City of Kenmore

City of Kenmore - 18120 68th Avenue NE - Kenmore, WA 98028
Phone: 425-398-8900 - E-mail: cityhall@kenmorewa.gov

Planning Commission Meeting
ON-SITE
Tuesday, May 7, 2024 - 7:00 PM
In addition, we try to provide access to the meeting virtually:
ZOOM LINK: https://kenmorewa-gov.zoom.us/j/87483329324

Or Telephone: Dial US: +1 253 205 0468 US
Callers please dial *9 to Raise/Lower Hand
Webinar ID: 874 8332 9324

Technical Difficulties - If the virtual component of the meeting disconnects, and we cannot resolve technical difficulties to reconnect the virtual component, the in-person meeting will continue at City Hall if there is a quorum of the body to conduct business.

If you have technical difficulties accessing the meeting virtually, please contact the Deputy City Clerk at mkang@kenmorewa.gov.

Land Acknowledgement to Honor First Peoples

We acknowledge that the City of Kenmore is situated upon the ancestral lands of the Snohomish, Snoqualmie, Sauk-Suiattle, Duwamish, Stillaguamish, Tulalip, Suquamish, Muckleshoot, and other tribes who are part of the Coast Salish Peoples. We recognize and express our deepest respect for their enduring stewardship and profound relationship with this land, which they have cherished and protected since time immemorial. We honor the First Peoples, acknowledge their vibrant cultures, and commit ourselves to learning from their wisdom in our journey to promote justice, equity, and mutual understanding. We pledge to stand alongside these communities in acknowledging past injustices and working towards a future that respects and celebrates the diverse heritage of this land.

1. **CALL TO ORDER**

2. **LAND ACKNOWLEDGEMENT**

3. **FLAG SALUTE**

4. **PUBLIC COMMENTS**

We welcome our community members to the Planning Commission meeting. In this forum, the Commission does not engage or dialogue with the public; the primary role is to listen. We will hear from our on-site guests first, followed by our pre-registered virtual guests. All guests must address comments to the Commission. The Clerk will acknowledge your request and call your name when it is your turn. Your time will start when we confirm that we can hear you. Please state your name and city of residence for the record and keep your comments to 3 minutes. We will not split your time with others or reset your time except by express approval of the Chair. You can submit materials to the Clerk in advance. This meeting is being recorded. Thank you for taking the time to express your comments.

VIRTUAL PARTICIPATION PROCESS: To provide public comments virtually, please fill

out the
Virtual Public Comment Request Form in advance of the meeting. The form closes at 12:00 Noon on the day of the meeting. You will be confirmed by the Clerk. If you are having difficulty, please reach out to the Clerk at stippleleen@kenmorewa.gov.

5. CONSENT AGENDA

Approval of Previous Meeting Minutes
04.02 Planning Commission Meeting Minutes

Planning Commissioner Excusals

6. AGENDA ITEMS

Natural Environment Element
Staff Memo
DRAFT Natural Environment Element

7. ADJOURNMENT

UPCOMING MEETINGS:
May 21, 2024, 7:00 p.m.

City of Kenmore
Joint Planning Commission Meeting Minutes
April 2, 2024 @ 7:00 PM

Planning Commission Members – In Attendance (the meeting was held onsite and virtually using the Zoom online platform)

Dwight Thompson, Chair
Mike Vanderlinde, Vice Chair (Virtual)
Tracy Banaszynski
David Dorrian
Saad Qadri
Chris Olson (Virtual)
Derek Wyckoff

Staff

Debbie Bent, Community Development Director
Todd Hall, Principal Planner
Shannon Tipple-Leen, Planning Commission Clerk
Michelle Kang, Co-Clerk

1. CALL TO ORDER

The meeting was called to order by Chair Thompson at 7:00 PM.

2. LAND ACKNOWLEGDEMENT

The Land Acknowledgement was read.

3. FLAG SALUTE

The Flag Salute was done.

4. PUBLIC HEARING

Todd Hall gave a presentation on the Northshore School District Comprehensive Plan Amendment and Rezone.

Chair Thompson opened the Public Hearing at 7:12pm. There were no Public Comments. The Public Hearing was closed at 7:15pm.

- **MOTION:** Commissioner Dorrian moved to take action on the rezone. Commissioner Banaszynski seconded the motion.
VOTE: 7 For, 0 Against, 0 Abstain. Motion Carried.

There were no amendments to the Northshore School District Comprehensive Plan Amendment and Rezone given.

- **MOTION:** Commissioner Banaszynski moved to accept as written and send the document to Council. Commissioner Qaadri seconded the motion.
VOTE: 7 For, 0 Against, 0 Abstain. Motion Carried.

5. CONSENT AGENDA

The minutes from March 5th and March 18th were unanimously approved. There were no Commissioner excusals.

- **MOTION:** Commissioner Banaszynski moved to accept the consent agenda. Chair Thompson seconded the motion.
VOTE: 7 For, 0 Against, 0 Abstain. Motion Carried.

6. AGENDA

Todd Hall provided a presentation on the Downtown and Community Character Design Element.

The report from ULI was discussed. The final report will be delivered to the City in June and will be used to inform the Downtown and Community Character Element, as well as help guide future downtown planning.

Questions/Comments:

There was high level discussion on both the Downtown and Community Character Element including:

- The verbiage of the word ‘character” and the message it portrays.

- Allowing for medium-density in the language rather than just single-family and multifamily dwellings.

- Removing names of specific companies.

- Planning for growth around the Brewery Row area.

- Allowing for the use of multi-modal vehicles on paths and trails.

- Highlighting climate goals in the elements.

- Retention of and/or environmental impacts of view corridors.

- Geotech and environmentally sensitive areas policies. Might need to separate – one for environment and one for safety or create zones in the city that are not environmentally critical.

- Public art.

- The types of businesses we want to attract with the types of buildings we build.

- Parking availability, types, and concepts.

- Development for entire breadth of the Average Medium Income (AMI) scale.

Todd and Debbie gave closing comments.

Upcoming Planning Commission meetings:
May 7 – Housing and Land Use Elements, Middle Housing
May 21 – Natural Environment Element
June 4 – Housing and Land Use Elements, Middle Housing (2nd review)
June 18 – Surface Water, Capital Facilities Plan, Natural Environment

- **MOTION:** Commissioner Banaszynski moved to cancel the April 16th meeting. Commissioner Qaadri seconded the motion.
VOTE: 7 For, 0 Against, 0 Abstain. Motion Carried.

The Deputy City Clerk gave briefly discussed the Open Public Meetings Act (OPMA) and reminded the Commissioners to put the Planning Commission email group in bcc when emailing to avoid accidently creating a discussion on email. Better practice is to email the Clerk and have her disseminate any information.

5.Approval of Previous Meeting Minutes

There was brief discussion regarding a City Council request to create an advisory group about middle housing. The parameters of that are to be determined at a later date.

6. ADJOURNMENT

Chair Thompson adjourned the meeting at 9:37 PM.

_____
Planning Commission
Approved by Planning Commission on: _____

City Of Kenmore, Washington

Memorandum

Date: May 7, 2024

To: Planning Commission

From: Debbie Bent, Community Development Director
Todd Hall, Principal Planner

Regarding: Comprehensive Plan Update: Natural Environment Element

The City of Kenmore is updating its comprehensive plan as part of the periodic review required by the WA State Growth Management Act (GMA). The Natural Environment Element, previously part of the Land Use Element as a "sub-element," is now a stand-alone element.

