CRITICAL AREA ORDINANCE UPDATES

Planning Commission Briefing

May 22, 2025

Tonight's Agenda

CAO Update Overview

- Why are we updating the critical area ordinance?
- What are critical areas
- Current critical area codes
- Anticipated code amendments
- Public outreach plan

PC Focus Session #1: Wetland Regulations

GMA Requirements

- Designation, Definition, and Protection of Critical Areas
- Best Available Science (BAS) Review
- Reasonable Use Exceptions
- Kirkland 2044 Comprehensive Plan
- Special consideration to:
  - Preserve or enhance anadromous fisheries
  - Protect the Waters of the State
  - Landscape scale / regional approach
  - Account for inherent economic, ecological, social and cultural values
- Non-regulatory outreach and education and monitoring and adaptive management programs

Designating and Defining Critical Areas

What are Critical Areas?

- All regulated critical areas fall into one of five categories:
  - Critical Aquifer Recharge Areas
  - Frequently Flooded Areas
  - Wetlands
  - Fish and Wildlife Habitat Conservation Areas (including streams)
  - Geologically Hazardous Areas
- Protection: Preservation of the functions and values of the natural environment or to safeguard the public from hazards to health and safety.
- Functions and values are scale related, ranging from site specific to watershed, and even regional
- Protection may require both regulatory and nonregulatory measures to meet No-Net-Loss requirements and prioritize mitigation sequencing.

Wetlands

- Small lakes and ponds
- Emergent wetlands
- Forested wetlands
- Documented mitigation sites
- Not other human-made water holding areas


Juanita Creek


Juanita Bay


Yarrow Bay Wetlands

Fish and Wildlife Habitat Conservation Areas (including Streams)

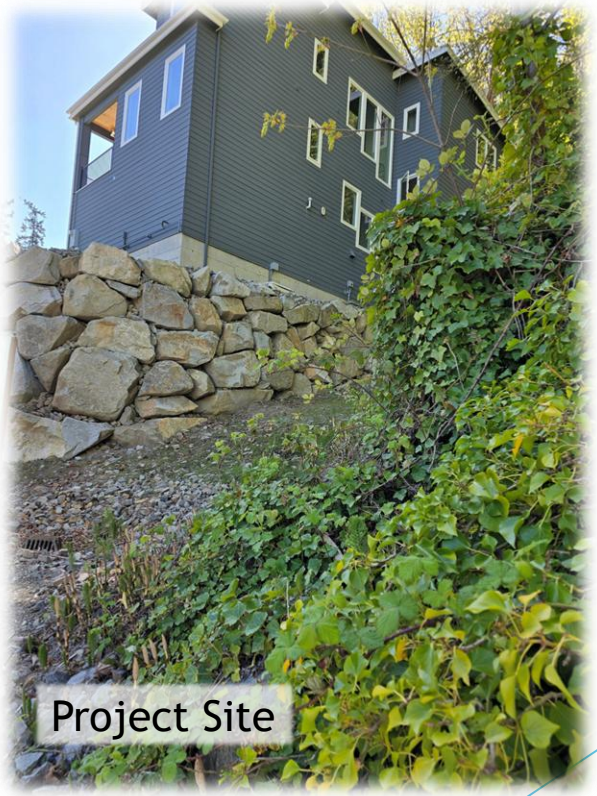
- Streams and other Waters of the State and surrounding habitat
- Habitat Conservation Areas for threatened, endangered and sensitive species


