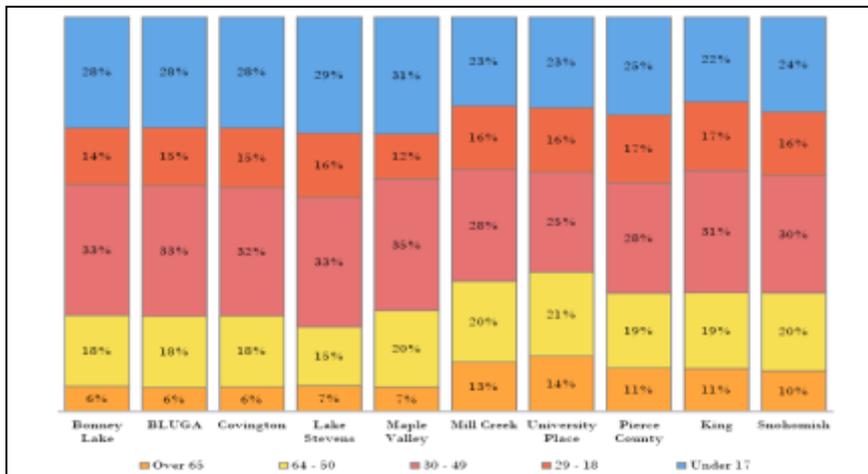
Population & Employment



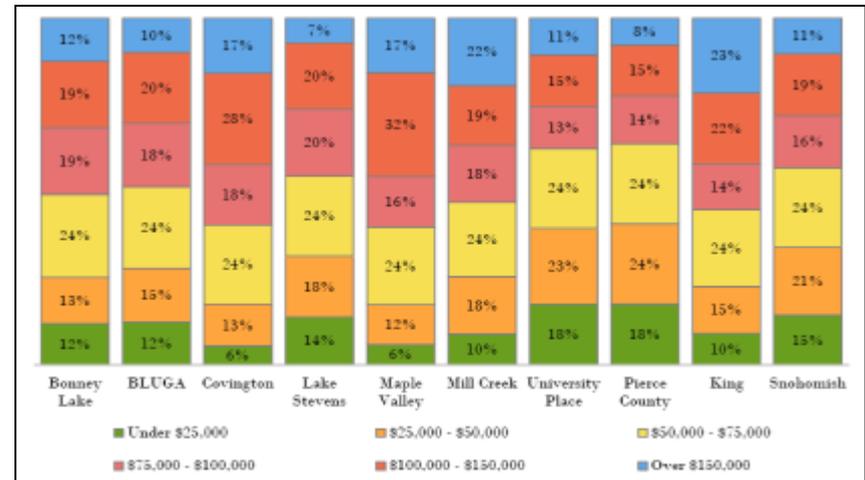
Race



Age Distribution



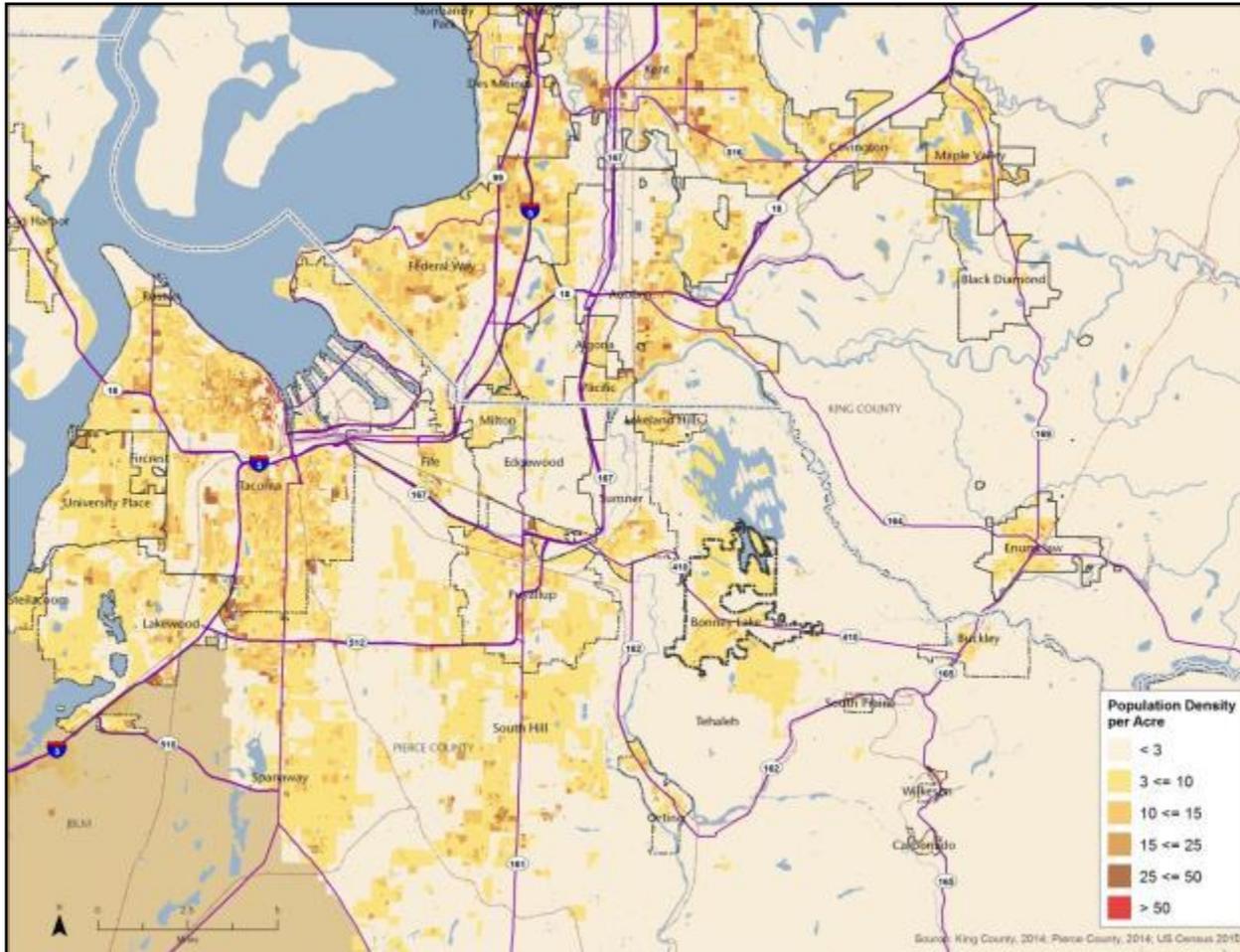
Household Income Distribution



Regional Context



Population Density



Population Density

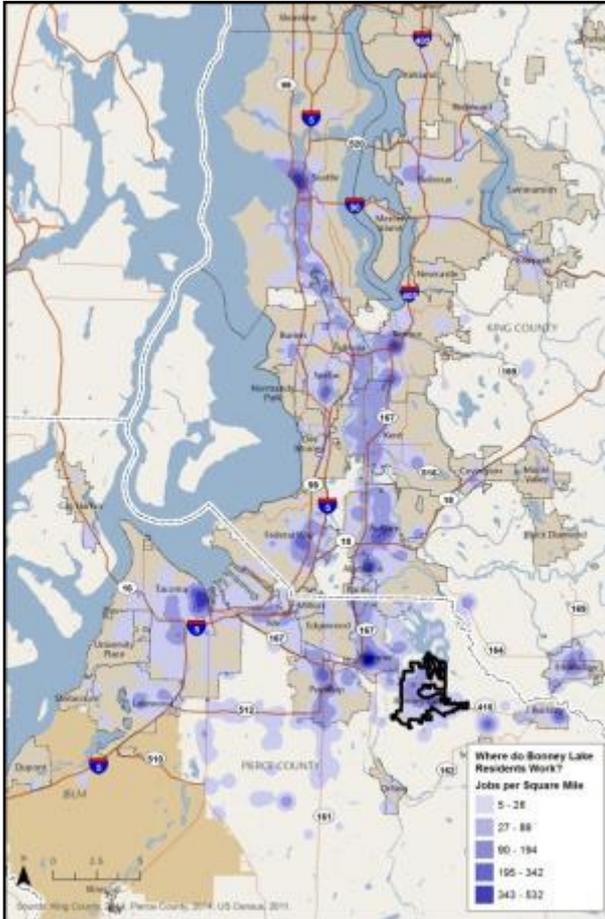
- Growing population south of Bonney Lake (Tehaleh)
- Few population centers to east and south
- Partially isolated due to topography and road connections

Regional Context

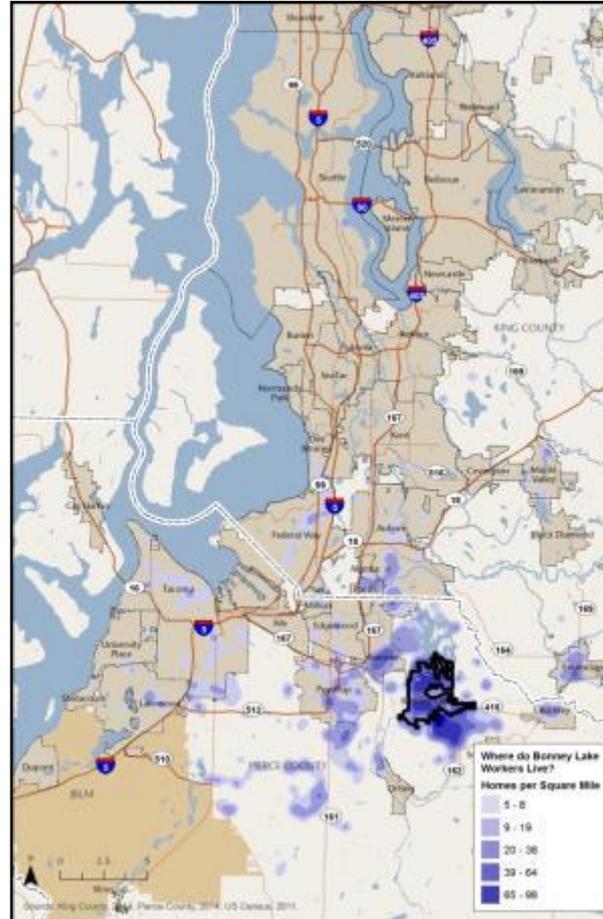


Commuting Patterns

Commuting from Bonney Lake



Commuting to Bonney Lake



Commuting Patterns

- Where do folks who live in Bonney Lake work?
- Where do folks who work in Bonney Lake live?

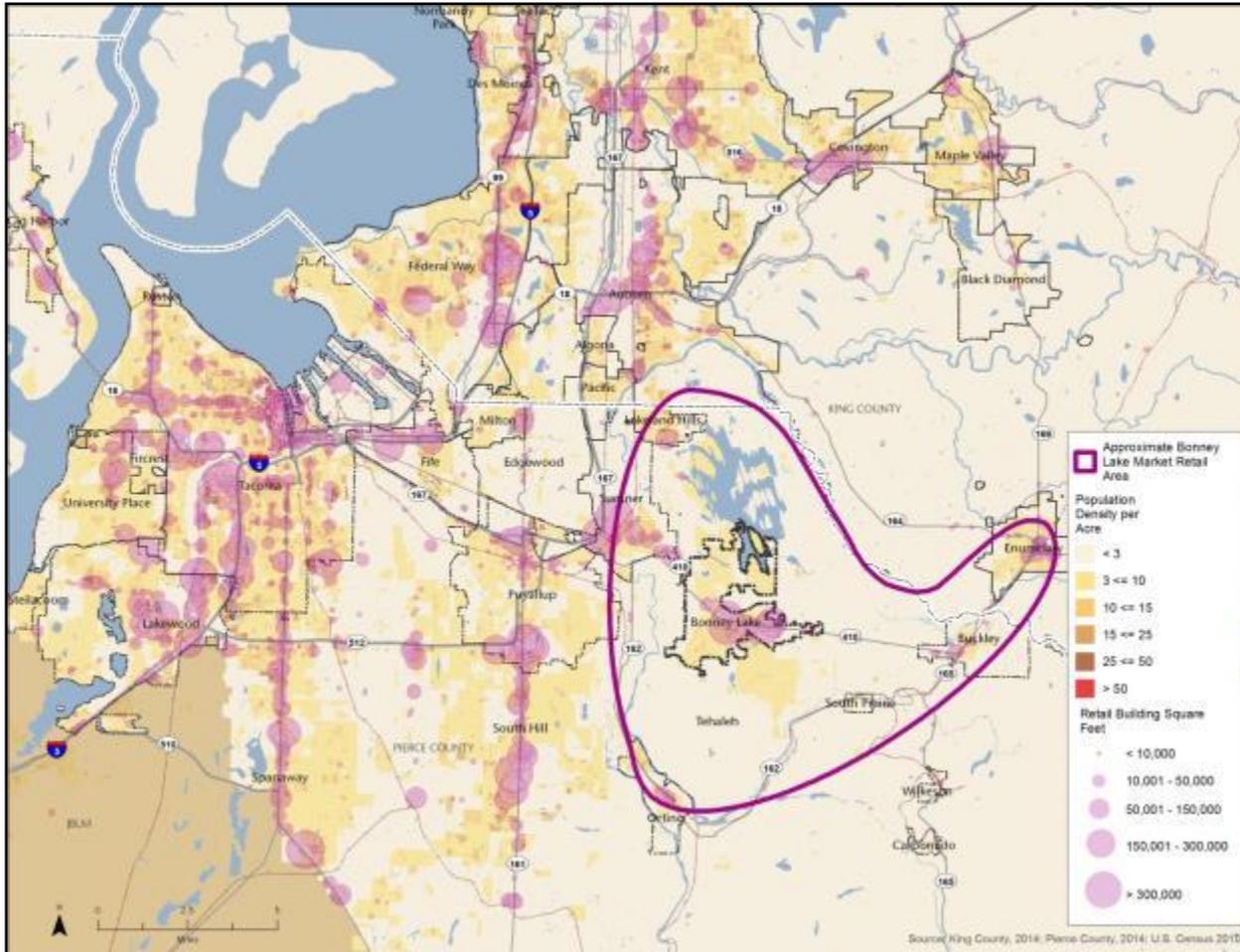
Question

- Do these maps reflect your experience and understanding?