In addition to the Natural Environment Elements, staff are making minor amendments to two chapters of the Kenmore Municipal Code: 18.20 Technical Terms and Land Use Definitions, and 18.55 Critical Areas. These two chapters will be presented for Planning Commission review at a future meeting, along with a revised Natural Environment Element based on Planning Commission feedback from the May 7th meeting.

The Natural Environment Element, along with the Surface Water and Capital Facilities Element, will be sent together for Department of Commerce and Department of Ecology for GMA and SEPA review, respectively, later this summer. Once recommended by the Commission, each element would be reviewed by City Council this summer, with adoption of the ordinance required by December 31, 2024.

Attachment 1: Draft Natural Environment Element

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~~Text~~ = deleted text
Text = new text

NATURAL ENVIRONMENT ~~SUB~~ ELEMENT

INTRODUCTION

~~Natural systems play an important part in defining the quality of life in the City of Kenmore. The different Miles of Lake Washington shoreline, small creeks, streams, street trees, and open spaces~~waterways provide recreational opportunities and visual amenities for the community. ~~Some of the smaller, unnamed creeks perform an important role in surface water management by channeling runoff from impervious surfaces to the Sammamish River and/or Lake Washington. Streams and wetlands provide habitat for fish and wildlife and the tree-covered forested hillsides protect the slopes from erosional and siltation processes, while also providing habitat. Future development will impact the natural systems and should be carefully reviewed to prevent minimize undue adverse environmental impacts that would lead to degradation of critical areas, air and groundwater quality, and to public and private property damage.~~

Purpose

The purpose of the Natural Environment ~~Sub~~ Element is to clarify the relationship between Kenmore's ~~the~~ natural ~~environment~~ and ~~the~~ built environments, ~~and~~ to ~~secure~~encourage a balanced approach to support ~~to of environmental and built future developmentenvironments, and support~~ Kenmore's vision of an equitable, inclusive, sustainable, and resilient environment. ~~Sensitive~~Critical Natural ~~areas~~environment systems ~~such as~~include Lake Washington, Sammamish River, Swamp Creek, ~~wetlands,~~plus smaller rivers/creeks and their associated wetlands ~~which all provide open space and important fish and wildlife habitat. open spaces, and fish and wildlife habitat contain much of the natural wealth valued by City residents.~~ Other ~~sensitive~~critical ~~l~~nautral areas, such as land prone to flooding and geologically hazardous areas (e.g. steep slopes and landslide hazards) are important because of the risk to lives and property posed by developing them. Tree canopy and native vegetation within natural areas are important to support fish and wildlife habitat.

Federal and State Requirements

While the Natural Environment Element is not a requirement ~~U~~under the Growth Management Act (GMA), all jurisdictions are required to protect and ~~enhance~~ conserve the natural ecosystems through comprehensive plans and policies, and to develop regulations that reflect natural constraints and protect critical~~sensitive features~~environments~~s~~. Land use and development is ~~to be~~ regulated through a variety of management recommendations as established by state and federal agencies in a manner that respects fish and wildlife habitat in conjunction with natural features and functions, including air and water quality. Natural resources and the built environment are ~~to be~~ managed to protect, improve, and sustain environmental quality.

Additionally, under the federal Clean Water Act, administered by the Washington Department of Ecology, local jurisdictional waterways are ~~to be~~ managed to prevent and reduce water pollution, clean up polluted waters, and protect and restore water quality to support recreation, business activities, supply drinking water, and protect fish and other aquatic ~~animals~~wildlife. ~~for multiple beneficial uses, including flood and erosion hazard reduction, fish and wildlife habitat, agriculture, open space, water supply, and hydropower.~~ Use of water resources for one purpose should, to the fullest extent possible, preserve and promote opportunities for other uses.

Environmentally Critical Areas and Shoreline Master Program

The Critical Areas chapter of the Kenmore Municipal Code designates and classifies environmentally critical, geologic, and flood hazard areas in order to protect these areas to protect life and property from hazards, while also allowing for reasonable use of public and private property. The Critical Areas chapter also includes regulations on fish and wildlife habitats of importance.

The City's Shoreline Master Program applies to "shorelines of the State." In Kenmore, these include Lake Washington, the Sammamish River, and the main stem of Swamp Creek. In addition, wetlands considered "associated" with State Shorelines, such as Swamp Creek No. 3, are also ~~jmjhj~~regulated by the Shoreline Master Program. The Shoreline Master Program regulations include Environment designations of Downtown Waterfront, Shoreline Residential, Urban Conservancy, Natural, and Aquatic. The Downtown Waterfront environment is more permissive in terms of uses and development standards than the other designations. The most restrictive environment designation is the Natural environment. The Shoreline Sub-Element of the Land Use Element addresses shoreline goals, objectives, and policies. The shoreline management chapter of the Kenmore Municipal Code includes regulations implementing the Shoreline Master Program and goals and policies of the Shoreline Sub-Element of the Comprehensive Plan.

Science supported by the State of Washington and partnering agencies play~~ce~~ a large role in defining critical areas, identifying functions and values, and identifying protection strategies. The State's Best Available Science (BAS) rule requires integration of science into the establishment and update of the critical area and shoreline regulations.

Countywide Planning Policies

The King County Countywide Planning Policies (CPP) seek to restore the quality of the natural environment and to protect it for future generations. The policies require all jurisdictions to manage natural drainage systems to improve water quality and habitat functions, minimize erosion and sedimentation, protect public health, reduce flood risks, and moderate peak storm water runoff rates. Jurisdictions in shared basins are to coordinate approaches and standards. Jurisdictions also are directed to encourage locally appropriate, low-impact development approaches and to plan for land use patterns and transportation systems that minimize air pollution and greenhouse gas emissions.

All jurisdictions are to collaborate with the Puget Sound Partnership to implement the Puget Sound Action Agenda for the benefit of Puget Sound and its watersheds.

~~Kenmore~~ Environmental Stewardship and Sustainability

Kenmore residents have a high awareness of and greatly value environmental protection. There are many City-sponsored events and nonprofit groups that encourage community involvement and volunteering in stewardship activities that increases community understanding and awareness of the natural environment, promoting sustainable land use activities and low-impact development practices, and how to avoid adverse environmental impacts. The City of Kenmore and its residents strive to lead by example in the conservation of natural resources, sustainability, and environmental equity.

This element, as well as the Climate Action Element, provide a variety of policies that support environmental stewardship and sustainability.

EXISTING CONDITIONS

Background

Kenmore residents highly value the natural environment, from its interconnected forested open spaces, wetland and riparian areas to its Sammamish River and Lake Washington shorelines. The protection of these areas is vital not only for the quality of life and enjoyment for humans, but also for flora and fauna. As Kenmore continues to grow, key considerations must be given to balance growth, development, and recreational access with the protection and preservation of the community's natural assets using Best Available Science.

To better understand the functions and activites of the city's valuable natural systems and wildlife, the narratives below summarize geologic, air, water and wetlands, and sensitive species that may be found in Kenmore.

Geology

Much of the City of Kenmore is comprised of undulating uplands formed as a result of different glacial depositional processes. ~~Stream erosion, subsequent to glaciation, carved gullies and ravines in the uplands. Drift plains and alternating valleys create a north-south trending "ridge and valley" regional topography, with one major east-west lowland bisecting Kenmore – the Sammamish River Valley where the river empties into Lake Washington.~~ The general topography of Kenmore is varied, ranging from hills up to 500 feet in elevation to the Lake Washington shoreline at 20 feet above sea level.