Forbes Creek

Frequently Flooded Areas and Critical Aquifer Recharge Areas

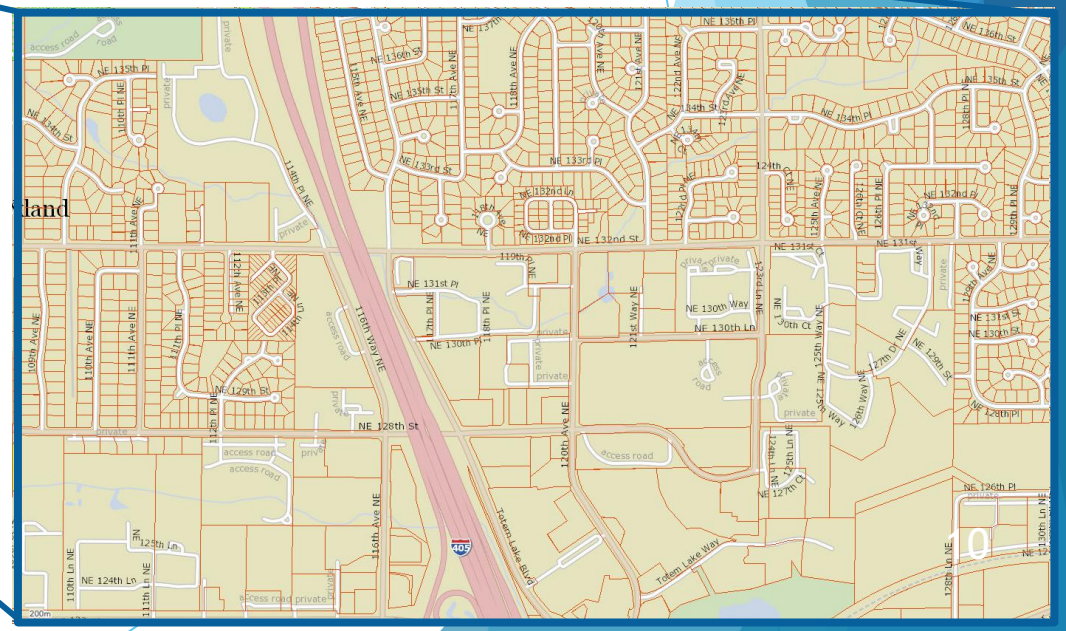
Geologically Hazardous Areas


Goat Hill


Project Site

Where are Critical Areas?

- Wetlands
- Floodplains
- Streams
- Habitat
- Ground Water
- Landslide
- Liquification/Seismic Hazard

