CITY COUNCIL WORKSHOP
October 1, 2024
6:00 P.M.

AGENDA

www.ci.bonney-lake.wa.us

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

The public is invited to attend Council Meetings and Workshops in person, via conference call or over the internet. The information for attending is provided below.

Council Workshop options:
In-Person: Bonney Lake Justice & Municipal Center at 9002 Main Street East in Bonney Lake
By phone: 323-792-6234 (Meeting ID: 384 308 606#)
By internet: Teams meeting link: TEAMS (Meeting ID: 222 580 150 033) **The City will be turning off all public cameras and microphones when attending online until the start of the citizen commenting section and will then turn them back off after the citizen commenting section is finished - Only staff and presenters will be visible and unmuted during the entire meeting.**

I. CALL TO ORDER: Mayor Terry Carter

A. Pledge of Allegiance

II. ROLL CALL: Mayor Terry Carter, Deputy Mayor Dan Swatman, Councilmember Angela Baldwin, Councilmember Aaron Davis, Councilmember Gwendolyn Fullerton, Councilmember Kerri Hubler, Councilmember J. Kelly McClimans, And Councilmember Brittany Rock.

III. AGENDA ITEMS:

Page 3 A. **Proclamation:** Domestic Violence Awareness Month.

Page 5 B. **Presentation:** Exodus Housing Presentation For Domestic Violence Awareness Month**.** (15 mins.)

Page 21 C. **Presentation:** Budget 101 (Cherie R.) (30 mins.)

Page 47 D. **Review Of Council Minutes:** September 10, 2024, City Council Meeting, And September 17, 2024, City Council Workshop.

E. **Council Open Discussion:**

Page 55 F. **Discussion: AB24-62 – Motion M24-62** - A Motion Of The City Council Of The City Of Bonney Lake, Pierce County, Washington, directing staff to submit the September 2024 version of the Environmental Stewardship Element to the

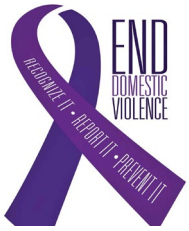
Department of Commerce and to include it in the final version of the comprehensive plan. (45 mins).

IV. EXECUTIVE/CLOSED SESSION: None.

V. ADJOURNMENT

For citizens with disabilities requesting translators or adaptive equipment for communication purposes, the City requests notification as early as possible prior to the meeting regarding the type of service or equipment needed.

The City Council may act on items listed on this agenda, or by consensus give direction for future action. The Council may also add and take action on other items not listed on this agenda.



BONNEY Lake

PROCLAMATION

WHEREAS, Domestic Violence Awareness Month is held each October to unite advocates across the nation in their efforts to end domestic violence; and

WHEREAS, according to the U.S. Centers for Disease Control and Prevention, one in four women and one in nine men in the U.S. will experience sexual or physical violence or stalking by an intimate partner during their lifetime; and

WHEREAS, domestic violence can happen to anyone and is present in every community, including the Bonney Lake community; and

WHEREAS, patterns of abusive behavior include physical and sexual assault, emotional abuse, isolation from friends and family, monitoring, and controlling another's finances to gain power and control over them; and

WHEREAS, children who grow up in violent homes are likely to also be abused and neglected; and

WHEREAS, the City of Bonney Lake believes that our community, including every residence, should be a place of safety for all individuals; and

WHEREAS, the City's Office of the Prosecuting Attorney prosecutes domestic violence related cases to hold perpetrators accountable for their actions; and

WHEREAS, the City helps victims obtain resources and discuss safety plans; and

WHEREAS, the City is grateful for the remarkable people and organizations that offer care and critical services to survivors of domestic violence, and remains committed to building a community where all people can feel safe and respected and live free from abuse.

NOW, THEREFORE, I Terry Carter, Mayor of Bonney Lake, with the full backing and encouragement of the entirety of the Bonney Lake City Council, do hereby proclaim that Bonney Lake declares October as:

Domestic Violence Awareness Month

in the city of Bonney Lake and encourages all citizens to actively stand against domestic violence in our community.

IN WITNESS THEREOF, I have hereunto set my hand and caused the Seal of the City of Bonney Lake to be affixed this 1st day of October 2024.

_____

Terry Carter, Mayor

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RAPID REHOUSING Program for Survivors of DOMESTIC VIOLENCE

Tonya Tunnell-Thornhill
Executive Director
Tonya@ExodusHousing.org
Marie Saplan
Family Service Specialist
Marie@ExodusHousing.org

Exodus Housing - A Very Brief History

- **Exodus Housing** began in 1994, providing housing and case management supportive services for low-income households who were homeless
  - In 2009, converted to 100% serving households who are fleeing or attempting to flee domestic violence

- **6 full-time staff 1 part-time**
  - 4.5 -Family Service Specialists, 1-Admin & Program Assistant, 1- Executive Director

- Our Annual budget for 2024 is $1,324,724
  - $1,149,724 Public Funding
  - $175,000 Private Funding (Foundations, communities of faith, companies, services clubs, individuals)

Program Services

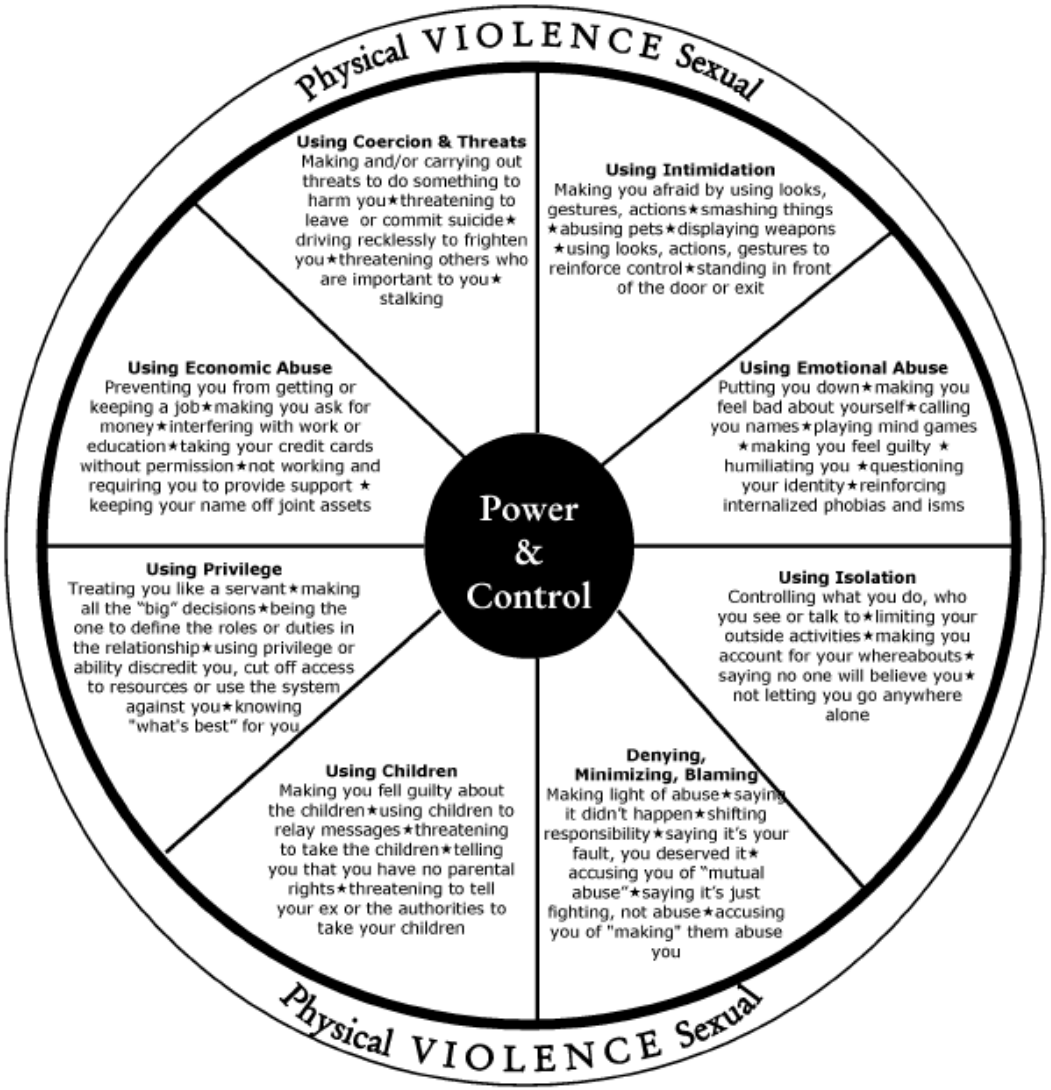
- **Mission Statement:** Encouraging independence, empowerment and self-sufficiency to households fleeing domestic violence by providing access to permanent housing, tailored services and community resources: Serving Pierce County
- **Services Offered**
  - Connections to permanent housing with landlords who rent fair market units in Pierce County
  - Ongoing customized case management meetings tailored to each individual family
  - Monthly rental assistance subsidy
    - Client pays 30% of monthly income to the landlord
    - Exodus pays all move-in costs and monthly rental balance

What is Domestic Violence

- **Domestic Violence…**
  - Is abusive behavior towards another person in the form of **power** and **control**
  - Has no boundaries and can affect everyone
  - Has long lasting affects on the people who experience it
  - Is a gradual situation that starts with grooming and gaining the trust of the person they are victimizing
  - May also include stalking, sex trafficking and other non intimate familial type relationships
- **Types of Abuse:**
  - Physical/sexual/use of weapons
  - Emotional/psychological/intimidation/interrogation
  - Forcing drug or alcohol use
  - Dragging through the legal system
  - Depriving basic needs (food and sleep are common)
  - No access to money
  - Isolation from family and friends
  - Forcing committing crime

DV Power and Control Wheel

Power and Control Wheel



Adapted from the Domestic Abuse Intervention Project Duluth, Minnesota

www.cagoldberglaw.com

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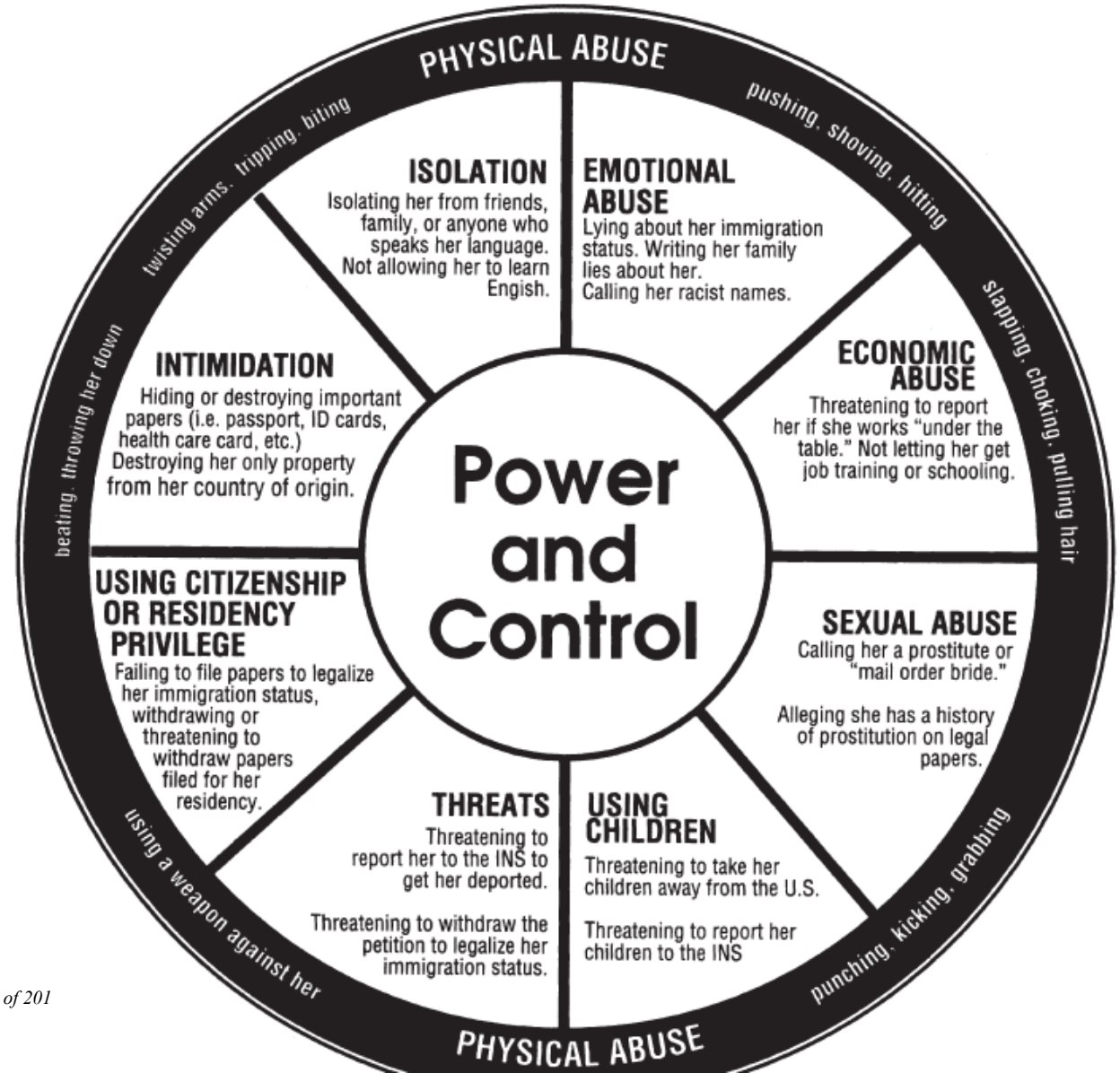
Forms of Domestic Violence that Women Experience

Immigrant Women



Fleeing Domestic Violence

- **Average number of times fleeing an abuser is 7 times…**
- **Why do Survivors Stay?**
  - Financially reliant on the abuser for basic needs
  - Children in common, or fear of losing children
  - No where to flee to and do not want to be homeless
  - Lack of opportunity to **escape**
  - Fear: abuser uses threats of harm/kill to them or their family/friends if they leave
  - Lack of help from the legal system in the past
  - Lack of community resources or support system
  - Abuser threatens self-harm
  - Belief system (religious or familial upbringing)
  - Societal beliefs regarding victim blaming (they must be doing something wrong)
  - Shame: do not want friends or family to know
  - Love: they hold out hope the abuser will change

Common Barriers

- **Barriers as a result of DV…**
  - Depression, PTSD and other mental health issues
  - Lack of employment/education
  - Lack of support system or connections to resources, often due to isolation or burnout by family/friends
  - Criminal charges – Felonies are common
  - No Driver's license/poor driving record
  - No money or access to Bank Account
  - Lack of documents (birth certificate, social security cards etc), often destroyed or withheld by the abuser
  - Poor or no rental history, housing debt, evictions, utility debt

Case Management

- **Service Delivery**
  - Goal is to provide quality services that meet clients where they are in life and assist in ending/reducing the occurrence of homelessness and domestic violence
  - Empower clients to make their own choices about the services they need and the goals they want to achieve on their path to self-sufficiency
  - Case management is client centered, non-judgmental, supportive and empathetic
  -
- **Case Management Meetings**
  - Monthly meetings focus on creating long-term stability goal plans and budgets that assist with increasing their ability to break down their barriers and achieve self-sufficiency
  - Give community resources and referrals
  - Coordinate wrap-around services with other agencies to offer additional support as a team effort

Program and Community Support

- **Partnerships and Community Engagement**
  - Develop community partnerships to fill in the gaps with other services needed
  - Attend community events to promote the mission of our program and gain support for our housing program through financial assistance, or donations
- **Ongoing Community Support**
  - Write grants to private foundations and public funding NOFA'S throughout the year
  - Grants may be operational or program and are used for overhead expenses, or client needs (car repair, legal fees, gas cards, education, daycare, credit repair, employment, therapy, licensing etc.)

2023 Program Outcomes

- **Clients Served:** We served 127 households to include 381 individuals, 252 of which were children
  - 98 households signed a lease in their name
  - 51 households exited the program by the end of 2022
- **Program Goal:** The outcome we hope to achieve is that at least 80% of exiting clients will retain their housing and 70% will maintain/increase their income from entry to exit
- **2023 Program Outcomes**
  - 91% retained permanent housing
  - 89% maintained/increased income
  - 80% were employed at exit
  - 25% graduated from or were enrolled in an education program
  - The average length of stay was 10 months

Success Story

JC was able to escape from Wisconsin to Washington with her two children, after fleeing from domestic violence and sex trafficking. She had resigned from her job in Wisconsin and depleted all her savings, with no other source of income. JC had no support system in Washington, but felt it was necessary for the safety of her and her children. She ended up in a hotel paid for by another social service agency and was awarded $528 a month in WA State TANF benefits. Shortly after entering our program, she obtained employment and was approved for an apartment. She also finished her master's degree. While in our program, JC's car broke down, but we were able to help her pay for car repairs so she could continue working and get her kids to school. She also was able to start paying down her debt, to help improve her credit. We referred her to Sound Outreach for additional financial education. By the end of our program, J.C. had found a better-paying job and was able to pay off her student loan debt and increase her credit score. J.C. exited the program with an annual income of $67,000 and reaching the goal of self-sufficiency and stability.

Questions? Comments?

EXODUS HOUSING

501(c) 3 Tax ID 91-1660137

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Additional expenses from prior budget

- Added 2 patrol sergeants
- Added Records & Disclosure Specialist
- Increased HR Generalist from .75 FTE to 1.00 FTE
- Lead Facility Worker
- Added Prosecutor
- Increased cost of City Attorney and Defense Counsel
- Loss of Before & After program
- Increase cost of insurance, jail and city/defense contract attorneys

Budget changes to reduce deficit by the Mayor

- Reduced contract attorney costs by $150K per year
- Eliminated all out of state travel $30K
- Reduced credit card fee charge by $40K
- Possible staffing reductions/rearrangements if vacancy arises
- Reduce recreation from a net loss of approx. $350K to $148K as previously approved by Council.
- Worked with department directors and managers to reduce budget requests by approximately $500K
- Hire recreation manager (this has been delayed since Rich left) to reduce OT 50K

Revenue options to consider in the future

- Transportation Benefit District
- Metropolitan Parks District
- Public Safety sales tax
- Business & Occupation tax
- Charging credit card fees for permits
- Possible implementation of utility tax on Tacoma Water & Valley
- Increase permit fees to align with costs
- Red light cameras

General Fund Ending Balance Analysis

	Additions	Deductions	Balance	Notes
2014			2,451,895	
2015		200,140	2,251,755	Transferred 460K to Fund 320
2016	1,148,455		3,400,210	Revenue came in higher
2017	2,845,637		6,245,847	Sold capital asset; revenues higher
2018	3,782,688		10,028,535	Revenue came in higher than projected; B&A program full year; exp lower
2019	3,311,922		13,340,457	Some restructure of EE's, revenue higher, expenses lower (large permit project)
2020	3,200,541		16,540,998	Inc in sales tax due to Covid; CARES grant; reduced expense
2021		2,046,123	14,494,875	Transfer out to Parks & create Fund 125 --6.3M; expenses reduced (employees, B&A)
2022	3,731,144		18,226,019	ARPA; increase in sales tax, transfer 1.5M to Parks; (reduced expense, employees, B&A)
2023	5,935,828		24,161,847	ARPA; court revenue returning to pre-covid, interest, reduced expenses (loss of B&A,

	2022	2023	2024	2025	2026
	Actual	Actual	Projected	Budget	Budget
General Fund (001)					
Taxes	$ 18,303,929	$ 18,108,580	$ 17,516,117	$ 18,065,487	$ 18,416,644
Licenses and Permits	775,967	822,157	664,678	767,138	805,256
Intergovernmental & Grants	1,587,104	1,577,691	1,711,275	1,728,346	1,640,842
Charges for Goods and Services	2,016,959	1,955,294	1,827,231	1,728,777	1,782,317
Fines and Forfeitures	129,635	156,131	138,492	140,356	142,260
Miscellaneous	1,058,224	1,459,186	1,562,050	1,278,700	1,278,700
Other Financing Sources	257,871	3,329,857	266,210	626,278	346,278
Total General Fund	$ 24,129,689	$ 27,408,895	$ 23,686,053	$ 24,335,081	$ 24,412,297
Drug Investigation Fund (120)					
Fines and Forfeitures	$ 4,721	$ 33,791	$ -	$ -	$ -
Miscellaneous	1,114	3,844	4,000	3,000	3,000
Non Revenues					
Other Financing Sources	-	-	-	-	-
Total Drug Investigation Fund	$ 5,835	$ 37,635	$ 4,000	$ 3,000	$ 3,000
Federal Drug Investigation Fund (121)					
Fines and Forfeitures	$ 34,853	$ 49,590	$ -	$ -	$ -
Miscellaneous	2,023	6,983	8,000	7,500	7,500
Other Financing Sources	-	-	-	-	-
Total Drug Investigation Fund	$ 36,876	$ 56,573	$ 8,000	$ 7,500	$ 7,500
Cummulative Reserve Fund (125)					
Miscellaneous	188,566	195,672	214,396	200,000	200,000
Other Financing Sources	56,681	198,566	198,566	71,000	71,000
Total Contingency Fund	$ 245,247	$ 394,238	$ 412,962	$ 271,000	$ 271,000
Contingency Fund (126)					
Miscellaneous	18,609	61,934	65,000	60,000	60,000
Other Financing Sources	-	-	-	-	-
Total Contingency Fund	$ 18,609	$ 61,934	$ 65,000	$ 60,000	$ 60,000
Affordable Housing Fund (130)					
Taxes	52,633	46,347	30,000	30,000	30,000
Miscellaneous	1,812	7,905	10,000	8,000	8,000
Total Contingency Fund	$ 54,445	$ 54,251	$ 40,000	$ 38,000	$ 38,000
ARPA Fund (131)					
Intergovernmental/Grants	2,954,595	-	-	-	-
Miscellaneous	83,558	284,792	146,000	10,000	-
Total ARPA Fund	$ 3,038,153	$ 284,792	$ 146,000	$ 10,000	$ -
Debt Service Fund (202)					
Miscellaneous	8,872	25,182	28,000	20,000	20,000
Other Financing Sources	994,000	985,000	990,000	986,000	988,000
Total Debt Service Fund	$ 1,002,872	$ 1,010,182	$ 1,018,000	$ 1,006,000	$ 1,008,000
Street CIP Fund (301)					
Taxes	$ 854,659	$ 465,674	$ 594,400	$ 594,400	$ 594,400
Intergovernmental/Grants	-	-	-	-	-
Charges for Goods and Services	248,256	519,584	30,000	200,000	200,000
Miscellaneous	140,468	470,131	491,000	485,000	480,000
Other Financing Sources	-	-	-	-	-
Total Street CIP Fund	$ 1,243,383	$ 1,455,389	$ 1,115,400	$ 1,279,400	$ 1,274,400

Park CIP Fund (302)					
Taxes	$ 598,261	$ 324,768	$ 400,000	$ 400,000	$ 400,000
Intergovernmental/Grants	3,003,978	136,856	35,000	-	-
Charges for Goods and Services	303,894	206,367	50,000	200,000	200,000
Miscellaneous Revenues	98,407	221,770	220,000	200,000	200,000
Other Financing Sources	1,549,000	-	-	-	-
Total Park CIP Fund	$ 5,553,539	$ 889,761	$ 705,000	$ 800,000	$ 800,000
General Government CIP Fund (320)					
Taxes	$ 256,398	$ 139,923	$ 200,000	$ 200,000	$ 200,000
Miscellaneous	188,266	261,881	263,700	257,700	257,700
Other Financing Sources	-	178,566	-	1,130,500	-
Total Government CIP Fund	$ 444,664	$ 580,370	$ 463,700	$ 1,588,200	$ 457,700
PWC CIP Fund (303)					
Miscellaneous	17,140	5,721	-		
Other Financing Sources	-	-	-		
Total PWC CIP Fund	$ 17,140	$ 5,721	$ -		
Water Fund (401)					
Intergovernmental/Grants					
Charges for Goods and Services	12,021,426	12,620,196	10,695,100	11,279,818	11,649,343
Miscellaneous	286,142	1,069,000	1,279,044	1,188,500	1,188,500
Proprietary Funds Revenue	622,442	-	1,700,000	-	-
Other Financing Sources	$ -	$ -	$ -	$ 9,280,000	$ -
Total Water Fund	$ 12,930,010	$ 13,689,196	$ 13,674,144	$ 21,748,318	$ 12,837,843
Sewer Fund (402)					
Intergovernmental/Grants					
Charges for Goods and Services	12,558,107	12,032,857	10,584,000	11,090,000	11,455,180
Miscellaneous	286,067	1,262,125	1,268,539	1,131,868	1,131,868
Proprietary Funds Revenue	-	-	-	-	-
Nonrevenues	-	-	-	-	-
Other Financing Sources	$ 400,710	$ -	$ -	$ -	$ -
Total Sewer Fund	$ 13,244,884	$ 13,294,982	$ 11,852,539	$ 12,221,868	$ 12,587,048
Storm Water Fund (415)					
Intergovernmental/Grants	-	75,000	25,000	255,000	195,000
Charges for Goods and Services	$ 2,020,368	$ 2,357,848	$ 2,283,000	$ 2,485,920	$ 2,654,894
Miscellaneous	$ 54,089	$ 185,916	$ 185,000	$ 185,000	$ 185,000
Other Financing Sources	171,733	32,797	-	994,758	-
Total Storm Water Fund	$ 2,246,190	$ 2,651,561	$ 2,493,000	$ 3,920,678	$ 3,034,894
Equipment Rental & Replacement Fund (501)					
Charges for Goods and Services	1,937,002	2,538,789	2,123,214	2,575,878	3,045,283
Miscellaneous	70,479	242,218	240,000	225,000	225,000
Nonrevenues	$ 6,843	$ -	$ -	$ -	$ -
Other Financing Sources	43,393	12,267	-	-	-
Total Equip Rental & Replacement Fund	$ 2,057,717	$ 2,793,274	$ 2,363,214	$ 2,800,878	$ 3,270,283

	2022	2023	2024	2025	2026
	Actual	Actual	Projected	Budget	Budget
General Fund (001)					
Salaries and Wages	$ 9,856,421	$ 10,570,033	$ 11,700,240	$ 12,545,326	$ 12,769,243
Personnel Benefits	3,841,094	4,097,365	4,546,414	4,929,851	5,105,100
Supplies	704,609	792,583	645,987	940,109	938,000
Services and Pass Through Payments	5,388,817	6,608,062	6,803,436	7,133,476	7,449,123
Intergovernmental					
Capital Outlay	119,379	148,104	123,584	429,000	129,000
Debt Service Principal & Interest					
Adjustments/Corrections	(2,243,339)	(1,926,646)	(2,050,661)	(2,050,000)	(2,050,000)
Other Financing Uses/Transfer Out	2,731,566	1,183,566	2,888,566	1,057,000	1,059,000
Total General Fund	$ 20,398,547	$ 21,473,067	$ 24,657,566	$ 24,984,762	$ 25,399,466
Drug Investigation Fund (120)					
Salaries and Wages					
Personnel Benefits					
Supplies	7,756	28,226	9,500	10,000	10,000
Services and Pass Through Payments					
Intergovernmental					
Capital Outlay					
	-	-	-	-	-
Total Drug Investigation Fund	$ 7,756	$ 28,226	$ 9,500	$ 10,000	$ 10,000
Federal Drug Investigation Fund (121)					
Supplies		39,842	2,700	15,000	15,000
Services and Pass Through Payments					
	-	-	-	-	-
Total Drug Investigation Fund	$ -	$ 39,842	$ 2,700	$ 15,000	$ 15,000
Cumulative Reserve Fund (125)					
Transfer Out	-	-	-	381,278	101,278
Total Cumulative Reserve Fund	$ -	$ -	$ -	$ 381,278	$ 101,278
Contingency Fund (126)					
Transfer Out					
Total Contingency Fund	$ -	$ -	$ -	$ -	$ -
Affordable Housing Tax Fund (130)					
Transfer Out	-	-	-	-	-
	-	-	-	-	-
Total ARPA Fund	$ -	$ -	$ -	$ -	$ -
ARPA Fund (131)					
Transfer Out	267,196	3,840,806	266,210	1,740,348	245,000
	-	-	-	-	-
Total ARPA Fund	$ 267,196	$ 3,840,806	$ 266,210	$ 1,740,348	$ 245,000
Debt Service Fund (202)					
Debt Service Principal/Interest	990,972	984,116	987,877	985,421	987,207
	-	-	-	-	-
Total Debt Service Fund	$ 990,972	$ 984,116	$ 987,877	$ 985,421	$ 987,207
Street CIP Fund (301)					
Supplies					
Other Services and Charges					
Intergovernmental					
Capital Outlay	405,770	1,215,839	1,584,200	2,367,500	2,775,000
Debt Service Principal					
Debt Service Interest	-	-	-	-	-
Total Street CIP Fund	$ 405,770	$ 1,215,839	$ 1,584,200	$ 2,367,500	$ 2,775,000

Park CIP Fund (302)					
Supplies					
Services and Pass Through Payments					
Intergovernmental					
Capital Outlay	6,290,648	1,907,511	203,600	4,325,000	915,000
Debt Service Principal					
Debt Service Interest	-	-	-	-	-
Total Park CIP Fund	$ 6,290,648	$ 1,907,511	$ 203,600	$ 4,325,000	$ 915,000
General Government CIP Fund (320)					
Supplies	1,176	842	500	-	-
Other Services and Charges	30,630	44,944	37,500	-	-
Intergovernmental					
Capital Outlay	18,960	255,788	74,000	1,350,000	-
Debt Service Principal	-	-	-	-	-
Other Financing Uses	-	-	-	-	-
Total Government CIP Fund	$ 50,766	$ 301,574	$ 112,000	$ 1,350,000	$ -
PWC CIP Fund (303)					
Supplies					
Services and Pass Through Payments					
Intergovernmental					
Capital Outlay	4,855,448	210,001	96,430	-	
Debt Service Principal					
Other Financing Uses	-	-	-	-	-
Total PWC CIP Fund	$ 4,855,448	$ 210,001	$ 96,430	$ -	$ -
Water Fund (401)					
Salaries and Wages	1,585,110	1,498,609	1,469,450	1,898,085	1,969,008
Personnel Benefits	687,660	633,813	565,189	739,473	776,167
Supplies	913,672	972,842	961,750	1,069,450	1,071,950
Other Services and Charges	4,252,974	4,799,198	4,895,558	5,223,886	5,399,500
Intergovernmental					
Capital Outlay	3,164,643	469,493	3,555,000	11,916,000	11,892,000
Debt Service Principal/Interest	1,343,517	1,337,769	1,270,946	840,595	838,699
Adjustments/Corrections	-	-	-	-	-
Other Financing Uses	-	-	-	-	-
Total Water Fund	$ 11,947,575	$ 9,711,724	$ 12,717,893	$ 21,687,489	$ 21,947,324
Sewer Fund (402)					
Salaries and Wages	1,116,900	988,870	988,419	1,109,285	1,149,856
Personnel Benefits	477,723	393,704	346,128	448,550	470,818
Supplies	92,508	65,749	92,950	95,450	110,850
Services and Pass Through Payments	4,829,476	5,393,105	5,941,164	6,013,940	6,177,839
Intergovernmental					
Capital Outlay	517,245	295,816	7,000,000	9,685,554	10,002,824
Debt Service Principal/Interest	1,396,964	1,017,055	1,013,540	904,406	900,953
Adjustments/Corrections	-	-	-	-	-
Other Financing Uses	-	-	-	-	-
Total Sewer Fund	$ 8,430,814	$ 8,154,299	$ 15,382,201	$ 18,257,185	$ 18,813,140
Storm Water Fund (415)					
Salaries and Wages	594,373	604,702	648,970	831,400	861,670
Personnel Benefits	240,037	254,856	241,091	325,600	341,780
Supplies	25,303	20,854	35,000	41,800	41,800
Services and Pass Through Payments	950,237	1,157,908	1,051,852	1,077,571	1,170,913
Intergovernmental					
Capital Outlay	71,499	30,438	50,000	1,313,000	1,190,000
Debt Service Principal/Interest	126,726	126,300	126,354	126,354	126,258
Adjustments/Corrections	-	-	-	-	-
Other Financing Uses	-	-	-	-	-
Total Storm Water Fund	$ 2,008,174	$ 2,195,058	$ 2,153,267	$ 3,715,725	$ 3,732,421

Equipment Rental & Replacement Fund (501)					
Salaries and Wages	203,166	214,909	242,706	335,138	347,712
Personnel Benefits	85,174	92,943	86,323	130,820	137,330
Supplies	382,182	391,009	426,000	491,588	491,588
Services and Pass Through Payments	241,447	215,456	265,680	258,993	259,149
Intergovernmental					
Capital Outlay	299,285	1,199,965	460,747	389,170	845,050
Adjustments/Corrections	-	-	-	-	-
Other Financing Uses	-	-	-	-	-
Total Equip Rental & Replacement Fund	$ 1,211,254	$ 2,114,282	$ 1,481,456	$ 1,605,709	$ 2,080,828

THE FOLLOWING PAGES ARE FOR INFORMATION ONLY FOR THE BUDGET 101 PRESENTATION

City of Bonney Lake, Washington

City Council Agenda Bill (AB)

Agenda Item Type: Ordinance	Agenda Bill Number & Ordinance/Resolution/Motion Number: AB24-103/D24-103	
Department/Division Submitting: Finance	**Presenter:** Cherie Reierson	**City Strategic Goal Category:** **DON'T FILL OUT YET**

Agenda Subject: 2025-2026 Preliminary Biennial Budget

Full Title/Motion: An Ordinance Of The City Council Of The City Of Bonney Lake, Pierce County, Washington, Adopting The Biennial Budget For Calendar Years 2025 And 2026; Providing For Severability And Corrections; And Establishing An Effective Date.

Administrative Recommendation: Approve

Short Background Summary: Revised Code of Washington (RCW) 35A.34 provides procedures for adopting, managing and amending a biennial budget. Pursuant to this guidance and Bonney Lake Municipal Code 3.96, a proposed biennial budget for fiscal year 2025 and 2026 has been prepared and filed.

Attachments: Ordinance, Exhibit A, Exhibit B, Exhibit C, FTE chart, budgeted transfers, out of state travel, CIP projects list, ER&R list

BUDGET INFORMATION

Budgeted Amount	Current Balance	Expenditure Amount Needed	Budgeted Balance Difference

Budget Explanation: The Biennial Budget is adopted at Fund level and is detailed in the attached exhibits.

COMMITTEE, BOARD & COMMISSION REVIEW

Public Hearing Date: **Name Of Committee/Commission Public Hearing Was Done At:**

Date & Name Of Committee/ Commission Meeting	Return To Committee/ Commission/Board	Council Workshop Discussion	Consent Agenda	Council Full Issues	Chair's Signature For Approval Of Next Steps
Date: Name:	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
Date: Name:	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
Date: Name:	☐ Yes	☐ Yes	☐ Yes	☐ Yes	
Date: Name:	☐ Yes	☐ Yes	☐ Yes	☐ Yes	

Hearing Examiner Review:

COUNCIL ACTION

Workshop Date(s): 11/5, 12/3

Public Hearing Date(s): 10/15, 10/22, 11/5, 11/26

Meeting Date(s): 9/24, 10/8, 10/22, 11/26, 12/10

Tabled To:

APPROVALS

Department Director: *Cherie Reierson, CPA*

Mayor: *Terry Carter*

Date Reviewed By City Attorney (if applicable):

ORDINANCE NO. D24-103

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, PIERCE COUNTY, WASHINGTON, ADOPTING THE BIENNIAL BUDGET FOR CALENDAR YEARS 2025 AND 2026; PROVIDING FOR SEVERABILITY AND CORRECTIONS; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, Ch. 35A.34 RCW provides procedures for adopting, managing, and amending a biennial budget; and

WHEREAS, a preliminary biennial budget for fiscal years 2023 and 2024 has been prepared and filed as required by law; and

WHEREAS, the City Council held public hearings upon notice as prescribed by law, and met for the purpose of setting the final budget of the City for the 2025-2026 fiscal biennium; and

WHEREAS, the City Council has made adjustments and changes deemed necessary and proper and desires to adopt the 2025-2026 Budget, including the biennial Capital Improvement Program.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. The biennial budget for the City of Bonney Lake for the period January 1, 2025, through December 31, 2026, as contained in the 2025-2026 Biennial Budget for total revenues/sources (including use of fund balances) and expenditures/uses and as revised by the City Council, is hereby adopted by 'Total Biennial Budget' for each fund as shown on the attached Exhibit "A" 2025-2026 Biennial Budget as well as Exhibit "C".

Section 2. That the budget document attached hereto as Exhibit "B" is hereby provided as a summary per year for management purposes.

Section 3. The City Clerk is directed to transmit a certified copy of the City of Bonney Lake adopted 2025-2026 Biennial Budget to the Office of the WA State Auditor and to the Association of Washington Cities.

Section 4. Severability. If any section, sentence, clause, or phrase of this Ordinance should be held to be unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause or phrase of this Ordinance.

Section 5. Publication. This Ordinance shall be published by an approved summary consisting of the title.

Section 6. Corrections. Upon the approval of the city attorney, the city clerk, and/or the code publisher is authorized to make any necessary technical corrections to this ordinance, including but not limited to the correction of scrivener's/clerical errors, references, ordinance numbering, section/subsection numbers, and any reference thereto.

Section 7. Effective Date. This Ordinance shall be effective five days after publication as provided by law.

ADOPTED by the City Council of the City of Bonney Lake and attested by the City Clerk in authentication of such passage on this __ day of _____, 20__.

APPROVED by the Mayor this __ day of _____, 20___.