~~The Vashon glaciation left a layer of till and recessional sand and gravel deposits that mantle the upland plateaus north and east of Lake Washington. The till and recessional deposits overlie Vashon outwash sand and gravel, and older glacial and nonglacial deposits that overlie bedrock at great depths.~~

~~The Vashon and older deposits in the Kenmore area form a sequence of sand and gravel layers separated by finer grained layers of clay and silt or tight, well-graded soils, which are exposed in places along the steep slopes that lie between the upland plateaus and the lowland drainages. The Vashon and older deposits comprise several aquifers and aquitards within the subsurface, which control subsurface water movement from the upland to the lowland as well as to the locations of streams and creeks that occupy former outwash channels.~~

~~Lodgment till from the Vashon glaciation mantles much of the upland area but is generally absent from the steeper slopes at the edge of uplands and in the lowland. Lodgment till is an unsorted mixture of sand, gravel, silt, and clay deposited at the base of a glacier that has been compacted to a very dense state by the great weight of the overriding ice. This type of till has very low permeability and typically acts as an aquitard, restricting the downward flow of groundwater and reducing recharge of deeper~~

~~aquifers. Till occurs at or very near the ground surface in the higher elevations of the watershed where north-south ridges and swales left by the passage of glacial ice cross the upland surface.~~

~~The ground surface along the upland margins and within former large outwash channels is underlain by a veneer of recessional outwash and ice contact deposits. Ice contact deposits were deposited during stagnation and melting of the ice sheet. These deposits consist of sand and gravel, similar to recessional outwash, but are more variable and often contain lenses of very silty material, till, and lacustrine silt and clay, which impede infiltration and groundwater flow.~~

~~Recent, unconsolidated deposits of alluvium, organic-rich deposits, and fill overlie the Vashon glacial soils. Recent alluvium, consisting of sand and gravel with interbeds of organic silt, peat and silty clay, exists within the floodplains of the Sammamish River and Swamp Creek. In general, the recent alluvium is poorly drained and associated with hydric soil conditions.~~

Geologic~~ally~~ Hazard~~ous Areas~~

Geologic~~ally~~ hazard~~ous~~ areas in Kenmore include lands with erosion, landslide, and seismic hazards. ~~These areas pose a threat to health and safety of residents and property owners when residential and nonresidential development~~Erosion hazard areas, identified on the City's Geologic Hazard Areas map, occur along the northwest City limits, along 61st Avenue NE, land south of NE 170th Street, and along the shoreline in the Inglewood neighborhood and St. Edward State Park.

The identification of areas susceptible to landslide~~sing~~ is necessary in the assessment of grading, building, foundation design, housing density, and other land development regulations. Steeply sloping unconsolidated glacial deposits are highly susceptible to landslides. Landslide hazard areas are found along 61st ~~and 68th~~ Avenue~~s~~ NE, ~~the~~ area~~s~~ south of NE 170th Street, ~~north of Simonds Road,~~ and the Inglewood/St. Edward State Park area along Lake Washington.

Seismic hazard areas are those areas subject to severe risk of earthquake damage as a result of seismically induced settlement or soil liquefaction. The City's Geologic Hazard Areas map identifies the region of Swamp Creek, the Sammamish River basin and the northern end of Lake Washington north of NE 166th Place as a seismic hazard area primarily due to the potential of soil liquefaction during times of seismic activity. Refer to **Figure ~~LU-~~NE-~~1~~1** for the map indicating geologic hazard areas in Kenmore.

Air Quality

Air quality is generally assessed in terms of concentrations of air-borne pollutants being higher or lower than ambient air quality standards set to protect human health and welfare. To measure existing air quality, the Washington State Department of Ecology, and the Puget Sound Clean Air Agency (PSCAA) maintain a network of monitoring stations throughout the Puget Sound region. Based on monitoring information collected over time, state (Ecology) and federal (U.S. Environmental Protection Agency) agencies designate regions as being "attainment" or "nonattainment" areas for particulate air pollutants. Attainment is a measure of whether National Ambient Air Quality Standards (NAAQS) are being met.

King County was designated as a nonattainment area in 1989. This designation brought about maintenance measures to bring the area back into attainment. The county now meets air quality standards and has a long-term plan for continuing to meet and maintain these standards and

other requirements of the Clean Air Act. The county presently is designated as a "maintenance area."

Future Conditions

Overall ~~A~~air quality in Kenmore is predicted to remain much as it is today~~, or to improve slightly~~. However, in recent years, Kenmore has experienced air quality degradation due to seasonal wildfire smoke, particularly during the summer months. Kenmore's Climate Action Element has policies that seek to mitigate negative impacts of wildfire smoke.

~~This is based on continuation of the State vehicle emissions inspection and monitoring program and decreased dependence on wood as a primary heating source as newer houses replace older ones.~~

~~Additionally, i~~Implementation of zoning responsive to air quality concerns can result in air pollution benefits c~~C~~ountywide and regionally. Decreased air pollution can be expected from zoning and development patterns that result in a reduction in vehicle miles traveled. Concentrated development and higher density development allows transit to serve people more efficiently and generally reduces the number of cars on the road. Although regional or c~~C~~ountywide emissions can be reduced with efficient land use patterns, air pollutant emissions would still occur in more populated areas and may affect more people. Policies in the Land Use and Transportation elements support compact and transit-oriented development that help reduce vehicular trips and lower emissions.

Figure ~~1~~ 1NE-1. Geologically Hazardous Areas

6.Natural Environment Element

Water and Wetlands

Wetlands provide habitat for a variety of aquatic and terrestrial plant and animal species. The extent to which a wetland will provide wildlife habitat will depend upon several features including the condition of the site, its size, presence of habitat features (e.g. open water, snags, islands or perches), the variety and complexity of the different habitat types within the wetland, and the surrounding habitat in the immediate vicinity. Predominant water features in the City include Swamp Creek as well as its tributaries and associated wetlands, the Sammamish River, and Lake Washington. In addition to these major water bodies, numerous small unnamed streams drain into these features. Kenmore is located in the Water Resources Inventory Area (WRIA) 8, which represents the salmon recovery planning area of the Lake Washington/Cedar/Sammamish watershed. With the joint cooperation of residents, businesses, scientists, environmentalists, and governments, the protection and restoration of salmon water bodies in WRIA 8 is achieved through science-based conservation planning. Funding for salmon conservation is provided by 29 local governments, including Kenmore, in the WRIA 8 watershed.