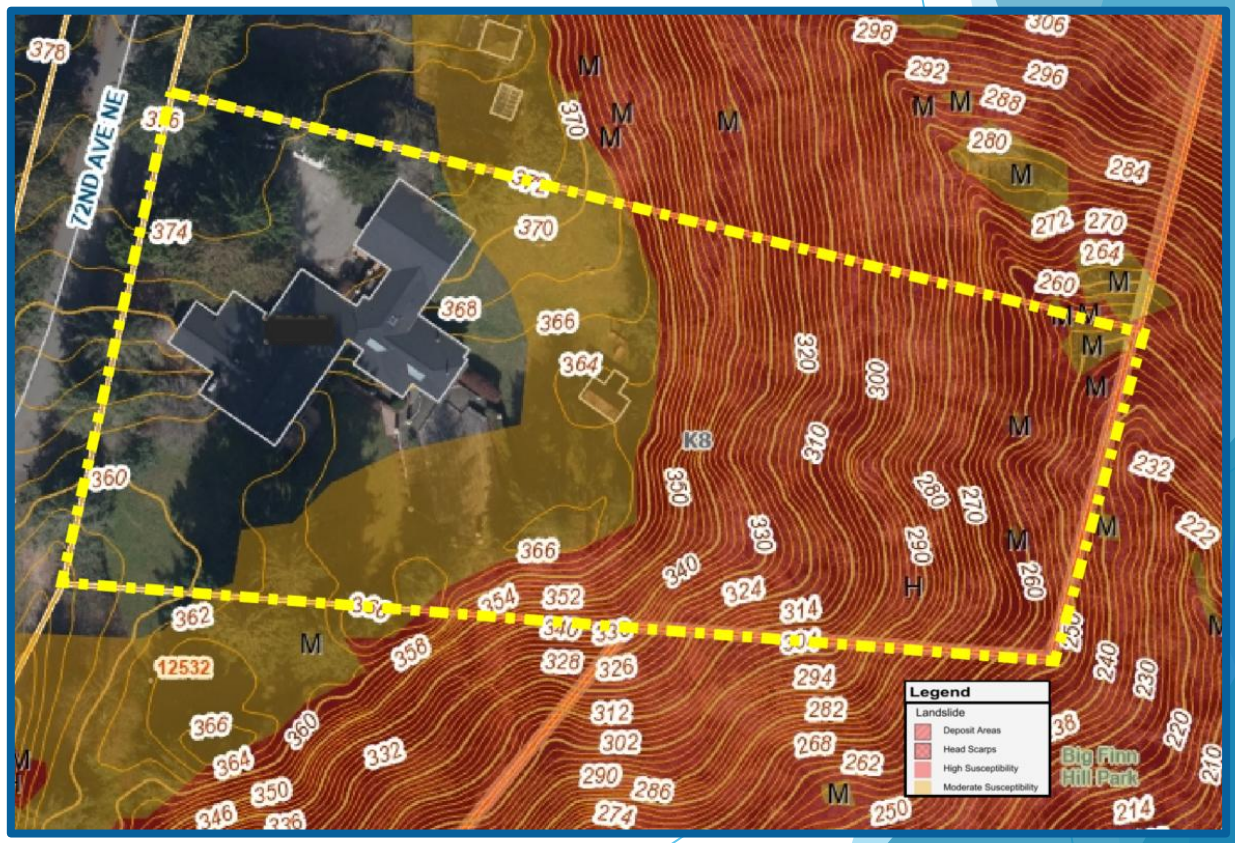


Current Code and General Updates

Current Critical Area Review Process (KZC 85 – Geologically Hazardous Areas)

- Geotechnical Report (KZC 85.15)
- Peer Review (KZC 85.22)

- Recording Documents
  - Dedication (KZC 85.40)
  - Liability (KZC 85.45)
  - Notice of Geologic Hazard (KZC 85.50)

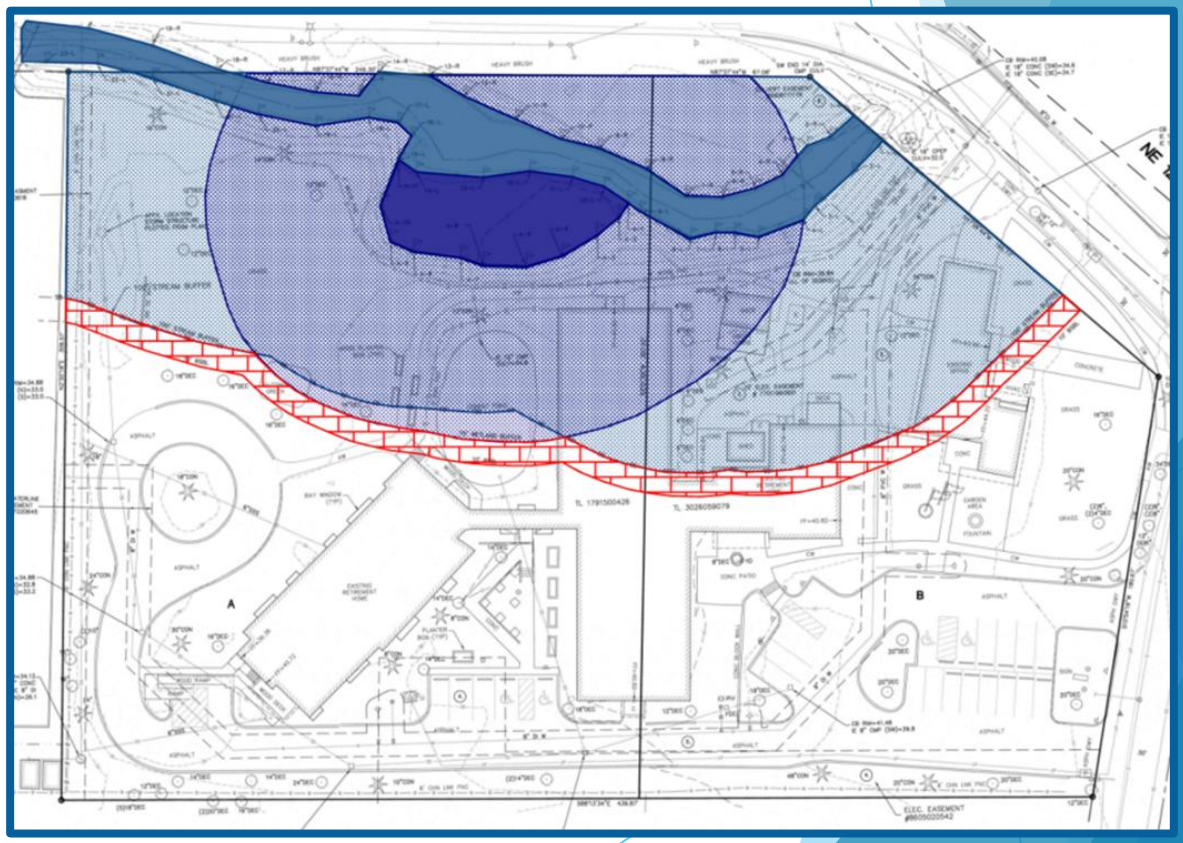


Potential Code Amendments and Policy Changes (KZC 85 – Geologically Hazardous Areas)

