Vancouver City Council

Anne McEnerny-Ogle, Mayor

Bart Hansen · Ty Stober · Erik Paulsen

Vancouver

WASHINGTON

Sarah J. Fox · Diana H. Perez · Kim D. Harless

City Council Meeting Agenda
July 8, 2024

In accordance with the Open Public Meetings Act (OPMA), the Vancouver City Council meeting will be open to in-person attendance. Options for viewing and/or participating in the meeting remotely will also be accommodated (see details below). The City Council will be attending this meeting in person.

All City Council workshops and meetings are broadcast (live closed captioning available) on www.cvtv.org, CVTV cable channels 23 / HD 323, and on the City's Facebook page, www.facebook.com/VancouverUS.

Public testimony will be accepted regarding any matter on the agenda below. ***Advance registration will be required (see details below).***

Testimony will be accepted in the following manner:

- **Written comments submitted in advance**

  Comments may be sent to council@cityofvancouver.us until 12:00 p.m. July 8. Comments will be compiled and sent to the City Council and entered into the record.

  Upon request, printouts of agenda materials will be provided, including large print.

WORKSHOPS: 3:00-6:00 p.m.
Vancouver City Hall - Council Chambers - 415 W 6th Street, Vancouver WA

Police Levy Recommendation
(Approximately 1 hour)

Jeff Mori, Police Chief, 360-487-7498; Natasha Ramras, Chief Financial Officer, 360-487-8484

Transportation System Plan Update
(Approximately 1 hour, to immediately follow previous workshop)

Kate Drennan, Transportation Planning Program Manager, 360-487-7959

Critical Areas Ordinance
(Approximately 1 hour, to immediately follow previous workshop)

Domenique Martinelli, Senior Planner, 360-487-7943

Joyo Delegation City Hall Tour: 6:00-6:20 p.m. - 1st Floor Lobby, City Hall

REGULAR COUNCIL MEETING: 6:30 p.m.

6:30 PM
Vancouver City Hall - Council Chambers - 415 W 6th Street, Vancouver WA

Pledge of Allegiance

Call to Order and Roll Call

Proclamation: Sister City Recognition

City Council and Joyo Delegation Dinner Break / Gift Presentation: 7:00 p.m. - Aspen Room, City Hall

Adjournment

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CITY OF Vancouver WASHINGTON

TO: Mayor and City Council

FROM: Eric Holmes, City Manager

DATE: 7/8/2024

SUBJECT Police Levy Recommendation

ATTACHMENTS:

- Police Community Advisory Committee Website Link

Police Community Advisory Committee Website Link

Police Community Advisory Committee -The City of Vancouver, WA

The webpage provides links to the following.

- Advisory Committee Report
- Meeting Materials

CITY OF Vancouver WASHINGTON

TO: Mayor and City Council

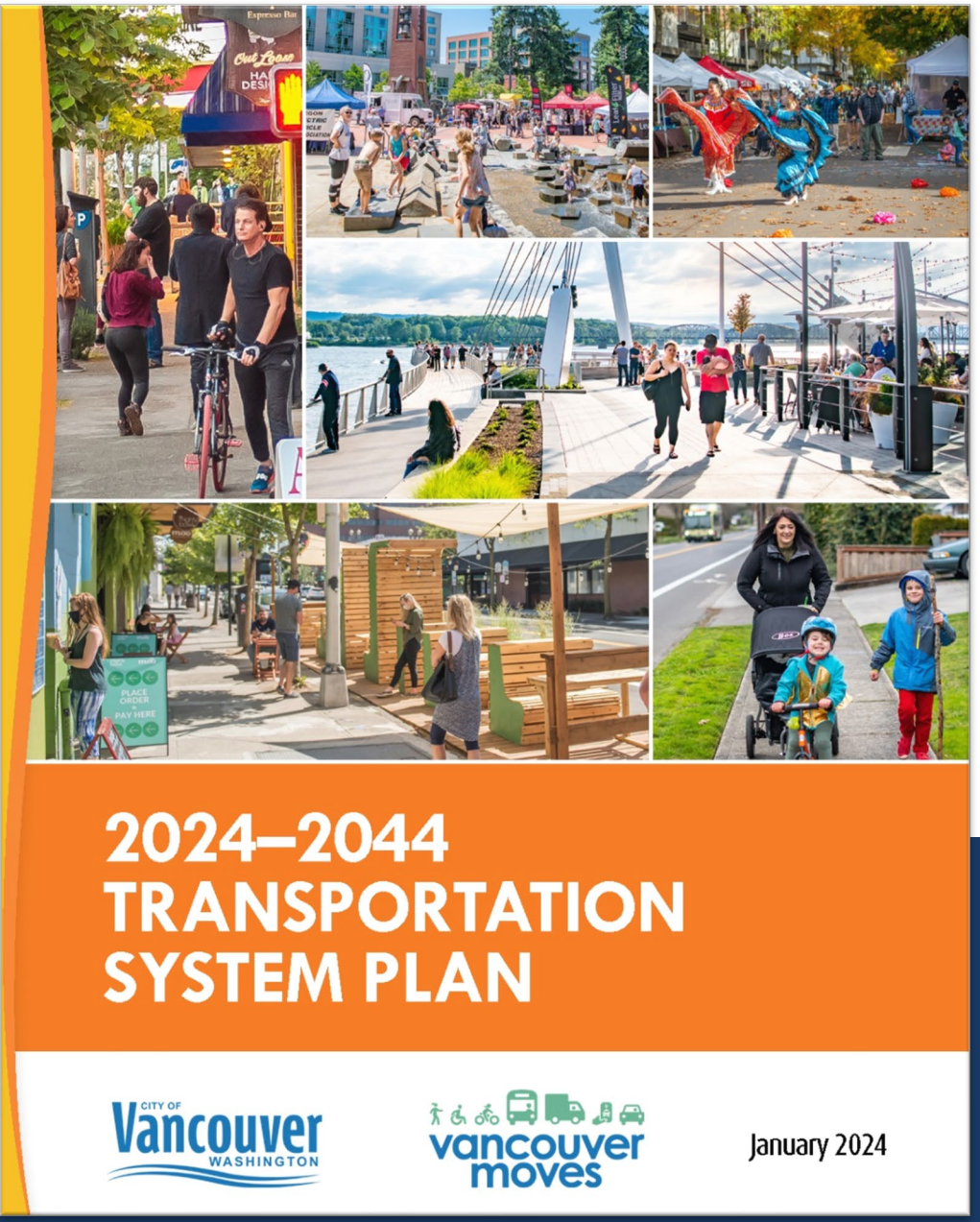
FROM: Eric Holmes, City Manager

DATE: 7/8/2024

SUBJECT Transportation System Plan Update

ATTACHMENTS:

- Presentation
- Memo



CITY OF Vancouver WASHINGTON

Transportation System Plan – Update

Kate Drennan
Transportation Planning Program Manager
Community Development
July 1, 2024

Agenda

- Updates on:
  - near-term implementation priorities
- Advancing TSP policies, programs & projects
- Next Steps

Complete Corridors Program

Complete Streets program
+ Major Capital Projects

Analyze the Project Corridor

- St Johns/ St James
- 29th/ 33rd Streets

Develop Options

- Upper Main Street
- 112th Avenue

Design Solutions

- McGillivray Blvd
- 34th Street

Implement Project Solutions

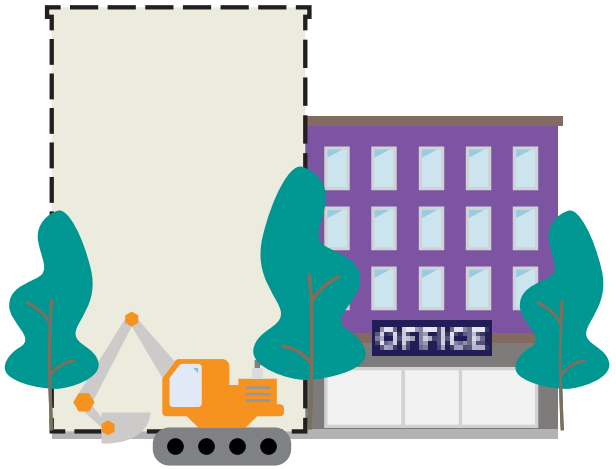
- Fourth Plain Blvd & Fort Vancouver Way

Collect Data and Evaluate Project Impacts

Project Refinement and Monitoring

- Columbia Street

Leveraging Development

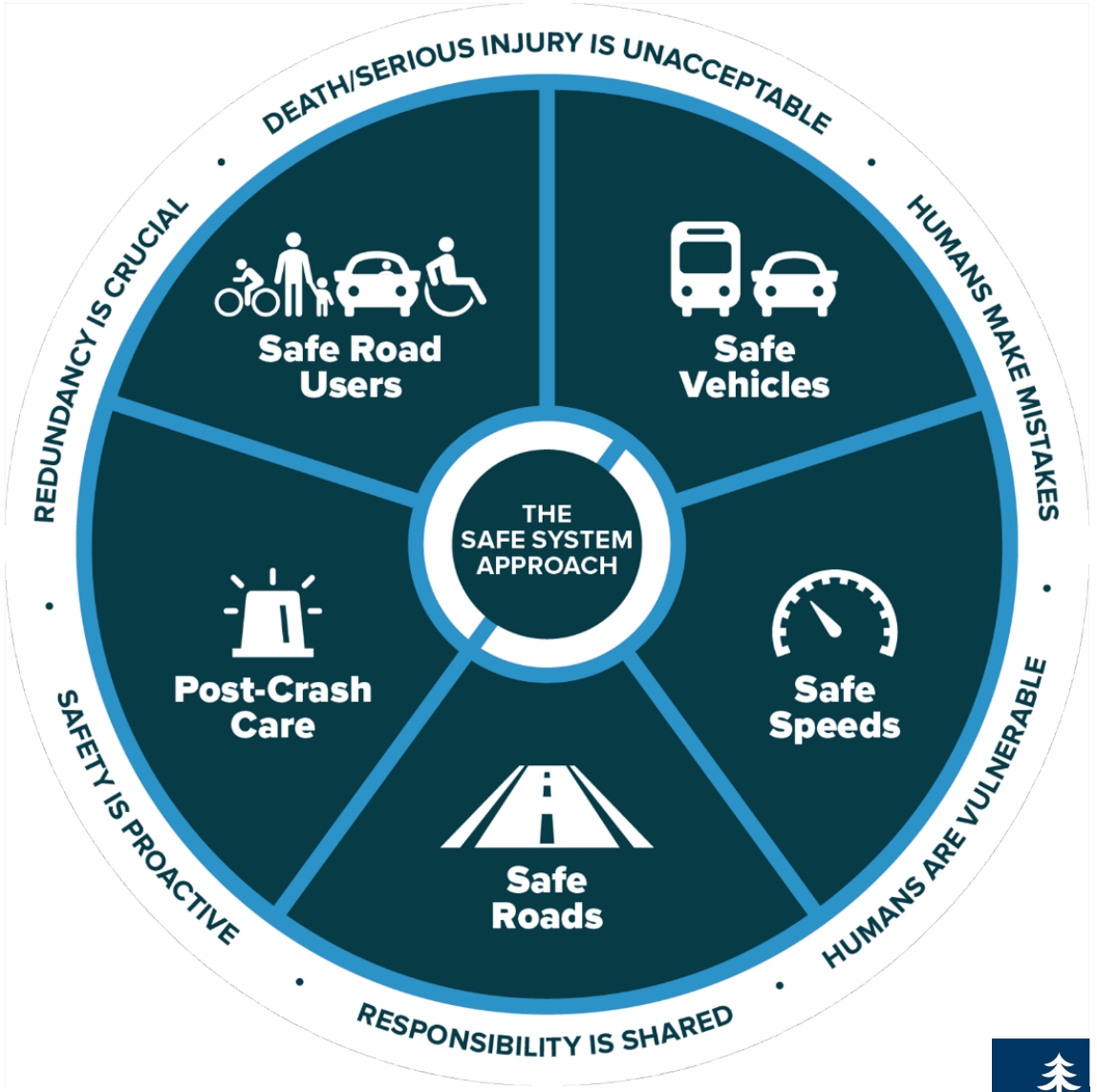


- Updating how we measure the impact of new development on the transportation system through:
  - Concurrency evaluation
  - Traffic impact analysis
  - Application of the traffic impact fee program

- Exploring implementation of multimodal concurrency approach taken by other Washington jurisdictions

Vision Zero

- Updating the Local Road Safety Plan to analyze most recent crash data
- Applying Safe Systems approach to projects and planning
- Pursuing speed limit reductions on city roadways



Safe Routes to School

- Standing up new program through creation a project charter with goals, outcomes, and action items
- Connecting locally with school districts and program providers to understand needs
- Researching peer programs in Washington
- Developing project prioritization criteria that advances equity goals

Big Ideas

1. Support Thriving Neighborhoods
2. Create Complete Corridors
3. Connect People to Transit
4. Build Low-Stress Networks
5. Make Growth a Benefit for All
6. Embrace the Future

Big Idea #1

Support Thriving Neighborhoods

- Creating Connected + Accessible 15-minute neighborhoods through Comprehensive Plan work
- Increasing funding for Neighborhood Traffic Calming
- Crafting Vancouver Safe Routes to School program

Big Idea #2

Create Complete Corridors

- Drafting Street typologies
- Use prioritization criteria in Transportation Improvement Program
- Updating street standards
- Applying pedestrian crossing policy
- Utilizing street user education

Big Idea #3

Connect People to Transit

- Prioritizing access to transit in project investments
- Applying transit speed and reliability treatments on Bus Rapid Transit corridors
- Supporting Vine expansion
- Providing bus passes for community / employees

Big Idea #4

Build Low-Stress Networks

- Building out TSP Modal Networks
- Creating a bicycle and small mobility parking program
- Hosting travel options training and events

Big Idea #5

Make Growth a Benefit for All

- Updating the Downtown Parking Plan
- Ongoing transportation demand management program work
- Implementing Commute Trip Reduction (CTR) program and updating City and regional plans
- Piloting New Movers program

Big Idea #6

Embrace the Future

- Utilize data for measuring progress
- Using location-based services to understand travel trends and changes
- Transitioning to zero-emissions City fleet
- Undertaking a City-wide Electrification Strategy

Next Steps

- Allocate transportation dollars in Biennial Budget process to advance programs and policies identified in the TSP
- Continue securing grant dollars to fund planning, design and construction of projects and implementation of programs
- Continue staff work to update Vancouver Municipal Code, internal policy documents, and guiding standards

Questions?

Thank you!

Kate Drennan, Transportation Planning Program Manager
kate.drennan@cityofvancouver.us

CITY OF Vancouver WASHINGTON

MEMORANDUM

DATE: July 1, 2024

TO: Mayor and City Council

FROM: Eric Holmes, City Manager

RE: Transportation System Plan Implementation Update

CC: Kate Drennan, Transportation Planning Manager, Community Development; Rebecca Kennedy, Deputy Director, Community Development; Ryan Lopossa, Transportation Manager, Public Works.

Background

In January 2024 City Council adopted the 2024 – 2044 Vancouver Transportation System Plan (TSP). The TSP is a guiding document that sets policy direction, outlines programs and projects, and prioritizes investments that advance safety, equity, and climate goals. The Plan is ambitious – presenting a vision of Vancouver where people of all ages and abilities can safely move through the City to go to work, school, and meet their daily needs using many different modes of travel. The TSP speaks to the integral role of land use in shaping travel patterns, and how our transportation system impacts our health, pocketbooks, and the natural environment.

This memo provides a six-month update on the work staff has undertaken to begin advancing priority implementation items (p. 103) and an expansive number of policies and programs outlined in the TSP's Big Ideas (p. 30).

Priority Implementation Items

The TSP identifies four priority initiatives for the first two-years of work following adoption of the 20-year Plan. The initiatives speak to foundational elements that guide the design and function of our streets and demonstrate a commitment to safety.

Complete Corridors

The Complete Corridors 'Big Idea' is to "create complete corridors that connect growth areas, support business, serve transit, and maximize safety'. The TSP definition focuses on the city's arterial network due to the density of major destinations, presence of transit, and directness of travel for users. Much of the City's staff time is focused on advancing this priority area through a series of "Safety and Mobility Projects" advanced through the Complete Streets program. These projects are focused on building out safe and accessible facilities for people on foot, bike, or using a small mobility device – and supporting transit speed and reliability on corridors where fixed-route or BRT investments exist or are planned.

The City currently has four Safety and Mobility projects in the planning phase (29th Street/ 33rd Street, St. Johns/ St. James, Upper Main Street, and 112th Avenue), two projects in the civil design phase (34th Street, McGillivray Blvd.), one in the construction phase (Fourth Plain Blvd), and one that will begin the data collection and evaluation phase in the Fall (Fort Vancouver Way).

In addition to Complete Streets projects, major Capital Projects such as SE 1st Street, NE 18th Street, Jefferson/Kauffman, and Main Street Promise are also integral to building out complete corridors that connect people to major activity centers in alignment with TSP-established priority modal networks.

Leveraging Development

This priority area focuses on how the City will measure the impact of new development on the transportation system. When new development occurs, the City has three processes that are triggered: concurrency evaluation, traffic impact analysis, and the application of the traffic impact fee program. Together, these assess how new trips added to the system will be calculated and addressed through proportional fees and required improvements.

The TSP calls for a shift to a more multimodal approach that measures concurrency (a measure of transportation system capacity to support development) on a person-trip basis rather than solely considering auto trips. In shifting to a person-trip performance measure, the transportation impact analysis and fee program can also consider investments to the overall system to address trip infrastructure or programs to serve all types of trips on the network.

Staff is currently exploring a shift to the multimodal concurrency approach taken by other Washington jurisdictions such as Bellingham, Redmond and Bellevue. The TSP consultant team provided a recommended adoption of "mobility units" – a mode-neutral person trip calculation to assess transportation system-wide capacity. As a next step, staff is contacting personnel at these jurisdictions to better understand how to apply it to the development process in Vancouver.

Vision Zero

Vision Zero is a policy based in a belief that serious injuries and deaths on our streets are preventable, and TSP calls for employing the safe-systems approach to reduce the number and severity of crashes on Vancouver streets. The safe systems approach relies on building in design

redundancies to prevent crashes and apply safety "countermeasures" that address contributing factors to crashes on the roadway.

Since TSP adoption, staff has been updating the Local Road Safety Plan, a report that evaluates crashes on city streets with a focus on crashes that resulted in a fatality or severe injury. The updated plan will assess five years of crash data, from 2018-2022. The Plan identifies the top ten intersections and roadway segments with the highest crash rates and which countermeasures would address factors contributing to the crashes. Staff uses this data to prioritize projects and treatments for capital and repaving projects.

Staff has also provided a workshop on the Safe Systems approach to members of the Transportation and Mobility Commission to increase knowledge and understanding of the practice and how it relates to projects coming before the Commission for review. A significant component of Vision Zero and the Safe Systems approach is reducing roadway speeds. As part of the TSP work to update street design guidance, staff is looking at reducing speeds citywide through creating a citywide speed limit of 20mph for local roads, and 25 – 30 mph for most other collector and arterial roadways based on their land use context, size, and other factors.

Safe Routes to School

This priority item is focused on creating a City of Vancouver Safe Routes to Schools (SRTS) program. SRTS is a nationally funded program to encourage students and caregivers to walk, roll and bike to school along safe pathways. While the City has worked with Vancouver schools in the past to improve infrastructure and written and supported related grant applications, the City does not have a formal program.

Since TSP adoption, staff has begun to stand up a program through creating a charter with program goals, objectives, and action items. The team is researching programs elsewhere in the state of Washington, connecting with local school district administrators, and meeting with regional bike education and encouragement program providers. Staff is also working on how to integrate the COV equity index when prioritizing project infrastructure needs and requests, and cross-referencing school-serving projects already identified in the TSP and Transportation Improvement Program. The City has received a Department of Commerce grant to aid in standing up this program.

Policies and Programs

Within the TSP, the six "Big Ideas" act as the organizing framework for 93 different policies, projects and programs to advance the underlying idea. While many of these are on a longer implementation timeline, the City is currently making progress on several highlighted below.

Support Thriving Neighborhoods (TN)

Make walking and rolling, small mobility and transit options convenient for neighborhood travel.

The City is making progress on this big idea through creation of Connected and Accessible Neighborhoods (formerly 15-minute neighborhoods) (TN1) as a key outcome of the Comprehensive Plan. The City is also growing the Neighborhood Traffic Calming Program through more allocation of transportation funds (TN1.1) and creating a Vancouver Safe Routes to Schools Program (TN1.2).

Create Complete Corridors (CC)

Create complete corridors that connect growth areas, support business, serve transit, and maximize safety.

The City has several policies and programs related to Complete Corridors in progress. As mentioned above, the City is planning and constructing safe and accessible facilities on several arterial roadways through the Complete Streets program and capital projects (CC1). Staff are finalizing an internal guiding document that creates "street typologies" to guide roadway design and function based on land use and roadway classification (CC1.1). Staff has a recommended methodology to move forward with people-based metrics (CC2) that would enable a transition to a multimodal concurrency standard (CC2.2) and are researching how to operationalize the change in the traffic impact analysis and transportation development review process (CC2.1)

Staff applied the new TSP prioritization criteria to the 2025-2031 Transportation Improvement Program (TIP)(CC2.3) and will continue to refine the process for the annual TIP update. The City updated the pedestrian crossing policy (CC3.2) and policy guiding street standards (CC3) at the time of TSP adoption, and these will be adopted into Title 11 later this year. City staff are also beginning to utilize user education materials (CC4.4) in the form of project- or infrastructure-specific materials such as pamphlets and signs on how to use the new bus and turn lanes (BAT) on Fort Vancouver Way or parking protected mobility lanes on the Mill Plain couplet and portions of Columbia Street.

Connect People to Transit (T)

Fill sidewalk gaps, add safe crossings and support speed and reliability projects that keep transit moving efficiently.

The City continues to collaborate with C-TRAN and support transit-focused improvements on our Enhanced Transit Network such as Mill Plain Blvd, projects being constructed this summer on Fourth Plain Blvd, and investments being planned for Upper Main Street in coordination with the HWY 99 Bus Rapid Transit (BRT) (T2 and T2.1). Staff are also coordinating on the next BRT extension of Fourth Plain Vine east to 162nd and south to Fishers Landing (T2.1).

Staff are also applying an access to transit lens when prioritizing project investments such as sidewalk infill, lighting, and crossings (T1) through both grant applications and complete streets projects.

Build Low-Stress Networks (LS)

Make the walking, rolling, bicycling, and small mobility networks inviting for all ages and abilities.

The City has implemented the key policy (LS1) to adopt a citywide low-stress Bicycle and Small Mobility Network through the adoption of the modal networks as outlined in the Transportation System Plan. Staff are using the modal networks to help inform the design of pedestrian, bike and small mobility facilities on these specified roadways. In addition, staff has begun to outline a bicycle and small mobility parking program (LS3.3) to outline processes and criteria for installing community-requested and City-initiated bike and small mobility parking. The long-range planning team has used grant funding to hire a part-time intern (LS4.1) to help with travel options education, training, and events (LS4 and LS 4.3) that highlight ways to move around the city outside a vehicle.

Make Growth a Benefit for All (G)

Manage growth by leveraging investments from new development and use parking and demand management policies to support livability.

The policies and programs in this big idea update development standards, right-size parking and recognize parking's impact on land use and travel behavior. Staff is making progress through the work of the Downtown Parking Plan which looks at updating parking codes, capacity, management, operations, and the experience of users downtown (G4, G4.1, and G2.3). Staff is also engaged in robust work implementing transportation demand management programs (G5) region-wide through the Commute Trip Reduction program (G4.2), at the City through employee travel options benefits, and in targeted neighborhood through the recently launched New Movers program.

Embrace the Future (F)

Adopt new technologies and track data to help meet our goal of carbon neutrality by 2040.

The City endeavors to employ new technologies to help manage resources like parking, better understand travel trends, and utilize data to track progress across a number of goals. In partnership with the Regional Transportation Council (RTC), the City has access to a contracted vendor for location-based services (F1.2) to calculate vehicle miles traveled within the city and region (F2.3). This data is vital for current efforts to calculate emissions from the transportation sector and report out on progress through the Climate Action Framework and other performance dashboards (F1.3).

Staff in General Services and Public Works are currently engaged in a process to convert the City fleet to zero-emissions vehicles (F4.1) and facilitate fleet charging infrastructure at existing and future City buildings. The Climate and Transportation Planning team have initiated the development of a City-wide Electrification Strategy to look at public charging infrastructure and determine the City's role in encouraging, regulating, owning or leasing public-serving EV chargers to accelerate a transition to EV vehicles.

Next Steps

Staff will continue to advance the four prioritization areas and other policies and programs within the Big Ideas as able with staff and program resources. Near-term, departments are working together to allocate transportation dollars in the Biennial Budget process to advance programs, policies and projects identified in the TSP. The City also aggressively pursues grant

funding to support planning, design and construction of projects and implementation of programs.