There are ~~N~~numerous wetlands ~~also are~~ located ~~in~~ throughout the City—many within public open spaces such as Wallace Swamp Creek Park, ʔaxʷadis (Tl' awh-ah-dees) ~~Squire's Landing~~ Park, and Inglewood Wetlands. Wetlands are transitional areas between aquatic and upland habitats and are identified based upon three parameters: hydrology, soils and vegetation. Through a no net loss policy, wetlands are either preserved or replaced. Mitigation sequencing, or avoidance, is used to the best extent possible to ensure impact to wetlands are avoided. ~~Wetlands are formally identified and delineated in accordance with the approved federal wetland delineation manual and applicable regional supplements. Under normal circumstances, wetlands include the following three components:~~

- ~~Presence of water (hydrology) or an indication of at least the seasonal presence of water on the surface or in the soils;~~
- ~~Unique soils (hydric soils) that differ from upland soils due to anaerobic conditions resulting from prolonged or frequent saturation or flooding; and~~
- ~~A dominance of plants adapted to growing in wet conditions (hydrophytic vegetation).~~

~~Wetlands provide habitat for a variety of aquatic and terrestrial plant and animal species. The extent to which a wetland will provide wildlife habitat will depend upon several features including the condition of the site, its size, presence of habitat features (e.g. open water, snags, islands or perches), the variety and complexity of the different habitat types within the wetland, and the surrounding habitat in the immediate vicinity. The ability of a wetland to provide habitat can also be linked to the degree it has been fragmented by urbanization and the level of disruption of the hydrology and vegetative continuity with other wetland systems.~~ See **Figure LU-~~11a~~ NE-2** for a map of streams and wetlands in Kenmore.

Figure NE-211a. Streams and Wetlands

Swamp Creek

The main stem of Swamp Creek is approximately 14.6 miles long, extending from headwaters wetlands in south Everett, through portions of Everett, Lynnwood, Brier, Mountlake Terrace, Bothell, unincorporated Snohomish County, and Kenmore to the Sammamish River. Within the city of Kenmore, there are 2.5 miles of shoreline along the stream. Swamp Creek is typical of Puget Sound lowland streams. It originates in upland areas with gently sloping hillsides and eventually flows through a broad valley to the mouth. ~~Topography along the stream course varies from 450 feet above sea level at the headwaters to 20 feet above sea level at the mouth of the creek. The stream has a low to moderate gradient of 1 to 6 percent. Site and vegetation clearing and grading, increased impervious surfaces, inadequate storm detention and other factors, particularly with development in the watershed upstream from Kenmore, have increased flood frequencies and severity. Despite these changes, the Swamp Creek floodplain contains some of the largest and highest quality wetlands and wildlife habitat in the City. Swamp Creek has actively migrated within its floodplain.~~

Little Swamp Creek and Muck Creek join with Swamp Creek in Kenmore, along with a third, unnamed tributary.

Water Quality

Site and vegetation clearing and grading, increased impervious surfaces, inadequate storm detention and other factors, particularly with development in the watershed upstream from Kenmore, have increased flood frequencies and severity. Despite these changes, the Swamp Creek floodplain contains some of the largest and highest quality wetlands and wildlife habitat in the City.

The increase in development in Kenmore's watersheds must be managed to maintain ~~W~~water quality ~~issues include~~and reduce sedimentation and pollution associated with stormwater runoff. Temperature and dissolved oxygen exceed the water quality standards for most of the summer and early fall. There also are frequent exceedances of the fecal coliform bacteria standard. Swamp Creek has been rated over time as either "moderate concern" or "high concern" since King County began monitoring water quality parameters in 2000.

To capture gravel and sediments, an in-stream sediment pond was created and is maintained in Wallace Swamp Creek Park. Additionally, the City has acquired several parcels in the Swamp Creek watershed that are susceptible to flooding. These parcels have been added to the City's open space preserve.

Fish Habitat

Swamp Creek supports several salmonid fish species including coho salmon (federal species of concern), Chinook salmon (federally listed, threatened), coastal cutthroat trout (sea-run and resident), sockeye salmon, and steelhead trout (federally listed, threatened). Resident cutthroat trout are the dominant salmon species that spawn in the Swamp Creek basin. Swamp Creek also supports coho spawning and Little Swamp Creek is documented to support coho rearing. There is no designated critical habitat for any salmonid species in Swamp Creek or its tributaries.

Wildlife Habitat

Wildlife species are concentrated in small forested and wetland areas of the Swamp Creek watershed. The Swamp Creek wetland complex provides excellent forage and nesting habitat for

birds and good forage and shelter habitat for amphibians, reptiles and small mammals. Ponded areas in the wetland provide resting sites for waterfowl. Of particular interest is the great blue heron rookery, described further below. To improve habitat areas, invasives species and restoration of native habitats have been accomplished at Swamp Creek Park and in other targeted areas in the watershed.

Sammamish River

The Sammamish River begins at the outlet of Lake Sammamish and ends at its confluence with Lake Washington. The total length of the river mainstem is approximately 14 miles. Within the City limits, the shoreline extends approximately 1.8 miles. ~~The river has a low gradient (approximately 0.02%), dropping only 14' in elevation over its length. The volume and rate of surface water discharge from Lake Sammamish is moderated by a weir at Marymoor Park.~~

The ~~R~~river has been altered over time to control flooding. The natural Sammamish River floodplain historically covered a very large area as the river meandered extensively across the valley floor. ~~Prior to channelization, land use in the valley was predominately agricultural and spring flooding regularly caused extensive damage to seed crops.~~ To reduce this damage and to help regulate the level of Lake Sammamish, in the 1960s the U.S. Army Corps of Engineers~~, with King County as a local sponsor,~~ dredged a deeper and straighter channel and constructed levees along the riverbanks ~~in the 1960s, filling in the former meanders. Levees were typically placed on the riverbanks to maximize the flood protection area. Miles of streambank were lined with rip-rap and are devoid of vegetation.~~ In the 1980s and 1990s, dredging at the mouth of the river was undertaken for navigational purposes.

Consequences of the flood control projects include reduced frequency of overbank flooding, reduced riparian habitat, and elimination of extensive wetland areas. In Kenmore, approximately 35.3 acres of wetlands are mapped on the Sammamish River shoreline. The City has undertaken ~~community~~ restoration efforts to control invasive plants and replant native species in portions of the Rhododendron Park wetlands, portions of ƛ'axʷadis (Tl' awh-ah-dees) ~~Squire's Landing~~ Park wetlands, Log Boom Park Wetlands, and in wetlands near the Wildcliffe Shores community.

Commented [DB1]: ask Richard about the status of the Samm River restoration project.

Water Quality

The water quality of the Sammamish River is largely influenced by the slow-moving nature of this lowland system and by the backwater effect from Lake Washington. ~~The slow~~Slow movement, while enhancing sediment deposition, also allows for development of dense stands of aquatic plants ~~and,~~ higher algal productivity~~. The backwater affect means that~~and warmer lake water with lower dissolved oxygen concentrations which is significantly influencing the conditions in the lower reach of the river, especially during summer months.~~; both of these conditions are limiting for salmon. A 2015 study prepared for King County reported that "Elevated water temperatures may also adversely affect the fitness of adult Chinook salmon, delay their arrival at spawning grounds, or increase their susceptibility to disease/parasites," and have even resulted in mortality prior to spawning.~~ Swamp Creek's cooler temperatures create an important thermal refuge for fish where the creek joins the river. Fecal coliform bacteria and various pollutants are additional water quality issues. ~~Temperature, dissolved oxygen, and fecal coliform are water quality parameters that currently are listed by the Washington Department of Ecology as Category 5, a level of impairment that requires development of a Total Maximum Daily Load (TMDL) or water quality improvement plan. Ecology has been conducting studies in support of temperature and dissolved oxygen TMDL development since 2014.~~

~~The King County Water Quality Index rated the river at the Kenmore monitoring station as either of high or moderate concern with respect to water quality between 2000 and 2008.~~

Commented [DB2]: Richard may have more info about water quality.