- General Updates and Clarity Updates
  - Potential amendments to thresholds for:
    - Exemptions
    - Required Review
    - Peer Review
  - Notice of Geologic Hazard recording document
- Required State Updates and BAS Review
  - Critical Area Maps
  - Natural Greenbelt Protective Easement (NGPE)
  - Structural Setbacks
  - Vegetative Requirements

Current Critical Area Review Process (KZC 90 – Wetlands/Streams/Habitat)

- Critical Area Determination (KZC 90.105)
- Critical Area Report (KZC 90.110)
- Vegetative Buffer Standards (KZC 90.130)
- Monitoring and Maintenance (KZC 90.160)



Potential Code Amendments and Policy Changes (KZC 90 - Wetlands/Streams/Habitat)

- General Updates and Clarity Updates
  - Coordination/consistency with other KZC Chapters
  - Simplify and streamline the permit review processes
- Required State Updates
  - Definitions and Designations
  - Emphasize Priority Habitats, Riparian Management Zones, Waters of the State, Anadromous Fisheries
  - Minimize impacts to wetlands and associated buffers
- BAS Review
  - Clarify no net loss requirements for habitat value and function
  - Stream Buffer Assessment

Outreach and Next Steps

Public Outreach – Methods of Outreach

Webpage

Social Media

Email / Bulletins

Direct Outreach

Stakeholder and SME Interviews

Current Web Page

Home / Government / Departments / Planning and Building Department / Critical Area Regulations

Critical Area Regulations

The Growth Management Act (GMA) requires all cities and counties in Washington State to adopt regulations protecting critical areas that provide vital environmental functions such as clean water, fresh air, and habitat for endangered and threatened species. Critical areas include the following:

- Wetlands
- Fish and Wildlife Conservation Areas
- Frequently Flooded Areas (FFA)
- Critical Aquifer Recharge Area (CARA)
- Geologically Hazardous Areas (GHA)

Learn More About Critical Areas:

Wetlands | Fish/Wildlife | FFA | CARA | **GHA**

Geologically Hazardous Areas include lands naturally susceptible to landslides, severe erosion, or soils susceptible to liquification during earthquakes. Management of these areas is important to public safety, property protection, infrastructure resilience, and environmental preservation.

Want to learn more?
City of Kirkland - Landslide Hazard Map
City of Kirkland - Interactive GIS Map\
WA Department of Natural Resources – Geologic Hazards
USGS – Natural Hazards

Contact Information

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Permitting and General Questions
Planning and Building
425-587-3600

Spills, Water Quality, or Other Critical Area Impacts
Public Works
425-587-3800

Submit questions via Our Kirkland

Our Kirkland >

- Explore Critical Areas in Kirkland +
- How Can You Protect Critical Areas? +
- How to Get a Permit for Critical Areas +
- 2025 Critical Area Ordinance Updates +
- FAQs +

https://www.kirklandwa.gov/Government/Departments/Planning-and-Building/Critical-Area-Regulations

Public Outreach - Stakeholders

- State Agencies
- Neighboring Jurisdictions
- King County and Water Resource Inventory Area Managers
- Tribes
- Critical Area Consultants
- Organized Interest Groups
- Neighborhood Associations
- Non-Government Organizations
- Property Owners
- General Public

Next Steps – Meeting Schedule*

*subject to change based on guidance from Planning Commission, City Council, and/or outreach efforts

DEADLINE FOR STATE APPROVAL
DECEMBER 31, 2025

Meeting	Date	Notes
~~PC Briefing~~	~~**April 24th**~~	~~Introduction to CAO Requirement Brief~~
PC Study Session	**May 22nd**	Introduction to CAO Requirement Brief Present Wetland related BAS updates and some code amendments for review
CC Briefing	**June 17th**	Introduction to CAO Requirement Brief
PC Study Session	**June 26th**	Review BAS and draft code amendments for Streams and Fish and wildlife Habitat
PC Study Session	**July 17th**	Review Chapter 85 and miscellaneous Chapter 90 amendments
PC Code Amendment Public Hearing	**July 24th**	Receive public testimony; PC to deliberate on recommendations to Council.
CC Study Session	**September 2**	Review major changes
PC Reserve meeting	**Sept 25th**	Provide solutions per council review
CC Reserve meeting	**October 21st**	Return to address questions and finalize code amendments
CC Final Adoption	**November 18**	Final adoption