Staff Contact:
Kate Drennan, Transportation Planning Program Manager, Community Development
Kate.Drennan@cityofvancouver.us, 360-487-7959

Attachments:
1. 2024-2044 City of Vancouver Transportation Plan

CITY OF Vancouver WASHINGTON

TO: Mayor and City Council

FROM: Eric Holmes, City Manager

DATE: 7/8/2024

SUBJECT Critical Areas Ordinance

Action Requested

ATTACHMENTS:

- Presentation
- Memo
- Attachment A - Best Available Science Report
- Attachment B - Updated Definitions VMC 20.150 - Clean
- Attachment C - Updated Definitions VMC 20.150 - Redline
- Attachment D - Critical Areas Ordinance VMC 20.740 - Clean
- Attachment E - Critical Areas Ordinance VMC 20.740 - Redline
- Attachment F - Critical Areas Mapping - 1
- Attachment G - Critical Areas Mapping - 2
- Attachment H - Critical Areas Mapping - 3

CITY OF Vancouver WASHINGTON

Critical Areas Ordinance

Domenique Martinelli (she/her)
Senior Long Range Planner, City of Vancouver
Ethan Spoo (he/him)
Senior Land Planner, WSP
July 8, 2024

Agenda

- Background
- Where We Are At
- Riparian Areas
- White Oak Habitat
- Wetland Buffers
- Geologic Hazard Areas
- Next Steps / Public Comment Period

Where We Are At

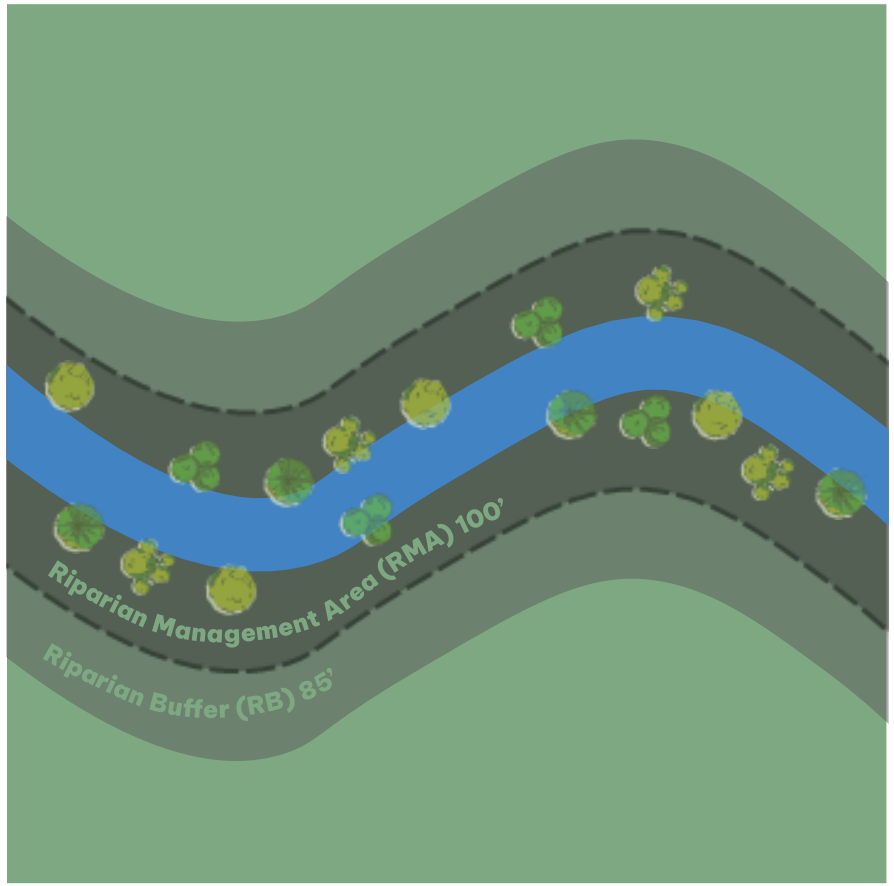
- Draft Ordinance of CAO ready to issue for public comment
  - Purpose of today's workshop to get comments on draft language / identify issues
- 45-day comment period to begin June 27
  - Fish and Wildlife Habitat Conservation Areas (Riparian Areas)
  - Wetland Buffers
  - White Oak Preservation
  - Geologic hazard areas

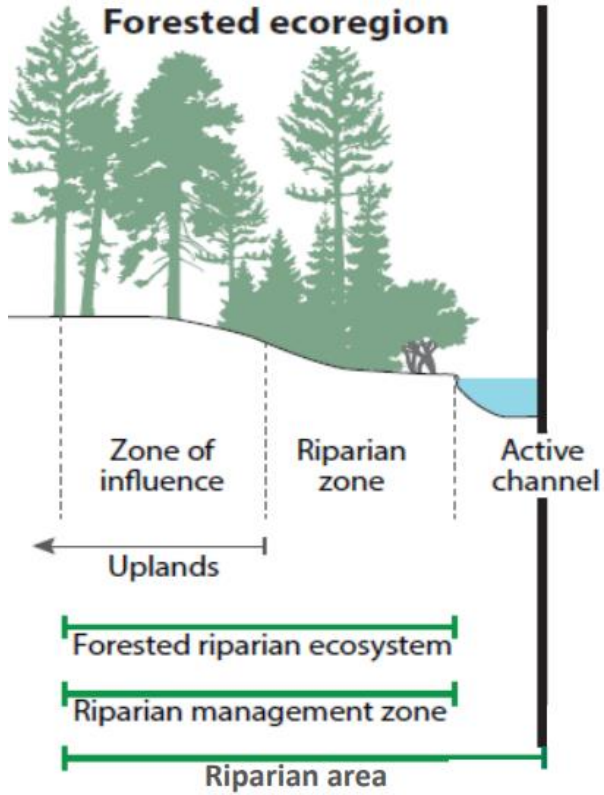
Background

- **GMA requires all Cities and Counties to designate and protect *Critical Areas using* Best Available Science (BAS) (RCW 36.70A.172)**
- **"No Net Loss of ecological functions"**
  - When impacts cannot be avoided, new activities must replace lost function and values through compensatory mitigation
- **Critical areas include:**
  - Wetlands
  - Fish and Wildlife Habitat Conservation Areas (FWHCAs)
  - Critical Aquifer Recharge Areas (CARAs)
  - Frequently Flooded Areas
  - Geologically Hazardous Areas
- **Ordinance last updated in 2019**

Riparian Areas

- Based on new Site Potential Tree Height (SPTH) Best Available Science
  - Protects downstream water quality, habitat functions of riparian areas
  - SPTH is based on the height of a mature tree
- Development restricted in:
  - Riparian Management Area (100’)
    - Land adjacent to a stream or lake
  - Riparian Buffer (85’)
    - Extends outwards from the edge of the RMA





White Oak Preservation

- WDFW Guidance on White Oak Habitat adopted by reference
- Mitigation sequence for no-net loss of function: avoid, minimize, compensate.
- Must comply with WDFW guidance in Critical Areas report
  - Evaluate habitat functions, provide expected protection and mitigation for impacted oaks on site.
  - Temporal mitigation (enhancement): 1:1 to 10:1
  - Permanent mitigation (replanting): 50: 1 to 250: 1
  - Must provide alternative site configurations before off-site mitigation occurs.

Wetlands

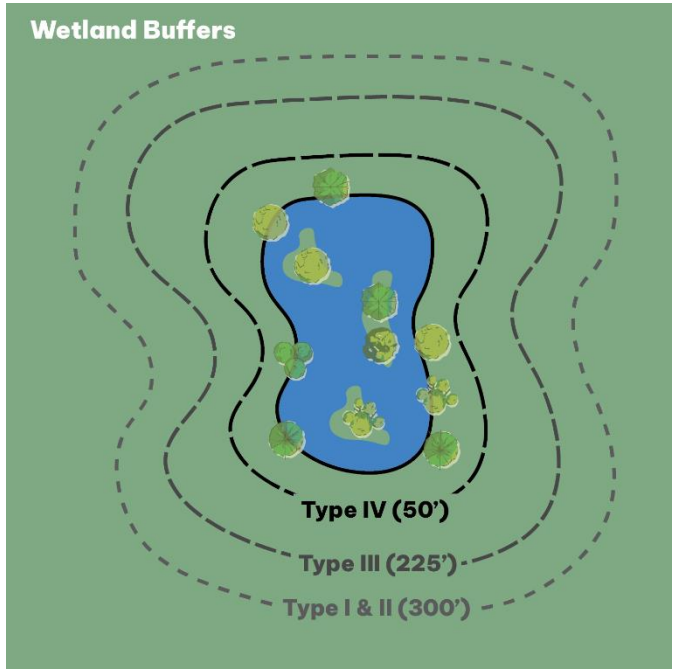
- Recommending most stringent buffer requirements (Ecology option 3)
- Flexibility through alternative pathways approach
  - Achieved by detailed assessment of habitat score and implementation of habitat corridor

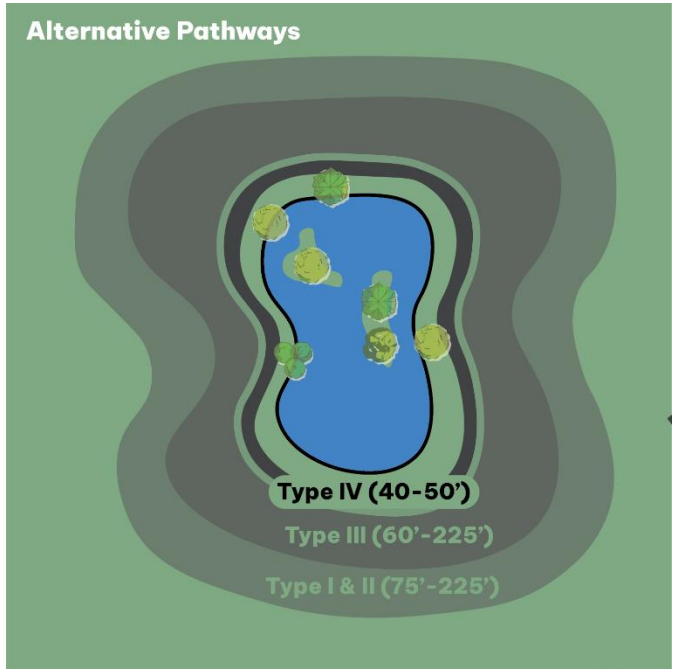
	Option 1: Measured by Wetland Category and Habitat Score	Option 2: Measured by Wetland Category and Adjacent Land Use	Option 3: Measured by Wetland Category Only
Pros	Provides most flexibility for widths and averaging	Requires less review time, less expense for applicants	Provides the greatest protection, least review time & applicant expense.
Cons	Requires most review time for City, higher cost for applicants	Provides less specific buffering options and decreased flexibility for applicant than Option 1	Provides no options and no flexibility, more requests for variances.

Wetland Buffers

- Buffer widths based on wetland category
  - Type I & II : (Greatest ecological function) 300’
  - Type III: (Most common): 225’
  - Type IV: (Lowest ecological function): 50’

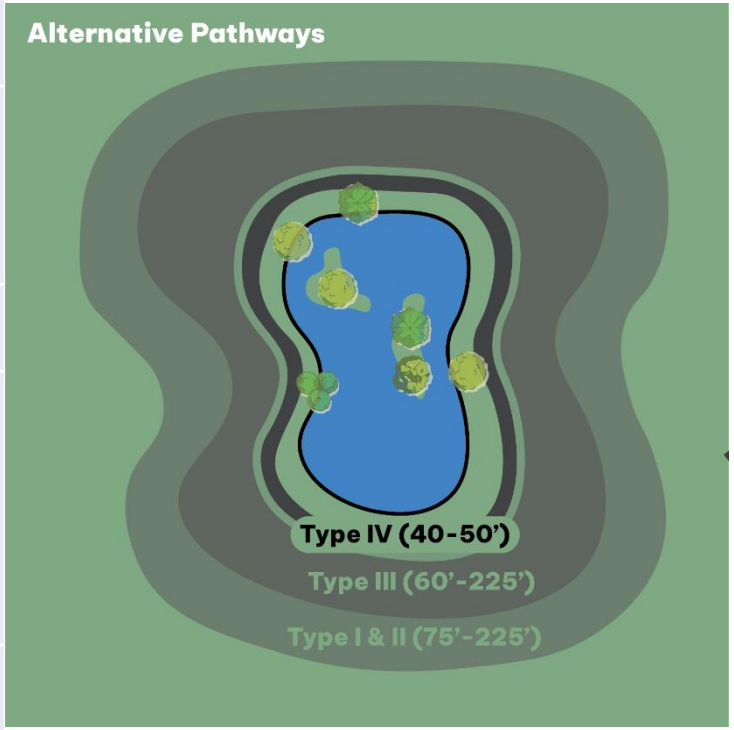
- Option for two alternative pathways
  - Applicant must demonstrate impacts cannot be avoided through alternative site designs
  - Allows for reduction in buffer widths if applicant can demonstrate low habitat scores or provide habitat corridor as mitigation
  - Criteria for habitat corridor specified in draft code





Alternative Pathways

Category of Wetland	Habitat Score 3 to 5 Points	Habitat Score 6 to 7 Points	Habitat Score of 8 to 9 Points	Buffer width Based on Special Characteristics
Category I: Bogs and Wetlands of High Conservation Value	NA	NA	[a]225’	[a]190’, [b]250’
Category I: Forested	[a]75’, [b]100’	[a]110’, [b]150’	[a]225’	NA
Category I or II: Based on rating of wetland functions (and not listed above)	[a]75’, [b]100’	[a]110’, [b]150’	[a]225’	NA
Category III: All types	[a]60’, [b]80’	[a]110’, [b]150’	[a]225’	NA
Category IV: All Types	[a]40’	[a]40’	[a]40’	NA



a: with habitat corridor, b: without

Geologic Hazard Areas

- Types regulated under CAO:
  - **Landslide** - Areas susceptible to landslides due to geologic, topographic, hydrological factors
    - Now defined as greater than 15% (in some circumstances), increased from 25%.
  - Seismic
    - Liquefaction – low density soils with shallow water table
    - Ground shaking amplification
    - Fault Rupture hazard – 100’ within known or USGS mapped faults
  - Erosion hazard
    - Soil erosion hazard
    - Bank erosion hazard- areas along lakes, rivers, streams susceptible to erosion
- Setback Requirements
  - **Landslide hazard:** 2 times the slope height or amount approved in Critical Areas Report (applies to top and bottom of slope)
  - **Fault rupture**: 50’, or 100’ when critical facilities present
  - **All others:** distance recommended in Critical Areas report by qualified geotechnical engineer.

Response to Questions from PC / CC December Work Sessions

- Accurate mapping of wetlands by category is not available

- Actual extent of wetlands and habitat areas are determined when site specific information is submitted through the regular permitting / development review process
  - Critical areas regulations are then applied based on field-delineated critical area boundaries.

- Regulatory takings prevent circumstances where properties entirely covered by Critical Areas would otherwise have no development potential.

- Department of Fish and Wildlife Riparian Guidance includes impacts of climate change.
  - Human-made alterations to riparian areas and streams have caused streams and waterbodies to increase in temperature and, consequently,
  - Will reduce conditions for native fish distribution and viability throughout the Pacific Northwest

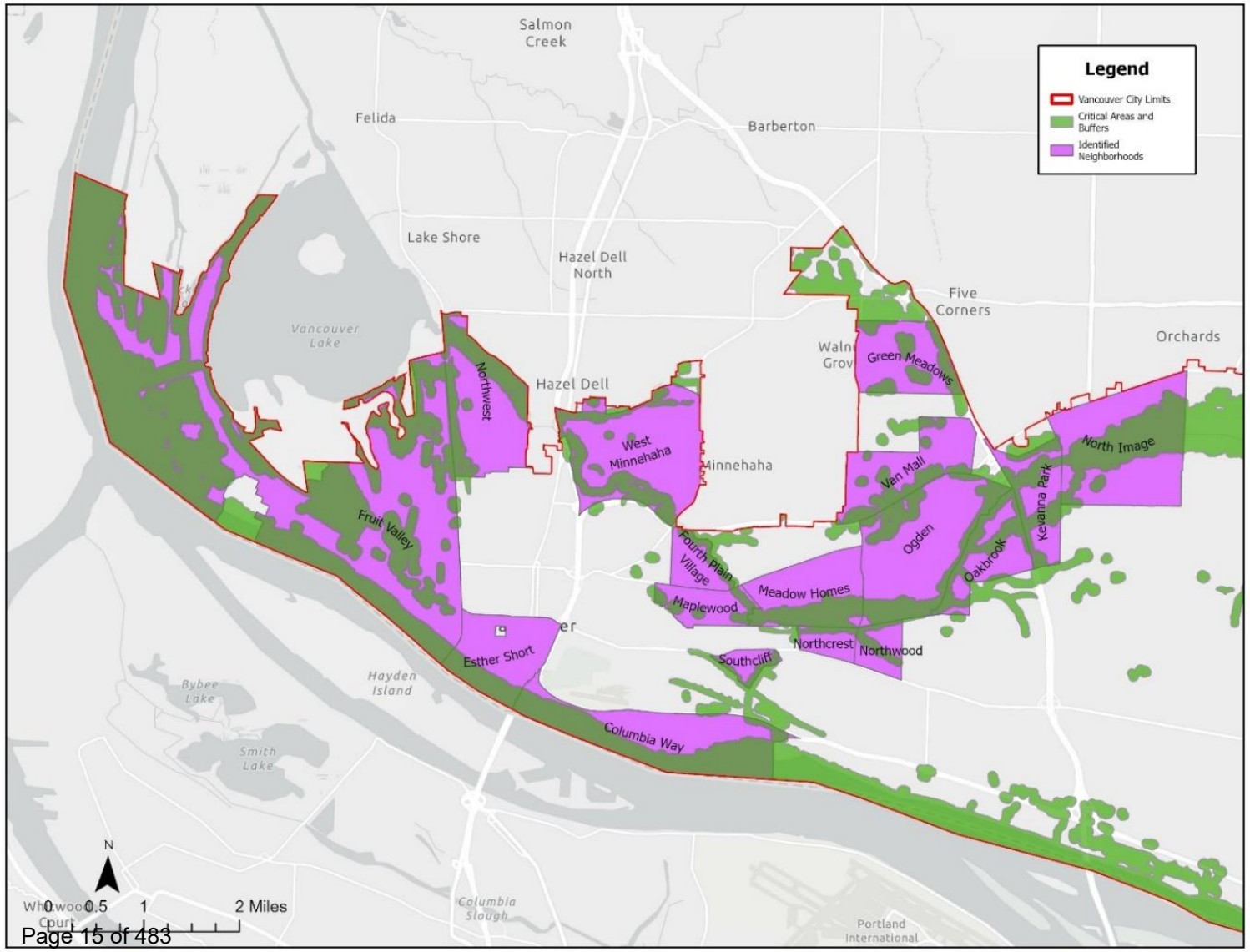
Summary of Planning Commission Work Session (6/25)

- Commissioners wanted to get a better understanding of buffers as a environmental protection / mitigation measure for wetlands
  - As a best management practice, buffering high quality wetlands from adjacent land uses is one of the most impactful protection measures. The closer development is to a wetland, the more measures and impacts are generally needed to ensure no net loss
- Commissioners asked to get mapping of priority white oak habitat range within the City
  - Maps developed in response, included in attachment E of the packet materials.
- Commissioners wanted to ensure protection of Critical Areas doesn't significantly conflict with concurrent goals of adding more housing
  - Providing flexibility where it makes sense to allow housing, while ensuring no net loss

Next Steps

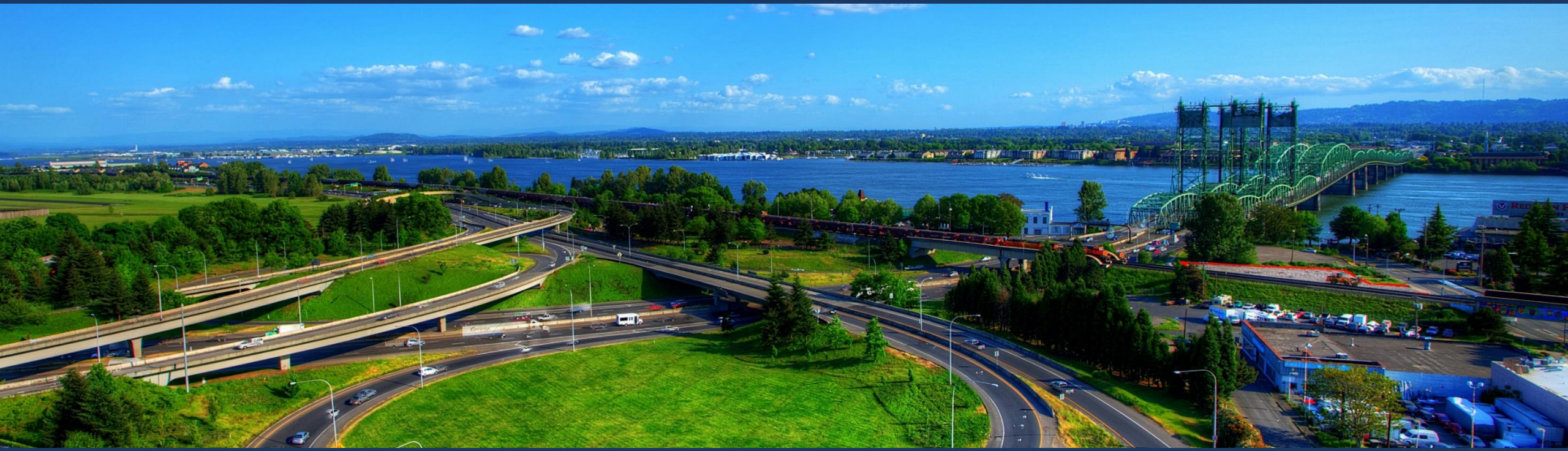
- 45-day public comment period starts on June 27
- Will return in September with proposed changes to ordinance based on input received during comment period

Additional Planned Engagement



- Neighborhood associations in the City with a high Equity Index score and occurrence of Critical Areas
- Engage on code language with WA Depart of Natural Resources, Dept of Fish and Wildlife, Dept of Health, Clark County Public Health, Clark Conservation District
- Participants of Our Vancouver Climate community working group invited to engage / review draft.

Questions?



CITY OF Vancouver WASHINGTON

MEMORANDUM

DATE: July 8, 2024

TO: Mayor and Council
CC: Eric Holmes, City Manager

FROM: Domenique Martinelli, Senior Long-Range Planner, CDD

RE: Critical Areas Ordinance Update

Intent

Provide City Council with a high-level overview of the proposed updates to the Critical Areas Ordinance (CAO) and summarize next steps for receiving community input on the draft language, prior to returning for adoption hearings anticipated in fall 2024. The proposed updates are mostly technical and intended to comply with updated state agency guidance and recent science. These issues were previously reviewed by the Planning Commission and City Council on December 12 and December 18th, respectively.

Background

Critical areas act as valuable assets to our community, through enhancing environmental quality, providing critical ecological functions, and protecting the community and public and private property from threats resulting from natural hazards. The Growth Management Act (GMA) requires all cities and counties in the state of Washington to adopt development regulations that protect critical areas – which are further broken down into five categories: wetlands, critical aquifer recharge areas (CARA's), frequently flooded areas, geologically hazardous areas, and fish and wildlife habitat conservation areas. The City regulates most Critical Areas under Vancouver Municipal Code Section 20.740, except for CARA's which are regulated in Section 14.26 under water resources protection.

The Growth Management Act requires Counties and Cities to ensure no net loss of ecological functions within their critical area regulations. Impacts to high-quality critical areas should be prohibited except in limited circumstances. Impacts to other critical areas must be avoided and minimized. When impacts cannot be avoided, new development must replace the lost functions and values through compensatory mitigation measures. The Growth Management Act also requires Counties and Cities to utilize Best Available Science (BAS) in the development of their critical area regulations to ensure new policies and regulations to designate and protect Critical Areas are based on reliable scientific information. As part of the CAO update, the City has documented BAS in a formalized report, based on findings from local, state and federal regulatory agencies. Non-scientific

factors (legal, social, cultural, economic and political) used for the development of Critical Areas regulations are required to:

- Identify information on record that supports its decision in departing from science-based recommendations;
- Explain rationale for its departure from science-based recommendations; and
- Identify potential risks to a critical area or areas function and values, and any reduction in risks with additional measures.

The City first adopted its Critical Area Ordinance under Vancouver Municipal Code (VMC) 20.740 in 2005, and completed it's most recent update in 2020, which was a minor technical update in response to a new model flood ordinance released from the Federal Emergency Management Agency (FEMA). More substantive changes occurred to the Wetlands rating systems during a 2019 update. Many components of the Critical Areas Ordinance have been updated or amended during various time periods as highlighted below:

Critical Area Ordinance Section	**Year of Most Recent update**
Geologic Hazard Areas	2007 (Ord M-3844)
Fish & Wildlife Habitat Conservation Areas	2009 (Ord M-3931)
Wetlands	2019 (Ord M-4289): Updated wetlands rating system
Frequently Flooded Areas	2020 (Ord M-4325): Minor updates in response to model flood ordinance
Critical Aquifer Recharge Areas	2009 (Ord M-3920)

The sections below highlight the proposed changes reflected in the current draft of the Critical Areas Ordinance.

Overall Summary of Changes:

- 20.150 Definitions
  - Modified definitions to comply with new state guidance and standards.
- 20.740.010 Purpose.
  - Minor text edits for language clarification
- 20.740.020 General Provisions.
  - Minor text edits for language clarification

- 20.740.030 Applicability and Exemptions from Requirement to Obtain Permit.
    - Reduced process for applications where only Critical Area is Soil Erosion Hazard, defer to Erosion Control Section of VMC 14.24.
    - Minor exemptions for loss of single white oak on single family residence
- 20.740.040 Approval Process.
    - Minor text edits for language clarification
- 20.740.050 Submittal Requirements.
    - Minor text edits for language clarification
- 20.740.060 Approval Criteria.
    - Added language for rectifying and reducing impacts.
    - Clarification that mitigation must be provided to address anticipated loss of critical area functions – equal to no net loss.
- 20.740.070 Minor Exceptions.
    - Minor text edits for language clarification
- 20.740.080 Reasonable Economic Use Exceptions.
    - Title changed to *Economic* Use Exception
- 20.740.090 Unauthorized Critical Areas Alterations and Enforcement.
    - Removal of Critical Areas Restoration fund – outdated language to fund that was never established.
- 20.740.100 Designation Process for Habitats of Local Importance.
    - Re-titled as *Designation Process for* Habitats of Local Importance
    - Specifies designation process is intended to cover areas and habitats not otherwise protected under other critical area regulations.
- 20.740.110 Fish and Wildlife Habitat Conservation Areas.
    - Updated Graphics
    - Removal of former Table 20.740.110-1, Riparian Management Area (RMA) buffer set to 100', Riparian Buffer (RB) set to 85' for all stream type classifications, in response to Best Available Science.
    - Additional standards and requirements for Critical Area reports
- 20.740.120 Frequently Flooded Areas.
    - No changes proposed – last updated during 2023 annual updates to comply with new FEMA guidance.
- 20.740.130 Geologic Hazard Areas.

  - Several text edits for language clarification

- 20.740.140 Wetlands.
  - Several text edits for language clarification
  - Revised wetland buffer tables – implementation of minimum requirements under Table 20.740.140-1, alternative options 1 & 2 allowed by providing 2 alternative site layout configurations demonstrating impacts cannot be avoided or reduced to result in less impact.
  - Criteria for habitat corridor requirements defined in order to use wetland buffers listed under Table 20.740.140-2.
  - Impact minimization measures for implementing a habitat corridor (Table 20.740.140-3).
  - Expanded options for compensatory mitigation actions
  - Consolidated mitigation replacement ratio table
  - Updated graphics

Scope of Changes

The proposed updates will not have an impact on the way that Critical Area permits are currently processed. The City typically identifies during the pre-application process whether or not a particular property may be covered under Critical Area regulations. Aside from the minor exemptions circumstances under 20.740.070, if the applicant proceeds forward with development within a Critical Area, they would be required to obtain a Critical Area permit consistent with the requirements of VMC 20.740.

The changes outlined above will generally increase the amount of land that is covered under Critical Area regulations in the City and increase protections and impose additional site-specific best management practices where issues are identified in a Critical Areas Report. The greatest extent of changes will come from increased distances for wetland buffers, and for increased widths in the Riparian Management Area (RMA) and Riparian Buffer (RB) for lower order streams that have downstream impacts on fish habitat and quality. Exhibit E provides a full City-wide map of Critical areas in the City, and the extent that potential areas will be affected by new regulations. The following aspects are mapped within this exhibit:

- Fish and Wildlife Habitat Conservation Areas
- Geohazards
- Soil Types and Ground shaking Amplification Risk
- Riparian Management Zones
- Wetland Buffers

Wetlands: Wetlands are areas that are inundated or saturated by surface water 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 are fragile ecosystems that serve a number of important beneficial functions. Wetlands reduce the impacts of erosion, siltation, flooding, ground and surface water pollution, and provide habitats for wildlife, plant and fisheries. Wetlands destruction or impairment may result in increased habitat degradation and public and private costs or property losses from flooding or erosion.

Wetlands are currently regulated under VMC Section 20.740.140. Based on the significance of the wetland, a buffer is put in place from the edge of the wetland, where development activity is restricted (except for minor allowances defined under 20.740.140(c)(a)). Wetland buffers tend to be one of the most common aspects of review under the CAO permitting process and tend to have the greatest impact on the overall site planning process for development when a significant wetland is in place. The current regulatory system determines a buffer width based on the wetland category (see definitions below) and the intensity of the proposed land use, based on a score of low, medium or high.