Opportunities



General Retail



General Retail

- Bonney Lake serves – and wants to remain – the retail center of the plateau
- Large retail clusters to west
- Potential for retail growth related with continued population growth, including Tehaleh

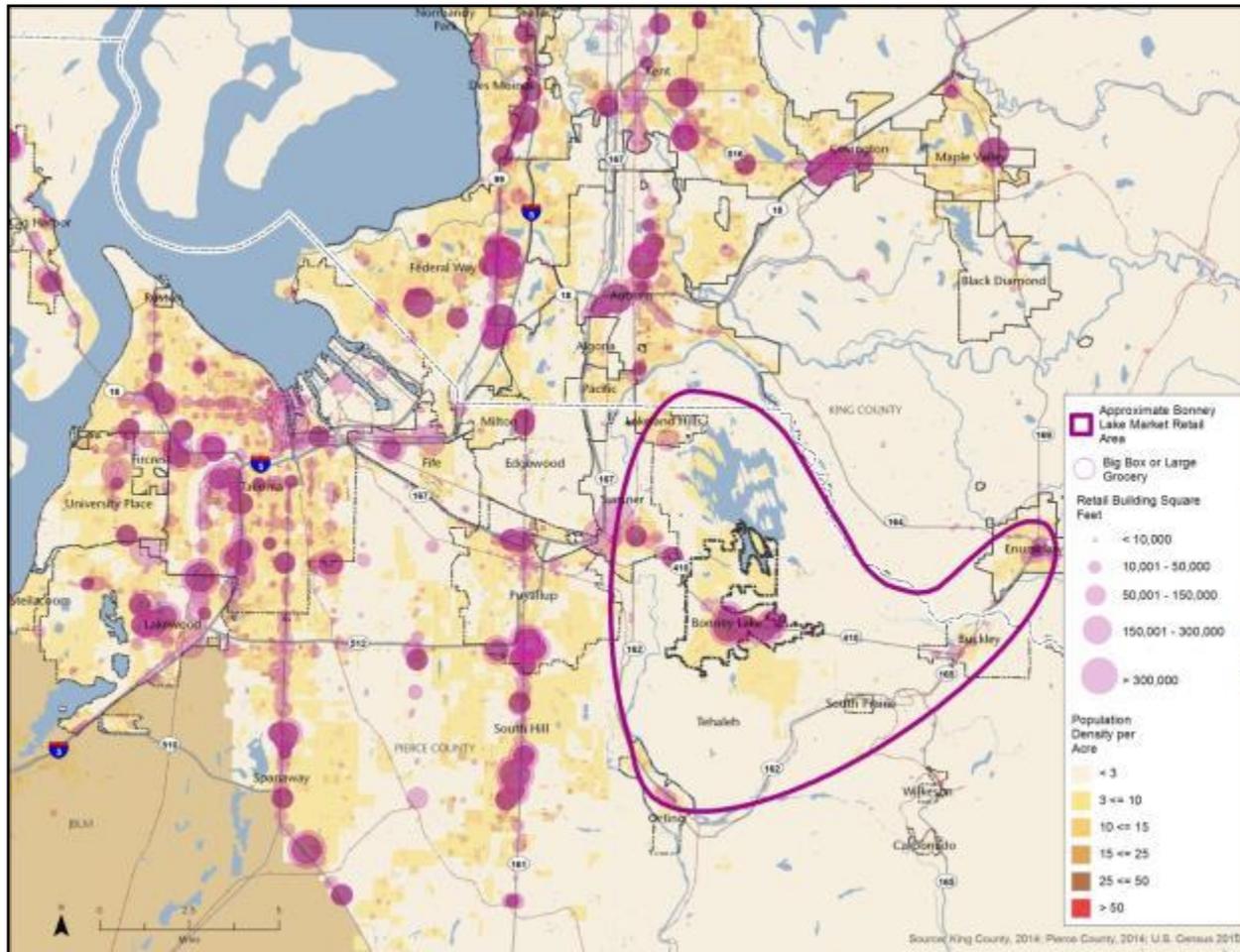
Question

- Does the retail capture area seem accurate?

Opportunities



Big Box Retail & Large Grocers



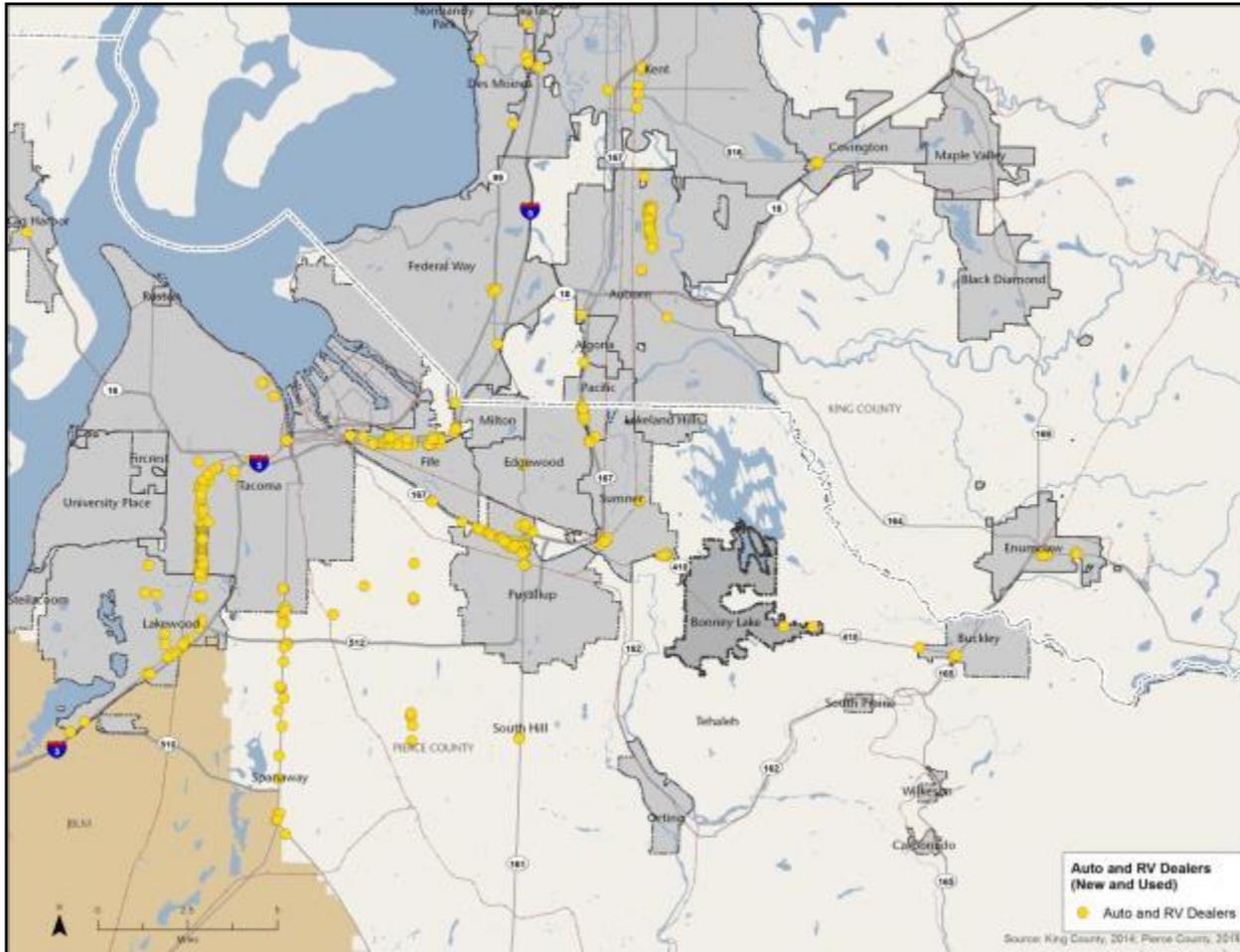
Big Box & Large Grocers

- Located along major roads
- Nearby concentrations in Puyallup and South Hill

Opportunities



Auto & RV Dealerships



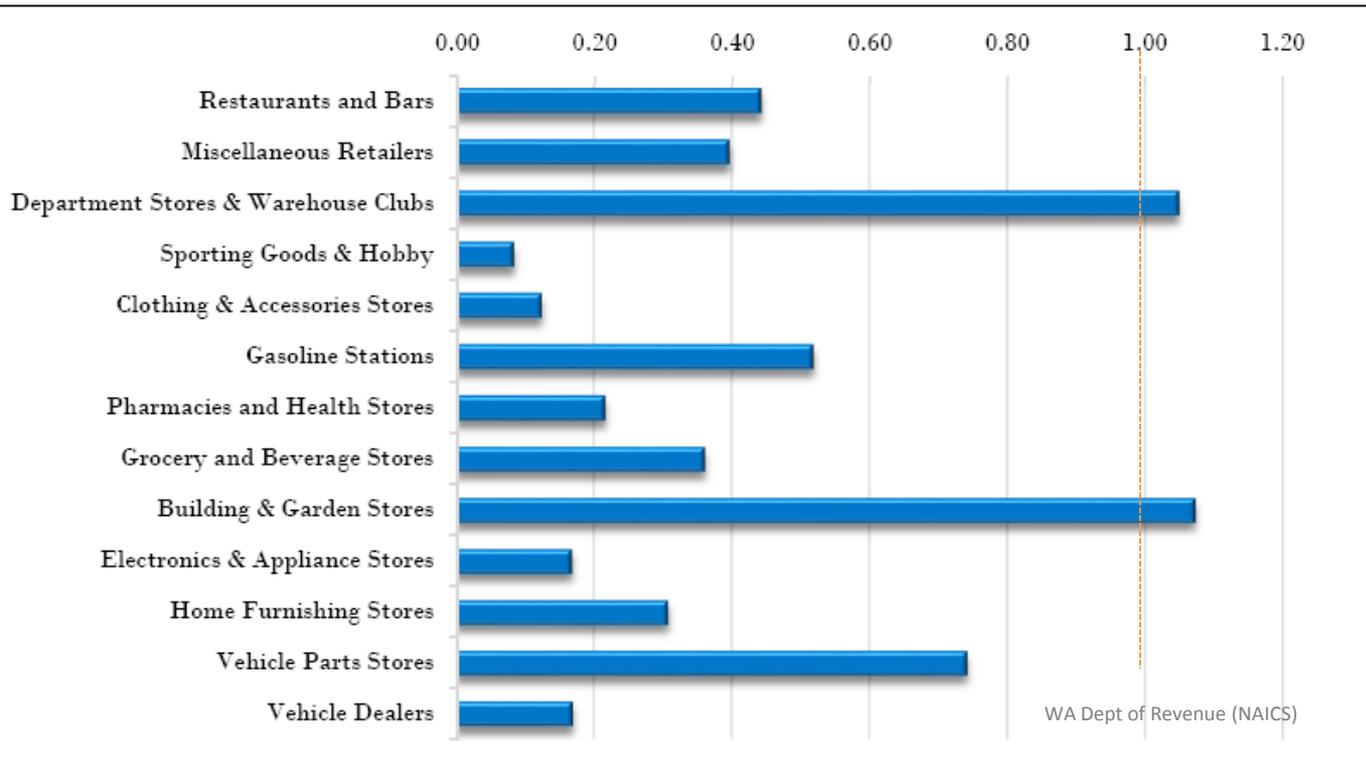
Auto & RV Dealers (new and used)

- Large concentration of dealers nearby in Puyallup
- Located near higher concentrations of population and in more remote communities

Opportunities



Retail Leakage



Retail Leakage

- Strengths in larger retail and big box absorb targeted retail categories
- Some seemingly underserved sectors not likely not feasible for Bonney Lake
- Potential support for: sporting goods retailer, smaller scale electronics or appliance stores

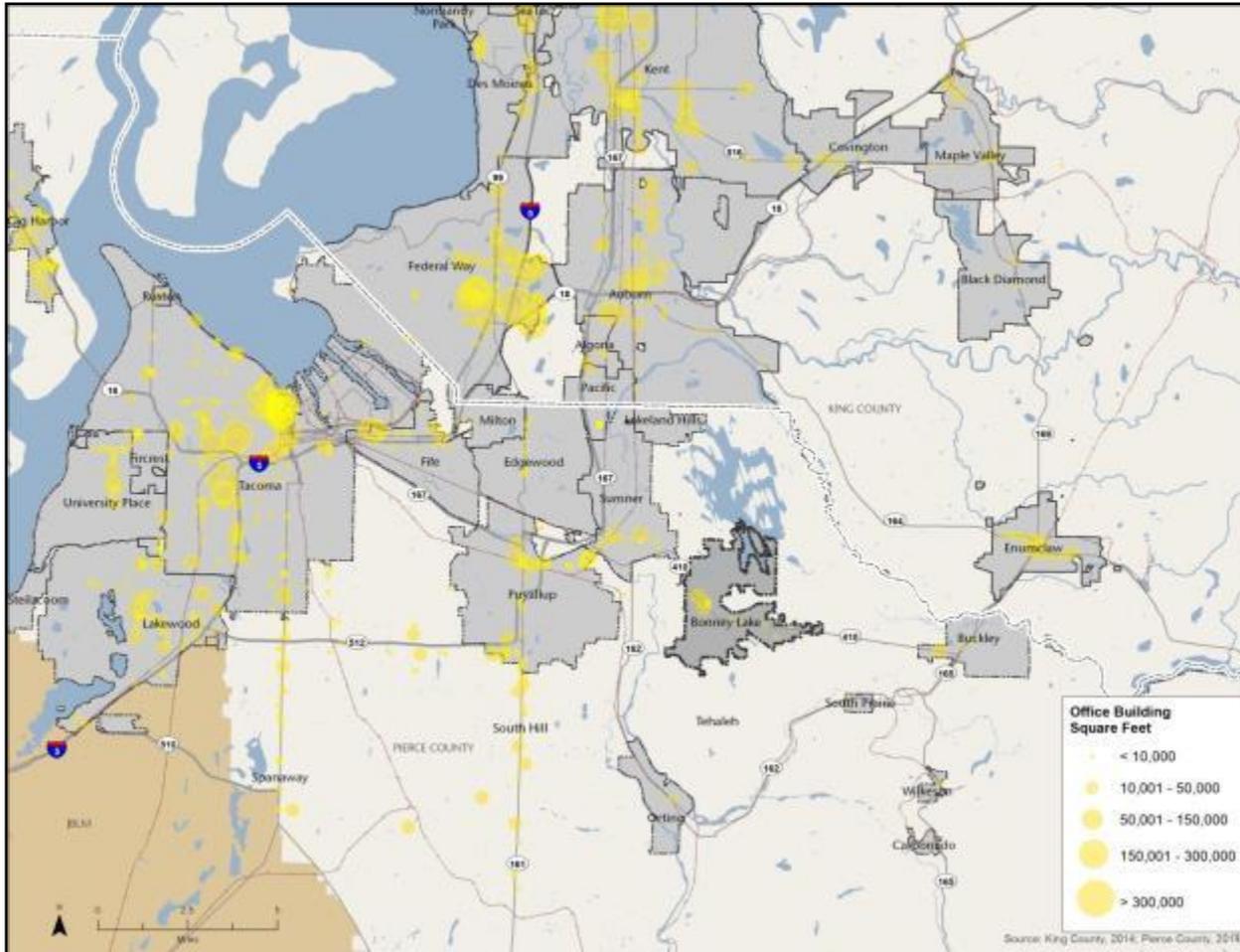
- Ratio closer to 1.0 indicate demand and sales are in balance
- Ratios < 0.8 indicate consumers leaving Bonney Lake to shop
- Ratios > 1.2 indicate consumers outside Bonney Lake are coming to Bonney Lake to shop

Question

- What opportunities do you see?