Discussion and Questions

- What additional information would the PC like to see when presented with update options at future meetings?
- Does the PC have comments on the proposed research options? Are there questions PC would like to have answered before making decisions?
- Does the PC have any questions on feedback on the proposed approach to the CAO update?
- Does the PC have comments or suggestions on the proposed public outreach plan?

Wetland Related Updates

- Add wetland related definitions to KZC 5: No Net Loss, Critical area buffer, Wetland Habitat points/Value, Waters of the State
- Clarity updates through out 90: Examples provided in Attachment 4
- Update Tables to meet State Recommendations and for Clarity.
  - Wetland recommendations come from Washington Department of Ecology, Army Corp or Engineers and Department of Commerce.
  - Kirkland's wetland code meets minimum requirements

Wetland Updates

“Critical areas are not meant to be altered to accommodate development—rather, development must be designed to avoid impacts to critical areas”

Mitigation Sequencing

KZC 90.145 WAC 365-196-830, WAC 365-190-080

Avoiding	Avoiding the impact altogether.
Minimizing	Minimizing impacts by limiting the degree or magnitude of the action.
Rectifying	Rectifying the impact by repairing, rehabilitating, or restoring.
Reducing or Eliminating	Reducing or eliminating the impact over time by preservation and maintenance operations.
Compensating	Compensating for the impact by replacing, enhancing, or providing substitute resources or environments.
Monitoring	Monitoring the impact and taking appropriate corrective measures.

90.55 Wetlands and Associated Buffer Standards

- Remove Tables from within tables
- Change language to reflect buffer requirements

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90.55 Wetlands and Associated Buffer Standards

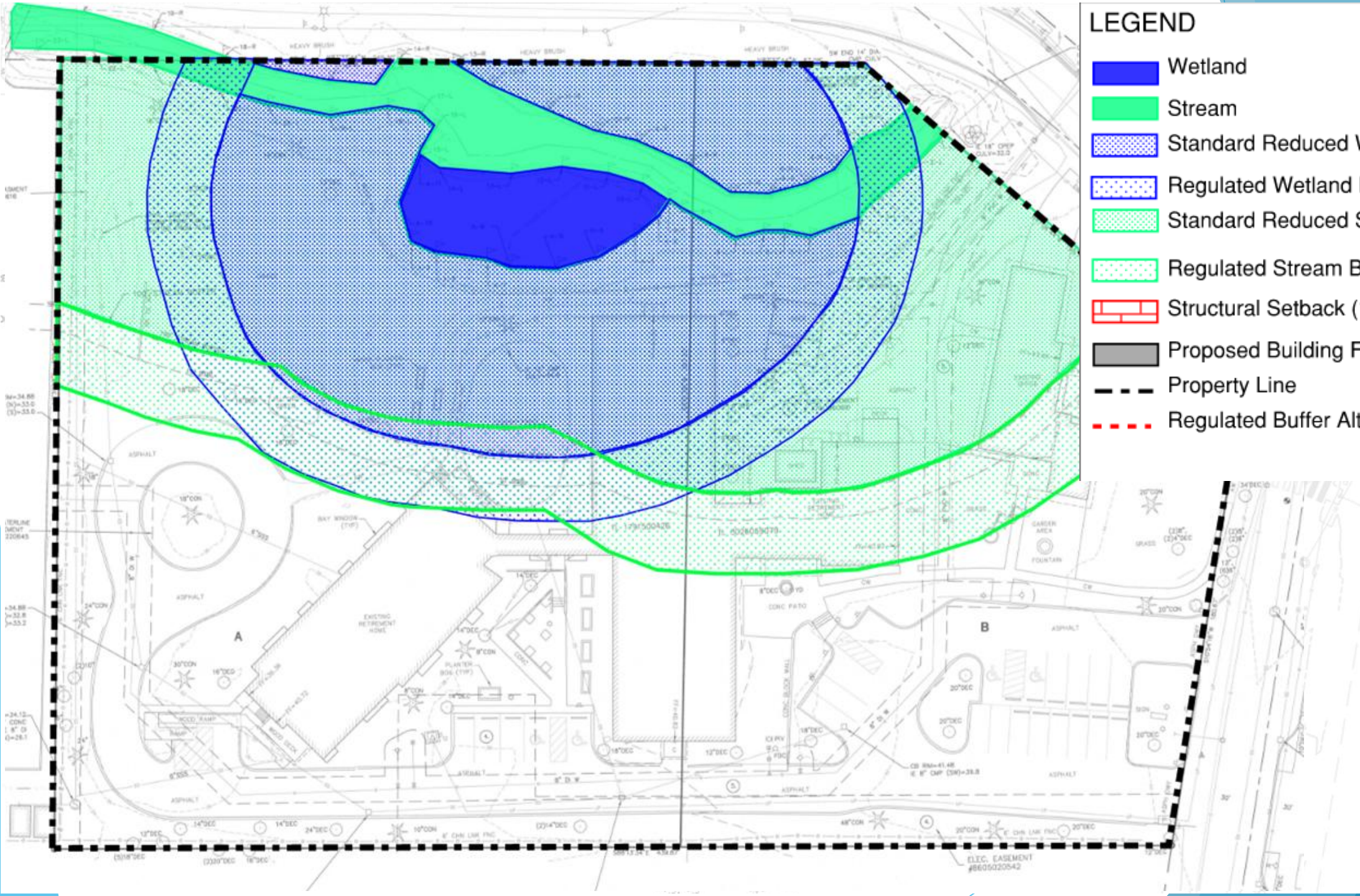
Wetlands and associated buffer standards are provided in this section. The table below is a summary of the wetland regulations. More details are provided for some of the regulations elsewhere in this chapter.