Fish Habitat

The Sammamish River remains a major migratory pathway for salmon. The mouth of the [R]iver provides salmon rearing habitat and it is believed that out-migrating juvenile salmon may hold in the shallow beach area near the river mouth before moving into the lake. The basin supports rainbow trout, coho salmon (federal species of concern), Chinook salmon (federally listed, threatened), coastal cutthroat trout, kokanee salmon, sockeye salmon, and steelhead trout (federally listed, threatened).

Wildlife Habitat

Historically, the Sammamish River with its broad, shallow channels and numerous backwater sloughs and meanders provided prime habitat for a wide variety of animal species. This diversity of wildlife has been reduced and birds are the most visible form of wildlife along the river. Bald eagles, other raptors and cormorants have been observed, as well as ~~flying along the River and~~ great blue herons feeding along the river ~~there~~.

Lake Washington

Lake Washington has a surface area of approximately 35 square miles. Kenmore's shoreline along the north end of Lake Washington is approximately 3.5 miles in length. The shoreline has little natural vegetation or habitat left due to urbanization. An exception is the waterfront along St. Edward State Park, which is roughly 3,000 feet in length and the longest undeveloped stretch of Lake Washington shoreline.

~~Construction of the Ship Canal in 1916 created the connection between Lake Washington and Puget Sound, causing the lake water surface elevation to drop approximately 9 feet. Currently the U.S. Army Corps of Engineers maintains the water level in the lake within a 2-foot range between 20 and 22 feet. The minimum water elevation is maintained during winter to allow for annual maintenance of docks and other structures, minimize damage during winter storms, and provide flood storage volume.~~

Water Quality

Water quality in Lake Washington has improved tremendously in the last 50 years. However, a continued concern is localized areas of eutrophication, wherein nutrients (particularly phosphorus) and bacteria from the watershed are transported to the lake, resulting in excessive plant growth including floating and attached algae and nuisance plants. Water quality concerns around increased water temperature, fecal coliform bacteria and chemical contaminants also are present.

Fish Habitat

Lake Washington supports over 30 fish species of which 12 are non-native and introduced to the lake. Native species of salmonids use the lake for migratory passage, rearing of juveniles, and foraging. No salmonid spawning typically occurs in Lake Washington. Salmonid species include Chinook (federally listed, threatened), coho (federal species of concern), sockeye salmon, steelhead trout (federally listed, threatened), resident rainbow trout, cutthroat trout, Dolly Varden/bull trout (federally listed, threatened) and kokanee salmon.

Wildlife Habitat

Mapped bald eagle nest sites are located on the east shore of Lake Washington and documented perch trees, including large black cottonwoods, are located along the lakeshore. Pileated woodpecker breeding (state candidate species) occurs in the forests of St. Edward State Park and extending onto forested portions of adjacent private and public properties. Other priority habitats associated with the lake include wetlands and biodiversity areas and corridors.

Endangered, Threatened, Sensitive and Priority Species

Federally Listed Species

Several federally listed species are known to occur or could potentially occur within the City's shorelines. Federally listed species that have been documented include Chinook salmon, ~~designated by National Oceanic and Atmospheric National Marine Fisheries Division (NOAA Fisheries) as Threatened in 1999 and re-confirmed in 2005;~~ bull trout~~, designated by U.S. Fish and Wildlife Service as Threatened in 1999;~~ and steelhead trout~~, designated by NOAA Fisheries as Threatened in 2007 and re-confirmed in 2014.~~

As defined in the Endangered Species Act, critical habitat is "specific geographic areas that contain features essential to the conservation of an endangered or threatened species and that may require special management and protection." ~~In 2005,~~ NOAA Fisheries has designated ~~"critical habitat" for Chinook salmon, including~~ Kenmore's Lake Washington shoreline and the lower portion of the Sammamish River as "critical habitat" for Chinook salmon.

~~In 2004, t~~The U.S. Fish and Wildlife Service has designated "critical habitat" for the Puget Sound Distinct Population Segment (DPS) of bull trout, including Kenmore's Lake Washington shoreline.

~~In 2016,~~ NOAA Fisheries designated "critical habitat" for the Puget Sound DPS steelhead which excludes all waters in the Lake Washington watershed, including in Kenmore.

State Priority Habitat and Species Program

The ~~State of~~ Washington Department of Fish and Wildlife (WDFW) has a Priority Habitat and Species (PHS) program which includes a catalog of habitats and species considered to be priorities for both conservation and management. Priority habitats are "habitat types or elements with unique or significant value to a diverse assemblage of species." In Kenmore priority habitats include wetlands, biodiversity areas and corridors, and freshwater ponds.

The State lists designate *Endangered*, *Threatened*, *Sensitive,* and *Candidate* species. Priority species include those designations, as well as "animal aggregations (e.g. heron colonies, bat colonies) considered vulnerable; and species of recreational, commercial, or tribal importance that are vulnerable." Priority species documented in Kenmore include Chinook salmon, bull trout, coho salmon, sockeye salmon, kokanee salmon, steelhead trout, coastal cutthroat trout, pileated woodpecker, purple martin, and great blue heron. Recent information indicates that the purple martin is no longer nesting in Kenmore.

The bald eagle's population status has improved to levels that resulted in the removal of the eagle from both federal and state listing. However, the eagle is still protected by the federal Golden and Bald Eagle Protection Act.

Due to the importance and size of Kenmore's great blue heron colony, the great blue heron is addressed below.

Great Blue Heron
Great blue herons are a permanent resident in all of Washington except the higher Cascade and Olympic ranges. They are highly vulnerable to human disturbance, predation, and competition for nesting habitat.

~~More productive colonies tend to form near large areas of high quality foraging habitat. Most colonies are within 1.9 miles of key foraging grounds, although herons can nest anywhere within 6.2 miles of where they are foraging.~~

~~Ideal nesting habitat consists of mature forest. Although most colonies are found in forests free of human disturbance, some nesting occurs in areas of persistent human activity. The birds are less tolerant of disturbance in the pre-courtship and courtship periods between mid-February and mid-April.~~

~~Bald eagles are the heron's primary predator (Azerrad, 2012).~~

A heron rookery has been established near the north end of the Kenmore Park and Ride, within Swamp Creek wetlands. ~~It housed approximately 40 nesting pairs in 2009.~~ The colony established itself after the Kenmore Park and Ride lot was developed. ~~There is a water barrier between the lot and the colony which may create a sense of safety. Other than encroaching development, factors which may cause the birds to move in the future include bald eagle intrusion, damage to nesting trees (trees can be damaged by the nesting as well as by flooding), reduction in foraging areas, and other factors (Norman 1999).~~

The birds are colonial during the breeding season but are noncolonial in the winter when they stay in the immediate area but separate into smaller groups. ~~The winter roosting areas have not been identified. In winter, the birds will switch from foraging in wetland areas to upland areas where they will feed, for example, on rodents (Norman 1999).~~

Colonies usually exist at the same location for many years, and productivity (the number of fledglings/nesting herons) may be positively related to the number of years colonies have been in use. The herons may relocate their colonies in response to increased predation on eggs and young by mammals and birds such as eagles, declines in food availability, or human disturbance (State of Washington Department of Fish and Wildlife 1999).