_____
Terry Carter, Mayor

AUTHENTICATED:

_____
Sadie A. Schaneman, CMC, City Clerk

AB____
Passed:
Valid:
Published:
Effective Date:
This Ordinance totals _____ page(s)

2025-2026 BIENNIAL BUDGET Exhibit "A"	`001	`120	`121	`125	`126	`130	`131	`202	`301	`302	`320	`303	`401	`402	`415	`501
	General Fund	Drug Investigation Fund	Federal Drug Investigation Fund	Cummulative Reserve Fund	Contingency Fund	Affordable Housing Tax Fund	ARPA Fund	Debt Service Fund	Street CIP Fund	Park CIP Fund	General Govt CIP Fund	PWC Const Fund	Water Funds	Sewer Funds	Stormwater Funds	Equip Replacement Funds
PROJECTED BEGINNING BALANCE	**$ 23,190,334**	**$ 73,460**	**$ 169,254**	**$ 4,556,695**	**$ 1,357,621**	**$ 229,058**	**$ 2,011,349**	**$ 154,338**	**$ 9,057,446**	**$ 4,874,694**	**$ 2,041,819**	**$ (0)**	**$ 20,002,663**	**$ 21,433,534**	**$ 4,299,327**	**$ 6,394,613**
Operating Revenues & Other Sources	48,747,378	6,000	15,000	542,000	120,000	76,000	10,000	2,014,000	2,553,800	1,600,000	2,045,900	-	34,586,161	24,808,916	6,955,572	6,071,161
Expenditures & Uses	50,384,228	20,000	30,000	482,556	-	-	1,985,348	1,972,628	5,142,500	5,240,000	1,350,000	-	43,634,813	37,070,325	7,448,147	3,686,537
Total Change in Fund Balance for the Biennium	(1,636,850)	(14,000)	(15,000)	59,444	120,000	76,000	(1,975,348)	41,373	(2,588,700)	(3,640,000)	695,900	-	(9,048,653)	(12,261,409)	(492,574)	2,384,624
ENDING BALANCE	21,553,484	59,460	154,254	4,616,139	1,477,621	305,058	36,001	195,711	6,468,746	1,234,694	2,737,719	(0)	10,954,010	9,172,124	3,806,753	8,779,236
Total Biennial Budget	**71,937,712**	**79,460**	**184,254**	**5,098,695**	**1,477,621**	**305,058**	**2,021,349**	**2,168,338**	**11,611,246**	**6,474,694**	**4,087,719**	**(0)**	**54,588,823**	**46,242,450**	**11,254,899**	**12,465,774**

2025 BUDGET FOR MGMT Exhibit B	`001 General Fund	`120 Drug Investigation Fund	`121 Federal Drug Investigation Fund	`125 Cumulative Reserve Fund	`126 Contingency Fund	`130 Affordable Housing Tax Fund	`131 ARPA Fund	`202 Debt Service Fund	`301 Street CIP Fund	`302 Park CIP Fund	`320 General Govt CIP Fund	`303 PWC Const Fund	`401 Water Funds	`402 Sewer Funds	`415 Stormwater Funds	`501 Equip Replace Funds
RESOURCES																
Revenues																
Taxes	18,065,487					30,000			594,400	400,000	200,000					
Licenses and Permits	767,138															
Intergovernmental	1,728,346						-		-	-					255,000	
Charges for Goods and Services	1,728,777								200,000	200,000			11,279,818	11,090,000	2,485,920	2,575,878
Fines and Forfeitures	140,356	-	-													
Miscellaneous	1,278,700	3,000	7,500	200,000	60,000	8,000	10,000	20,000	485,000	200,000	257,700	-	1,188,500	1,131,868	185,000	225,000
Other Financing Sources	626,278	-	-	71,000	-	-		986,000	-	-	1,130,500	-	9,280,000	-	994,758	-
Total Revenues	24,335,081	3,000	7,500	271,000	60,000	38,000	10,000	1,006,000	1,279,400	800,000	1,588,200	-	21,748,318	12,221,868	3,920,678	2,800,878
SDC/Capital Restricted													475,000	500,000	65,000	
Unrestricted Revenue (Proprietary)													21,273,318	11,721,868	3,855,678	
USES																
General Fund																
Legislative	138,175															
Municipal Court & Probation	1,449,613															
Executive	1,104,142															
Emergency Management	262,349															
Finance	1,934,661															
Prosecutor	659,846															
Information Services	815,346	-			-				-	-	-		-	-	-	-
Administrative Services	641,141	-			-				-	-	-		-	-	-	-
Human Resources	406,717	-			-				-	-	-		-	-	-	-
Police	10,884,008	-			-				-	-	-		-	-	-	-
Public Works/Engineering Administration	1,692,741	-			-				-	-	-		-	-	-	-
Senior Center	667,022	-			-				-	-	-		-	-	-	-
Community Services	12,150	-			-				-	-	-		-	-	-	-
Beautification	21,715	-			-				-	-	-		-	-	-	-
Community Forest	75,421	-			-				-	-	-		-	-	-	-
Community Events	74,350	-			-				-	-	-		-	-	-	-
Community Development	1,500,847				-				-	-	-		-	-	-	-
Facilities	1,192,358	-							-	-	-		-	-	-	-
Recreation Program	828,655															
Park Facilities	747,990	-			-					-	-		-	-	-	-
Non Departmental	1,925,515	-			-				-		-		-	-	-	-
Drug Investigation Fund		10,000	15,000		-											
Contingency Fund/Cumulative Reserve Fund		-		381,278	-											
ARPA Fund							1,740,348									
Debt Service Fund								985,421								
Street CIP Fund		-			-				2,367,500							
Parks CIP Fund		-			-					4,325,000						
General Government CIP Fund	-	-			-				-	-	1,350,000		-	-	-	-
PCW Construction Fund												-				
Water Fund	-	-			-				-	-	-		9,771,489			
Water CIP													11,916,000			
Sewer Fund	-	-			-				-	-	-			8,571,631		
Sewer CIP														9,685,554		
Storm Water Fund	-	-			-				-	-	-				2,402,725	
Storm Water CIP															1,313,000	
Equipment Replacement Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,605,709
Total Expenses	27,034,762	10,000	15,000	381,278	-	-	1,740,348	985,421	2,367,500	4,325,000	1,350,000	-	21,687,489	18,257,185	3,715,725	1,605,709
Indirect Cost	(2,050,000)															
TOTAL	**$ (649,681)**	**$ (7,000)**	**$ (7,500)**	**$ (110,278)**	**$ 60,000**	**$ 38,000**	**$ (1,730,348)**	**$ 20,579**	**$ (1,088,100)**	**$ (3,525,000)**	**$ 238,200**	**$ -**	**$ 60,829**	**$ (6,035,317)**	**$ 204,953**	**$ 1,195,169**

2026 BUDGET FOR MGMT Exhibit B	`001 General Fund	`120 Drug Investigation Fund	`121 Federal Drug Investigation Fund	`125 Cumulative Reserve Fund	`126 Contingency Fund	`130 Affordable Housing Tax Fund	`131 ARPA Fund	`202 Debt Service Fund	`301 Street CIP Fund	`302 Park CIP Fund	`320 General Govt CIP Fund	`303 PWC Const Fund	`401 Water Funds	`402 Sewer Funds	`415 Stormwater Funds	`501 Equip Replacement Funds
RESOURCES																
Revenues																
Taxes	18,416,644					30,000			594,400	400,000	200,000					
Licenses and Permits	805,256															
Intergovernmental	1,640,842								-	-					195,000	
Charges for Goods and Services	1,782,317								200,000	200,000			11,649,343	11,455,180	2,654,894	3,045,283
Fines and Forfeitures	142,260	-	-													
Miscellaneous	1,278,700	3,000	7,500	200,000	60,000	8,000	-	20,000	480,000	200,000	257,700	-	1,188,500	1,131,868	185,000	225,000
Other Financing Sources	346,278	-	-	71,000	-	-		988,000	-	-	-	-	-	-	-	-
Total Revenues	24,412,297	3,000	7,500	271,000	60,000	38,000	-	1,008,000	1,274,400	800,000	457,700	-	12,837,843	12,587,048	3,034,894	3,270,283
Capital Restricted													525,000	550,000	65,000	
Unrestricted Revenue (Proprietary)													12,312,843	12,037,048	2,969,894	
USES																
General Fund																
Legislative	138,175															
Municipal Court & Probation	1,504,293															
Executive	1,129,551															
Emergency Mangement	269,231															
Finance	1,991,138															
Prosecutor	687,412															
Information Services	770,106	-			-				-	-	-		-	-	-	-
Administrative Services	659,485	-			-				-	-	-		-	-	-	-
Human Resources	419,578	-			-				-	-	-		-	-	-	-
Police	10,933,033	-			-				-	-	-		-	-	-	-
Public Works/Engineering Administration	1,762,334	-			-				-	-	-		-	-	-	-
Senior Center	684,946	-			-				-	-	-		-	-	-	-
Community Services	12,150	-			-				-	-	-		-	-	-	-
Beautification	21,715	-			-				-	-	-		-	-	-	-
Community Forest	76,432	-			-				-	-	-		-	-	-	-
Community Events	75,350	-			-				-	-	-		-	-	-	-
Community Development	1,558,663				-				-	-	-		-	-	-	-
Facilities	1,169,902	-							-	-	-		-	-	-	-
Recreation Program	848,883															
Park Facilities	771,983	-			-					-	-		-	-	-	-
Non Departmental	1,965,106	-			-				-		-		-	-	-	-
Drug Investigation Fund		10,000	15,000		-											
Contingency Fund/Cumulative Reserve		-		101,278	-											
ARPA Fund							245,000									
Debt Service Fund								987,207								
Revenue Bond Fund																
Street CIP Fund		-			-				2,775,000							
Parks CIP Fund		-			-					915,000						
General Government CIP Fund	-	-			-				-	-	-		-	-	-	-
PCW Construction Fund												-				
Water Fund	-	-			-				-	-	-		10,055,324			
Water CIP													11,892,000			
Sewer Fund	-	-			-				-	-	-			8,810,316		
Sewer CIP														10,002,824		
Storm Water Fund	-	-			-				-	-	-				2,542,421	
Storm Water CIP															1,190,000	
Equipment Replacement Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,080,828
Total Expenses	27,449,466	10,000	15,000	101,278	-	-	245,000	987,207	2,775,000	915,000	-	-	21,947,324	18,813,140	3,732,421	2,080,828
Indirect Cost	(2,050,000)															
TOTAL	**$ (987,170)**	**$ (7,000)**	**$ (7,500)**	**$ 169,722**	**$ 60,000**	**$ 38,000**	**$ (245,000)**	**$ 20,793**	**$ (1,500,600)**	**$ (115,000)**	**$ 457,700**	**$ -**	**$ (9,109,481)**	**$ (6,226,092)**	**$ (697,527)**	**$ 1,189,455**
Biennium TOTAL																
Estimated 2024 Ending Fund Balance	23,190,334	73,460	169,254	4,556,695	1,357,621	229,058	2,011,349	154,338	9,057,446	4,874,694	2,041,819	(0)	20,002,663	21,433,534	4,299,327	6,394,613
Estimated 2026 Ending Fund Balance	21,553,484	59,460	154,254	4,616,139	1,477,621	305,058	36,001	195,711	6,468,746	1,234,694	2,737,719	(0)	10,954,010	9,172,124	3,806,753	8,779,236

EXHIBIT "C"

2025- 2026 BUDGET

FUND	TITLE	REVENUES	EXPENDITURES
001	General Fund	71,937,712	71,937,712
120	Drug Investigation Fund	79,460	79,460
121	Federal Drug Inv. Fund	184,254	184,254
125	Cumulative Reserve Fund	5,098,695	5,098,695
126	Contingency Fund	1,477,621	1,477,621
130	Affordable Housing Tax	305,058	305,058
131	ARPA Fund	2,021,349	2,021,349
202	Debt Service Fund	2,168,338	2,168,338
301	Street CIP	11,611,246	11,611,246
302	Parks CIP	6,474,694	6,474,694
303	PWC CIP	(0)	(0)
320	General Govt CIP Fund	4,087,719	4,087,719
401	Water Fund	54,588,823	54,588,823
402	Sewer Fund	46,242,450	46,242,450
415	Stormwater Fund	11,254,899	11,254,899
501	ERR Fund	12,465,774	12,465,774
	TOTAL	229,998,092	229,998,092

STREET CIP

Project	Project ID	2025	2026
ADA Improvements	ADA Plan	275,000	275,000
Chip Seal Program	CW3	300,000	300,000
Sidewalks		275,000	275,000
Street Reconstruction	CW1	350,000	350,000
Street Overlay- (192nd-SR410 to Old Sumner Buckley) *Dependent upon option for Sewer **Project ID: LS-04** -LS17 or LS24*	CW3	275,000	275,000
Pavement Condition Index (PCI) *Maintains Eligibility for Federal Funds*	CW1 and CW3	75,000	
Angeline & Veteran's Memorial Drive Roundabout (RAB) 2025- Design & 2026- ROW	I4	600,000*$	50,000*$
214th Overlay- (City Limits to City Limits) 2025- Design & Row & 2026- Construction	CW3	217,500	750,000**
W Tapps Hwy & Church Lk Rd *Part of West Tapps Corridor Improvement Project* 2026- Design	R37 and I1		500,000$
	Totals	**$2,367,500**	**$2,775,000**

*RTCC Grant $562,250 (City match of 13.5%)

**Applying for TCC Grant $648,750 (City match of 13.5%)

$ TIF Eligible Projects

PARK CIP

Project	Project ID	2025	2026
AYP Northwest Parking Lot Upgrades	AYP A	4,100,000*	
AYP Tennis Court Upgrades- (With Pickleball Conversion) *New Covered Basketball Court Portion Delayed*	AYP H	75,000	
Bonney Lake Sports Complex (BLSC) Pickleball/Multi-Sport Courts, Restrooms, Parking 2025 & 2026- Design	BLSC A	150,000	500,000
Cedarview Park (CVP) Covered Sport Court, Playfield Improvements & 206th Parking 2026-Design	CVP A		240,000
Viking Dog Park (VDP) ADA Access Pathway *Not until tree work is complete*	VDP		25,000
Wayfinding & Interpretive Signage	System-wide		50,000
Minor ADA Access & Amenity Upgrades	System-wide		100,000
	Totals	**$4,325,000**	**$915,000**

*Applying for RCO Grant-$1,000,000

GENERAL GOVERNMENT CIP

Project	Project ID	2025	2026
Senior Center Improvements^		750,000*	
PSB Generator-Construction^	ARPA	600,000**	
	Totals	**$1,350,000**	**$0**

*State Legislature (DOC) Grant $630,500

**Remaining ARPA Funds $215,887

^Project carried over from 2024

WATER CIP

Project	Project ID	2025	2026
Grainger Springs Upgrades- Construction^	F5	3,000,000	500,000
Wholesale 800 to 748 Zones Connection *Public Services Building Control Valve Modifications*	PZ4	166,000	
Tacoma Point Water Reservoir Replacement^ *Old Tank Demolition*	ST2	100,000	
Replace Pressure Relief Valve (PRV) 1 & 2 With New PRV Station			327,000
Lakeridge 810 Zone Reservoir*^	ST3	3,000,000	4,000,000
Lakeridge 748 Zone Water Reservoir^	ST4	3,000,000	4,000,000
West Tapps Drive Water Main *Part of West Tapps Corridor Improvement Project* 2026-Design	WM10		25,000
Fennel Creek Crossing Water Main	WM31	2,500,000	2,000,000
Wellhead Protection Program *Related to Victor Falls Issues*	P4		630,000
Cedarview Water Main Replacement Program	WM4		300,000
12" Water Main Replacement- (Myers Rd to City Limits) 2026- Design	WM7		110,000
Decant Facility Roofing+		150,000	
	Totals	**$11,916,000**	**$11,892,000**

*Drinking Water State Revolving Fund Loan (DWSRFL) (DOH) $9,280,000

+Peak 410 Developer Agreement states Developer to build Decant Facility with City responsible for the roof portion. Decant Facility needs to be moved out of AYP park as it is in violation of RCO Agreement.

^Project carried over from 2024

SEWER CIP

Project	Project ID	2025	2026
LS-17 Capacity Upgrades (Pumps, Valves, Grates)	LS-02	375,000	
LS-17 Replacement Construction or LS-24 Diversion Design 2025- Study & 2026- Design	LS-04	50,000	300,000
SR 410 Sewer Main Improvements (East of LS-17) *Includes Riverside Dr Sewer Manhole Replacement* 2025- Design & 2026- Construction	C-02	750,000	1,000,000
I&I Reduction Program- Angeline @ LS-17, 77th St Ct E @ 195th Ave Ct E, and 205th @ Inlet Island^	C-04	500,000	3,500,000
Sewer Plan Update	G-03	100,000	200,000
West Tapps Hwy Extension* *Part of West Tapps Corridor Improvement Project* 2026-Design			110,000
Cedarview Sewer "Dry Line" Installation (Septic Reduction) 2026- Design	Rate Study Project		600,000
Decant Facility Roofing+		150,000	
City of Bonney Lake Subtotal		$1,925,000	$5,710,000
SUMNER WWTF PROJECTS			
WWTF Improvements		146,016	522,387
WWTF Aeration Basins		246,780	40,500
WWTF Clarifiers			54,000
WWTF Disinfection & Discharge			889,880
WWTF Biosolids		54,000	86,057
WWTF Biosolids Modernization		7,290,000	2,700,000
Mach & Eq - Sewer		3375	
Mach & Eq - WWTF		20,383	
Sumner WWTF Subtotal		7,760,554	4,292,824
	Totals	**$9,685,554**	**$10,002,824**

* This project is being done as part of a corridor project while the road is being reconstructed and the watermains installed. The project is being done instead of Mt. Creek Force Main Replacement (C-03) estimated at $120,000 for design and $750,000 for replacement. The Mt. Creek Force Main Replacement is being constructed by the developer as part of the Peak410 Project.
+Peak 410 Developer Agreement states Developer to build Decant Facility with City responsible for the roof portion. Decant Facility needs to be moved out of AYP park as it is in violation of RCO Agreement.
^Project carried over from 2024

STORM CIP

Project	Project ID	2025	2026
Water Quality Swale Retrofit Program-Construction $ 2025- 67th Ct E & 2026- 67th St E ^	4-1	633,000*	690,000
Fennel Creek TMDL (Total maximum Daily Load) ^	NPDES Requirement	50,000**	50,000
NPDES (National Pollutant Discharge Elimination System) Compliance	NPDES Requirement	50,000	50,000
Inlet Island – Lake Tapps- Construction $^ S Island Rd Conveyance Improvements at S Island Dr E	1-8	230,000	
Stormwater Management Action Plan (SMAP)^		100,000**	
Stormwater Comprehensive Plan		100,000	200,000
Lake Tapps Allan Yorke Park/West Tapps Highway East Subbasin Retrofit $ *Part of West Tapps Corridor Improvement Project* 2026-Design	3-3		170,000
Fennel Creek Stream Gauge	5-1		30,000
Decant Facility Roofing+		150,000	
	Totals	**$1,313,000**	**$1,190,000**

*Remaining ARPA Funds $160,902

**Remaining ARPA Funds $150,000

$Request Pierce County Flood Control Zone District Opportunity Funds. Bonney Lake fund balance as of 1/1/2024 is of $352,801 and estimated at $50,000 each year.

+Peak 410 Developer Agreement states Developer to build Decant Facility with City responsible for the roof portion. Decant Facility needs to be moved out of AYP park as it is in violation of RCO Agreement.

^Project carried over from 2024

ER&R Fund

Asset #	Dept	Item	2025	2026	Overage
RS214	Facilities -GF	Transit Van	88,720		47,037
RS213	Water	F250 extended cab 4x4	68,250		36,378
RS416	Sewer	Transit Van	88,720		88,720
PD086	Police-GF	F250 Super duty/F350 4x4	79,380		49,011
PD1407	Police-GF	Escape/Pathfinder	64,100		38,739
PD1406	Police-GF	Tahoe/F150 4x4		110,780	64,049
PD1702	Police-GF	Tacho/F150 4x4		110,780	54,220
EQ292	Multiple	Brush Chipper		100,100	62,638
RS274	Water	F250 Extended cab 4x4		71,500	35,308
RS222	ER&R	Mechanic service truck		249,000	238,091
NEW	Multiple	Caterpillar wheel loader		202,890	202,890

*Please note that replacement vehicles have some money set aside in ER&R Fund. Not all are covered at 100% which causes the individual fund to pick up the balance-overage column.

City of Bonney Lake POSITION SUMMARY	Year	2019 Adopted F.T.E.	2020 Adopted F.T.E.	2021 Adopted F.T.E.	2022 Adopted F.T.E.	2023 Adopted F.T.E.	2024 Amended	2025 Budget F.T.E.	2026 Budget F.T.E.
CITY COUNCIL									
Councilmember (Part-Time)		7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
TOTAL CITY COUNCIL		**7.00**	**7.00**	**7.00**	**7.00**	**7.00**	**7.00**	**7.00**	**7.00**
EXECUTIVE									
Mayor Part-Time)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
City Administrator		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Asst to the City Administrator (title change eff 2024; was Exec		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Administrative Specialist II									
Facilities, Special Events, and Projects Manager		1.00	1.00	1.00					
Recreation & Special Events Manager		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Special Events Coordinator									
Recreation Supervisor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Recreation Coordinator		3.00	3.00	3.00	3.00	3.00	2.00	2.00	2.00
Before/After School Site Director		6.80	7.65	6.80	6.80	6.80	6.80		
Facilities Maintenance Worker II		1.00	1.00	1.00	*moved to Public Services				
Emergency Management Manager					1.00	1.00	1.00	1.00	1.00
TOTAL EXECUTIVE		**16.80**	**17.65**	**16.80**	**15.80**	**15.80**	**14.80**	**8.00**	**8.00**
LEGAL									
Deputy City Attorney/Prosecutor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prosecutor					1.00	1.00	1.00	1.00	1.00
Limited Term Legal Specialist					1.00	1.00	1.00	1.00	1.00
Legal Specialist I/II							1.00	1.00	1.00
Administrative II/III		1.00	1.00	1.00	1.00	1.00			
TOTAL LEGAL		**2.00**	**2.00**	**2.00**	**4.00**	**4.00**	**4.00**	**4.00**	**4.00**
COURT									
Municipal Judge		0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Judicial Branch Manager (title change eff 2024;was Court		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Bailiff				0.65					
Judicial Specialists I/II		4.00	4.00	4.00	4.50	4.50	4.50	4.00	4.00
Judicial Specialists III		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Limited Term Case Manager							1.00	1.00	1.00
Court Svc Case Manager (title change eff 2024; was Probation		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
TOTAL COURT		**7.85**	**7.85**	**8.50**	**8.35**	**8.35**	**9.35**	**8.85**	**8.85**
FINANCE									
Chief Financial Officer		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Senior Accountant		1.00	1.00	1.00					
Finance and Payroll Accountant					1.00	1.00	1.00	1.00	1.00
Accountant		1.00	1.00						
Accounting Specialist Cashier I/II		5.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00
Accounting Specialist III		1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Accounting Specialist IV							1.00	1.00	1.00
Customer Service Manager (Utility)					1.00	1.00	1.00	1.00	1.00
Financial Operations Supervisor		1.00	1.00	1.00					
TOTAL FINANCE		**10.00**	**10.00**	**9.00**	**9.00**	**9.00**	**9.00**	**9.00**	**9.00**

City of Bonney Lake POSITION SUMMARY	Year	2019 Adopted F.T.E.	2020 Adopted F.T.E.	2021 Adopted F.T.E.	2022 Adopted F.T.E.	2023 Adopted F.T.E.	2024 Amended	2025 Budget F.T.E.	2026 Budget F.T.E.
CITY CLERK & ADMINISTRATIVE SERVICES									
Administrative Services Director/IS Manager		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
City Clerk					1.00	1.00	1.00	1.00	1.00
Deputy City Clerk		1.00	1.00	1.00					
Administrative Specialist I/II		2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Records and Disclosure Specialist						1.00	1.00	1.00	1.00
Human Resources Manager		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Human Resources Generalist		0.75	0.75	0.75	0.75	1.00	1.00	1.00	1.00
Information Services Manager		1.00	1.00	1.00	1.00				
PC/Network Technician		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Senior Center Manager		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Cook		0.80	0.80	0.80	0.80	0.80	0.80		
Kitchen Asst		0.70	0.70	0.70	0.70	0.70	0.70		
Kitchen Aide		0.30	0.30	0.30	0.30	0.30	0.30	1.22	1.22
Limited term (grant) Senior Aide				0.75	0.75	0.75	0.75	0.75	0.75
Dishwasher			0.38	0.38	0.38	0.38	0.38	0.60	0.60
Senior Center Aide/Van Driver		2.20	2.20	2.20	2.20	2.20	2.20	3.00	3.00
TOTAL CITY CLERK & ADMINISTRATIVE SERVICES		**12.75**	**13.13**	**13.88**	**13.88**	**14.13**	**14.13**	**14.57**	**14.57**
POLICE									
Police Chief		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Assistant Police Chief		2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Executive Asst to the Chief (title change 2024; was Admin. Asst)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Department Assistant									
Records Clerk		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Police Sergeant		5.00	5.00	5.00	5.00	7.00	7.00	7.00	7.00
Patrol Officers		22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
School Resource Officer			1.00	1.00	1.00	1.00	1.00	1.00	1.00
CJTC Officer				1.00					
Community Services Officer		2.50	2.50	2.50	3.00	3.00	3.00	3.00	3.00
Bailiff		0.45	0.45						
Child Passenger Safety Program Manager		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
TOTAL POLICE		**37.95**	**38.95**	**39.50**	**39.00**	**41.00**	**41.00**	**41.00**	**41.00**

City of Bonney Lake POSITION SUMMARY	Year	2019 Adopted F.T.E.	2020 Adopted F.T.E.	2021 Adopted F.T.E.	2022 Adopted F.T.E.	2023 Adopted F.T.E.	2024 Amended	2025 Budget F.T.E.	2026 Budget F.T.E.
PUBLIC SERVICES									
Department of Public Services Director		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Admin. Support Team									
Permit Center Lead									
Administrative Supervisor		1.00	1.00	1.00			1.00	1.00	1.00
Administrative Specialist III		1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
GIS Assistant		1.00							
Infrastructure Development Team									
City Engineer		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Assistant City Engineer		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Development Review Engineer		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Engineering Assistant							1.00	1.00	1.00
GIS Analyst		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Project Manager									
Contract Administrator		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Construction Inspector		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Development Services Team									
Development Services Manager							1.00	1.00	1.00
Planning and Building Supervisor		1.00	1.00	1.00	1.00	1.00			
Plans Examiner/BO		1.00	1.00	1.00					
Senior Building Inspector/Plans Examiner					1.00	1.00	1.00	1.00	1.00
Building Inspector I		1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00
Plans Examiner					1.00				
Permit Coordinator					1.00	1.00	1.00	1.00	1.00
Permit Technician I/II		1.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00
Associate/Assistant Planner		2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Assistant/Senior Planner						1.00	1.00	1.00	1.00
Assistant Planner/Code Enforcement		1.00	1.00	1.00					
Code Enforcement					1.00	1.00	1.00	2.00	2.00
Public Works Team									
Superintendent of Public Works		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Administrative Supervisor		1.00	1.00	1.00	1.00	1.00			
Administrative Specialist IV									
Administrative Specialist I/II		2.00	2.00	2.00	1.00	1.00			
Administrative Specialist III					1.00	1.00			
Public Works Operations Engineer									
Assistant City Engineer		1.00	1.00	1.00	1.00	1.00			
Electrician		1.00	1.00	1.00	1.00	1.00			
Assistant Superintendent of Public Works		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Lead Worker		5.00	5.00	5.00	5.00	5.00	5.00	6.00	6.00
Facility Maintenance Worker III					1.00	1.00	1.00		
Maintenance Worker III		5.00	7.00	7.00	7.00	8.00	8.00	8.00	8.00
Limited Term MWI/II – Parks							2.00	2.00	2.00
Maintenance Worker I/II		22.00	21.00	21.00	21.00	20.00	20.00	21.00	21.00
Meter Reader/ Meter Reader II		2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Custodian						2.00	2.00	2.00	2.00
Fleet Manager							1.00	1.00	1.00
Mechanic I/II		1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
TOTAL PUBLIC SERVICE DEPARTMENT		**61.00**	**62.00**	**63.00**	**64.00**	**66.00**	**67.00**	**68.00**	**68.00**
TOTAL STAFFING (excludes Councilmembers)		**148.35**	**151.58**	**152.68**	**154.03**	**158.28**	**159.28**	**153.42**	**153.42**

Out of State Travel

On February 26, 2008, the City Council adopted Resolution 1787 addressing out-of-state travel. As per Section 2C, below is a listing of requested out-of-state travel for the 2025-2026 biennium. Per the Mayor, only out of state travel authorized is grant funded for 2025-2026 unless authorized by the Council.

Department:	**Court**	
BARS Account #	001.000.012.512.50.43.xx (Travel Expenses)	$2500
BARS Account #	001.000.012.512.50.49.xx (Registration)	$ 600
Staff Position(s)	Judge, Court Case Manager, Deputy City Attorney	
Destination	FL	
Dates	2025	
Purpose of Travel	ALLRISE Conference (grant funded)	

Department:	**Court**	
BARS Account #	001.000.012.512.50.43.xx (Travel Expenses)	$2500
BARS Account #	001.000.012.512.50.49.xx (Registration)	$ 600
Staff Position(s)	Judge, Court Case Manager, Deputy City Attorney	
Destination	TBD	
Dates	2026	
Purpose of Travel	ALLRISE Conference (grant funded)	

Summary of Interfund Transfers

2025

Transfer Out: General Fund $986,000
Transfer In: Debt Service Fund $986,000
For general obligation debt

Transfer Out: General Fund $71,000
Transfer In: Cumulative Reserve Fund $71,000
Current year savings for computer replacement ($26,000) and police laptop replacement ($45,000)

Transfer Out: Cumulative Reserve Fund $101,278
Transfer In: General Fund $101,278
Radio replacement over the next five years (2025-2029); $506,394 saved in Cumulative Reserve Fund

Transfer Out: Cumulative Reserve Fund $280,000
Transfer In: General Fund $280,000
Laptop replacement (PD/City) saved in Cumulative Reserve Fund

2026

Transfer Out: General Fund $988,000
Transfer In: Debt Service Fund $988,000
For general obligation debt

Transfer Out: General Fund $71,000
Transfer In: Cumulative Reserve Fund $71,000
Current year savings for computer replacement ($26,000) and police laptop replacement ($45,000)

Transfer Out: Cumulative Reserve Fund $101,278
Transfer In: General Fund $101,278
Radio replacement over the next four years (2026-2029); $405,116 saved in Cumulative Reserve Fund

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CITY COUNCIL MEETING

September 10, 2024
6:00 P.M.
DRAFT MINUTES

www.ci.bonney-lake.wa.us

Location: The physical location of the Council Meeting was at the Bonney Lake Justice & Municipal Center, 9002 Main Street East, Bonney Lake, Washington. The public was also given the option to call in or attend virtually the Council Meeting.

Audio starts at: 06:00:00

I. CALL TO ORDER – Mayor Carter, called the meeting to order at 6:00 p.m.

A. Pledge of Allegiance: Mayor Carter audience in the Pledge of Allegiance.

B. Roll Call: City Clerk Sadie Schaneman called the roll. In addition to Mayor Terry Carter, elected officials attending were Deputy Mayor Dan Swatman, Councilmember Angela Baldwin, Councilmember Aaron Davis, Councilmember Gwendolyn Fullerton, Councilmember Kerri Hubler, Councilmember J. Kelly McClimans and Councilmember Brittany Rock.

Staff members in attendance at the physical location were City Administrator John Vodopich, Chief of Police Mark Berry, Administrative Services Director Chuck McEwen, Interim Public Services Director Jason Sullivan, City Clerk Sadie Schaneman, and Records and Disclosure Coordinator Kandice Besaw.

Staff members in virtual attendance using the City's Teams conference line were Chief Finance Officer Cherie Reierson and City Attorney Jennifer Robertson.

C. Agenda Modifications: None.

D. Announcements, Appointments and Presentations: None.

II. PUBLIC HEARINGS, CITIZEN COMMENTS & CORRESPONDENCE:

A. Public Hearing: None.

Audio starts at: 6:00:53

B. Citizen Comments: *For efficient use of city resources, comments will be a short summary and not verbatim. Video recordings will be uploaded to the city's YouTube channel and an audio recording to the state digital archives for review of all the comments.*

Dan Decker, 20401 70th St E, Bonney Lake: Spoke on diversity and content neutral when it's not.

C. Correspondence: The City Clerk's Office received an online submission that was shared prior to the meeting with the mayor and council from Jocelyn Parker asking Council to remove the dotted passing lane on Angeline Road between 104th and 109th Streets.

Audio starts at: 6:04:54

III. COUNCIL COMMITTEE REPORTS:

A. Finance Committee: Deputy Mayor Swatman reported the Finance Committee met in person and virtually today at 5:00 p.m. The Committee went thru personnel updates; had a presentation from the Mt. Rainier FC, discussed and forwarded AB24-101 to a future meeting, discussed proposed policies and procedures, and approved their minutes.

B. Community Development Committee: Councilmember Fullerton reported the Community Development Committee did not meet and is expected to have their next meeting in person and virtually at 3:30 p.m. on September 17, 2024.

C. Public Safety Committee: Councilmember Baldwin reported the Public Safety Committee met in person and virtually today at 3:45 p.m. The Committee received an update from the Police Department and East Pierce Fire and Rescue; received a report from the Emergency Manager and the Prosecutor, discussed and forwarded AB24-90, AB24-91, AB24-95 and AB24-99 to a future meeting, discussed BLMC Chapter 10.32 Vehicle Impoundment and Tow Truck Operators, Allan Yorke Park Operational Plan, Angeline Road and approved their minutes.

D. Other Reports: Councilmember Fullerton shared that she attended the CFF (Communities for Families) Meeting and that they are getting ready for the holidays and looking for volunteers. She also attended the Lions Club and Council along with the public are invited to the 20th year celebration on the 28th of September.

Audio starts at: 6:12:00

IV. CONSENT AGENDA:

A. **Approval of Corrected Minutes:** None.

B. **Approval of Accounts Payable and Utility Refund Checks/Vouchers:** Accounts Payable Check/Vouchers #97538 To #97656, And Wire Transfers #20240801, #2024071501, #2024081501, #2024082201, #2024082202, And #2024082101 In The Amount Of $1,206,568.28 **Voids:** None.

C. **Approval of Payroll:** August 16 – 31, 2024 For Checks #35039 - 35045 Including Direct Deposits And Electronic Transfers Totaling $890,484.28. **Voids:** None.

Councilmember Fullerton moved to approve the Consent Agenda as amended. Councilmember Baldwin seconded the motion.

Consent Agenda approved 7 - 0.

V. FULL COUNCIL ISSUES:

Audio starts at: 6:12:17

A. **AB24-87 – Resolution R24-87** - A Resolution Of The City Council Of The City Of Bonney Lake, Pierce County, Washington, Authorizing The Mayor To Sign An Agreement With Tyler Technologies To Migrate The City's Enterprise Resource Planning Systems And Authorize Out Of State Travel For 2025-2027 To The Tyler Connect Conferences And Authorize Extra Hire And/Or Overtime To Support This Migration Project.

Councilmember Fullerton moved to approve Resolution R24-87. Councilmember Baldwin seconded the Motion.

Administrative Services Director Chuck McEwen gave a detailed overview regarding the migration project.

Council discussed and shared their concerns, including:
- Costs and ending fund balance.
- Data sharing and Multifactor authenticators.
- Benefits and staffing efficiency.

Resolution R24-87 approved 7 – 0.

Audio starts at: 6:37:52

B. **AB24-60 – Motion M24-60** - A Motion Of The City Council Of The City Of Bonney Lake, Pierce County, Washington, Directing Staff To Submit The August 2024 Version Of The Community Development Element To The Department Of Commerce And To Include It In The Final Version Of The Comprehensive Plan.

Councilmember Fullerton moved to approve Motion M24-60. Councilmember McClimans seconded the Motion.

Interim Public Services Director Sullivan thoroughly explained all the options and implications involved and how prolonging could potentially make it difficult for the city to apply for grants and loans.

Council discussed and shared their concerns, including:
- State vs. Federal law.
- Deadlines.
- Grant Applying.

Councilmember McClimans moved to table Motion M24-60 to the next Council workshop. Councilmember Davis seconded the Motion.

Motion to tabled approved 5 – 2.
Councilmembers Baldwin and Fullerton voted no.

VI. EXECUTIVE / CLOSED SESSION: None.

VII. ADJOURNMENT:

At 7:13 p.m. the Meeting was adjourned by Mayor Carter with the common consent of the City Council.

Sadie A. Schaneman, CMC, City Clerk Terry Carter, Mayor

Items presented to Council at the September 10, 2024, Meeting for the record:

(1) Lion International 20-year anniversary celebration invitation.

Note: Unless otherwise indicated, all documents submitted at City Council meetings and workshops are on file with the City Clerk. For detailed information on agenda items, please view the corresponding Agenda Packets, which are posted on the city website and on file with the City Clerk.

CITY COUNCIL WORKSHOP

September 17, 2024
6:00 P.M.
DRAFT MINUTES

www.ci.bonney-lake.wa.us

Location: The physical location of the Council Meeting was at the Bonney Lake Justice & Municipal Center, 9002 Main Street East, Bonney Lake, Washington. The public was also given the option to call in or attend virtually the Council Meeting

Audio starts at: 06:00

I. CALL TO ORDER – Mayor Terry Carter, called the workshop to order at 6:00 p.m.

A. Pledge of Allegiance

Audio starts at: 06:01

II. ROLL CALL: City Clerk Sadie Schaneman called the roll. In addition to Mayor Carter, elected officials attending were Deputy Mayor Dan Swatman, Councilmember Angela Baldwin, Councilmember Aaron Davis, Councilmember Gwendolyn Fullerton, and Councilmember Kerri Hubler. Councilmember J. Kelly McClimans was in virtual attendance and Councilmember Brittany Rock was not in attendance.

Deputy Mayor Swatman moved to excuse the absence of Councilmember Rock. Councilmember Baldwin seconded the motion.

Motion approved 6-0.

Staff members in attendance at the physical location were City Administrator John Vodopich, Assistant Chief Ryan Boyle, Interim Public Services Director Jason Sullivan, Interim Planning Manager Lauren Balisky, and City Clerk Sadie Schaneman.

Staff members in virtual attendance Administrative Specialist II Debbie McDonald, and City Attorney Jennifer Robertson.

III. AGENDA ITEMS:

Audio starts at: 6:02

A. **Review Of Council Minutes:** August 13, 2024, City Council Meeting, August 20, 2024, City Council Workshop, And August 27, 2024, City Council Meeting.

The draft minutes were forwarded to the September 24, 2024, meeting for approval.

Audio starts at: 6:02

B. **Council Open Discussion:**

Mayor Carter:
City of Bonney Lake Updates: Mayor Carter gave a summary of emergency calls involving the Bonney Lake Police Department over the last week, including the

calls where they also assisted outside law enforcement agencies and a statement on why the "Diversity" artwork was removed from public viewing.

Audio starts at: 6:03

C. **Discussion: AB24-100 – Resolution R24-100** - A Resolution Of The City Council Of The City Of Bonney Lake, Pierce County, Washington, Designating A Pierce County Conservation Futures And Open Space Citizens Advisory Board Representative.

City Clerk Schaneman updated Council that at this time no one has applied to be on the advisory board as the City representative. If Councilmembers are interested, they would also need to apply.

After further discussion Councilmember Hubler and Councilmember McClimans will both apply to be co-representatives for the board.

Audio starts at: 6:09

D. **Discussion: AB24-60 – Motion M24-60 –** A Motion Of The City Council Of The City Of Bonney Lake, Pierce County, Washington, Directing Staff To Submit The August 2024 Version Of The Community Development Element To The Department Of Commerce And To Include It In The Final Version Of The Comprehensive Plan.

Interim Public Services Director Sullivan reviewed with Council questions that he had received on item AB24-60 since last week's Council Meeting and discussed the answers.

Council discussed and shared their ideas and concerns, including:
- How to have the least amount of Government restrictions.
- What does underutilize mean.
- What qualifies as an essential public building.
- Asked for Councilmember McClimans questions and answers to be emailed to all Councilmembers for review.

Council agreed to move the agenda bill to full council issues for the next Council Meeting on September 24, 2024.

Audio starts at: 8:12

IV. EXECUTIVE/CLOSED SESSION: None.

Audio starts at: 8:12

V. ADJOURNMENT:

At 8:12 p.m. the Meeting was adjourned by Mayor Carter with the common consent of the City Council.

Sadie A. Schaneman, CMC, City Clerk

Terry Carter, Mayor

Items presented to Council at the September 17, 2024, Workshop:

(1) *Statement* – Mayor Carter.

Note: Unless otherwise indicated, all documents submitted at City Council meetings and workshops are on file with the City Clerk. For detailed information on agenda items, please view the corresponding Agenda Packets, which are posted on the city website and on file with the City Clerk.

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City of Bonney Lake, Washington

City Council Agenda Bill (AB)

Agenda Item Type: Motion	**Agenda Bill Number & Ordinance/Resolution/Motion Number:** AB24-62 – Motion M24-62	
Department/Division Submitting: Development Services	**Presenter:** Jason Sullivan, Interim Public Services Director	**City Strategic Goal Category:** **DON'T FILL OUT YET**

Agenda Subject: Environmental Stewardship Element – Comprehensive Plan Update

Full Title/Motion: A Motion Of The City Council Of The City Of Bonney Lake, Pierce County, Washington, directing staff to submit the September 2024 version of the Environmental Stewardship Element to the Department of Commerce and to include it in the final version of the comprehensive plan.

Administrative Recommendation: None.

Short Background Summary (Use a memo to write a full history): Staff has completed drafting updates to the Environmental Stewardship Element to ensure consistency with Washington State law, multi-county planning policies (MPP), countywide planning policies (CPP). The attached Briefing Memorandum provides additional details. The attached Consistency Matrix provides a crosswalk between existing and proposed policy and identifies the State law, MPP, or CPP necessitating the policy.

Attachments: Briefing Memorandum, Final Draft Environmental Stewardship Element (clean), Final Draft Environmental Stewardship Element (redline), RCW / MPP / CPP Consistency Matrix

BUDGET INFORMATION

Budgeted Amount	**Current Balance**	**Expenditure Amount Needed**	**Budgeted Balance Difference**

Budget Explanation:

COMMITTEE, BOARD & COMMISSION REVIEW

Public Hearing Date: **Name Of Committee/Commission Public Hearing Was Done At:**

Date & Name Of Committee/ Commission Meeting	**Return To Committee/ Commission/Board**	**Council Workshop Discussion**	**Consent Agenda**	**Council Full Issues**	**Chair's Signature For Approval Of Next Steps**
Date: Name:	☐ **Yes**	☐ **Yes**	☐ **Yes**	☐ **Yes**	
Date: Name:	☐ **Yes**	☐ **Yes**	☐ **Yes**	☐ **Yes**	
Date: Name:	☐ **Yes**	☐ **Yes**	☐ **Yes**	☐ **Yes**	
Date: Name:	☐ **Yes**	☐ **Yes**	☐ **Yes**	☐ **Yes**	
Hearing Examiner Review:					

COUNCIL ACTION

Workshop Date(s): 10/01/2024 Public Hearing Date(s):

Meeting Date(s): Tabled To:

APPROVALS

Department Director:	**Mayor:**	**Date Reviewed By City Attorney (if applicable):**
Jason Sullivan	*Terry Carter*	

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Public Services Briefing Memorandum

Meeting Date: October 1, 2024

Memo Date: September 20, 2024

Staff Contact: Jason Sullivan – Interim Public Services Director

Prepared By: Lauren Balisky – Interim Planning Manager

Action Type: Discussion

Agenda Title: Periodic Update – Final Draft Environmental Stewardship Element

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PURPOSE:

The purpose of this item is to brief the City Council on the final draft Environmental Stewardship Element.

EXECUTIVE SUMMARY:

The City completed a final draft Environmental Stewardship Element for review. This chapter is presented with a "clean" and a "redline" copy due to the minor scope of changes.