Table 90.55.1 Wetlands and Associated Buffer Standards

Wetland Classification and Rating	In accordance with the 2014 Department of Ecology Washington State Wetland Rating System for Western Washington, as revised. Wetland category and rating shall be determined through a survey and field investigation by a qualified critical area professional approved by the City as part of a critical area report in KZC 90.110. Wetland rating categories shall not change due to illegal modification.
Wetland Delineation	In accordance with the approved federal delineation manual and applicable regional supplements described in WAC 173-22-035 and based on field investigation and a survey. See KZC 90.110.
Wetland Determination	Planning Official makes determination if a wetland and/or a buffer exist on the subject property, and if so, its category, rating, boundaries and buffer width based on a required critical area report pursuant to KZC 90.110. In addition, the Planning Official makes determination if the standard buffer meets the buffer vegetative standards in KZC 90.130.
Wetland Buffer Width Standard	**Wetland Buffer Widths**

Wetland Category	Buffer Width Based on Habitat Points		
	3-5 habitat pts.	6-7 habitat pts.	8-9 habitat pts.
Category I: Bogs and Wetlands of High Conservation Value	190 feet	190 feet	225 feet
Category I: Others	75 feet	110 feet	225 feet
Category II	75 feet	110 feet	225 feet
Category III	60 feet	110 feet	225 feet
Category IV	40 feet		
	See KZC 90.130 for buffer vegetation requirements		

Wetland Buffer Width Alternative	Applicant can choose not to comply with the vegetative buffer standards in KZC 90.130 by complying with the following requirements: 1) Increase buffer width listed above in Wetland Buffer Widths by 33% within entire buffer. 2) Remove all structures and improvements within the buffer. 3) Discontinue any maintenance of lawn and nonnative vegetation within the buffer. 4) Cease all activities in the buffer, except those permitted under KZC 90.35(12) and (13). In no case shall a standard and an alternate buffer standard be combined for a development proposal.
Other Standards	• Buffer averaging is permitted for both the standard buffer and the alternative buffer if criteria are met. See KZC 90.115. • Increased buffer width may be required if wetland or its buffer contains or is adjacent to severe erosion area, habitat of certain species or frequently flooded area based on critical area report. See KZC 90.125. • Wetlands that are degraded must be restored if the project is subject to KZC 90.130(3)(a) for the vegetative buffer standard and/or a wetland modification is