Opportunities

General Office



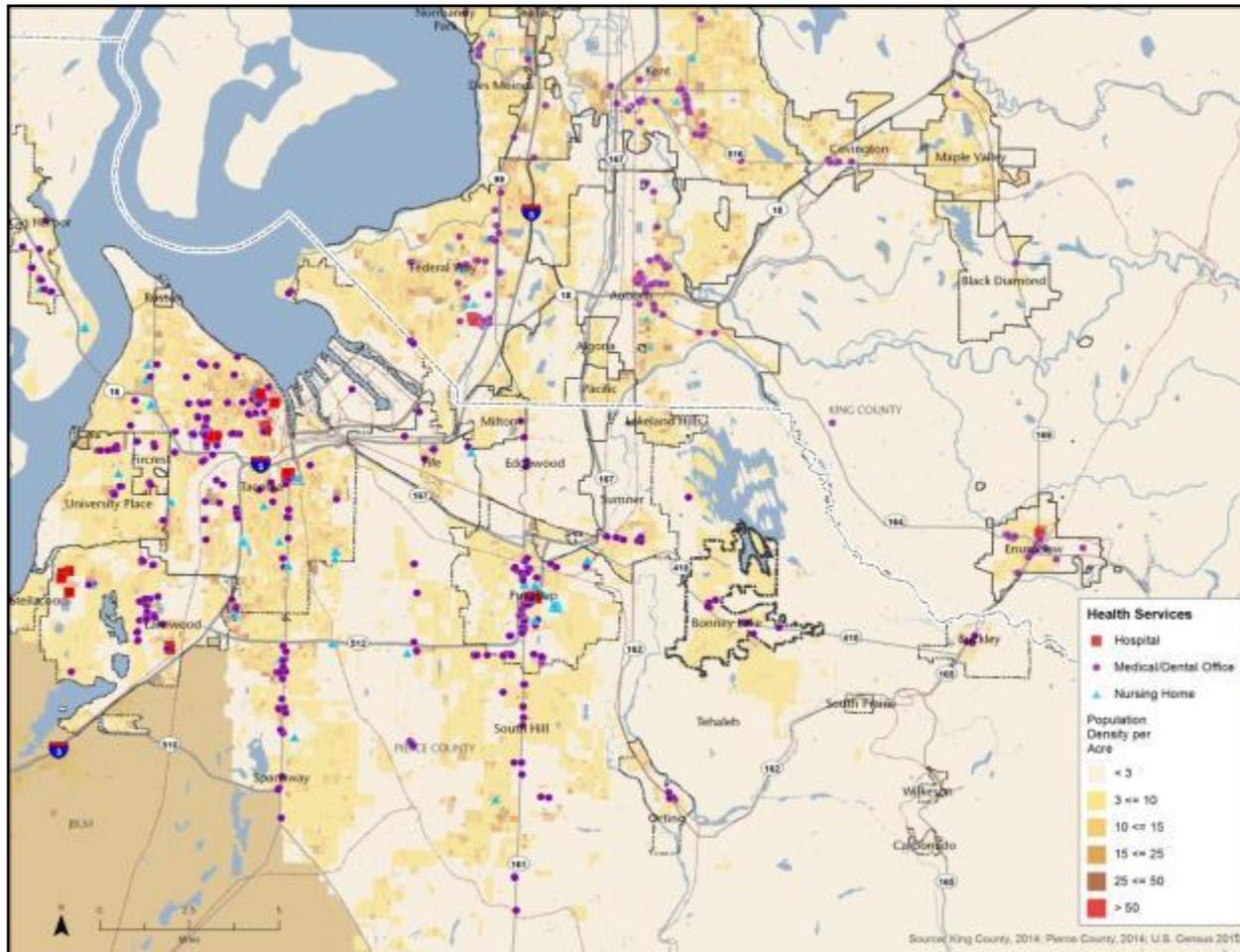
General Office

- Located in established downtowns
- Near major highways and transit routes

Opportunities



Health Services



Health Services

- Located near high density population areas
- Higher wage jobs
- Demand for professional services and medical office space in Bonney Lake will grow with population

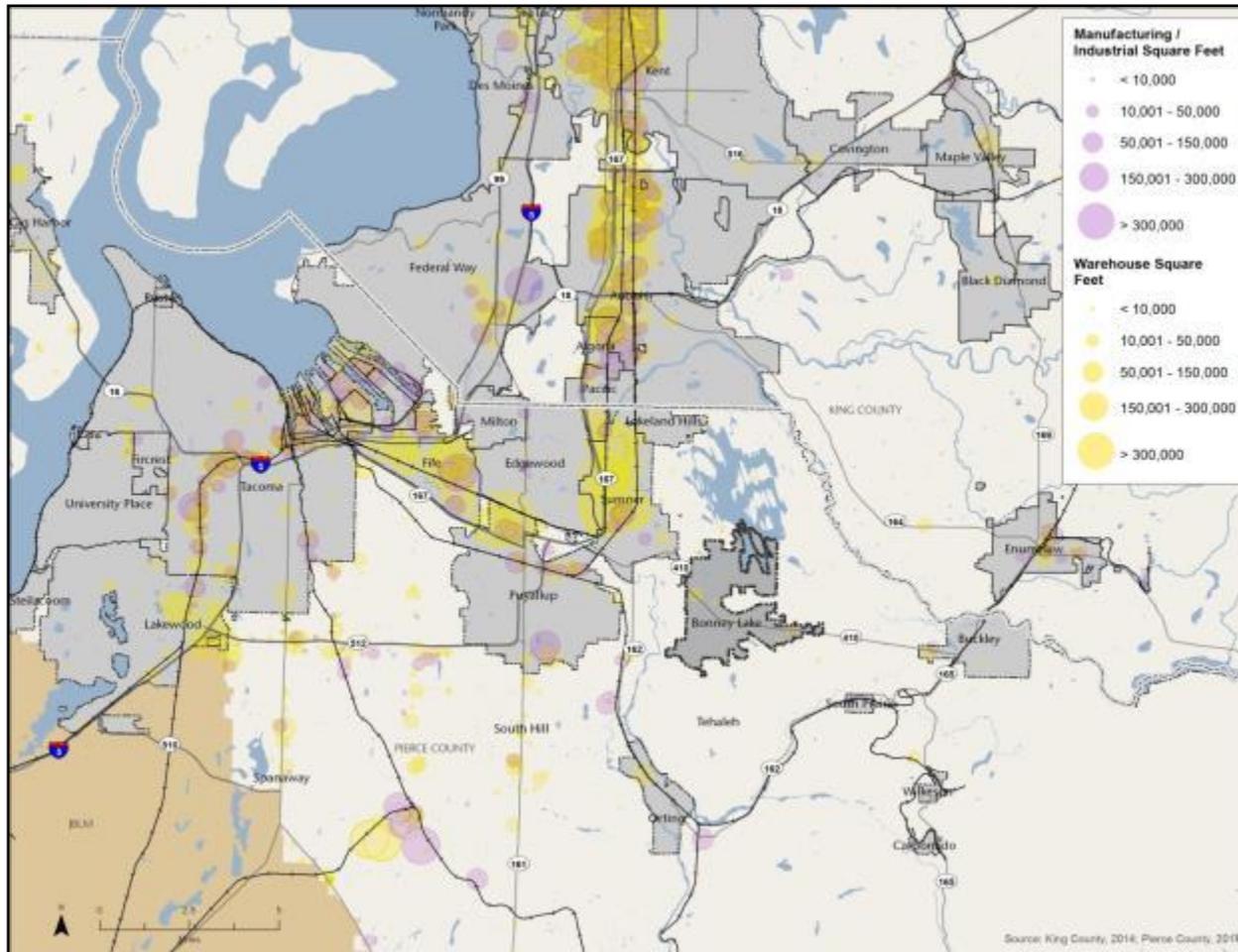
Question

- What can Bonney Lake do to best accommodate growth in professional services/medical office space?

Opportunities



Warehousing and Industrial

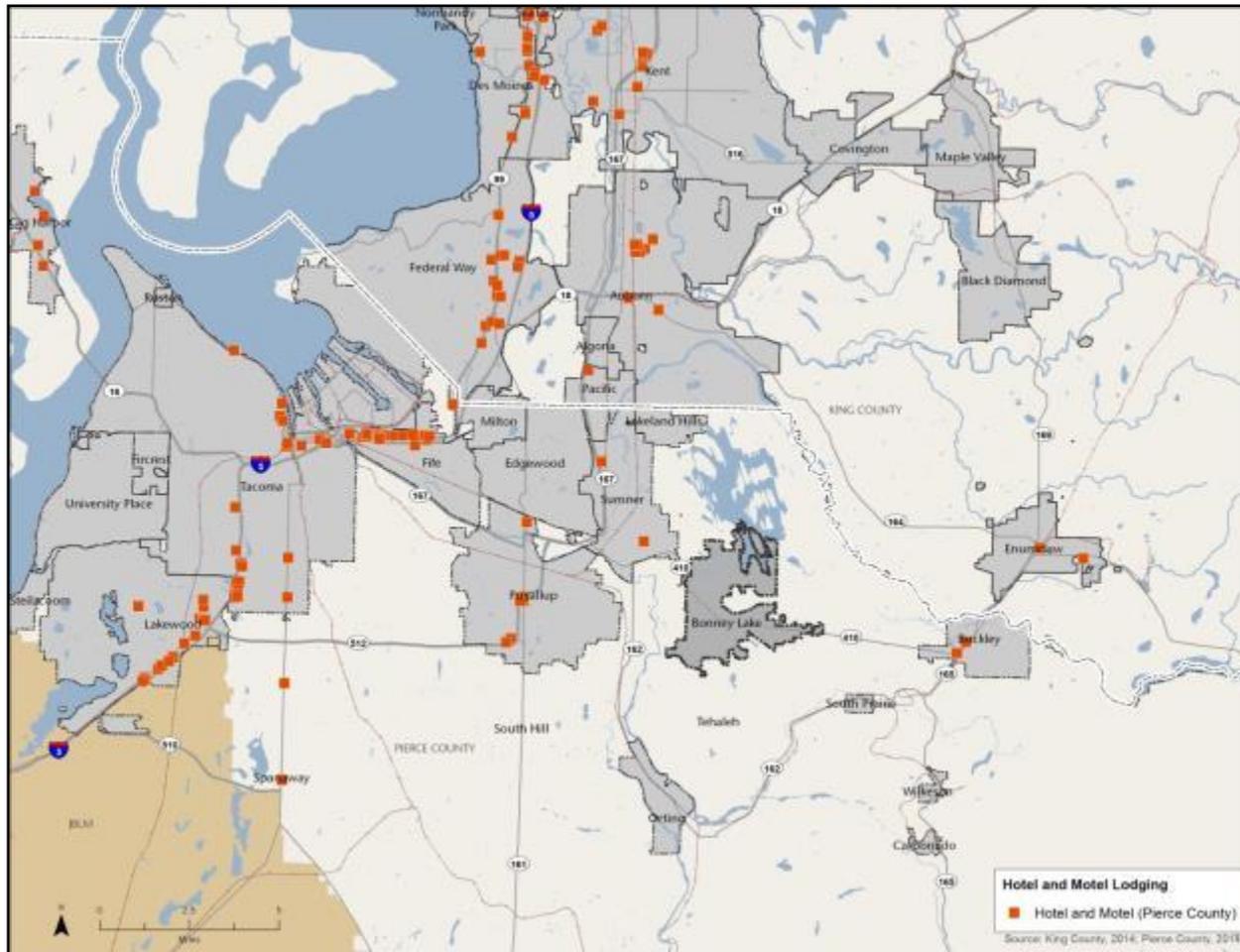


Warehousing and Industrial

- Large clusters in Kent and Auburn Valleys
- Located near railways, major highways, and ports
- Limited potential in Bonney Lake due to challenging access

Opportunities

Overnight Lodging



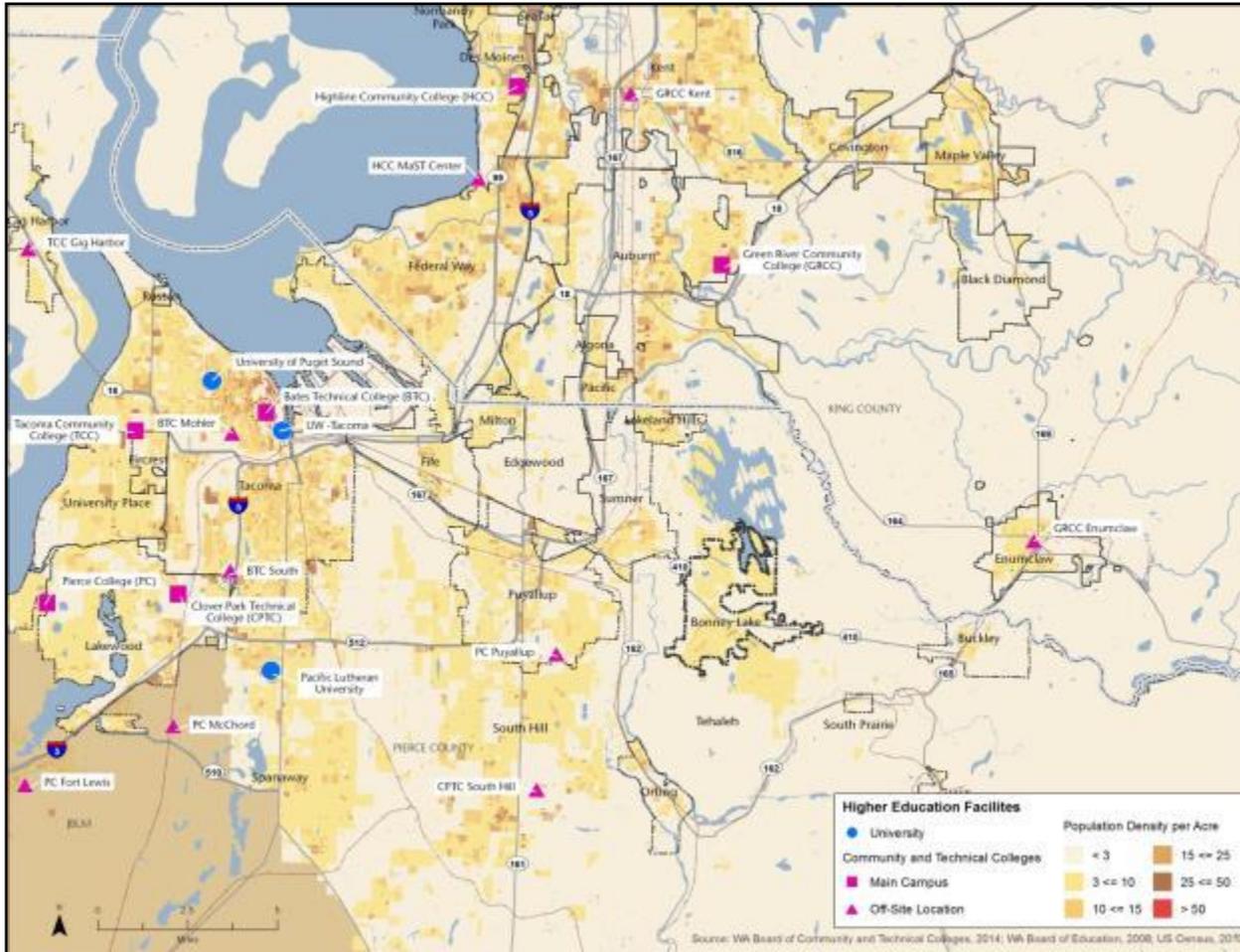
Overnight Lodging

- Located near major highways and transit routes
- Closer to higher population densities and businesses
- Lodging may be challenging for Bonney Lake given location, scale, and lack of business travelers

Opportunities



Higher Education



Higher Education

- Located in denser population areas
- Potential long-term goal for Bonney Lake

Strengths & Challenges



Strengths

- High quality of life
- Relatively affordable housing
- Strong retail, services base
- Lake Tapps, Mount Rainier
- State Route 410

Challenges

- Development climate: seen as not facilitative, with high impact fees
- Lack of community focal point
- Unclear vision for downtown and community as a whole
- Quality of built environment
- State Route 410

Opportunities & Threats



Strengths

- High quality of life
- Relatively affordable housing
- Strong retail, services base
- Lake Tapps, Mount Rainier
- State Route 410

Challenges

- Development climate: seen as not facilitative, with high impact fees
- Lack of community focal point
- Unclear vision for downtown and community as a whole
- Quality of built environment
- State Route 410

Opportunities

- Focus on *quality*: community, built environment
- Build on existing retail base
- Be ready for more professional and health services
- Long-term: overnight lodging, higher education
- Tehaleh

Threats

- Tehaleh
- Increased traffic, strip development
- Regional retail competition

Potential Strategies

With a Focus on the Built Environment

Development Climate

- Define and communicate cohesive vision for Downtown and other sub-areas
 - What uses are desired where? What is the City's plan for Downtown?
- Take a facilitative approach to encouraging business investment
- Study options for impact fees