DISCUSSION:

Background

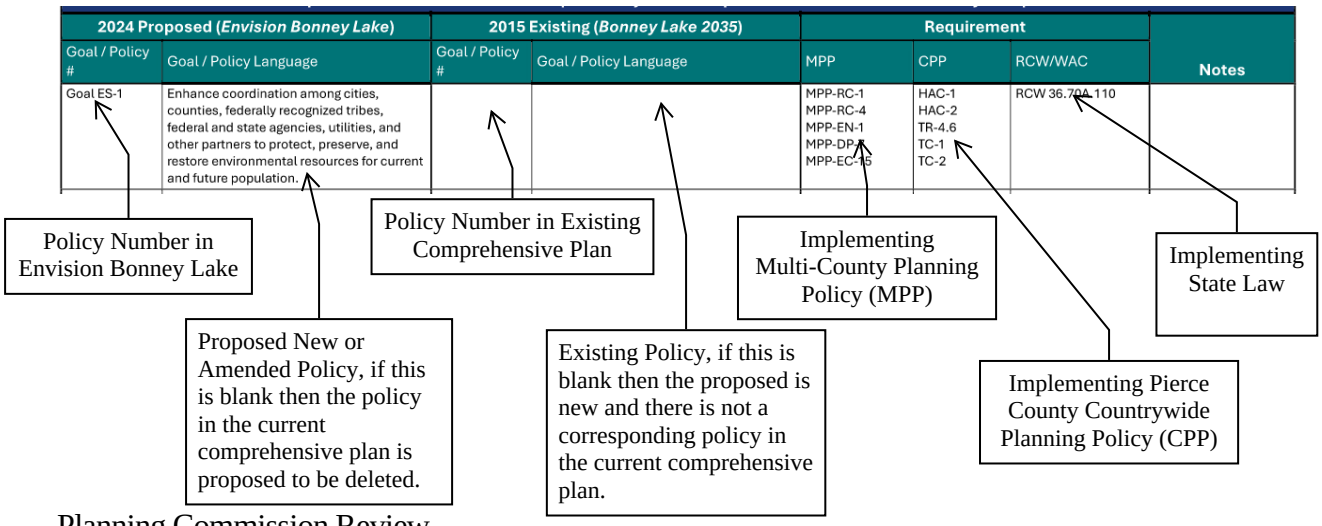
Washington's Growth Management Act (GMA) adopted as Chapter 36.70A RCW mandates that the City adopt and regularly update a comprehensive plan. The City's comprehensive plan is intended to serve as the policy framework to effectively manage growth and development within the City, protect the property rights of the City's residents, facilitate economic development, and guide land use decisions and infrastructure investments.

This Environmental Stewardship Element provides a framework to guide decision making regarding the conservation, management, and utilization of Bonney Lake's natural resources. Minor updates were made to be more consistent with the GMA, the adopted multicounty planning policies (MPPs) established as part of the Puget Sound Regional Council's *VISION 2050,* and the adopted countywide planning policies (CPPs) established by Pierce County.

Summary of Changes

The Element has been updated to ensure formatting consistent with the Community Development Element, update maps, address policy gaps identified as part of the gap analysis (a tool that compares the current comprehensive plan with updated laws, MPPs and CPPs), and incorporate comments from various Planning Commission discussions.

See the attached Consistency Matrix for a complete comparison of existing policies, proposed policies, applicable State law, MPPs, CPPs, and, if applicable, additional rationale for a change. Below is an example of the matrix.



Planning Commission Review

The full draft Environmental Stewardship Element was provided to the Planning Commission for review at its September 18, 2024, meeting. The Planning Commission moved to forward the document to Council without changes.

ATTACHMENTS:

A. Final Review Draft Environmental Stewardship Element – Clean
B. Final Review Draft Environmental Stewardship Element – Redline
C. Environmental Stewardship Element – Goal – Policy Comparison Table

Environmental Stewardship Element

Envision BONNEY LAKE
Celebrating 100 Years

TABLE OF CONTENTS

LIST OF EXHIBITS

1. INTRODUCTION

The purpose of the Environmental Stewardship Element is to provide a framework to guide decision making regarding the conservation, management, and utilization of Bonney Lake's natural resources. The topics in the Enviromental Stewardship element overlap with other elements in the Comprehensive Plan, including the Community Development, Public Facilities and Services, and Mobility Elements. However, the Environmental Stewardship 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.

1.1 REGULATORY CONTEXT

Growth Management Act

In 2023, the Washington State Legislature passed major updates to environmental goals (RCW 36.70A.020) and mandatory element requirements (RCW 36.70A.070) in the Growth Management Act (GMA), adding a climate change and resiliency element and affirming the importance of shoreline management planning to local comprehensive planning efforts. The requirement for a climate change and resiliency element is conditioned on the availability of state funds (RCW 36.70A.070(10)). This component is due in 2029, if funding is provided.

With this update, six (6) of the 15 goals of the GMA specifically pertain to environmental conservation and enhancement:

- **Natural Resource Industries:** Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forestlands 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, and increase access to natural resource lands and waters.
- **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.

- **Climate Change and Resiliency:** Adapt to and mitigate the effects of a changing climate through reductions in greenhouse gas emissions, preparing for climate impact scenarios, fostering resiliency to climate impacts and natural hazards, protecting and enhancing health and safety, and advancing environmental justice.

- **Shorelines:** When a community contains shorelines of the state, the Shoreline Master Program is considered an element of the Comprehensive Plan (see **Chapter 8**).

While a separate Environmental Stewardship Element is not a mandatory element required by RCW 36.70A.070, it is required to ensure that the City's Comprehensive Plan is consistent with the GMA goals and the adopted Multi-County Planning Policies (MPPs) and County-Wide Planning Policies (CPPs), as required by RCW 36.70A.100. This Element also addresses the importance of the environment to the community, protecting local water supplies, and to preserving and enhancing natural systems and habitats.

The GMA requires the City to designate critical areas and to adopt development regulations to protect such areas, consistent with the environmental goals in RCW 36.70A.020. The goals and policies in this Element support the preparation and implementation of these regulations. Critical areas are defined as the following areas and ecosystems in RCW 36.70A.030(5):

- Wetlands;

- Areas with a critical recharging effect on aquifers used for potable water;

- Fish and wildlife habitat conservation areas;

- Frequently flooded areas; and

- Geologically hazardous areas (susceptibility to erosion, sliding, earthquake, or other geological events).

Lastly, the GMA also directs local governments to identify lands that are useful for public purposes and to identify open space corridors within urban growth areas that are useful for recreation, open spaces, wildlife habitat, trails and connections of critical areas (RCW 36.70A.160). The City has completed this work as part of the **Parks, Trails, Recreation and Open Space Plan** (**Appendix TBD**).

Multi-County Planning Policies (MPPs)

The Puget Sound Regional Council (PSRC) adopted MPPs in VISION 2050[1]. These policies encourage local jurisdictions to adopt coordinated strategies, policies, and actions to ensure the region's needs are met. This Element was prepared to be consistent with VISION 2050 in the following areas:

- **Open Space and Habitat**: Protecting, enhancing, and restoring open spaces, including natural lands, farmlands, working forests, aquatic systems, regional trails, and parks.
- **Puget Sound Recovery**: Protecting and restoring critical habitat, converting hardened shorelines back to more natural conditions, protecting aquifers, promoting and installing stormwater infrastructure, and upgrading sewage and septic facilities to improve water quality and water supplies across the region.
- **Air Quality**: Reducing air pollution and greenhouse gases to improve health outcomes and access to the scenic vistas that make the Puget Region a high-quality place to live.

County-Wide Planning Policies (CPPs)

Pierce County adopted updated CPPs in 2022[2] that further refine how municipal comprehensive plans are drafted and adopted. This Element was prepared to be consistent with the CPPs in the following areas:

- **Regional Coordination:** Work across jurisdictions to cooperatively identify, protect, enhance and restore natural resources, critical areas, and open space.
- **Open Space:** Plan for and provide access to open space for all segments of the population, regardless of socioeconomic status.
- **Watershed Planning:** Coordinate efforts across jurisdictional boundaries to plan for natural systems at their natural boundaries.
- **Development Regulations:** Use best available science to regularly update development regulations for the built and natural environments.
- **Air Quality:** Reducing air pollution from particulates, toxics, and greenhouse gases.

[1] Available online at: https://www.psrc.org/planning-2050/vision-2050
[2] Available online at: https://online.co.pierce.wa.us/cfapps/council/iview/proposal.cfm?proposal_num=2022-29

1.2 ORGANIZATION

The Element is divided into the following sections :

- **Section 2:** Regional Coordination acknowledges the importance of local tribes as stewards of this land since time immemorial, and the role of future coordination in environmental planning.
- **Section 3: Critical Areas** addresses the preservation and protection of environmental critical areas, including (1) geologically hazardous areas, (2) aquifer and wellhead protection areas, (3) surface water, (4) frequently flooded areas, (5) wetlands, and (6) fish and wildlife habitat areas.
- **Section 4: Urban Forestry** is focused on the steps needed to maintain, preserve, and enhance Bonney Lake's tree canopy.
- **Section 5: Agricultural Lands** addresses the need for the City to protect agricultural resource lands and promote urban agriculture.
- **Section 6: Air Quality** relates to regulating air pollution, toxic air contaminates, and greenhouse gas emissions.
- **Section 7: Resiliency** focuses on building community resilience in the face of inevitable change.
- **Section 8: Environmental Stewardship Goals and Policies** contains goals and policies based on best available science that are meant to guide day-to-day City decisions on topics related to the protection of the environment.

2. REGIONAL COORDINATION

Bonney Lake is framed within a beautiful natural setting, with open spaces, an abundance of trees, scenic mountain vistas, and watersheds provide habitat functions, recreational enjoyment, and contribute to the City's general quality of life. Therefore, preservation and restoration of these environmental resources require a regional approach and coordination among cities, counties, federally recognized tribes, federal and state agencies, utilities, and other partners. The City of Bonney Lake will be taking additional steps to coordinate planning efforts with local Tribes as directed by Substitute House Bill 1717[3] (HB 1717), enacted in 2022.

[3] Available online at: https://app.leg.wa.gov/billsummary?billnumber=1717&year=2022

3. CRITICAL AREAS

The Washington State Growth Management Act (GMA) and implementing rules require cities to protect environmental critical areas, which include:

- Maintaining functions and values of hydrological ecosystems and watersheds through the protection, preservation, and restoration of wetlands, lakes, rivers, ponds, streams, and floodplains. As part of preventing pollutants from entering the waters of the state, jurisdictions subject to the U.S. Environmental Protection Agency (EPA) National Pollution Discharge Elimination System (NPDES) must also comply with all permit requirements and are encouraged to adopt the Department of Ecology's *Stormwater Manual for Western Washington* or the equivalent, incorporate relevant land-use recommendations from adopted local watershed plans, and adopt a clearing and grading ordinance.

- Identifying and providing policies to conserve, connect, restore, and prevent impacts to fish and wildlife habitat conservation areas (FWHCA); however, not every parcel of land that provides habitat for wildlife constitutes fish and wildlife habitat. [4] FWHCA only include areas where endangered, threatened, and sensitive species have a primary association; habitats and species of local importance (determined locally); commercial and recreational shellfish areas; kelp and eelgrass beds; herring, smelt, and other forage fish spawning areas; naturally occurring ponds under twenty acres and submerged aquatic beds that provide fish or wildlife habitat; waters of the state; lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity; and state natural area preserves, natural resource conservation areas, and wildlife areas.[5]

- Designating and providing policies to protect the functions and values of geological hazardous areas and preventing impacts associated with development within geological hazardous areas. Geological hazardous areas are areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development. There is no affirmative mandate associated with this definition except to "protect the functions and values." However, if a local jurisdiction, as the City has, requires lower densities in geologically hazardous

[4] *Pilchuck, et al v. Snohomish County*. Final Decision and Order. Case Number 95-3-0047c. (December 6, 1995).

[5] WAC 365-190-130(2)

areas, the geologically hazardous areas must be mapped using "best available science."

- Designating and providing policies to protect the functions and values of Critical Aquifer Recharge Areas (CARAs) and preventing impacts associated with development within CARAs. 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.[6] Potable water is an essential life sustaining element for people and once contaminated it is difficult, costly, and sometimes impossible to clean up. Preventing contamination is necessary to avoid exorbitant costs, hardships, and potential physical harm to people and ecosystems.[7] Therefore, WAC 365-190-100(3) requires cities to classify recharge areas for aquifers according to aquifer vulnerability.

Policies to protect the functions and value of critical areas are mandated to be based on "best available science."[8] The CPSGMHB in *DOE/CTED v. City of Kent* referencing *Honesty in Environmental Analysis and Legislation v. Seattle*, 96 Wn. App. 522, 979 P.2d 864 (1999) stated, that the"…purpose of the best available science requirement is to ensure that critical areas regulations are not based on speculation and surmise, but on meaningful, reliable, relevant evidence."[9] The CPSGMHB also found in Kent that there is no bright-line definition of "best available science" but rather a requirement to consider the following factors as established in *Ferry County v. Concerned Friends of Ferry County, et al.*, 155 Wn.2d 824, 123 P.3d 102 (2005):

> (1) The scientific evidence contained in the record; (2) Whether the analysis by the local decision-maker of the scientific evidence and other factors involved a reasoned process; and (3) Whether the decision made by the local government was within the parameters of the Act as directed by the provisions of RCW 36.70A.172(1).

In other words, a jurisdiction is not required to win the scientific argument, but only to demonstrate that the jurisdiction's policies and regulations are based on reliable evidence reviewed through a reasoned process. In 2019, the City participated in a robust

6 WAC 365-090-030(3)
7 WAC 365-190-100(1)
8 RCW 36.70A.172(1)
9 *Washington State Department of Ecology and Washington State Department of Commerce, Trade, and Economic Development v. City of Kent*. Final Decision and Order. Case Number 05-3-0034. (April 19, 2006).

update of its critical area's ordinance using best available science to update and change the ordinance to better serve and protect the community.

Maps presented in this Element are for reference purposes only and not intended to identify precise locations of critical areas or environmental features. At the time of development, best available information including site-specific analysis will determine the presence or absence of such features.

3.1 GEOLOGICALLY HAZARDOUS AREAS

The geological foundation of the Bonney Lake area consists of impermeable sedimentary 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 **Exhibit 1** illustrates soil associations within the City of Bonney Lake. Soil associations consist of one or more major soils and other minor soils but are named for the major soils. Soil association maps provide a broader perspective of the soils to identify areas that have soil properties that are either favorable or unfavorable for certain land uses.

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.

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 ago[10]. 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

[10] Dragovich J.D, et. al. (September 1995) *Liquefaction Susceptibility for the Sumner 7.5-minute Quadrange, Washington*. Prepared for Washington State Department of Natural Resources.

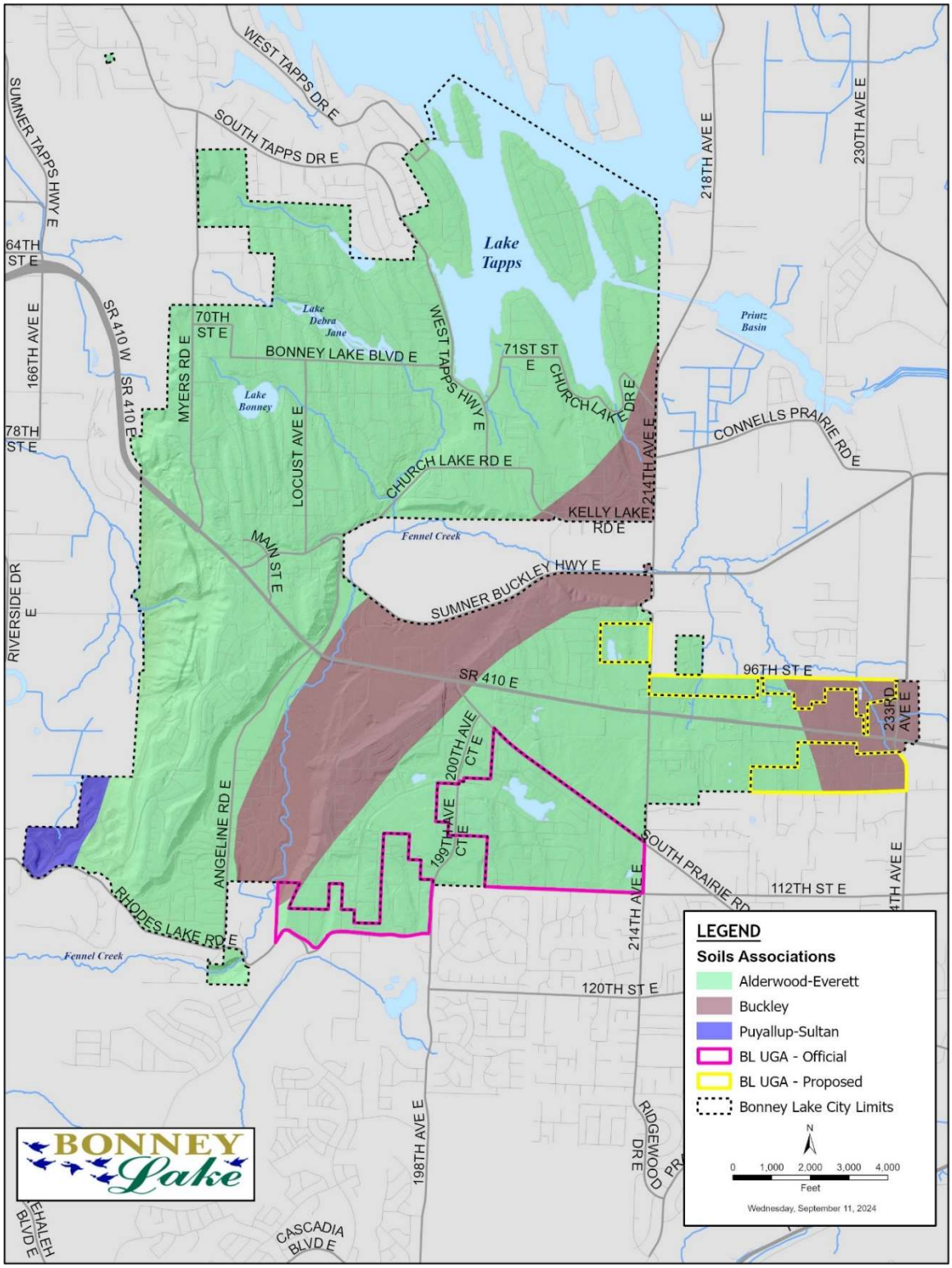
favorable for pasture and hay farming. The soil can support residential developments if there is access to community sewage facilities.[11]

The remaining one (1)% consists of the Puyallup-Sultan association, which is well suited to both farming and residential development.[12]

[11] 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).

[12] ibid.

Exhibit 1: Soil Associations



Source: Prepared by the City of Bonney Lake, courtesy of Pierce County Planning and Public Works. Data from USDA Soil Conservation Service, April 3, 2000.

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". This subsection contains a discussion of the four main geological hazards in Bonney Lake.

Landslide Hazards

> *Bonney Lake is surround 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 (1964)*

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 the steepness of the slope and the presences of unconsolidated glacial materials. Slopes generally collapse when rainstorms oversaturated the soil on the slope. Such failure is especially likely where a permeable layer lies atop a less permeable layer because percolating water seeps out at the layer boundary.

Exhibit 2 and **Exhibit 3** illustrate the areas of Bonney Lake with a high and moderate susceptibility to shallow or deep landslides**.** The data contained in **Exhibit 2** and **Exhibit 3** was created based on modeling developed by the Department of Natural Resources and not site-specific evaluations. Therefore, **Exhibit 2** and **Exhibit 3** should only be used as a screening tool to highlight areas where further site-specific investigation is needed to determine if there is truly susceptibility to either a shallow or deep landslide[13].

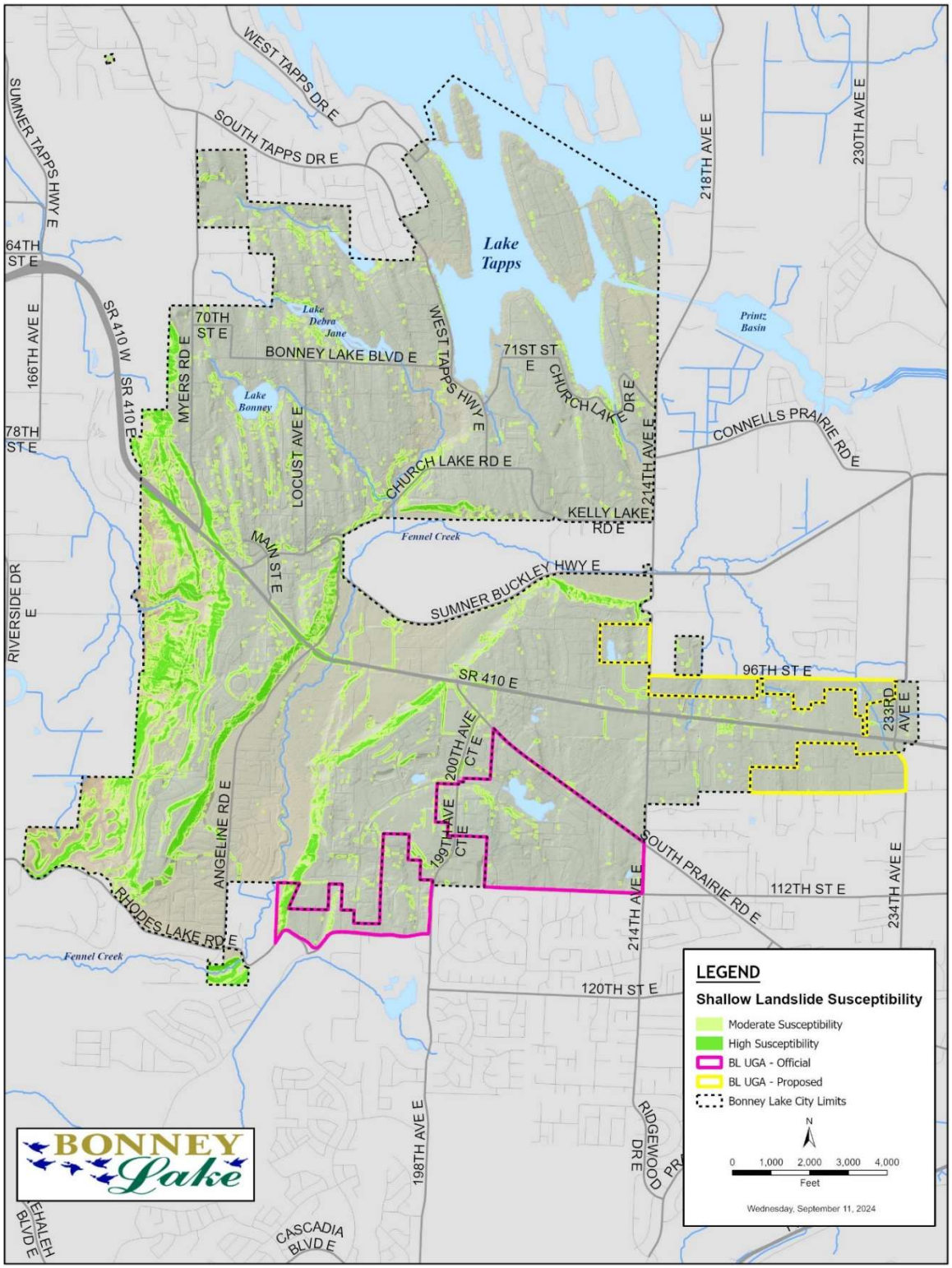
The City categorizes landslide hazard areas into two categories:

- **Class 1** landslide hazard areas have slopes that:
  - Are 40% or greater with a vertical relief of 10 feet or more; or
  - Are 25% or greater with a vertical relief of 10 feet or more and two (2) or more limiting factors detailed in the Critical Areas Ordinance.
  - These Class 1 landslide hazard areas are undevelopable.

[13] Mickelson, K. A.; Jacobacci, K. E.; Contreras, T. A; Biel, Alyssa; Slaughter, S. L. (2017) *Landslide Inventory, Susceptibility, And Exposure Analysis Of Pierce County*, Report of Investigations 39,

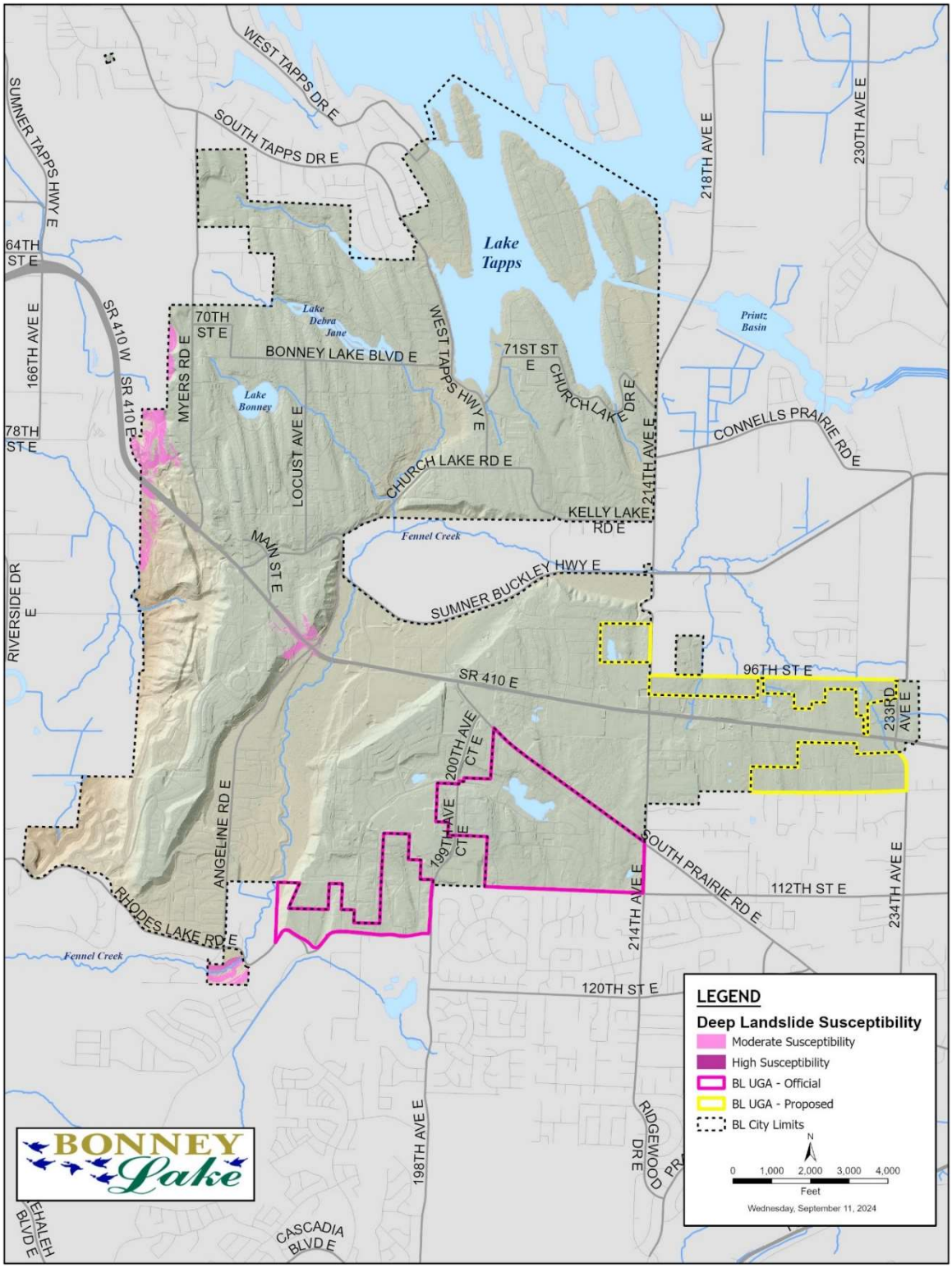
- **Class 2** landslide hazard areas have slopes that:
  - Are 25% to 39% with a vertical relief of 10 feet or more that do not have two (2) or more additional limiting factors;
  - Are 15% to 25% with a vertical relief of 10 feet or more and have additional risk factors.
  - Class 2 landslide hazard areas also include engineered slopes like those in the Sky Island, Panorama Heights, and Panorama West developments.
  - Class 2 landslide hazard areas may be buildable but require some special precautions. These categories are designed to protect citizens and their private property from damage during natural disasters.

Exhibit 2: Shallow Landslide Susceptibility



Source: Prepared by the City of Bonney Lake, courtesy of Pierce County Planning and Public Works. Data from Washington Geological Survey, November 6, 2017.

Exhibit 3: Deep Landslide Susceptibility



Source: Prepared by the City of Bonney Lake, courtesy of Pierce County Planning and Public Works. Data from Washington Geological Survey, November 1, 2018.

Erosion Hazards

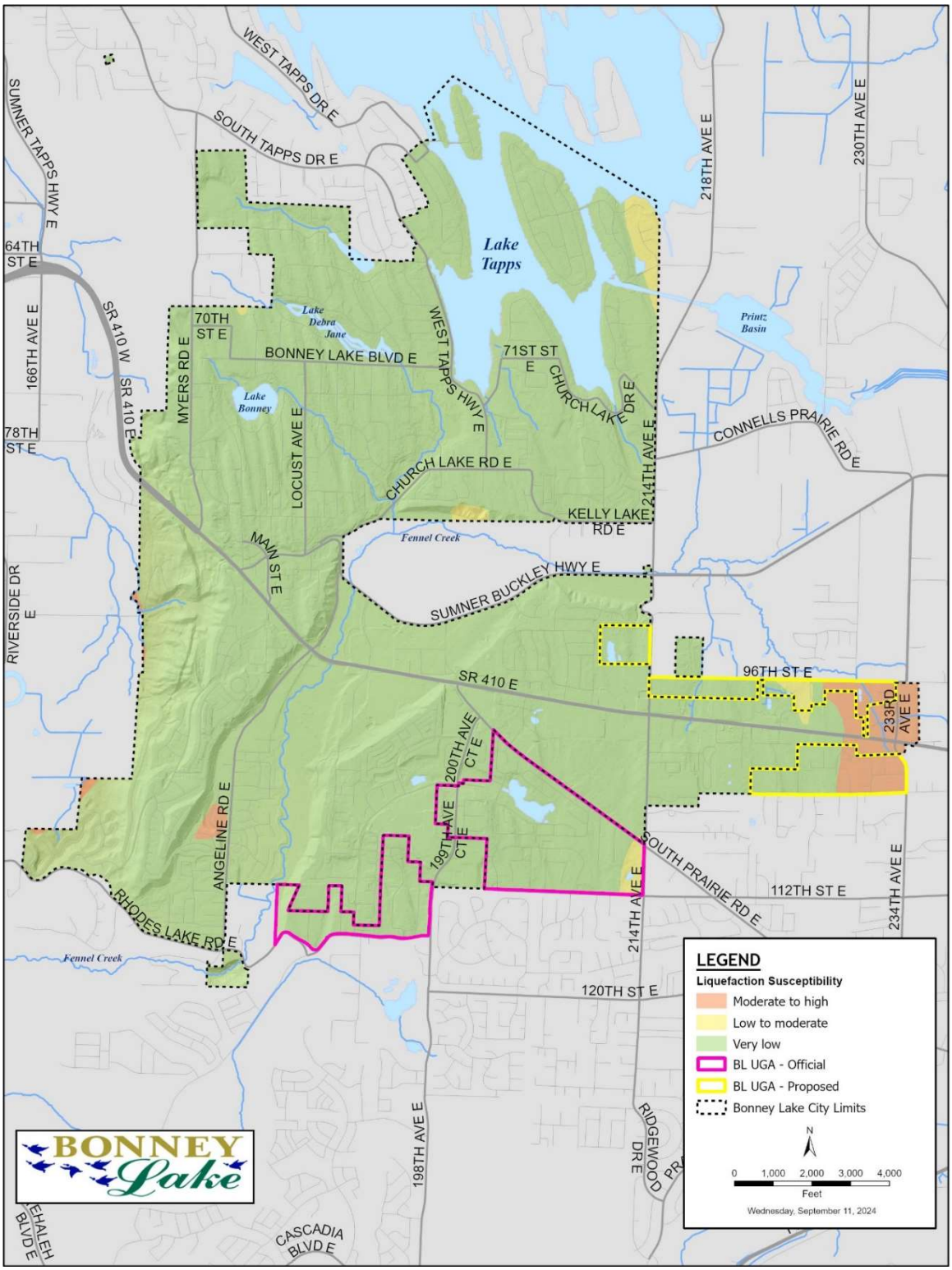
In addition to landslides, land clearing, earth movement, and unmanaged stormwater can cause erosion, which damages the site itself, the downstream drainage network, and aquatic habitat. The finer the soil and the steeper the slope, the greater the erosion hazard. The City utilizes the U.S. Department of Agriculture's Natural Resources Conservation Service data to identify these areas,

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 behave as a liquid, similar to quicksand.[14] The City utilizes data from the Washington Department of Natural Resources to identify these areas. The majority of the City has a low risk of liquefaction as illustrated in **Exhibit 4**.

[14] Dragovich J.D, et. al. (September 1995) *Liquefaction Susceptibility for the Sumner 7.5-minute Quadrange, Washington*. Prepared for Washington State Department of Natural Resources.

Exhibit 4: Liquefaction Susceptibility



Source: Prepared by the City of Bonney Lake, courtesy of Pierce County Planning and Public Works. Data from Washington Department of Natural Resources, undated. Retrieved September 11, 2024.

Volcanic Hazards

Mount Rainier, a dormant volcano, is the highest peak in the Cascade Range and carries a larger load of glacier ice than any other mountain in the contiguous United States, posing geologic hazards during both future eruptions and periods without eruptive activity especially given the Mountain's great topographic relief.[15] Bonney Lake is far enough away to avoid lava flows and landslides. However, in addition to these associated hazards, lahars that originate on Mount Rainier or an eruption of Mount Rainier could affect the plateau. There are four types or cases of lahars:

- **Case M:** This is a low-probability and high-consequence lahar. The Osceola Mudflow is an example in this category which occurred about 5,600 years ago and has occurred on Mount Rainier only once in in the last 10,000 years. [16]
- **Case I:** This type of lahar has occurred once every 500 to 1,000 years during the last 5,600 years. The annual probability of such a flow originating somewhere on Mount Rainier is about 0.1 to 0.2 percent. The Electron Mudflow, which reached the Puget Lowland about 600 years ago via the Puyallup River, is the most recent example.[17]
- **Case II:** The typical recurrence interval of this type of lahar is near the lower end of the 100-to-500-year range. The annual probability of such a flow is close to 1 percent for the volcano as a whole. For planning purposes, Case II flows are analogous to the 100-year flood commonly considered in engineering practice. Some Case II flows have inundated flood plains well beyond the volcano and a few have reached the Puget Lowland. Case II flows have a very low clay content. The most common origin for this class of flow is melting of snow and glacier ice caused by hot rock fragments during a volcanic eruption. An example is the National Lahar, which occurred about 2,000 years ago in the Nisqually River valley.[18]
- **Case III:** This type of lahar is small but has a recurrence interval of 1 to 100 years for the volcano as a whole. This class of flow includes small debris avalanches as well as lahars. Case III flows are not triggered by an eruption but are largely restricted

[15] Cakir R. and Walsh T. (May 2012) *Loss Estimation Pilot Project for Lahar Hazards from Mount Rainier Washington.* Prepared for the Washington State Department of Natural Resources.
[16] ibid
[17] ibid
[18] ibid

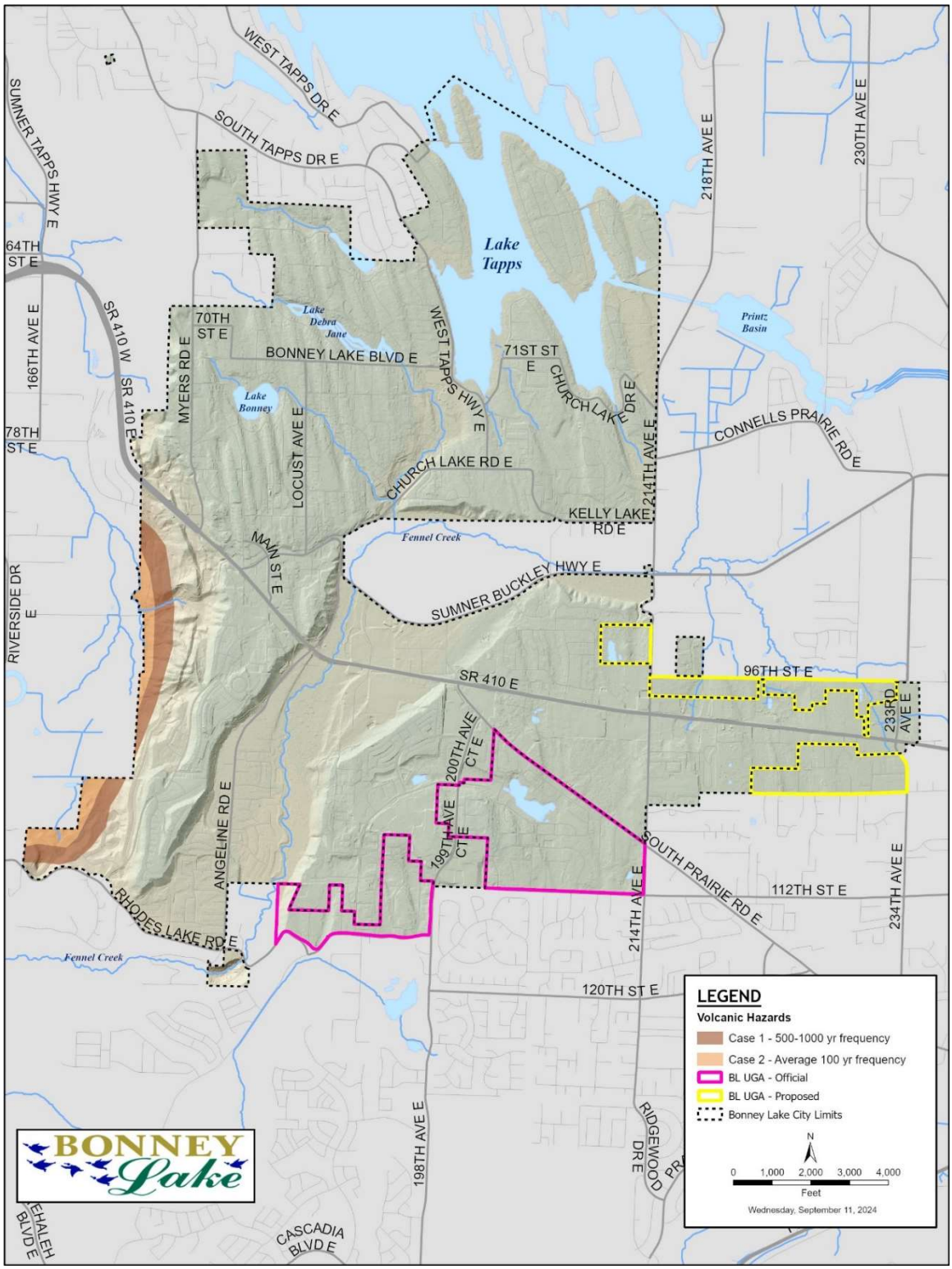
to the slopes of the volcano and rarely move beyond the National Park boundary.[19]

Portions of the City could be impacted by a Case I lahar that flows down either the Carbon River or Puyallup River valleys or by Case M lahars that flowed down the White River valley. Case I, Case II, Case III lahars that flowed down the White River or by Case M lahars that flowed down either the Puyallup River or Carbon River valleys would not affect the Bonney Lake.[20]

Given the extremely low-probability of a Case M lahar, less than 0.1% of all lahars that have originated on Mount Rainier, areas impacted only by this case of lahar are not considered to be within the volcanic hazard area zone as delineated by the Washington State Department of Natural Resources as illustrated in **Exhibit 5**. Areas impacted by a Case M lahar and the blast zone for an eruption of Mount Rainier, while not officially designated as a volcanic hazard area due to the low annual probability of these events are illustrated in **Exhibit 6**.