The wetland quality categories are defined as follows:

- Category I – Highest Value, typically larger than one acre that are undisturbed having mature old growth and/or unique or rare wetland types
- Category II – wetlands that have a moderately high function and value
- Category III – moderate levels of function, adverse impacts can often be allowed with mitigation
- Category IV – heavily disturbed, lowest ecological value

Habitat scores are based on the Washington State wetlands rating system. During the development review process, it is the responsibility of the proposed developer or landowner to hire a qualified wetlands specialist to assess and assign a wetland score using the Washington Department of Ecology Rating system.

In October 2022, the department of Ecology released new guidance offering three different approaches to establishing protective buffers, and modifying rating systems that cities can choose from while updating their Critical Areas regulations. Feedback from City Council, Planning Commission and the initial round of stakeholder engagement emphasized the need to put in the greatest buffer widths to provide protections, and ensuring flexibility and options are present in the code for applicants in an equitable manner. In response, the current approach in the draft ordinance establishes a minimum setback based on wetland rating system only (option #3 in the Department of Ecology Guidance document).

Table 20.740.140-1. WETLAND BUFFER WIDTH REQUIREMENTS

Wetland Category	Buffer Width (Feet)
I	300

II	300
III	225
IV	50

The draft provides two alternative options if applicants aren't able to implement the full buffer widths, and are able to demonstrate (by providing site plans for two additional site configurations) that impacts cannot be avoided or reduced. These alternative options determine setback distances by wetland category and habitat score and allow for lesser setbacks if the applicant provides a habitat corridor as a mitigation measure.

Category of Wetland	**Habitat Score 3 to 5 Points**	**Habitat Score 6 to 7 Points**	**Habitat Score of 8 to 9 Points**	**Buffer width Based on Special Characteristics**
Category I: Bogs and Wetlands of High Conservation Value	NA	NA	[a]225'	[a]190', [b]250'
Category I: Forested	[a]75', [b]100'	[a]110', [b]150'	[a]225'	NA
Category I or II: Based on rating of wetland functions (and not listed above)	[a]75', [b]100'	[a]110', [b]150'	[a]225'	NA
Category III: All types	[a]60', [b]80'	[a]110', [b]150'	[a]225'	NA
Category IV: All Types	[a]40'	[a]40'	[a]40'	NA

* ***a****: habitat corridor provided,* ***b****: no habitat corridor provided.*

In order for applicants to use the reduced setbacks shown in the table above (values denoted with [a] only), they will be required to implement a habitat corridor at least 100' on the site, that includes impact minimization measures. Measures include best management practices (BMP's) to address

impacts from light, noise, toxic runoff, stormwater, runoff, disturbances from humans and pets, and dust impacts.

In addition, several edits have been made to the draft regarding mitigation options. Table 2740.140-5 has been simplified to remove unnecessary sections, with the mitigation ratios remaining generally unchanged. The updates also include prioritizing mitigation options in the following order:

- Mitigation Banking – allows applicants to compensate for loss by purchasing credits for a bank
- In-lieu fee credits – third party compensation to agency or organization tasked with enhancing, protecting, or creating new wetlands
- Permittee responsible mitigation – applicant-initiated mitigation efforts

Geologically Hazardous Areas: These are defined as areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to siting commercial, residential, or industrial development consistent with public health or safety concerns. This includes Erosion hazard areas, which contain soil types that are more prone to erosion, and landslide and seismic hazard areas, which are at high risk of mass movement, landslides and liquefaction during a seismic event. Geologically Hazardous areas are regulated under VMC 20.740.130, and haven't been substantially updated since 2007.

The majority of this section remains relatively unchanged, except for re-organization and language changes to align with recent guidance. Some relatively minor changes are included to comply with Best Available Science and policy direction from the Department of Ecology. Proposed changes are as follows:

- Updating the following definitions:
    - *Geologically Hazardous Area* – to include areas that are susceptible to other types of geological events.
    - *Landslide Hazards* – defining landslide hazard areas as areas with slopes that meet the following criteria:
        - Greater than 15% slope;
        - Hillsides with permeable sediment overlying bedrock; and
        - Groundwater seepage

      The current definition lists slopes greater than 25%, effectively increasing the number of slopes within the City that are defined as Critical Areas.
    - *Seismic Hazard* – includes areas that are likely to become unstable during a seismic event, such as steep slopes, bluffs, and areas with unstable soils.
- A revised buffer width for landslide hazard areas of 2 times the height of the slope, or an amount determined by a qualified geotechnical engineer as part of the Critical Areas report, whichever is greater.

Fish and Wildlife Habitat Conservation Areas (FHWCA's)

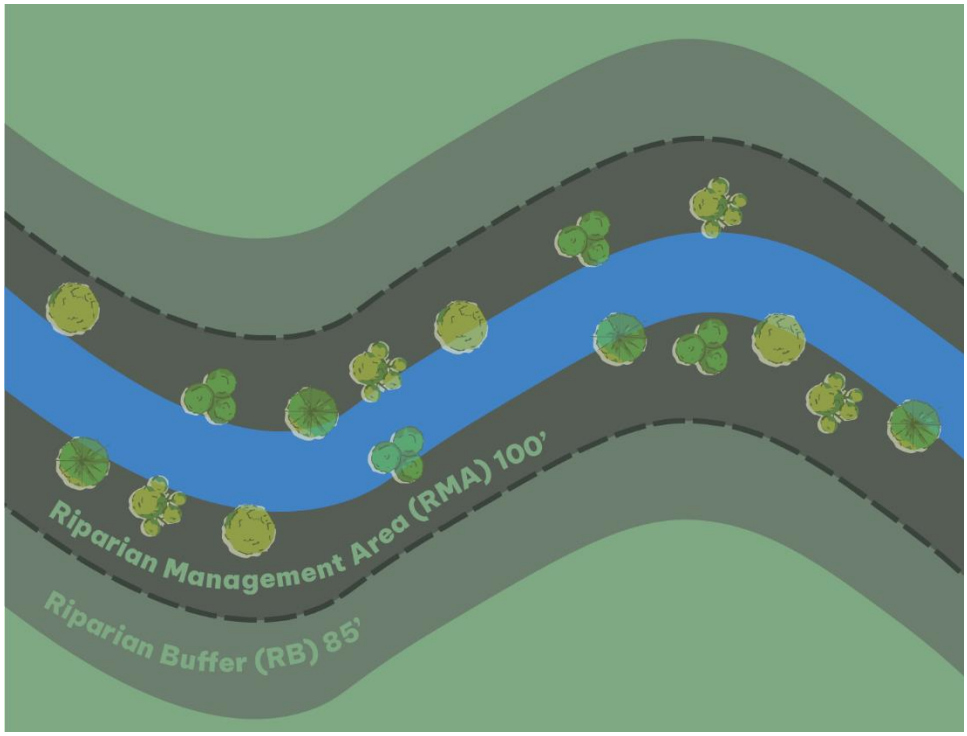
The Growth Management Act requires cities and counties across the state to address land use issues that directly and indirectly impact fish and wildlife habitat. Fish and wildlife habitat conservation is the management of land to ensure sufficient habitat quality, quantity, and connectivity to support long term, viable populations of fish and wildlife species and prevent the creation of isolated subpopulations within their natural geographic distribution.

FHWCA's are regulated under VMC 20.140.110, and last updated in 2009. The primary regulatory mechanism in this portion of the code to protect FWHCA's are though placing buffers from shorelines, lakes, streams, rivers, and riparian areas. In 2020, the Washington Department of Fish and Wildlife (WDFW) conducted new mapping of riparian area buffers based on best available science. This science recommends placing buffer widths based on preserving high functioning ecological areas and incentivizing restoration and basing the width of riparian management zone based on a measurement called *Site Potential Tree Height*, which is the average maximum height of the tallest dominant tree species in a riparian area. Ultimately, this will mean all stream order types will see an increase in buffer widths if implemented in accordance with WDFW guidance.

In the current ordinance, riparian buffers are regulated by stream type (F, N, S, U, see table below). In the new ordinance, to accommodate best available science and provide greater protections, all stream order classifications will be regulated with a Riparian Management Area (RMA) of 100', and a Riparian Buffer of 85', for a total combined setback of 185'. The table below shows the proposed increase in setbacks for all stream order types from the existing requirements.

Stream Type	**Existing Requirement(ft)**	**Average of SPTH (ft)**	**Average % of Change (ft)**
F (lakes, streams, and rivers that contain fish habitat)	175	185	+10
N (Streams and rivers that are not shorelines of the state, and do not contain fish habitat)	125	185	+60
S (Shorelines of the State)	175	185	+10
U (un-typed)	125	185	+60

Combined Riparian Management Area (RMA) and Riparian Buffer (RB)



In circumstances where the applicant is not able to implement the full buffer width of the combined RMA and RB, the applicant may defer to using WDFW's mapping tool for Site Potential Tree height, which may potentially result in a smaller width. Additional standards and requirements were added to the draft specifying that evaluation of habitat functions must be included in the Critical Areas report, specifications for a monitoring program when a mitigation plan is required, and requirements for detailing any clearing activities in the Critical Areas report.

Oregon White Oak (Regulated Under Fish and Wildlife Habitat Conservation Areas)

City staff received significant input from Planning Commission, City Council, and individuals engaged during the initial round of stakeholder engagement about the need to prioritize preservation of priority White Oak habitat. In January of 2024, the Washington Department of Fish and Wildlife issued new guidance to Cities in Washington State for mitigating impacts to Oregon White Oak priority habitat. The new code adopts this guidance fully by reference and all subsequent amendments and requires that applicants demonstrate compliance within their Critical Areas reports if priority habitat is present on site, as well as demonstrating mitigation consistent with the guidance.

In the event that mitigation of impacts on site is not practicable, the applicant would be required to provide a minimum of two alternative site designs and layouts to demonstrate no other options are available to avoid or lessen impacts and demonstrate mitigation measures satisfactory to the guidance and demonstrate no net loss of ecological functions. Authority is given to the Planning Director to determine whether proposed mitigation efforts are satisfactory to address impacts, and may impose additional requirements as measures as needed to lessen impacts.

An exemption has also been added under 20.740.030 to allow for situations where a single standalone white oak (not part of a larger grove) is removed on a property where the development or expansion of a single-family residence is allowed.

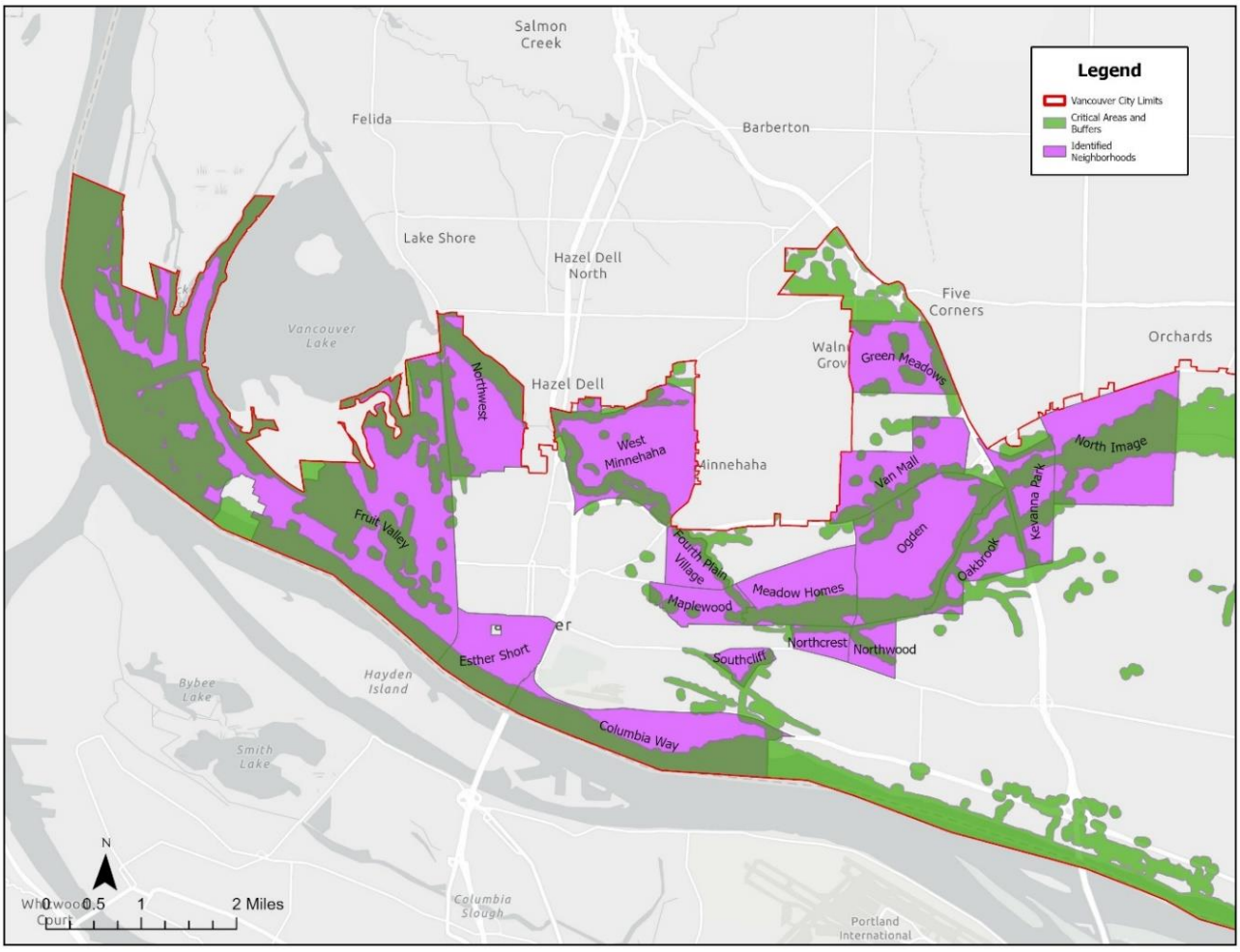
Timeline + Next Steps

The City is required to adopt it's revised CAO as part of the GMA Periodic review process by December 30, 2025, which is the same timeframe for updating the Comprehensive Plan and implementing development regulations. It is anticipated the update process will conclude well before that deadline, by the end of 2024 at the latest. A 45-day public comment period on the draft ordinance was commenced on June 28, with a closing date of August 12 for community members to comment. Specific outreach will be conducted with the following groups to get input on the draft code language:

- Neighborhood associations in the City with a high Equity Index score and presence of Critical Areas (see below map).
- Regulatory agencies, including the Washington Department of Natural Resources, Department of Fish and Wildlife, Department of Health, Clark County Public Health, and Clark Conservation District
- Participants that are currently engaged as part of the Our Vancouver Climate Community working group. Invitations will be extended to residents currently subscribed to email lists on environmental related topics.

Two meetings open to the general public (held remotely) will be held during the public comment period. Additional meetings will be scheduled with each of the groups previously listed as needed. Feedback received during the public comment period will be integrated into overall environmental land use policy intended to be addressed holistically as part of the Comprehensive Plan Update process.

Following the closure of the public comment period, staff will return to Planning Commission and City Council in September with proposed edits to the draft ordinance based on input received. After these work sessions, adoption hearings will be scheduled with Planning Commission and City Council.



Attachments

A: Presentation
B: Best Available Science Report
C: Updated Definitions (20.150) – clean and redline from existing code
D: Critical Areas Ordinance (20.740) – clean and redline from existing code
E: Critical Area Maps

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Technical Report

Best Available Science Research
Vancouver Critical Areas Ordinance Update

Submitted to

City of Vancouver
Vancouver, Washington

September 23

Submitted by

WSP USA
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31000436.000

TECHNICAL REPORT

Best Available Science Research
Washougal Critical Areas Ordinance Update

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LIST OF ACRONYMS AND ABBREVIATIONS

ASCE	American Society of Civil Engineers
ASFPM	Association of State Floodplain Managers, Inc.
BAS	best available science
BMP	best management practice
CAO	critical areas ordinance
CARA	critical aquifer recharge area
City	City of Vancouver
CMZ	channel migration zone
CRS	community rating system
DNR	Washington State Department of Natural Resources
DOH	Washington State Department of Health
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	flood insurance rate map
GMA	Growth Management Act
I-5/I-205	Interstate 5/Interstate 205
I-Codes	International Codes (2018, 2015, 2012, and 2009)
LIDAR	light detection and ranging
LWD	large woody debris
NAI	No Adverse Impact
NEHRP	National Earthquake Hazard Reduction Program
NFIP	National Flood Insurance Program
NOAA	National Oceanic and Atmospheric Administration
NRC	National Research Council
PHS	priority habitats and species
PRM	permittee-responsible mitigation
RCW	Revised Code of Washington
RMZ	riparian management zone
SEPA	State Environmental Policy Act
SFHA	special flood hazard area
SMA	Shoreline Management Act
$SPTH_{200}$	200-year site potential tree height
SR 14/SR 500	State Route 14/State Route 500
UGA	urban growth area
USACE	U.S. Army Corps of Engineers
USDA-NRCS	U.S. Department of Agriculture Natural Resources Conservation Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VMC	Vancouver Municipal Code
WAC	Washington Administrative Code
WDFW	Washington Department of Fish and Wildlife
WSDOT	Washington State Department of Transportation

1.0 INTRODUCTION

As a fully planning county, Clark County and all municipalities within it, including the City of Vancouver (City), are required to periodically update their critical areas ordinance (CAO) on the schedule set out in the Growth Management Act (GMA) (see Revised Code of Washington [RCW] Sections 36.70A.130 and 36.70A.172). The CAO update needs to comply with the GMA, State Environmental Policy Act (SEPA), and must also meet requirements of the Shoreline Management Act (SMA) for regulation of critical areas within shorelines. The Washington Administrative Code (WAC) provides additional requirements for designation of critical areas in WAC 365-190. The deadline for the update of the CAO, other regulations as necessary, and the Comprehensive Plan of the City of Vancouver is June 30, 2025.

Critical areas in Vancouver are currently protected by the City's CAO (Vancouver Municipal Code [VMC] 20.740), first adopted in 2005, as required by RCW 36.70A.172. The protection of these critical areas is important to preserve the ecological functions and values of the City's natural environment and for the protection of public health, safety, and welfare of Vancouver's residents. Critical areas include habitats of local importance, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, wetlands, and critical aquifer recharge areas (CARAs). CARAs are regulated under VMC 14.26, "Water Resources Protection," separately from the City's other critical areas provisions contained in VMC 20.740.

The CAO was most recently updated in 2020, specifically an amendment to Frequently Flooded Areas. Evolving best available science (BAS) for critical areas means the City's CAO may not reflect the latest science or guidance from the State of Washington. BAS is defined in WAC 365-195 (see further discussion below under Section 3.0 of this report). As an example, the City's CAO needs to be updated to meet the most recent riparian management guidance from the Washington Department of Fish and Wildlife (WDFW) – *Riparian Ecosystems, Volume 1: Science Synthesis and Management Implications (Quinn et al. 2020) and Riparian Ecosystems, Volume 2: Management Recommendations (Rentz et al. 2020)*. City staff have also mentioned that they would prefer that the CARA regulations in VMC 14.26 be integrated with the other critical areas regulations in VMC 20.740.

This report consists of a background of the City's existing critical areas landscape, review of BAS and critical area resource documents, and guidance that provide BAS-based approaches to protecting the functions and values of critical areas. The BAS review includes peer-reviewed literature, gray literature, expert opinion and the anecdotal experience of professionals that is relevant to the City, documents prepared for other jurisdictions, guidance prepared by state and federal agencies, and research from across the country regarding the effectiveness of existing standards and the state of the science. This document presents the findings of the review and Appendix B lists the literature, data, and reports used to review the state of BAS for each regulated critical area.

2.0 VANCOUVER'S CRITICAL AREAS LANDSCAPE

The geography of Vancouver's critical areas is discussed in this section. As a supplement to this section, see the critical areas maps contained in Appendix A. Together, the description and maps provide the general distribution of Vancouver's critical areas. Also discussed below are how critical areas are designated areas as per the City's CAO and any differences in designation compared with WAC 365-190.

2.1 HABITATS OF LOCAL IMPORTANCE

Habitats of Local Importance (VMC 20.740.100) are critical areas for fish and wildlife habitat that are not designated as priority habitats and species by the State, but are designated as locally significant by the City. These are determined by a need for protection due to existing high diversity of fish or wildlife species, declining populations, habitat scarcity, areas sensitive to disturbance from human activity or development, or other unique local habitat functions. Designated areas also need to be sufficient in size to support the species or habitat functions and this designation will not compromise the ability of the City to achieve Comprehensive Plan goals. A habitat of local importance must also have a proposed management strategy that describes how the functions of the habitat will be protected after designation. Vancouver has not designated any habitats of local importance and they are, therefore, not discussed further in this report.

2.2 WETLANDS

Wetlands are areas that support vegetation adapted to life in saturated soil conditions under normal circumstances (VMC 20.740.140). Wetlands must be designated in accordance with the definition in RCW 36.70A.030 and in accordance with the federal wetland delineation manual and regional supplements (WAC 173-22-035). Wetlands include swamps, marshes, bogs, and similar areas, but do not include artificial wetlands intentionally created (e.g., irrigation and drainage ditches, canals, and detention facilities). Counties and cities must adopt a rating system for wetlands. The rating system most frequently used (also used by Vancouver) is the joint rating system developed by the Washington State Department of Ecology (Ecology) and the U.S. Army Corps of Engineers (USACE).

Areas in the City that have prevalent wetland areas are along the banks of the Columbia River, Vancouver Lake, Burnt Bridge Creek, Fisher Creek, and Love Creek; areas between Vancouver Lake and the Columbia River; Curtin Springs Wildlife Habitat; Vancouver Lake Park; Centerpointe Park; areas west of Northeast Padden Parkway and Northeast Andresen Road; areas in the Port of Vancouver; and other mapped areas as shown in Appendix A.

2.3 CRITICAL AQUIFER RECHARGE AREAS

CARAs are areas where rainfall and surface water can infiltrate into the subsurface and recharge aquifers used for potable water. CARAs are regulated under VMC 14.26, which was recently updated in City Ordinance M-4372 codified in August 2022. The purpose of this code is to protect the City's water resources by reducing risks of groundwater contamination by establishing development regulations and minimum standards (VMC 14.26). Aquifer areas must be classified according to

the vulnerability of an aquifer, which is determined by the combined effect of hydrogeological susceptibility to contamination and the potential contaminant releases that may impact the aquifers (WAC 365-190-100). The entire area within the City's jurisdictional boundaries is designated as CARA under VMC 14.26.115.B. The City further identifies Special Protection Areas within the citywide CARA that are those areas within 1,900 feet of any municipal water supply well.

2.4 GEOLOGICALLY HAZARDOUS AREAS

Landslide, seismic, and erosion hazard areas are geologically hazardous areas (VMC 20.740.130). Coal mine and volcanic hazards also qualify as geologically hazardous areas (WAC 365-190-120), but these do not occur in Vancouver.

Landslides: Landslide areas are generally characterized by the following identifying potential factors per the City's CAO: slopes greater than 25 percent on a property and adjacent areas within 100 feet and areas of historic or active landslides. WAC 365-190-120 defines landslide areas as areas delineated by the U.S. Department of Agricultural Natural Resources Conservation Service (USDA-NRCS) as having significant limitations for building development; coastal areas mapped as Classes u (unstable), uos (unstable old slides), and urs (unstable recent slides) in Ecology's Coast Atlas; or areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey (USGS) or Washington State Department of Natural Resources (DNR). Also, it includes areas with slopes steeper than 15 percent; hillsides intersecting geological contacts with a permeable sediment overlaying an impermeable sediment or bedrock; and springs or groundwater seepage. WAC goes further in defining landslides as areas that have shown movement during the Holocene epoch or which are underlain or covered by mass wastage debris from this epoch; slopes parallel or subparallel to planes of weakness in subsurface materials; slopes having gradients steeper than 80 percent subject to rockfall during seismic shaking; areas potentially unstable as a result of rapid stream incision, erosion, and undercutting by wave action, including stream channel migration zones; areas that show evidence or are at risk from snow avalanches; areas located in a canyon or on an active alluvial fan subject to inundation by catastrophic flooding; and any area with a slope of 40 percent or steeper with a vertical relief of 10 or more feet and not composed of bedrock.

Areas of the City that are identified as areas of potential instability landslide areas by information provided by Clark County Maps Online are slopes south of and above Burnt Bridge Creek in central Vancouver and bordering Burnt Bridge Creek on both sides from Falk Road to NW Fruit Valley Road; slopes above the Columbia River paralleling State Route 14 (SR 14) and Evergreen Boulevard; parallel to Fruit Valley Road; and areas along Southeast Evergreen Highway east of Interstate 205 (I-205) between SR 14 and the Columbia River and west of Southeast 192nd Avenue. The only areas mapped as areas of historic or active landslides are along Burnt Bridge Creek immediately east of Vancouver Lake and along Evergreen Highway east of I-205. Mapped landslide areas of high confidence by the USGS Landslide Inventory are located around Burnt Bridge Creek Park; along the eastern side Northwest Fruit Valley Road and north of West 39th Street; areas north of SR 500 at Arnold Park and

Bosco Farm Neighborhood Park; areas south of SR 500 along Burnt Bridge Creek and Burnt Bridge Creek Park; an area in Dubois Park; and area just west of Dubois Park and between East Mill Plain Boulevard and East Evergreen Boulevard (see Appendix A).

Seismic Hazard Areas: The City designates seismic hazard areas as those with low to moderate, moderate, moderate to high, or high liquefaction susceptibility, or Peat Deposits; areas of fill; National Earthquake Hazard Reduction Program (NEHRP) ground shaking amplification soils C to D, D, D to E, and E; and fault rupture hazard areas. WAC 365-190-120 defines seismic hazard areas as those subject to a severe risk of damage as a result of ground shaking induced by an earthquake, slope failure, settlement or subsidence, surface faulting, or tsunamis. It also includes areas with a historical record of earthquake damage.

Areas mapped with liquefaction susceptibility risk are typically found in Vancouver along the Columbia River generally west of Southeast Ellsworth Road; areas between the Columbia River and Vancouver Lake; areas along Burnt Bridge Creek; Spring Branch Creek; and areas north and south of SR -500 and Northeast 95th Street. Areas of the City with NEHRP ground shaking amplifications of C to D or higher are generally located west of I-5 near Vancouver Lake. The area north of SR 500 and between I-5 and I-205 are generally Class D; south of SR 500 and east of I-205 are generally Site Class C; faults associated with the Quaternary Lacamas fault zone are present on the eastern side of Vancouver, that generally trends southeast starting at Northeast 28th Street and Northeast 38th Avenue to the Columbia River and ending east of Government Island. Related faults also traverse the very northeast corner of the city, generally around Northeast Fourth Plain Boulevard and Northeast 162nd Avenue.