Downtown

- Facilitate creation of Downtown as a focal point for the community with pedestrian-scale development and retail diversity

Midtown

- Focus on *quality* corridor development: connections to neighborhoods, median, art

Eastown

- Maintain a long-term view, with flexibility (flex-tech)
- Evaluate infrastructure investment and incentives to encourage development

Question

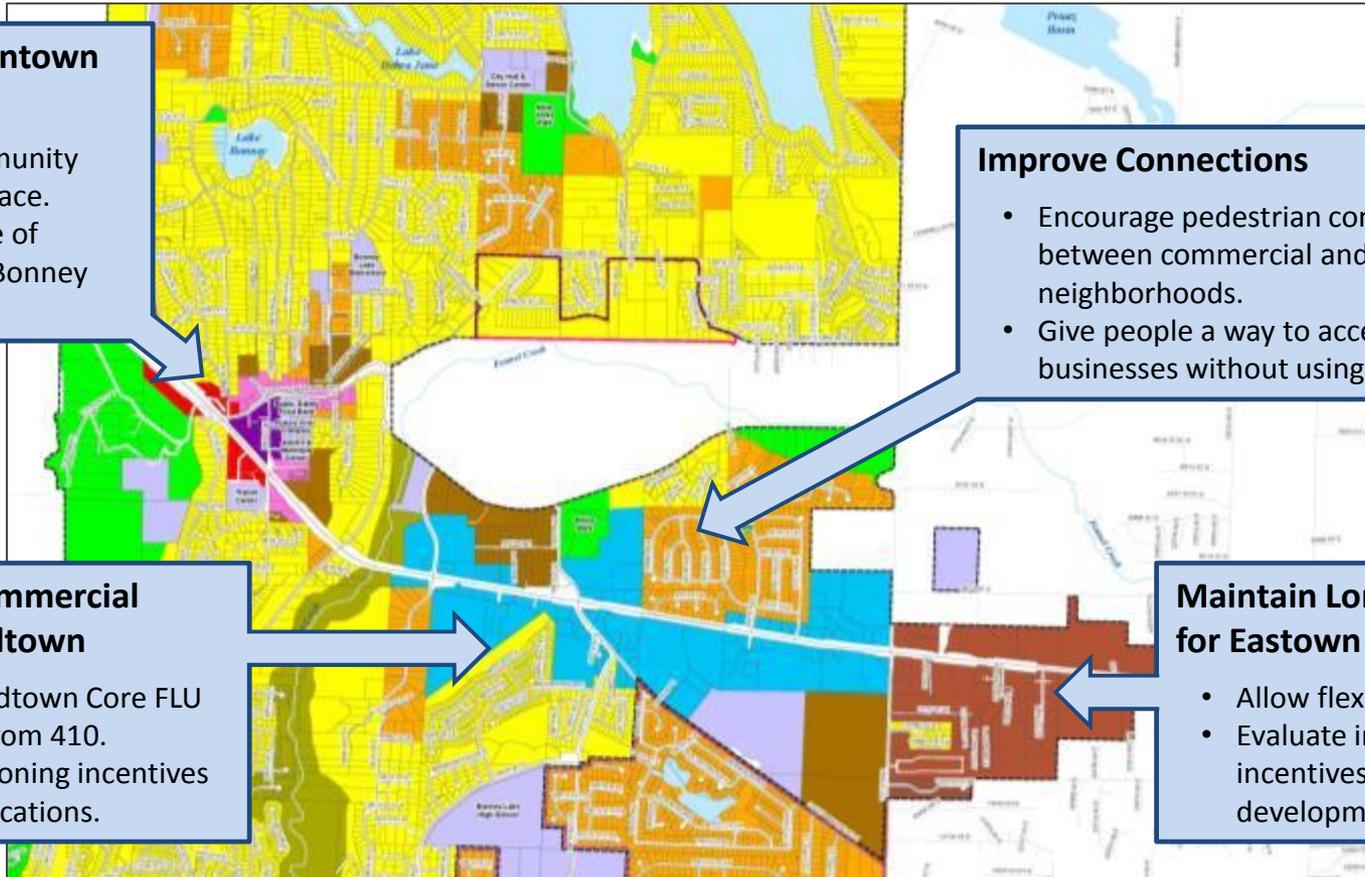
- What else can be done to advance these ideas?

Potential Strategies



With a Focus on the Built Environment

Comprehensive Plan Future Land Use



Continue Downtown Planning

- Create community gathering space.
- Create sense of identity for Bonney Lake.

Improve Connections

- Encourage pedestrian connections between commercial and adjacent neighborhoods.
- Give people a way to access businesses without using 410.

Reinforce commercial nodes in Midtown

- Extend Midtown Core FLU outward from 410.
- Consider zoning incentives at these locations.

Maintain Long-Term View for Easttown

- Allow flexibility in uses.
- Evaluate infrastructure and incentives to encourage development.

Thank you!



Next Steps

- Development of Goals, Policies, and Implementation Steps consistent with Comprehensive Plan
- Create draft *Economic Development Strategic Action Plan*
- Development of marketing materials
- Council Presentation
- Planning Commission Briefing on Draft Action Plan

THIS PAGE INTENTIONALLY LEFT BLANK

Chapter 7

Environmental Conservation

Table of Contents

1. INTRODUCTION	7-1
2. VISION	7-2
3. CRITICAL AREAS	7-2
3.1 Geological Hazards	7-3
3.2 Critical Aquifer Recharge Areas	7-9
3.3 Surface Water	7-13
3.4 Floodplains	7-16
3.5 Wetlands.....	7-18
3.6 Fish and Wildlife Habitat	7-19
4. URBAN FORESTRY	7-21
5. AGRICULTURAL LANDS	7-22
6. AIR QUALITY	7-23

LIST OF FIGURES

<i>Figure 7-1: Soil Associations</i>	7-4
<i>Figure 7-2: Slope Stability</i>	7-6
<i>Figure 7-3: Liquefaction Susceptibility</i>	7-7
<i>Figure 7-4: Lahar Impact Areas</i>	7-8
<i>Figure 7-5: Critical Aquifer Recharge Areas (CARA)</i>	7-11
<i>Figure 7-6: Aquifer Contamination Susceptibility</i>	7-12
<i>Figure 7-7: Surface Waters and Stream Typing</i>	7-15
<i>Figure 7-8: Special Flood Hazard Areas</i>	7-17
<i>Figure 7-9: Fish and Wildlife Conservation Areas</i>	7-20

1. INTRODUCTION

“Land, air and water resources are indispensable to life and, thus, constitute social values. For example, the water contained in underground aquifers is a valuable resource if not polluted. Prevention of erosion, and visual amenity are two social values of existing vegetation. Recognition of these social values, inherent in natural processes, can serve as the basis for wise land use and environmental management.”

*Comprehensive Plan
The City of Bonney Lake
October 23, 1985*

The purpose of the Environmental Conservation Element is to provide a framework to guide decision making in regards to the conservation, management, and utilization of Bonney Lake’s natural resources. The topics of this element overlap with other elements in the Comprehensive Plan including the Community Development, Community Facilities and Services, and Mobility Elements. However, the Conservation Element distinguishes itself by being primarily oriented to the conservation

of natural resources, including air and water quality protection, greenhouse gas reduction, and energy conservation.

While all elements of the Comprehensive Plan have equal weight under the Growth Management Act (GMA) – Chapter 36.70A RCW, four of the fourteen goals of the GMA specifically pertain to environmental conservation:

- **Natural Resource Industries.** Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses.
- **Open Space and Recreation.** Encourage the retention of open space and development of recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks.
- **Environment.** Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water
- **Citizen participation and coordination.** Encourage the involvement of citizens in the planning process and ensure coordination between communities and jurisdictions to reconcile conflicts.

The Growth Management Act (GMA) and associated state regulations requires Bonney Lake to:

- establish policies for protecting groundwaters used for public water supplies and for managing storm water runoff to prevent flooding and pollution;

- decide what natural resource lands (timber, agriculture, and mineral) to designate;
- protect anadromous fish (fish that migrate up from the ocean to spawn); and
- use “best available science” to protect critical areas including wetlands; aquifer recharge areas; fish and wildlife habitat, frequently flooded areas; and geologically hazardous areas. The latter includes steep slopes, seismic areas, and volcanic hazard areas.

The Element is divided into four sections. The first section address the preservation and protection of environmental critical areas: (1) geological hazards, (2) critical aquifer recharge areas, (3) surface waters, (4) floodplains, (5) wetlands, and (6) fish and wildlife habitat areas. The second section address urban forestry focused on steps need to maintain, preserve, and enhance Bonney Lake’s tree canopy. The third section address the need for the City to protect agricultural resources lands and promote urban agriculture. The final section provides policies related to regulating air pollution, toxic air contaminates, and greenhouse gas emissions. The policies in the Element are based on best available science and are meant guide day-to-day City decisions on topics such as related to the protection of the environment and the review of new development.

2. VISION

Bonney Lake is a City that preserves, enhances, and responsibly uses the areas natural resources which are critical to maintaining Bonney Lake’s natural setting cherished by the City’s residents and contributes to the City’s general quality of life. Bonney Lake is framed within a beautiful natural setting, with open spaces, an abundance of trees and scenic mountain vistas visible for the enjoyment of Bonney Lake residents. Bonney Lake’s surface water provide both habitat functions and recreational enjoyment.

Bonney Lake is a City that prides itself for its environmental stewardship, including an emphasis on sustainable land use and development patterns, while still flourishing as a successful suburban community and protecting the rights property owners’.

3. CRITICAL AREAS

The Washington State Growth Management Act (GMA) and implementing rules require cities and counties to “ include the ‘best available science’ [BAS] when developing policies and development regulations to protect the functions and values of critical areas and must give "special consideration" to conservation or protection measures necessary to preserve or enhance anadromous fisheries.” (WAC 365-195-900) Critical areas include fish and wildlife habitat conservation areas, wetlands, frequently flooded areas, critical aquifer recharge areas used for potable water, and, geologically hazardous areas (RCW 36.70A.030(5)). Maps are presented as references but are not intended to identify precise locations of critical areas or environmental features; rather, at the time of development, best available information including site specific analysis will determine presences or absence of such features.

3.1 GEOLOGICAL HAZARDS

Seismic and geological conditions must be taken into account in the planning and development of land. The geological foundation of the Bonney Lake area consists of impermeable sedimentary and bedrock formed by volcanic activity during the Eocene to Miocene age. Receding glaciers left 5 to 100 feet of till, ranging from porous sand and gravel to hardpan composites. Glaciers, glacial meltwater, and rivers created the Puyallup and Fennel Creek valleys.

The soil map in **Figure 7-1** illustrates soil associations within the City of Bonney Lake. Soil associations consists of one or more major soils and other minor soils and are named for the major soils. Soil association maps provide a broader perspective of the soils in order to identify areas that have soil properties that are either favorable or unfavorable for certain land uses.¹

Eighty-two percent (82%) of the soils within Bonney Lake are within in the Alderwood - Everett association. This soil association consist of Alderwood, Everett, Indianola Kitsap and small amounts of other soil types and is poor for farming but good for pasture and timber. The soil association is well suited for urban residential and industrial development. Onsite sewerage disposal systems are suited to as much as one-third of this association.²

Seventeen percent (17%) of the soils are within the Buckley association. The parent material of this soil association is the lobe of the Osceola mudflow, a portion of Mount Rainier which liquefied and flowed into the Puyallup River valley through Fennel Creek approximately 5,700 years ago³. Buckley loam soils make up nearly 70% of this association but includes small amounts of Alderwood, and other minor soil types making it a hydric soil that is favorable for pasture and hay farming and residential developments provided that there is access to community sewage facilities.⁴

The remaining 1% consist of the Puyallup-Sultan association which is well suited to both farming and residential development.⁵

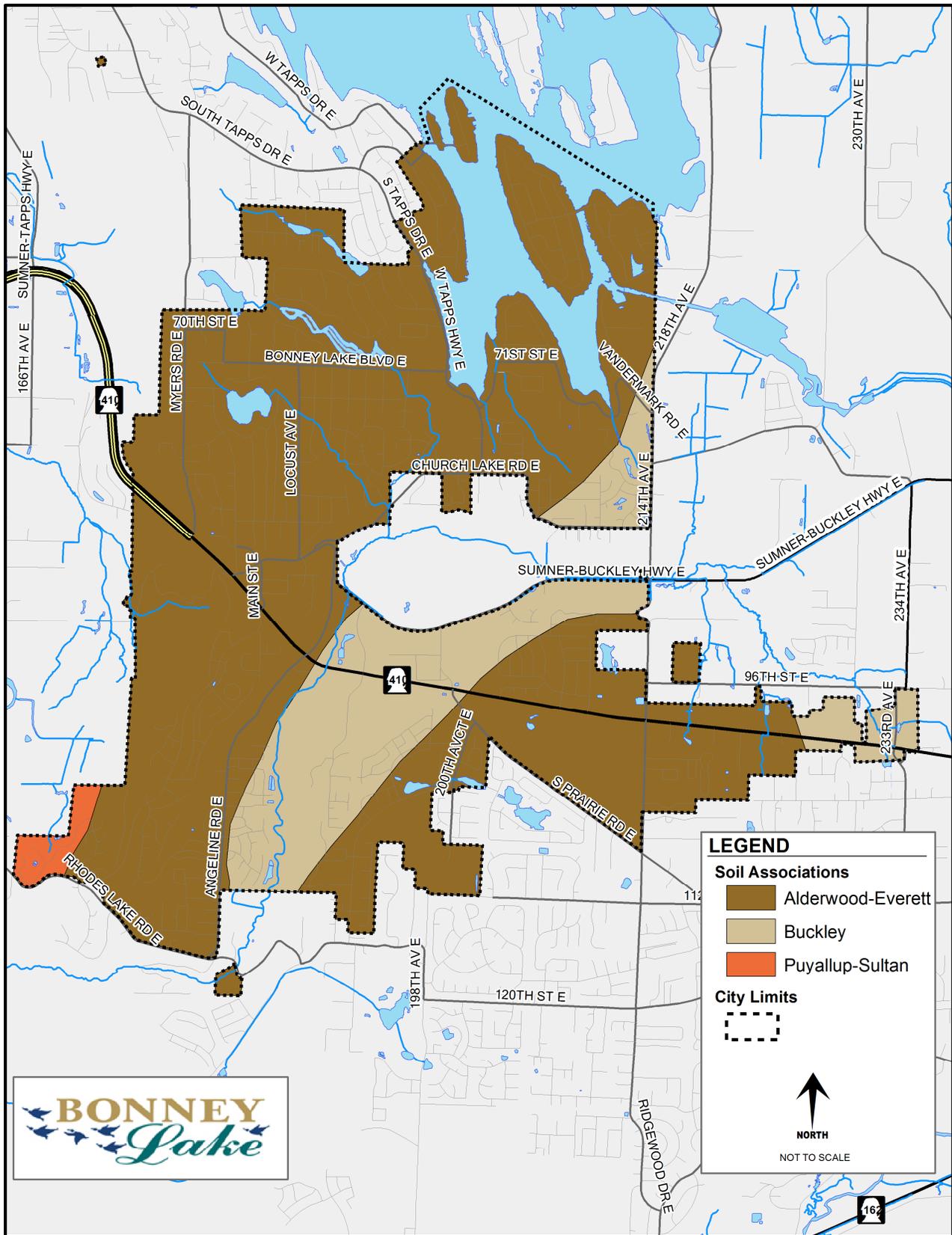


Figure 7-1: Soil Associations

According to RCW 36.70A.030, Geologically Hazardous Areas are “those areas that are susceptible to erosion, sliding, earthquake, or other geological events and are not suited to the siting of commercial, residential, or industrial development consistent with public health and safety concerns”. There are four main hazards in Bonney Lake which are discussed below:

“Bonney Lake is surrounded by land that is on slopes exceeding 25 percent. These slopes should be retained in their natural state and will help delineate the urban areas since land having slopes exceeding 15 percent are difficult to develop...”