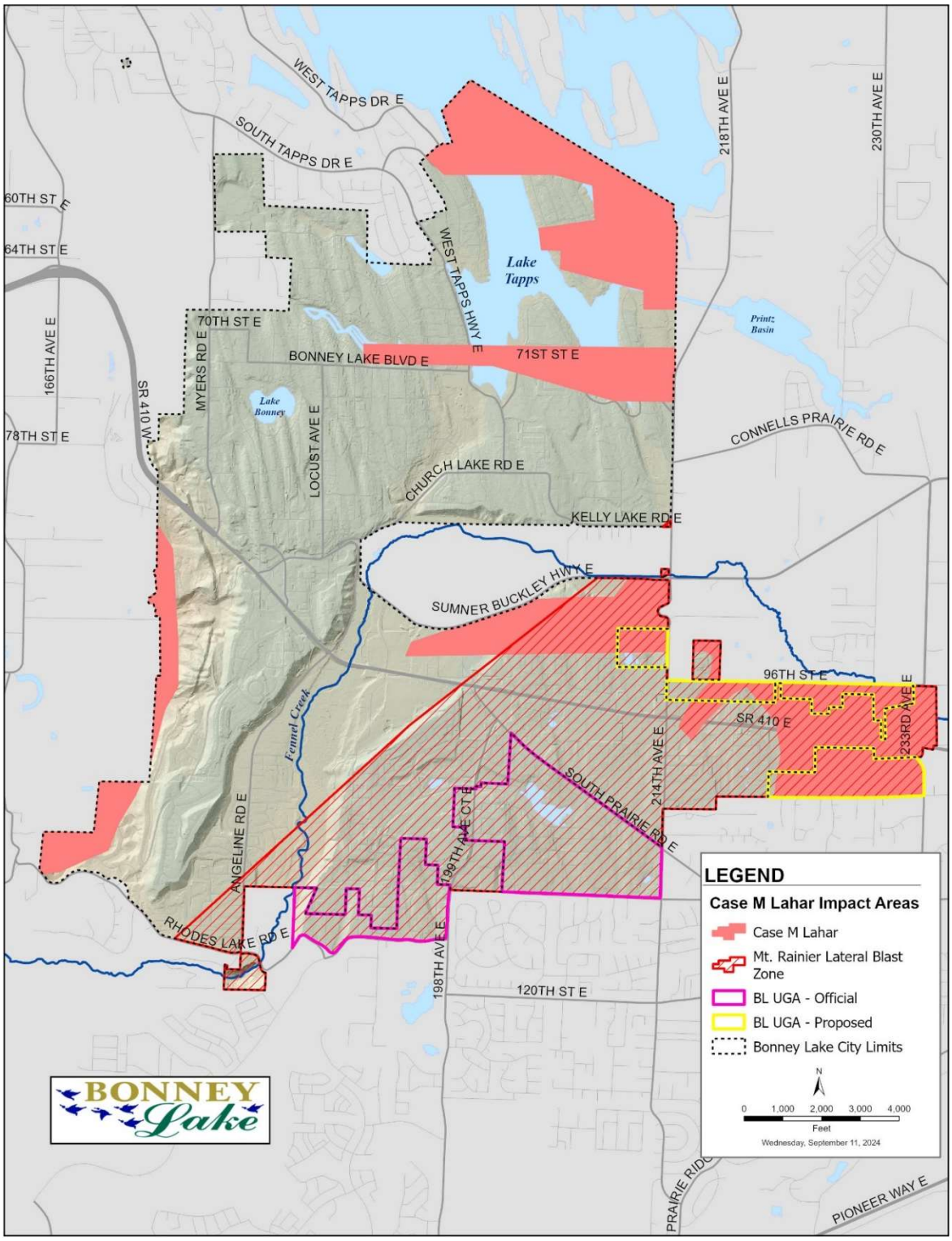
[19] ibid
[20] ibid

Exhibit 5: Volcano Hazard Zone



Source: Prepared by the City of Bonney Lake, courtesy of Pierce County Planning and Public Works. Data from Washington Department of Natural Resources, June 5, 2013.

Exhibit 6: Case M Lahar Impact Areas



Source: Prepared by the City of Bonney Lake. Data from Washington State Department of Natural Resources, Information Circular 113, May 2012, and United States Geological Survey, Open-File Report 98-428, September 18, 2013.

3.2 AQUIFER AND WELLHEAD PROTECTION AREAS

Potable water is an essential life sustaining element for people. 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.[21] A primary source of potable water in the City is aquifers, which are geologic formations that readily transmit water to wells or springs.

The importance of protecting aquifers and the associated recharge areas for public water supplies is evident by the fact that the GMA address this issue in two sections:

- **RCW 36.70A.070:** Land use elements are required to provide for protection of the quality and quantity of groundwater used for public water supplies.
- **WAC 365-190-100:** Aquifer recharge areas are designated as environmental critical areas.

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, as defined in WAC 365-190-100(3):

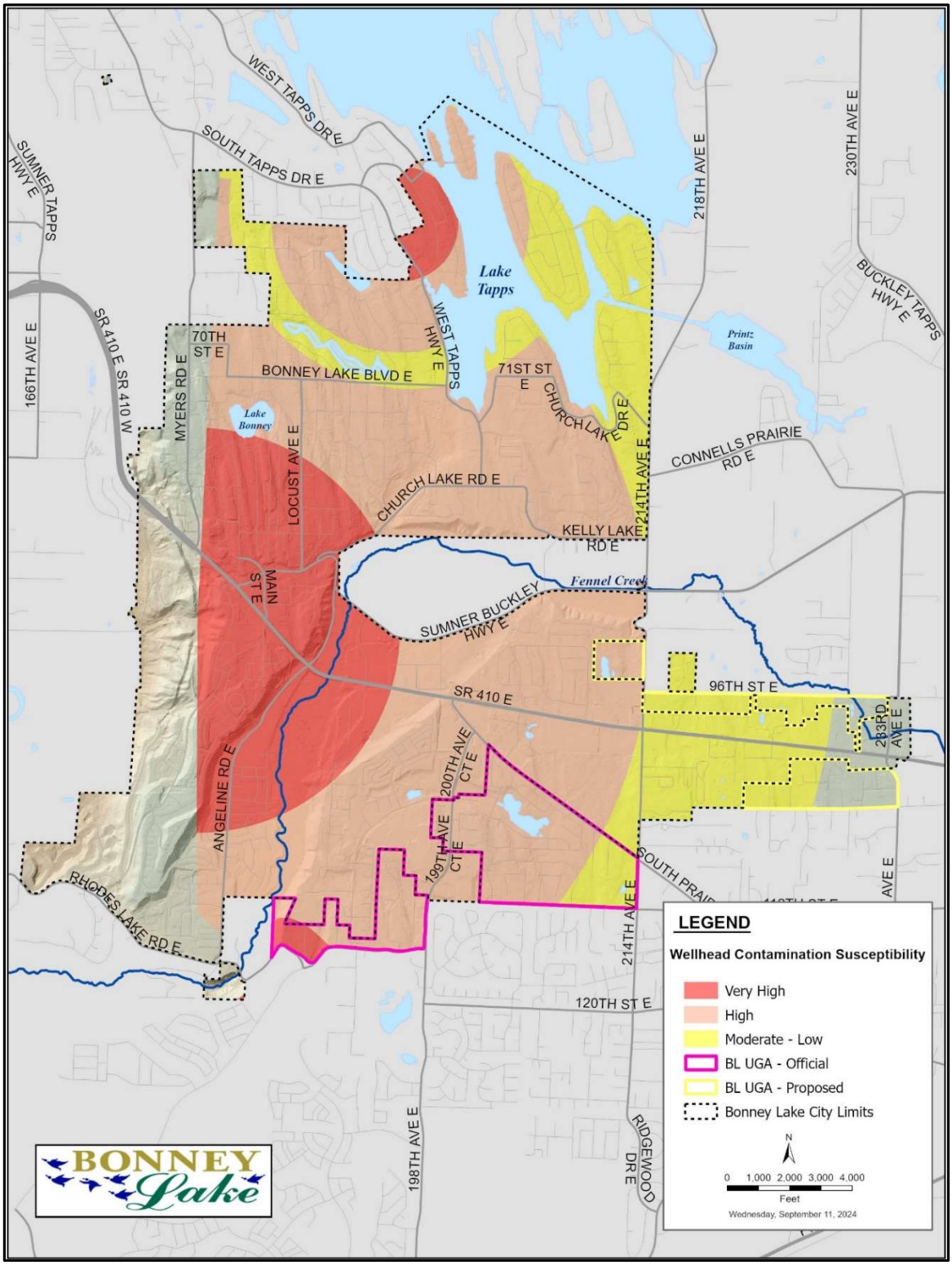
> … Vulnerability is the combined effect of hydrogeological susceptibility to contamination and the contamination loading potential. High vulnerability is indicated by land uses that contribute directly or indirectly to contamination that may degrade groundwater, and hydrogeological conditions that facilitate 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.

The City of Bonney Lake has a robust Water System Plan and Wellhead Protection Program. Grainger Springs has a 100-foot sanitary control area and is at moderate risk of contamination from the source area. Victor Falls Springs is at high risk for contamination from septic systems in the source area.

[21] WAC 365-190-100(1)

In order to protect 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 CARAs. Additionally, the City has designed the one-year TOT zone as having very high contamination susceptibility, the five-year TOT zone as having high contamination susceptibility, and the 10-year TOT zone as having moderate to low contamination susceptibility (see **Exhibit 7**). These designations promote protection of wellheads which are sites most at risk for spreading contamination into the aquifer. The 2019 update to the Critical Areas Ordinance defined wellhead protection areas and integrated protections for wellheads into the existing CARA protections.

Exhibit 7: Wellhead Contamination Susceptibility



Source: Prepared by the City of Bonney Lake, RH2 Engineering, March 1, 2002.

3.3 SURFACE WATER

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

- *Bonney Lake Comprehensive Plan (1985)*

The 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 affect 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 regulates stormwater discharge from municipal storm drain systems under a nationwide permit to prevent impacts to surface waters as the result of development, which is referred to as the National Pollutant Discharge Elimination System (NPDES). 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.

The Washington Department of Fish and Wildlife has provided new guidance in *Riparian Ecosystems – Volume 2: Management Recommendations* (Riparian Guidance)[22] dated December 2020. Using this new guidance, the City established riparian management zones (RMZs) around streams based on the site potential tree height (SPTH), which is the average maximum height of the tallest dominant trees (200 years in age or more) for a given site class. Along the City's streams:

- The SPTH is between 191 feet and 204 feet[23].
- The RMZ for fish bearing streams (shown as Type "F" in **Exhibit 8**) was established as 200 feet, or at one (1) SPTH as recommended in the Riparian Guidance. This will also help protect the water quality of Fennel Creek, a priority documented in the City's Watershed Protection Plan.

[22] Available online at: https://wdfw.wa.gov/publications/01988

[23] Based on the draft WDFW Priority Habitats & Species (PHS) Riparian Ecosystems: Site Potential Tree Height online mapping tool, accessed on August 18, 2023.

- The RMZ for non-fish bearing perennial streams (shown as Type "Np" in **Exhibit 8**) was established at 120 feet, which is 60% of one SPTH as recommended in the Riparian Guidance.
- The RMZ for non-fish bearing seasonal streams (shown as Type "Ns" in **Exhibit 8**) was maintained at 70 feet based on existing site conditions and consultation with WDFW, as recommended in the Riparian Guidance.

Lake Tapps

The Pacific Coast Power Company constructed Lake Tapps between 1909 and 1911 by diverting water from the White River into a diked area of the plateau. The 2,500-acre lake, now owned by the Cascade Water Alliance, is considered a shoreline of statewide significance and as such is discussed in the **Shoreline Element** of this Comprehensive Plan.

Lake Bonney

Lake Bonney is 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.

Between 2004 and 2007, the lake was 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 lake eutrophication with decreasing water quality and aesthetic values, odor problems, and algae blooms during the summer due to the presence of sunlight and nutrients.[24]

Since 2014, Lake Bonney has shown generally increasing TSI (Trophic State Index) scores indicating improving lake health. 2018 data classifies Lake Bonney as mesotrophic. [25] Lake Bonney did exceed the State's standards for fecal coliform bacteria in 2012 and 2013 but met the State's standards in 2014.[26] In efforts to improve the health of the lake,

[24] 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.

[25] 2018 Bonney lake Annual Lake Report. City of Bonney Lake: Volunteer Lake Monitoring Program. Prepared by Pierce Conservation District for the City of Bonney Lake.

[26] Ragland, I. (2014) City of Bonney Lake: Volunteer Lake Monitoring Program. Prepared by Pierce Conservation District for the City of Bonney Lake.

the City included a required vegetative conservation area[27] within 20 feet of the lake to be installed when property owners make waterward improvements on their lots.

Lake Debra Jane

Lake Debra Jane is about 15 acres in size and ranges from seven (7) 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 grows in the weeds along the shoreline, especially in the summer. Lake Debra Jane is a mesotrophic lake.[28]

The lake has a history of total coliform counts that have been in gross excess of the Department of Ecology's standards and occasionally exceeds the standards of the Pierce County Health Department.[29] In efforts to improve the health of the lake, the City included a required vegetative conservation area27 within 20 feet of the lake to be installed when property owners make waterward improvements on their lots.

Fennel Creek

Fennel Creek begins at a spring near the intersection of SR-410 and 234th Ave E flowing 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 3 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. This reach is 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, listed as threatened or

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[27] Under WAC 173-26-221(5)(a), "Vegetation conservation includes activities to protect and restore vegetation along or near marine and freshwater shorelines that contribute to the ecological functions of shoreline areas. Vegetation conservation provisions include the prevention or restriction of plant clearing and earth grading, vegetation restoration, and the control of invasive weeds and nonnative species."

[28] ibid.

[29] RH2 Engineering, Inc. (June 1998). *City of Bonney Lake Wellhead Protection and Monitoring Program – Phase I.* Prepared for the City of Bonney Lake.

endangered under the Endangered Species Act (ESA).[30] This portion of Fennel Creek is a Shoreline of the State, discussed in more detail in the **Shoreline Element**.

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.[31] Bonney Lake's greatest concentration of wetlands is along 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 Foster Wheeler Analysis 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.

Bonney Lake Outfall

The Lake Bonney Outlet starts on the eastern shoreline of Lake Bonney and flows for approximately one (1) mile through a series of pipes, culverts, swales, ditches, and open channels in mostly residential areas prior to joining Debra Jane Creek at the southwest of the corner of Church Lake Rd East and Evergreen Drive. Lake Bonney Outlet, upstream of 192nd Avenue Place East is an intermittent watercourse that occasionally flows when Lake Bonney fills past its capacity does not support fish due to the lack of stream channels and significant sections of pipes and culverts. Downstream of 192nd Avenue Place East,

[30] Foster Wheeler Environmental Corporation. 1999. Environmental Analysis of the Fennel Creek Corridor. Pg. 2-75.
[31] ibid.

the Bonney Lake Outlet is a perennial fish bearing stream with hydrology supported by springs and precipitation.

Debra Jane Creek

Debra Jane Creek starts at the outlet in the southeast corner of Debra Jane Lake. Maps show that Debra Jane Creek then flows south through residential and forested areas for approximately 1 mile until it reaches the confluence with Bonney Lake Outlet. Debra Jane Creek, from the outlet at Debra Jane Lake to Allan Yorke Park, is an intermittent stream that occasionally flows when the lake fills past its capacity and does not support fish due to the lack of significant stretches of defined stream channel. Once Debra Jane Creek enters Allan Yorke Park, the stream becomes perennial stream supported by wetland seeps, springs, and precipitation without physical fish barriers (other than passable culverts) downstream from Allan Yorke Park to the confluence of Bonney Lake Outlet, and eventual connection to Fennel Creek. Habitat is suitable for fish use throughout this section, with clear bed/bank, sorted substrate, and complex habitats and is considered a perennial stream with fish use.

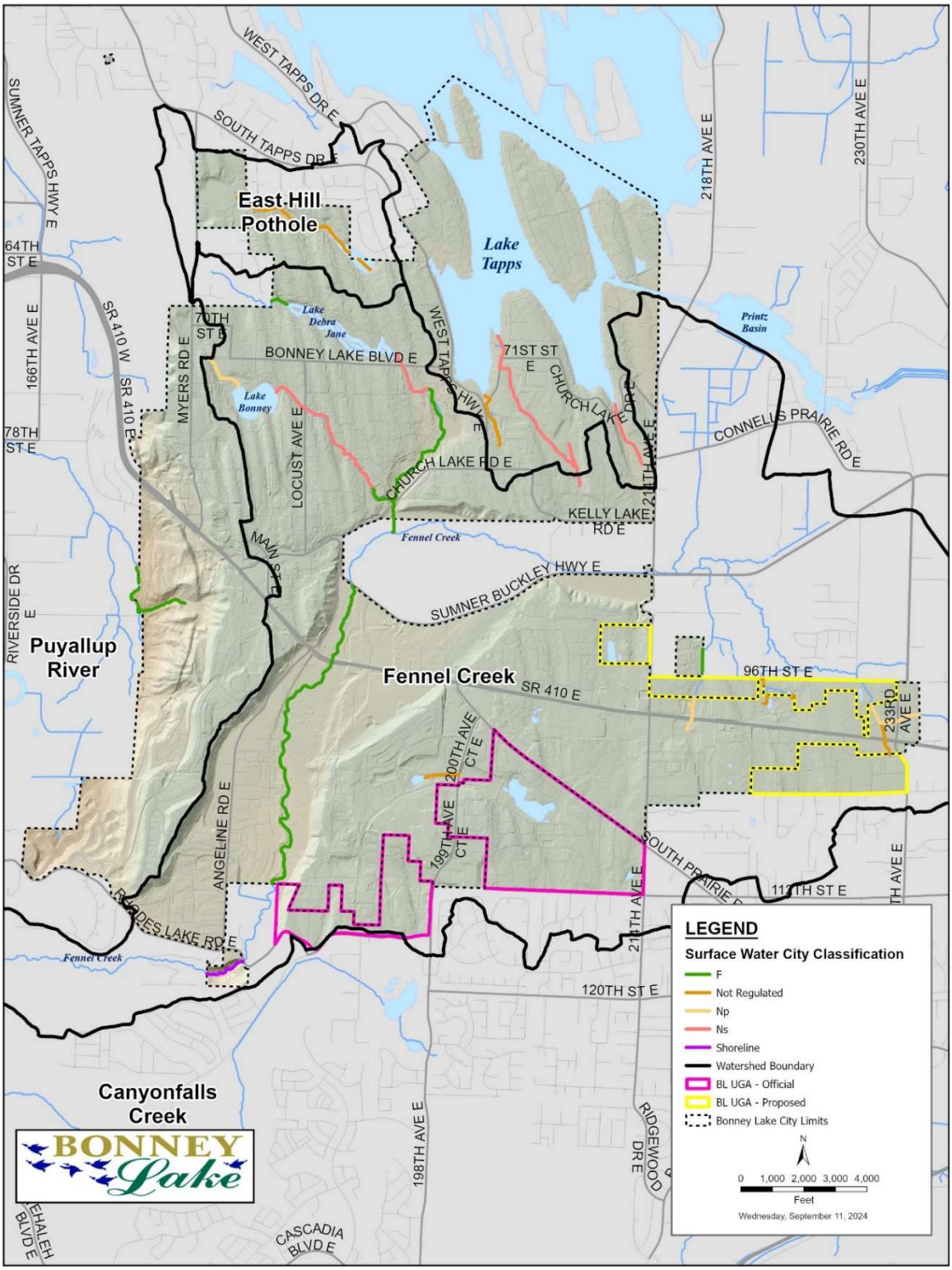
Other Streams

During 2018, the City undertook a stream assessment project. Prior to this assessment that City had mapped and classified most but not all stream located within the City. This assessment confirmed the presence or absence of the streams and assigned a classification per City code, if appropriate. More details regarding the project are available in a Final Stream Assessment Technical Memorandum which was completed by The Watershed Company for the City of Bonney Lake.

Streams evaluated as a portion of this assessment were assigned types consistent with the Bonney Lake Municipal Code, and WAC 222-16-030 and 222-16-031. **Exhibit 8** illustrates other small-unnamed streams located in the City.

The Federal Clean Water Act requires that all states restore their waters to be "fishable and swimmable." Washington's Water Quality Assessment, which meets the federal requirements for an integrated report under Sections 303(d) and 305(b) of the Clean Water Act, does not identify any impaired water bodies within Bonney Lake.

Exhibit 8: Surface Waters and Stream Typing



Source: Prepared by the City of Bonney Lake. Data from City of Bonney Lake, Watershed Company, Washington State Department of Fish & Wildlife, January 28, 2019.

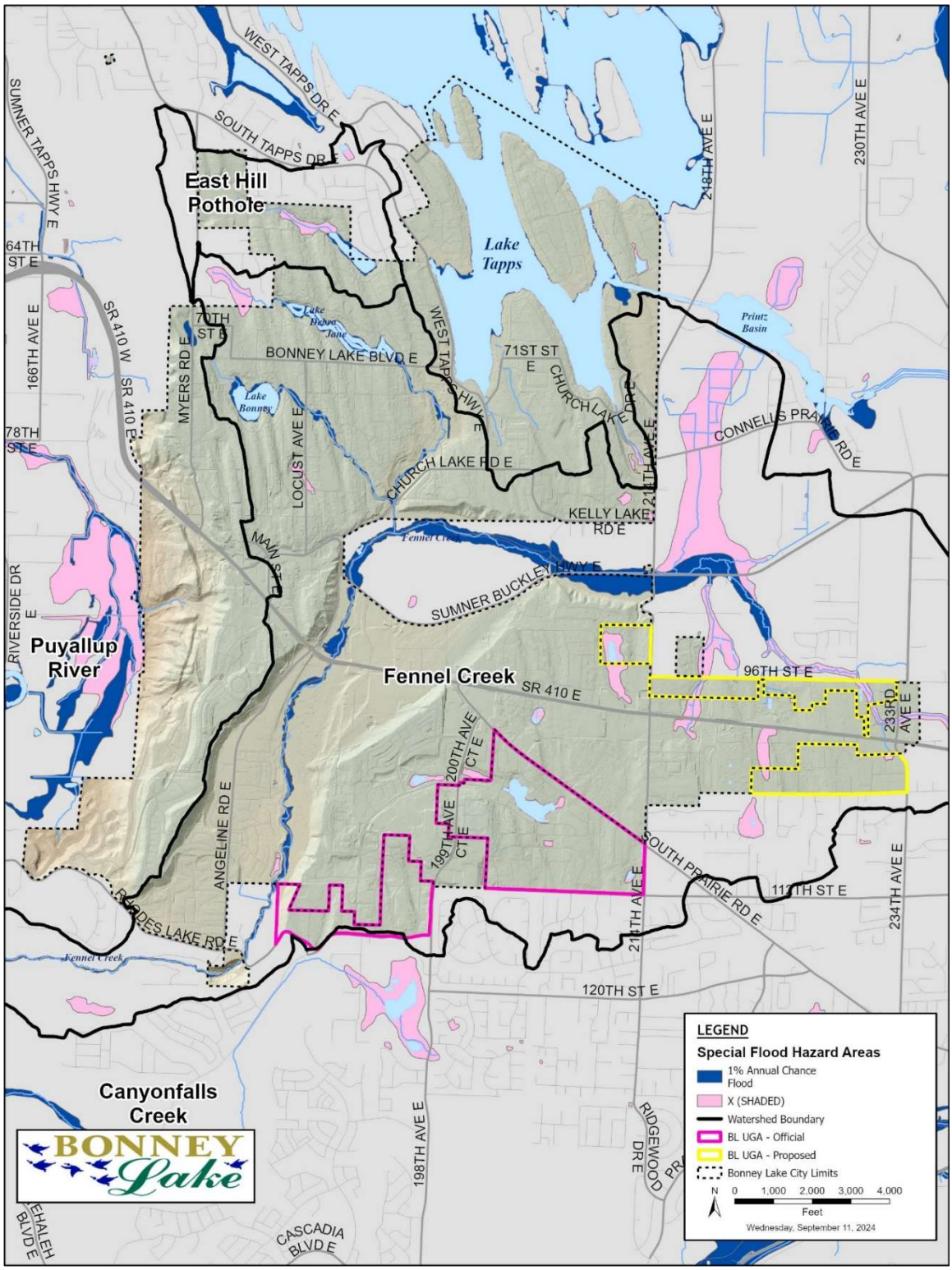
3.4 FREQUENTLY FLOODED AREAS

Flooding is defined as a general and temporary condition or partial or complete inundation of normally dry land areas from the overflow of inland water, the unusual and rapid accumulation of runoff of surface waters from any source, and mudslides which are proximately cause by flooding and are similar to a river of liquid and flowing mud. Flooding can also include the collapse or subsidence of land along the shore of a lake or other body of water a result of erosion or undermining cause by waves or currents or water exceeding average or anticipated levels.

Floodplains are regulated to protect the natural functions and habitat value of these areas and to manage potential risks to public safety. Bonney Lake regulates floodplains as special flood hazard areas, (see **Exhibit 9**), which is defined as land within the community subject to a one percent or greater chance of flooding in any given year.[32] To minimize flood damage, and maintain FEMA flood insurance eligibility, the City has administered floodplain regulations since 1982.

[32] BLMC 16.26.020

Exhibit 9: Special Flood Hazard Areas



Source: Prepared by the City of Bonney Lake, courtesy of Pierce County Planning and Public Works. Data from Federal Emergency Management Agency, May 28, 2024.

Of growing concern in urban areas are urban stream/groundwater flood hazards. As weather patterns shift, increasing the variability and severity of precipitation events, urban stormwater systems can face challenges coping with increased rates of development when paired with larger than average storm events, as in **Exhibit 10**, if not proactively planned for. Urban stream flooding is exacerbated by rain-on-snow events. Sometimes debris can accumulate in stormwater collection systems and reduce the capacity of the system to convey flow.[33]

Exhibit 10: Image of 2016 Flooding at 188th Ave E and 62nd St E

Photo Credit: KOMO News

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

[33] Pierce County Department of Emergency Management. (n.d.). Pierce County Hazard Identification & Risk Assessment (March 2015 Edition). Retrieved from https://www.co.pierce.wa.us/DocumentCenter/View/7032/HIRA?bidId=

(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.[34] 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 wetlands and an undisturbed buffer around the wetland.

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 and in a few other isolated spots.

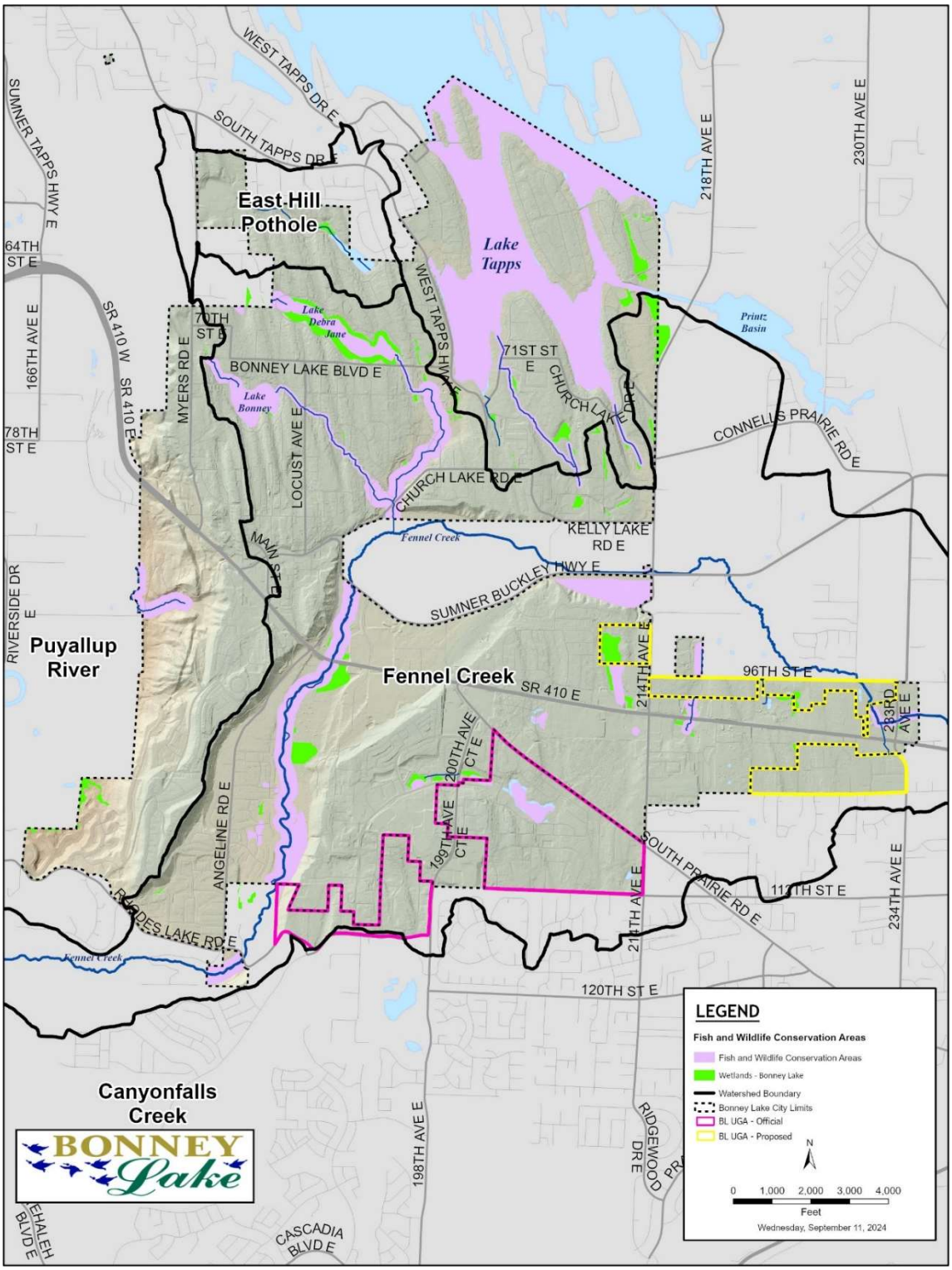
3.6 FISH AND WILDLIFE HABITAT AREAS

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 compatible.

[34] Cooke Scientific Services. (February 2000). *Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (SAM)*.

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." Areas that are considered FWHCA, as determined by the Department of Natural Resources, are illustrated in **Exhibit 11**.

Exhibit 11: Fish and Wildlife Conservation Areas



Source: Prepared by the City of Bonney Lake, courtesy of Pierce County Planning and Public Works. Data from Washington Department of Fish and Wildlife, Department of Health and Department of Natural Resources, May 3, 2023.

4. URBAN FORESTRY

> *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.*
>
> - *Bonney Lake Comprehensive Plan (1985)*

A healthy urban forest contributes to a sustainable City in several ways. Trees consume carbon dioxide (CO2), 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.[35]

Recognized by the Arbor Day Foundation as a Tree City USA[36] since 2005, Bonney Lake has an active Community Forest Program and has made a commitment to protect and manage the community's tree resources. As part of this ongoing commitment, the City contracted with the Watershed Company to prepare an analysis of the City's tree canopy. This analysis included a review of the effectiveness of existing codes, trends from recent development, and yield priority recommendations. This analysis was completed in 2019 and utilized high-resolution multispectral aerial imagery to complete a map-based canopy analysis that compared 2008 and 2017/2018 canopy coverage, see **Exhibit 12**. The analysis revealed a reduction in total coverage percentage from 43% to 34%; ; or 1,872 acres reduced to 1,638 acres of tree canopy.

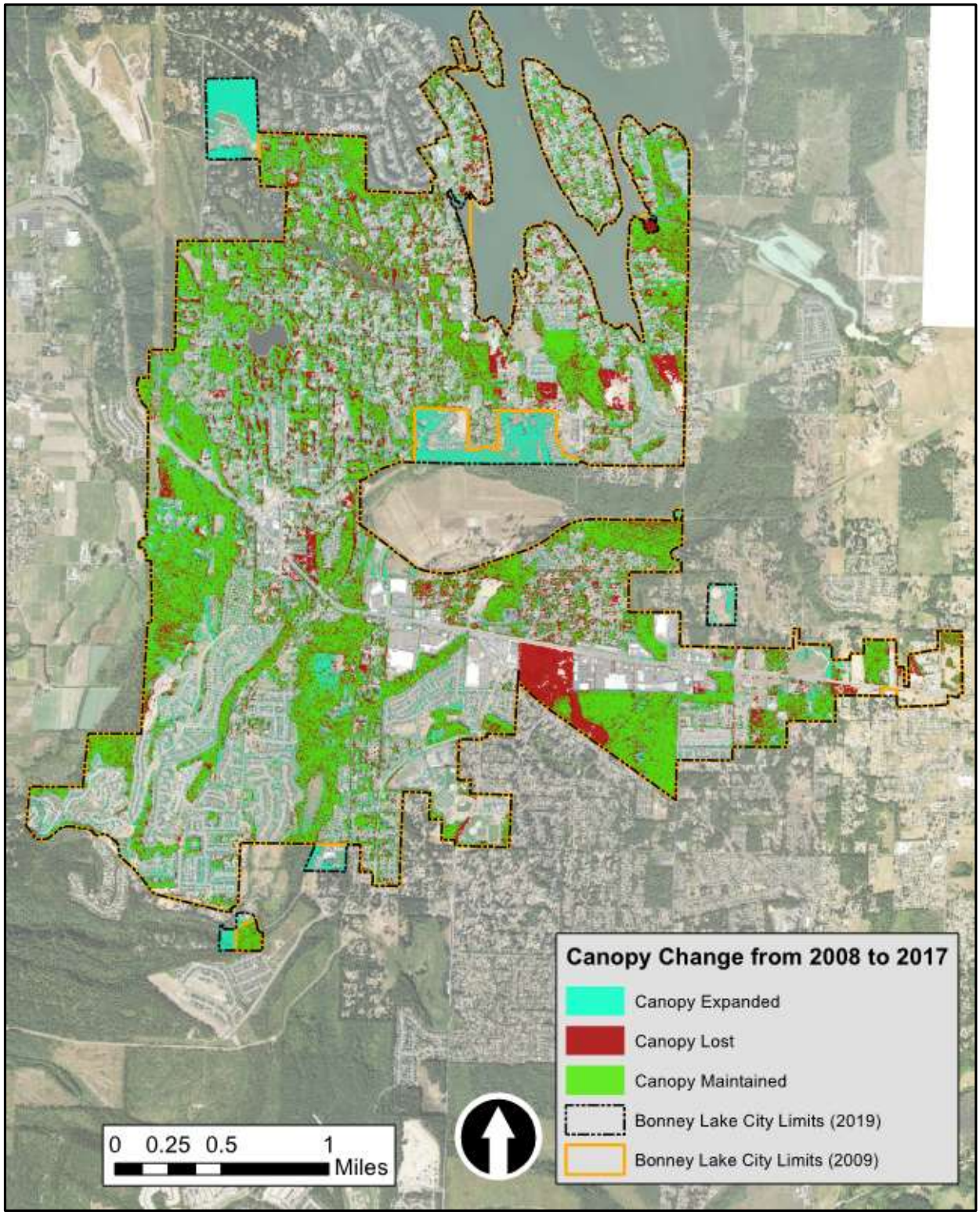
Previous best practice established a 40% canopy coverage as an average for urban areas. However, as of 2017, this is no longer the best practice.[37] Based on existing impervious surface, future population projections, and a land use analysis the City has established a new canopy goal of 38%. . The urban canopy is concentrated in existing residential and open space areas. Revisions to the clearing and landscaping codes that

[35] Davey Resource Group. (March 2011). *City of Bonney Lake Washington: Urban Tree Canopy Assessment*. Prepared for the City of Bonney Lake.
[36] To learn more about the Tree City USA program, visit: https://www.arborday.org/programs/treecityusa/
[37] The Watershed Company. (November 2019). *Technical Memorandum – Bonney Lake Canopy Analysis*. Prepared for the City of Bonney Lake.

support the protection of this existing canopy and encourages tree replacement will be required in order to meet the 38% goal.

Trees make an important contribution to the aesthetics of the City, as well as the natural environment. Documentation and monitoring of the tree canopy will play an important role in preserving the visual identity and health of the Bonney Lake community. We all live under one canopy and must work together to protect it.

Exhibit 12: Tree Canopy Change, 2008 to 2017



5. AGRICULTURAL LANDS

The GMA requires jurisdictions to prevent conversion of agricultural lands of long-term commercial significance. There are no such lands in the BLUGA. However, as a suburban community located on the edge of the Pierce County's urban growth area boundaries, pockets of agricultural lands of long-term commercial significance surround Bonney Lake. Therefore, the City should work cooperatively with the County to preserve and protect these areas. Additionally, one of the City's proposed additions to the Bonney Lake Urban Growth Area (BLUGA), the Fennel Creek Corridor Area, contain lands designated as agricultural resource lands (ARL). Areas designated as ARL are agricultural lands of long-term commercial significance, which should be preserved and protected, from urban development. The City proposes to preserve these resource lands by designating the areas as Open Space – Conservancy and zoning the areas Residential/Conservancy District that is comparable to 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 framer's markets involved in a wide range of activities including raising, cultivation, processing, marketing, and distribution of food in urban areas.[38] 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 by 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.[39]

[38] National Policy & Legal Analysis Network to Prevent Childhood Obesity. (?). *Seeding the City: Land Use Policies to Promote Urban Agriculture*.
[39] ibid.

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 (1964)*

While air quality is not specifically identified as a critical area, protecting air quality is listed as a goal of the GMA and both the MPPs and CPPs include specific provisions that require the City to establish policies related to air quality. In the Puget Sound Region the primary concern is ground-level ozone, carbon monoxide, and fugitive dust which can damage lung tissue leading to respiratory disease, contribute to cancer and cardiovascular disease, and obscure many of our most scenic vistas, such as views of the Olympic and Cascade mountain ranges, including Mount Rainier.[40]

Air quality in Bonney Lake is monitored and regulated by the Puget Sound Clean Air Agency (PSCAA). The PSCAA is a special purpose, regional government agency covering King, Kitsap, Pierce and Snohomish Counties chartered by state law in 1967 under the Washington State Clear Air Act. The agency 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.

6.1 CRITERIA AIR POLLUTANTS

The Federal and Washington State Clean Air Acts have established ambient air quality standards for different air pollutants. The Federal Clean Air Act of 1970 (amended in 1977 and 1990) established the national ambient air quality standards (NAAQS) for six "criteria" pollutants which are known to be hazardous to human health:

- Carbon monoxide (CO)
- Ozone (O3)
- Nitrogen dioxide (NO2)
- Particulate matter (PM10 and PM2.5)
- Sulfur dioxide (SO2); and

[40] Puget Sound Regional Council. *Vision 2040*. 2008 pg. 39.

- Lead (Pb),.

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 in the Puget Sound region: particle pollution and ozone (smog), which can cause heart attacks, strokes, asthma attacks and even premature death.[41]

6.2 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 several health problems, including cancer and birth defects, as well as damage to lungs, immune systems and nervous systems. In our region, health risk from air toxics comes primarily from fine particles in diesel exhaust.[42]

6.3 GREENHOUSE GAS EMISSIONS

> *Residential areas should be protected from the dangers of fire, explosions, toxic, noxious matter, and other similar objectionable influences.*
>
> - *Bonney Lake Comprehensive Plan (1985)*

In addition to the air quality, cities in the central Puget Sound Region are required to address climate change. While addressing climate has been added as a mandatory elements established in RCW 36.70A.070 by way of HB 1181 (2023) this change is not required for the 2024 periodic update cycle. However, the City is required to be consistent with adopted MPPs and CPPs pursuant to RCW 36.70A.100 and RCW 36.70A.210. Both the MPPs and CPPs include specific provisions that require the City to establish goals, policies, strategies, and performance measures related to the reduction of greenhouse gas emissions and to address adaptation to the effects of climate change. Additionally, the City will be required to incorporate a climate element by the time of the 2029 5-year check-in established by HB 1241 in 2022.

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41 PSCAA Website: http://www.pscleanair.org/airquality/airqualitybasics/airtoxics/Pages/default.aspx Accessed on 11/5/14

42 ibid.

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 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.

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, 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 non-recyclable 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 using conservation-based rates and a tiered rate structures for water use.

In Puget Sound region, nearly 40% of the GHGs pollution comes from transportation[43]. The goals and policies in the Community Development Element and Community Mobility Elements attempt to address the GHGs. These goals and policies encourage a local balance of jobs and housing, proximity of shopping, recreational, childcare, and other uses to residential areas, higher intensity land uses near transit, and encourage the use of alternative transportation modes such as transit, walking and bicycling.

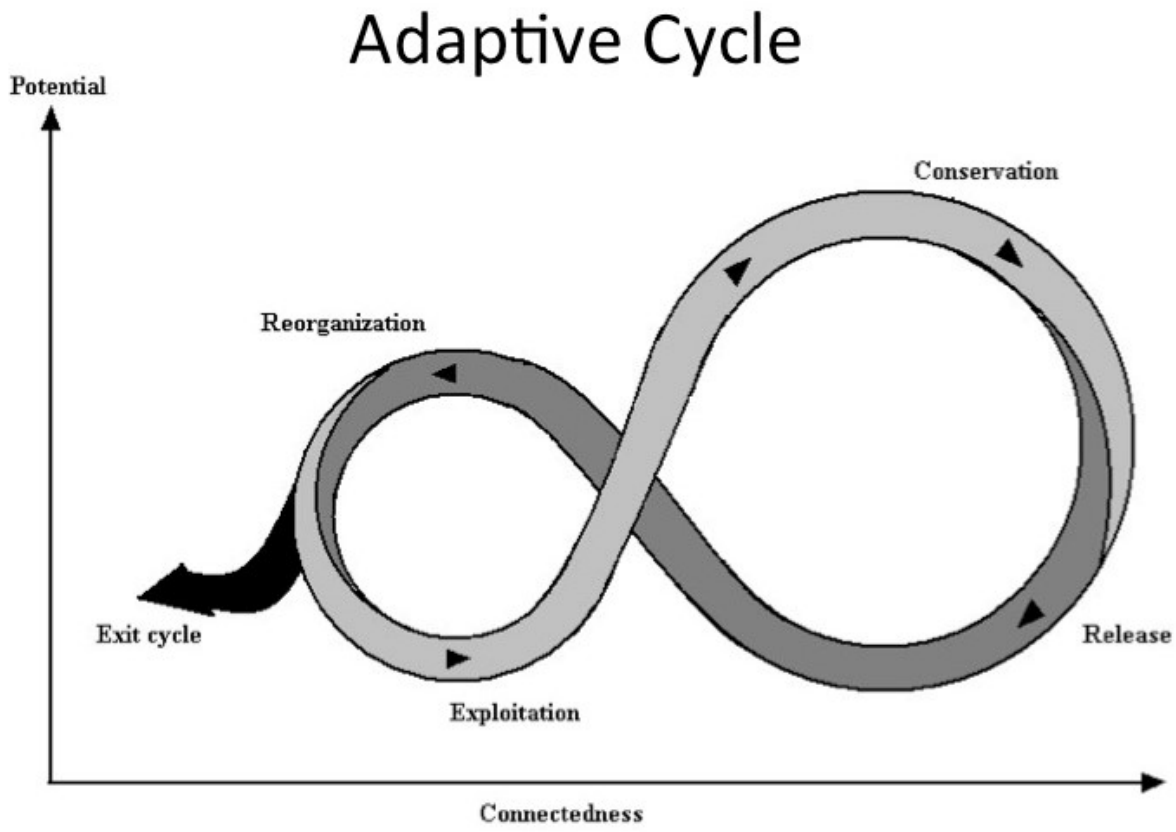
In addition to transportation, GHGs are released during energy production and consumption, such as electricity used to power homes and businesses, and fuel used to power cars and trucks. Reducing the carbon content of the fuel source (e.g., solar or wind power versus fossil fuels) or reducing energy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

[43] Puget Sound Clean Air Agency. *Puget Sound Regional Emission Inventory*. December 2023. Available online at: https://www.pscleanair.gov/DocumentCenter/View/5361/2019-Four-County-GHG-EI-FINAL

7. RESILIENCY

As the instances of natural disaster increase throughout the world, communities must begin planning for how these disasters may affect them. In Pierce County the most frequently occurring natural disaster is flooding. Historically, disaster planning has focused on avoid or minimizing damage from these events. Policies developed today have started focusing on building community resilience and preparing for inevitable disasters and the post-disaster to recovery. In this instance resiliency is the defined as the ability of a community or ecosystem to return to a functioning state and enter into recovery as quickly as possible. Resiliency can be thought of as a cycle as depicted in **Exhibit 13**. This adaptive cycle can be seen in ecological and social systems throughout our world.