Erosion Hazard Areas: Erosion hazard areas under Vancouver's CAO are areas identified as having a severe erosion hazard by the 1972 USDA Soil Conservation Service Soil Survey of Clark County Washington. These include erosion hazard areas along banks, streams, and rivers due to flow patterns creating regression or retreat of these banks. Erosion hazard areas are defined by WAC 365-190-120 as areas that are likely to become unstable, such as bluffs, steep slopes, and areas with unconsolidated soils. In the City, erosion hazard areas are found generally along Burnt Bridge Creek adjacent and west of I-5, east of Northwest Fruit Valley Road between West 39th Street and Burnt Bridge Creek, along the Portland Vancouver Junction Rail line between I-5 and Northeast Saint James Road, an area bounded to the west and east by Fort Vancouver Way and Northeast 87th Avenue and to the north and south by East 18th Street and SR 14, and other mapped areas as shown in Appendix A.

2.5 FREQUENTLY FLOODED AREAS

Frequently Flooded Areas are areas of special flood hazards (VMC 20.740.120) determined by the Federal Emergency Management Agency (FEMA) and scientific and engineering reports entitled Flood Insurance Study effective September 5, 2012 and any subsequent revisions. Areas designated as frequently flooded areas as defined by WAC 365-190-110 are those that affect human health and safety and to public

facilities and services. Jurisdictions may optionally designate and consider the future flow flood plain; the potential effects of a tsunami; high tides with strong winds; sea level rise and extreme weather events, including those resulting from global climate change; and greater surface runoff caused by increased impervious surfaces.

Frequently flooded areas in the City are found along the Columbia River, Burnt Bridge Creek, and Vancouver Lake and areas between Vancouver Lake and the Columbia River.

2.6 FISH AND WILDLIFE HABITAT CONSERVATION AREAS

Areas that are determined as fish and wildlife habitat conservation areas (VMC 20.740.110) are based on site conditions and varying available data. These areas include habitat used for any life stage of an endangered, threatened, or sensitive fish or wildlife species; priority habitats and areas associated with priority species as determined by the Washington Department of Fish and Wildlife (WDFW); rivers, lakes, streams and naturally occurring ponds; locally significant habitat areas or habitats of local importance; and riparian management areas are riparian buffers. WAC 395-190-130 defines fish and wildlife habitat conservation areas as those that are commercial and recreational shellfish areas; kelp and eelgrass beds; herring, smelt, and other forage fish spawning areas; naturally occurring ponds under 20 acres and their submerged aquatic beds; waters of the state; and state natural area preserves, natural resource conservation areas, and state wildlife areas.

Primary fish and wildlife habitat conservation areas in the city, including riparian and non-riparian habitat areas, and species areas that can be found along the Columbia River, Burnt Bridge Creek, Fisher Creek, Love Creek, Vancouver Lake and areas between the lake and the Columbia River, South Vancouver Lake Lowlands, Burnt Bridge Creek Greenway, parks along the banks of the Columbia River, Biddlewood Natural Area, Henry J. Biddle Natural Area, Mimsi Marsh, Ellsworth Springs East, David Douglas Park, Blandford Canyon West, Meadowbrook Marsh, along the Portland Vancouver Junction Rail between I-5 and Northeast Saint James Road, and other areas as mapped in Appendix A.

3.0 WHAT IS BEST AVAILABLE SCIENCE?

A foundational element of all CAO updates is documenting the BAS that supports the new and/or revised regulations. As regulated by RCW 36.70A.172, BAS must be used in developing policies and development regulations in order to protect functions and values of critical areas. BAS is utilizing the best, most current information available from a valid scientific process or sources that have been adopted by the scientific community. According to WAC 365-195-905, counties and cities may use a list of identified resources from local, state, or federal natural resources that have met the criteria of BAS. The responsibility of including BAS in development and implementation of critical areas policies or regulations rests on each jurisdiction. However, counties and cities should consult with a qualified scientific expert or team to identify scientific information, determine BAS, and assess applicability to critical areas. The scientific expert or experts may use professional judgment regarding

critical areas but shall use criteria set out in WACs 365-195-900 through 365-195-925 and any other technical guidance provided by the department. Characteristics of BAS include:

- **WAC 365-195-900** – Jurisdictions must identify and include BAS in accordance with WAC for updates and adoption of policies and regulations, including for periodic review and evaluation to determine a jurisdiction is meeting statutory obligations.
- **WAC 365-190-905** – Assessment criteria are provided for jurisdictions to determine whether information gathered for development of critical areas policies and regulations is adequate for BAS. It also provides guidance on the types of information that can be used, determining qualified professionals, setting responsibilities of jurisdictions, and validating scientific information.
- **WAC 365-190-910** – Obtaining BAS is regulated by this statute and includes consulting with state and federal natural resource agencies and tribes for efficient development of scientific information and recommendations. Counties or cities may also have their own scientific data that is or can be eligible for BAS.
- **WAC 365-190-915** – Criteria are listed for using BAS in the development of policies and development regulation and shall protect the functions and values of the critical areas. BAS shall be included in the decision-making process. Jurisdictions shall use BAS with variances and exemptions determinations regarding generally applicable critical areas policies and development regulations. Nonscientific information (legal, social, cultural, economic, and political) used for critical area policies and regulations departing from BAS shall:
  - Identify information on record that supports its decision in departing science-based recommendations;
  - Explain rationale for its departure from science-based recommendations; and
  - Identify potential risks to a critical area or areas function and values, and any reducing risks with additional measures.
- **WAC 365-190-920** – Inadequate scientific information relating to a jurisdiction's critical areas shall utilize a “precautionary or a no risk approach” or use a formal adaptive management program that relies on scientific methods.
- **WAC 365-190-925** – Jurisdictions must give “special consideration” for necessary conservation or protection measures to preserve or enhance anadromous fisheries. Record evidence shall be provided with protected habitat that includes all life stages of anadromous fish.

Scientific information can be produced only through a valid scientific process as listed above and BAS must be used in developing policies and development regulations in order to protect functions and values of critical areas (RCW 36.70A.172). The BAS research presented below meets State requirements and includes scientific information that is readily available, is of high quality, and/or has been independently peer-reviewed.

4.0 WETLANDS

Wetlands are highly productive and valuable ecosystems that provide high-quality habitat to various terrestrial and aquatic flora and fauna, protect water quality by filtering contaminants and promoting infiltration, provide aquifer recharge, and slow the velocity of and retain flood waters protecting downstream communities from the impacts of flooding. Current BAS for wetlands includes guidance for the identification, classification, and categorization of wetlands, information regarding useful and effective protective buffers, and guidance for mitigating impacts to wetlands, including mitigation sequencing and compensatory mitigation, all of these are factors in protecting and maintaining wetland functions and values. This section of the report discusses the functions and values provided by wetlands and information regarding their identification, classification/characterization, and protection and management.

4.1 FUNCTIONS AND VALUES

4.1.1 Functions in General

Wetland functions are the interactions between the structural components of the wetland, and the physical, chemical, and biological processes within the wetland and surrounding landscape (Sheldon et al. 2005). Because wetlands provide functions at many scales, from the microscopic to watershed level, functions are generally grouped into one of three categories: biochemical, hydrologic, and habitat functions. Not all wetlands provide the same level of functions, and most functions are dependent on a number of factors that include the presence and kind of vegetation, soil type, water regime and residence time of water, and position within the landscape. Additionally, the value of an individual wetland may differ from another because of external factors, such as the presence of nearby contaminant sources (e.g., agricultural practices), runoff from adjacent impervious surfaces, proximity to resident and anadromous fish-bearing streams, precipitation patterns, likelihood of flooding, and/or changes in regional climate conditions. The following sections provide a broad overview of the functions provided by wetlands, and examples of the value of these functions to society. The discussion is not exhaustive but is meant to show representative examples of the findings of existing science regarding the functions provided by wetlands (Sheldon et al. 2005).

4.1.2 Biochemical Functions

Biochemical functions include nutrient cycling, removal and retention of metal and toxic organic compounds, and sediment stabilization, among others. Water quality can be impaired by the presence of contaminants, including sediments, phosphorous, metals and organic compounds, and/or pathogens. As discussed in Ecology's *Wetlands in Washington State Volume 1 – A Synthesis of the Science* (Sheldon et al. 2005), wetlands improve water quality by promoting sedimentation, absorbing and precipitating contaminants, biodegrading contaminants by supporting microbes that break them down, removing nitrogen through nitrification and denitrification processes, and helping retain and remove pathogens by detaining water and aiding microorganisms that feed on bacteria. These natural processes provide water quality protection that reduces society's dependency on water quality treatment facilities,

protect local resources such as fish stocks that may be impaired by contaminated water, and help promote the health and safety of communities by limiting the presence of pathogens, metals, and toxic organic compounds in the drinking water that is provided by groundwater and surface water resources (Sheldon et al. 2005).

4.1.3 Hydrologic Functions

The hydrologic functions provided by wetlands include flood attenuation, groundwater recharge, decreased downstream erosion, and reduction in peak flows, among others. The hydrologic functions of wetlands are related to their ability to retain more surface water than terrestrial habitats; the many wetlands across a watershed retain and gradually release runoff and surface water that would otherwise flow directly into surface waters (Adamus et al. 1991, *in* Sheldon et al. 2005). While these functions are associated with water storage, an individual wetland's ability to store surface or subsurface water is additionally influenced by a number of factors, including the wetland's location within the landscape, soils and vegetation, and the type or class of the wetland (Sheldon et al. 2005). These functions can contribute to the long-term health, safety and financial benefits to downstream communities; for example, wetlands in floodplains dissipate the erosive forces of flood waters, and can store large volumes of surface water; these functions act to protect downstream communities from flooding events, and channel migration, and minimize damage to structures and other assets such as cropland.

4.1.4 Habitat Functions

Wetlands provide habitats for various species, including species that are dependent on wetland habitat for their entire life cycle, species that rely on wetlands for a single life stage, and species that use wetlands on occasion, such as for drinking water, or as a stopover point during migration (Johnson and O'Neil 2001). Wetlands support anadromous and resident fish, reptiles and amphibians, waterfowl and migratory birds, and terrestrial species, as well as a variety of aquatic invertebrates and microorganisms. The use of a wetland by any specific animal or group of animals depends on factors that include hydrologic regime, structure and complexity of vegetation, proximity to other habitat, climate/seasonality, and topography, among others (Adamus et al. 1991, Mitsch and Gosselink 2000). Many of the species that rely on wetlands for all or part of their life cycle have unique societal and cultural values. For example, wetlands provide juvenile rearing habitat for salmon, and they provide habitat for waterfowl that are valued for recreation (e.g., birding and hunting). Wetlands supply habitat for protected species, such as migratory birds, WDFW priority species, and state and federally listed threatened and endangered species.

4.1.5 Carbon Sequestration Functions

According to RCW 70A.45.010, carbon sequestration is defined as the process of capturing and storing atmospheric carbon dioxide through biologic, chemical, geologic, or physical processes. Wetlands are known to be some of the largest stores of carbon on the planet (USGCRP 2018). Wetland soils are anoxic (oxygen-poor), and therefore slow decomposition and lead to the accumulation of organic matter (Nahlik and Fennessy 2016). The amount of carbon storage depends upon wetland

type and size, vegetation, the depth of wetland soils, groundwater and nutrient levels, pH, and other factors. Wetland soils also store carbon that flows in from upland areas, through soil erosion or movement of vegetative debris (Kusler and Christie 2011). Climate modeling has shown a potential favorable ratio of greenhouse gas production to sequestration in future climate change scenarios, meaning wetlands could become an even greater carbon sink than during current conditions. Global warming may affect the period of time it takes a wetland to become a net sink, but may also increases the amount of sequestered carbon significantly depending on local climate conditions (Mitsch et al. 2013). However, disturbed or warmed wetlands typically release greenhouse gases that contribute the most to global warming (i.e., carbon dioxide, methane, and nitrous oxide) (Mitsch et al. 2013).

4.1.6 Impacts

Disturbances to wetlands and the functions they provide can occur at several geographic scales, and can be created by and depend on a variety of land uses, the land use intensity/severity, and the scale at which the disturbance occurs (Sheldon et al. 2005). Disturbances include vegetation removal and increased impervious surfaces, agricultural practices, logging and development, and other activities that alter natural drainage patterns, fill wetlands, and increase inputs of pollutants. Each of these disturbances may affect the functions and values of wetlands by increasing water volume and flow rates after storm events; increasing sediment and other pollutants in runoff; contributing to habitat fragmentation; increasing erosion, and/or reducing biodiversity (Sheldon et al. 2005).

Protecting wetland resources entails the regulation of direct and indirect impacts to wetlands and should be guided by BAS. Direct wetland impacts are activities that include filling, draining, or adversely impacting the vegetation within a wetland. Indirect impacts result from changes to the surrounding landscape that negatively influence the physical, chemical, or biological characteristics of a wetland, such as its hydroperiod, microclimate or habitat connectivity, for example (McMillan 2000).

4.2 IDENTIFICATION AND CLASSIFICATION

Section 365-190-090 of the WAC and RCW 36.70A.030 define wetlands as,

> *... areas that are inundated or saturated by surface water 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 those 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 1 July 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.*

To address regional wetland characteristics and improve the accuracy of wetland delineations, the USACE issued regional supplements to its wetland delineation manual (1987) on which the state manual is based. Therefore, current wetland methodology is based on the USACE manual and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast* Region (Version 2.0) (regional supplement) (USACE 2010). The USACE manual provides the methodology for identifying jurisdictional wetlands based on an examination of vegetation, soils, and hydrology. Vancouver's CAO references the "approved federal wetland delineation manual and applicable regional supplements but does not specifically reference the manual and supplement by name (see VMC 20.740.120).

WAC 365-190-090 also indicates that when designating wetlands, counties and cities should use a rating system that evaluates the existing wetland functions and values to determine what functions must be protected, and, when developing wetland rating systems, jurisdictions should consider using the wetland rating system developed jointly by Ecology and the USACE. Ecology's *Wetland Rating System for Western Washington* (Hruby 2014) is the most commonly used and regionally accepted wetland classification system, and categorizes wetlands based on their specific attributes, including rarity, sensitivity, and the functions they provide. To identify and classify wetlands, the system incorporates other classification systems, including the hydrogeomorphic classification and classification of plant communities (Cowardin et al. 1979), as well as classification based on special characteristics. As described in the Ecology guidance, the rating system was designed to "differentiate between wetlands based on their sensitivity to disturbance, their significance, their rarity, our ability to replace them, and the functions they provide" (Hruby 2014). The intent of the system is to provide a basis for developing standards to protect and manage wetlands. Vancouver's CAO uses the *Wetland Rating System for Western Washington* (Hruby 2014) in compliance with WAC 365-190-090.

4.3 BEST AVAILABLE SCIENCE FOR WETLAND PROTECTION

The protection of the functions and values provided by wetlands is generally recognized as achievable (in part) by using protective wetland buffers. Buffers are vegetated areas adjacent to an aquatic resource (a wetland for purposes of this discussion) that can, through various processes, reduce the impacts of adjacent land uses (Sheldon et al. 2005). Functions provided by buffers include removing sediments, excess nutrients, and toxics; influencing the microclimate; maintaining habitat connectivity; and minimizing adjacent disturbances. The effectiveness of buffers to protect wetland functions and values is generally related to the type of wetland function to be protected, the activities that are being buffered, and the characteristics of both the wetland and its associated buffer. For example, differing widths for effective buffers for water quality protection, and habitat for a specific species have been documented. Additionally, different buffer widths to protect a similar function may be necessary depending on the stressors associated with the different wetlands that provide the function. Generally, the characteristics that most influence buffer functions include vegetation, slope of the buffer, the soils, and the

width of the buffer; of these, just vegetation and buffer width can be manipulated or controlled easily (Sheldon et al. 2005).

It is generally accepted that the width of a buffer should be related to the wetland functions that need protecting, the intensity of the adjacent land use, and the condition of the adjacent buffer. While the BAS states unanimously that buffers are effective in protecting wetlands functions and values, there is significant debate about how much buffer is necessary to protect particular functions. In order to protect the ecological functions and values of wetlands, it is necessary for regulators to consider a number of ecological principles, and their implications for development and the use of natural resources. These principals include factors such as temporal and spatial functions of ecological processes and implications of development, direct and cumulative impacts, and the type, intensity, and duration of impacts to natural resources.

As stated in Ecology's *Wetlands in Washington State Volume 2 – Protecting and Managing Wetlands* (Granger et al. 2005),

> *[a]uthors who synthesized the literature on the effectiveness of buffer widths suggest buffers between 25 and 75 feet for wetlands with minimal wildlife habitat functions and adjacent low-intensity land uses; 50 to 150 feet for wetlands with moderate habitat functions or adjacent high-intensity land uses; and 150 to 300 feet for wetlands with high habitat functions. Effective buffer widths for protecting water quality ranged from 25 to 50 feet for 60 percent removal of pollutants, to 150 to 200 feet for 80 percent removal of pollutants.*

Ecology suggests assessing the potential risk to wetlands as a result of development and the amount of risk that is acceptable; this risk assessment can offer a local jurisdiction insight on appropriate protective measures for implementation (Granger et al. 2005). This means that regulations implementing larger, rather than smaller, buffers around all wetlands would be characterized as lower risk for preserving functions and values, whereas a jurisdiction that implements narrower buffers would have a higher risk of impacting functions and values, and the narrower buffers would be unlikely to provide all of the functions necessary to protect wetlands.

In October 2022, Ecology released new guidance offering three different approaches to establishing protective buffers. Buffer Option 1 offers the most flexibility in buffer widths based on the wetland category, level of impacts from adjacent land uses, and the functions of the wetland (i.e., habitat, special characteristics, etc.), and offers opportunities for buffer reductions (Ecology 2022b). Buffer Option 2 established buffer widths based on wetland category and the existing or proposed adjacent land use, with no options for buffer averaging or reductions. Buffer Option 3 includes fixed buffer widths based solely on the wetland category with no opportunity for buffer reductions or averaging. These three options offer local jurisdictions different approaches with different risk tolerances to choose from when developing or updating their critical areas ordinances.

4.4 SCIENCE OF IMPACTS AND MITIGATION

When a change in land use has the potential to adversely affect a wetland, regulatory agencies require the applicant to conduct wetland mitigation, as part of a national "no net loss" policy toward protecting wetlands. "No net loss of wetland functions and values" is a federal and state policy goal that emerged in 1989 and has been a mainstay of land use regulations since then (National Research Council [NRC] 2001). To date, the no net loss policy has been interpreted to mean that wetlands should be conserved wherever possible, and that wetlands converted to other uses must be offset through compensatory mitigation to provide the same functions and values that have been lost (NRC 2001). As described in the 1990 Memorandum of Agreement between the U.S. Environmental Protection Agency (EPA) and the USACE (EPA and USACE 1990), the mitigation sequence is a three-step sequence that helps guide decisions and to determine the type and level of mitigation required under Clean Water Act Section 404/401 Regulations. The Washington SEPA (Chapter 43-21C RCW), administered by Ecology, also requires that a sequence of actions be taken for proposals that will impact wetlands (mitigation sequence). The following are the steps in the mitigation sequence according to the implementing rules of SEPA (Chapter 197-11-768 WAC):

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree or magnitude of the impacts;
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
- Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or
- Monitoring the impact and taking appropriate corrective measures.

If, through mitigation sequencing, it is determined that compensatory mitigation is necessary, an applicant has several alternatives for how to approach compensation. The alternatives, reviewed and described by Ecology et al. (2021), are prioritized as follows:

- Mitigation bank credits: Allows applicants to compensate for wetland loss by purchasing credits from a bank that is commissioned to restore, create, enhance, or preserve wetland areas in providing compensatory mitigation for authorized impacts to wetlands.
- In-lieu fee program credits: Allows applicants to compensate for wetland losses by paying a fee to a third party, such as a government agency or conservation organization, where the fee is used to ensure wetland protection, creation, and enhancement of wetlands.
- Permittee-responsible mitigation (PRM) under a watershed approach.

- PRM that is on site and in-kind.
- PRM that is off site and/or out-of-kind.

PRM includes the following approaches:

- Restoration: Re-establishment of wetland conditions where they formerly, but no longer, exist.
- Creation: Establishment of wetland conditions in a location where wetland conditions previously did not exist or that has not been a wetland within the last 100 to 200 years.
- Enhancement/Exchange: Modifying a specific structural feature of an existing degraded wetland to improve one or more functions based on management objectives.
- Preservation: Protection of an existing and well-functioning wetland from perspective future development threats.
- Mixed Compensatory Mitigation: Involves more than one of the listed types of compensatory mitigation.

Additionally, Ecology adopted an approach for estimating the functions lost when a wetland is altered, and to estimate the gain in functions that may result from restoration, creation, enhancement, and/or preservation (Hruby 2011). This methodology estimates the type and area of compensation to be provided based on functions of the wetland being altered (i.e., debits) and the amount the proposed compensatory mitigation will create (i.e., credits). The guidance establishes that the proposed compensatory mitigation is acceptable when the "credit" score for the mitigation project is higher than the "debit" score for the impacted wetland (Hruby 2011)

As a result of failure of many previous mitigation projects, USACE, Ecology, and some Washington jurisdictions are encouraging the use of mitigation banks and in-lieu fee programs because these can offer greater assurance for mitigation success to both the applicant and the jurisdiction (USACE and EPA 2008; Ecology 2009).

4.5 SUMMARY EVALUATION OF EXISTING ORDINANCE AND RECOMMENDATIONS

To maintain consistency with state and federal wetland delineation methods, the City should adopt the latest federal wetland delineation manual and its supplements for use in delineating wetlands. This is not expected to change the outcome of wetland delineation efforts within the City, as state and federal regulators already require this methodology to determine wetland boundaries.

Additionally, to be consistent with state and federal guidance on the use of mitigation banks and in-lieu fee programs for compensatory mitigation, the City should update the mitigation code section (VMC 20.740.140[C][2]) to reflect this preference. This is

not expected to change the options available to applicants but to clarify the preference for banks and in-lieu fee programs over permittee-responsible options that have not shown a high likelihood of success.

Finally, to be consistent with state wetland protection guidance, the City should update the code to reflect recent guidance published by Ecology in October 2022. . The recent guidance includes the following additional recommendations that should be included in the updated code:

- Reformatted buffer tables, including the incorporation of previous adjustments to the range of habitat scores based on review of the referenced wetland data used to calibrate the Washington wetland rating system
- Updated and expanded minimization measures table for use with the buffer tables
- Functionally disconnected buffers
- Clarified corridor requirements and expanded applicability
- Clarified geographic scope of exemption guidance for small wetlands
- Recommendations from the 2021 interagency wetland mitigation guidance document
- Updated definitions
- New language addressing the role of wetland functions in mitigating climate change (e.g., carbon sequestration)

These updates may have some changes on how wetlands are protected with buffers and the ability to reduce buffers based on the new guidance.

5.0 CRITICAL AQUIFER RECHARGE AREAS

The GMA requires the protection of public groundwater drinking supplies. The supply of public drinking water depends on the availability of groundwater, and without replenishment, the amount of water in aquifers can be diminished or even depleted (Ecology 2021a). CARAs are “areas with a critical recharging effect on aquifers used for potable water where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water” (WAC Chapter 365-190). By protecting CARAs, a community can focus its efforts and resources on protecting the most critical groundwater drinking supplies.

CARAs are regulated by Section 14.26 of the VMC.

5.1 FUNCTIONS AND VALUES

Regulating CARAs protects public drinking water from contamination by hazardous materials and waterborne pathogens, helps ensure the future availability of groundwater, and is less expensive than post-contamination cleanup or treatment of groundwater. Studies have shown that funding initiatives to protect groundwater is more cost-effective than cleaning up groundwater after contamination occurs (Ecology 2021a). Contaminated public drinking water can cause illness, bring about the ingestion of chemicals or other harmful substances, and incur costs as new wells must be developed or contaminated soils and/or groundwater must be remediated (Ecology 2021a).

5.2 IDENTIFICATION AND CLASSIFICATION

The Washington State Department of Health (DOH) regulates and maps drinking water wells. CARAs recommended for protection by WAC 365-190-100 include:

- Wellhead Protection Areas: These areas are defined as "the boundaries of the 10-year time of groundwater travel". Clark County Maps Online maps wellhead locations based on information from DOH and the 1-, 5-, and 10-year time of travel zones around these wellheads. Time-of-travel zone information comes from DOH's Source Water Assessment Program mapping tool.
- Sole Source Aquifers: These areas are designated by the EPA pursuant to the Federal Safe Drinking Water Act. Nearly all of Clark County and the city of Vancouver are located within the Troutdale Sole Source Aquifer (EPA 2006).
- Susceptible Groundwater Management Areas: These areas are designated as moderately or highly vulnerable or susceptible in an adopted groundwater management program developed pursuant to WAC Chapter 173-100. There is no adopted groundwater management program for Vancouver or mapped groundwater management areas in the city.
- Special Protection Areas: These areas are defined by WAC 173-200-090 and designated by Ecology. There are special protection areas currently mapped for Vancouver.
- Moderately or Highly Vulnerable Recharge Areas: These areas are moderately or highly vulnerable to degradation or depletion because of hydrogeologic characteristics as delineated in a hydrogeologic study. These areas are not mapped.

CARAs are identified by their vulnerability. Vulnerability is the combination of hydrogeological susceptibility (the high potential for surface recharge and infiltration in CARAs due to the permeability of the soil around them) and the potential of contamination sources based on an analysis of existing land uses. Clark County designates Municipal Wellhead Protection Areas shown on Clark County MapsOnline that indicate different zones that estimate the time it would take for a pollutant release to reach the wellhead area. Vancouver's CAO designates Special Protection Areas within CARAs as those within 1,900 feet of any municipal wellheads These areas are mapped by Clark County MapsOnline.

5.3 BEST AVAILABLE SCIENCE FOR CARAS

BAS for protecting CARAs recommends addressing both recharge and discharge areas. Aquifer recharge occurs where stormwater, irrigation water, and other water infiltrates into the ground. Using resources and land in various ways can impact aquifer recharge areas; some examples of risks include the contamination of CARAs by hazardous materials or reducing recharging effects by increasing impervious surfaces. Discharge areas are locations where groundwater flows from the surface such as a spring, wetland, or well. Discharge areas are typically protected by other critical areas regulations such as wetland and riparian area requirements.

BAS recommends protecting public groundwater by limiting potential contamination risks within CARAs and promoting land use and development standards that maintain groundwater quality, withdrawals and recharge. In order to support the adequate recharge of its aquifers, a municipality can limit impervious surfaces, encourage low impact development, and use other stormwater best management practices (BMPs) such as raingardens. A commonly used resource for identifying BMPs that will protect groundwater recharge and water quality is the *Stormwater Management Manual for Western Washington* (Ecology 2019).

Some land use activities have been identified as high risk for groundwater contamination, and jurisdictions should consider prohibiting these uses within priority CARAs or requiring strict pollution prevention requirements to further mitigate potential risks. BAS also recommends the identification and monitoring of existing high-risk uses within CARAs. Examples of high-risk uses in CARAs include landfills, wood treatment facilities, chrome platers, tank farms, and facilities that treat, store, or dispose of hazardous waste (Ecology 2021a).

Other uses may present a moderate or low risk of contamination within a CARA, and can be permitted as conditional uses, provided that they meet BMPs and other requirements to ensure protection of the CARA.