~~The City of Kenmore's critical area regulations should require a year-round buffer around an active rookery, where unusually loud activities should be prohibited (Azerrad, 2012). Between February 1 and August 31, no clearing or grading or land disturbing activity should be allowed within the buffer unless approved by the Washington State Department of Fish and Wildlife (the SR-522 right of way is exempt from the buffer). Permits for activities within the heron rookery buffer require approval of a habitat management plan by the State and City.~~

Frequently Flooded Areas

Frequently Flooded Areas are defined as open channel and overbank areas that together constitute a floodplain. These floodplains, which are generally flat, low-lying areas adjacent to rivers or streams, are frequently inundated with water and periodically flood during storm events. During such events, large volumes of water and debris flow downstream which may sometime cause land erosion and property damage.

The Federal Emergency Management Agency (FEMA) delineates flood hazards along all major river and stream corridors in the county. Kenmore has two waterways, Sammamish River and Swamp Creek, that are at risk from floodwater. Figure NE-3, Frequently Flooded Areas, shows the areas that are at risk from floodwater.

While flood events do cause human- and property-related damage, it's important to note that floodplains provide critical functions for riparian habitat, habitat formation, connectivity to wetlands, store and convey stormwater and floodwater, and recharge groundwater.

Tree Preservation and Canopy Protection

~~Kenmore is a community that highly values the natural environment. ~~Tree preservation and canopy protection is one of the ways that helps maintain and improve quality of life. Trees provide a number of benefits, including:

- Oxygen production
- Carbon sequestration
- Soil conservation
- Biodiversity and habitat
- Aesthetic and psychological benefits
- Economic value
- Water quality improvements
- Surface water management
- Cultural significance
- Shade and temperature regulation
- Traffic calming effects
- Air quality
- Recreational opportunities
- Safety

Trees are regulated by Kenmore Municipal Code (KMC) via the Exceptional Tree Ordinance. Through this ordinance, a certain percentage of existing trees are required to be retained if, for instance, a property is being redeveloped or if property owner wishes to remove certain trees on their property. Trees that are removed shall be replanted with newly planted trees, subject to code requirements.

An urban tree canopy (UTC) assessment, funded by King Conservation District, was conducted in 2021. The results of this assessment showed that out of 3,900 land acres, the city of Kenmore has an UTC of approximately 1,790 acres (46%). Urban tree canopy is the percentage of ground area that is covered by tree crowns and relates to the branching spread of trees in an urban forest.

Figure NE-3 Frequently Flood Areas

Commented [TH3]: Need Amanda to create new map.

6.Natural Environment Element

~~**Shoreline Master Program**~~

~~The Shoreline Master Program applies to "shorelines of the State." In Kenmore, these include Lake Washington, the Sammamish River, and the main stem of Swamp Creek. In addition, wetlands considered "associated" with State Shorelines, such as Swamp Creek No. 3, also are regulated by the Shoreline Master Program. The Shoreline Master Program regulations include Environment designations of Downtown Waterfront, Shoreline Residential, Urban Conservancy, Natural, and Aquatic. The Downtown Waterfront environment is more permissive in terms of uses and development standards than the other designations. The most restrictive environment designation is the Natural environment. The Shoreline Sub-Element of the Land Use Element addresses shoreline goals, objectives and policies.~~

GOALS, OBJECTIVES, AND POLICIES

Following are the natural environment goals, objectives and policies. In some cases, policies are cross-referenced in more than one Element or Sub-Element, and this is noted by a policy reference in italics (e.g., *Policy SW-42.3.1*).

GOAL NE-1. PRACTICE ENVIRONMENTAL STEWARDSHIP BY PROTECTING, ENHANCING, AND PROMOTING THE NATURAL ENVIRONMENT IN AND AROUND THE CITY OF KENMORE.

OBJECTIVE NE-1.1 Cooperate regionally and strive locally to improve air quality.

Policy NE-1.1.1 Protect air quality from adverse impacts through the following measures:

a. Encourage alternative modes of transportation to reduce reliance on the automobile as the primary method of transportation.

b. Promote mixed-use and compact development forms, particularly in the Downtown, to help reduce the need for automobile use.

c. Require air quality impact analysis for major new developments, which could adversely impact the air quality levels in the vicinity. Determined through environmental review.

d. Work with other agencies to educate the public about air quality impacts due to vehicular travel and due to improper use of woodstoves and fireplaces.

e. Work with ~~other~~state and special-purpose agencies to monitor air quality within the planning area, such as Department of Ecology and Puget Sound Clean Air Agency.

Policy NE-1.1.2 Through development standards and city operations, reduce air pollution emissions from construction and land clearing activities, and street sweeping.

Policy NE-1.1.3 Shift all City fleet vehicles, where practical, from combustible engine to electric.

OBJECTIVE NE-1.2 Encourage a reduction in overall noise levels throughout the community.

Policy NE-1.2.1 Require new developments which could generate substantial levels of noise or could expose people to substantial levels of noise from existing noise generators to submit an analysis of potential noise impacts and propose mitigation. Determined through environmental review.

Policy NE-1.2.2 ~~Implement~~ Enforce city noise and nuisance ordinances to address various noise sources and require cessation or mitigation of noise.

Policy NE-1.2.3 Encourage residential or other noise-sensitive development proposed for location in noise-impacted areas to be oriented away from noise source, or to be constructed with materials that will maximize noise reductions, or to incorporate fencing, landscaping, or other noise-reducing features, appropriate to the situation. Noise impacted areas may include the vicinity of SR-522, or the vicinity of the Air Harbor, or other areas that may be determined through environmental review.

Policy NE-1.2.4 Require buffering or other noise reduction and mitigation measures for development adjacent to or within the immediate vicinity of environmentally critical areas to protect habitat areas.

OBJECTIVE NE-1.3 Encourage a reduction in light and glare impacts throughout the community.

Policy NE-1.3.1 Through design standards or educational opportunities, discourage the use of building materials or signage materials that cause glare impacts to substantial numbers of motorists or surrounding neighborhoods.

Policy NE-1.3.2 Require low-intensity lighting with appropriate illumination levels and light shields for lighting standards along streets, pedestrian lighting, ~~s~~ and in public open spaces and parks.

Policy NE-1.3.3 Encourage residents to provide exterior lighting for security purposes which does not unduly impact their neighbors.

Policy NE-1.3.4 Restrict lights pointing up to avoid artificial light spillage, affecting the view of the night sky.

Policy NE-1.3.5 Manage lighting levels to protect Kenmore's ecological systems and public health while ensuring public safety and equitable lighting.

OBJECTIVE NE-1.4 Cooperate regionally and strive locally to protect surface and ground water quality and quantity from degradation.

Policy NE-1.4.1 Actively work with communities upstream from Kenmore to develop and implement appropriate surface water regulations to adequately retain and

detain surface water so as to minimize the adverse effects upon the environment in Kenmore.

Policy NE-1.4.2 Use incentives, regulations, and programs to manage Kenmore's water resources (rivers, streams, lakes, wetlands and ground water) and to protect and enhance their multiple beneficial uses including fish and wildlife habitat, flood and erosion control, water supply, energy production, transportation, recreational opportunities and scenic beauty. Use of water resources for one purpose should, to the fullest extent practicable, preserve opportunities for other uses.

Policy NE-1.4.3 Allow development that supports continued ecological and hydrologic functioning of water resources. Development should not have a significant adverse impact on water quality or water quantity.

Policy NE-1.4.4 Participate in the development of watershed plans integrating surface water, ground water, drinking water and wastewater planning to provide efficient water resource management.

Policy NE-1.4.5 Actively encourage the use of environmentally safe methods of vegetation control.