Exhibit 13: The Adaptive Cycle[44]



The rapid growth and conservation phases are referred to as the fore loop and characterized by an accumulation of capital and stability. The release and reorganization phases are referred to as the back loop and are characterized by uncertainty and loss of capital, but also novelty and experimentation. In terms of community preparedness, the change from fore loop to back loop is the disruptive event (i.e., natural disaster).

This resiliency approach encourages communities to plan for safety, continuity of operations and delivery of services, and appropriate levels of infrastructure and support during events and for post-disaster recovery. The most likely instances for the City of Bonney Lake to face are flooding and being an area of reception for persons evacuated from surrounding areas during natural disasters. Hazard identification and risk

[44] Holling, C. S., & Gunderson, L. H. (2002). Panarchy: Understanding Transformations in Human and Natural Systems (Edition 1). Washington, D.C.: Island Press.

management for the area are managed by Pierce County and more information about these topics can be found in the Pierce County Hazard Identification and Risk Assessment.

7.1 CLIMATE CHANGE

Resilience thinking acknowledges that social-ecological systems are always changing, and adapting. With climate change, communities must plan for resilience in the face of changes in average temperature, weather conditions, wind patterns, precipitation, and increased variability in the frequency and severity of extreme weather events.

Likely impacts of climate change on the City are changes in rain and snowfall patterns, residents moving to the area because of sea-level rise impacting other parts of the region, an increased need to invest in infrastructure that can accommodate greater fluctuations in service, and economic changes.

7.2 FLOOD

Flooding is the most common hazard in Pierce County. Of particular risk are areas of the City within special flood hazard areas. However, other low-lying areas of the City and isolated "potholes" or closed depressions can be at risk of flooding, and once these areas flood the water can remain for the rest of the wet season. Flooding impacts about 50% of the population of Pierce County each year.[45] Mapping these low-lying and closed depressions could alert residents that might not otherwise prepare for flood events. This was demonstrated during the flooding of a portion of the City during February of 2016.

7.3 FIRE

While wildfires can be a natural part of the adaptive cycle in healthy forests, the densely knit rural-urban divide brings these fires too close to our homes, our neighbors, and our livelihoods. All communities face some risk for fire, but 2020 demonstrated that this risk is closer and more real than we would have thought given the extended wet season experienced in the South Sound Region.

Likely impacts from fire include temporary loss of air quality, sudden need for shelter/evacuation planning, temporary loss of ingress and egress from the City, loss of

[45] Pierce County Department of Emergency Management. (n.d.). Pierce County Hazard Identification & Risk Assessment (March 2015 Edition). Retrieved from https://www.co.pierce.wa.us/DocumentCenter/View/7032/HIRA?bidId=

telecommunication systems, loss of tree canopy, increase risk of landslide, and a need for long-term recovery management that focuses on soil health and stability. A focus on resiliency acknowledges that fires will happen, but community education, emergency preparedness, and established plans for recovery can save our homes and our lives.

Exhibit 14: Sumner Grade Fire, 2020

Image Credit: WSDOT

7.4 DROUGHT AND HEATWAVES

Bonney Lake's beauty and quality of life are likely to change if a long-lasting drought impacts the area. These impacts can include habitat reduction for birds, insects, and amphibians, impacts on water distribution, impacts on tourism, and higher risk of wildfire. A resilient community prepares for these changes and develops interdisciplinary networks of professionals before disaster strikes to ensure resources are in place to address these changes before the change impact day to day living.

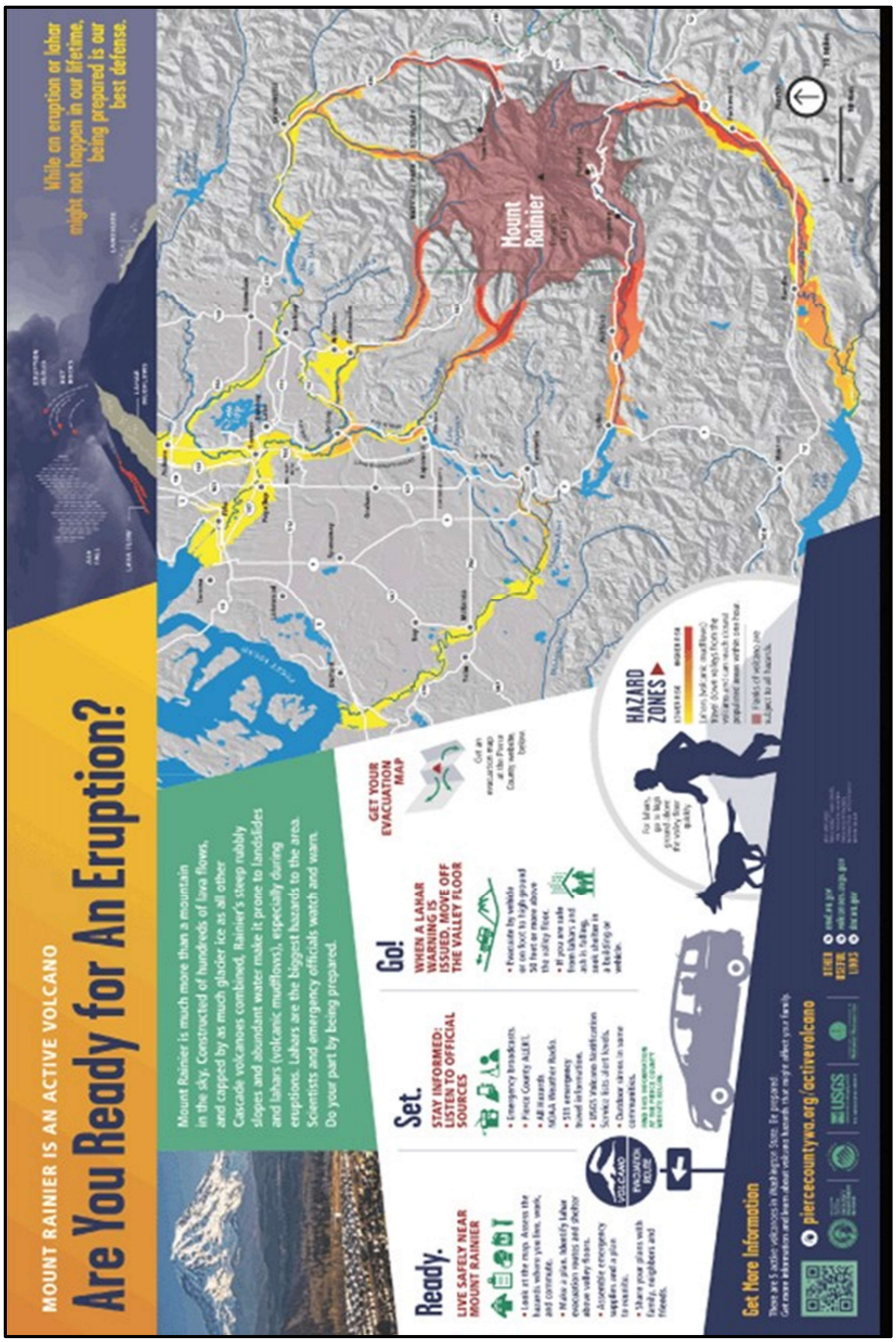
7.5 EARTHQUAKE

As evaluated in section 3.1 of this chapter, areas with steep slopes may be at higher risk of liquefaction and landslide. Many of the homes in the southern portion of the City could be impacted by seismic event. The City has taken steps to strictly regulate development in these higher risk areas. Additionally, close geographic proximity to volcanos has increased the general population's awareness of the risk of earthquake and the potential effects of an event. In addition to preparing residents for an earthquake event, the City is likely to be impacted by transportation disruption, energy disruption, and an influx of evacuees from other areas during an event.

7.6 VOLCANIC

While flood may be the most common event in Pierce County, a volcano event would impact the largest segment of the population. The immediate and secondary impacts of such an event would be far-reaching and long-lasting. Resilient communities prepare for these events, understanding they are inevitable even if they never happen in our lifetime. Investment in early alert systems and communication systems that will function and be accessible during an event are important aspects of preparedness, volcanoes give warning signs before they erupt. Additionally, education and outreach can help citizens understand risks (see **Exhibit 15**). Bonney Lake is an evacuation site for residents in other areas of Pierce County.

Exhibit 15: Are You Ready for An Eruption?[46]



[46] Pierce County Emergency Management. (n.d.). Mount Rainier is an Active Volcano Are You Ready for An Eruption [Interpretive Image]. Retrieved from https://www.piercecountywa.gov/3730/Mount-Rainier-Active-Volcano

7.7 TRANSPORTATION ACCIDENT HAZARD

Of unique risk to the City of Bonney Lake is the impact of a transportation accident hazard. The road system in Bonney Lake has been defined, extensively, by housing development. A resilient streets system has built-in redundancies that ensure that emergency personal and citizens have multiple travel routes regardless of transportation mode or temporary obstructions.

Sustainable transportation systems are best achieved by planning transportation around pedestrians. Pedestrian focused transportation promotes interconnected grids of closely spaced streets, readily available parking, and increased density.[47] In addition to cul-de-sac development, the dependence on State Route 410 to provide routes throughout the City puts the transportation at risk of being devastated during a medium to large vehicle accident or road system failure. These issues are addressed more fully in the Mobility Element of this plan.

[47] Tumlin, J. (2012). Sustainable Transportation Planning: Tools for Creating Vibrant, Healthy, and Resilient Communities. Hoboken, NJ: John Wiley & Sons, Inc.

8. ENVIRONMENTAL STEWARDSHIP GOALS AND POLICIES

The policies in this section identify actions the City should consider over the upcoming planning period to achieve the stated goals.

Goal ES-1	**Enhance coordination among cities, counties, federally recognized tribes, federal and state agencies, utilities, and other partners to protect, preserve, and restore environmental resources for current and future population.**	
Policies:	**ES-1.1**	Coordinate with Tribes, local and reginal jurisdictions, and community partners to restore and enhance the Puget Sound watersheds to a more natural state.
	ES-1.2	Coordinate with Tribes, local and reginal jurisdictions, and community partners to identity, mitigate, and adapt to the impacts of climate change on regional hydrological systems and local critical area.
	ES-1.3	Maintain and enhance the ecological, social, and economic benefits provided by a healthy Puget Sound environment.
	ES-1.4	Support implementation of the Puget Sound Partnership's action agenda.
Goal ES-2:	**Protect the environment, public health, and property from erosion, landslides, and unnecessary scars on the land that could occur as part of development.**	
Policies:	**ES-2.1**	Discourage development and disturbance of native vegetation on steep slopes.
	ES-2.2	Require buildings to be set back from the toe and top of steep slopes.
	ES-2.3	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.
	ES-2.4	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.

	ES-2.5	Ensure that soils are suitable for the development proposed. Where soil suitability is questionable, require review by a geotechnical engineer.
	ES-2.6	Maintain existing vegetation to the greatest extent possible in order to prevent erosion. In cases where development necessitates removal of vegetation, a reasonable amount of landscaping should be required to replace trees, shrubs, and ground cover removed during construction.
	ES-2.7	When erosion hazard areas are disturbed, require erosion control measures, and limit the duration of site exposure.
	ES-2.8	Enforce building codes designed to prevent earthquake damage.
Goal ES-3:	**Protect the quality and supply of groundwater used for public water supplies to ensure reliable current and future sources of safe and drinkable water for Bonney Lake and the region.**	
Policies:	**ES-3.1**	Evaluate, monitor and mitigate 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.
	ES-3.2	Work with Pierce County, the Washington State Department of Ecology, Tribes and any relevant liable or engaged parties to protect Bonney Lake's water supply from contaminants originating inside and outside the city limits
	ES-3.3	Periodically review and update land use policies, regulations, development, or operating standards to ensure the use of best available science for meeting and exceeding levels of groundwater recharge while preventing degradation of groundwater quality.
	ES-3.4	Manage surface water to maintain and improve water quality, maximizing groundwater recharge.
	ES-3.5	Require new subdivisions and commercial development to connect to public sewers.
	ES-3.6	Encourage homes and businesses with septic systems to connect to public sewers.

	ES-3.7	Use the best available science (BAS) to protect and enhance groundwater quality.
	ES-3.8	Require regular water quality monitoring and improvement projects to ensure safe drinkable water for all residents regardless of race social, or economic status, accounting for potential impacts of climate change on water quality.
Goal ES-4:	**Preserve, restore, and enhance the quality of surface waters to provide high quality natural habitats protected from point and non-point pollution sources.**	
Policies:	**ES-4.1**	Protect water bodies from point and non-point sources of contamination and nitrification.
	ES-4.2	Promote the enhancement or restoration of surface waters as adjacent development activities occur.
	ES-4.3	Protect against erosion of drainage channels.
	ES-4.4	Encourage land developments to maximize stormwater infiltration.
	ES-4.5	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.
	ES-4.6	Preserve vegetative buffers along streams and drainage ways to enhance water quality, protect habitat, and prevent erosion.
	ES-4.7	Mitigate stormwater related impacts through best management practices based on the best available science.
	ES-4.8	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.
	ES-4.9	Construct the Fennel Creek corridor environmental improvements identified in the 1999 Environmental Analysis of the Fennel Creek Corridor.
	ES-4.10	Continue to purchase property along the Fennel Creek Corridor to preserve the corridor and consider using property around the creek as wetland mitigation sites.

	ES-4.11	Work with Tribes, local and regional jurisdictions, and community partners to restore local freshwater bodies identifying and mitigating potential impacts from extreme weather events.
Goal ES-5:	**Minimize risks to life and property resulting from flooding and preserve habitat associated with floodplains.**	
Policies:	**ES-5.1**	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 floodplain.
	ES-5.2	Protect floodplains from filling, excavating, and other activities that would interfere with natural drainage patterns and negatively affect the habitat functions.
	ES-5.3	Preserve and enhance floodplains to provide for natural flood storage protection and habitat functions.
	ES-5.4	Require new development and redevelopment designs to minimize hazards associated with flooding and limit the amount of runoff that contributes to flooding.
	ES-5.5	Design new city development and redevelopment projects to minimize hazards associated with flooding and extreme weather events, limiting the amount of runoff that contributes to flooding.
	ES-5.6	Research and evaluation the implementation of development incentives for projects incorporating climate mitigation and adaptation strategies into their stormwater design criteria.
	ES-5.7	Coordinate the implementation of flood mitigation and adaptation measures based on the best available science for development already built within flood zones.
Goal ES-6:	**Protect and enhance natural habitat, groundwater recharge, and floor attenuation functions performed by wetlands.**	
Policies:	**ES-6.1**	Ensure that wetland buffers are adequately sized to protect functions and values of wetlands.
	ES-6.2	Ensure a no net loss of wetland functions and values.
	ES-6.3	Avoid denying all reasonable use on any parcel.

	ES-6.4	Protect wetlands from water quantity or quality impacts stemming from improper stormwater management.
	ES-6.5	Encourage environmental stewardship programs aimed at wetland preservation.
	ES-6.6	Pursue implementation of a wetland mitigation-banking program.
	ES-6.7	Use the best available science when assessing wetland values and functions.
Goal ES-7:	**Preserve, restore, and enhance fish and wildlife habitat conservation areas.**	
Policies:	**ES-7.1**	Preserve habitats for species, which the federal or state government have identified, as endangered, threatened, or sensitive.
	ES-7.2	Further the conservation of sites that protect fish and wildlife habitat conservation areas through incentives or acquisition.
	ES-7.3	Support the restoration of ecological functions and the natural environment in environmentally damaged areas by offering incentives.
	ES-7.4	Protect and enhance water quality in lakes and streams using the best available science in coordination with local and regional jurisdictions, Tribes, and community organizations.
	ES-7.5	Promote clustered developments, common areas, buffers, conservation easements, and retention of native vegetation as a means of conserving critical habitat.
	ES-7.6	Use the best available science in measures preserving, restoring, and enhancing fish and wildlife habitats, giving special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish habitat.
	ES-7.7	Coordinate conservation or protection measures of anadromous fish habitat in partnership with local Tribes.
Goal ES-8:	**Establish and maintain a healthy urban forest with an overall tree canopy goal of 38percent.**	
Policies:	**ES-8.1**	Protect and conserve open space and transition buffers between urban and rural areas.

	ES-8.2	Preserve and protect public views of the mountains and valley corridors.
	ES-8.3	Practice land cover management, which includes forest and topsoil preservation, native growth protection easements, dense vegetative zones, and preservation of the tree canopy.
	ES-8.4	Protect significant trees and, promote tree replanting, and the use of native plants in residential and commercial development and redevelopment.
	ES-8.5	Support the preservation of native vegetation and mature trees, revegetation, and appropriate landscaping to improve the quality of air, water, and fish and wildlife habitat.
	ES-8.6	Promote the use of native plants in residential and commercial landscapes.
	ES-8.7	Maintain the City urban forestry in-lieu fee program to assist the City in establishing or preserving urban tree canopy.
	ES-8.8	Provide opportunities to engage the Tree Board as advisors and stakeholders committed to the preservation of our tree canopy.
Goal ES-9:	**Preserve and protect agricultural resource lands and urban agriculture sites to improve access to healthy foods, build social connections, and provide locally sourced foods.**	
Policies:	**ES-9.1**	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.
	ES-9.2	Allow continued agricultural production in areas which are producing such products but are not currently in designated agricultural resource lands as long as such production is appropriate in compatible with surrounding urban context.
	ES-9.3	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.
	ES-9.4	Protect property owner's rights to cultivate gardens to produce fresh fruits and vegetables and to keep a limited number of farm animals through the City's development regulations.

	ES-9.5	Expand access to community gardens through Bonney Lake to increasing availability of locally sourced fresh produce while reducing greenhouse gas emissions.
	ES-9.6	Remain open to further designations of agricultural resource lands on land shown to merit that designation.
	ES-9.7	Ensure that land uses proposed adjacent to lands designated, as agricultural resource lands are compatible with agricultural activities.
	ES-9.8	Support community education programs providing opportunities to learn about urban agriculture and ways to use and access healthy foods locally, especially for communities that experience greater barriers accessing healthy foods.
	ES-9.9	Identity and mitigate the potential impacts of climate change on local agricultural lands, systems, and working condition.
Goal ES-10:	**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) and ensuring that overall air quality meets or exceeds State and Federal standards.**	
Policies:	**ES-10.1**	Support efforts of other local, regional, and State agencies to improve regional air quality.
	ES-10.2	Coordinate land use planning and local transportation planning to reduce the potential for long-term exposure to criteria air pollutants and toxic air contaminants.
	ES-10.3	Reduce the air quality impacts created by truck traffic, hazardous materials, and development through transportation investments that reduce vehicle miles traveled and greenhouse gas emissions.
	ES-10.4	Continue to implement the policies adopted by Resolution 2049.
	ES-10.5	Encourage energy efficiency in site design, building orientation, landscaping, and utilities/infrastructure for all development and redevelopment projects.
	ES-10.6	Pursue renewable energy sources as part of new and existing city buildings and infrastructure projects.
	ES-10.7	Incentivize renewable energy sources for new and existing buildings and infrastructure projects proposed in the city.

	ES-10.8	Identify and publish a citywide approach to increasing energy efficiency and greenhouse gas emission reductions.
	ES-10.9	Evaluate the implementation of incentive opportunities to encourage desired energy efficiency practices within site design, building orientation, landscaping, and utility/infrastructure for all development and redevelopment projects.
Goal ES-11:	**Develop disaster preparedness management systems with a focus on community resilience that prepares the Bonney Lake community to withstand, adapt, and recover from disaster in a responsive and healthy manner.**	
Policies:	**ES-11.1**	Improve and retrofit existing infrastructure and develop future infrastructure to withstand a variety of compounding severe weather events ranging from droughts to floods, prioritizing improvements to communities most vulnerable to these events.
	ES-11.2	Cooperate with other agencies in preparing emergency management plans to respond to a lahar originating on Mount Rainer, an eruption of Mount Rainer, or an earthquake along the Cascadia Subduction Zone or the Nisqually Fault Line.
	ES-11.3	Develop and update maps that identify areas of the City most at risk of hazards and develop resiliency resources and education programs for citizens likely to be impacted, prioritizing resources and programs for citizens most vulnerable within these areas.
	ES-11.4	Develops plans for managing event evacuees and, when appropriate, enter into inter-local and mutual aid agreements to help manage temporary population influx from disasters.
	ES-11.5	Develop a continuity of operations plan that identifies the City's essential functions and provides procedures for notifications, orders of succession, delegation of authority, alternate locations, essential records, and reconstitution.
	ES-11.6	Evaluate urban forestry program and codes for incorporation of fire prevention and preparedness best practices.
	ES-11.7	Complete a Risk and Resilience Analysis and develop an Emergency Response Plan for drinking water infrastructure.
	ES-11.8	Coordinate with other local and regional agencies and community organizations in preparing emergency management plans to respond to a variety of compounding severe weather

events ranging from droughts to floods, prioritizing improvements to communities most vulnerable to these events.

ES-11.9 Ensure members of the public receive timely concise information and instructions to proactively respond when an emergency strikes, especially for communities disproportionately impacted in emergency situations.

ES-11.10 Coordinate with Tribes, local and regional jurisdictions, and community groups to explore the logistics of joining a Pierce County coalition to address the impacts of climate change on a regional scale, recognizing the clear danger posed by climate change, and its potential to drastically impact quality of life, the natural and built environment, and human health and safety for future generations.

ES-11.11 Require the incorporation of climate resiliency measures in all new development, especially new critical infrastructure and public facilities.

Environmental Stewardship Element

Envision BONNEY LAKE
Celebrating 100 Years

TABLE OF CONTENTS

LIST OF EXHIBITS

1. INTRODUCTION

The purpose of the Environmental Stewardship Element is to provide a framework to guide decision making ~~in regards to~~ regarding the conservation, management, and utilization of Bonney Lake's natural resources. The topics in ~~this~~ the Enviromental Stewardship element overlap with other elements in the Comprehensive Plan, including the Community Development, Public Facilities and Services, and Mobility Elements. However, the Environmental Stewardship 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.

1.1 REGULATORY CONTEXT

Growth Management Act

In 2023, the Washington State Legislature passed major updates to environmental goals (RCW 36.70A.020) and mandatory element requirements (RCW 36.70A.070) in the Growth Management Act (GMA), adding a climate change and resiliency element and affirming the importance of shoreline management planning to local comprehensive planning efforts. The requirement for a climate change and resiliency element is conditioned on the availability of state funds (RCW 36.70A.070(10)). This component is due in 2029, if funding is provided.

~~While all elements of the Comprehensive Plan have equal weight under the Growth Management Act (GMA) – Chapter 36.70A RCW~~With this update, ~~four~~ six (6) of the ~~fourteen~~ 15 goals of the GMA specifically pertain to environmental conservation and enhancement:

- **Natural Resource Industries:** Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forestlands 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, and increase access to natural resource lands and waters.
- **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~~ Participation and ~~coordination~~Coordination:** Encourage the involvement of citizens in the planning process and ensure coordination between communities and jurisdictions to reconcile conflicts.

- **Climate Change and Resiliency:** Adapt to and mitigate the effects of a changing climate through reductions in greenhouse gas emissions, preparing for climate impact scenarios, fostering resiliency to climate impacts and natural hazards, protecting and enhancing health and safety, and advancing environmental justice.

- **Shorelines:** When a community contains shorelines of the state, the Shoreline Master Program is considered an element of the Comprehensive Plan (see **Chapter 8**).

While a separate Environmental Stewardship Element is not a mandatory element required by RCW 36.70A.070, it is required to ensure that the City's Comprehensive Plan is consistent with the GMA goals and the adopted Multi-County Planning Policies (MPPs) and County-Wide Planning Policies (CPPs), as required by RCW 36.70A.100. This Element also addresses the importance of the environment to the community, protecting local water supplies, and to preserving and enhancing natural systems and habitats.

The GMA requires the City to designate critical areas and to adopt development regulations to protect such areas, consistent with the environmental goals in RCW 36.70A.020. The goals and policies in this Element support the preparation and implementation of these regulations. Critical areas are defined as the following areas and ecosystems in RCW 36.70A.030(5):

- Wetlands;
- Areas with a critical recharging effect on aquifers used for potable water;
- Fish and wildlife habitat conservation areas;
- Frequently flooded areas; and
- Geologically hazardous areas (susceptibility to erosion, sliding, earthquake, or other geological events).

Lastly, the GMA also directs local governments to identify lands that are useful for public purposes and to identify open space corridors within urban growth areas that are useful for recreation, open spaces, wildlife habitat, trails and connections of critical areas (RCW 36.70A.160). The City has completed this work as part of the **Parks, Trails, Recreation and Open Space Plan** (**Appendix TBD**).

Multi-County Planning Policies (MPPs)

The Puget Sound Regional Council (PSRC) adopted MPPs in VISION 2050[1]. These policies encourage local jurisdictions to adopt coordinated strategies, policies, and actions to ensure the region's needs are met. This Element was prepared to be consistent with VISION 2050 in the following areas:

- **Open Space and Habitat**: Protecting, enhancing, and restoring open spaces, including natural lands, farmlands, working forests, aquatic systems, regional trails, and parks.
- **Puget Sound Recovery**: Protecting and restoring critical habitat, converting hardened shorelines back to more natural conditions, protecting aquifers, promoting and installing stormwater infrastructure, and upgrading sewage and septic facilities to improve water quality and water supplies across the region.
- **Air Quality**: Reducing air pollution and greenhouse gases to improve health outcomes and access to the scenic vistas that make the Puget Region a high-quality place to live.

County-Wide Planning Policies (CPPs)

Pierce County adopted updated CPPs in 2022[2] that further refine how municipal comprehensive plans are drafted and adopted. This Element was prepared to be consistent with the CPPs in the following areas:

- **Regional Coordination:** Work across jurisdictions to cooperatively identify, protect, enhance and restore natural resources, critical areas, and open space.
- **Open Space:** Plan for and provide access to open space for all segments of the population, regardless of socioeconomic status.
- **Watershed Planning:** Coordinate efforts across jurisdictional boundaries to plan for natural systems at their natural boundaries.
- **Development Regulations:** Use best available science to regularly update development regulations for the built and natural environments.
- **Air Quality:** Reducing air pollution from particulates, toxics, and greenhouse gases.

[1] Available online at: https://www.psrc.org/planning-2050/vision-2050
[2] Available online at: https://online.co.pierce.wa.us/cfapps/council/iview/proposal.cfm?proposal_num=2022-29

1.2 ORGANIZATION

The Element is divided into ~~five~~ the following sections~~.~~ :

- **Section 2:** Regional Coordination acknowledges the importance of local tribes as stewards of this land since time immemorial, and the role of future coordination in environmental planning.
- **Section 3: Critical Areas** ~~The first section~~ addresses the preservation and protection of environmental critical areas~~:~~, including (1) ~~geological hazards~~geologically hazardous areas, (2) ~~critical aquifer recharge~~aquifer and wellhead protection areas, (3) surface water~~s~~, (4) ~~floodplains~~frequently flooded areas, (5) wetlands, and (6) fish and wildlife habitat areas.
- **Section 4: Urban Forestry** ~~The second section addresses urban forestry and~~ is focused on the steps needed to maintain, preserve, and enhance Bonney Lake's tree canopy.
- **Section 5: Agricultural Lands** ~~The third section~~ addresses the need for the City to protect agricultural resource lands and promote urban agriculture.
- **Section 6: Air Quality** relates ~~The fourth section provides policies related~~ to regulating air pollution, toxic air contaminates, and greenhouse gas emissions.
- **Section 7: Resiliency** ~~The final section~~ focuses on building community resilience in the face of inevitable change.
- **Section 8: Environmental Stewardship Goals and Policies** ~~The policies in the Element are~~contains goals and policies based on best available science ~~and~~ that are meant to guide day-to-day City decisions on topics related to the protection of the environment.

~~2. ENVIRONMENTAL STEWARDSHIP VISION~~

~~Bonney Lake is a city that preserves, enhances, and responsibly uses the area's 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 for the enjoyment of Bonney Lake residents. Bonney Lake's surface water provides 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 community and protecting the rights of property owners'.~~

2. REGIONAL COORDINATION

Bonney Lake is framed within a beautiful natural setting, with open spaces, an abundance of trees, scenic mountain vistas, and watersheds provide habitat functions, recreational enjoyment, and contribute to the City's general quality of life. Therefore, preservation and restoration of these environmental resources require a regional approach and coordination among cities, counties, federally recognized tribes, federal and state agencies, utilities, and other partners. The City of Bonney Lake will be taking additional steps to coordinate planning efforts with local Tribes as directed by Substitute House Bill 1717[3] (HB 1717), enacted in 2022.

[3] Available online at: https://app.leg.wa.gov/billsummary?billnumber=1717&year=2022

3. CRITICAL AREAS

The Washington State Growth Management Act (GMA) and implementing rules require cities to protect environmental critical areas, which include:

- Maintaining functions and values of hydrological ecosystems and watersheds through the protection, preservation, and restoration of wetlands, lakes, rivers, ponds, streams, and floodplains. As part of preventing pollutants from entering the waters of the state, jurisdictions subject to the U.S. Environmental Protection Agency (EPA) National Pollution Discharge Elimination System (NPDES) must also comply with all permit requirements and are encouraged to adopt the Department of Ecology's *Stormwater Manual for Western Washington* or the equivalent, incorporate relevant land-use recommendations from adopted local watershed plans, and adopt a clearing and grading ordinance.

- Identifying and providing policies to conserve, connect, restore, and prevent impacts to fish and wildlife habitat conservation areas (FWHCA); however, not every parcel of land that provides habitat for wildlife constitutes fish and wildlife habitat. [4] FWHCA only include areas where endangered, threatened, and sensitive species have a primary association; habitats and species of local importance (determined locally); commercial and recreational shellfish areas; kelp and eelgrass beds; herring, smelt, and other forage fish spawning areas; naturally occurring ponds under twenty acres and submerged aquatic beds that provide fish or wildlife habitat; waters of the state; lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity; and state natural area preserves, natural resource conservation areas, and wildlife areas.[5]

- Designating and providing policies to protect the functions and values of geological hazardous areas and preventing impacts associated with development within geological hazardous areas. Geological hazardous areas are areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development. There is no affirmative mandate associated with this definition except to "protect the functions and values." However, if a local jurisdiction, as the City has, requires lower densities in geologically hazardous

[4] *Pilchuck, et al v. Snohomish County*. Final Decision and Order. Case Number 95-3-0047c. (December 6, 1995).

[5] WAC 365-190-130(2)

areas, the geologically hazardous areas must be mapped using "best available science."

- Designating and providing policies to protect the functions and values of Critical Aquifer Recharge Areas (CARAs) and preventing impacts associated with development within CARAs. 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.[6] Potable water is an essential life sustaining element for people and once contaminated it is difficult, costly, and sometimes impossible to clean up. Preventing contamination is necessary to avoid exorbitant costs, hardships, and potential physical harm to people and ecosystems.[7] Therefore, WAC 365-190-100(3) requires cities to classify recharge areas for aquifers according to aquifer vulnerability.

Policies to protect the functions and value of critical areas are mandated to be based on "best available science."[8] The CPSGMHB in *DOE/CTED v. City of Kent* referencing *Honesty in Environmental Analysis and Legislation v. Seattle*, 96 Wn. App. 522, 979 P.2d 864 (1999) stated, that the"…purpose of the best available science requirement is to ensure that critical areas regulations are not based on speculation and surmise, but on meaningful, reliable, relevant evidence."[9] The CPSGMHB also found in Kent that there is no bright-line definition of "best available science" but rather a requirement to consider the following factors as established in *Ferry County v. Concerned Friends of Ferry County, et al.*, 155 Wn.2d 824, 123 P.3d 102 (2005):

> (1) The scientific evidence contained in the record; (2) Whether the analysis by the local decision-maker of the scientific evidence and other factors involved a reasoned process; and (3) Whether the decision made by the local government was within the parameters of the Act as directed by the provisions of RCW 36.70A.172(1).

In other words, a jurisdiction is not required to win the scientific argument, but only to demonstrate that the jurisdiction's policies and regulations are based on reliable evidence reviewed through a reasoned process. In 2019, the City participated in a robust

6 WAC 365-090-030(3)
7 WAC 365-190-100(1)
8 RCW 36.70A.172(1)
9 *Washington State Department of Ecology and Washington State Department of Commerce, Trade, and Economic Development v. City of Kent*. Final Decision and Order. Case Number 05-3-0034. (April 19, 2006).

update of its critical area's ordinance using best available science to update and change the ordinance to better serve and protect the community.

Maps presented in this Element are for reference purposes only and not intended to identify precise locations of critical areas or environmental features. At the time of development, best available information including site-specific analysis will determine the presence or absence of such features.

3.1 GEOLOGICALLY HAZARDOUS AREAS

The geological foundation of the Bonney Lake area consists of impermeable sedimentary 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 **Exhibit 1** illustrates soil associations within the City of Bonney Lake. Soil associations consist of one or more major soils and other minor soils but 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.

~~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.

~~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 ago[10]. Buckley loam soils make up nearly 70% of this association but includes small amounts of Alderwood, and other minor soil types making

[10] Dragovich J.D, et. al. (September 1995) *Liquefaction Susceptibility for the Sumner 7.5-minute Quadrange, Washington*. Prepared for Washington State Department of Natural Resources.

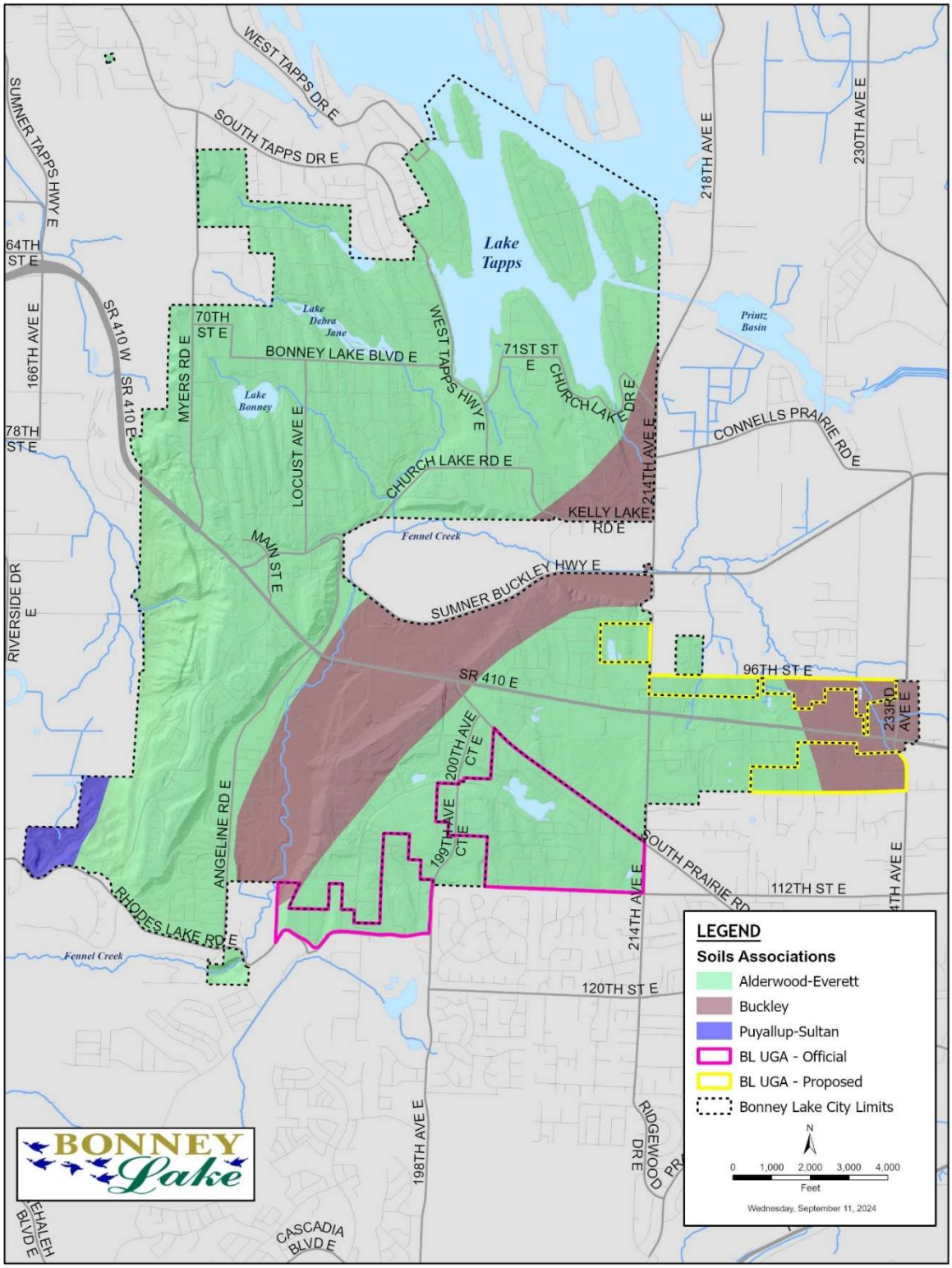
it a hydric soil that is favorable for pasture and hay farming. The soil can support residential developments if there is access to community sewage facilities.[11]

The remaining one (1)% consists of the Puyallup-Sultan association, which is well suited to both farming and residential development.[12]

[11] 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).

[12] ibid.

Exhibit 1: Soil Associations



Source: Prepared by the City of Bonney Lake, courtesy of Pierce County Planning and Public Works. Data from USDA Soil Conservation Service, April 3, 2000.

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". ~~Below is~~This subsection contains a discussion of the four main geological hazards in Bonney Lake~~:~~.

Landslide Hazards

> *Bonney Lake is surround 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 (1964)*

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 the steepness of the slope and the presences of unconsolidated glacial materials. Slopes generally collapse when rainstorms oversaturated the soil on the slope. Such failure is especially likely where a permeable layer lies atop a less permeable layer because percolating water seeps out at the layer boundary.

Exhibit 2 and **Exhibit 3** illustrate~~s~~ the areas of Bonney Lake with a high and moderate susceptibility to shallow or deep landslides**.** The data contained in **Exhibit 2** and **Exhibit 3** was created based on modeling developed by the Department of Natural Resources and not site-specific evaluations. Therefore, **Exhibit 2** and **Exhibit 3** should only be used as a screening tool to highlight areas where further site-specific investigation is needed to determine if there is truly susceptibility to either a shallow or deep landslide[13].