*Plan for Bonney Lake,
Washington May 2, 1964*

Landslide Hazards

The soils in the Bonney Lake area are susceptible to landslide at slopes of 15% or more. The slopes bordering the Puyallup valley are highly dangerous because of their steepness and their soils, which consist of unconsolidated glacial materials. Slopes generally collapse when their soils become oversaturated during rain storms. Such failure is especially likely where a permeable layer lies atop a less permeable layer because percolating water seeps out at the layer boundary. Areas of Bonney Lake with a high and moderate degree of slope instability are illustrated in **Figure 7-2**.

Erosion Hazards

In addition to landslides, land clearing, earth movement, and unmanaged stormwater can cause erosion which damages the site itself, the downstream drainage network, and aquatic habitat. The finer the soil and the steeper the slope, the greater the erosion hazard.

Seismic Hazards

The Puget Sound area is also seismically active. An earthquake could cause improperly built structures to collapse, trigger landslides, and cause liquefaction. Liquefaction occurs when increasing water pressure during an earthquake or other ground vibration causes loose, fine sandy and silty sediments layers below the water table to temporarily behave as a liquid, similar to quick sand.⁶ The majority of the City has a low risk of liquefaction as illustrated in **Figure 7-3**.

Volcanic Hazards

Mount Rainier is an active volcano. It has erupted over 60 times in the past 10,000 years, most recently about 160 years ago. The Bonney Lake plateau is far enough away to avoid lava flows, blown rock, and landslides. All but a small portion of the City is high enough to avoid the lahars that are likely in the South Prairie Creek, Carbon River, Puyallup River, and White River valleys as illustrate in the **Figure 7-4**. While the lahars will not have a direct impact on the area, communication facilities and access to Bonney Lake would be impacted. Bonney Lake’s likeliest severe impact is that it could be blanketed with volcanic pumice and dust if the mountain erupts through its northwest flank or if the wind is blowing northwest.

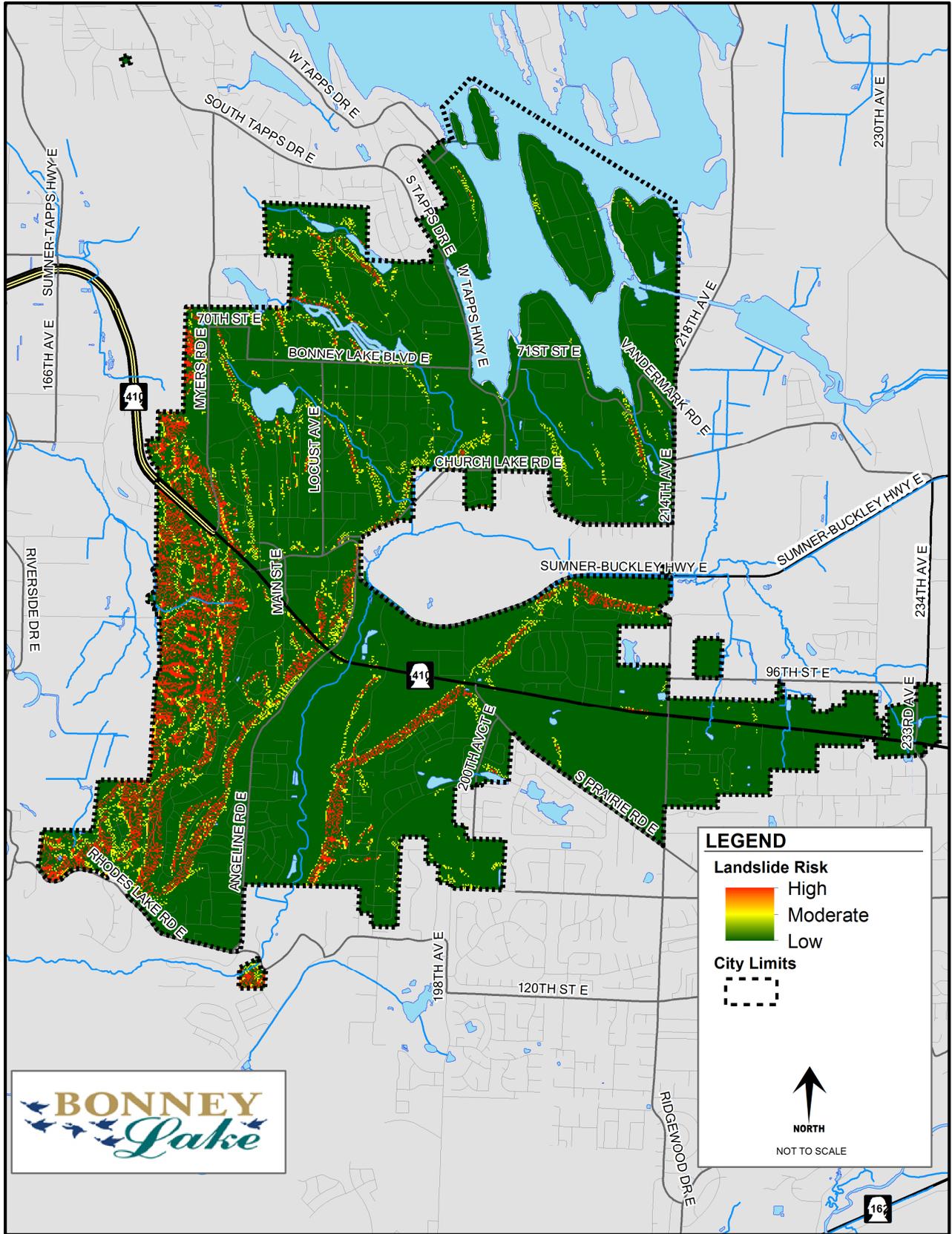


Figure 7-2: Slope Stability

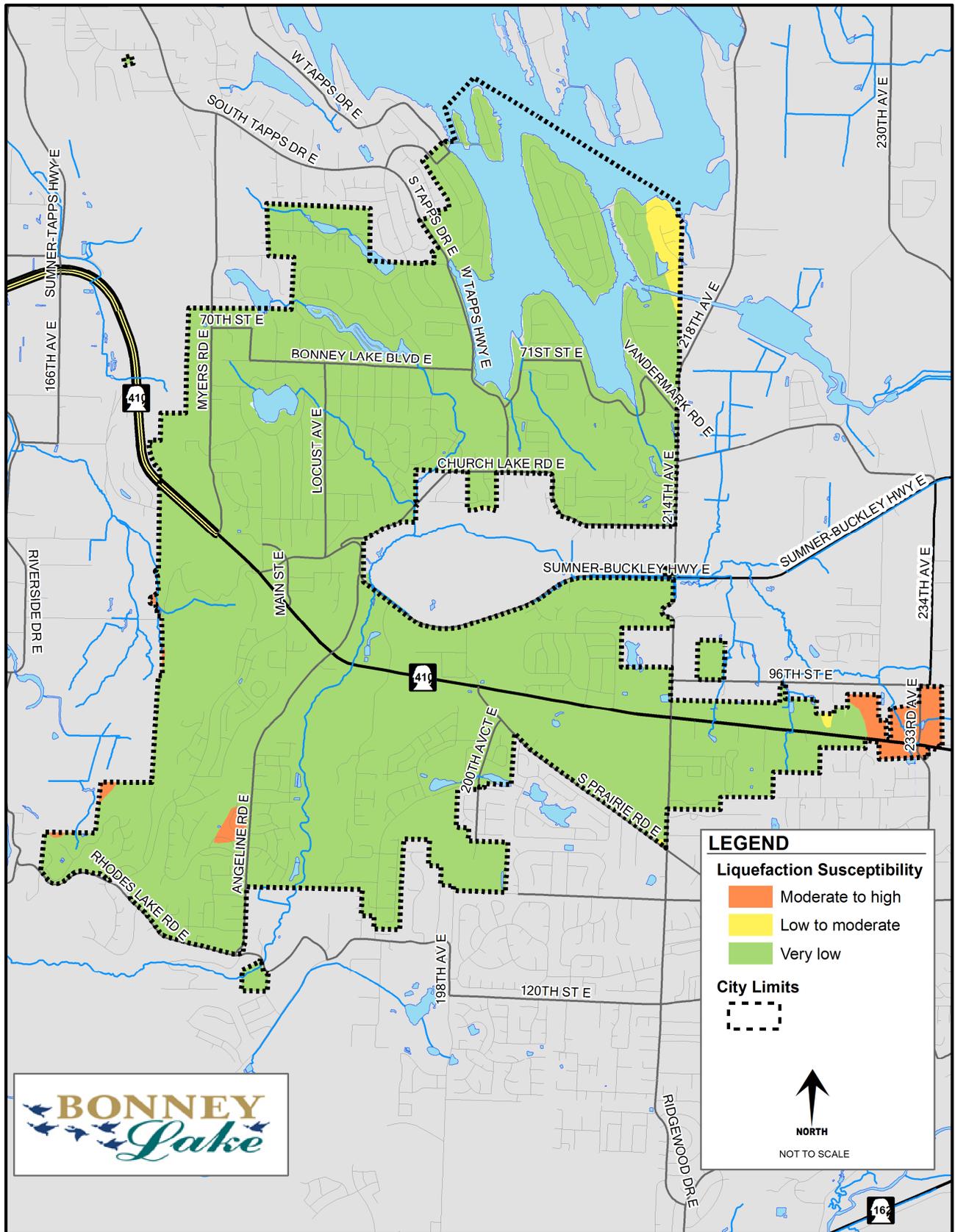


Figure 7-3: Liquefaction Susceptibility

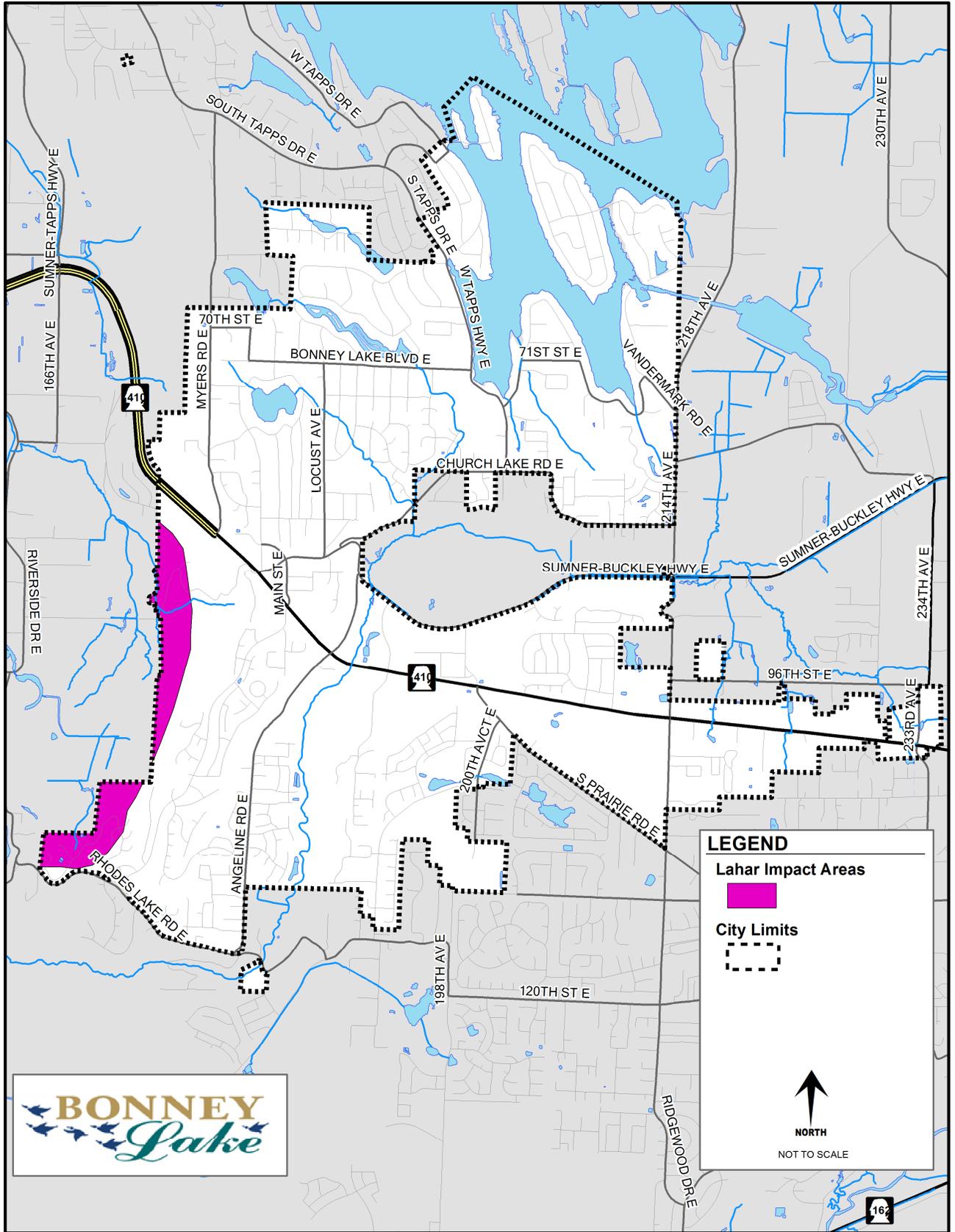


Figure 7-4: Lahar Impact Areas

Goal EC-1: Development accounts for soil conditions and avoids land surface modifications that would induce erosion, create landslides, or unnecessarily scar the land in order to protect the environment, public health, and property.

Policy EC-1.1: Discourage development and disturbance of native vegetation on steep slopes.

Policy EC-1.2: Require buildings to be set back from the toe and top of unstable slopes.

Policy EC-1.3: Require geotechnical or engineering studies to demonstrate that any proposed development in areas that have a high or moderate landslide hazard risk has been designed to withstand the hazard and not aggravate the hazard for other properties.

Policy EC-1.4: Designate areas with a moderate or high risk of slope instability either as Open Space – Conservancy, Open Space – Private, or Open Space – Public to limit the development intensity, site coverage, and vegetation removal within these hazardous areas.

Policy EC-1.5: Ensure that soils are suitable for the development proposed. Where soil suitability is questionable, require review by a geotechnical engineer.

Policy EC-1.6: Maintain existing vegetation to the greatest extent possible in order to prevent erosion. In case where development necessitates removal of vegetation, a reasonable amount of landscaping should be required to replace trees, shrubs, and ground cover removal during construction.

Policy EC-1.7: When erosion hazard areas are disturbed, require erosion control measures and limit the duration of site exposure.

Policy EC-1.8: Enforce building codes designed to prevent earthquake damage.

Policy EC-1.9 Cooperate with other agencies in preparing evacuation plans in the event of eruption.

3.2 CRITICAL AQUIFER RECHARGE AREAS

Potable water is an essential life sustaining element for people and once contaminated it is difficult, costly, and sometimes impossible to clean up; therefore, preventing contamination is necessary to avoid exorbitant costs, hardships, and potential physical harm to people and ecosystems.⁷ A primary source of potable water in the City is aquifers which are geologic formation that readily transmits water to wells or springs.