LEGEND
Wetland
Stream
Standard Reduced Wetland Buffer (75')
Regulated Wetland Buffer Alternative (100')
Standard Reduced Stream Buffer (100')
Regulated Stream Buffer Alternative (133')
Structural Setback (10')
Proposed Building Footprint
Property Line
Regulated Buffer Alternative Boundary

90.55 Wetlands and Associated Buffer Standards

- Remove Tables from within tables
- Change language to reflect buffer requirements
- Add a second table clarifying the "Regulated buffer width" previously defined as the 33% increase

Table 90.55.1 Standard Reduced Wetland Buffer Widths			
Wetland Category	Standard Reduced Buffer Width Based on Habitat Points		
	3-5 habitat pts.	6-7 habitat pts.	8-9 habitat pts.
Category I: Bogs and Wetlands of High Conservation Value	190 feet	190 feet	225 feet
Category I: Others	75 feet	110 feet	225 feet
Category II	75 feet	110 feet	225 feet
Category III	60 feet	110 feet	225 feet
Category IV	40 feet		
	See KZC 90.130 Vegetative Buffer Standards, 90.145, 90.150, 90.155 apply with buffer width reductions		

Table 90.55.2 Regulated Buffer Width Alternative			
Wetland Category	Regulated Buffer Width Based on Habitat Points		
	3-5 habitat pts.	6-7 habitat pts.	8-9 habitat pts.
Category I: Bogs and Wetlands of High Conservation Value	250 feet	250 feet	300 feet
Category I: Others	100 feet	150 feet	300 feet
Category II	100 feet	150 feet	300 feet
Category III	80 feet	150 feet	300 feet
Category IV	50 feet		
	Qualifies for buffer averaging, and no mitigation requirements		

Table 90.155.1 Measures to minimize impacts to wetlands and Associated buffers

- Combined table from Department of Ecology 2022 with KZC table 90.155.1
- Improve planning team's ability to communicate and assess regulations
- Intent to reduce pollution to the critical area and its buffer.
- Light, Noise, Toxic runoff, Stormwater runoff, Pet and Human, air pollution
- Table is not static and innovative ideas to reduce disturbance should be encouraged

Table 90.155.1 Proposed Amendments:

Any additional activity or use identified to cause disturbance may require a review and implementation of measures to minimize that disturbance. Some example measures may not apply to correlated activities or may not be feasible for the site. Unique activities and disturbances not included in the table may require alternative measures to minimize the identified impacts.

Examples of disturbance	Activities and uses that cause disturbances	Examples of ~~Required~~ measures to minimize impacts
Lights	• Parking lots • Commercial Industrial • Residential • Recreation (e.g., athletic fields) • ~~Agricultural buildings~~	• Direct lights away from wetland • Only use lighting where necessary for public safety and keep lights off when not needed • Use motion-activated lights • Use full cut-off filters to cover light bulbs and direct light only where needed • Limit use of blue-white colored lights in favor of red-amber hues • Use lower-intensity LED lighting • Dim light to the lowest acceptable intensity
	All Lighting shall comply with regulations in Chapter 115 KZC.	
Noise	• Parking lots • Drive-through facilities • Commercial • Industrial • Recreation (e.g., athletic fields, bleachers, etc.) • Residential Generators and Hvac units • ~~Agriculture~~	• Locate activity that generates noise away from wetland • Minimize noise through design measures: • Construct a fence to reduce noise impacts on the adjacent wetland and buffer. Fence must comply with KZC 115.40 regulations • Plant a strip of additional dense shrub vegetation adjacent to wetland buffer • Install other insulation techniques
	Activities or uses that generate relatively continuous, potentially disruptive exterior noise, such as industrial, manufacturing and repair services, shall provide an additional 10 feet in width of heavily vegetated buffer strip immediately adjacent to the outer wetland buffer that meets the requirements of KZC 95.42.1, Buffer Standard 1.	

What to Expect Next

- Continue to streamline and clarify wetland related code using the Planning department's expertise, cross-referenced with Department of Ecology recommendations
- Coordinate requests and recommendations from other city departments
- Include review from On Call wetland consultant for clarity and process
- Cross-reference the edits with other sections of KZC 90 and KZC 83
- Bring all Wetland clarity edits together for final PC review
- Return to PC to focus on Streams, Fish and Wildlife Habitat and Floodplains

Any Thoughts, Questions or Considerations?