Groundwater wells and construction of groundwater wells are potential conduits that could connect the aquifer with potential overlying contaminants. Well construction standards in WAC 246-290 and 246-291 are intended to help reduce the risk of contamination. However, many wells were installed prior to adoption of well construction standards. Jurisdictions often distinguish between Group A and Group B wells as defined by the Washington Department of Health. Group A wells are “water systems providing service to 15 or more service connections used by year-round residents for 180 or more days within a calendar year regardless of the number of people, or regularly serving at least 25 year-round residents for more than 180 days per year.” Group B water systems serve less than 15 service connections and less than 25 people per day or 25 or more people per day during fewer than 180 days per calendar year. (WAC 246-290-020). Both types of wells have the potential to act as conduits and, therefore, the City of Vancouver should consider regulating, not only Group A wells, but also Group B wells.

5.3.1 Science of Impacts and Mitigation

Protection of water supply well heads in a sole-source aquifer is of primary importance to the City of Vancouver. Designation of CARAs is intended to protect the water supply by adopting and enforcing regulations that are supported by science-based mitigation measures. Potential releases of pollutants can infiltrate into the ground and ultimately to groundwater where they can then travel with the groundwater. Where contaminated groundwater is withdrawn from supply wells, these wells may require treatment to remove pollutants or reduce them to non-hazardous levels. The science behind wellhead protection areas considers the path from surface release to wellhead and aims to identify specific sensitive areas that can

be protected with appropriate land-use controls to minimize potential future contamination and costs related to treatment.

The groundwater management areas and program requirements cited in WAC 173-100 should be considered in Vancouver's municipal code revisions. The WAC includes additional detailed elements that provide a more comprehensive technical characterization of groundwater resources and how they are managed. As an example, elements pertaining to groundwater quality, wellhead protection areas, and groundwater quantity evaluations within a coordinated program would likely add value to the City's water resources protection and management.

5.4 SUMMARY EVALUATION OF EXISTING ORDINANCE AND RECOMMENDATIONS

The current Special Wellhead Protection Areas designated by the City (VMC 14.26.115[B][2]). are solely based on the 1,900-foot radius around a production well. While groundwater flow in the immediate vicinity of the well may be primarily circular, and thus support a radius-based zone, the science suggests that larger areas upgradient of a wellhead will be more capable of bringing contaminated groundwater to a well than an equal distance downgradient of the wellhead. This is shown by the Clark County maps that represent different "residence" time zones for groundwater travel to a wellhead. These expanded wellhead protection zones should be based on state of the practice groundwater flow modelling to establish the radius of wellhead "capture zones" that should provide better, more science-based protection zones than a standard 1,900-foot radius. It is recommended that Special Protection area boundaries be modified to reflect physical processes that are involved with groundwater infiltration and potential contamination, similar to what has been done for Clark County.

Designations of CARAs should be reconciled with those listed in WAC 365-190-100.

The City should consider regulating Group B wells in addition to Group A wells. Once draft regulations are developed, the City should look use test case reviews to determine that regulations are effective and tailored to meet the City's objectives and BAS standards.

6.0 GEOLOGICALLY HAZARDOUS AREAS

6.1 FUNCTIONS AND VALUES

The GMA recognizes four main types of geologic hazards: landslide hazard areas, erosion hazard areas, seismic hazard areas, and areas subject to other geologic events such as coal mine hazards and volcanic hazards. All of these geologic events are risks to human health and safety and can damage property. Managing geologically hazardous areas is necessary to ensure the safety and wellbeing of city residents, and to prevent avoidable damage and/or loss of public and private property. In addition, according to the Washington Department of Commerce, "geologically hazardous areas also have an important function in maintaining habitat integrity." Geologic processes, including mass wasting events, such as landslides and debris flows,

contribute needed sediment and wood for building complex instream habitats, estuarine marshes, and beaches important for fisheries, wildlife, and recreation." (Commerce 2021) The section below addresses the BAS for designating and mapping geologically hazardous critical areas in the interests of human health, structural safety, and the contributions of these areas to the natural environment.

6.2 IDENTIFICATION AND CLASSIFICATION

The DNR website "Geologic Hazards and the Environment" provides information and maps of seismic hazards, landslides, and erosion hazards and is an important BAS mapping source. DNR's Geologic Information Portal is a BAS information source for mapping landslide, seismic, and erosion hazards. Erosion hazards are also mapped by corresponding soil type through the USDA-NRCS online web soil survey of Clark County. Geologic hazards are also commonly identified through site-specific geologic or geotechnical engineering studies where agency-produced hazard mapping is insufficient.

The city landscape has various environments susceptible to geologic hazards as noted in Section 2.0 of this report; many of these areas are also subject to erosion hazards (see the Geologically Hazardous critical areas map in Appendix A). Seismic hazard areas are also discussed below, and coal mine and volcanic hazards do not exist within Vancouver.

6.3 BEST AVAILABLE SCIENCE FOR LANDSLIDE HAZARDS

According to DNR, "Washington is one of the most landslide-prone states in the country, with hundreds to thousands of events each year" (DNR 2021a). Landslides are mass wasting events with soil and rock moving downslope and are more frequent after precipitation events when ground becomes saturated and soil loses its strength. Gravity, water, and friction all play a role in landslides. There are many different types of landslides, but slides generally fall into two categories: shallow and deep-seated (DNR 2021a). Literature tends to focus on how to categorize and map these hazards. DNR's Division of Geology and Earth Resources recently completed landslide hazard mapping in the Columbia River Gorge and this data is available on DNR's Geologic Information Portal website and is considered BAS for designation of landslides in the city in the absence of site-specific studies. These mapped features are located east of Vancouver.

Site-specific geotechnical studies with a delineation of landslide hazards and recommended mitigation measures for building in and/or near these areas are considered BAS based on the criteria in WAC 365-195-905. The literature contains mitigation measures and best practices for site development near landslide hazards. According to the USGS, "the simplest means of dealing with landslide hazards is to avoid construction on steep slopes and existing landslides; however, this is not always practical" (Highland and Brobrowsky 2008). The USGS recommends other mitigation, including slope stabilization, by channeling drainage away from the landslide, draining groundwater away from the landslide, minimizing surface irrigation, using retaining walls, retaining/planting vegetation, and seeking professional advice (Highland and Brobrowsky 2008). Burns and Mickelson (2012)

recommends a buffer from the top of shallow landslide-prone slopes equal to twice the vertical height of the slope for high or moderate susceptibility landslide areas or an average of 30 feet.

6.3.1 Science of Impacts and Mitigation

Slope instability is attributable to natural and man-made causes. While large geologically controlled landslides are found further up the Columbia River valley, these types of large landslides are not typically found within the Vancouver city limits. They types of landslides that may occur in the city are smaller slope failures associated with over-steepened slopes along rivers, streams or bluff edges. While these areas of instability may not be extensive, local mitigation activities can be implemented to minimize the potential damages associated with them, similar to erosion hazards.

6.4 SUMMARY EVALUATION OF EXISTING ORDINANCE AND RECOMMENDATIONS

The City should update the landslide hazard areas section of their development code based on the current WAC definitions. VMC 20.740.130(A)(1) currently lists indicators for potential landslide hazard areas in the City and are not entirely inclusive or current with the State-defined indicators. This section of the VMC should be revised to directly define and reference the definition of landslide hazard areas pursuant WAC 365-190-120(6).

Potentially unstable slopes will typically coincide with areas of soil erosion hazards within the city of Vancouver. Grading, construction, or slope erosion mitigation activities in these areas should include consultation of a licensed engineering geologist to help ensure that the potential for instability has been appropriately evaluated and mitigation measures appropriately designed and established. The City should consider including BMPs in its code for landslide hazard areas. If applicants implement these BMPs, then they could avoid filing a critical areas report.

6.5 BEST AVAILABLE SCIENCE FOR EROSION HAZARDS

Erosion is "the wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep" (Washington State Department of Transportation [WSDOT] 2021). The 1972 USDA-NRCS soil survey of Clark County classifies the erosion potential of soil types as slight, moderate, severe, and very severe. According to "Understanding Soil Risks and Hazards, Using Soil to Survey to Identify Areas with Risks and Hazards to Human Life and Property,"

…construction activities can have serious detrimental effects on the soil on construction sites. Topsoil removal, grading, and filling drastically reduce soil quality on these sites, resulting in long-term adverse impacts on plant growth and runoff. Removal of topsoil inhibits biological activity and reduces the supply of organic matter and plant nutrients ... Erosion from construction sites has offsite environmental and economic impacts. (USDA-NRCS 2004). Further, the VMC Chapter 14.24 meets BAS regarding avoidance and mitigation of erosion activities.

The 1972 soil survey is considered BAS for erosion hazards generally in the city and the county. The geography of erosion hazard areas in Vancouver is noted in Section 2.0 of this report. Soils rated by USDA-NRCS as "severe" or "very severe" are those with an erodibility index of 0.75 or greater and, in most jurisdictions across the state, are classified as regulated critical areas. In addition to the 1972 soil survey, Clark County MapsOnline also includes a Severe Erosion Hazards Area map that should also be considered BAS. BMPs for development or alteration in erosion hazard areas tend to focus not on prohibiting development, but on requiring erosion controls during construction, eliminating clearing activities during the wet season, and directing the drainage around these areas so as not to exacerbate pre-existing erosion potential. Ecology's *Stormwater Management Manual for Western Washington* (Ecology 2019) is considered a BAS document for erosion control methods. In "Understanding Soil Risks and Hazards," which is considered to be BAS, USDA-NRCS recommends the following erosion control techniques during construction:

- Divide the project into smaller phases, clearing smaller areas of vegetation.
- Schedule excavation during low-rainfall periods when possible.
- Fit development to the terrain.
- Excavate immediately before construction instead of exposing the soil for months or years.
- Cover disturbed soils with vegetation or mulch as soon as possible and thus reduce hazard of erosion.
- Divert water from disturbed areas.
- Control concentrated flow and runoff, thus reducing the volume and velocity of water from work sites and preventing the formation of rills and gullies.
- Minimize the length and gradient of slopes (e.g., use bench terraces).
- Prevent the movement of sediment to off-site areas.
- Inspect and maintain all structural control measures.
- Install windbreaks to control wind erosion.
- Avoid soil compaction by restricting the use of trucks and heavy equipment to limited areas.
- Break up or till compacted soils prior to vegetating or placing sod.
- Avoid dumping excess concrete or washing trucks on site.
- Revegetate exposed surfaces to provide immediate permanent or intermittent cover.

6.5.1 Science of Impacts and Mitigation

Erosion hazard impacts include unstable slopes that may threaten structures, as well as potentially excessive sediment contributions to surface waters of the City.

Mitigation of these impacts can be addressed with BMPs outlined above, as well as preventing activities that over-steepen slopes that can contribute to slope instability and threaten infrastructure installations.

6.6 SUMMARY EVALUATION OF EXISTING ORDINANCE AND RECOMMENDATIONS

For construction or development work that is performed in erosion hazard areas, it is recommended that erosion mitigation work to be performed by a certified erosion and sediment control lead in accordance with Ecology requirements.

Additional structure for the regulations could be added to link to WAC 220-660-120 and 220-660-130 to expand BAS for erosion protection.

The City should consider including BMPs in its code for erosion hazard areas. If applicants implement these BMPs, then they could avoid filing a critical areas report.

6.7 BEST AVAILABLE SCIENCE FOR SEISMIC HAZARDS

Earthquakes can be incredibly expensive and destructive natural hazard events that can level buildings and damage public infrastructure. According to DNR, "Washington has the second highest risk of large and damaging earthquakes in the nation as a result of its geologic setting" (DNR 2021b). WAC 365-190-120 defines seismic hazards as geologically hazardous areas and requires that jurisdictions adopt CAOs regulating development in them. This same WAC section defines seismic hazard areas as "areas subject to a severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement or subsidence, soil liquefaction, surface faulting or tsunamis."

According to USGS, "ground shaking or ground motion is the movement of the earth's surface due to earthquakes and is produced by seismic waves that are generated by sudden slip on a fault and travel through the earth and along its surface" (USGS 2021). Ground shaking is the most frequently observed effect of an earthquake. The degree of ground shaking will depend on the geologic conditions and soil types for a given area. The NEHRP has delineated "site classes" to characterize the degree of shaking and or amplification that can occur in response to an earthquake. Clark County MapsOnline includes a map of NEHRP site class for Vancouver that should be considered BAS for seismic design to mitigate earthquake effects. Generally the City is dominated by Site Classes C and D, with areas around drainages and Vancouver Lake including areas with more sever site classes of D and E.

The USGS defines liquefaction as "the phenomenon that occurs when loose, saturated sediments at or near the ground surface lose their strength in response to strong ground shaking from an earthquake" (USGS 2021). Clark County MapsOnline includes a map of Liquefaction Susceptibility that should be considered BAS for Vancouver. Throughout most of Vancouver, the liquefaction susceptibility is low to very low; however, a susceptibility of moderate to high has been mapped around the Vancouver Lake area, as well as low lying areas adjacent to the Columbia River.

Further some areas with higher groundwater levels associated with surface streams also indicate a liquefaction susceptibility of low to moderate.

DNR's Washington Geologic Survey and its Geologic Information Portal have online map information for active faults, seismic scenarios, and liquefaction susceptibility that is considered to be BAS for seismic hazards. Clark County MapsOnline shows faults running southeast to northwest on the east side of the city that appear to be associated with the Lacamas Fault zone aligned slightly further east through Lacamas Lake. The design level earthquake in the city is a Cascadia Subduction Zone earthquake, which would have strong shaking intensity.

The following documents represent BAS for earthquake design:

- NEHRP Recommended Seismic Provisions for New Buildings and Other Structures (FEMA 2020)
- Minimum Design Loads for Buildings and Other Structures, American Society of Civil Engineers (ASCE) 7 (2016 ASCE-7 Standard) (ASCE 2016)
- 2018 International Building Code (International Code Council 2018)

6.7.1 Science of Impacts and Mitigation

Mitigation of ground shaking due to seismic events requires recognition of the appropriate site class for a given site, as well as appropriate construction standards and seismic design considerations. Use of appropriate construction methods that consider the earthquake hazards and site response will minimize potential impacts from earthquake events.

6.8 SUMMARY EVALUATION OF EXISTING ORDINANCE AND RECOMMENDATIONS

Soft-story structures that possess little structural shear resistance on lower levels of a building are specifically recognized as susceptible to severe damage from a seismic event. Many municipalities have implemented soft-story seismic retrofit ordinances to address these risks and help mitigate earthquake-related structural damage.

Seismic shaking hazards (VMC 20.740.130[A][2][b]) for the city should be amended to add Site Class E as areas around Vancouver Lake are appropriately categorized and thus should also be amended for liquefaction areas of moderate to high and above (VMC 20.740.130[A][2][a][1]).

7.0 FREQUENTLY FLOODED AREAS

7.1 FUNCTIONS AND VALUES

Good management of frequently flooded areas can protect downstream areas and reduce the risk of flooding to public safety and property. In addition, floodplains also provide valuable instream and off-channel habitat to a variety of species and are important for water quality protection. Floodplains enhance biological productivity and help maintain biodiversity and the ecological value of ecosystems (FEMA 2007).

7.2 IDENTIFICATION AND CLASSIFICATION

Frequently flooded areas are defined as areas that will be inundated by a flood event having a 1 percent chance of being equaled or exceeded in any given year. The 1 percent annual chance flood is also referred to as the base flood or 100-year flood. In Washington, jurisdictions are required to regulate the 100-year floodplain as a critical area, at a minimum, but may also optionally regulate other areas, including channel migration zones, areas inundated by the flood of record, areas subject to groundwater flooding, or streams where the path of flood waters can be unpredictable (Ecology 2021b).

As part of its continuing effort to improve floodplain management practices, FEMA encourages communities to steer development away from the floodplains documented in flood insurance rate map (FIRM) panels. FIRM panels are official maps of communities in which FEMA has delineated special flood hazard areas (SFHAs) and the risk premium zones applicable to the community. As the impacts of climate change become more prevalent, floods are expected to become more frequent. Revised FIRMs and the Flood Insurance Study for Clark County became effective September 5, 2012 and revised maps for properties along the Washougal River, Little Washougal River, and behind the Port of Camas-Washougal's levee on the Columbia River became effective January 19, 2018 (Clark County Public Works 2021). Flood hazard areas within Vancouver include those referenced in Section 2.0 of this report.

7.3 BEST AVAILABLE SCIENCE FOR FREQUENTLY FLOODED AREAS

Development within floodplains has always been popular because humans want to live near water and use it for recreation and commercial and industrial purposes. However, development within a floodplain results in a problematic cycle, as development alters the natural flow and drainage patterns of the floodplain, and the development is in turn damaged by flooding in the altered floodplain (FEMA 2007).

Developing or updating frequently flooded areas ordinances can be an opportunity to promote flood safety and protect ecological habitat through locally appropriate standards (Ecology et al. 2021). The fundamental floodplain management program that most ordinances are built on is FEMA's National Flood Insurance Program (NFIP). FEMA manages NFIP in order to provide disaster assistance for properties subject to flood damage. The minimum requirements of the NFIP protect the health, safety, and welfare of the community by protecting buildings from the 100-year flood, which FEMA refers to as SFHAs.

FEMA encourages communities to use the FEMA elevation certificate as an official record showing that new buildings and substantial improvements in all identified SFHAs have been properly elevated. This elevation information is also needed to show compliance with the floodplain management ordinance and can be used by the property owner to obtain flood insurance.

Limiting development within floodplains reduces the need for "structural solutions," which are both expensive and disruptive to the local environment (Association of State Floodplain Managers, Inc. [ASFPM] 1993). BAS recommends limiting all

development within floodplains (including grading and fill) and prohibiting new residential development. Repairs, reconstruction, or improvements to an existing structure within the floodplain may be allowed, but consideration should be given to the design and structural integrity of these improvements.

The BAS for development within floodplains is generally agreed upon as being the applicable flood resistant provisions of the 2021, 2018, 2015, 2012, and 2009 International Codes (I-Codes); the referenced standard ASCE 24, Flood Resistant Design and Construction; and NFIP requirements. FEMA has compiled the applicable I-Codes provisions into a single document, "Flood Resistant Provisions of the 2021 International Codes" (FEMA 2021). General recommendations for development within a floodplain include:

- For buildings located within more than one SFHA, the provisions associated with the most restrictive SFHA should apply.
- It should be demonstrated through hydrologic and hydraulic analyses performed by an accredited professional that the grading and/or fill will not result in any increase in flood levels.
- Grading and fill should not be approved unless fill is placed, compacted, and sloped to minimize shifting, slumping, and erosion during the rise and fall of flood water.
- Exterior walls extending below the base flood elevation should be constructed with flood-damage-resistant materials.
- The finished ground level of an under-floor space (e.g., a crawl space) should be equal to or higher than the outside finished ground level on one side or more.
- Anchoring to prevent flotation.
- Using flood-resistant construction materials and methods.
- Preventing infiltration of flood waters in utility systems.
- Elevating residential and nonresidential construction above the base flood elevation.

7.3.1 Science of Impacts and Mitigation

The most common types of direct human disturbance to floodplains are filling and clearing—often associated with residential development, agriculture, forest practices, or infrastructure improvements—and channelization. The combination of these activities often results in a disconnection of the channel from its floodplains. Floodplains can also be affected indirectly, through alterations of flow regime resulting from flow regulation (e.g., dams and reservoirs) and water withdrawals (e.g., irrigation). Climate change will also affect the flow regime, potentially exacerbating other types of human disturbance within floodplains (ESA 2014).

The BAS for development within floodplains encourages addressing floodplain development to promote flood safety and ecological habitat protection by developing

standards beyond the minimum NFIP requirements. The NFIP encourages such activities through the community rating system (CRS), which provides reduced flood insurance premiums in participating communities (FEMA 2010b, ASFPM 2016).

ASFPM's No Adverse Impact (NAI) floodplain management describes how a community's mitigation program can be augmented and improved (ASFPM 2016). It also identifies how communities can receive CRS credits for implementing NAI tools, which include:

- Flood Acquisition and Relocation Mitigation Projects
- Waterway Restoration through Dam Removal
- Nonstructural Erosion Control and Shoreline Stabilization
- Sustainable Stormwater Management, and
- Mitigating Critical Facilities
- Similarly, Ecology's enhanced flood safety steps include: Habitat protection and endangered species protection.
- Higher regulatory standards beyond the FEMA minimums: For example, some jurisdictions use the "flood of record" elevations to regulate the minimum elevation of structures, where the record flood is higher than the 100-year flood elevation used by FEMA.
- Climate change and unique circumstances: A jurisdiction may have unique risks due to the potential for tsunamis, high tides with strong winds, sea level rise or extreme weather events that it may want to address.

Washington State law (RCW 86.16) contains some additional requirements that are more restrictive than the NFIP, and FEMA requires that communities meet state standards as well. WAC 173-158 outlines administrative rules for implementing RCW 86.16. In addition to adopting the NFIP standards in 44 Code of Federal Regulations parts 59 and 60, WAC 173-158 sets additional standards regarding construction in the floodway and avoiding negative impacts on wetlands.

A Regional Guidance was prepared for communities in the Puget Sound Basin to assist them in meeting the ESA requirements as clarified in the Biological Opinion issued by National Marine Fisheries Service (FEMA 2010b). The Regional Guidance can be used as a reference by communities who wish to prepare studies considering the foreseeable future land use changes in establishing future base flood elevations.

7.3.1.1 Climate Change

WAC 365-190-110 requires classifications of frequently flooded areas to include, at a minimum, the FEMA 100-year floodplain designation. It also states that communities should consider the future flow floodplain at build out, the potential effects of climate change, and the effects of increasing impervious surfaces.

The current FEMA guidelines for assessing flood frequency are based on the assumptions that flood distribution is not significantly affected by climatic trends or longer-term cycles and that historical flood behavior is representative of future events. As such, flood studies and floodplain mapping that has been developed based on FEMA guidance may not reflect future watershed and floodplain conditions as affected by climate change (FEMA 2010b, ESA 2014).

FEMA published the impact of climate change and population growth on the NFIP through the year 2100 (FEMA 2013b). Changes to precipitation, land use and sea level rise were considered. The study shows that by the year 2100, the 100-year floodplain depth and lateral size are projected to increase, on average, by 45 percent above current levels across the nation.

In Washington, climate change is expected to exacerbate flooding due to increasing temperature, decreasing snowpack, higher intensity rain events and sea level rise. Further from the coast, flooding is more sensitive to changes in river flow than sea level rise. The highest river flows and heavy rainfall events are generally expected to increase in rain-dominant and in mixed rain and snow watersheds (Mauger and Kennard 2017).

7.3.1.2 Future Land Use

Nationally, about 70 percent of the future increases in the 100-year floodplain areas and flood depth can be attributed to climate change while the remaining 30 percent represents the influence of normal population growth (i.e., land use) (FEMA 2013b). On the contrary, future hydrologic and floodplain conditions in the Puget Sound are more influenced by changes in land cover and land use than by climate change (FEMA 2010b). As such, there is little concrete guidance for how to interpret BAS in determining and mapping future floodplain conditions locally. General agreement is that it is most important to capture future conditions for smaller streams that are in or near areas that are likely to urbanize, such as in or near a city or its urban growth area (UGA).

FEMA recommends that communities evaluate changes to the base flood from expected future watershed development based on the development patterns laid out in their local long range land use plans. At the request of a community and with the approval of FEMA, FIRMs, and Flood Insurance Study reports may include, for informational purposes, flood hazard areas based on projected- or future-conditions hydrologic and hydraulic analyses (FEMA 2019).

7.3.1.3 Channel Migration Zones (CMZ)

Channel migration is a natural geologic process, which describes how a stream or river channel moves over time. Streams and rivers may change course or migrate through a variety of factors, such as erosion and deposition of sediments, which alter their geology, geometry, and functionality. As streams and rivers change course, their potential hazards also change. While these processes normally occur over long periods of time, quick avulsions in a single storm, flooding, or human influences can

rapidly affect the speed at which a channel changes course or migrates over time (Rapp and Abbe 2003).

In unconfined valleys of Western Washington, lateral channel migration is the primary physical process that creates biodiversity on floodplains. This channel migration also presents a hazard to adjacent communities and infrastructure. These costs and benefits of channel migration make it a central consideration in floodplain management and restoration. The Washington State Shoreline Master Program (SMP) Guidelines require counties to identify the general location of CMZs as part of the shoreline planning process. Managing development within the CMZ allows for the occurrence of fluvial processes, maintains channel complexity and habitat diversity, and reduces potential damage to infrastructure within hazardous areas (Ecology 2014). Ecology has developed tools to guide identification of CMZs from basic planning level assessments to detailed project level assessments (Rapp and Abbe 2003, Legg and Olson 2014, Legg et al. 2014, Olson et al. 2014, Legg and Olson 2015).

Potential CMZs have been identified and mapped throughout Clark County (Clark County 2010). Stream and river reaches are identified as having a Moderate-Low, Moderate, Moderate-High, and High potential for channel migration based on review of existing data. In some cases, field checks were performed on streams that WDFW thought had migrated. Existing relevant data used in this analysis include channel characteristics, such as confinement and gradient; geographic information system soils and geology data; aerial photographs; maps; light detection and ranging (LIDAR); and/or spatial and temporal data (Clark County 2010). Streams that have High CMZ ranking within Vancouver or its UGA are predominantly Salmon Creek and some parts of Burnt Bridge Creek.

7.4 SUMMARY EVALUATION OF EXISTING ORDINANCE AND RECOMMENDATIONS

Vancouver's frequently flooded areas ordinance (VMC 20.740.120) is generally consistent with state (RCW 86.16) and federal NFIP requirements for flood control and protection. VMC 20.740.120 identifies regulated flood hazard areas, provides procedures for development permits, review, and enforcement, and floodproofing requirements.

Vancouver could also consider the future flow floodplain at buildout, the potential effects of climate change, and the effects of increasing impervious surfaces when designating and frequently flooded areas (WAC 365-190-110).

Recommendation: Require, or at a minimum encourage, consideration of future conditions during investigation of base flood elevation. Updated standards could reference available guidance for future conditions (FEMA 2010b, FEMA 2013, FEMA 2019), Washington RiskMAP program (Ecology 2022a) or other more useful and applicable methods that may become available in the future.

Clark County's approach to classification and definition of CMZs is consistent with approaches described in literature on CMZ mapping. Map 27 in the Clark County (2010) Shoreline Inventory and Characterization Report, which shows the potential CMZs, is incorporated by reference in VMC 20.740.120 and development in the CMZ is regulated similar to a SFHA that is not the floodway. The determination of what land use is allowed within different parts of the CMZ is based upon a policy decision rather than a science-based determination, and therefore not restricted by BAS criteria. Jurisdictions, such as King County and Pierce County, regulate severe risk CMZs as floodways.

Recommendation: Consider regulating severe risk CMZs as floodways, where new development is generally not allowed.

8.0 FISH AND WILDLIFE HABITAT CONSERVATION AREAS

Fish and wildlife habitat conservation areas are the various highly productive and diverse ecosystems that provide resources and functions necessary for fish and wildlife and the surrounding human populations. These critical area functions include, but are not limited to, the protection of sensitive species, water quality, and bank stability, and the provision of corridors for movement between habitat and of habitat for foraging, nesting, overwintering, rearing, escape, and cover. These areas also benefit local communities by providing water quality improvements and protection from flooding, and financial opportunities related to recreation, tourism, and education, among others. BAS indicates that the identification and characterization of these areas, and providing protective measures such as buffers for them, is critical to maintaining the functions and values they provide. This report relies primarily on WDFW management recommendations, which are a consolidation of scientific literature and information on the importance of various habitats.