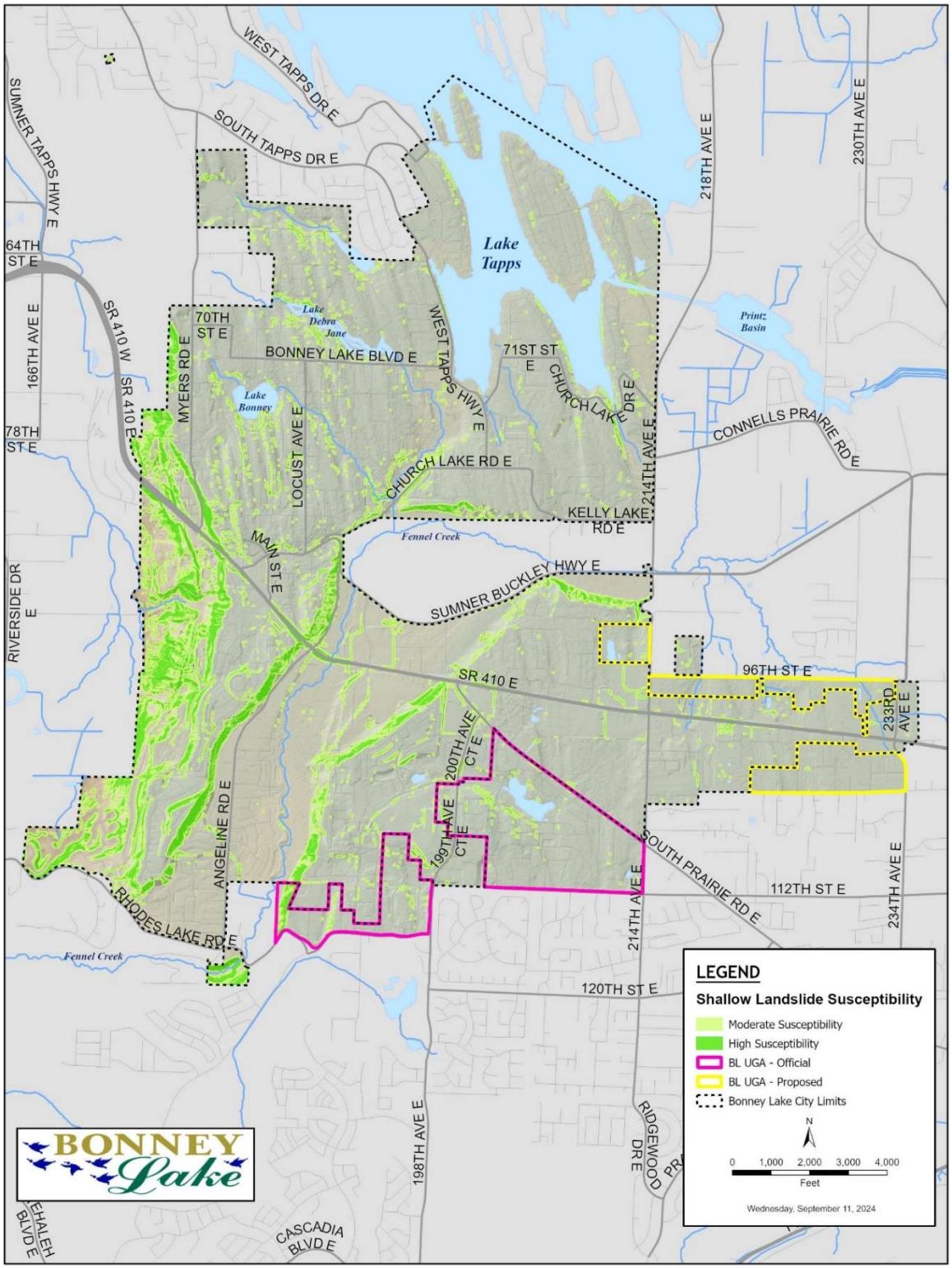
The City categorizes landslide hazard areas into two categories~~.~~:

- **Class 1** landslide hazard areas have slopes that:
  - ~~a~~Are 40~~ percent~~% or greater with a vertical relief of 10 feet or more; or
  - ~~have slopes that a~~Are 25~~ percent~~ % or greater with a vertical relief of 10 feet or more and two (2) or more limiting factors detailed in the Critical Areas Ordinance.
  - These ~~class~~ Class 1 landslide hazard areas are undevelopable.

[13] Mickelson, K. A.; Jacobacci, K. E.; Contreras, T. A; Biel, Alyssa; Slaughter, S. L. (2017) *Landslide Inventory, Susceptibility, And Exposure Analysis Of Pierce County*, Report of Investigations 39,

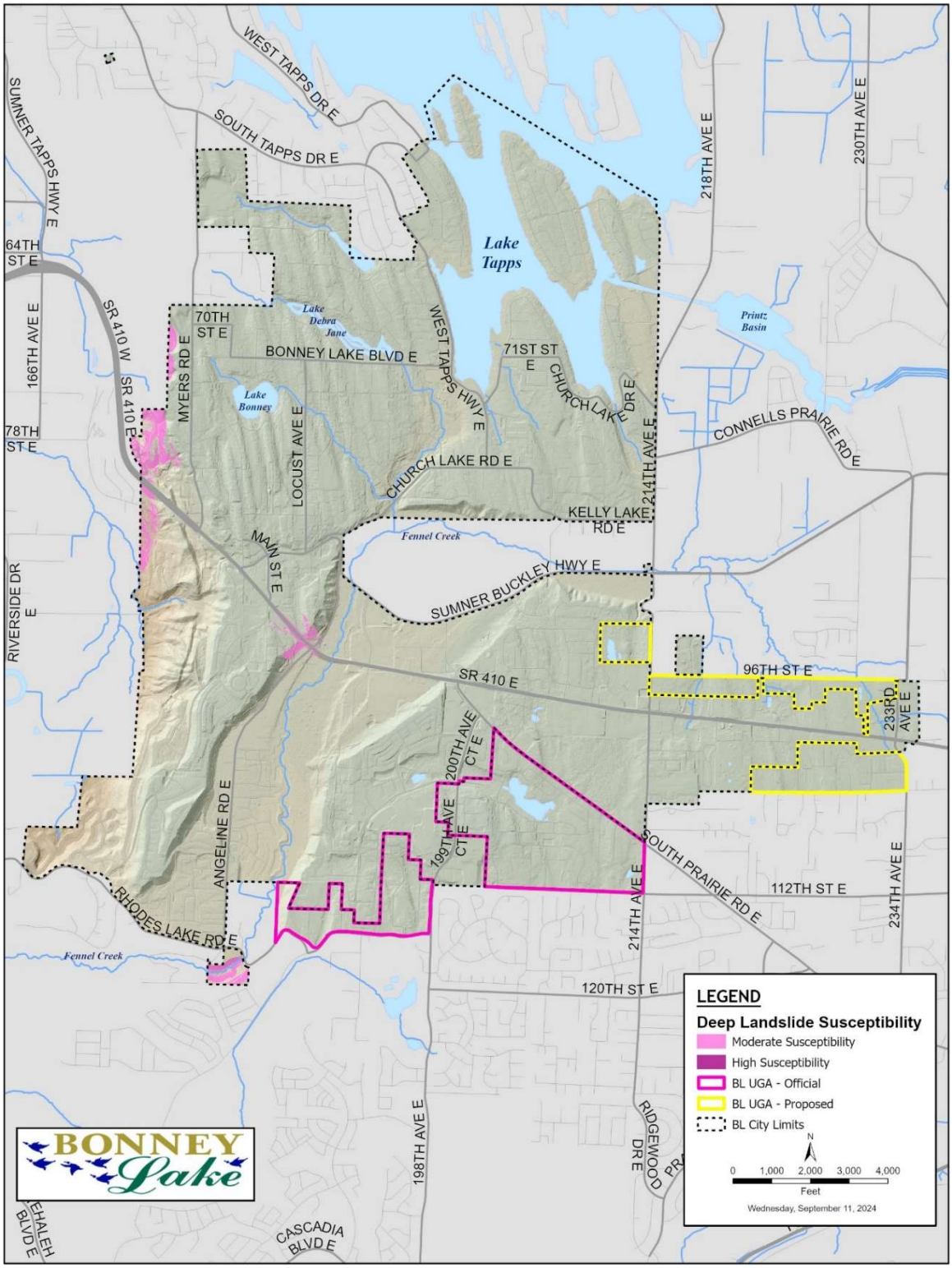
- **Class 2** landslide hazard areas have slopes that:
  - ~~of~~Are 25~~ percent~~% to 39~~ percent~~% with a vertical relief of 10 feet or more that~~ but~~ do not have two (2) or more additional limiting factors;
  - Are ~~and areas with slopes of~~ 15% to 25~~ percent~~% with a vertical relief of 10 feet or more and have additional risk factors.
  - Class 2 landslide hazard areas also include engineered slopes like those in the Sky Island, Panorama Heights, and Panorama West developments.
  - Class 2 landslide hazard areas may be buildable but require some special precautions. These categories are designed to protect citizens and their private property from damage during natural disasters.

Exhibit 2: Shallow Landslide Susceptibility



Source: Prepared by the City of Bonney Lake, courtesy of Pierce County Planning and Public Works. Data from Washington Geological Survey, November 6, 2017.

Exhibit 3: Deep Landslide Susceptibility



Source: Prepared by the City of Bonney Lake, courtesy of Pierce County Planning and Public Works. Data from Washington Geological Survey, November 1, 2018.

Erosion Hazards

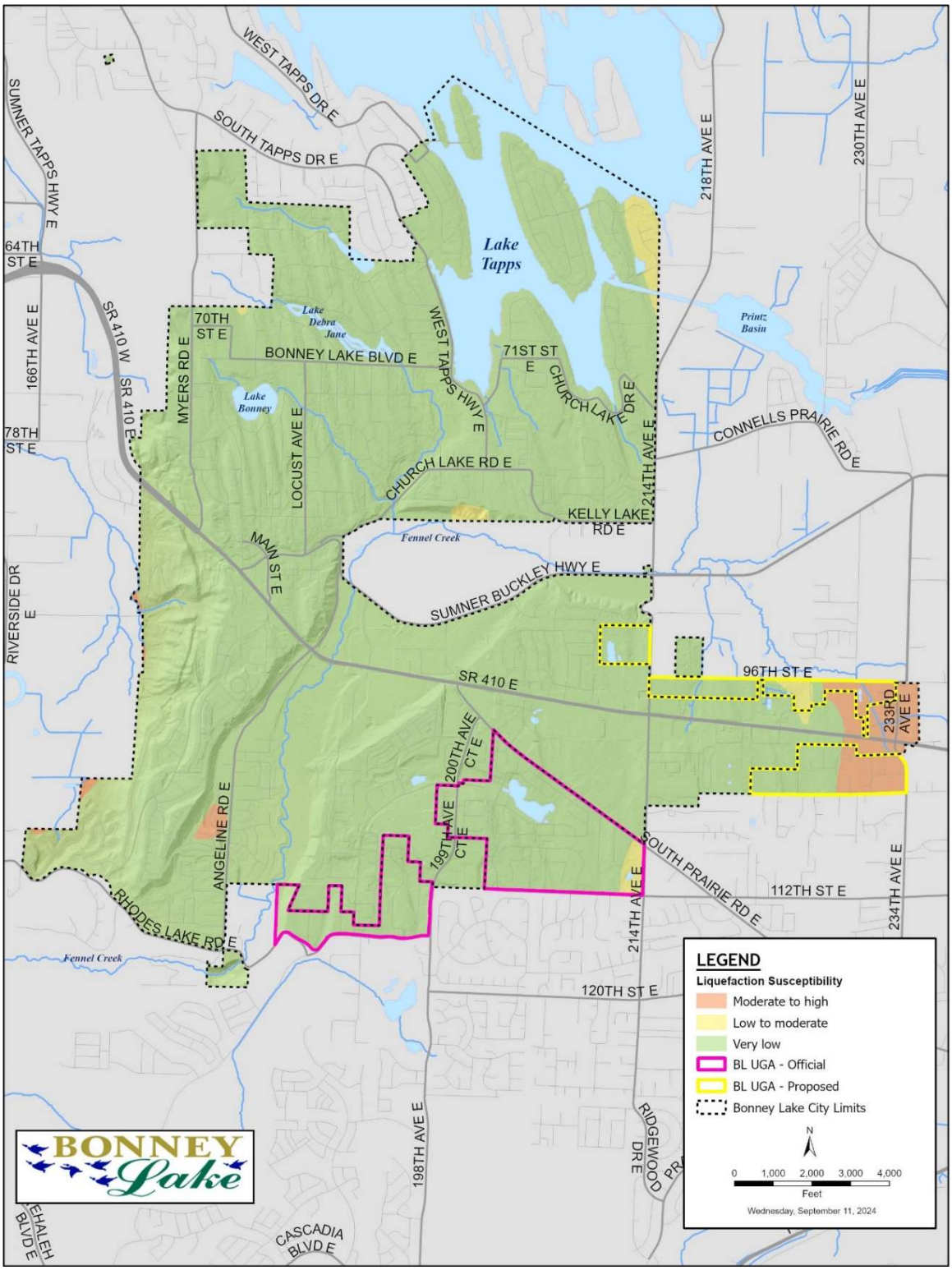
In addition to landslides, land clearing, earth movement, and unmanaged stormwater can cause erosion, which damages the site itself, the downstream drainage network, and aquatic habitat. The finer the soil and the steeper the slope, the greater the erosion hazard. The City utilizes the U.S. Department of Agriculture's Natural Resources Conservation Service data to identify these areas,

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 behave as a liquid, similar to quicksand.[14] The City utilizes data from the Washington Department of Natural Resources to identify these areas. The majority of the City has a low risk of liquefaction as illustrated in **Exhibit 4**.

[14] Dragovich J.D, et. al. (September 1995) *Liquefaction Susceptibility for the Sumner 7.5-minute Quadrange, Washington*. Prepared for Washington State Department of Natural Resources.

Exhibit 4: Liquefaction Susceptibility



Source: Prepared by the City of Bonney Lake, courtesy of Pierce County Planning and Public Works. Data from Washington Department of Natural Resources, undated. Retrieved September 11, 2024.

Volcanic Hazards

Mount Rainier, a dormant volcano, is the highest peak in the Cascade Range and carries a larger load of glacier ice than any other mountain in the contiguous United States, posing geologic hazards during both future eruptions and periods without eruptive activity especially given the Mountain's great topographic relief.[15] Bonney Lake is far enough away to avoid lava flows and landslides. However, in addition to these associated hazards, lahars that originate on Mount Rainier or an eruption of Mount Rainier could affect the plateau. There are four types or cases of lahars:

- **Case M:** This is a low-probability and high-consequence lahar. The Osceola Mudflow is an example in this category which occurred about 5,600 years ago and has occurred on Mount Rainier only once in in the last 10,000 years. [16]
- **Case I:** This type of lahar has occurred once every 500 to 1,000 years during the last 5,600 years. The annual probability of such a flow originating somewhere on Mount Rainier is about 0.1 to 0.2 percent. The Electron Mudflow, which reached the Puget Lowland about 600 years ago via the Puyallup River, is the most recent example.[17]
- **Case II:** The typical recurrence interval of this type of lahar is near the lower end of the 100-to-500-year range. The annual probability of such a flow is close to 1 percent for the volcano as a whole. For planning purposes, Case II flows are analogous to the 100-year flood commonly considered in engineering practice. Some Case II flows have inundated flood plains well beyond the volcano and a few have reached the Puget Lowland. Case II flows have a very low clay content. The most common origin for this class of flow is melting of snow and glacier ice caused by hot rock fragments during a volcanic eruption. An example is the National Lahar, which occurred about 2,000 years ago in the Nisqually River valley.[18]
- **Case III:** This type of lahar is small but has a recurrence interval of 1 to 100 years for the volcano as a whole. This class of flow includes small debris avalanches as well as lahars. Case III flows are not triggered by an eruption but are largely restricted

[15] Cakir R. and Walsh T. (May 2012) *Loss Estimation Pilot Project for Lahar Hazards from Mount Rainier Washington.* Prepared for the Washington State Department of Natural Resources.
[16] ibid
[17] ibid
[18] ibid

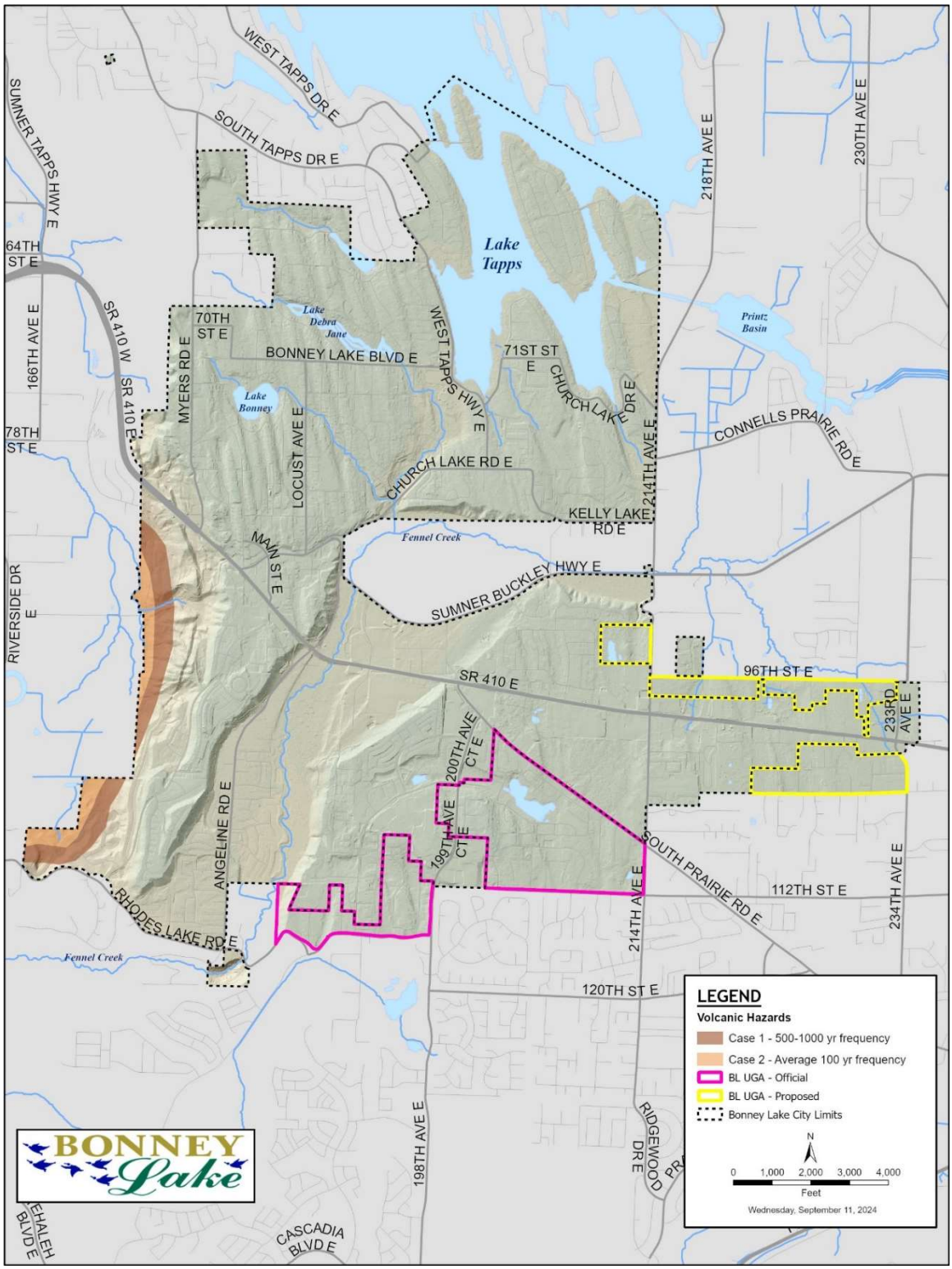
to the slopes of the volcano and rarely move beyond the National Park boundary.[19]

Portions of the City could be impacted by a Case I lahar that flows down either the Carbon River or Puyallup River valleys or by Case M lahars that flowed down the White River valley. Case I, Case II, Case III lahars that flowed down the White River or by Case M lahars that flowed down either the Puyallup River or Carbon River valleys would not affect the Bonney Lake.[20]

Given the extremely ~~low~~ low-probability of a Case M lahar, less than 0.1% of all lahars that have originated on Mount Rainier, areas impacted only by this case of lahar are not considered to be within the volcanic hazard area zone as delineated by the Washington State Department of Natural Resources as illustrated in **Exhibit 5** ~~7-5~~. Areas impacted by a Case M lahar and the blast zone for an eruption of Mount Rainier, while not officially designated as a volcanic hazard area due to the low annual probability of these events are illustrated in **Exhibit 6**.

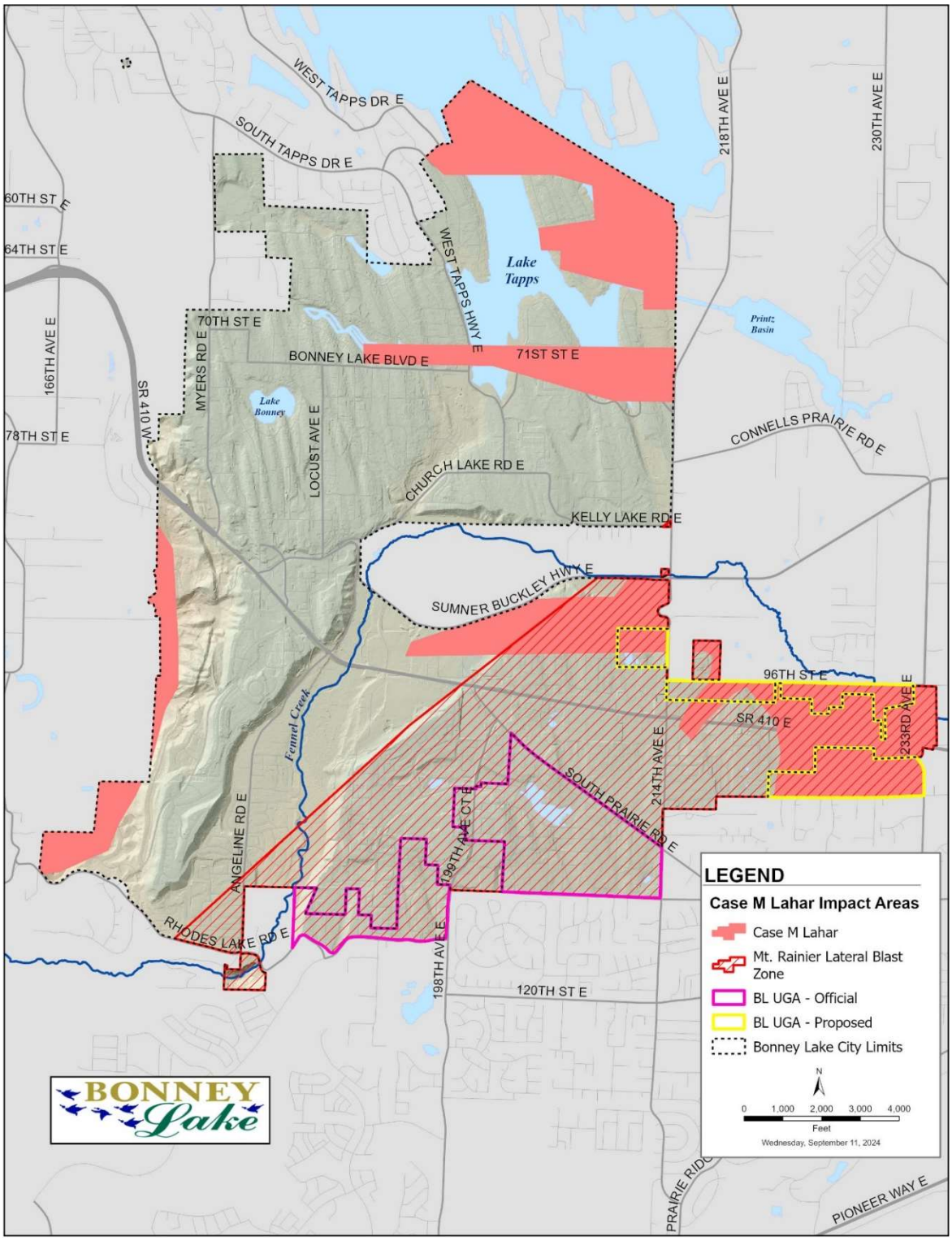
[19] ibid
[20] ibid

Exhibit 5: Volcano Hazard Zone



Source: Prepared by the City of Bonney Lake, courtesy of Pierce County Planning and Public Works. Data from Washington Department of Natural Resources, June 5, 2013.

Exhibit 6: Case M Lahar Impact Areas



Source: Prepared by the City of Bonney Lake. Data from Washington State Department of Natural Resources, Information Circular 113, May 2012, and United States Geological Survey, Open-File Report 98-428, September 18, 2013.

3.2 AQUIFER AND WELLHEAD PROTECTION AREAS

Potable water is an essential life sustaining element for people. ~~and o~~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.[21] A primary source of potable water in the City is aquifers, which are geologic formations that readily transmit~~s~~ water to wells or springs.

~~The City of Bonney Lake has a robust Water System Plan and Wellhead Protection Program. Grainger Springs has a 100-foot sanitary control area and is at moderate risk of contamination from the source area. Victor Falls Springs is at high risk for contamination from septic systems in the source area.~~

The importance of protecting 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:

- **RCW 36.70A.070:** ~~land~~ Land use elements are required to provide for protection of the quality and quantity of groundwater used for public water supplies.
- **WAC 365-190-100:** ~~aquifer~~ Aquifer recharge areas are designated as environmental critical areas.

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, as 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

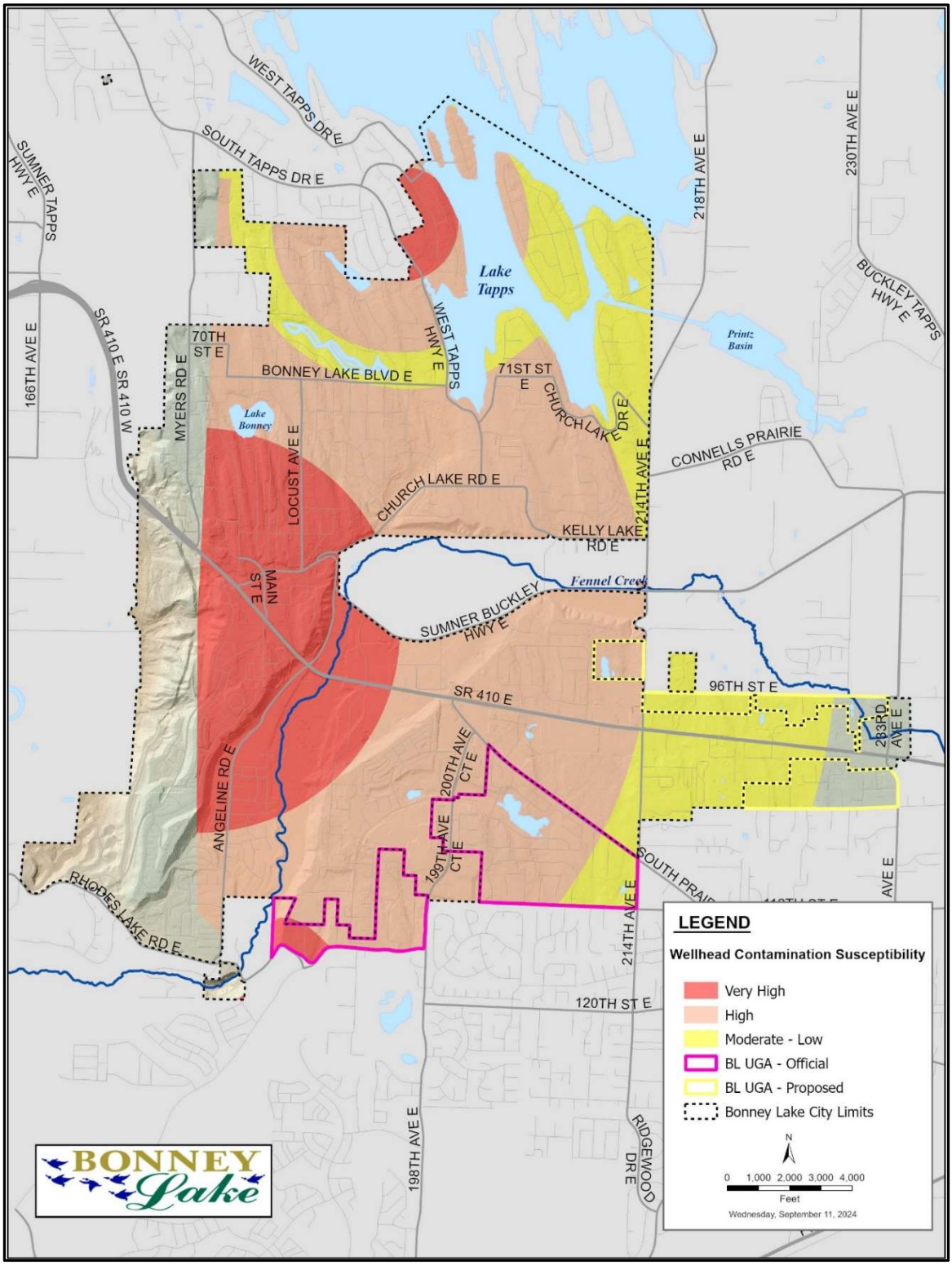
[21] WAC 365-190-100(1)

impervious surfaces may result in higher concentrations of contaminants than would otherwise occur.

The City of Bonney Lake has a robust Water System Plan and Wellhead Protection Program. Grainger Springs has a 100-foot sanitary control area and is at moderate risk of contamination from the source area. Victor Falls Springs is at high risk for contamination from septic systems in the source area.

In order to protect 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 CARAs. Additionally, the City has designed the one-year TOT zone as having very high contamination susceptibility, the five-year TOT zone as having high contamination susceptibility, and the 10-year TOT zone as having moderate to low contamination susceptibility (see **Exhibit 7**). These designations promote protection of wellheads which are sites most at risk for spreading contamination into the aquifer. The 2019 update to the Critical Areas Ordinance defined wellhead protection areas and integrated protections for wellheads into the existing CARA protections.

Exhibit 7: Wellhead Contamination Susceptibility



Source: Prepared by the City of Bonney Lake, RH2 Engineering, March 1, 2002.

3.3 SURFACE WATER

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

- *Bonney Lake Comprehensive Plan (1985)*

The 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 affect 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 regulates stormwater discharge from municipal storm drain systems under a nationwide permit to prevent impacts to surface waters as the result of development, which is referred to as the National Pollutant Discharge Elimination System (NPDES). 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.

The Washington Department of Fish and Wildlife has provided new guidance in *Riparian Ecosystems – Volume 2: Management Recommendations* (Riparian Guidance)[22] dated ~~May 2018~~December 2020. Using this new guidance, the City established riparian management zones (RMZs) around streams based on the site potential tree height (SPTH), which is the average maximum height of the tallest dominant trees (200 years in age or more) for a given site class. Along the City's streams:

- ~~I~~The SPTH is between 191 feet and 204 feet[23] ~~based on the draft WDFW Priority Habitats & Species (PHS) Riparian Ecosystems: Site Potential Tree Height online mapping tool accessed on March 14, 2019~~August 18th, 2023.
- The RMZ for fish bearing streams (shown as Type "F" in **Exhibit 8**) was established as 200 feet, or at one (1) SPTH as recommended in the Riparian Guidance. This

[22] Available online at: https://wdfw.wa.gov/publications/01988

[23] Based on the draft WDFW Priority Habitats & Species (PHS) Riparian Ecosystems: Site Potential Tree Height online mapping tool, accessed on August 18, 2023.

will also help protect the water quality of Fennel Creek, a priority documented in the City's Watershed Protection Plan.

- The RMZ for non-fish bearing perennial streams (shown as Type "Np" in **Exhibit 8**) was established at 120 feet, which is ~~sixty percent~~60% of one SPTH as recommended in the Riparian Guidance.
- The RMZ for non-fish bearing ~~perennial~~ seasonal streams (shown as Type "Ns" in **Exhibit 8**) was maintained at ~~thirty-five (35)~~70 feet based on existing site conditions and consultation with WDFW, as recommended in the Riparian Guidance.

Lake Tapps

The Pacific Coast Power Company constructed Lake Tapps between 1909 and 1911 by diverting water from the White River into a diked area of the plateau. The 2,500-acre lake, 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)*~~this Comprehensive Plan.

Lake Bonney

Lake Bonney is a ~~seventeen~~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.

Between 2004 and 2007, the lake was 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 lake eutrophication with decreasing water quality and aesthetic values, odor problems, and algae blooms during the summer due to the presence of sunlight and nutrients.[24]

Since 2014, Lake Bonney has shown generally increasing TSI (Trophic State Index) scores indicating improving lake health. 2018 data classifies Lake Bonney as mesotrophic. [25] Lake Bonney did exceed the State's standards for fecal coliform bacteria in 2012 and

[24] 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.

[25] 2018 Bonney lake Annual Lake Report. City of Bonney Lake: Volunteer Lake Monitoring Program. Prepared by Pierce Conservation District for the City of Bonney Lake.

2013 but met the State's standards in 2014.[26] In efforts to improve the health of the lake, the City included a required vegetative conservation area[27] within 20 feet of the lake to be installed when property owners make waterward improvements on their lots.

Lake Debra Jane

Lake Debra Jane is about 15 acres in size and ranges from seven (7) to ~~fifteen~~ 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 grows in the weeds along the shoreline, especially in the summer. Lake Debra Jane is a mesotrophic lake.[28]

The lake has a history of total coliform counts that have been in gross excess of the Department of Ecology's standards and occasionally exceeds the standards of the Pierce County Health Department.[29] In efforts to improve the health of the lake, the City included a required vegetative conservation area27 within 20 feet of the lake to be installed when property owners make waterward improvements on their lots.

Fennel Creek

Fennel Creek begins at a spring near the intersection of SR-410 and 234th Ave E flowing 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 3 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. This reach is an Urban Natural Open Space consisting of a high value riparian corridor with multiple vegetation layers and a

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[26] Ragland, I. (2014) City of Bonney Lake: Volunteer Lake Monitoring Program. Prepared by Pierce Conservation District for the City of Bonney Lake.

[27] Under WAC 173-26-221(5)(a), "Vegetation conservation includes activities to protect and restore vegetation along or near marine and freshwater shorelines that contribute to the ecological functions of shoreline areas. Vegetation conservation provisions include the prevention or restriction of plant clearing and earth grading, vegetation restoration, and the control of invasive weeds and nonnative species."

[28] ibid.

[29] RH2 Engineering, Inc. (June 1998). *City of Bonney Lake Wellhead Protection and Monitoring Program – Phase I.* Prepared for the City of Bonney Lake.

predominance of native plant species providing high quality habitat for wildlife species including Coho salmon, cutthroat trout, and winter steelhead, listed as threatened or endangered under the Endangered Species Act (ESA).[30] This portion of Fennel Creek is a Shoreline of the State, discussed in more detail 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.[31] Bonney Lake's greatest concentration of wetlands is along 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 Foster Wheeler Analysis 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.

Bonney Lake Outfall

The Lake Bonney Outlet starts on the eastern shoreline of Lake Bonney and flows for approximately one (1) mile through a series of pipes, culverts, swales, ditches, and open channels in mostly residential areas prior to joining Debra Jane Creek at the southwest of the corner of Church Lake Rd East and Evergreen Drive. Lake Bonney Outlet, upstream of 192nd Avenue Place East is an intermittent watercourse that occasionally flows when

[30] Foster Wheeler Environmental Corporation. 1999. Environmental Analysis of the Fennel Creek Corridor. Pg. 2-75.
[31] ibid.

Lake Bonney fills past its capacity does not support fish due to the lack of stream channels and significant sections of pipes and culverts. Downstream of 192nd Avenue Place East, the Bonney Lake Outlet is a perennial fish bearing stream with hydrology supported by springs and precipitation.

Debra Jane Creek

Debra Jane Creek starts at the outlet in the southeast corner of Debra Jane Lake. Maps show that Debra Jane Creek then flows south through residential and forested areas for approximately 1 mile until it reaches the confluence with Bonney Lake Outlet. Debra Jane Creek, from the outlet at Debra Jane Lake to Allan Yorke Park, is an intermittent stream that occasionally flows when the lake fills past its capacity and does not support fish due to the lack of significant stretches of defined stream channel. Once Debra Jane Creek enters Allan Yorke Park, the stream becomes perennial stream supported by wetland seeps, springs, and precipitation without physical fish barriers (other than passable culverts) downstream from Allan Yorke Park to the confluence of Bonney Lake Outlet, and eventual connection to Fennel Creek. Habitat is suitable for fish use throughout this section, with clear bed/bank, sorted substrate, and complex habitats and is considered a perennial stream with fish use.

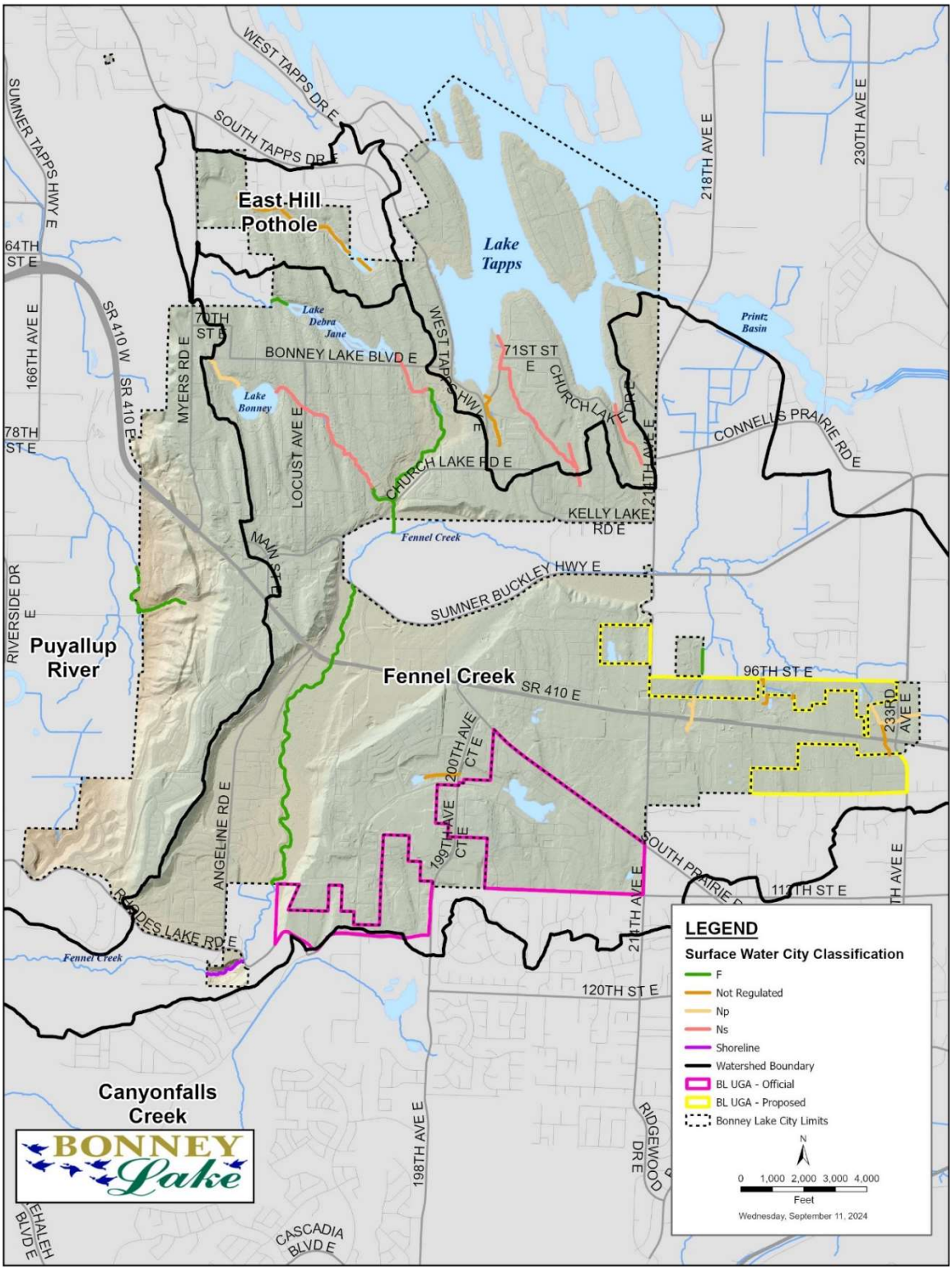
Other Streams

During 2018, the City undertook a stream assessment project. Prior to this assessment that City had mapped and classified most but not all stream located within the City. This assessment confirmed the presence or absence of the streams and assigned a classification per City code, if appropriate. More details regarding the project are available in a Final Stream Assessment Technical Memorandum which was completed by The Watershed Company for the City of Bonney Lake.

Streams evaluated as a portion of this assessment were assigned types consistent with the Bonney Lake Municipal Code, and ~~Washington Administrative Code~~WAC 222-16-030 and 222-16-031. **Exhibit 8** illustrates other small-unnamed streams located in the City.

The Federal Clean Water Act requires that all states restore their waters to be "fishable and swimmable." Washington's Water Quality Assessment, which meets the federal requirements for an integrated report under Sections 303(d) and 305(b) of the Clean Water Act, does not identify any impaired water bodies within Bonney Lake.

Exhibit 8: Surface Waters and Stream Typing



Source: Prepared by the City of Bonney Lake. Data from City of Bonney Lake, Watershed Company, Washington State Department of Fish & Wildlife, January 28, 2019.