Policy NE-1.4.6 Support awareness and education to improve and protect surface and ground water quality. This may be achieved through the following examples:

- Promoting the use of safe, less toxic lawn and gardening products;
- Proper recycling and disposal of chemicals;
- Educate businesses on surface and groundwater protecting using Best Management Practices (BMPs);
- Educate the public on reducing pollution generating practices and activities, such as encouraging the use of electric vehicles and equipment.

OBJECTIVE NE-1.5 ~~**Adopt an urban forestry strategy to encourage the preservation and planting of trees on public and private property**~~**.Educate the public and business community about the importance and benefits of trees in Kenmore.**

Policy NE-1.5.1 Foster partnerships with agencies and nonprofits that support and educate about the importance of urban forestry, such as King Conservation District.

Policy NE-1.5.2 Continue the support tree canopy preservation and foster tree appreciation in the community.

Policy NE-1.5.3 Encourage public involvement in urban forestry stewardship at public events, and through volunteer events and workshops.

OBJECTIVE NE-1.6 **Adopt an urban forestry strategy which encourages the preservation and protection of trees on public and private properties.**

Policy NE-1.6.1 Through urban forestry, street design standards and parks programs, encourage the planting of street trees throughout the City.

OBJECTIVE NE-1.7 **Protect the natural, environmental, ecological, public access, aesthetic, and economic aspects of Lake Washington, the Sammamish River, and Swamp Creek.**

Policy NE-1.7.1 Protect, enhance, and restore Lake Washington, Sammamish River, and Swamp Creek's riparian and shoreline habitat~~. Ensure these waterbodies are top priority~~ to protect the city's water quality, protect fish and wildlife ~~P~~of the State

Policy NE-1.7.2 ~~Work~~Encourage ~~with~~ and work with private property owners, ~~particularly those containing highly industrialized uses, to clean up polluted shorelines and~~ to restore ~~ecological conditions.~~degraded shorelines.

Policy NE-1.7.3 ~~In the City's Shoreline Sub-Element and Shoreline Master Program, b~~Balance the need to provide for shoreline protection, and public access, with the need ~~to~~ for public and visual access to shorelines, allowing for water-oriented uses and economic development, and balancing private property rights.

Policy NE-1.7.4 Allow development within the shoreline jurisdiction that preserves the resources and ecology of the water and shorelines; avoids natural hazards; promotes visual and physical access to the water; and preserves archeological resources, traditional cultural resources, and navigation rights. Protection of critical areas should be balanced with visual values and physical access as long as there is no net adverse impact to regulated shoreline ecological processes and functions.

~~Policy Balance private property rights with the need for public physical and visual access to shorelines.~~

GOAL NE-2 ***PROTECT LIFE AND PROPERTY IN AREAS OF NATURAL HAZARDS WHILE STILL ALLOWING FOR COMPATIBLE GROWTH AND DEVELOPMENT.***

OBJECTIVE NE-2.1 **Strive to protect lives and public and private property from flooding.**

Policy NE-2.1.1 Implement the Surface Water Element goals, objectives, and policies to minimize flood hazards in the community.

Policy NE-2.1.2 Recognize the Swamp Creek basin as an environmentally ~~sensitive~~critical area that has sustained repeated flooding impacts. Densities and services should reflect the environmental sensitivity of the Swamp Creek basin.

Policy NE-2.1.3 Support restoration opportunities that reconnect floodplain wetlands, restore natural processes, and mitigate the impacts of flooding and erosion.

Commented [DB4]: ask Richard if we want to include anything about property acquisition

OBJECTIVE NE-2.2 ~~Strive to p~~Protect slopes from erosion and sliding by limiting development within geologically hazardous areas.

Policy NE-2.2.1 Require land uses permitted in mapped Erosion Hazard Areas to minimize soil disturbance and maximize retention and replacement of native vegetative cover.

Policy NE-2.2.2 Require new development to protect natural vegetation coverage at levels sufficient to moderate surface water runoff and erosion and to protect the integrity of stream channels. When revegetation is required, appropriate native vegetation should be used.

Policy NE-2.2.3 Require grading and construction activities to be conducted with erosion control ~~Best Management Practices~~BMPs and other development controls as necessary to minimize sediment discharge from construction sites.

Policy NE-2.2.4 Require increased surface water management in areas draining over steep and erosive slopes.

Policy NE-2.2.5 Limit development within Landslide Hazard Areas, such as on slopes with a grade of 40 percent or more, unless the risks and adverse impacts associated with such development can be reduced to a non-significant level.

~~Policy LU-14.2.6 Limit development in Landslide Hazard Areas unless the risks and adverse impacts associated with such development can be reduced to a non-significant level.~~

OBJECTIVE NE-2.3 Minimize the potential for damage due to liquefaction and seismic hazards.

Policy NE-2.3.1 In areas with severe seismic hazards, apply Uniform Building Code, and any other necessary special building design and construction measures to minimize the risk of structural damage, fire, and injury to occupants and to prevent post-seismic collapse.

GOAL NE-3. PROTECT AND ENHANCE UNIQUE, VALUABLE, AND CRITICAL PLANTS AND WILDLIFE.

OBJECTIVE NE-3.1 Protect wetlands from encroachment and degradation and encourage wetland restoration.

Policy NE-3.1.1 Determine wetland boundaries in accordance with the approved federal wetland delineation manual and applicable regional supplements.

Policy NE-3.1.2 Utilize a wetland classification system that is based on best available science.

Policy NE-3.1.3 Use mitigation sequencing when reviewing projects to avoid or minimize impacts to environmentally critical areas, consistent with federal and State guidelines.

Policy NE-3.1.4 ~~Strive to achieve~~Require and enforce mitigation in order to ensure no-net-loss of wetland functions or values within each drainage basin. Acquisition, enhancement, regulations, and incentive programs may be used independently or in combination with one another to protect and enhance wetlands functions.

Policy NE-3.1.5 Require development adjacent to wetlands to be sited such that wetland functions are protected, an adequate buffer around the wetlands is provided, and significant adverse impacts to wetlands are prevented.

Policy NE-3.1.6 Protect areas of native vegetation that connect wetland systems. Whenever effective, incentive programs such as buffer averaging, density credit transfers, or appropriate non-regulatory mechanisms should be used.

Policy NE-3.1.7 Protect the unique hydrologic cycles, soil and water chemistries, and vegetation communities of bogs, fens and other legislatively designated unique wetland ecosystems through the use of ~~Best Management Practices~~BMPs to control and/or treat stormwater within the wetland basin.

Policy NE-3.1.8 Allow public access to wetlands for scientific, recreational use, and traditional cultural use where public access trails are carefully sited, ~~sensitive~~ critical habitats and species are protected, and hydrologic continuity is maintained.

Policy NE-3.1.9 Allow enhancement or restoration of degraded wetlands to maintain or improve wetland functions, provided that all wetland functions are evaluated in a wetland management plan, and adequate monitoring, code enforcement and evaluation is provided and assured by responsible parties. Restoration or enhancement must result in a net improvement to the functions of the wetland system. Technical assistance to small property owners should be considered.

Policy NE-3.1.10 Alterations to wetlands may be allowed, only after all wetland functions are evaluated, the least harmful and reasonable alternatives are identified, and affected significant functions are appropriately mitigated, in order to:

a. Accomplish a public agency or utility development;

b. Provide necessary utility and road crossings;

c. Enhance an ecological function; or,

d. Avoid a denial of all reasonable use of the property.