8.1 IDENTIFICATION AND CLASSIFICATION

The following fish and wildlife habitat conservation areas are applicable to the city and must be considered for classification and designation per WAC 365-190-130:

a) Areas where endangered, threatened, and sensitive species have a primary association, including federal and state species (WDFW priority habitats and species, including riparian habitat areas) and state priority habitat areas associated with state priority species.

b) Habitats and species of local importance, as determined locally; including heritage tree sites within the city.

c) Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat.

d) Waters of the state:
   - Type S waters are all waters, within their bankfull width, as inventoried as "shorelines of the state" under RCW Chapter 90.58 and the rules promulgated pursuant to Chapter 90.58, including periodically inundated areas of their associated wetlands. Type S shorelines are regulated under the city's shoreline

master program (1974) that the City is currently updating. The Columbia River and Washougal River within the city are Type S waters.

- Type F waters are segments of natural waters that are not classified as Type S waters and have a high fish, wildlife, or human use. These are segments of natural waters and the periodically inundated areas of their associated wetlands. Gibbons Creek is an example of a Type F water within the city.
- Type Np waters are all segments of natural waters within defined channels that are perennial non-fish habitat streams. Perennial streams are waters that do not go dry at any time of a year of normal rainfall. However, for the purpose of water typing, Type Np waters include the intermittently dry portions of the perennial channel below the uppermost point of perennial flow.
- Type Ns waters are all segments of natural waters within defined channels that are not Type S, F, or Np waters. These are seasonal, non-fish habitat streams in which surface flow is not present for at least some portion of a year of normal rainfall and are not located downstream from any stream reach that is a Type Np water. Type Ns waters must be physically connected by an aboveground channel system to a Type S, F, or Np water.

e) Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity.

f) State natural area preserves, natural resource conservation areas, and state wildlife areas.

The fish and wildlife habitat conservation areas described above have been identified by the WAC for their intrinsic value and because they contribute to the state's biodiversity. This review addressed the BAS regarding the functions and values of these habitat conservation areas and the measures recommended to protect them. Each of the fish and wildlife habitat conservation areas noted above that are present within the city are important to various ecosystems. For example, riparian areas cover a relatively small area but they support a higher diversity and abundance of fish and wildlife than any other habitat (Rentz et al. 2020). Riparian areas also support a significant number of threatened, endangered, sensitive, and priority species, and directly influence instream habitat; therefore, protecting riparian areas is directly linked to several fish and wildlife habitat conservation areas listed above (i.e., waters of the state). Protecting riparian habitat areas meets several of the goals and policy recommendations of WAC 365-190.130 Fish and Wildlife Habitat Conservation Areas. The BAS regarding the protection of riparian habitats is discussed below.

Additionally, areas associated with federally listed threatened, endangered, sensitive, and candidate species are determined by the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA) Fisheries. Areas associated with state-listed threatened, endangered and sensitive species are determined by WDFW. Determinations of state and federally listed species are made (by mandate of the WAC and ESA, respectively) solely on the basis of the best scientific and commercial data available. Thus, the protection of these species, by nature of their designation, is rooted in BAS. Furthermore, both the USFWS and NOAA Fisheries have developed rigorous species assessments in order to collect data

about a given species. The data includes, but is not limited to, information about the life history, biology, population structure and abundance, and threats and vulnerability to the species. In addition to aiding in the determination of species listings, the information collected in these assessments is used to support and advise on policy and management recommendations. As their designations and protection are rooted in BAS, these species are not discussed in detail in this report.

8.2 BEST AVAILABLE SCIENCE FOR FISH AND WILDLIFE HABITAT CONSERVATION AREAS

8.2.1 Riparian Areas

Riparian areas are situated adjacent to aquatic habitat and are transitional areas that contain elements of both aquatic and upland ecosystems, which mutually influence each other.

Functions provided by riparian areas include water quality, streambank stabilization, maintaining moist and mild microclimates and cool stream temperatures, nutrient cycling/inputs, and flood control. Riparian areas also offer multilayered habitat structure and complexity that provide habitat for breeding, rearing, forage, cover, escape, and migration, and habitat connectivity between aquatic and terrestrial habitats. Functioning riparian habitat is essential for a number of threatened, endangered, sensitive, and priority species, including salmon and steelhead, reptiles and amphibians, cavity nesting birds, and migratory birds, among others (Rentz et al. 2020). While protecting these areas can be controversial and restrict the development potential of private and public property, on the other hand, limiting development in riparian areas can benefit humans by protecting water quality in streams and rivers used as drinking water and can promote healthy fish populations that are a source of food for people.

WDFW's *Management Recommendations* indicates that the protection of riparian habitat may yield the greatest gains for fish and wildlife (and by extension humans) while involving the least amount of area, when compared to other habitats, because riparian habitat:

- covers a relatively small area yet supports a higher diversity and abundance of fish and wildlife than any other habitat;
- provides important fish and wildlife breeding habitat, seasonal ranges, and movement corridors;
- is highly vulnerable to alteration; and
- has important social values, including water purification, flood control, recreation, and aesthetics.

Approximately 85 percent of Washington's wildlife species have been known to use riparian habitat associated with rivers and streams (Thomas 1979). Many of these species are dependent on riparian areas for at least one stage in their life cycles, while others may use riparian areas only occasionally or to move between habitats

(O'Connell et al. 1993). Reptiles, amphibians, cavity nesting ducks and other waterfowl, beaver, otter, and great blue heron are examples of species that rely almost exclusively on riparian area habitats and their proximity to water, and mild microclimates for breeding, nesting, rearing, forage, and cover. Other species, such as migratory birds, rely on these highly productive habitats as stopover locations during seasonal migration, or as breeding and rearing habitat before or after migration, and thus may be present only during specific seasons (Andelman and Stock 1994).

Riparian areas are linked by definition to instream fish habitat and support its functions for fish. Seventy-seven species of fish inhabit freshwater in Washington for all or a portion of their lives (Wydoski and Whitney 1979), including ESA-listed salmon and various other native aquatic species. Riparian areas provide a number of physical, chemical, and biological processes for instream habitats, including maintaining appropriate water temperatures; stabilizing stream channels and banks; providing inputs of large woody debris (LWD); regulating stream velocity; storing, conserving, and purifying water; providing nutrient inputs and cycling; and providing and maintaining migratory habitat (Cummins 1974, Harmon et al. 1986, Beschta 1978, Sullivan et al. 1987, Meehan and Bjornn 1991, Swanston 1991). LWD inputs from riparian areas provide complex stream structure, including pools and riffles, and cover for hiding and escape. Side channels, backwater wetlands, and floodplains also provide invaluable rearing, hiding, cover, and escape habitat for juvenile salmon.

Riparian areas are not just valuable as fish and wildlife habitat, they provide important water quality, flood control, recreation, and aesthetics functions for people as well. Functioning riparian areas can filter 40 to 90 percent of organic debris and environmental pollutants from surface water before the pollutants enter stream channels (Lowrance et al. 1984, Rhodes et al. 1985). The natural water quality functions provided by riparian areas can reduce the contamination, and ease our reliance on water quality treatment facilities. When flood waters move through riparian areas, vegetation acts to slow stream water velocity, and the slowed flood waters deposit sediment loads, and infiltrate soils. Because functioning riparian areas retain flood waters and reduce their velocity and erosive forces, these areas protect downstream communities from flooding and stream bank erosion, and minimize flood damage to structures and other assets such as cropland (Griggs 1984, Roseboom and Russell 1985, Booth 1991). In addition to their preventive functions for people (water quality and flood prevention), riparian areas also provide financial benefits by supporting recreational opportunities for hunting and fishing (Theurer et al. 1985). Other recreational activities supported by functioning riparian habitat include hiking, bird watching, camping, and tourism (Knutson and Naef 1997).

8.2.2 Priority Habitats and Species

8.2.2.1 Biodiversity Areas and Corridors

Biodiversity areas and corridors are areas of habitat that are relatively important to various species of native fish and wildlife. WDFW's mapping tool for priority habitats and species (PHS) identifies a biodiversity area within the City associated with Burnt Bridge Creek. Biodiversity areas that have been identified as biologically

diverse through a scientifically based assessment conducted over a landscape scale (e.g., ecoregion, countywide or citywide, watershed, etc.). These areas could also be within a city or a UGA and contain habitat that is valuable to fish or wildlife and is mostly comprised of native vegetation. Relative to other vegetated areas in the same city or UGA, the mapped area is vertically diverse (e.g., multiple canopy layers, snags, or downed wood), horizontally diverse (e.g., contains a mosaic of native habitats), or supports a diverse community of species as identified by a qualified professional who has a degree in biology or closely related field and professional experience related to the habitats or species occurring in the biodiversity area. These areas may have more limited wildlife functions than other priority habitat areas due to the general nature and constraints of these sites in that they are often isolated or surrounded by highly urbanized lands (WDFW 2008).

Corridors are areas of relatively undisturbed and unbroken tracts of vegetation that connect fish and wildlife habitat conservation areas, priority habitats, areas identified as biologically diverse, or valuable habitats within a city or UGA (WDFW 2008).

8.2.2.2 Oregon White Oak Woodlands

Oregon white oak (*Quercus garryana*) is Washington's only native oak. WDFW's PHS mapping tool identifies several areas of Oregon white oak in the city. Although limited and declining, oaks and their associated floras comprise distinct woodland ecosystems. The various plant communities and stand age mixtures within oak forests provide valuable habitat that contributes to wildlife diversity statewide. In conjunction with other forest types, oak woodlands provide a mix of feeding, resting, and breeding habitat for many wildlife species. More than 200 vertebrate and a profusion of invertebrate species use Washington's oak woodlands. Some species occur in especially high densities, whereas others are not typically found in Washington. Oaks provide habitat for species that are state listed as Sensitive, Threatened, Endangered, or candidates for these listings (Larsen and Morgan 1998).

"Priority Oregon white oak woodlands are stands of pure oak or oak/conifer associations where canopy coverage of the oak component of the stand is $25%; or where total canopy coverage of the stand is <25 percent, but oak accounts for at least 50 percent of the canopy coverage present. The latter is often referred to as an oak savanna. In non-urbanized areas west of the Cascades, priority oak habitat is stands 0.4 hectare (1 acre) in size. In urban or urbanizing areas, single oaks, or stands of oaks <0.4 hectare (1 acre), may also be considered priority habitat when found to be particularly valuable to fish and wildlife (i.e., they contain many cavities, have a large diameter at breast height, are used by priority species, or have a large canopy)" (Larsen and Morgan 1998).

Oregon white oak woodlands are used by an abundance of mammals, birds, reptiles, and amphibians. Many invertebrates, including various moths, butterflies, gall wasps, and spiders, are found exclusively in association with this oak species. Oak/conifer associations provide contiguous aerial pathways for animals such as the State Threatened western gray squirrel, and they provide important roosting, nesting, and

feeding habitat for wild turkeys and other birds and mammals. Dead oaks and dead portions of live oaks harbor insect populations and provide nesting cavities. Acorns, oak leaves, fungi, and insects provide food. Some birds, such as the Nashville warbler, exhibit unusually high breeding densities in oak. Oaks in Washington may play a critical role in the conservation of neotropical migrant birds that migrate through, or nest in, Oregon white oak woodlands (Larsen and Morgan 1998).

The decline of Oregon white oak woodlands has been accelerated by human activities –primarily oak removal. Conifer encroachment is a significant threat to remaining oaks, particularly on the west side of the Cascades and in portions of the Columbia Gorge, and is aggravated by urban development, fire suppression, timber conversion, and cattle grazing. Grazing is a primary use of oak woodlands and reduces species richness of ground cover, increases soil moisture, compacts soils, and disturbs sod, all of which may promote conifer growth and encroachment west of the Cascades. East of the Cascades, these pressures may also affect oak woodlands. In addition, the selective harvest of east-side conifers is detrimental to those wildlife species that depend on mixed oak/conifer associations. Fire suppression has also contributed to the decline of Oregon white oak woodlands. Natural fires and those intentionally set by Native Americans historically played a paramount role in oak forest ecology, especially natural oak regeneration. Frequent low-intensity fires curbed conifer encroachment, controlled stand density, and initiated oak sprouting. Today, managed burning can help restore degraded oak habitat (Larsen and Morgan 1998).

8.3 SCIENCE OF IMPACTS AND MITIGATION

8.3.1 Riparian Ecosystems

The scientific literature supports the importance of riparian ecosystems and the importance of maintaining riparian vegetation to support stream channel stability and the longitudinal, lateral, and vertical connectivity to quality fish and wildlife habitat. Management of riparian areas should regulate all land use activities that affect riparian ecosystems to ensure that the existing functions and values are protected from development. Land use impacts include impacts from forestry, road infrastructure, agriculture, urbanization, and stream channel modification. These impacts can affect important stream and riparian ecosystem components that create diverse habitats including large wood recruitment, nutrient inputs, diverse stream channel morphology (i.e., riffles, pools, runs, etc.), stream temperature regulation, groundwater recharge, pollutant removal, filtering of sediment and nutrients, etc.

Large Wood

Impacts from land uses, including forestry, agriculture, and urbanization affecting riparian forests, remove riparian forests and can lead to a reduction in the availability of large wood to fish bearing streams. Riparian forest management is key to conservation of fish habitats in forested areas in Washington.

Stream Temperature

Studies have clearly shown that a reduction of stream shade from vegetation removal results in warmer summer stream temperatures (Sridhar et al. 2004; Allen et al. 2007).

The type and condition of riparian vegetation plays an important role in the amount of solar radiation reaching a stream's surface. Management of vegetation in riparian areas can affect stream temperatures, which impacts fish, amphibians, and invertebrate populations and survival. Fish can be sensitive to altered thermal regimes, especially salmonids, which can be sensitive to high water temperatures and have a narrow thermal tolerance (Farrell et al. 2008; Eliason et al. 2011; Ayllon et al. 2013).

Pollutant Removal

Riparian buffers help reduce the flow of pollutants to aquatic ecosystems with removal functions depending on the complex interactions between vegetation, soil, and hydrology. Because of the variability between vegetation, soil, and hydrology, as well as spatial and temporal variability, pollutant removal functions can vary greatly between and within riparian sites. This variability can make management decisions regarding riparian buffer width difficult to determine, as there has been no widely accepted recommendations on buffer width. Desired pollutant removal outcomes should be based on:

1. Factual information regarding the anticipated impacts or outcomes of policy options (i.e., science);
2. An understanding of stakeholders' priorities and preferences (i.e., values); and
3. A process for using science and values to explore tradeoffs amongst policy options (Wilhere and Quinn 2018).

Filtering of Sediment and Nutrients

Riparian areas provide filtration for sediment and crucial sources and sinks for organic matter and nutrients for streams. Riparian areas are important areas that facilitate the movements of nutrients between upland areas and streams. Impacts to riparian areas that result in a physical disconnection or degradation of the integrity of the riparian area function will negatively affect the ability of the riparian area to provide filtering or removal of sediment and nutrients.

8.3.1.1 Management Recommendations

Generally, recommendations include limiting or restricting activities that may affect riparian areas negatively; examples include tree and vegetation removal, road building, agriculture and grazing, and clearing and earth moving for development (Knutson and Naef 1997). There is limited specific information regarding the level of development or activity a riparian area can withstand, and while they provide similar functions, all riparian areas are different, and support different communities of species; therefore, WDFW recommends a conservative approach to riparian habitat protection. To protect the functions and values of riparian areas, WDFW recommends designating riparian areas that are wide enough to allow proper functioning of riparian and aquatic ecosystems, including protection of instream habitat through temperature and sediment control, preservation of fish and wildlife habitat, and connectivity between aquatic, riparian, and upland habitats. The goal of this recommendation is to protect the full range of riparian functions, not just instream habitat by buffering adjacent, more upland uses. WDFW-published literature showed

that widths recommended for riparian management zones (RMZs) that protect the full range of ecological functions necessary to support fish and wildlife is estimated by one 200-year site potential tree height ($SPTH_{200}$). The RMZ in areas of the state that currently or historically supported forests (i.e., Vancouver) is defined as the distance of one SPTH, where the $SPTH_{200}$ is the average maximum height attained by dominant trees at 200 years of age, measured from the edge of the active channel or CMZ, whichever is wider. The RMZ describes the area that has the potential to provide full riparian function, regardless of its current conditions. Measuring the RMZ width at the outer edge of the CMZ ensures that when the stream migrates, it will still be adjacent to the zone of influence that can provide riparian function (Rentz et al. 2020).

The RMZ is a scientifically based description of the area adjacent to rivers and streams that has the potential to provide full functions based on the $SPTH_{200}$ conceptual framework (Rentz et al. 2020). WDFW notes that most riparian areas in forested ecoregions the $SPTH_{200}$ is 100 feet or greater, and so the RMZ is delineated using one $SPTH_{200}$. However, if the $SPTH_{200}$ is less than 100 feet, WDFW recommends that the RMZ be delineated based on the pollution removal function, which is considered a minimum of 100 feet because this distance will achieve 95 percent or more removal efficacy of phosphorous, sediment, and most pesticides (Rentz et al. 2020).

Current site conditions should always be considered when reviewing regulations, with the ultimate goal of maintaining remaining riparian functions. Additional management recommendations include improving functions through voluntary restoration, and maintaining and enhancing connectivity laterally along the stream. Areas closer to the stream provide the greatest conservation benefit and should be prioritized for preservation, replanting, or restoration. Using low impact development techniques to better manage stormwater, and adopting a stormwater design manual equivalent to Ecology's most current version of Stormwater Management Manual for Western Washington are also recommended (Rentz et al. 2020).

To aid with site-specific RMZ delineation, WDFW created an internet-based mapping tool that reports recommended widths for RMZs statewide based on $SPTH_{200}$. The tool also notes instances where a 100-foot RMZ should be applied to support the pollution removal function. Appendix 1 of the management recommendations provides guidance on how to use these interactive maps. The guidance notes that in highly altered areas where soil data are not available, it may be necessary to estimate $SPTH_{200}$ values based on nearby soils.

8.3.1.2 Mitigation

A near consensus of scientific opinion holds that the most effective and reliable means of maintaining viable self-sustaining fish, especially salmon, is to maintain/restore ecosystems to conditions that resemble or emulate their historical range of natural variability (Swanson et al. 1994; Reeves et al. 1995; Bisson et al. 2009). This opinion is based in part on the complexity of processes that affect the expression of habitats over time and space.

The following steps in the mitigation sequence according to the implementing rules of SEPA (Chapter 197-11-768 WAC) would apply to riparian areas:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree or magnitude of the impacts;
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
- Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or
- Monitoring the impact and taking appropriate corrective measures.

8.3.2 Priority Habitat and Species

WDFW's PHS list is periodically updated and includes species and habitats for which special conservation measures should be taken. The PHS list explains why each priority habitat and species is on the list, shows which counties have that species or habitat, and provides links to PHS management recommendations. Cities and counties use the PHS list when designating and protecting Fish and Wildlife Habitat Conservation Areas under the GMA and SMA.

8.3.2.1 Oregon White Oak Woodlands Management Recommendations

WDFW's *Management Recommendations* for Oregon white oak woodlands are designed to maintain and enhance the integrity of Oregon white oak woodlands, reverse the trend of oak habitat loss, and promote the protection of oak habitat that is presently in good condition. Oaks west of the Cascades and in wetter sites along the Columbia Gorge should be cut only for stand enhancement. Replacing the wholesale removal of mixed oak/conifer stands with selective cutting would reduce fragmentation and conifer encroachment, and it would benefit structural and vegetative species diversity within oak forests. Encroaching conifers within oak groves should be thinned, and conifers adjacent to these stands should be retained for wildlife. An alternative to removing trees is to leave them standing as snags (Larsen and Morgan 1998).

Specific recommendations include the following:

- Do not cut Oregon white oak woodlands except for habitat enhancement.
- Allow only early spring, low-impact cattle grazing.
- Allow low-impact recreation (hunting, fishing, hiking, and mushroom and acorn collecting).
- Selectively harvest individual oaks to improve stand age-class and structural diversity.

- Thin encroaching conifers in oak woodlands west of the Cascades and along the Columbia Gorge; do not remove conifers from mixed stands east of the Cascades.
- Retain large, dominant oaks and standing dead and dying trees.
- Create snags when thinning oaks or conifers instead of removing trees.
- Leave fallen trees, limbs, and leaf litter for foraging, nesting, and denning sites.
- Retain contiguous aerial pathways.
- Conduct prescribed burns where appropriate.

8.4 SUMMARY EVALUATION OF EXISTING ORDINANCE AND RECOMMENDATIONS

The City should update the Fish and Wildlife Conservation Areas section (VMC 20.740.110) of their development code based on the current RCWs and WACs, including (1) revising the definition of fish and wildlife habitat conservation areas to be consistent with the State's definition, (2) add language to the existing ordinance that addresses priority habitat and species and their associated management recommendations (i.e., habitat associated with listed species, oak woodlands, biodiversity areas, etc.), (3) add language to the existing ordinance that addresses changes in how riparian management areas are determined and protected, and (4) add conservation and protection measures that preserve or enhance anadromous fish and their habitat important for all life stages.

Specific recommendations by WDFW associated with riparian management areas for urban riparian ecosystems include the following (Rentz et al. 2020):

- Update riparian area widths to meet WDFW guidance.
- Delineate urban RMZs to protect what areas remain and to highlight lost or degraded areas to target for restoration.
- Quantify current conditions, with a goal of maintaining and improving functions through regulatory and voluntary means.
- Identify and prioritize restoration opportunities and projects within the RMZ
    - Protect riparian functions that remain, especially in places that are relatively high functioning; implement actions that enhance degraded functions
    - Prioritize opportunities to maintain and restore in-stream and riparian connectivity.
    - Adopt a stormwater design manual equivalent to Ecology's most current manual for western Washington
    - Manage stormwater by adopting Ecology's latest manual regarding LID for new development, redevelopment and retrofit projects.
- When replacing or removing existing infrastructure with in an RMZ:
    - Map RMZ to pinpoint the best sites to restore – consider connectivity and adjacency to other priority habitats;
    - Improve aquatic connectivity by replacing culverts and removing barriers to movement;

- Revegetate with native plants and consider improvements for wildlife by integrating structures necessary for nesting, breeding and foraging;
- As infrastructure is remodeled or replaced, incorporate additional setbacks for streams;
- Control access to RMZ to limit soil compaction; and
- Avoid operating equipment near the stream to reduce sedimentation and soil compaction; and avoiding using chemicals in the RMZ that are not approved for use there by Ecology.

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APPENDIX A

DRAFT CRITICAL AREAS MAPS

APPENDIX B

BEST AVAILABLE SCIENCE SOURCES

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Chapter 20.150
DEFINITIONS

Sections:

20.150.010 Meaning of Words Generally.

General. All of the terms in this title have their commonly accepted dictionary meaning unless they are specifically defined in this chapter, or the context in which they are used clearly indicates to the contrary. (Ord. M-3692 § 8, 02/28/2005; Ord. M-3643, 01/26/2004)

20.150.020 Meaning of Common Words.

A. *Tense.* All words used in the present tense include the future tense.

B. Singular/plural. All words used in the plural include the singular, and all words used in the singular include the plural unless the context indicates to the contrary.

C. *Gender.* All words used in the masculine gender include the feminine gender.

D. Use of shall, should, will and may. The words shall and will are mandatory, the word should is directory, and the word may is permissive.

E. *Use of building and structure.* The word building includes the word structure.

F. *Use of 'used for'.* The phrase used for includes the phrases arranged for, designed for, intended for, maintained for and occupied for.

G. *Use of land and property.* The words land and property are used interchangeably unless the context clearly indicates to the contrary.

H. *Use of occupied.* The word occupied shall included premises designed or intended to be occupied.

I. Use of person. The word person shall include persons, association, firm, partnership or corporation, as well as the individual. (Ord. M-3891 § 3, 11/03/2008 – Effective 12/3/08; Ord. M-3692 § 8, 02/28/2005; Ord. M-3643, 01/26/2004).

20.150.030 Common Acronyms.

ADA The Americans with Disability Act

ADA Also, Average Daily Attendance

ADT Average Daily Traffic

ADU Accessory Dwelling Unit

BAS Best Available Science

BFE Base Flood Elevation

BMPs Best Management Practices

CAP Critical Areas Permit

CAR Critical Areas Report

CARAs Critical Aquifer Recharge Areas

CDD Community Development Department

CFR Code of Federal Regulations

CMZ Channel Migration Zone

CRZ Critical Root Zone

CUP Conditional use permit

DAHP Washington State Department of Archaeology and Historic Preservation

DBH Diameter at Breast Height

DFIRM Digital Flood Insurance Rate Map

DNS Determination of Non-Significance

DNR Washington State Department of Natural Resources

DOE or **Ecology** Washington State Department of Ecology

DS Determination of Significance

EIS Environmental Impact Statement

ESA The Federal Endangered Species Act

FAA Federal Aviation Administration

FAR Floor Area Ratio

FBFM Flood Boundary-Floodway Maps

FCC Federal Communications Commission

FEMA Federal Emergency Management Agency

FIRM Flood Insurance Rate Map

FIS Flood Insurance Study

FTE Full-time Equivalent

FWHCAs Fish and Wildlife Habitat Conservation Areas

GLA Gross Leaseable Area

GMA The Washington State Growth Management Act of 1990

gsf Gross Square Feet

HGM Hydrogeomorphic

LOS Level of service

MDNS Mitigated Determination of Non-Significance

NAICS The North American Industrial Classification System

NFIP National Flood Insurance Program

OHWM Ordinary High Water Mark

PHS Priority Habitats and Species

PUD Planned Unit Development

RCW Revised Code of Washington

RMA Riparian Management Area

RB Riparian Buffer

SEPA State Environmental Policy Act

SF Square Feet. Also s.f. and sq.ft.

SPTH Site Potential Tree Height

SRO Single-Room Occupancy

SWCCA Southwest Washington Clean Air Agency (formerly SWAPCA)

TDL Total Developable Land

USC United States Code

USGS U.S. Geological Survey

VMC Vancouver Municipal Code

WAC Washington Administrative Code

WDFW Washington Department of Fish and Wildlife (Ord. M-4402 § 3(C), 2023; Ord. M-4017 § 10, 2012; Ord. M-3692 § 8, 2005; Ord. M-3643, 2004)

20.150.040A Meanings of Specific Words and Terms A through D.

Abutting. Contiguous or adjoining with a common boundary line, except that where two or more lots adjoin only at a corner or corners, they shall not be considered as "abutting" unless the common property line between the two parcels measures eight feet or more in a single direction. It shall include the terms "adjoining" and "contiguous."

Accept. To receive as complete and in compliance with all submittal requirements.

Access or Access Way. The place, means or the way by which pedestrians and vehicles shall have safe, adequate and usable ingress and egress to a property or use as required by this title.

Accessory Dwelling Unit (ADU). One or more rooms with private bath and kitchen facilities comprising an independent, self-contained dwelling unit within or attached to a single-family dwelling or in a detached building on the same lot as the primary dwelling unit. An ADU is distinguishable from a duplex in that, unlike a duplex, it is clearly subordinate to the primary dwelling unit, both in use and appearance.