The importance of protecting these aquifers and the associated recharge areas for public water supplies is evident by the fact that the GMA address this issue in two different sections: (1) land use elements are required to provide for protection of the quality and quantity of groundwater used for public water supplies pursuant to RCW 36.70A.070 and (2) aquifer recharge areas are designated as environmental critical areas pursuant to WAC 365-190-100. Critical Aquifer Recharge Areas (CARAs) are established to protect sources of drinking water that are vulnerable to contamination that would affect the potability of the water or are susceptible to reduced recharging. Therefore, cities classify recharge areas for aquifers according to aquifer vulnerability which is defined in WAC 365-190-100(3):

Vulnerability is the combined effect of hydrogeological susceptibility to contamination and the contamination loading potential. High vulnerability is indicated by land uses that contribute directly or indirectly to contamination that may degrade groundwater, and hydrogeological conditions that facilitate degradation. Low vulnerability is indicated by land uses that do not contribute contaminants that will degrade groundwater, and by hydrogeological conditions that do not facilitate degradation. Hydrological conditions may include those induced by limited recharge of an aquifer. Reduced aquifer recharge from effective impervious surfaces may result in higher concentrations of contaminants than would otherwise occur.

In order to protect the Bonney Lake's groundwater the City has designated the one-year, five year, and ten year time-of-travel (TOT) zones identified in the *City of Bonney Lake Wellhead Protection and Monitoring Program Phase II* (November 2000) as Critical Aquifer Recharge Areas (CARAs). Additionally, the City has designed the one-year TOT zones as having very high contamination susceptibility, the five-year TOT zones as having high contamination susceptibility, and the 10-year TOT zone as having moderate to low contamination susceptibility.

Goal EC-2: Protect the quality of groundwater used for public water supplies to ensure adequate sources of potable water for Bonney Lake and the region.

Policy EC-2.1: Evaluate the potential impacts of land development on critical aquifer recharge areas to ensure that the level of protection provided corresponds with the potential for contaminating the water supply aquifer.

Policy EC-2.2: Work with Pierce County, the Washington State Department of Ecology, and other agencies to protect Bonney Lake's water supply from contaminants originating outside the city limits.

Policy EC-2.3: Periodically review and update land use policies, regulations, or development or operating standards that ensure appropriate levels of groundwater recharge while prevent degradation of groundwater quality.

Policy EC-2.3: Manage surface water so as to maintain water quality and maximize groundwater recharge.

Policy EC-2.4: Require new subdivisions and commercial development to connect to public sewers.

Policy EC-2.5: Encourage homes and businesses with septic systems to connect to public sewers.

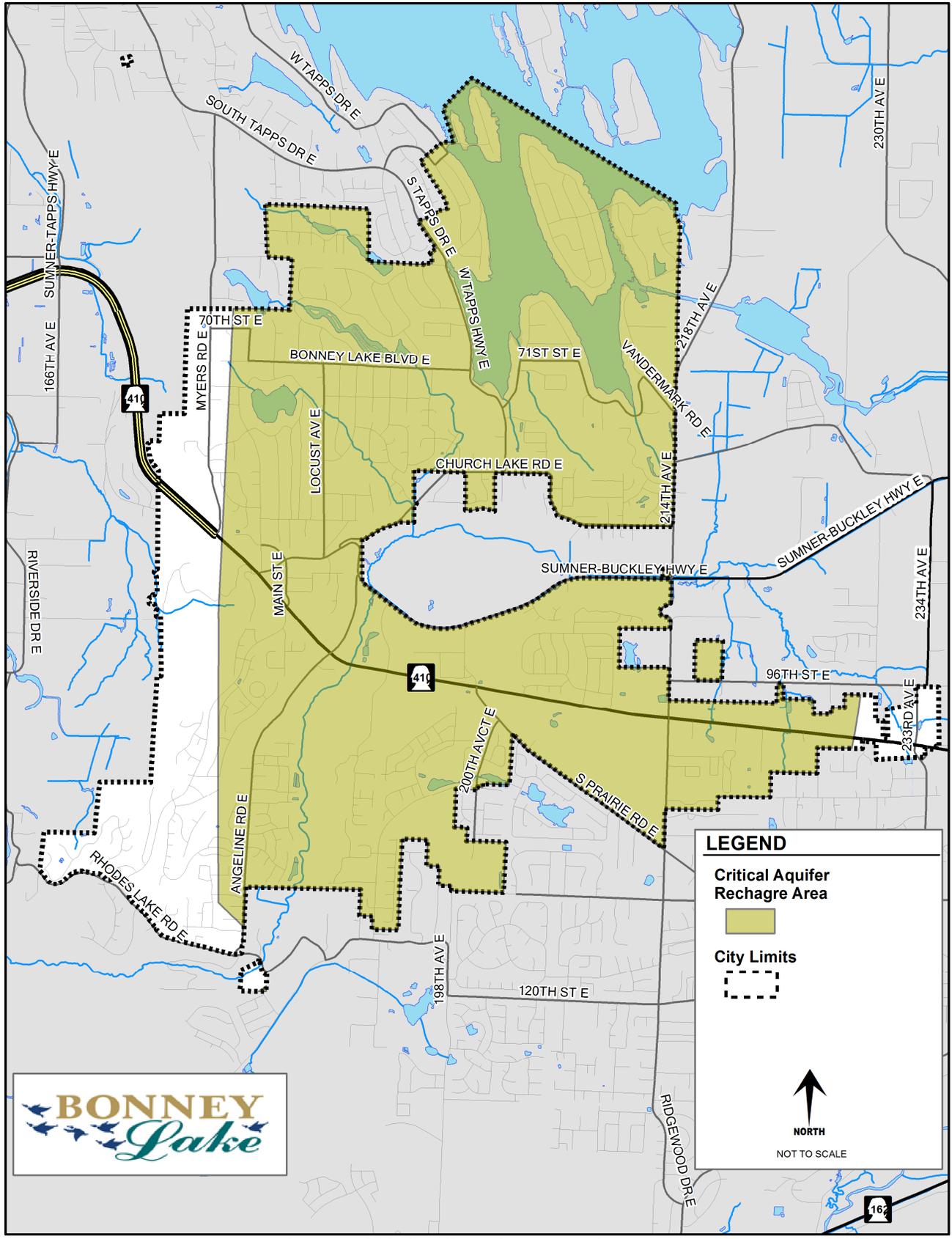


Figure 7-5: Critical Aquifer Recharge Areas (CARA)

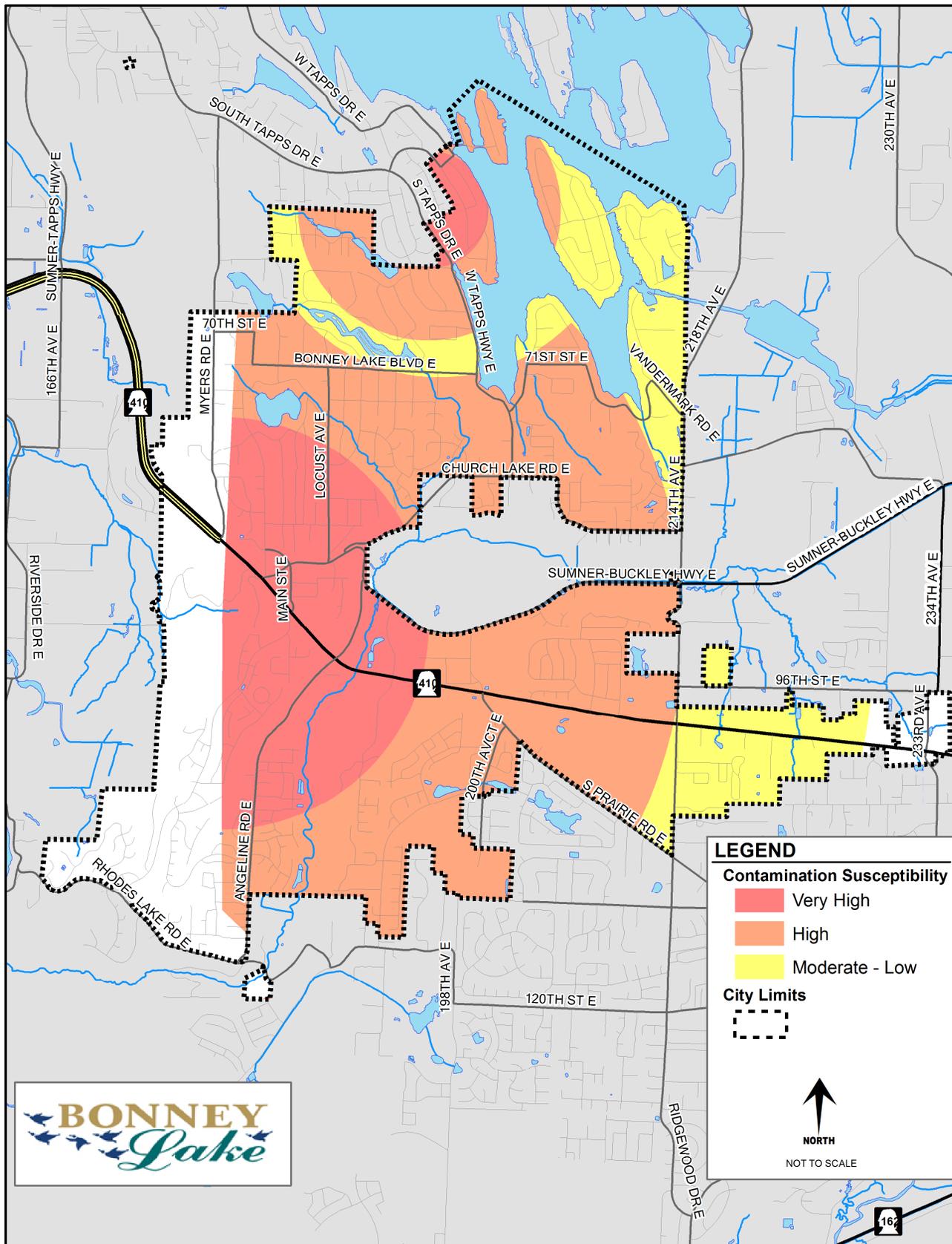


Figure 7-6: Aquifer Contamination Susceptibility

3.3 SURFACE WATER

“Maintain and enhance the quality of streams, wetlands, and lakes by retaining their natural characteristics.”

*City of Bonney Lake Comprehensive Plan
August 1985*

Water quality of Bonney Lake’s surface waters is closely tied to the amount of development that occurs nearby, as development has the potential to cause impacts from contaminated runoff and siltation. Poor water quality can adversely impact natural resources, including streams, aquatic, and terrestrial ecosystems,

and the plants and animals that depend on them. Poor water quality also has a negative impact on public health.

The Federal Clean Water Act’s 1987 Amendment requires that storm waste discharge from municipal storm drain systems be regulated under a nationwide surface water permit program referred to as the National Pollutant Discharge Elimination System (NPDES) to prevent impacts to surface waters as the result of development. The City’s Public Works Department is responsible for managing the City’s compliance with the NPDES permit under the guidance of the Washington State Department of Ecology.

Lake Tapps

Puget Sound Energy (PSE) created Lake Tapps in 1910 by diverting water from the White River into a diked area of the plateau. The 2,500-acre, now owned by the Cascade Water Alliance, is considered a shoreline of statewide significance and as such is discussed in the Shoreline Element of *Bonney Lake 2035* (Chapter 8).

Lake Bonney

Lake Bonney a 17 acre lake that has a mean water depth of 11 feet with a maximum depth of 21 feet located in a depression fed by surface and ground water. Lake Bonney is used for swimming, fishing, and non-power boating. Almost the entire shoreline has been developed for homes. Waterfowl frequent the lake. The lake is experiencing a mesotrophic to early eutrophic state of enrichment due to non-point pollution associated with residential development and lawn maintenance that over time will result in eutrophic lake with decreasing water quality and aesthetic value, odor problems, and algae blooms during the summer due to the presence of sunlight and nutrients.⁸

Lake Debra Jane

A former swamp was altered to create Lake Debra Jane. It is about 15 acres in size and ranges from seven to 15 feet in depth. The lake is used for fishing, swimming, and non-power boating. Waterfowl frequent the lake. Lake Debra Jane is fed by local springs that are augmented in late summer by nearby wells. The lake has little inflow/outflow for two to three months during the year. Algae grow in the weeds along the shoreline, especially in the summer. The lake has a history of total coliform counts that have been in gross excess of the Department of Ecology’s standards and occasionally too high for the Pierce County Health Department.⁹

Fennel Creek

Fennel Creek begins at a spring near the intersection of SR-410 and 234th Ave. E. It flows west then south through a flat, shallow valley to Victor Falls, then west through a deep canyon to the Puyallup River. The creek collects surface and spring runoff all along the corridor, including excess flows from the municipal water supply springs near Victor Falls. The Fennel Creek drainage basin covers about 11 square miles, of which three square miles are located within the City of Bonney Lake.

The reach of Fennel Creek below Victor Falls is within the highest class range (Class AA) established for Washington state surface waters and is classified as an Urban Natural Open Space consisting of a high value riparian corridor with multiple vegetation layers and a predominance of native plant species providing high quality habitat for wildlife species including Coho Salmon, cutthroat trout, and winter steelhead which are considered threatened or endangered under the Endangered Species Act (ESA).¹⁰ Human activities above the falls affect the health of salmonid habitat below the falls. This portion of Fennel Creek is also considered a Shoreline of State and is discussed in the Shoreline Element (Chapter 8).

The reach of Fennel Creek above Victor Falls that gently meanders through the plateau has high water quality values (Class A) and moderate habitat values containing a mosaic of vegetation classes including forested uplands, forested wetlands, palustrine emergent wetlands, scrub-shrub wetlands, riverine wetlands, and pastures.¹¹ Bonney Lake's greatest concentration of wetlands are along in the Fennel Creek corridor. The corridor's riparian (streamside) vegetation, its linear nature, and its close association with wetlands make it Bonney Lake's most valuable asset in terms of wildlife habitat and biological potential.

In 1999, the Foster Wheeler Environmental Corporation prepared for the City an Environmental Analysis of the Fennel Creek Corridor. It thoroughly studied the corridor's environmental quality, providing a baseline for future comparison. The Environmental recommended improvements designed to remedy its environmental problems. For example, where the creek has been straightened it recommends that it be restored to its original sinuosity by installing diversion berms and large woody debris. Where riparian vegetation has been destroyed it recommends plantings. Where it floods a road the study recommends culverts. Where wetlands have been damaged it recommends that they be enhanced by hydrological connections and plantings. Because its wetland functions and values can be greatly enhanced at reasonable cost, the corridor has great potential for wetland mitigation. That is, if a wetland outside the corridor is in the path of development and not worth saving, the developer could pay to enhance wetlands inside the corridor, thus preventing a net loss of wetland functions and values.

Other Streams

Figure 7-7 illustrates other small unnamed streams draining Lake Debra Jane and Lake Bonney. These streams join near Church Lake Road then flow into Fennel Creek. Narrow wetlands lie along them.