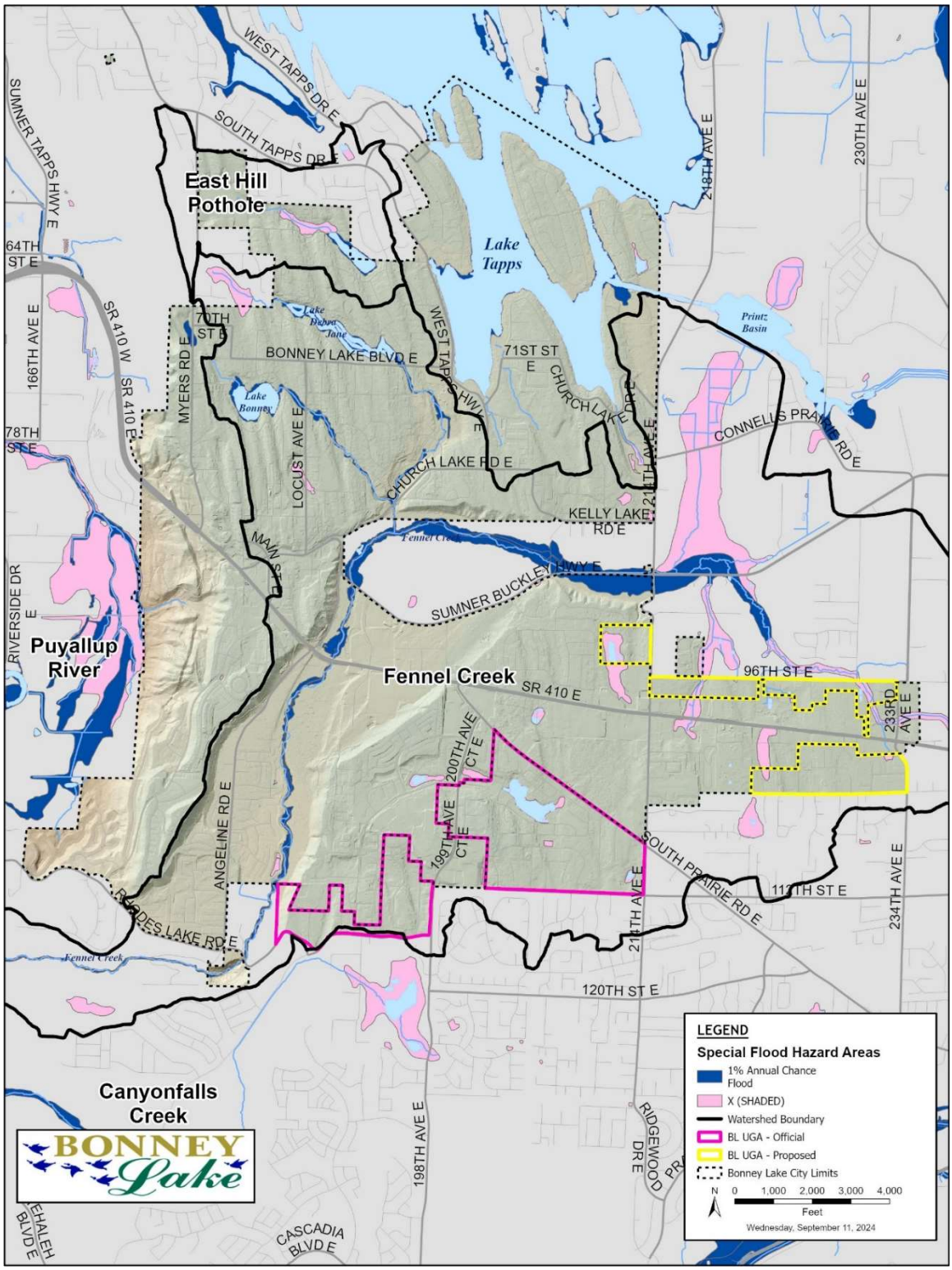
3.4 FREQUENTLY FLOODED AREAS

Flooding is defined as a general and temporary condition or partial or complete inundation of normally dry land areas from the overflow of inland water, the unusual and rapid accumulation of runoff of surface waters from any source, and mudslides which are proximately cause by flooding and are similar to a river of liquid and flowing mud. Flooding can also include the collapse or subsidence of land along the shore of a lake or other body of water a result of erosion or undermining cause by waves or currents or water exceeding average or anticipated levels.

Floodplains are regulated to protect the natural functions and habitat value of these areas and to manage potential risks to public safety. Bonney Lake regulates floodplains as special flood hazard areas, (see **Exhibit 9**), which is defined as land within the community subject to a one percent or greater chance of flooding in any given year.[32] To minimize flood damage, and maintain FEMA flood insurance eligibility, the City has administered floodplain regulations since 1982.

[32] BLMC 16.26.020

Exhibit 9: Special Flood Hazard Areas



Source: Prepared by the City of Bonney Lake, courtesy of Pierce County Planning and Public Works. Data from Federal Emergency Management Agency, May 28, 2024.

Of growing concerns in urban areas are urban stream/groundwater flood hazards. As weather ~~averages~~ patterns ~~change~~ shift, increasing the variability and severity of precipitation events, urban stormwater systems ~~have~~ can ~~trouble~~ face challenges coping with increased rates of development when paired with larger than average storm events, ~~see~~ as in **Exhibit 10**, if not proactively planned for. Urban stream flooding is exacerbated by rain-on-snow events. Sometimes debris can accumulate in stormwater collection systems and reduce the capacity of the system to convey flow.[33]

Exhibit 10: Image of 2016 Flooding at 188th Ave E and 62nd St E

Photo Credit: KOMO News

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

[33] Pierce County Department of Emergency Management. (n.d.). Pierce County Hazard Identification & Risk Assessment (March 2015 Edition). Retrieved from https://www.co.pierce.wa.us/DocumentCenter/View/7032/HIRA?bidId=

(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.[34] 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 wetlands and an undisturbed buffer around the wetland.

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 and in a few other isolated spots.

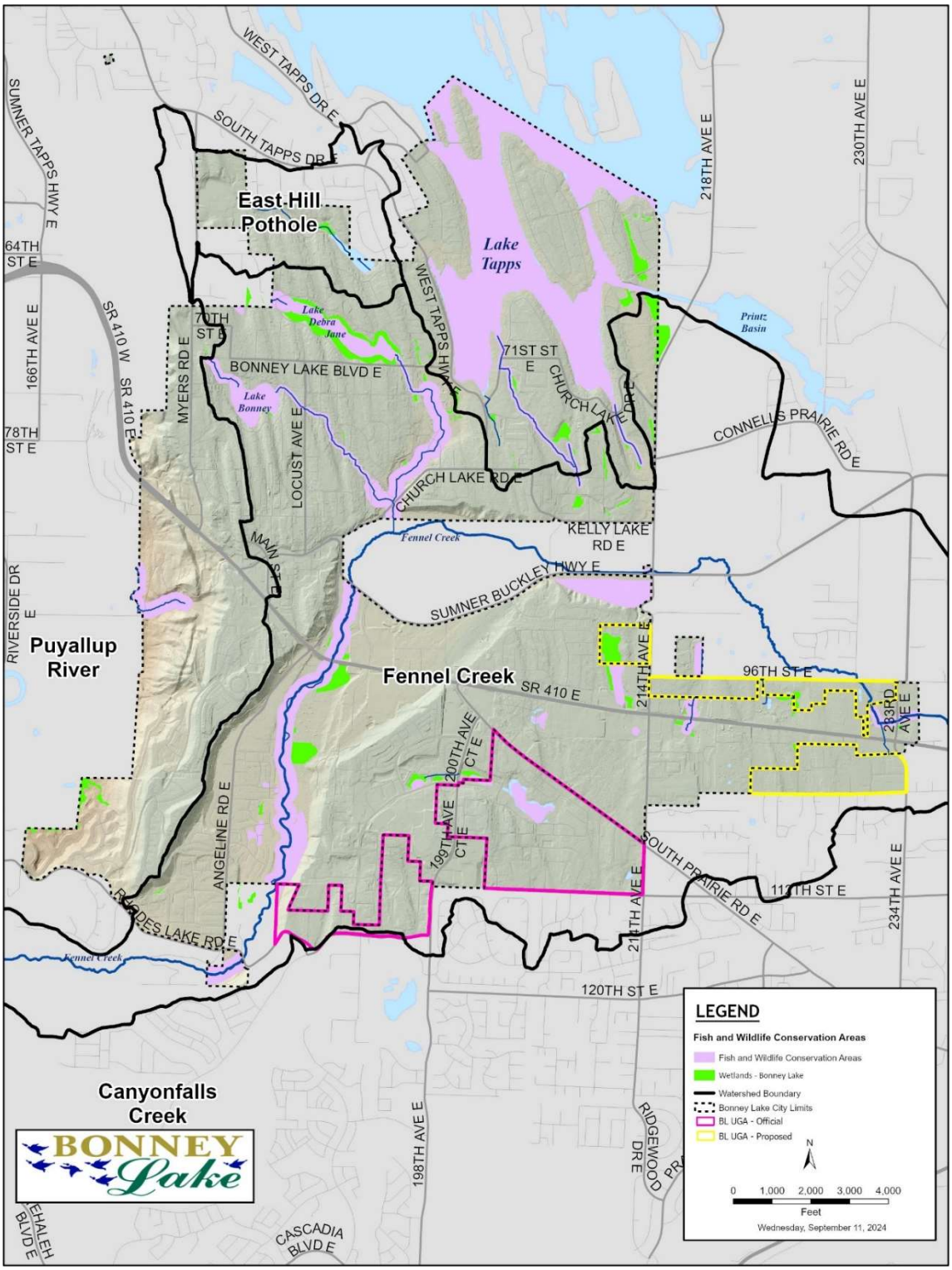
3.6 FISH AND WILDLIFE HABITAT AREAS

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 compatible.

[34] Cooke Scientific Services. (February 2000). *Wetland and Buffer Functions Semi-Quantitative Assessment Methodology (SAM)*.

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." Areas that are considered FWHCA, as determined by the Department of Natural Resources, are illustrated in **Exhibit 11**.

Exhibit 11: Fish and Wildlife Conservation Areas



Source: Prepared by the City of Bonney Lake, courtesy of Pierce County Planning and Public Works. Data from Washington Department of Fish and Wildlife, Department of Health and Department of Natural Resources, May 3, 2023.

4. URBAN FORESTRY

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.

- *Bonney Lake Comprehensive Plan (1985)*

A healthy urban forest contributes to a sustainable City in ~~a number of~~several ways. Trees consume carbon dioxide (CO2), 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 ~~forty~~40-year period, ~~one hundred~~100 urban trees in the Pacific Northwest provide $202,000 in benefits.[35]

~~As~~ Recognized by the Arbor Day Foundation as a Tree City~~,~~ USA[36] since 2005, ~~with~~ Bonney Lake has an active Community Forest Program~~, Bonney Lake~~ and has made a commitment to protect and manage the community's tree resources. As part of this ongoing commitment, the City contracted with the Watershed Company to prepare an analysis of the City's tree canopy. This analysis included a review of the effectiveness of existing codes, trends from recent development, and yield priority recommendations. This analysis was completed in 2019 and utilized high-resolution multispectral aerial imagery to complete a map-based canopy analysis ~~which~~ that compared 2008 and 2017/2018 canopy coverage, see **Exhibit 12**. The analysis revealed a reduction in total coverage percentage from 43% to 34%; ; or 1,872 acres reduced to 1,638 acres of tree canopy.

Previous best practice established a 40% canopy coverage as an average for urban areas. However, as of 2017, this is no longer the best practice.[37] Based on existing impervious surface, future population projections, and a land use analysis the City has established a new canopy goal of 38%. . The urban canopy is concentrated in existing residential and open space areas. Revisions to the clearing and landscaping codes

[35] ~~=~~Davey Resource Group. (March 2011). *City of Bonney Lake Washington: Urban Tree Canopy Assessment*. Prepared for the City of Bonney Lake.

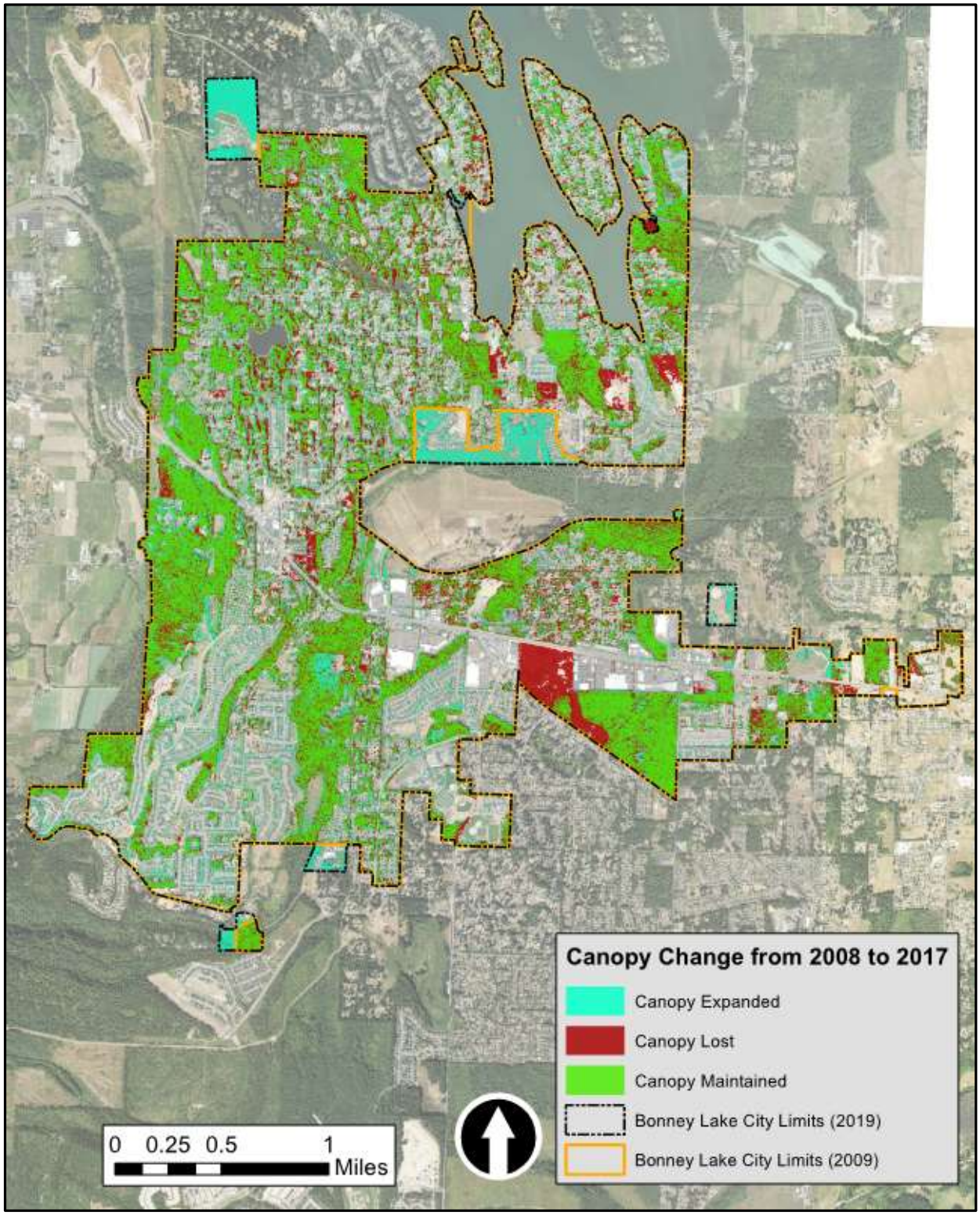
[36] To learn more about the Tree City USA program, visit: https://www.arborday.org/programs/treecityusa/

[37] The Watershed Company. (November 2019). *Technical Memorandum – Bonney Lake Canopy Analysis*. Prepared for the City of Bonney Lake.

~~which~~ that support the protection of this existing canopy and encourages tree replacement will be required in order to meet the 38% goal.

Trees make an important contribution to the aesthetics of the City, as well as the natural environment. Documentation and monitoring of the tree canopy will play an important role in preserving the visual identity and health of the Bonney Lake community. We all live under one canopy and must work together to protect it.

Exhibit 12: Tree Canopy Change, 2008 to 2017



5. AGRICULTURAL LANDS

The GMA requires jurisdictions to prevent conversion of agricultural lands of long-term commercial significance. There are no such lands in the BLUGA. However, as a suburban community located on the edge of the Pierce County's urban growth area boundaries, pockets of agricultural lands of long-term commercial significance surround Bonney Lake. Therefore, the City should work cooperatively with the County to preserve and protect these areas. Additionally, one of the City's proposed additions to the Bonney Lake Urban Growth Area (BLUGA), the Fennel Creek Corridor Area, contain lands designated as agricultural resource lands (ARL). Areas designated as ARL are agricultural lands of long-term commercial significance, which should be preserved and protected, from urban development. The City proposes to preserve these resource lands by designating the areas as Open Space – Conservancy and zoning the areas Residential/Conservancy District that is comparable to 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 framer's markets involved in a wide range of activities including raising, cultivation, processing, marketing, and distribution of food in urban areas.[38] 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 by 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.[39]

[38] National Policy & Legal Analysis Network to Prevent Childhood Obesity. (?). *Seeding the City: Land Use Policies to Promote Urban Agriculture.*

[39] ibid.

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 (1964)*

While air quality is not specifically identified as a critical area, protecting air quality is listed as a goal of the GMA and both the MPPs and CPPs include specific provisions that require the City to establish policies related to air quality. In the Puget Sound Region~~,~~ the primary concern is ground-level ozone, carbon monoxide, and fugitive dust which can damage lung tissue leading to respiratory disease, contribute to cancer and cardiovascular disease, and obscure many of our most scenic vistas, such as views of the Olympic and Cascade mountain ranges, including Mount Rainier.[40]

Air quality in Bonney Lake is monitored and regulated by the Puget Sound Clean Air Agency (PSCAA). The PSCAA is a special purpose, regional government agency covering King, Kitsap, Pierce and Snohomish Counties chartered by state law in 1967 under the Washington State Clear Air Act. The agency 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.

6.1 CRITERIA AIR POLLUTANTS

The Federal and Washington State Clean Air Acts have established ambient air quality standards for different air pollutants. The Federal Clean Air Act of 1970 (amended in 1977 and 1990) established the national ambient air quality standards (NAAQS) for six "criteria" pollutants which are known to be hazardous to human health:

- ~~c~~Carbon monoxide (CO)
- ~~,o~~Ozone (O3)
- ~~,n~~Nitrogen dioxide (NO2)
- ~~,particulate~~ Particulate matter (PM10 and PM2.5)
- ~~,s~~Sulfur dioxide (SO2~~),~~); and

[40] Puget Sound Regional Council. *Vision 2040*. 2008 pg. 39.

- ~~l~~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 in the Puget Sound region: particle pollution and ozone (smog), which can cause heart attacks, strokes, asthma attacks and even premature death.[41]

6.2 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~~ several health problems, including cancer and birth defects, as well as damage to lungs, ~~and~~ immune systems and nervous systems. In our region, health risk from air toxics comes primarily from fine particles in diesel exhaust.[42]

6.3 GREENHOUSE GAS EMISSIONS

> *Residential areas should be protected from the dangers of fire, explosions, toxic, noxious matter, and other similar objectionable influences.*
>
> - *Bonney Lake Comprehensive Plan (1985)*

In addition to the air quality, cities in the central Puget Sound Region are required to address climate change. While addressing climate ~~change is not specifically addressed in the GMA goals established by RCW 36.70A.020 nor the mandatory~~ has been added as a mandatory elements established ~~by~~ in RCW 36.70A.070 by way of HB 1181 (20~~0~~23) this change is not required for the 2024 periodic update cycle. However, the City is required to be consistent with adopted MPPs and CPPs pursuant to RCW 36.70A.100 and RCW 36.70A.210. Both the MPPs and CPPs include specific provisions that require the City to establish goals, policies, strategies, and performance measures related to the reduction of greenhouse gas emissions and to address adaptation to the effects of climate change. Additionally, the City will be required to incorporate a climate element by the time of the 2029 5-year check-in established by HB 1241 in 2022.

[41] PSCAA Website: http://www.pscleanair.org/airquality/airqualitybasics/airtoxics/Pages/default.aspx Accessed on 11/5/14

[42] ibid.

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 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.

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, 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 non-recyclable 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 using conservation-based rates and a tiered rate structures for water use.

In Puget Sound region, nearly ~~50~~40% of the GHGs pollution comes from transportation[43]. The goals and policies in the Community Development Element and Community Mobility Elements attempt to address the GHGs. These goals and policies encourage a local balance of jobs and housing, proximity of shopping, recreational, childcare, and other uses to residential areas, higher intensity land uses near transit, and encourage the use of alternative transportation modes such as transit, walking and bicycling.

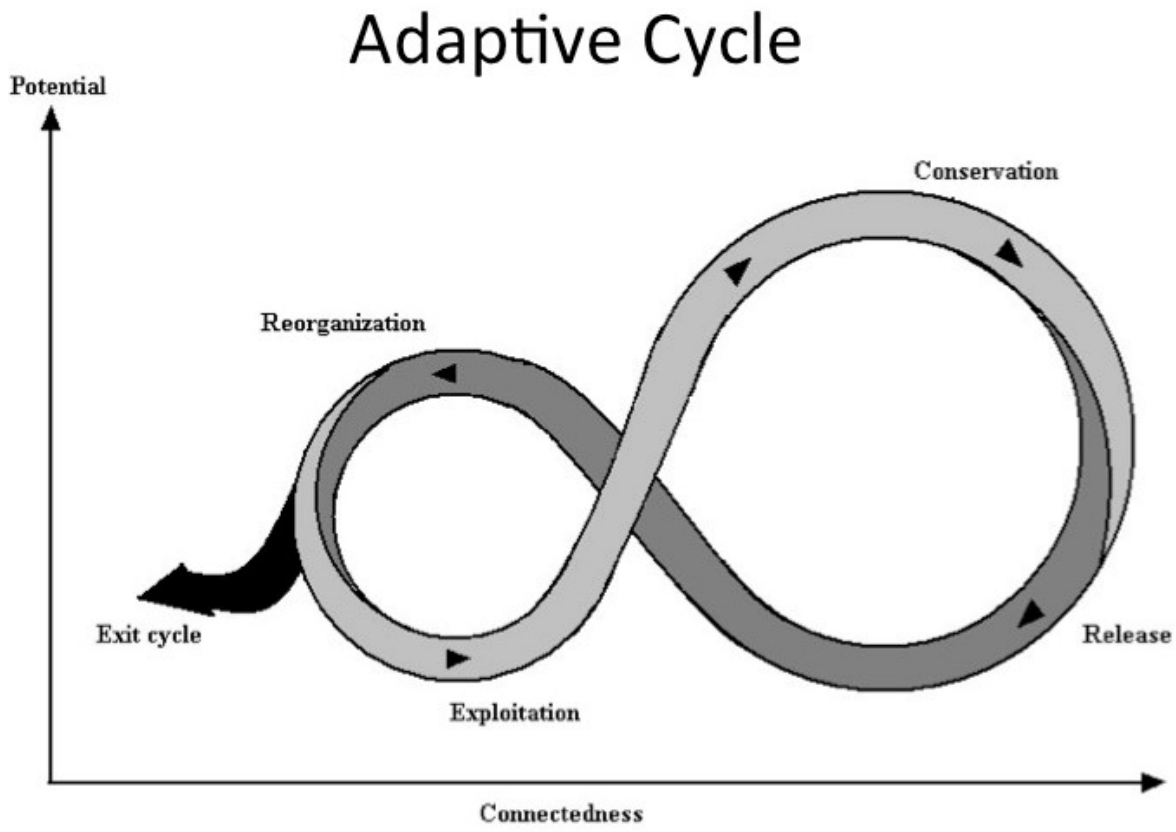
In addition to transportation, GHGs are released during energy production and consumption, such as electricity used to power homes and businesses, and fuel used to power cars and trucks. Reducing the carbon content of the fuel source (e.g., solar or wind power versus fossil fuels) or reducing energy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

[43] Puget Sound Clean Air Agency. *Puget Sound Regional Emission Inventory*. December 2023. Available online at: https://www.pscleanair.gov/DocumentCenter/View/5361/2019-Four-County-GHG-EI-FINAL

7. RESILIENCY

As the instances of natural disaster increase throughout the world, communities must begin planning for how these disasters may affect them. In Pierce County the most frequently occurring natural disaster is flooding. Historically, disaster planning has focused on avoid or minimizing damage from these events. Policies developed today have started focusing on building community resilience and preparing for inevitable disasters and the post-disaster to recovery. In this instance resiliency is the defined as the ability of a community or ecosystem to return to a functioning state and enter into recovery as quickly ~~and healthfully~~ as possible. Resiliency can be thought of as a cycle as depicted in **Exhibit 13**. This adaptive cycle can be seen in ecological and social systems throughout our world.

Exhibit 13: The Adaptive Cycle[44]



The rapid growth and conservation phases are referred to as the fore loop and characterized by an accumulation of capital and stability. The release and reorganization phases are referred to as the back loop and are characterized by uncertainty and loss of capital, but also novelty and experimentation. In terms of community preparedness, the change from fore loop to back loop is the disruptive event (i.e., natural disaster).

This resiliency approach encourages communities to plan for safety, continuity of operations and delivery of services, and appropriate levels of infrastructure and support during events and for post-disaster recovery. The most likely instances for the City of Bonney Lake to face are flooding and being an area of reception for persons evacuated from surrounding areas during natural disasters. Hazard identification and risk

[44] Holling, C. S., & Gunderson, L. H. (2002). Panarchy: Understanding Transformations in Human and Natural Systems (Edition 1). Washington, D.C.: Island Press.

management for the area are managed by Pierce County and more information about these topics can be found in the Pierce County Hazard Identification and Risk Assessment.

7.1 CLIMATE CHANGE

Resilience thinking acknowledges that social-ecological systems are always changing, and ~~many changes reflect a progression through linked adaptive cycles~~adapting. ~~Climate~~ With climate change, communities must plan for resilience in the face of ~~includes~~ changes in average temperature, weather conditions, wind patterns, precipitation, and increased variability in the frequency and severity of extreme weather events ~~or in the distribution of weather around the average conditions. Climate change encompasses the major influx in temperature, precipitation, or wind patterns~~.

Likely impacts of climate change on the City are changes in rain and snowfall patterns, residents moving to the area because of sea-level rise impacting other parts of the region, an increased need to invest~~ment~~ in infrastructure ~~to create resilient systems that can cope with changes~~that can accommodate greater fluctuations in service, and economic changes.

7.2 FLOOD

Flooding is the most common hazard in Pierce County. Of particular risk are areas of the City within special flood hazard areas. However, other low-lying areas of the City and isolated "potholes" or closed depressions can be at risk of flooding, and once these areas flood the water can remain for the rest of the wet season. Flooding impacts about 50% of the population of Pierce County each year.[45] Mapping these low-lying and closed depressions could alert residents that might not otherwise prepare for flood events. This was demonstrated during the flooding of a portion of the City during February of 2016.

7.3 FIRE

~~During 2020 an unprecedented fire season impacted the City of Bonney Lake.~~ While wildfires can be a natural part of the adaptive cycle in healthy forests, the densely knit rural-urban divide brings these fires too close to our homes, our neighbors, and our livelihoods. All communities face some risk for fire, but 2020 demonstrated that this risk is

[45] Pierce County Department of Emergency Management. (n.d.). Pierce County Hazard Identification & Risk Assessment (March 2015 Edition). Retrieved from https://www.co.pierce.wa.us/DocumentCenter/View/7032/HIRA?bidId=

closer and more real than we would have thought given the extended wet season experienced in the South Sound Region.

Likely impacts from fire include temporary loss of air quality, sudden need for shelter/evacuation planning, temporary loss of ingress and egress from the City, loss of telecommunication systems, loss of tree canopy, increase risk of landslide, and a need for long-term recovery management that focuses on soil health and stability. A focus on resiliency acknowledges that fires will happen, but community education, emergency preparedness, and established plans for recovery can save our homes and our lives.

Exhibit 14: Sumner Grade Fire, 2020

Image Credit: WSDOT

7.4 DROUGHT AND HEATWAVES

Bonney Lake's beauty and quality of life are likely to change if a long-lasting drought impacts the area. These impacts can include habitat reduction for birds, insects, and amphibians, impacts on water distribution, impacts on tourism, and higher risk of wildfire. A resilient community prepares for these changes and develops interdisciplinary networks of professionals before disaster strikes to ensure resources are in place to address these changes before~~,~~ ~~they~~ the change impact day to day living.

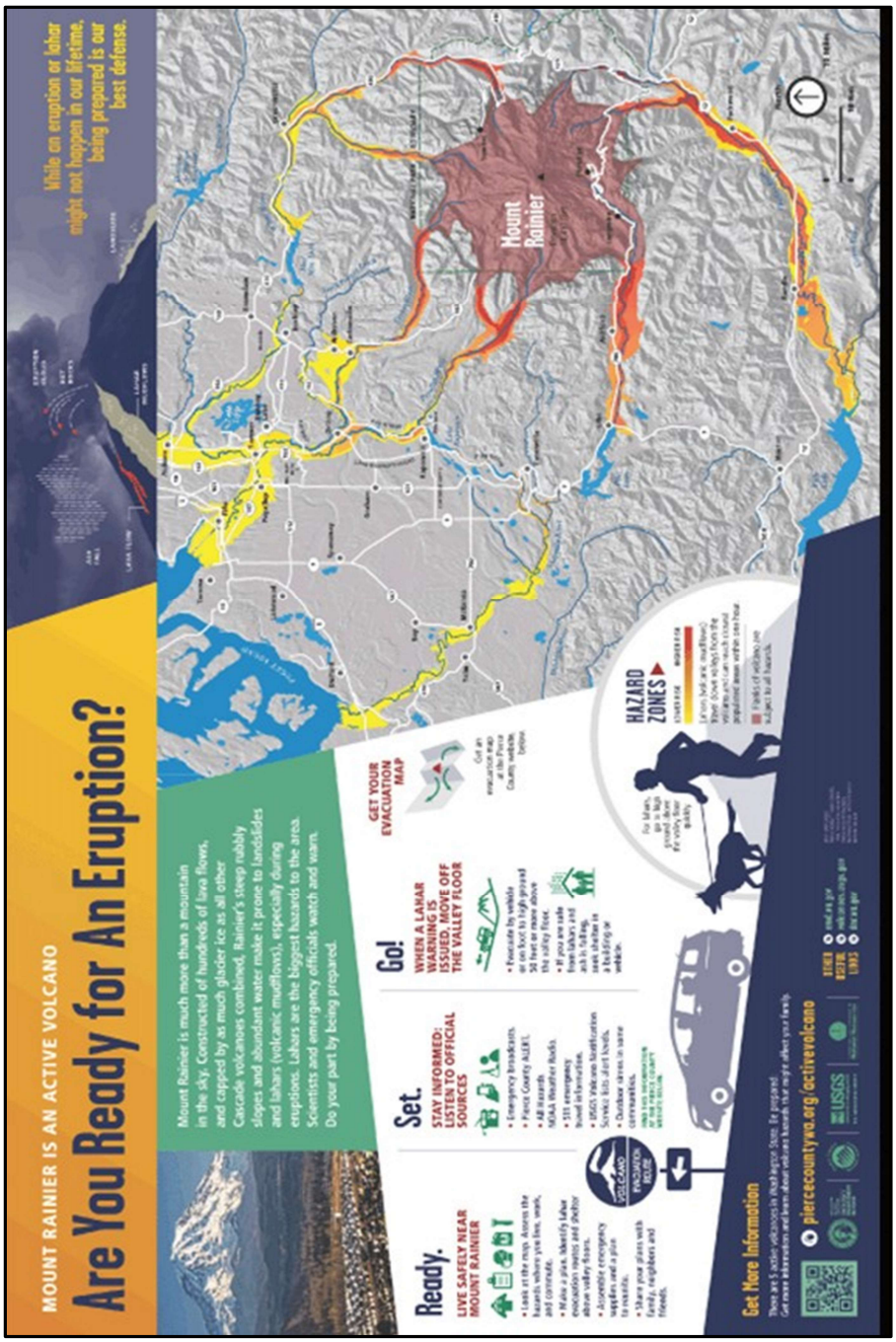
7.5 EARTHQUAKE

As evaluated in section 3.1 of this chapter, areas with steep slopes may be at higher risk of liquefaction and landslide. Many of the homes in the southern portion of the City could be impacted by ~~an earthquake~~seismic event. The City has taken steps to strictly regulate development in ~~this~~ these higher risk areas. Additionally, close geographic proximity to volcanos has increased the general population's awareness of the risk of earthquake and the potential effects of an event. In addition to preparing residents for an earthquake event, the City is likely to be impacted by transportation disruption, energy disruption, and an influx of evacuees from other areas during an event.

7.6 ~~7.7~~ VOLCANIC

While flood may be the most common event in Pierce County, a volcano event would impact the largest segment of the population. The immediate and secondary impacts of ~~the~~ such an event ~~will~~ would be far-reaching and long-lasting. Resilient communities prepare for these events, understanding they are inevitable even if they never happen in our lifetime. Investment in early alert systems and communication systems that will function and be accessible during an event are important aspects of preparedness, volcanoes give warning signs before they erupt. Additionally, education and outreach can help citizens understand risks (see **Exhibit 15**). Bonney Lake is an evacuation site for residents in other areas of Pierce County.

Exhibit 15: Are You Ready for An Eruption?[46]



[46] Pierce County Emergency Management. (n.d.). Mount Rainier is an Active Volcano Are You Ready for An Eruption [Interpretive Image]. Retrieved from https://www.piercecountywa.gov/3730/Mount-Rainier-Active-Volcano

7.7 ~~7.6~~ TRANSPORTATION ACCIDENT HAZARD

Of unique risk to the City of Bonney Lake is the impact of a transportation accident hazard. The road system in Bonney Lake has been defined, extensively, by housing development. A resilient streets system has built-in redundancies that ensure that emergency personal and citizens have multiple travel routes regardless of transportation mode or temporary obstructions.

Sustainable transportation systems are best achieved by planning transportation around pedestrians. Pedestrian focused transportation promotes interconnected grids of closely spaced streets, readily available parking, and increased density.[47] In addition to cul-de-sac development, the dependence on State Route 410 to provide routes throughout the City puts the transportation at risk of being devastated during a medium to large vehicle accident or road system failure. These issues are addressed more fully in the Mobility Element of this plan.

[47] Tumlin, J. (2012). Sustainable Transportation Planning: Tools for Creating Vibrant, Healthy, and Resilient Communities. Hoboken, NJ: John Wiley & Sons, Inc.

8. ENVIRONMENTAL STEWARDSHIP GOALS AND POLICIES

The policies in this section identify actions the City should consider over the upcoming planning period to achieve the stated goals.

Goal ES-1	Enhance coordination among cities, counties, federally recognized tribes, federal and state agencies, utilities, and other partners to protect, preserve, and restore environmental resources for current and future population.	
Policies:	**ES-1.1**	Coordinate with Tribes, local and reginal jurisdictions, and community partners to restore and enhance the Puget Sound watersheds to a more natural state.
	ES-1.2	Coordinate with Tribes, local and reginal jurisdictions, and community partners to identity, mitigate, and adapt to the impacts of climate change on regional hydrological systems and local critical area.
	ES-1.3	Maintain and enhance the ecological, social, and economic benefits provided by a healthy Puget Sound environment.
	ES-1.4	Support implementation of the Puget Sound Partnership's action agenda.

Goal ES-2: ~~**Goal ES-1**~~	**Protect the environment, public health, and property from erosion, landslides, and unnecessary scars on the land that could occur as part of ~~the Development~~development.**	
Policies:	**ES-2.1** ~~**ES-1.1**~~	Discourage development and disturbance of native vegetation on steep slopes.
	ES-2.2 ~~**ES-1.2**~~	Require buildings to be set back from the toe and top of steep slopes.
	ES-2.3 ~~**ES-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.
	ES-2.4 ~~**ES-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.

ES-2.5 ~~**ES-1.5**~~ Ensure that soils are suitable for the development proposed. Where soil suitability is questionable, require review by a geotechnical engineer.

ES-2.6 ~~**ES-1.6**~~ Maintain existing vegetation to the greatest extent possible in order to prevent erosion. In cases where development necessitates removal of vegetation, a reasonable amount of landscaping should be required to replace trees, shrubs, and ground cover removed during construction.

ES-2.7 ~~**ES-1.7**~~ When erosion hazard areas are disturbed, require erosion control measures, and limit the duration of site exposure.

ES-2.8 ~~**ES-1.8**~~ Enforce building codes designed to prevent earthquake damage.

Goal ES-3: ~~**Goal ES-2**~~	**Protect the quality and supply of groundwater used for public water supplies to ensure ~~adequate~~ reliable current and future sources of ~~potable~~ safe and drinkable water for Bonney Lake and the region.**	
Policies:	**ES-3.1** ~~**ES-2.1**~~	Evaluate, monitor and mitigate 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.
	ES-3.2 ~~**ES-2.2**~~	Work with Pierce County, the Washington State Department of Ecology, Tribes and ~~other agencies~~any relevant liable or engaged parties to protect Bonney Lake's water supply from contaminants originating inside and outside the city limits
	ES-3.3 ~~**ES-2.3**~~	Periodically review and update land use policies, regulations, development, or operating standards to ensure ~~appropriate~~ the use of best available science for meeting and exceeding levels of groundwater recharge while preventing degradation of groundwater quality.
	ES-3.4 ~~**ES-2.4**~~	Manage surface water to maintain and improve water quality, ~~and maximize~~ maximizing groundwater recharge.
	ES-3.5 ~~**ES-2.5**~~	Require new subdivisions and commercial development to connect to public sewers.

	ES-3.6 ~~**ES-2.6**~~	Encourage homes and businesses with septic systems to connect to public sewers.
	ES-3.7	Use the best available science (BAS) to protect and enhance groundwater quality.
	ES-3.8	Require regular water quality monitoring and improvement projects to ensure safe drinkable water for all residents regardless of race social, or economic status, accounting for potential impacts of climate change on water quality.
Goal ES-4: ~~**Goal ES-3**~~	**Preserve, ~~and~~ restore, and enhance the quality of surface waters to provide high quality natural habitats protected from point and non-point pollution sources.**	
Policies:	**ES-4.1** ~~**ES-3.1**~~	Protect water bodies from point and non-point sources of contamination and nitrification.
	ES-4.2 ~~**ES-3.2**~~	Promote the enhancement or restoration of surface waters as adjacent development activities occur.
	ES-4.3 ~~**ES-3.3**~~	Protect against erosion of drainage channels.
	ES-4.4 ~~**ES-3.4**~~	Encourage land developments to maximize stormwater infiltration.
	ES-4.5 ~~**ES-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.
	ES-4.6 ~~**ES-3.6**~~	Preserve vegetative buffers along streams and drainage ways to enhance water quality, protect habitat, and prevent erosion.
	ES-4.7 ~~**ES-3.7**~~	Mitigate stormwater related impacts through best management practices~~.~~ based on the best available science.
	ES-4.8 ~~**ES-3.8**~~	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.

	ES-4.9 ~~**ES-3.9**~~	Construct the Fennel Creek corridor environmental improvements identified in the 1999 Environmental Analysis of the Fennel Creek Corridor.
	ES-4.10 ~~**ES-3.10**~~	Continue to purchase property along the Fennel Creek Corridor to preserve the corridor and consider using property around the creek as wetland mitigation sites.
	ES-4.11	Work with Tribes, local and regional jurisdictions, and community partners to restore local freshwater bodies identifying and mitigating potential impacts from extreme weather events.
Goal ES-5: ~~**Goal ES-4**~~	**Minimize risks to life and property resulting from flooding and preserve habitat associated with floodplains.**	
Policies:	**ES-5.1** ~~**ES-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 floodplain.
	ES-5.2 ~~**ES-4.2**~~	Protect floodplains from filling, excavating, and other activities that would interfere with natural drainage patterns and negatively affect the habitat functions.
	ES-5.3 ~~**ES-4.3**~~	Preserve and enhance floodplains to provide for natural flood storage protection and habitat functions.
	ES-5.4 ~~**ES-4.4**~~	Require new development and redevelopment designs to ~~Design new development and redevelopment projects to~~ minimize hazards associated with flooding and limit the amount of runoff that contributes to flooding.
	ES-5.5	Design new city development and redevelopment projects to minimize hazards associated with flooding and extreme weather events, limiting the amount of runoff that contributes to flooding.
	ES-5.6	Research and evaluation the implementation of development incentives for projects incorporating climate mitigation and adaptation strategies into their stormwater design criteria.
	ES-5.7	Coordinate the implementation of flood mitigation and adaptation measures based on the best available science for development already built within flood zones.

Goal ES-6: ~~Goal ES-5~~	**Protect and enhance natural habitat, groundwater recharge, and floor attenuation functions performed by wetlands.**	
Policies:	**ES-6.1** **~~ES-5.1~~**	Ensure that wetland buffers are adequately sized to protect functions and values of wetlands.
	ES-6.2 **~~ES-5.2~~**	Ensure a no net loss of wetland functions and values.
	ES-6.3 **~~ES-5.3~~**	Avoid denying all reasonable use on any parcel.
	ES-6.4 **~~ES-5.4~~**	Protect wetlands from water quantity or quality impacts stemming from improper stormwater management.
	ES-6.5 **~~ES-5.5~~**	Encourage environmental stewardship programs aimed at wetland preservation.
	ES-6.6 **~~ES-5.6~~**	Pursue implementation of a wetland mitigation-banking program.
	ES-6.7	Use the best available science when assessing wetland values and functions.
Goal ES-7: ~~Goal ES-6~~	**Preserve, ~~and~~ restore, and enhance fish and wildlife habitat conservation areas.**	
Policies:	**ES-7.1** **~~ES-6.1~~**	Preserve habitats for species, which the federal or state government have identified, as endangered, threatened, or sensitive.
	ES-7.2 **~~ES-6.2~~**	~~Encourage~~ Further the conservation of sites that protect fish and wildlife habitat conservation areas through incentives or acquisition.
	ES-7.3 **~~ES-6.3~~**	~~Encourage~~ Support the restoration of ecological functions and the natural environment in environmentally damaged areas ~~through~~ by offering incentives.
	ES-7.4 **~~ES-6.4~~**	Protect and enhance water quality in lakes and streams using the best available science in coordination with local and regional jurisdictions, Tribes, and community organizations.
	ES-7.5 **~~ES-6.5~~**	Promote clustered developments, common areas, buffers, conservation easements, and retention of native vegetation as a means of conserving critical habitat.