Accessory Equipment Structure. An unstaffed structure that is subordinate and clearly incidental to the principal use or structure on the lot and may be used to house and protect the equipment necessary for processing wireless communications signals. Associated equipment may include air conditioning and emergency generators.

Accessory Structure. A building or structure which is clearly incidental to the primary structure on the same lot.

Accessory Use. A use of land or portion there of which is clearly incidental and subordinate to the principle use of the land located on the same lot or premises.

Acre. A measure of land area containing 43,560 square feet.

Actual Construction. The actual placing of building materials in their permanent position, fastened in a permanent manner, including any excavation.

Addition. Means the same as enlargement.

Adjacent. Abutting or located directly across a street right-of-way.

Adjoin. Means the same as abutting.

Adult Bookstore. Any premises from which minors are excluded and in which the retail sale of books, magazines, newspapers, movie films, devices, slides or other photographic or written reproductions distinguished or characterized by their emphasis on matter depicting, describing or relating to specified sexual activities or specified anatomical areas is conducted as a principal use of the premise; or as an adjunct to some other business activity, but which constitutes the primary or a major attraction to the premises.

Adult Entertainment Shows. Any premises from which minors are excluded and in which live entertainment is provided, or any device is provided in which the subject matter is distinguished or characterized by the emphasis on matter depicting, describing or relating to specified sexual activities or displaying specified anatomical areas as the principal use of the premises or is shown as an adjunct to some other business activity which is conducted on the premises and constitutes a major attraction; and wherein fees of any kind are charged.

Adult Motion Picture Theater. Any establishment from which minors are excluded in which motion pictures, slides or similar photographic reproductions are shown depicting adult entertainment as the principal use of the premises, or are shown as an adjunct to some other business activity which is conducted on the premises and constitutes a major attraction; and wherein fees of any kind are charged; and wherein such movies are shown on a regular basis, and not to include a theater showing adult movies less than 5 percent of the total showing time of the theater.

Agent. Any person authorized in writing to act on behalf of the legal owner.

Agriculture, Existing and Ongoing. Those activities conducted on lands defined in RCW 84.34.020(2), and those activities involved in the production of crops or livestock, for example, the operation and maintenance of farm and stock ponds or drainage ditches; the operation and maintenance of ditches, irrigation systems (including irrigation laterals, canals, or irrigation drainage ditches); changes between agricultural activities; and normal maintenance, repair, or operation of existing serviceable structures, facilities, or improved areas. Activities that bring an area into agricultural use are not part of an ongoing operation. An operation ceases to be

ongoing when the area on which it is conducted is converted to a nonagricultural use or has lain idle for more than five years, unless the idle land is registered in a federal or state soils conservation program, or unless the activity is maintenance of irrigation ditches, laterals, canals, or drainage ditches related to an existing and ongoing agricultural activity. Forest practices are not included in this definition.

Airport Approach Surface. The surface which is longitudinally centered on an airport's extended runway centerline, extending outward and upward from the end of the primary surface. An approach surface is applied to each end of the runway based upon the type of approach procedure permitted. Because landings under instrument flight rules, using the Portland International Airport Localizer Directional Aid, are an approved procedure at Pearson Field, the following approach surface dimensions have been applied:

Width of approach surface: 500' at inner end, 4,000' at outer end (inner end begins at end of primary surface)

Length of approach surface: 10,000 feet

Slope of approach surface: 34:1 (one foot vertically for every 34 feet horizontally)

Airport Conical Surface. The conical surface is an inclined plane beginning at the edge of the horizontal surface and extending outward at a 20:1 slope for a distance of 4,000 feet.

Airport Horizontal Surface. The horizontal plane 150 feet above the established airport elevation. The shape of the plane is determined by striking arcs from the end of each primary surface. The radius of each arch is connected by lines tangent to the arcs. For Pearson Field, the radius of these arcs is 5,000 feet for runways 08 and 26.

Airport Transitional Surface. The transitional surface is an inclined plane extending outward from the primary and approach surfaces at a 7:1 slope. From the primary surface and approach surface, the transitional surface slopes upward to the horizontal surface. The transitional surface extends outward from the approach surface a distance of 5,000 feet.

Aisle. The corridor by which vehicles enter into and depart from parking spaces.

Alley. A public right-of-way or private easement not over 30 feet wide which provides a secondary means of access to abutting lots, not intended by the city for general traffic circulation.

Alteration of Watercourse. Any action that will change the location of the channel occupied by water within the banks of any portion of a riverine waterbody.

Alteration, Structural. Any change in a supporting member of a building, such as a bearing wall, column, beam or girder, floor or ceiling joist, roof rafts, roof diaphragms, foundations, piles, or retaining wall or similar components.

Altered. Structurally changed.

Alternative Mode. Refers to any means of commute transportation other than that in which the single-occupant vehicle is the dominant mode.

Alternative Work Schedules. Programs such as compressed work weeks that eliminate commuting trips for affected employees. For the purposes of this chapter, changing the time of when an affected employee begins his work shift shall not be considered an alternative work schedule if it only moves trips out of the peak period and does not eliminate trips.

Amateur or Ham Radio. Radio facilities operated for noncommercial purposes by individuals licensed by the FCC with an interest in construction and operation of radio equipment, usually as a hobby or avocation.

Amendment. A change in the wording, context or substance of this title or the comprehensive plan, or a change in the boundaries of a district upon the zoning district map or the boundaries of a designation on the comprehensive plan map.

Amenity. A natural or created feature that enhances the aesthetic and functional quality or makes more attractive or satisfying a particular property, place or area.

Americans with Disabilities Act (ADA). A 1990 federal law designed to bring disabled Americans into the economic mainstream by providing them equal access to jobs, transportation, public facilities and services. The ADA contains requirements for most developments including accessible parking stalls, entrances and exits, pathways, and public facilities such as restrooms.

Anadromous. Fish that migrate up rivers and streams from the ocean to breed in fresh water.

Annexation. The incorporation of a land area into the City of Vancouver with a resulting change in the boundaries of the city.

Annual Average Day/Night Sound Level (Ldn). Calculated in decibels, the Ldn is the 24-hour logarithmic average sound level from midnight to midnight, obtained after adding 10 decibels to sound levels in the night from midnight to 7 a.m., and from 10 p.m. to midnight (0000 to 0700, and 2200 to 2400 hours), and then logarithmically average day-to-day over a 12-month period.

Antenna. A device used to transmit and/or receive radio or electromagnetic waves between land- and/or satellite-based structures; any device commonly consisting of poles, panels, rods, reflecting discs or similar device use for the transmission or reception of radio frequency signals, typically mounted on a supporting tower, pole, mast or building.

Apartment. A dwelling unit in a multiple-family building.

Apartment House. Means the same as Dwelling, Multiple-Family.

Appeal. A request for an impartial review of a land use decision or interpretation of land use-related codes rendered by community development department, its employees or any review body of the city of Vancouver.

Applicable Pretreatment Standards. For any specified pollutant, city prohibitive standards, city specific pretreatment standards (local limits), State of Washington pretreatment standards, or EPA's Categorical Pretreatment Standards, whichever standard is most appropriate or most stringent.

Applicant. A person submitting an application for development.

Approach Surface. The surface which is longitudinally centered on an airport's extended runway centerline, extending outward and upward from the end of the primary surface at a slope of 20 feet horizontally for each foot vertically. In plan, the perimeter of the approach surface coincides with the perimeter of the approach zone.

Approach Zone. An area at the end of an airport's runway which is 250 feet wide and expands outward uniformly to a width of 1,250 feet at a horizontal distance of 5,000 feet. The centerline of the zone is a continuation of the centerline of the runway.

Approved Plan. A plan that has been granted final approval by the appropriate approval authority.

Archaeological Interest. Capable of providing scientific or humanistic understandings of past human behavior, cultural adaptation, and related topics through the application of scientific or scholarly techniques such as controlled observation, contextual measurement, controlled collection, analysis, interpretation, and explanation [WAC 25-48-020(12)].

Archaeological Object. An object that comprises the physical evidence of an indigenous and subsequent culture including material remains of past human life including monuments, symbols, tools, facilities, and technological by-products [WAC 25-48-020(8)].

Archaeological Resources. Any material remains of human life or activities that are of archaeological interest. This shall include all sites, objects, structures, artifacts, implements, and locations of prehistoric or archaeological interest, whether previously recorded or still unrecognized, including, but not limited to, those pertaining to prehistoric and historic American Indian or aboriginal burials, campsites, dwellings, and their habitation sites, including rock shelters and caves, their artifacts and implements of culture such as projectile points, arrowheads, skeletal remains, grave goods, basketry, pestles, mauls, and grinding stones, knives, scrapers, rock carvings and paintings, and other implements and artifacts of any material [WAC 25-48-020(10)]. This shall also include any material remains of human life or activities from historic periods which are located at least partially below the ground surface necessitating the use of archaeological methods for study or recovery.

Archaeological Resource Survey. A procedure by which an archaeologist makes a determination of the actual existence (presence or absence) of an archaeological site in a disturbance area, a preliminary assessment of the site's potential significance, and a recommendation for further evaluation, avoidance, mitigation, or recovery of resources in compliance with the provisions of this chapter.

Archaeological Site. Land or water areas that show evidence of artifacts of human, plant or animal activity, usually dating from periods of which only vestiges remain.

Archaeological Site, Known, Recorded. An archaeological site that has been recorded with the Washington State Department of Archaeology and Historic Preservation (DAHP) or its successor.

Archaeological Site, Potentially Significant. An archaeological site which:

1. contains archaeological objects at a density of at least 100 per cubic meter per stratigraphic or cultural unit; or
2. includes at least one feature; or
3. includes at least one relatively uncommon archaeological object; or
4. contains skeletal remains; or
5. is otherwise considered potentially significant by the archaeologist.

Archaeologist, Professional. "Professional archaeologist" means a person with qualifications meeting the federal secretary of the interior's standards for a professional archaeologist. Archaeologists not meeting this standard may be conditionally employed by working under the supervision of a professional archaeologist for a period of four years provided the employee is pursuing qualifications necessary to meet the federal secretary of the interior's standards for a professional archaeologist. During this four-year period, the professional archaeologist is responsible for all findings. The four-year period is not subject to renewal. RCW 27.53.030(8).

Area of Shallow Flooding. A designated zone AO, AH, AR/AO or AR/AH (or VO) on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow. Also referred to as the "sheet flow area."

Areas of Special Flood Hazards. Lands in the flood plain subject to a one percent or greater chance of flooding in any given year. Designations on Flood Insurance Rate Maps always include the letter A. Also referred to as "frequently flooded areas." "Special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard."

Arterial. Any principal arterial, minor arterial, or collector arterial streets.

ASCE 24. The most recently published version of ASCE 24, Flood Resistant Design and Construction, published by the American Society of Civil Engineers.

Assessed Value. The value at which property is appraised for tax purposes.

Attached Antenna. An antenna is that affixed to an existing structure other than a wireless communication support structure.

Attached Sidewalks. Those sidewalks abutting the back of a curb.

Automobile Wrecking. The dismantling or disassembling of motor vehicles, or the storage, sale, or dumping of dismantled, partially dismantled, obsolete, or wrecked vehicles or their parts. Three or more dismantled, obsolete or inoperable motor vehicles on one lot shall constitute a wrecking yard.

Average. The arithmetic mean.

Average Daily Attendance (ADA). Regarding School Impact Fees, the average number of students attending an elementary or secondary school and used for the design of the facility.

Awning. A hood or cover which projects from the wall of a building, of a type which may be retracted, folded or collapsed against the face of a supporting building.

Banner. An on-site sign such as those used to announce an open house or a grand opening, or to make a special announcement. Normally, it is constructed of fabric and is without a rigid frame.

Base Flood. The flood having a 1percent chance of being equaled or exceeded in any given year. Also referred to as the "100-year flood." Designated on Flood Insurance Rate Maps by the letter A.

Base Flood Elevation. The elevation that the base flood is expected to reach. Also referred to as the "100-year flood elevation."

Basement. A portion of a building included between a floor, with its level 2 feet or more below the level from which the height of the building is measured, and the ceiling next above said floor. For the purposes of VMC 20.740.120, Frequently Flooded Areas, basement means any area of a building having its floor subgrade (below ground level) on all sides.

Base zone. The zoning designation applicable to a parcel of property irrespective of an Overlay District as reflected on the Vancouver Zoning Map.

Beach Nourishment. With respect to bank erosion hazard areas, beach nourishment is the placement of sand or soil to fill an eroding bank.

Berm. A mound of earth, typically linear in form and generally used as a buffer between uses or properties.

Best Management Practices. Systems of practices and management measures that:

1. control soil loss and reduce water quality degradation caused by nutrients, animal waste, toxics, and sediment; and

2. minimize adverse impacts to surface water and groundwater flow, circulation patterns, and to the chemical, physical, and biological characteristics of Fish and Wildlife Habitat Conservation Areas (FWHCAs), wetlands and buffers.

Bike Lane. Lanes on an improved street which are designated for use by cyclists and separated from vehicular traffic either by striping or small concrete barrier.

Bikeway. A pathway, paved and separated from streets and sidewalks, designed to be used by cyclists.

Binding Site Plan. A type of land division that segregates a portion of a legal lot created for the sale or lease of commercially- or industrially-zoned property; placement of manufactured homes or travel trailers on leased sites; and creation of condominiums pursuant to 58.17.040 RCW.

Bioengineering Techniques. Techniques that apply the principles of the biological, ecological, and soils sciences and structural engineering to build structures which, using live plant materials as a main structural component, stabilize the soil against erosion, sedimentation, and flooding. Also referred to as "soft armoring techniques."

Biomass Generation. A major utility facility that provides for the production or collection of organic materials such as wood and agricultural residues and municipal solid waste that are primarily organic materials and the conversion or use of that material for the production of heat, electricity, or substitute fuels through several processes including, but not limited to, burning, pyrolysis, or anaerobic digestion.

Block. A group of lots, tracts or parcels within well defined and fixed boundaries.

Bog. A type of wetland where (1) organic (peat or muck) soil layers comprise at least 16 of the first 32 inches of the soil profile; or (2) there is more than 70 percent cover of mosses at ground level and more than 30 percent of the total shrub and herbaceous cover consists of species listed in Table 3 – Characteristic Bog Species in Washington State found in Hruby, 2004, Washington State Wetlands Rating System for Western Washington, Ecology publication #04-

06-025, or as revised by Ecology. Many bogs have soils classified as peat or muck, are nutrient poor, have a low pH (acidic), and are fed largely by rainfall rather than streams or groundwater.

Boundary Adjustment. The minor alteration of the boundary between two lots or tracts which does not result in the creation of any additional lot(s); also known as boundary line adjustment.

Breezeway. A structure for the principal purpose of connecting the main building or buildings on a property with other main buildings or accessory buildings.

Buffer. An area that is contiguous to and protects a critical area from incompatible uses and which is required for the continued maintenance, functioning, and/or structural stability of a critical area.

Building. Any structure having a roof and walls, used or built for the shelter or enclosure of persons, animals or property of any kind.

Building Envelope. That portion of a legal lot exclusive of the areas required for front, side, and rear yards and other required open spaces and which is available for siting and constructing a building or buildings.

Building Height. The vertical distance from the average grade to the average height of the roof peak of the building, except in a shoreline jurisdictional area, in which case the height shall be measured from average existing grade (prior to development) to the highest point of a structure (see also WAC 173-27-030). For exceptions subject to airport height limits located within the approach, transitional and horizontal surfaces refer to Airport definitions and Sections 20.570 and 20.630.050 VMC.

Building, Main. A building within which is conducted the principal use permitted on the lot, as provided in this title.

Building Permit. The permit required for new construction and additions pursuant to Title 17 of the Vancouver Municipal Code (VMC).

Business Complex. Any building containing more than one business, or any group of buildings in close proximity to one another sharing parking, ownership, and ingress or egress.

Caliper. The diameter of a tree trunk measured at 6 feet above the ground for up to and including 4 inches caliper size, and one foot above the ground for larger trees.

Canopy. A permanent roofed structure attached to and supported by the building.

Canopy, Auto Dealership Plan District. A structure, enclosure, or shelter constructed of fabric or pliable materials supported by any manner, except by air or the contents it protects, and open without sidewalls or drops on 75 percent or more of the perimeter, consistent with Vancouver Fire Code Title 16, Section 16.04.060 and the International Fire Code (IFC).

Capital Facilities Plan. The City of Vancouver Capital Facilities Plan element of the Comprehensive Plan adopted pursuant to Chapter 36.70A RCW and RCW 82.02.050, and as such plan is amended.

Caretaker Residence. A single unit providing a complete independent living space for one or more persons, including permanent facilities for living, sleeping, eating, cooking and sanitation (same as Dwelling).

Central Business District. This area is the section of Vancouver defined as the commercial business district bounded by 4th Plain Boulevard to the north, Columbia River to the south, I-5 to the east, and Lincoln Avenue to the west. This can apply to other areas as developed in the city, with similar zoning.

Certificate of Concurrency. A document issued by the transportation manager pursuant to Section 20.980.120 VMC indicating: the location or other description of the property on which a development is proposed; the type of development application for which the certificate of concurrency is issued; an identification of any affected transportation corridor and TMZ; the specific uses, densities, intensities, and any transportation system improvements, strategies, or other mitigation measures that were considered in the determination to issue the certificate, and which are authorized or required for development of the property; the amount of capacity within the affected transportation corridor or TMZ that is reserved for the development described in the certificate, and a statement that the reservation of capacity is nontransferable to other development(s); any conditions required pursuant to Section 20.980.120 VMC; and an effective date.

Change of Use. Any use that differs from the previous use as defined in Chapter 20.160, Use Classifications.

Channel Migration Zone (CMZ): The area within which a river channel is likely to migrate and occupy over a specified time period.

Citizens Band Radio. Two-way radio facilities operated for a short-range personal and business communications, without necessity of a federal license, pursuant to 47 CFR Part 95.

City. The City of Vancouver, Washington.

City Council or Council. The City Council of the City of Vancouver, Washington.

City Standards. Shall mean standard specifications, technical drawings, detail drawings and other information the city has adopted as minimum standards.

Clark County Cultural Resources Inventory. The comprehensive inventory of historic resources within the boundaries of Clark County including resources identified in the Clark County cultural resources inventory and other inventories by local jurisdictions within Clark County.

Cleaner Fuels. Liquid or gaseous fuels produced from renewable sources or that have low or no emissions, including the following:

1. Carbon-free fuels that generate no carbon emissions including green hydrogen or fuels that are certified by state or federal responsible agencies as net-zero carbon emissions.

2. Any credit-generating fuel under the Washington State Low Carbon Fuel Standard (HB 1091 2021-2022) as allowed by the Washington State Department of Ecology.

3. Any biomass renewable fuels approved by the federal Environmental Protection Agency under the federal Renewable Fuel Standard (40 CFR Part 80) as regulation exists or may hereafter be amended and meeting any future federal renewable fuels regulations.

4. Alcohol fuels meeting the requirements of RCW 19.112.010(1) as that statute exists or may hereafter be amended.

5. Biodiesel fuel meeting the requirements of RCW 19.112.010(3), and renewable diesel meeting the requirements of RCW 19.112.010(9), as those statutes exist or may hereafter be amended.

6. E85 motor fuel which meets the requirements of RCW 19.112.010(2) exclusively for the propulsion of motor vehicles upon the roads, or RCW 19.112.010(6) for other motors, as those statutes exist or may hereafter be amended.

7. Alternative fuels that are not fossil fuels and that produce low or no carbon that meet state or federal requirements not otherwise listed above.

Clearing. The destruction or removal of vegetation from a site by physical, mechanical, chemical or other means. This does not include landscape maintenance or pruning consistent with accepted horticultural practices, such as those recommended by the Washington State University Extension Service, which does not impair the health or survival of the trees or native vegetation.

Closed Record Approval Hearing. An administrative hearing to approve or deny a project permit that is on the record to the City Council following an open record predecision hearing as defined by WAC 197-11-775 before the planning commission or hearings examiner.

Co-location. The use of a single wireless communications support structure or the use of a site by more than one wireless communications provider.

Commercial Nursery, or Tree Farm. A licensed plant or tree nursery or farm in relation to those trees planted and growing on the premises of the licensee, which are planted and grown for sale through retail or wholesale channels in the ordinary course of the licensee's business.

Commission or Planning Commission. Means the Planning Commission of the City of Vancouver, Washington.

Compatible. The capability of being able to function in a consistent and harmonious manner with others and surroundings.

Compatible Design. A building and/or site design which blends with the surrounding area. This might include a pitched roof of a similar pitch to surrounding roofs, trim, shutters or other architectural window detail; horizontal siding and/or brick exterior; and similar unit size or scale.

Comprehensive Plan. A long-range plan intended to guide the growth and development of a community or region that typically includes inventory and analytic sections leading to recommendations for the community's future economic development, housing, recreation and

open space, transportation, community facilities and land use, all related to the community's goals and objectives for these elements.

Concurrent. Means that the existing capacity of an affected transportation corridor or transportation management zone is sufficient to accommodate the projected transportation impacts of a proposed development; or that transportation system improvements, strategies, or other mitigation measures which will achieve or maintain an operating level at or above the applicable level of service for the affected transportation corridor or management zone: and are planned, reasonably funded, and scheduled for completion no later than six years after development approval as reflected in the most recent version of the Six-Year Street Plan; and will be available and complete no later than six years after development approval, as provided by a voluntary financial commitment (where appropriate) by the applicant that is in place at the time development is approved by the Development Review Authority.

Conditional Use. An activity specified by this title as a principal or an accessory use, permitted when authorized by the appropriate approval authority and subject to certain conditions.

Contiguous. Means the same as abutting.

Contributing. A property which dates to the historic period and retains sufficient physical integrity so as to convey its historic character.

Contributing Area. When referring to wetlands, the land and/or water area adjacent to a wetland that drains into that wetland.

Conversion Option Harvest. A timber harvest as established in DNR's Forest Practices Regulations and Chapter 20.770 VMC, Tree Conservation, whereby a property owner is allowed to harvest a limited amount of timber from their property within the City of Vancouver, while still maintaining the rights to convert their property to a use inconsistent with growing timber.

Conveyance. A mechanism for transporting water or other liquids from one point to another, including pipes, ditches, and channels.

Co-tenant. A person who resides with the applicant for the deferral and who has an ownership interest in the residence.

Court. An open, uncovered, and unoccupied space within an allotted property line.

Court Height. A measurement from the floor level of the lowest story in the building in which there are windows from rooms served by the court, to the highest point of the enclosing walls of the court.

Critical Aquifer Recharge Areas. Areas with a critical recharging effect on aquifers used for potable water as defined by the Washington State Growth Management Act. Critical aquifer recharge areas are regulated under VMC 14.26.

Critical Areas. Critical areas include FWHCAs, Wetlands, Frequently Flooded Areas, CARAs, and Geologic Hazard Areas as defined by the Washington State Growth Management Act. Critical aquifer recharge areas are regulated under VMC 14.26. The others are regulated under VMC 20.740.

Critical Facility. Facilities that serve vulnerable populations, house emergency services, meet the definition of a Class I or Class II Operation under VMC 14.26, or perform other functions that would pose significant safety issues in even a slight landslide, flooding, erosion, seismic, or other natural hazard event. Critical facilities include, but are not limited to: schools, nursing homes, hospitals, police, fire, and emergency response installations, installations which produce, use, or store hazardous materials.

Critical Root Zone (CRZ). The area where the tree's roots are located. This root zone is generally the area surrounding a tree trunk at a distance equal to one foot for every inch of tree diameter at breast height (dbh). This area is described as the radius of a circle around the tree.

Crown. The area of a tree containing leaf- or needle-bearing branches.

Crown Cover. The area within the drip line or perimeter of the foliage of a tree.

Cul-de-Sac. The circular turnaround at the end of a dead-end street.

Cultural Resources. The historic or prehistoric or archeological sites and standing structures, cemeteries, burial grounds and funerary objects and distributions of cultural remains and artifacts.

DAHP. Washington State Department of Archaeology and Historic Preservation.

Decibels (dB). The measure of noise loudness on a scale weighted to approximate human ability to perceive sound (A). Each decibel is a measure of the difference in energy of a sound compared to another sound which is used as a reference. The reference sound is barely audible

to the human ear, and each interval of 10 decibels indicates sound energy ten times greater than before. The A-weighted scale generally places zero dB at the threshold of hearing and 135 dB at the threshold of pain.

Dedication. The limited grant by a property owner allowing the use of property by the public for specified purposes by means of a deed or transfer to the city.

Dedication, Fee In Lieu Of. Payments in cash as an alternative to dedication of land or construction of improvements.

Deed. A legal document conveying ownership of real property.

Demolish. To raze, destroy, dismantle, deface or in any other manner cause partial or total ruin of a structure or other improvement.

Density. A measurement of ratio comparing the number of dwelling units with land area in relationship to a specified amount of land, expressed as the number of residential dwelling units per acre of land or the amount of land area expressed in the square feet of land assignable to each dwelling unit in a residential development.

Density, Net. The development density derived by dividing the net buildable area of the subject property (gross area less the total aggregate area required by the city for public or private streets, schools or other public facilities, not including parks and public or private recreation facilities dedicated or created as an integral part of the development) by the applicable lot size or area per unit.

Density, Gross. The development density derived by dividing the gross area of the subject property by the applicable minimum lot size. Gross density is used to determine the maximum number of lots that may be achieved on a parcel being developed.

Department. The Development Review Services Department, Long Range Planning Department, Public Works Department, or any division, subdivision, or organizational unit of the city established by ordinance, rule or order.

Destroy any tree. To damage, disfigure or cause injury or death which may include, but not be limited to, topping, excessive pruning not consistent with nationally-accepted standards, poisoning, and trenching or excavating in such a manner as to make the tree root system no viable.

Detached Sidewalks. A sidewalk separated from the back of curb by a uniform width planting strip.

Developer. Any person, firm or corporation undertaking the development of any parcel of land.

Development. Any humanmade change to improved or unimproved real estate including but not limited to: mining, dredging, filling, drilling, grading, paving, or excavation, storage of equipment or materials; any subdivision or short platting of land; the construction or re-construction of residential, commercial, industrial, public or any other building or building space, and the placement of all types of manufactured homes defined herein. Development also includes the change in use of a building or land if approval is required pursuant to the Vancouver Municipal Code, Title 17 (Building Code). As related to the Tree Conservation Ordinance, development shall mean the division of a parcel of land into two or more parcels; the construction, reconstruction, conversion, structural alteration, relocation, or enlargement of any structure; any mining, excavation, landfill, clearing or land disturbance.

Development Application. Any application (including supporting materials) for approval of a development to which the provisions of Title 20 VMC apply.

Development Review Authority. The planning official, the City Hearings Examiner, the Planning Commission, or City Council, each having authority to approve a development application pursuant to Title 20 VMC.

Diameter at Breast Height (DBH). A tree's diameter in inches at 4 1/2 feet above the ground. On multi-stemmed or -trunk trees, the diameter shall be the diameter equivalent to the sum of trunk areas measured at 4 1/2 foot above the ground.