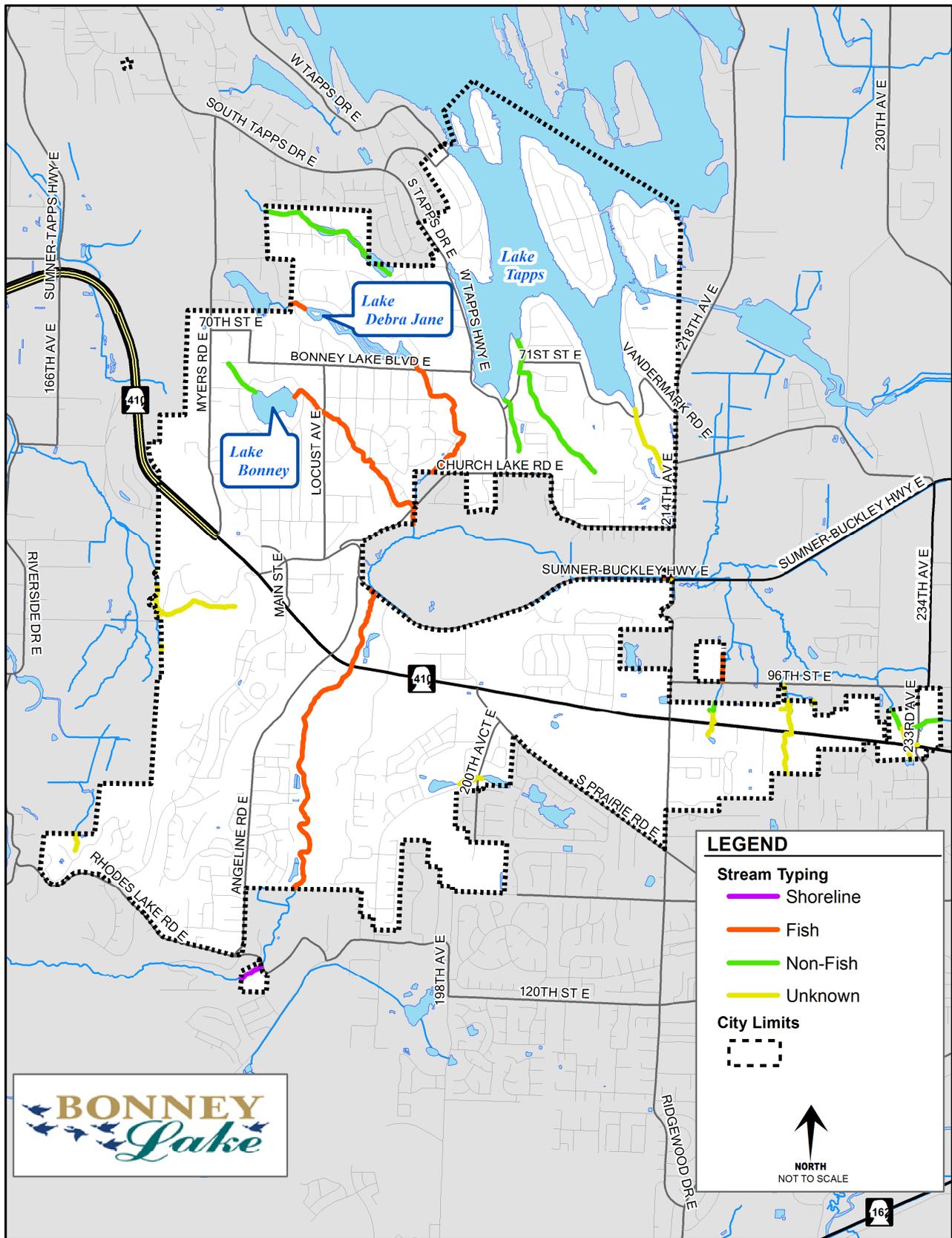


Figure 7-7: Surface Waters and Stream Typing

Goal EC-3: Preserve and restore the quality of surface waters to provide high quality natural habitats protected from point and non-point pollution sources.

Policy EC-3.1: Protect water bodies from point and non-point sources of contamination and nitrification.

Policy EC-3.2: Promote the enhancement or restoration of surface waters as adjacent development activities occur.

Policy EC-3.3: Protect against erosion of drainage channels.

Policy EC-3.4: Encourage land developments to maximize stormwater infiltration.

Policy EC-3.5: Promote Low Impact Development techniques as an alternative to standard development practices such as, using natural systems to maintain and enhance environmental quality by having them perform such functions as cleaning air and water, and controlling storm water runoff.

Policy EC-3.5: Preserve vegetative buffers along streams and drainage ways to enhance water quality, protect habitat, and prevent erosion.

Policy EC-3.6: Mitigate stormwater related impacts through best management practices.

Policy EC-3.7: Protect Fennel Creek's natural functions by being especially diligent in applying to the Fennel Creek corridor those policies relating to wetlands and fish and wildlife habitat as stated elsewhere in this Element.

Policy EC-3.8: Construct the Fennel Creek corridor environmental improvements identified in the 1999 Environmental Analysis of the Fennel Creek Corridor.

Policy EC-3.9: Continue to purchase property along the Fennel Creek Corridor to preserve the corridor and consider using property around the creek as wetland mitigation sites.

3.4 FLOODPLAINS

Floodplains are regulated to protect the natural functions and habitat value of these areas and to manage potential risks to public safety. The City of Bonney Lake defines floodplains as: "Special flood hazard areas: means the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year" (BLMC 16.26.020). Floodplains are mapped along the Fennel Creek, Lake Tapps, Lake Bonney, Lake Debra Jane and other small pockets in the City. To minimize flood damage, and maintain FEMA flood insurance eligibility, the City has administered floodplain regulations since 1982.

The City of Bonney Lake adopted a Comprehensive Stormwater Plan (CSP) Plan in September 2000. This document is designed manage stormwater in compliance with Ecology requirements and regional goals. The CSP plan contains a process for evaluating drainage capacities, ranking flood problem areas, and initiating capital improvement projects.

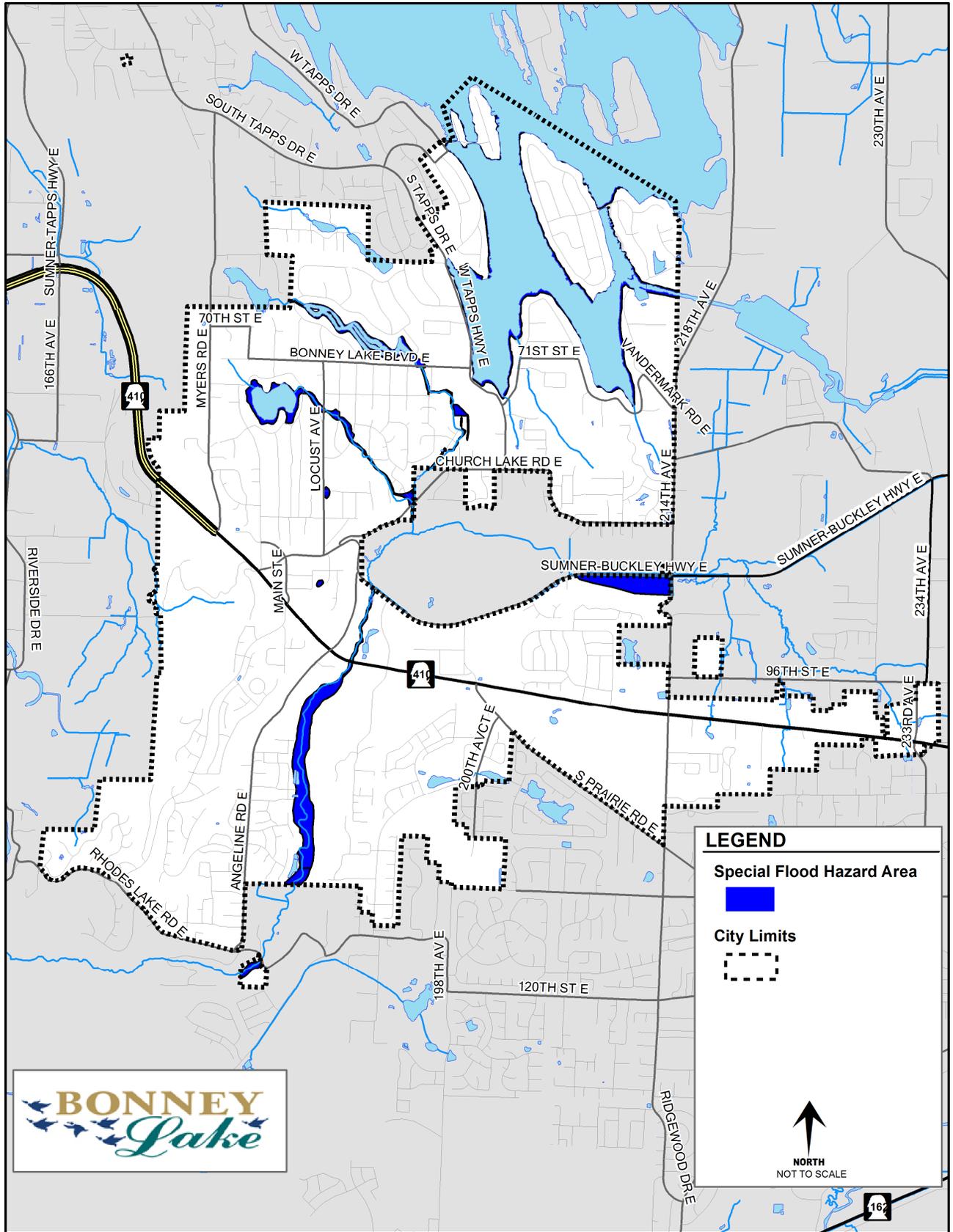


Figure 7-8: Special Flood Hazard Areas

Goal EC-4: Minimize risks to life and property resulting from flooding and preserve habitat associated with floodplains.

Policy EC-4.1: Prohibit new buildings in the 100 year flood zone as determined by the Federal Emergency Management Agency (FEMA) and as shown on the FEMA Flood Insurance Rate Maps (FIRM) unless the base elevation is above the floodplain elevation, the structure has been flood proofed, or the area is removed from the flood zone in the 100-year floodplain.

Policy EC-4.2: Protect floodplains and from filling, excavating, and other activities that would interfere with natural drainage patterns and negatively impact the habitat functions provided in floodplains.

Policy EC-4.3: Preserve floodplains to provide natural flood storage protection and habitat functions.

Policy EC-4.4: Design new development and redevelopment projects to minimize hazards associated with flooding and limit the amount of runoff that contributes to flooding.

3.5 WETLANDS

The commonly used wetland definition as issued by the U.S. Environmental Protection Agency (EPA) the U.S. Army Corps of Engineers (Corps), Shoreline Management Act (SMA), Growth Management Act (GMA) and recorded in the Washington Administrative Code (WAC 173-22-030(10)) is:

Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.

Wetland scientists generally acknowledge that wetlands perform the following eight functions: 1) flood/storm water control, 2) base stream flow/groundwater support, 3) erosion/shoreline protection, 4) water quality improvement, 5) natural biological support, 6) general habitat functions, 7) specific habitat functions, and 8) cultural and socioeconomic values.¹² In the past these functions were not understood. Many wetlands were senselessly destroyed by clearing, dredging, draining, and filling. Federal, state, and local government regulations now protect significant wetlands and an undisturbed buffer around the wetland. The higher the wetland's "functions and values," the wider the buffer must be.

The Bonney Lake area contains bogs, forested wetlands, scrub/shrub wetlands, wet meadows, shallow marsh wetlands, and deep marsh. The greatest concentration of wetlands is in the Fennel Creek corridor. Wetlands also exist along swales draining Lake Bonney and Lake Debra Jane, along the certain lake shoreline, and in a few isolated spots.

Goal EC-5: Protect wetlands and the natural functions they perform.

Policy EC-5.1: Ensure that wetland buffers are adequately size to protect functions and values of wetlands.

Policy EC-5.2: Allow no net loss of wetland functions and values.

Policy EC-5.5: Avoid denying all reasonable use on any parcel.

Policy EC-5.6: Protect wetlands from water quantity or quality impacts stemming from improper stormwater management.

Policy EC-5.7: Encourage environmental stewardship programs aimed at wetland preservation.

Policy EC-5.8: Pursue implementation of a wetland mitigation banking program.

3.6 FISH AND WILDLIFE HABITAT

Urbanization and agriculture have reduced Bonney Lake’s wildlife habitat, but the area’s lakes, stream corridors, wetlands, floodplains, and forests support many plants and animals. Urban development and habitat conservation are not entirely incompatible sensitive design, a reasonable balance can be maintained.

According to State rules (WAC 365-190), fish, and wildlife conservation areas (FWHCAs) are “...areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness.” Not every parcel of land that constitutes fish and wildlife habitat is considered FWHCA as provided in the Center Puget Sound Growth Management Hearings Board in *Pilchuck, et al v. Snohomish County*. Areas that are considered FWHCA, as determined by the Department of Natural Resources, are illustrated in Figure 7-9.

Goal EC-6: Preserve and restore fish and wildlife habitat conservation areas.

Policy EC-6.1: Preserve habitats for species which the state or federal government have identified as endangered, threatened, or sensitive.

Policy EC-6.2: Encourage conservation of sites that protect fish and wildlife habitat conservation areas through incentives or acquisition.

Policy EC-6.3: Encourage the restoration of ecological functions and the natural environment in environmentally damaged areas through incentives.

Policy EC-6.4: Protect water quality in lakes and streams.

Policy EC-6.5: Promote clustered developments, common areas, buffers, conservation easements and retention of native vegetation as means of conserving critical habitat.

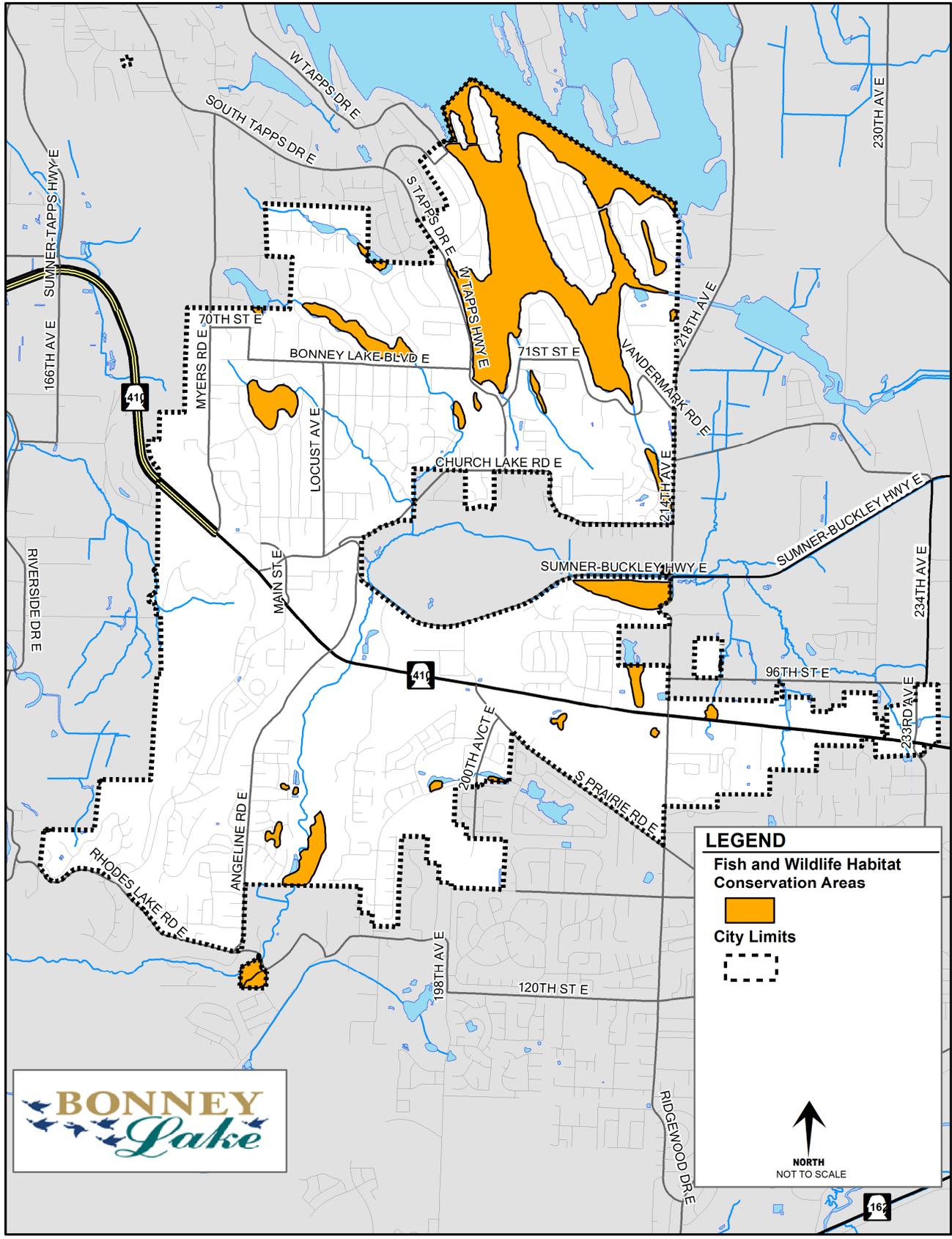


Figure 7-9: Fish and Wildlife Conservation Areas

4. URBAN FORESTRY

A healthy urban forest contributes to a sustainable city in a number of ways. Trees consume carbon dioxide (CO₂) (which is a greenhouse gas) and absorb air and water pollutants. They also provide shade (which reduces energy consumption), absorb runoff, reduce soil erosion, provide habitat for plants and animals, and make walking more pleasant. The Center for Urban Forest Research estimates that over a 40 year period 100 urban trees in the Pacific Northwest provide \$202,000 in benefits.¹³

“Preserve Bonney Lake’s character by maintaining significant trees, tree lines, and wooded lots to the maximum extent possible through the regulation of clearing prior to development.”