	ES-7.6	Use the best available science in measures preserving, restoring, and enhancing fish and wildlife habitats, giving special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish habitat.
	ES-7.7	Coordinate conservation or protection measures of anadromous fish habitat in partnership with local Tribes.
Goal ES-8: ~~Goal ES-7~~	**~~Promote, preserve, and emphasize~~Establish and maintain a healthy urban forest with an overall tree canopy goal of 38~~%.~~percent.**	
Policies:	**ES-8.1** ~~ES-7.1~~	Protect and conserve open space and transition buffers between urban and rural areas.
	ES-8.2 ~~ES-7.2~~	Preserve and protect public views of the mountains and valley corridors.
	ES-8.3 ~~ES-7.3~~	Practice land cover management, which includes forest and topsoil preservation, native growth protection easements, dense vegetative zones, and preservation of the tree canopy.
	ES-8.4 ~~ES-7.4~~	Protect significant trees and, promote tree replanting, and ~~encourage~~ the use of native plants in residential and commercial development and redevelopment.
	ES-8.5 ~~ES-7.6~~	~~Promote~~ Support the preservation of native vegetation and mature trees, revegetation, and appropriate landscaping to improve the quality of air, ~~and~~ water, ~~quality~~ and fish and wildlife habitat.
	ES-8.6 ~~ES-7.7~~	Promote the use of native plants in residential and commercial landscapes.
	ES-8.7 ~~ES-7.7~~	~~Develop an~~ Maintain the City urban forestry in-lieu fee program to assist the City in establishing or preserving urban tree canopy.
	ES-8.8 ~~ES-7.8~~	Provide opportunities to engage the Tree Board as advisors and stakeholders committed to the preservation of our tree canopy.
Goal ES-9: ~~Goal ES-8~~	**Preserve and protect agricultural resource lands and urban agriculture sites to improve access to healthy foods, build social connections, and provide locally source~~d~~s ~~of~~ food~~s~~.**	

Policies:	**ES-9.1** ~~**ES-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.
	ES-9.2 ~~**ES-8.2**~~	Allow continued agricultural production in areas which ~~currently~~ are ~~produce~~ producing such products~~,~~ but ~~which have not been~~are not currently in designated agricultural resource lands ~~if~~ as long as such production is appropriate in ~~an~~ compatible with surrounding urban context.
	ES-9.3 ~~**ES-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.
	ES-9.4 ~~**ES-8.4**~~	Protect property owner's rights to cultivate gardens to produce fresh fruits and vegetables and to keep a limited number of farm animals through the City's development regulations.
	ES-9.5 ~~**ES-8.5**~~	Expand access to community gardens through Bonney Lake to increasing~~e access~~ availability of locally sourced ~~to~~ fresh produce while reducing greenhouse gas emissions.
	ES-9.6 ~~**ES-8.6**~~	Remain open to further designations of agricultural resource lands on land shown to merit that designation.
	ES-9.7 ~~**ES-8.7**~~	Ensure that land uses proposed adjacent to lands designated, as agricultural resource lands are compatible with agricultural activities.
	ES-9.8	Support community education programs providing opportunities to learn about urban agriculture and ways to use and access healthy foods locally, especially for communities that experience greater barriers accessing healthy foods.
	ES-9.9	Identity and mitigate the potential impacts of climate change on local agricultural lands, systems, and working condition.

Goal ES-10: ~~**Goal ES-9**~~	**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) and ensuring that overall air quality meets or exceeds State and Federal standards.**

Policies:	**ES-10.1** ~~**ES-9.1**~~	Support efforts of other local, regional, and State agencies to improve regional air quality.

	ES-10.2 ~~**ES-9.2**~~	Coordinate land use planning and local transportation planning to reduce the potential for long-term exposure to criteria air pollutants and toxic air contaminants.
	ES-10.3 ~~**ES-9.3**~~	Reduce the air quality impacts created by truck traffic, hazardous materials, and development through transportation investments that reduce vehicle miles traveled and greenhouse gas emissions.
	ES-10.4 ~~**ES-9.4**~~	Continue to implement the policies adopted by Resolution 2049. ~~Policy ES-9.5: Encourage energy efficiency in site design, building orientation, landscaping, and utilities/infrastructure for all development and redevelopment projects.~~
	ES-10.5 ~~**ES-9.5**~~	Encourage energy efficiency in site design, building orientation, landscaping, and utilities/infrastructure for all development and redevelopment projects.
	ES-10.6 ~~**ES-9.6**~~	~~Encourage~~ Pursue renewable energy sources as part ~~for~~ of new and existing city buildings and infrastructure projects.
	ES-10.7	Incentivize renewable energy sources for new and existing buildings and infrastructure projects proposed in the city.
	ES-10.8	Identify and publish a citywide approach to increasing energy efficiency and greenhouse gas emission reductions.
	ES-10.9	Evaluate the implementation of incentive opportunities to encourage desired energy efficiency practices within site design, building orientation, landscaping, and utility/infrastructure for all development and redevelopment projects.
Goal ES-11: ~~**Goal ES-10**~~	**Develop disaster preparedness management systems with a focus on community resilience that prepares ~~our residents,~~the Bonney Lake community to withstand, adapt, and ~~systems to~~ recover from disaster ~~quickly and healthfully~~ in a responsive and healthy manner.**	
Policies:	**ES-11.1** ~~**ES-10.1**~~	Improve and retrofit existing infrastructure and develop future infrastructure to withstand ~~greater than average weather events including storms and drought~~ a variety of compounding severe weather events ranging from droughts to floods, prioritizing improvements to communities most vulnerable to these events.
	ES-11.2 ~~**ES-10.2**~~	Cooperate with other agencies in preparing emergency management plans to respond to a lahar originating on Mount Rainer, an eruption of Mount Rainer, or an earthquake along the Cascadia Subduction Zone or the Nisqually Fault Line.

ES-11.3 / ~~**ES-10.3**~~ Develop and update maps that identify areas of the City most at risk of hazards and develop resiliency resources and education programs for citizens likely to be impacted~~.~~, prioritizing resources and programs for citizens most vulnerable within these areas.

ES-11.4 / ~~**ES-10.4**~~ Develops plans for managing event evacuees and, when appropriate, enter into inter-local and mutual aid agreements to help manage temporary population influx from disasters.

ES-11.5 / ~~**ES-10.5**~~ Develop a continuity of operations plan that identifies the City's essential functions and provides procedures for notifications, orders of succession, delegation of authority, alternate locations, essential records, and reconstitution.

ES-11.6 / ~~**ES-10.6**~~ Evaluate urban forestry program and codes for incorporation of fire prevention and preparedness best practices.

ES-11.7 / ~~**ES-10.7**~~ Complete a Risk and Resilience Analysis and develop an Emergency Response Plan for drinking water infrastructure.

ES-11.8 Coordinate with other local and regional agencies and community organizations in preparing emergency management plans to respond to a variety of compounding severe weather events ranging from droughts to floods, prioritizing improvements to communities most vulnerable to these events.

ES-11.9 Ensure members of the public receive timely concise information and instructions to proactively respond when an emergency strikes, especially for communities disproportionately impacted in emergency situations.

ES-11.10 Coordinate with Tribes, local and regional jurisdictions, and community groups to explore the logistics of joining a Pierce County coalition to address the impacts of climate change on a regional scale, recognizing the clear danger posed by climate change, and its potential to drastically impact quality of life, the natural and built environment, and human health and safety for future generations.

ES-11.11 Require the incorporation of climate resiliency measures in all new development, especially new critical infrastructure and public facilities.

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2024 Proposed (*Envision Bonney Lake*)		**2015 Existing (*Bonney Lake 2035*)**		**Requirement**			**Notes**
Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
Goal ES-1	Enhance coordination among cities, counties, federally recognized tribes, federal and state agencies, utilities, and other partners to protect, preserve, and restore environmental resources for current and future population.			MPP-RC-1 MPP-RC-4 MPP-EN-1 MPP-DP-7 MPP-EC-15	HAC-1 HAC-2 TR-4.6 TC-1 TC-2	RCW 36.70A.110	
ES-1.1	Coordinate with Tribes, local and reginal jurisdictions, and community partners to restore and enhance the Puget Sound watersheds to a more natural state.			MPP-RC-15 MPP-PS-23	HAC-1 HAC-2 TR-4.6 TC-1 TC-2	RCW 36.70A.110	
ES-1.2	Coordinate with Tribes, local and reginal jurisdictions, and community partners to identity, mitigate, and adapt to the impacts of climate change on regional hydrological systems and local critical area.			MPP-RC-15 MPP-EN-1 MPP-PS-23	HAC-1 HAC-2 TR-4.6 TC-1 TC-2	RCW 36.70A.110	
ES-1.3	Maintain and enhance the ecological, social, and economic benefits provided by a healthy Puget Sound environment.			MPP-EC-15 MPP-RC-15	HAC-3 HAC-5	RCW 36.70A.110	
ES-1.4	Support implementation of the Puget Sound Partnership's action agenda.			MPP-RC-1	ENV-20		
Goal ES-2	Protect the environment, public health, and property from erosion, landslides, and unnecessary scars on the land that could occur as part of the Development.	Goal ES-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.	Environmental Goal	ENV-3		Updated grammar.
ES-2.1	Discourage development and disturbance of native vegetation on steep slopes.	Policy ES-1.1	Discourage development and disturbance of native vegetation on steep slopes.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		
ES-2.2	Require buildings to be set back from the toe and top of steep slopes.	Policy ES-1.2	Require buildings to be set back from the toe and top of steep slopes.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		
ES-2.3	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 ES-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.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		

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2024 Proposed (*Envision Bonney Lake*)		**2015 Existing (*Bonney Lake 2035*)**		**Requirement**			**Notes**
Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-2.4	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 ES-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.	MPP-EN-3 MPP-EN-5	ENV-30 ENV-30.1 ENV-30.2 ENV-34 ENV-38 ENV-39 ENV43.4 RUR-9 TR-9 EPF-6.10 H-3		
ES-2.5	Ensure that soils are suitable for the development proposed. Where soil suitability is questionable, require review by a geotechnical engineer.	Policy ES-1.5	Ensure that soils are suitable for the development proposed. Where soil suitability is questionable, require review by a geotechnical engineer.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		
ES-2.6	Maintain existing vegetation to the greatest extent possible in order to prevent erosion. In cases where development necessitates removal of vegetation, a reasonable amount of landscaping should be required to replace trees, shrubs, and ground cover removed during construction.	Policy ES-1.6	Maintain existing vegetation to the greatest extent possible in order to prevent erosion. In cases where development necessitates removal of vegetation, a reasonable amount of landscaping should be required to replace trees, shrubs, and ground cover removed during construction.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		
ES-2.7	When erosion hazard areas are disturbed, require erosion control measures and limit the duration of site exposure.	Policy ES-1.7	When erosion hazard areas are disturbed, require erosion control measures and limit the duration of site exposure.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		
ES-2.8	Enforce building codes designed to prevent earthquake damage.	Policy ES-1.8	Enforce building codes designed to prevent earthquake damage.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		
Goal ES-3	Protect the quality and supply of groundwater used for public water supplies to ensure reliable current and future sources of safe and drinkable water for Bonney Lake and the region.	Goal ES-2	Protect the quality of groundwater used for public water supplies to ensure adequate sources of potable water for Bonney Lake and the region.	Environmental Goal	ENV-30 ENV-30.1 ENV-30.2 ENV-34 ENV43.4 RUR-9		Added "and supply", "reliable current and future", and "safe and drinkable". Removed "adequate" and "potable".
ES-3.1	Evaluate, monitor and mitigate 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 ES-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	MPP-EN-5 MPP-PS-25	ENV-30 ENV-30.1 ENV-30.2 ENV-34 ENV43.4 RUR-9		Added "...monitor and mitigate...".

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2024 Proposed (*Envision Bonney Lake*)		**2015 Existing (*Bonney Lake 2035*)**		**Requirement**			**Notes**
Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-3.2	Work with Pierce County, the Washington State Department of Ecology, Tribes and any relevant liable or engaged parties to protect Bonney Lake's water supply from contaminants originating inside and outside the city limits.	Policy ES-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	MPP-PS-25	ENV-7.8		Added "...tribes...", "...any relevant liable or engaged parties...", and "...inside and...".
ES-3.3	Periodically review and update land use policies, regulations, development, or operating standards to ensure the use of best available science for meeting and exceeding levels of groundwater recharge while preventing degradation of groundwater quality.	Policy ES-2.3	Periodically review and update land use policies, regulations, development, or operating standards to ensure appropriate levels of groundwater recharge while preventing degradation of groundwater quality.	MPP-EN-17 MPP-PS-25	ENV-7		Added "...the use of best available science for meeting and exceeding...".
ES-3.4	Manage surface water to maintain and improve water quality maximizing groundwater recharge.	Policy ES-2.4	Manage surface water to maintain and improve water quality and maximize groundwater recharge.	MPP-EN-17	ENV-7		Updated grammar.
ES-3.5	Require new subdivisions and commercial development to connect to public sewers.	Policy ES-2.5	Require new subdivisions and commercial development to connect to public sewers.	MPP-PS-10	UGA-13.4		
ES-3.6	Encourage homes and businesses with septic systems to connect to public sewers.	Policy ES-2.6	Encourage homes and businesses with septic systems to connect to public sewers.	MPP-PS-10	UGA-13.4		
ES-3.7	Use the best available science (BAS) to protect and enhance groundwater quality.			MPP-EN-6	ENV-32	WAC 365-195-905 through WAC 365-195-925	
ES-3.8	Require regular water quality monitoring and improvement projects to ensure safe drinkable water for all residents regardless of race social, or economic status, accounting for potential impacts of climate change on water quality.			MPP-EN-4 MPP-EN-10	ENV-7 ENV-23 ENV-27 TR-9.2 UGA-13.4.3		Added to comply with the MPPs. Growth Management Act will require a Climate Change Element to be incorporated into Comprehensive plans by 2029.
Goal ES-4	Preserve, and restore, and enhance the quality of surface waters to provide high quality natural habitats protected from point and non-point pollution sources.	Goal ES-3	Preserve and restore the quality of surface waters to provide high quality natural habitats protected from point and non-point pollution sources.	Environmental Goal	ENV-19		
ES-4.1	Protect water bodies from point and non-point sources of contamination and nitrification.	Policy ES-3.1	Protect water bodies from point and non-point sources of contamination and nitrification.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		

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Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-4.2	Promote the enhancement or restoration of surface waters as adjacent development activities occur.	Policy ES-3.2	Promote the enhancement or restoration of surface waters as adjacent development activities occur.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		
ES-4.3	Protect against erosion of drainage channels.	Policy ES-3.3	Protect against erosion of drainage channels.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		
ES-4.4	Encourage land developments to maximize stormwater infiltration	Policy ES-3.4	Encourage land developments to maximize stormwater infiltration	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		
ES-4.5	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 ES-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.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		
ES-4.6	Preserve vegetative buffers along streams and drainage ways to enhance water quality, protect habitat, and prevent erosion.	Policy ES-3.6	Preserve vegetative buffers along streams and drainage ways to enhance water quality, protect habitat, and prevent erosion.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		
ES-4.7	Mitigate stormwater related impacts through best management practices. based on the best available science.	Policy ES-3.7	Mitigate stormwater related impacts through best management practices.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		Added "...based on best available science."
ES-4.8	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 ES-3.8	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	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		
ES-4.9	Construct the Fennel Creek corridor environmental improvements identified in the 1999 Environmental Analysis of the Fennel Creek Corridor.	Policy ES-3.9	Construct the Fennel Creek corridor environmental improvements identified in the 1999 Environmental Analysis of the Fennel Creek Corridor.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		

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2024 Proposed (*Envision Bonney Lake*)		**2015 Existing (*Bonney Lake 2035*)**		**Requirement**			**Notes**
Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-4.10	Continue to purchase property along the Fennel Creek Corridor to preserve the corridor and consider using property around the creek as wetland mitigation sites.	Policy ES-3.10	Continue to purchase property along the Fennel Creek Corridor to preserve the corridor and consider using property around the creek as wetland mitigation sites.	MPP-EN-3 MPP-EN-5	ENV-30 ENV-30.1 ENV-30.2 ENV-34 ENV-38 ENV-39 ENV43.4 RUR-9 TR-9 EPF-6.10 H-3		
ES-4.11	Work with Tribes, local and regional jurisdictions, and community partners to restore local freshwater bodies identifying and mitigating potential impacts from extreme weather events.			MPP-RC-1 MPP-RC-15 MPP-EN-1	HAC-1 HAC-2 TR-4.6 TC-1 TC-2		
Goal ES-5	Minimize risks to life and property resulting from flooding and preserve habitat associated with floodplains.	Goal ES-4	Minimize risks to life and property resulting from flooding and preserve habitat associated with floodplains.	Environmental Goal	ENV-23 TR-20		
ES-5.1	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 floodplain.	Policy ES-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 floodplain.	MPP-EN-18	ENV-23 ENV-27 TR-9.2 TR-10		
ES-5.2	Protect floodplains from filling, excavating, and other activities that would interfere with natural drainage patterns and negatively affect the habitat functions.	Policy ES-4.2	Protect floodplains from filling, excavating, and other activities that would interfere with natural drainage patterns and negatively affect the habitat functions.	MPP-EN-14 MPP-EN-18	ENV-3 ENV-3.1 ENV-21 ENV-22 ENV-23 ENV-27 ENV-36 TR-9.2 TR-10		
ES-5.3	Preserve and enhance floodplains to provide for natural flood storage protection and habitat functions.	Policy ES-4.3	Preserve floodplains to provide for natural flood storage protection and habitat functions.	MPP-EN-14 MPP-EN-18	ENV-3 ENV-3.1 ENV-21 ENV-22 ENV-23 ENV-27 ENV-36 TR-9.2 TR-10		Added "...and enhanced...".

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2024 Proposed (*Envision Bonney Lake*)		**2015 Existing (*Bonney Lake 2035*)**		**Requirement**			**Notes**
Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-5.4	Require new development and redevelopment designs to minimize hazards associated with flooding and limit the amount of runoff that contributes to flooding.	Policy ES-4.4	Design new development and redevelopment projects to minimize hazards associated with flooding and limit the amount of runoff that contributes to flooding.	MPP-EN-5 MPP-EN-18	ENV-23 ENV-27 ENV-30 ENV-30.1 ENV-30.2 ENV-34 ENV-43.4 RUR-9 TR-9.2 TR-10		Updated grammar.
ES-5.5	Design new city development and redevelopment projects to minimize hazards associated with flooding and extreme weather events, limiting the amount of runoff that contributes to flooding.			MPP-CC-10	TR-10 TR-20 ENV-27		Added to comply with the MPPs. Growth Management Act will require a Climate Change Element to be incorporated into Comprehensive plans by 2029.
ES-5.6	Research and evaluation the implementation of development incentives for projects incorporating climate mitigation and adaptation strategies into their stormwater design criteria.			MPP-DP-46	TR-10 TR-20		Added to comply with the MPPs. Growth Management Act will require a Climate Change Element to be incorporated into Comprehensive plans by 2029.
ES-5.7	Coordinate the implementation of flood mitigation and adaptation measures based on the best available science for development already built within flood zones.			MPP-EN-6	ENV-32	WAC 365-195-905 through WAC 365-195-925	
Goal ES-6	Protect and enhance natural habitat, groundwater recharge, and floor attenuation functions performed by wetlands.	Goal ES-5	Protect natural habitat, groundwater recharge, and floor attenuation functions performed by wetlands.	Environmental Goal			Added "...and enhance...".
ES-6.1	Ensure that wetland buffers are adequately sized to protect functions and values of wetlands.	Policy ES-5.1	Ensure that wetland buffers are adequately sized to protect functions and values of wetlands.	MPP-EN-17	ENV-7 ENV-23 ENV-27 TR-9.2 UGA-13.4.3		
ES-6.2	Ensure a no net loss of wetland functions and values.	Policy ES-5.2	Ensure a no net loss of wetland functions and values.	MPP-EN-17	ENV-7 ENV-23 ENV-27 TR-9.2 UGA-13.4.3		

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2024 Proposed (*Envision Bonney Lake*)		**2015 Existing (*Bonney Lake 2035*)**		**Requirement**			**Notes**
Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-6.3	Avoid denying all reasonable use on any parcel.	Policy ES-5.3	Avoid denying all reasonable use on any parcel.	MPP-EN-17	ENV-7 ENV-23 ENV-27 TR-9.2 UGA-13.4.3		
ES-6.4	Protect wetlands from water quantity or quality impacts stemming from improper stormwater management.	Policy ES-5.4	Protect wetlands from water quantity or quality impacts stemming from improper stormwater management.	MPP-EN-17	ENV-7 ENV-23 ENV-27 TR-9.2 UGA-13.4.3		
ES-6.5	Encourage environmental stewardship programs aimed at wetland preservation.	Policy ES-5.5	Encourage environmental stewardship programs aimed at wetland preservation.	MPP-EN-17	ENV-7 ENV-23 ENV-27 TR-9.2 UGA-13.4.3		
ES-6.6	Pursue implementation of a wetland mitigation-banking program.	Policy ES-5.6	Pursue implementation of a wetland mitigation-banking program.	MPP-EN-17	ENV-7 ENV-23 ENV-27 TR-9.2 UGA-13.4.3		
ES-6.7	Use the best available science when assessing wetland values and functions.			MPP-EN-6	ENV-32	WAC 365-195-905 through WAC 365-195-925	
Goal ES-7	Preserve, restore, and enhance fish and wildlife habitat conservation areas.	Goal ES-6	Preserve and restore fish and wildlife habitat conservation areas.	Environmental Goal	ENV-21 ENV-32		Added "...and enhance...".
ES-7.1	Preserve habitats for species, which the federal or state government have identified, as endangered, threatened, or sensitive.	Policy ES-6.1	Preserve habitats for species, which the federal or state government have identified, as endangered, threatened, or sensitive.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		
ES-7.2	Further the conservation of sites that protect fish and wildlife habitat conservation areas through incentives or acquisition	Policy ES-6.2	Encourage conservation of sites that protect fish and wildlife habitat conservation areas through incentives or acquisition	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		Updated grammar.
ES-7.3	Support the restoration of ecological functions and the natural environment in environmentally damaged areas by offering incentives.	Policy ES-6.3	Encourage the restoration of ecological functions and the natural environment in environmentally damaged areas through incentives.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		Updated grammar.

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Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-7.4	Protect and enhance water quality in lakes and streams using the best available science in coordination with local and regional jurisdictions, Tribes, and community organizations.	Policy ES-6.4	Protect water quality in lakes and streams.	MPP-EN-3	ENV-38 ENV-39 TR-9 EPF-6.10 H-3		Added "...using the best available science in coordination with local and regional jurisdictions, Tribes, and community organizations."
ES-7.5	Promote clustered developments, common areas, buffers, conservation easements, and retention of native vegetation as a means of conserving critical habitat.	Policy ES-6.5	Promote clustered developments, common areas, buffers, conservation easements, and retention of native vegetation as a means of conserving critical habitat.	MPP-EN-3 MPP-EN-5 MPP-EN-10 MPP-RGS-15	ENV-3.9 ENV-30 ENV-30.1 ENV-30.2 ENV-34 ENV-38 ENV-39 ENV-43.4 TR-9 EPF-6.10 H-3 RUR-5 RUR-9		
ES-7.6	Use the best available science in measures preserving, restoring, and enhancing fish and wildlife habitats, giving special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish habitat.			MPP-EN-6 MPP-PS-21	ENV-21 ENV-32	WAC 365-195-905 through WAC 365-195-925	
ES-7.7	Coordinate conservation or protection measures of anadromous fish habitat in partnership with local Tribes.			MPP-RC-15	TC-1 TC-2	RCW 36.70A.110	
Goal ES-8	Establish and maintain a healthy urban forest with an overall tree canopy goal of 38 percent.	Goal ES-7	Promote, preserve, and emphasize a healthy urban forest with an overall tree canopy goal of 38%.	Environmental Goal	ENV-16.8 ENV-22.3 ENV-23.3 ENV-44.2		Updated grammar.
ES-8.1	Protect and conserve open space and transition buffers between urban and rural areas	Policy ES-7.1	Protect and conserve open space and transition buffers between urban and rural areas	MPP-EN-9 EN-Action-4	ENV-11 ENV-12 ENV-13 ENV-15 ENV-16.8 ENV-17 ENV-22.3 ENV-23.3 ENV-44.2		

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Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-8.2	Preserve and protect public views of the mountains and valley corridors.	Policy ES-7.2	Preserve and protect public views of the mountains and valley corridors.	MPP-EN-9 EN-Action-4	ENV-11 ENV-12 ENV-13 ENV-15 ENV-16.8 ENV-17 ENV-22.3 ENV-23.3 ENV-44.2		
ES-8.3	Practice land cover management, which includes forest and topsoil preservation, native growth protection easements, dense vegetative zones, and preservation of the tree canopy.	Policy ES-7.3	Practice land cover management, which includes forest and topsoil preservation, native growth protection easements, dense vegetative zones, and preservation of the tree canopy.	MPP-EN-9 MPP-EN-13	ENV-16.8 ENV-22.3 ENV-23.3 ENV-44.2		
ES-8.4	Protect significant trees and, promote tree replanting, and the use of native plants in residential and commercial development and redevelopment.	Policy ES-7.4	Protect significant trees, promote tree replanting, and encourage the use of native plants in residential and commercial development.	MPP-EN-9 MPP-EN-13	ENV-16.8 ENV-22.3 ENV-23.3 ENV-44.2		Added "...and redevelopment."
ES-8.5	Support the preservation of native vegetation and mature trees, revegetation, and appropriate landscaping to improve the quality of air, water, and fish and wildlife habitat.	Policy ES-7.5	Promote the preservation of native vegetation and mature trees, revegetation, and appropriate landscaping to improve air and water quality and fish and wildlife habitat.	MPP-EN-9 MPP-EN-13	ENV-16.8 ENV-22.3 ENV-23.3 ENV-44.2		Updated grammar.
ES-8.6	Promote the use of native plants in residential and commercial landscapes	Policy ES-7.6	Promote the use of native plants in residential and commercial landscapes	MPP-EN-9 MPP-EN-13	ENV-16.8 ENV-22.3 ENV-23.3 ENV-44.2		
ES-8.7	Maintain the City urban forestry in-lieu fee program to assist the City in establishing or preserving urban tree canopy.	Policy ES-7.7	Develop an in-lieu fee program to assist the City in establishing or preserving urban tree canopy.	MPP-EN-9 MPP-EN-13	ENV-16.8 ENV-22.3 ENV-23.3 ENV-44.2		Updated to current language.
ES-8.8	Provide opportunities to engage the Tree Board as advisors and stakeholders committed to the preservation of our tree canopy.	Policy ES-7.8	Provide opportunities to engage the Tree Board as advisors and stakeholders committed to the preservation of our tree canopy.	MPP-EN-9	ENV-16.8 ENV-22.3 ENV-23.3 ENV-44.2		
Goal ES-9	Preserve and protect agricultural resource lands and urban agriculture sites to improve access to healthy foods, build social connections, and provide local sourced food.	Goal ES-8	Preserve and protect agricultural resource lands and urban agriculture sites to improve access to healthy foods, build social connections, and provide local sources of food.	MPP-DP-20	AG-8 CU-1 EC-4		Updated grammar.

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Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-9.1	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 ES-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.	MPP-DP-20 MPP-DP-32 MPP-DP-42 MPP-EC-23	ENV-18.3 AG-2.1 AG-5 AG-5.1 AG-5.2 AG-7.2 ENV-7.9 ENV-7.10 ENV-7.11		
ES-9.2	Allow continued agricultural production in areas which are producing such products but are not currently in designated agricultural resource lands as long as such production is appropriate incompatible with surrounding urban context.	Policy ES-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 appropriate in an urban context.	MPP-DP-20 MPP-DP-32 MPP-DP-39 MPP-EC-23	ENV-18.3 RUR-8 RUR-9 RUR-10		Updated grammar.
ES-9.3	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 ES-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.	MPP-DP-20 MPP-DP-32 MPP-DP-33 MPP-DP-39 MPP-DP-42 MPP-DP-44 MPP-EC-23	ENV-18.3 AG-2.1 AG-5 AG-5.1 AG-5.2 AG-7.2 ENV-7.9 ENV-7.10 ENV-7.11 RUR-3 RUR-4		
ES-9.4	Protect property owner's rights to cultivate gardens to produce fresh fruits and vegetables and to keep a limited number of farm animals through the City's development regulations.	Policy ES-8.4	Protect property owner's rights to cultivate gardens to produce fresh fruits and vegetables and to keep a limited number of farm animals through the City's development regulations.	MPP-DP-20	AG-8		
ES-9.5	Expand access to community gardens through Bonney Lake to increasing availability of locally sourced fresh produce while reducing greenhouse gas emissions.	Policy ES-8.5	Expand access to community gardens through Bonney Lake to increase access to fresh produce.	MPP-DP-20	AG-8		Added "...availability of locally sourced..." and "...while reducing greenhouse gas emissions."
ES-9.6	Remain open to further designations of agricultural resource lands on land shown to merit that designation.	Policy ES-8.6	Remain open to further designations of agricultural resource lands on land shown to merit that designation.	MPP-DP-20 MPP-DP-39 MPP-DP-44	AG-8 RUR-8 RUR-9 RUR-10		

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Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-9.7	Ensure that land uses proposed adjacent to lands designated, as agricultural resource lands are compatible with agricultural activities.	Policy ES-8.7	Ensure that land uses proposed adjacent to lands designated, as agricultural resource lands are compatible with agricultural activities.	MPP-DP-20 MPP-DP-39 MPP-DP-41 MPP-DP-42 MPP-DP-43 MPP-DP-44	RUR-8 RUR-9 RUR-10 AG-2.1 AG-3 AG-4.1 AG-5 AG-5.1 AG-5.2 AG-6 AG-7 AG-7.2 AG-7.9 ENV-7 ENV-7.9 ENV-7.10 ENV-7.11 EPF-4.2.8		
ES-9.8	Support community education programs providing opportunities to learn about urban agriculture and ways to use and access healthy foods locally, especially for communities that experience greater barriers accessing healthy foods.			MPP-DP-20	AG-8	RCW 36.70A.070(5)	
ES-9.9	Identity and mitigate the potential impacts of climate change on local agricultural lands, systems, and working condition.			MPP-DP-39	ENV-1 ENV-6		Added to comply with the MPPs. Growth Management Act will require a Climate Change Element to be incorporated into Comprehensive plans by 2029.
Goal ES-10	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) and ensuring that overall air quality meets or exceeds State and Federal standards.	Goal ES-9	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) and ensuring that overall air quality meets or exceeds State and Federal standards.	Environmental Goal	ENV-46 TR-10		

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Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-10.1	Support efforts of other local, regional and State agencies to improve regional air quality.	Policy ES-9.1	Support efforts of other local, regional and State agencies to improve regional air quality.	MPP-EN-1 MPP-EN-3 MPP-EN-22 MPP-CC-11 CC-Action-3	ENV-1 ENV-4 ENV-5.4 ENV-16 ENV-17 ENV-20 ENV-21.9 ENV-23 ENV-25 ENV-29 ENV-36 ENV-38 ENV-39 ENV-39.2 ENV-40 ENV-42 ENV-46.4 TR-9 TR-11 TR-21 EPF-6.10 H-3 C-22 C-31 C-33		
ES-10.2	Coordinate land use planning and local transportation planning to reduce the potential for long-term exposure to criteria air pollutants and toxic air contaminants.	Policy ES-9.2	Coordinate land use planning and local transportation planning to reduce the potential for long-term exposure to criteria air pollutants and toxic air contaminants.	MPP-EN-3 MPP-EN-22 MPP-CC-11 CC-Action-3	ENV-29 ENV-38 ENV-39 ENV-46.4 TR-9 TR-11 TR-21 EPF-6.10 H-3 C-22 C-31 C-33		

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Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-10.3	Reduce the air quality impacts created by truck traffic, hazardous materials, and development through transportation investments that reduce vehicle miles traveled and greenhouse gas emissions.	Policy ES-9.3	Reduce the air quality impacts created by truck traffic, hazardous materials, and development.	MPP-EN-3 MPP-EN-22 MPP-CC-11 CC-Action-3	ENV-29 ENV-38 ENV-39 ENV-46.4 TR-9 TR-11 TR-21 EPF-6.10 H-3 C-22 C-31 C-33		Added "...through transportation investments that reduce vehicle miles traveled and greenhouse gas emissions."
ES-10.4	Continue to implement the policies adopted by Resolution 2049.	Policy ES-9.4	Continue to implement the policies adopted by Resolution 2049.	MPP-EN-3 MPP-EN-22 MPP-CC-11 CC-Action-3	ENV-29 ENV-38 ENV-39 ENV-46.4 TR-9 TR-11 TR-21 EPF-6.10 H-3 C-22 C-31 C-33		
ES-10.5	Encourage energy efficiency in site design, building orientation, landscaping, and utilities/infrastructure for all development and redevelopment projects.	Policy ES-9.5	Encourage energy efficiency in site design, building orientation, landscaping, and utilities/infrastructure for all development and redevelopment projects.	MPP-EN-3 MPP-EN-5 MPP-EN-22 MPP-CC-11 CC-Action-3 MPP-DP-46	ENV-29 ENV-34 ENV-38 ENV-39 ENV-43.4 ENV-46.4 TR-9 TR-11 TR-21 EPF-6.10 H-3 C-22 C-31 C-33 RUR-9		

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Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-10.6	Pursue renewable energy sources as part of new and existing city buildings and infrastructure projects.	Policy ES-9.6	Encourage renewable energy sources for new and existing buildings and infrastructure.	MPP-EN-3 MPP-EN-22 MPP-CC-2 MPP-CC-11 CC-Action-3 MPP-DP-46 MPP-PS-13	ENV-29 ENV-34 ENV-38 ENV-39 ENV-43.4 ENV-46.4 TR-9 TR-11 TR-21 EPF-6.10 H-3 C-22 C-31 C-33 RUR-9		Updated grammar.
ES-10.7	Incentivize renewable energy sources for new and existing buildings and infrastructure projects proposed in the city.			MPP-PS-13 MPP-CC-5 MPP-CC-7	ENV-45 C-31		Added to comply with the MPPs. Growth Management Act will require a Climate Change Element to be incorporated into Comprehensive plans by 2029.
ES-10.8	Identify and publish a citywide approach to increasing energy efficiency and greenhouse gas emission reductions.			Climate Change Goal MPP-EN-22 MPP-CC-1 MPP-CC-3	ENV-45 ENV-46 TR-10 C-31		Added to comply with the MPPs. Growth Management Act will require a Climate Change Element to be incorporated into Comprehensive plans by 2029.
ES-10.9	Evaluate the implementation of incentive opportunities to encourage desired energy efficiency practices within site design, building orientation, landscaping, and utility/infrastructure for all development and redevelopment projects.			MPP-CC-5 MPP-CC-7	ENV-45 ENV-46 TR-10 C-31		Added to comply with the MPPs. Growth Management Act will require a Climate Change Element to be incorporated into Comprehensive plans by 2029.

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Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	**Notes**
Goal ES-11	Develop disaster preparedness management systems with a focus on community resilience that prepares the Bonney Lake community to withstand, adapt, and recover from disaster in a responsive and healthy manner.	Goal ES-10	Develop disaster preparedness management systems with a focus on resilience that prepares our residents, community, and systems to recover from disaster quickly and healthfully.	MPP-PS-19			Updated grammar. Added to comply with the MPPs. Growth Management Act will require a Climate Change Element to be incorporated into Comprehensive plans by 2029.
ES-11.1	Improve and retrofit existing infrastructure and develop future infrastructure to withstand a variety of compounding severe weather events ranging from droughts to floods, prioritizing improvements to communities most vulnerable to these events.	Policy ES-10.1	Improve existing infrastructure and develop future infrastructure to withstand greater than average weather events including storms and drought.	MPP-CC-7 MPP-CC-8 CC-Action-3 CC-Action-4 MPP-T-31 MPP-PS-17 MPP-PS-19	ENV-40 C-22 C-31 C-33 ENV-29 ENV-39 ENV-46.2 TR-9 TR-11 TR-20 TR-20.1 TR-21 UGA-10 H-5		Added "...and retrofit..." and "... a variety of compounding severe weather events ranging from droughts to floods, prioritizing improvements to communities most vulnerable to these events."
ES-11.2	Cooperate with other agencies in preparing emergency management plans to respondto a lahar originating on Mount Rainer, an eruption of Mount Rainer, or an earthquake along the Cascadia Subduction Zone or the Nisqually Fault Line.	Policy ES-10.2	Cooperate with other agencies in preparing emergency management plans to respondto a lahar originating on Mount Rainer, an eruption of Mount Rainer, or an earthquake along the Cascadia Subduction Zone or the Nisqually Fault Line.	MPP-CC-8 CC-Action-3 CC-Action-4 MPP-PS-17 MPP-PS-19	ENV-40 TR-20.1 C-22 C-31 C-33 ENV-29 ENV-39 ENV-46.2 TR-9 TR-11 TR-20 TR-21 H-5		

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Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-11.3	Develop and update maps that identify areas of the City most at risk of hazards and develop resiliency resources and education programs for citizens likely to be impacted., prioritizing resources and programs for citizens most vulnerable within these areas.	Policy ES-10.3	Develop maps that identify areas of the City most at risk of hazards and develop resiliency resources and education programs for citizens likely to be impacted.	MPP-CC-7 MPP-CC-8 CC-Action-3 CC-Action-4 MPP-PS-17 MPP-PS-19	ENV-40 C-22 C-31 C-33 ENV-29 ENV-39 ENV-46.2 TR-9 TR-11 TR-20 TR-20.1 TR-21 H-5		Added "...and update..." and "...prioritizing resources and programs for citizens most vulnerable within these areas."
ES-11.4	Develops plans for managing event evacuees and, when appropriate, enter into interlocal and mutual aid agreements to help manage temporary population influx from disasters.	Policy ES-10.4	Develops plans for managing event evacuees and, when appropriate, enter into interlocal and mutual aid agreements to help manage temporary population influx from disasters.	MPP-CC-8 CC-Action-3 CC-Action-4 MPP-T-31 MPP-PS-17 MPP-PS-19	ENV-40 C-22 C-31 C-33 ENV-29 ENV-39 ENV-46.2 TR-9 TR-11 TR-20 TR-20.1 TR-21 UGA-10 H-5		
ES-11.5	Develop a continuity of operations plan that identifies the City's essential functions and provides procedures for notifications, orders of succession, delegation of authority, alternate locations, essential records, and reconstitution.	Policy ES-10.5	Develop a continuity plan that identifies the City's essential functions and provides procedures for notifications, orders of succession, delegation of authority, alternate locations, essential records, and reconstitution.	MPP-CC-8 CC-Action-3 CC-Action-4 MPP-PS-17 MPP-PS-19	ENV-40 TR-20.1 C-22 C-31 C-33 ENV-29 ENV-39 ENV-46.2 TR-9 TR-11 TR-20 TR-21 H-5		Added "...of operations...".
ES-11.6	Evaluate urban forestry program and codes for incorporation of fire prevention and preparedness best practices.	Policy ES-10.6	Evaluate urban forestry program and codes for incorporation of fire prevention and preparedness best practices.	MPP-PS-19	TR-20		
ES-11.7	Complete a Risk and Resilience Analysis and develop an Emergency Response Plan for drinking water infrastructure.	Policy ES-10.7	Complete a Risk and Resilience Analysis and develop an Emergency Response Plan for drinking water infrastructure.	MPP-PS-19	TR-20		

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Goal / Policy #	Goal / Policy Language	Goal / Policy #	Goal / Policy Language	MPP	CPP	RCW/WAC	
ES-11.8	Coordinate with other local and regional agencies and community organizations in preparing emergency management plans to respond to a variety of compounding severe weather events ranging from droughts to floods, prioritizing improvements to communities most vulnerable to these events.			MPP-CC-6 MPP-CC-7 MPP-PS-17	TR-20		Added to comply with the MPPs. Growth Management Act will require a Climate Change Element to be incorporated into Comprehensive plans by 2029.
ES-11.9	Ensure members of the public receive timely concise information and instructions to proactively respond when an emergency strikes, especially for communities disproportionately impacted in emergency situations.			MPP-PS-17 MPP-T-31	TR-20		Added to comply with the MPPs. Growth Management Act will require a Climate Change Element to be incorporated into Comprehensive plans by 2029.
ES-11.10	Coordinate with Tribes, local and regional jurisdictions, and community groups to explore the logistics of joining a Pierce County coalition to address the impacts of climate change on a regional scale, recognizing the clear danger posed by climate change, and its potential to drastically impact quality of life, the natural and built environment, and human health and safety for future generations.			MPP-PS-17 MPP-T-31	HAC-1 HAC-2 TR-4.6 TC-1 TC-2		Added to comply with the MPPs. Growth Management Act will require a Climate Change Element to be incorporated into Comprehensive plans by 2029.
ES-11.11	Require the incorporation of climate resiliency measures in all new development, especially new critical infrastructure and public facilities.			MPP-CC-7 MPP-EC-16 MPP-T-31 MPP-PS-19	ENV-40		Added to comply with the MPPs. Growth Management Act will require a Climate Change Element to be incorporated into Comprehensive plans by 2029.