Policy NE-3.1.1 Approve wetland mitigation proposals if they would result in improved overall wetland functions within a drainage basin. All wetland functions should be considered. Ensure mitigation sites replace or augment the functions that would be lost as a result of the project proposal. Further, mitigation sites should be located strategically to alleviate habitat fragmentation.

Policy NE-3.1.1 Promote mitigation projects that contribute to an existing wetland system or restore an area that was historically a wetland. The goal for these mitigation projects is no net loss of wetland functions per drainage basin.

Policy NE-3.1.3 Preserve land used for wetland mitigation in perpetuity. Monitoring and maintenance should be provided until the success of the site is established.

Policy NE-3.1.4 Support a cooperative multi-jurisdictional effort to develop a plan for the establishment and utilization of a wetland mitigation banking program or in lieu fee program.

~~Policy .1 Apply appropriate penalties for current as well as previous wetland alteration violations, such as requiring wetland restoration, through code enforcement and stricter standards for development on sites where wetlands have been illegally filled.~~

OBJECTIVE NE-3.2 Protect streams from encroachment and degradation and encourage stream restoration.

Policy NE-3.2.1 River and stream channels should be preserved, protected, and enhanced for their hydraulic, ecological, and aesthetic functions.

Policy NE-3.2.2 Consider daylighting natural drainage channels and removing fish barriers where feasible to improve and restore habitat.

Policy NE-3.2.2 In partnership with other jurisdictions and interested parties, continue restoring stream and river channels and surrounding riparian areas to enhance water quality and fish and wildlife habitat and to mitigate flooding and erosion. Of particular interest is retention of forest communities along stream and river channels that provide shade and a source of woody debris to the aquatic habitat.

OBJECTIVE 3.3 Maintain and promote ~~a~~regional biodiversity ~~of~~ focusing on native species and habitat within the City, while also eliminating invasive species to the extent possible.

Policy NE-3.3.1 Protect native plant communities by encouraging management and control of non-native invasive plants, including aquatic plants. Environmentally

sound methods of vegetation control, including appropriate use of approved herbicides, should be used to control noxious weeds.

Policy NE-3.3.2 Recognize that aquatic weeds and toxic algae are a regional issue. Lobby King County to take the lead on a solution to control aquatic weeds and algae on the Sammamish River, Swamp Creek, and Lake Washington. At the same time, facilitate the use of local resources, including volunteers, to reduce aquatic weeds.

Policy NE-3.3.3 Encourage the use of native plants in landscaping requirements, erosion control projects, and in the restoration of stream banks, lakes, shorelines, and wetlands. ~~Provide incentives for u~~Us~~e~~ing native plants, mature plantings, and higher densities of biomass when feasible to help reduce non-native species and noxious weeds.

Policy NE-8.3.4 Maintain fish and wildlife through conservation and enhancement of terrestrial, air, and aquatic habitats.

Policy NE-8.3.5 Preserve habitats for species which have been identified as endangered, threatened, or ~~sensitive~~critical by the state or federal government.

Policy NE-8.3.6 Designate and protect natural resources having a primary association with ~~Fish and Wildlife Habitats of Importance~~Species of Concern, Priority Species, and Species of Local Importance, including:

a. Habitat for federal or state listed endangered or threatened species;

b. Habitat for state sensitive, and candidate species; animal aggregations considered vulnerable; and those species of recreational, commercial, or tribal importance that are vulnerable as identified and mapped by the State Priority Habitats and Species program.

c. Habitat for great blue herons;

~~d. Habitat for bald eagles;~~

d. Biodiversity areas and corridors designated and mapped in the Priority Habitats and Species program by the State Department of Fish and Wildlife; and,

e. Riparian corridors.

~~Policy .3.8 Provide a mechanism for nomination and consideration of additional Fish and Wildlife Habitats of Importance.~~

Policy NE-8.3.7 Identify species which need protection during the development review process.

Commented [TH5]: Has this actively been done by staff or Council? Keep or no?

Commented [DB6R5]: Richard has info about city's efforts for aquatic weed control.

~~Policy .3.10 **Stream and wetland buffer requirements may be increased to protect Fish and Wildlife Habitats of Importance. Whenever possible, density transfers and/or buffer averaging should be allowed.**~~

Policy NE-8.3.8 Protect salmonid habitats by ensuring that land use and facility plans (transportation, water, sewer, electricity, gas) include riparian and stream habitat conservation measures developed by the County, cities, tribes, service providers, and/or state and federal agencies. Development within basins that contain fish enhancement facilities should consider significant adverse impacts to those facilities.

Policy NE-8.3.12 Work with adjacent jurisdictions, state and federal governments and tribes during land use plan development and site development review to identify and protect habitat networks at jurisdictional boundaries.

Policy NE-8.3.13 Integrate fish and wildlife habitats into capital improvement projects whenever feasible.

Policy NE-8.3.14 Promote voluntary fish and wildlife habitat enhancement projects by private individuals and businesses through educational and incentive programs.

Policy NE-8.3.15 Actively participate in the Watershed Resource Inventory Area (WRIA) 8 Council to ensure that the City's planning, implementation, and enforcement efforts regarding surface and groundwater, environmentally ~~sensitive~~critical areas, and development regulations are consistent with regional efforts. A central purpose of the watershed planning and implementation should be the recovery of endangered, threatened, sensitive ~~or sensitive~~and priority species such as Chinook salmon, steelhead trout and bull trout.

Policy NE-8.3.16 Regularly review the City's capital projects, and planning and regulatory efforts to ensure consistency with the Federal 4(d) rule.

IMPLEMENTATION STRATEGIES

The Natural Environment ~~Sub-~~Element policies would require new, continuing or increased commitments of City resources to prepare new regulations, review/amend existing regulations, create educational or incentive programs, or coordinate with adjacent jurisdictions.

New programs, rules, or regulations would be needed to address:

- Air quality and noise analyses for major new developments
- Urban forestry strategies – continuation of periodic tree canopy assessments
- Habitat enhancement educational -, volunteer and incentive programs, continue to work with local groups supporting ongoing stewardship and restoration efforts in City parks and other areas

6.Natural Environment Element

- Aquatic weed and algae control – continue to provide City resources for aquatic weed and algae control.

A review of existing programs, rules and regulations would be needed to ensure they meet the policies, including:

- Control of air emissions from construction and land clearing activities
- Erosion control ~~Best Management Practices~~BMPs
- Increased surface water management requirements on steep and erosive slopes
- Sufficiency of wetland, stream, fish and wildlife habitat, flood hazard, seismic hazard, landslide hazard, and erosion hazard regulations – continue periodic review and update of critical area and shoreline regulations for compliance with Best Available Science.
- Sufficiency of design standards for building materials, critical area signage and lighting
- Sufficiency of noise standards
- Sufficiency of native vegetation requirements and tree management and protection requirements
- Sufficiency of aquatic weed prevention and invasive plant prevention
- Sufficiency of protection against pollutants, including fertilizer, entering streams, the river and the lake.

Additional or continuing efforts would need to be made to coordinate with adjacent jurisdictions or participate in regional programs, including:

- Working with adjacent, upstream communities on water quality and flooding issues
- Participating in the development of watershed plans
- Working with King County and the Sammamish River cities to control aquatic weeds and algae on the Sammamish River and Lake Washington
- Establishing a wetland mitigation banking program or in lieu fee program
- Restoring stream channels.

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