*City of Bonney Lake
Comprehensive Plan
August 1985*

As a Tree City, USA, with an active Community Forest Program, Bonney Lake has made a commitment to protect and manage the community’s tree resources. As part of this commitment the City contract with Davey Resource Group to prepare an Urban Tree Assessment which determined that the City of Bonney Lake has an overall tree canopy coverage of 43% slightly higher than the goal of 40% suggested by American Forest.¹⁴

Each year, the City plants and prunes trees to expand and maintain the urban forest. The City also has tree-planting requirements in parking lots to help offset air pollution from cars and reduce the heat island effect. In addition, there are many thousands of trees in private yards across the City. These make an important contribution to the aesthetics of the City, as well as the natural environment. However, without a plan to replace trees lost to development, there could be a significant reduction in the overall canopy and the environmental services provided to the community.

Goal EC-7: Promote, preserve, and emphasize a healthy urban forest with an overall tree canopy of 50%.

Policy EC-7.1: Protect and conserve open space, including transition buffers between urban and rural areas.

Policy EC-7.2: Preserve and protect public views of mountains and valley corridors.

Policy EC-7.3: Practice land cover management with includes forest and topsoil preservation, native growth protection easements, dense vegetative zones, and preservation of tree canopy zones.

Policy EC-7.4: Protect significant trees and promote tree replanting, and encourage the use of native plants.

Policy EC-7.6: Promote the preservation of native vegetation and mature trees; revegetation; and appropriate landscaping to improve air and water quality and fish and wildlife habitat.

Policy EC-7.7: Encourage preservation of the urban forest, and promote the use of native plants in residential and commercial landscapes.

5. AGRICULTURAL LANDS

The GMA requires jurisdictions to prevent urban conversion of agricultural lands of long-term commercial significance. The City recognizes no such lands in the BLUGA. However, as a suburban community located on the edge of the Pierce County’s urban growth area boundaries, Bonney Lake is surrounded by pockets of agricultural lands of long term commercial significance and as such the City should work cooperatively with the County to preserve and protect these areas. Additionally, two of the City’s proposed additions to the BLUGA, Fennel Creek Corridor Area and 214th Area, contain lands designated as agricultural resource lands (ARL). Areas designated as ARL are considered agricultural lands of long term commercial significance which should be preserved and protected from urban development. The City proposes to retain that designation for those lands by designating the areas as Open Space – Conservancy and zoning the area Residential/Conservancy District which is compare the County’s zoning in both the terms of allowed uses and density.

In addition to preserving agricultural lands of long-term commercial significance, Bonney Lake should also take steps to promote and preserve urban agricultural lands. Urban agriculture is an umbrella term encompassing backyard gardens, community gardens, urban farms, and farmer’s markets involved in a wide range of activities including raising, cultivation, processing, marketing, and distribution of food in urban areas.¹⁵ Preserving and promoting urban agriculture would have a number of positive impacts on Bonney Lake which include:

- Promoting community health by expanding access to fresh foods;
- Reducing green-house gas emissions caused transporting food over long distances;
- Increasing social-capital by facilitating community engagement (See Community Development Element for a discussion of the health impacts of social capital); and
- Activating underutilized community spaces.¹⁶

Goal EC-8: Preserve and protect agricultural resource lands and urban agriculture sites to improve access to healthy foods access, build social connections, and provide local source of food.

Policy EC-8.1: Preserve Pierce County’s designation of “urban agricultural land of long-term commercial significance” for properties so designated in the proposed Fennel Creek Corridor UGA.

Policy EC-8.2: Allow continued agricultural production in areas which currently produce such products but which have not been designated agricultural resource lands if such production is compatible with their urban context.

Policy EC-8.3: Maintain agricultural production as the principal use on agricultural lands by limiting residential development, preventing conversion to non-agricultural uses, and prohibiting uses that are incompatible with long term agricultural production.

Policy EC-8.4: Protect property owner’s rights to cultivate gardens to produce fresh vegetables and to keep a limited number of farm animals through the City’s development regulations.

Policy EC-8.5: Expand access to community gardens through Bonney Lake to support local farms and also increasing access to fresh produce.

Policy EC-8.6: Remain open to further designations of agricultural resource lands on land shown to merit that designation.

Policy EC-8.7: Ensure that land uses proposed adjacent to resource lands designated as agricultural resource lands are compatible with agricultural activities.

6. AIR QUALITY

“The emission of noise, smoke, dust, other obnoxious matter are to be limited and controlled by specific performance standards.”

*Plan for Bonney Lake,
Washington May 2, 1964*

Air quality in Bonney Lake is monitored and regulated by the Puget Sound Clean Air Agency (PSCAA) which covers, King Kitsap, Pierce and Snohomish Counties. The PSCAA a special purpose, regional government agency chartered by state law in 1967 under the Washington Clear Air Act and monitors air quality in the basin through a regional network of air pollution monitoring stations to determine if the national and State standards for criteria air pollutants and emission limits of toxic air contaminants are being achieved.

Criteria Air Pollutants

The Federal and Washington Clean Air Act have established ambient air quality standards for different air pollutants. The national ambient air quality standards (NAAQS) were established by the Federal Clean Air Act of 1970 (amended in 1977 and 1990) for six "criteria" pollutants: carbon monoxide (CO), ozone (O3), nitrogen dioxide (NO2), particulate matter (PM10 and PM2.5), sulfur dioxide (SO2), and lead (Pb), which are known to be hazardous to human health. Over the years PSCAA has made great strides toward reducing levels of carbon monoxide, sulfur dioxide, nitrogen dioxide and lead, which are now well below federal air quality standards. However, two air pollutants remain a concern Puget Sound region: particle pollution and ozone (smog) which can cause heart attacks, strokes, asthma attacks and even premature death.¹⁷

Toxic Air Contaminants

In addition to the six criteria air pollutants, the PSCAA increasingly is focusing efforts on reducing air toxics, which is group of over 400 pollutants known or suspected to cause a number of health problems, including cancer and birth defects, as well as damage to lungs, and immune and nervous systems. In our region, health risk from air toxics comes primarily from fine particles in diesel exhaust.¹⁸

“Residential areas should be protected from the dangers of fire, explosions, toxic, noxious matter, and other similar objectionable influences.”

*City of Bonney Lake
Comprehensive Plan
August 1985*

Greenhouse Gas Emissions

Unlike emissions of criteria pollutants and toxic air pollutants, which have local or regional impacts, emissions of greenhouse gasses (GHGs) have a broader, global impact. The principal GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated compounds. These gases allow visible and ultraviolet light from the sun to pass through the atmosphere, but they prevent heat from escaping back out into space, a process known as the “greenhouse effect”. Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the earth’s climate.

The City’s efforts to reduce GHGs began in 2010 with the passage of Resolution 2049 which adopted policies to reduce emissions of GHGs. As part of Resolution 2049, the City stated that local governments throughout the nation, both large and small, are reducing the production of global warming pollutants through programs that provide economic and quality of life benefits, such as reduced energy bills, green space preservation, air quality improvements, reduced traffic congestion, improved transportation choices, and economic development and job creation through energy conservation and new energy. The City of Bonney Lake adopted the following policies, as part of Resolution 2049, to reduce GHGs:

- The City will strive to assure that all new municipal buildings are models of cost effective, energy-efficient design.
- The City will encourage energy conservation practices in City buildings by raising the awareness of employee energy use.
- The City will use the recently approved shared resource conservation manager position to conduct energy audits of publicly owned buildings, evaluate potential conservation measures, and then carry out those measures that are appropriate.
- The City will monitor the efficiency of the pumps in water and sewer systems, and operate and maintain them at peak efficiency whenever practically feasible. When evaluating new systems, the most cost effective option using the least amount of energy will be preferred.
- The City will participate in the County-wide solid waste management plan which reduces the solid waste stream by recycling and other means, investigates ways to convert nonrecyclable solid waste to energy, and promotes the purchase of recycled and recyclable goods.
- Where and when permitted under the building code, the City will encourage the use of building construction materials made from recycled and recyclable materials.
- The City will publicize energy conservation actions to raise public awareness of the value of wise energy use.
- The City will promote internal recycling programs, purchasing policies, and employee education to reduce the amount of waste produced.

- The City will implement its non-motorized transportation plan, on a funding available basis, to provide safe and convenient access for pedestrians and bicyclists to, across, and along major transit priority streets.
- The City will continue to support water conservation through the use of conservation based rates and a tiered rate structures for water use

In Puget Sound region, nearly 50% of the GHGs pollution comes from transportation. The goals and policies in the Community Development Element and Mobility Elements attempt to address the GHGs related to transportation by encouraging a local balance of jobs and housing, promote the proximity of shopping, recreational, childcare and other uses to residential areas in order to minimize the number and distance of vehicle trips, encourage higher intensity uses near transit to reduce dependence on the automobile, and encourage the use of alternative transportation modes such as transit, walking and bicycling.

In addition to transportation, GHGs are released during energy production and consumption, such as electricity used to power homes and businesses, and fuel used to power cars and trucks. Reducing the carbon content of the fuel source (e.g. solar or wind power versus fossil fuels) or reducing energy consumption (e.g. using energy efficient appliances or designing buildings for solar access) will help to further reduce overall GHGs emissions.

Goal EC-9: Overall air quality will meet or exceed State and Federal standards and meet the Washington State goal to reduce greenhouse emissions to 25% below 1990 levels by 2035 established by RCW 70.235.020(1)(a)(ii).

Policy EC-9.1: Support efforts of other local, regional and State agencies to improve regional air quality.

Policy EC-9.2: Coordinate land use planning and local transportation planning to reduce the potential for long-term exposure criteria air pollutants and to toxic air contaminants.

Policy EC-9.3: Reduce the air quality impacts created by truck traffic, hazardous materials and development.

Policy EC-9.4: Continue to implement the policies adopted by Resolution 2049

Policy EC-9.5: Encourage energy efficiency in site design, building orientation, landscaping, and utilities/infrastructure for all development and redevelopment projects.

Policy EC-9.6: Encourage renewable energy sources for new and existing buildings and infrastructure.

Endnotes:

- ¹ Zulauf, A. S., et. al. (February 1979) *Soil Survey of Pierce County Area, Washington*. Prepared for the Natural Resource Conservation Service (formerly Soil Conservation Service).
- ² *ibid.*
- ³ Dragovich J.D, et. al. (September 1995) *Liquefaction Susceptibility for the Sumner 7.5-minute Quadrangle, Washington*. Prepared for Washington State Department of Natural Resources.
- ⁴ Zulauf, A. S., et. al. (February 1979) *Soil Survey of Pierce County Area, Washington*. Prepared for the Natural Resource Conservation Service (formerly Soil Conservation Service).
- ⁵ *ibid.*
- ⁶ Dragovich J.D, et. al. (September 1995) *Liquefaction Susceptibility for the Sumner 7.5-minute Quadrangle, Washington*. Prepared for Washington State Department of Natural Resources.
- ⁷ WAC 365-190-100(1)
- ⁸ Parati of Oregon, LLC. (February 2007). *Bonney Lake Preliminary Water Quality Assessment: An Analysis of Conditions 2004 through 2007*. Prepared for the City of Bonney Lake.
- ⁹ RH2 Engineering, Inc. (June 1998). *City of Bonney Lake Wellhead Protection and Monitoring Program – Phase I*. Prepared for the City of Bonney Lake.
- ¹⁰ Foster Wheeler Environmental Corporation. 1999. Environmental Analysis of the Fennel Creek Corridor. Pg. 2-75.
- ¹¹ *ibid.*
- ¹² Cooke Scientific Services. (February 2000). *Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (SAM)*.
- ¹³ Davey Resource Group. (March 2011). *City of Bonney Lake Washington: Urban Tree Canopy Assessment*. Prepared for the City of Bonney Lake.
- ¹⁴ *ibid.*
- ¹⁵ National Policy & Legal Anayliss Network to Prevent Childhood Obesity. (?). *Seeding the City: Land Use Policies to Promote Urban Agriculture*.
- ¹⁶ *ibid.*
- ¹⁷ PSCAA Website: <http://www.pscleanair.org/airquality/airqualitybasics/airtoxics/Pages/default.aspx> Accessed on 11/5/14
- ¹⁸ *ibid.*

Bonney Lake Planning Commission Future Agendas

2014 – Q4

November 5, 2014

- **Continued Public Hearing:** Bonney Lake 2035 – Cultural Arts and Heritage
- **Public Hearing:** State-Licensed Marijuana Uses
- **Public Hearing:** 2014 Comprehensive Plan Amendments

November 19, 2014

- **Public Hearing:** Subdivision Access Width Requirements
- Berk Presentation – Market Analysis
- Bonney Lake 2035 – Draft Environmental Conservation Element

December 3, 2014

- **Public Hearing:** Bonney Lake 2035 – Environmental Conservation Element
- 2015 – 2016 Work Plan
- Joint Planning Commission and City Council Meeting

December 17, 2014 – Canceled

2015 – Q1

January 7, 2015 – Canceled

January 20, 2015 (SPECIAL MEETING)

- City Council/Planning Commission Joint Meeting: 2015 – 2016 Work Plan

February 4, 2015

- Bonney Lake 2035 – DRAFT Economic Vitality Element
- **Public Hearing:** Amendments to the Recreational Vehicle Code.

February 18, 2015

- **Public Hearing:** Adding single family residence as a permitted use in the R-2
- **Public Hearing:** Amendments to the Telecommunication Code
- Bonney Lake 2035 – DRAFT Public Service and Facilities Element

October 27, 2014

March 4, 2015

- ***Public Hearing:*** Bonney Lake 2035 – DRAFT Economic Vitality Element
- Bonney Lake 2035 – DRAFT Transportation Element

March 18, 2015

- Bonney Lake 2035 – Public Open House #3 (Public Services/Facilities and Transportation)

2015 – Q2

April 7, 2014

- ***Public Hearing:*** Bonney Lake 2035 – Public Services/Facilities and Transportation