Direct-to-Home Satellite Service. The distribution or broadcasting of programming or services by satellite directly to the subscriber's premises without use of ground-receiving or distribution equipment, except at the subscriber's premises or in the uplink process to the satellite.

Disturbance Area. Regarding archaeological resource protection, the geographical area in which archaeological resources could potentially be adversely impacted by a proposed ground-disturbing action or activity. It includes equipment or material staging areas; utility installation areas; temporary roads or haul routes; or other areas outside of the proposed building footprint(s) that could be disturbed during construction. The disturbance area shall not be smaller, and will generally be larger than the area of the property proposed for development. In

no case shall the disturbance area be smaller than one acre or the area of the parcel(s) upon which the property proposed for development is located, whichever is less.

Regarding critical areas, a pronounced, temporary change in environmental conditions within an ecosystem. Disturbances often act quickly and can alter ecosystem composition, structure, and function.

Dog Day Care. A facility where dogs may be groomed, trained, exercised, and socialized, but not kept or bred, sold, or let for hire.

Domestic Animal. Any animal other than livestock that lives and breeds in a tame condition including, but not limited to: dogs, cats, small birds and other animals kept as pets.

Doorway Identification Nameplates. A nonelectric sign that is limited to the name, address, and number of the building, institution or person and is limited to the activity carried on in the building or institution or to the occupancy of the person.

Downed Woody Vegetation. Shrubs, trees, or their branches that have fallen and are on the ground or in, across, or dangling above streams, rivers, lakes, or ponds; also known as large woody debris.

Drive-Through Facility. A facility or structure that is designed and intended to allow drivers to remain in their vehicles before and during participation in an activity on the site.

Driveway. A private way providing ingress and egress from one or two lot parcels or tracts to a public or private street.

Dwelling. A single unit providing a complete independent living space for one or more persons, including permanent facilities for living, sleeping, eating, cooking and sanitation.

Dwelling, Efficiency Living Unit. Any room having cooking facilities, and used for combination living, dining, and sleeping purposes for not more than two persons, and designed as a separate apartment, not merely rooming accommodations. Each efficiency living unit shall be provided with a separate bathroom meeting the requirements of the Building Code.

Dwelling, Houseboat Moorage. A facility that provides moorings for houseboats.

Dwelling, Multiple-Family. A building or portion thereof designed or used as a residence by three or more households and containing three or more dwelling units.

Dwelling, Single-Family. A building designed or used for residence purposes by not more than one household and containing one dwelling unit only. Such dwelling units may be either detached (i.e., free-standing) or attached (i.e., sharing) common walls with other such units.

Dwelling, Single-Room Occupancy Housing (SRO). A building wherein furnished rooms without cooking facilities are rented for compensation to three or more nontransient persons not included in the family unit of the owner or tenant of the premises.

Dwelling, Two-Family, or Duplex. A building designed or used for residence purposes by not more than two households and containing two dwelling units. (Ord. M-4402 § 3(C), 2023; Ord. M-4380 § 2, 2022; Ord. M-4325 § 3, 2020; Ord. M-4289 § 4, 2019; Ord. M-4179 § 61, 2016; Ord. M-4170 § 5, 2016; Ord. M-4034 § 2, 2012; Ord. M-4024 § 4, 2012; Ord. M-4024 § 3, 2012; Ord. M-4017 § 11, 2012; Ord. M-4002 § 2, 2011; Ord. M-3959 § 3, 2010; Ord. M-3922 § 2, 2009; Ord. M-3868 § 2, 2008; Ord. M-3844 § 3, 2007; Ord. M-3840 § 3, 2007; Ord. M-3832 § 1, 2007; Ord. M-3733 § 2, 2006; Ord. M-3709 § 2, 2005; Ord. M-3701 § 2, 2005; Ord. M-3692 § 8, 2005; Ord. M-3667 § 2, 2004; Ord. M-3663 § 2, 2004; Ord. M-3643, 2004)

20.150.040B Meanings of Specific Words and Terms E through H.

Early Notice. The city's response to an applicant stating whether it considers issuance of a determination of significance likely for the applicant's proposal.

Easement. A grant of one or more of the property rights by the property owner to and/or for use by the public, a corporation or another person or entity.

Ecology. The Washington State Department of Ecology.

Egress. An exit from a building or site.

Electric Vehicle. Any on-road vehicle that operates, either partially or exclusively, on electrical energy from the grid, or an off-board source, that is stored on-board for locomotive purpose. "Electric vehicle" includes: 1) a battery electric vehicle; 2) a plug-in hybrid electric vehicle; 3) a neighborhood electric vehicle; 4) a medium-speed electric vehicle; and/or (5) a battery-powered scooter.

Elevated Building. For insurance purposes, a nonbasement building that has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

Elevation, Architectural. A scale drawing of the side, front or rear of a structure.

Elevation Certificate. An administrative tool of the National Flood Insurance Program (NFIP) that can be used to provide elevation information, to determine the proper insurance premium rate, and to support a request for a letter of map amendment (LOMA) or letter of map revision based on fill (LOMR-F).

Emergency Repair. The work necessary to prevent destruction or dilapidations to real property or structural appurtenances thereto immediately threatened or damaged by fire, flood, earthquake or other disaster.

Emergent wetland. A wetland with at least 30 percent of the surface area covered by erect, rooted, herbaceous vegetation as the uppermost vegetative strata.

Employees. Refers to all persons, including proprietors, working on the premises.

Employer. A sole proprietorship, partnership, corporation, unincorporated association, cooperative, joint venture, agency, department, district or other individual or entity, whether public, nonprofit or private, that employs workers.

Endangered and Threatened Species, Federally Designated. Fish and wildlife species identified by the U.S. Fish and Wildlife Service or NOAA Fisheries as threatened or endangered under the Endangered Species Act, 16 USC Section 1531, et seq.

Endangered, Threatened and Sensitive Species, State Designated. Fish and wildlife species native to the State of Washington and identified by the Washington Department of Fish and Wildlife as sensitive, threatened, or endangered species.

Energy-Efficient Construction. A structure designed and built which encourages the efficient use of energy. Construction standards qualifying for this shall be as specified by the State Energy Code. Design or construction methods that can be proven to provide equivalent or better energy conservation performance may be allowed as an alternative.

Engineer. An individual licensed by the State of Washington to practice civil engineering.

Enhancement. Actions performed to improve the condition of an existing degraded critical area or buffer so that the functions provided are of a higher quality. See also Wetland Enhancement.

Enlargement. An increase in size of an existing structure or use, affecting the physical size of the property, building, parking, and other improvements.

Entertainment. Regarding Adult Businesses, any exhibition or dance of any type, pantomime, modeling or any other performance.

Entertainer. Regarding Adult Businesses, means any person who provides sexually-oriented adult entertainment within a public place of amusement whether or not a fee is charged or accepted for such entertainment.

Equity Value. The amount by which the fair market value of a residence as determined from the records of the county assessor exceeds the total amount of any liens or other obligations against the property.

Erect. To build, construct, attach, hang, place, inscribe, suspend or affix any sign or to paint any wall sign.

Erosion Control. The design and installation of measures to control erosion and sedimentation during and after construction and to permanently stabilize soil exposed during and after construction using a combination of structural control measures, cover measure, and construction practices.

Erosion hazard. These are areas containing soils which, according to the U.S. Department of Agriculture Natural Resources Conservation Service Soil Survey Program, may experience significant erosion. Erosion hazard areas also include channel migration zones. See VMC 20.740.130 for designation of erosion hazard areas.

Essential Facility (Applies in Frequently Flooded Areas). This term has the same meaning as “essential facility” defined in ASCE 24. Table 1-1 in ASCE 24-14 further identifies building occupancies that are essential facilities.

Essential Public Facilities. Public facilities and privately-owned or operated facilities serving a public purpose that are typically difficult to site. They include but are not limited to: airports, state education facilities, state or regional transportation facilities, prisons, jails, other correctional facilities, and solid waste handling facilities. These facilities are of state-wide and regional significance, as opposed to facilities which only serve Clark County. Therefore, local transit service is not considered an essential public facility. Essential public facilities will be allowed in locations appropriate for the services provided and the people served.

Exception. Permission to depart from a specific design standard in this title.

Existing Manufactured Home Park or Subdivision (Applies in Frequently Flooded Areas). A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by the community.

Exotic. Any species of plants or animals that are not native to the area.

Expansion to an Existing Manufactured Home Park or Subdivision (Applies in Frequently Flooded Areas). The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Extraordinary hardship. Extraordinary hardship occurs when strict application of the provisions of 20.775 VMC Wetlands and Water Bodies Protection would prevent all reasonable economic use of the subject parcel.

Façade. Any exterior building face, from corner to corner and finished floor to eave, exclusive of any roof area.

Face. To front upon.

Family. See Household.

Feature. An artifact or set of artifacts which, due to its size and complexity, loses its integrity when moved, and therefore, cannot be transported as a unit to a laboratory or museum for study or display (e.g., a hearth, an ash lens, a storage pit, a cache of related artifacts, or a house floor).

Fence, Sight-Obscuring. A fence or evergreen planting constructed or arranged in such a way as to obstruct vision.

Findings. A written statement of the facts determined to be relevant by the approval authority as the basis for making its decision. The approval authority applies the relevant facts to the approval criteria or standards to reach its decision.

Fish and Wildlife Habitat Conservation Areas (FWHCAs). FWHCAs are areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and that, 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, including locally designated important habitats and species. These areas also include habitat for Endangered, Threatened and Sensitive species; Priority Habitats and areas associated with Priority Species; Riparian Management Areas; Habitats of Local Importance, and water bodies,; water bodies; forage fish spawning areas; naturally occurring ponds less than 20 acres; waters of the state; natural area preserves; natural resource conservation areas; and state wildlife areas. Fish and Wildlife Habitat Conservation Areas do not include artificial features or constructs such as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company.

Fish Habitat. Habitat which is used by any fish at any life stage at any time of the year, including potential habitat likely to be used by fish which could be recovered by restoration or management and includes off-channel habitat.(WAC 222-16-030)

Flood or Flooding.

1. A general and temporary condition of partial or complete inundation of normally dry land areas from:

    a. The overflow of inland or tidal waters.

    b. The unusual and rapid accumulation or runoff of surface waters from any source.

    c. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in subsection (1)(b) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

2. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water

exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in subsection (1)(a) of this definition.

Flood Elevation Study. An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards. Also known as a Flood Insurance Study (FIS).

Flood Insurance Rate Map (FIRM). The official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

Floodplain. The relatively flat area or lowlands adjoining the channel of a river, stream, watercourse, or other similar body of water that has been or may be susceptible to being inundated by floodwater. The floodplain includes the areas of special flood hazards (frequently flooded areas).

Floodplain Administrator. The community official designated by title to administer and enforce the floodplain management regulations.

Floodplain or Flood-Prone Area. Any land area susceptible to being inundated by water from any source. See “Flood or flooding.”

Flood-Proofing. Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents. Flood-proofed structures are those that have the structural integrity and design to be impervious to floodwater below the base flood elevation.

Floodway. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Also referred to as “regulatory floodway.”

Floor Area. The area of all floors, finish wall-to-finish wall, included in surrounding walls of a building.

Floor Area, Gross. The total enclosed area of all floors of a building measured to the outside face of the structural members in exterior walls and including halls, stairways, elevator shafts at each floor level, service mechanical equipment rooms, habitable basement or attic areas, and structured (not surface) areas for vehicle parking and loading.

Floor Area Ratio (FAR). A mathematical expression determined by dividing the total floor area of a building by the total area of the lot. It is determined by dividing the total gross floor area of all the buildings on a lot by the area of that lot, excluding public easements and right-of-ways, landscaped areas required under the requirements of this chapter and Chapter 20.740, Wetlands and Drainage Areas. For example, a floor area ratio of 2 to 1 (or 2:1) means that there are 2 square feet of gross floor area for every 1 square foot of lot area.

Frequently Flooded Areas. Areas of special flood hazards.

Front. Each side of a lot abutting a public street except state or federally designated highways.

Frontage. That portion of a parcel of property that abuts a dedicated public street, highway or approved private street, from property line to property line.

Fronting Street. Shall mean a public or private road providing for vehicular access to the boundary of a parcel of real property being proposed for development.

Full-time Employee. A person other than an independent contractor scheduled to be employed on a continuous basis for fifty-two weeks a year for an average of thirty-five hours or more per week.

Full-time Equivalent (FTE). The equivalent number of full-time students attending a post secondary school such as a trade school, college or university.

Fully Complete. Regarding land use applications, the determination by the Review Authority that the application and associated documentation contain sufficient information and detail to reach a final decision; such determination shall not be interpreted to mean that the application meets applicable standards.

Functionally Dependent Use (Applies in Frequently Flooded Areas). A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The

term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long-term storage or related manufacturing facilities.

Functionally Disabled. With respect to a person who has a physical or mental impairment which substantially limits one or more of such person's major life activities; has a record of having such an impairment, or being regarded as having such an impairment. Such term does not include current, illegal use of or addiction to a controlled substance.

Functions or Functions and Values of FWHCAs. Functions or functions and values are the beneficial roles served by FWHCAs. FWHCAs provide habitat for breeding, rearing, foraging, protection and escape, migration, and over-wintering. FWHCAs affect the quality of habitat by providing complexity of physical structure, supporting biological diversity, regulating stormwater runoff and infiltration, removing pollutants from water, and maintaining appropriate temperatures.

Functions or Functions and Values of Wetlands. Functions or functions and values are the beneficial roles served by wetlands. Wetlands improve water quality, maintain watershed hydrology (for example, by providing base stream flow during dry periods and controlling flooding), and provide habitat.

Garage, Private. A paved, covered, and enclosed motor vehicle parking space with a locking door, either attached or detached from the living unit. An accessory building or an enclosed accessory portion of the main building designed and/or used for shelter or storage of vehicles, boats and/or other vehicles owned or operated by the occupants of the main building.

Garage, Public. A structure or portion thereof other than a private or community garage used for the storage of self-propelled vehicles or trailers. Any garage, other than a private garage, open to use by members of the public.

Geographic Barrier. A natural or constructed land form or feature such as, but not limited to: a promontory, a ravine, a large or fast-moving body of water or a dike.

Geologic Hazard Areas. Geologic hazard areas include landslide, seismic, and erosion hazard areas designated pursuant to VMC 20.740.130(A) and are defined as areas that are not generally suitable for the siting of commercial, residential, or industrial development consistent with public health or safety concerns unless determined otherwise with a critical areas report

provided by a qualified professional in accordance with VMC 20.740.130(B) and in compliance with the performance standards of VMC 20.740.130(C).

Grab Sample. Regarding solid waste regulations, a single sample which is taken from a waste stream without regard to the flow in the waste stream and without consideration of time.

Grade. As defined in the City Adopted Building Code(s).

Grading. Any excavation, filling or combination thereof.

Grading Permit. The permit required under Chapter 70 of the City Adopted Building Code(s).

Gross Floor Area. Means the same as floor area.

Gross Leasable Area (GLA). The total floor area designed for both tenant occupancy and exclusive use. This includes both owned and leased areas.

Ground-disturbing Action or Activity. Any development, construction, or related operation which could alter the site, including but not limited to: tree or tree stump removal, road or building construction or grading.

Group Living. Living facilities for groups of unrelated individuals that include at least one person residing on the site who is responsible for supervising, managing, monitoring and/or providing care, training or treatment or residents

Guest House Dwelling. A detached accessory building designed, constructed and used for the purpose of providing temporary living accommodations for guest, or for members of the same household as that occupying the main structure, and containing no kitchen or kitchen facilities.

Guyed Tower. Any wireless communication support, using guy wires which are permanently anchored.

Habitable Floor Area. The total heated floor area in a structure devoted to living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces, and other similar areas are not counted as habitable floor area.

Habitat Corridor. Habitat corridors are areas of relatively undisturbed and unbroken tracts of vegetation that connect Fish and Wildlife Habitat Conservation Areas, priority habitats, areas identified as biologically diverse, or valuable habitats within a city or urban growth area. Habitat

corridors as required for Option 3A wetland buffers must meet the specific requirements outlined in VMC 20.740.140.

Habitats of Local Importance. FHWCAs which are not designated as Priority Habitats and Species by the Washington Department of Fish and Wildlife but are designated as locally significant by the city.

Hard surface. Hard surface is an impervious surface, a permeable pavement or a vegetated roof.

Hazardous Material. Any product, substance, commodity or waste in liquid, solid or gaseous form that exhibits a characteristic that presents a risk to water resources. Risk may be due to ignitability, toxicity, reactivity, instability, corrosivity, or persistence. This definition extends to all "dangerous wastes" and "hazardous substances" that are defined in WAC 173-303 (State Dangerous Waste Regulations). It also includes the chemicals and/or substances that are defined in the Federal Emergency Planning and Community Right to Know Act (EPCRA) and/or the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

Hazardous Waste. Means all dangerous and extremely hazardous waste as defined in RCW 70.105.010 except for moderate risk waste.

Hazardous Waste Storage. The holding of dangerous waste for a temporary period as regulated by State Dangerous Waste Regulations, Chapter 173-303 WAC.

Hazardous Waste Treatment. The physical, chemical or biological processing of dangerous waste to make wastes nondangerous or less dangerous, safer for transport, amenable for energy or material resource recovery, amenable for storage, or reduced in volume.

Hazardous Waste Treatment and Storage Facility, Off-Site. The treatment and storage facilities that treat and store wastes from generators on properties other than those on which the off-site facilities are located.

Hazardous Waste Treatment and Storage Facility, On-Site. The treatment and storage facilities that treat and store wastes generated on the same geographically contiguous or bordering property.

Headwaters. Springs, lakes, ponds or wetlands that provide significant sources of water to a stream.

Healthy Soil. Soil that is of good quality with the capacity to sustain plant, animal, and human life by providing nutrients, air and water space to infiltrate, pollutant absorption and filtering, and habitat.

Heritage Tree. A tree or group of trees designated as such by the city in Chapter 20.770 VMC, Tree Conservation.

High-Intensity Land Use. Land uses which are associated with high levels of human activity or substantial habitat impacts including Residential, Commercial, and Industrial zoning districts.

Historic District. A geographically definable area possessing a significant concentration, linkage or continuity of sites, buildings, structures or objects united by past events or aesthetically by plan or physical development.

Historic Structure (Applies in Frequently Flooded Areas). Any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or

4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

    a. By an approved state program as determined by the Secretary of the Interior, or

    b. Directly by the Secretary of the Interior in states without approved programs.

Home Occupation. A use conducted entirely within a residential building, which use is clearly incidental and secondary to the use of the dwelling for dwelling purposes, and complies with the criteria established by 20.860 VMC Home Occupations.

Homeowners Association. A nonprofit corporation or association operating under a recorded land agreement through which:

1. Each person owning or purchasing a lot in a planned unit or other described land area is automatically by such ownership or purchase a member; and

2. Each lot is automatically subject to a charge for a proportionate share of the expenses for the organization's activities, such as maintaining a common area and improvements.

Household. An individual, two or more persons related by blood or marriage, a group of two or more disabled residents protected under the Federal Fair Housing Amendment Act of 1988, adult family homes as defined under Washington State law, or a group living arrangement where six or fewer residents receive supportive services such as counseling, foster care, or medical supervision at the dwelling unit by resident or nonresident staff. Up to six residents not related by blood or marriage who live together in a single-family dwelling or in conjunction with any of the above individuals or groups, shall also be considered a household. For purposes of this definition, minors living with parent or legal guardian shall not be counted as part of the maximum number of residents.

Hydric Soil. Soil that is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper part. The presence of hydric soil shall be determined following the methods described in the Wetlands Delineation Manual defined in this chapter.

Hydrogeomorphic (HGM) Classification. System used to classify wetlands based on the position of the wetland in the landscape (geomorphic setting), the water source for the wetland, and the flow and fluctuation of the water once in the wetland.

Hydrophytic Vegetation. Macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. The presence of hydrophytic vegetation shall be determined following the methods described in the Wetlands Delineation Manual defined in this chapter. (Ord. M-4325 § 3, 2020; Ord. M-4179 § 62, 2016; Ord. M-4034 § 2, 2012)

20.150.040C Meanings of Specific Words and Terms I through L.

Impact. The effect of an activity on designated critical areas, their buffers or sensitive resources.

Impact Fee. The fee levied as a condition of issuance of a building permit or development approval to support necessary public improvements affected by the development such as the transportation system, park acquisition and development, and schools.

Impact, Indirect. Impacts resulting from activities in the environs of a designated critical area, its buffer or a sensitive resource. Indirect impacts can result from construction activities nearby (e.g., producing sediment that enters a wetland or noise that disturbs a species listed under the Endangered Species Act). Other examples of indirect impacts include: changing the hydrology of an area such that it reduces water flow to a wetland or water body; introducing a barrier to wildlife movement through an area (such as a road or facility with bright night lighting); or reducing the size of a resource such that it can no longer perform the functions at its former level. The relationship of a designated critical area, buffer or sensitive resource to its surroundings must be considered in evaluating indirect impacts.

Impact, Permanent. Impacts that result in the permanent loss of a designated critical area, its buffer or a sensitive resource.

Impact, Temporal. The long-term effects of an activity or development where functions can be replaced eventually but cannot and do not achieve a similar functionality in a short period of time. For example, replacing the functions of song bird habitat in a tree canopy provided by a 50 year-old palustrine forested wetland, may take over 20 years to develop at the impact site.

Impact, Temporary. Short-term effects lasting for a limited time and where functions can be replaced in a relatively short period of time (about one year). For example, replacing the functions of habitat for small mammals or water quality for palustrine emergent (PEM) wetlands (those principally vegetated with grasses and forbs) may be done in one growing season if the disturbance is not severe.

Impervious Surface. A nonvegetated surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A nonvegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common

impervious surfaces include, but are not limited to, structures, roof tops, walkways, patios, driveways, carports, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, haul roads and soil surface areas compacted by construction operations, and oiled or macadam or other surfaces which similarly impede the natural infiltration of stormwater.

Improvement. Any permanent structure including building, paving, or infrastructure that becomes part of, placed upon, or is affixed to property.

Infill Development. Development that occurs on underutilized or challenged parcels.

Infill Development Plan. A plan that is required to be submitted with infill development which identifies the existing and proposed lot characteristics, including applicable standards and incentives.

Infill Land Division. The division of an infill parent parcel using some or all of the standards contained in the Infill Development Ordinance.

Infill Parcels. Parcels that meet the eligibility criteria of this chapter or those parcels created by the land division of an infill parent parcel through the application of the standards in the Infill Ordinance.

Infill Parent Parcel. Regarding Infill Development, the larger parcel of land from which infill parcels are divided.

Ingress. Access or entry.

Inordinate Light Source. Lighting source that is exceptionally bright or outside normal industry standards as found by the planning official.

Integrated Pest Management. A sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks.

Intermittent stream. Surface streams with no observable flow during 30 consecutive calendar days in a normal water year.

Junkyard/Salvage Yard. A place where waste, discarded, or salvaged materials are bought, sold, exchanged, baled, packed, disassembled, or handled, including auto wrecking yards,

house wrecking yards, used lumber yards, and places where such uses are conducted entirely within a completely enclosed building, but not including pawn shops or establishments for the sale, purchase, or storage of used furniture and household equipment, used cars in operable condition, or salvaged materials incidental to manufacturing operations.

Kennel. Shall mean any premises on which four or more dogs older than 5 months are kept, excluding veterinary clinics, animal hospitals, and dog daycare facilities.

Kitchen. Any room or rooms, or portion thereof, used or intended to be used for cooking or the preparation of food.

Land-disturbing activity. Regarding erosion control regulations, any activity that results in a change in the existing soil cover (both vegetative and nonvegetative) or existing soil topography. Land-disturbing activities include, but are not limited to, demolition, reconstruction, construction, clearing, grading, filling, and excavation.

Land Form Alteration. Any man-made change to improved or unimproved property including, but not limited to, the addition of buildings or other structures; mining; quarrying; dredging; filling; grading; earthwork construction; stockpiling of rock, sand, dirt or gravel or other earth material; paving; excavation or drilling operations located within the area of special flood hazard.

Landscaping. To beautify or improve a section of ground by contouring the land and planting flowers, shrubs or trees. Landscaping may also include nonvegetative improvements such as courtyards, fountains, pedestrian walkways, plazas, and medians.

Landslide hazard areas. Areas subject to landslides based on a combination of geologic, topographic, and hydrologic factors, including areas susceptible to landslide because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors; this includes, at a minimum, the following:

1. Areas of historic failures, such as:

    a. Areas delineated by the U.S. Department of Agriculture Natural Resources Conservation Service as having a significant limitation for building site development;

b. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey (USGS) or DNR;

c. Areas with all three of the following characteristics:

i. Slopes steeper than 15 percent;

ii. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and

iii. Springs or groundwater seepage.

2. Areas that have shown movement during the Holocene epoch (from 10,000 years ago to the present) or that are underlain or covered by mass wastage debris of this epoch.

3. Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;

4. Slopes having gradients steeper than 80 percent subject to rockfall during seismic shaking;

5. Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action, including stream channel migration zones;

6. Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and

7. Any area with a slope of 40 percent or steeper and a vertical relief of 10 or more feet except areas composed of bedrock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least 10 feet of vertical relief.

Lattice Tower. A wireless communications support structure, which consists of a network of vertical and horizontal supports and crossed metal braces, forming a tower that is usually triangular or square in cross-section.

Ldn. Annual Average Day/Night Sound Level. The "Ldn, Day/Night Sound Level," in decibels, is the 24-hour logarithmic average sound level, from midnight to midnight, obtained after adding

10 decibels to sound levels in the night from midnight to 7:00 a.m., and from 10:00 p.m. to midnight (0000 to 0700, and 2200 to 2400 hours), and then logarithmically averaged day-to-day over a 12-month period.

Legal Owner. The owner of record, as shown by the records of Clark County.

Livestock. Any horse, beef or dairy cattle, sheep, goat, llama, alpaca, mule, jack, jenney, burro, domesticated hare, rabbit, emu, ostrich, poultry or similar animal.

Liquefaction Hazard Areas. Liquefaction hazard areas are areas typically underlain by cohesionless soils of low density, usually in association with a shallow groundwater table, that lose substantial strength during earthquakes.

Load Space or Loading Area. An off-street space or berth on the same lot or parcel with a building or use, or contiguous to a group of buildings or uses, for the temporary parking of a vehicle which is loading or unloading, merchandise or materials.

Local Public Facility. A land use designed to serve the needs of the local neighborhood or community affected by the impact(s) of development. Local Public Facilities include, but are not limited to: elementary, middle, and high schools; fire stations; police stations; parks; and transit facilities. Local Public Facilities shall not include land use(s) of regional or community-wide significance, such as airports, colleges, hospitals, regional parks or community centers.

Logo. A group of letters, typically stylized, or symbols that represent a word, group of words or business name.

Lot Area. The computed area contained within the lot lines; said area to be exclusive of street or alley rights-of-way or access easements, Bonneville Power Administration (BPA) easements, water detention/retention ponds, wetlands and wetland buffers which are delineated and recorded on plats and short plats.

Lot, Corner. A lot abutting upon two or more streets at their intersection, or upon two parts of the same street; such street or parts of the same street forming an interior angle of less than 135° within the lot lines.

Lot Coverage. That percentage of the total lot area covered by structures, including all projections except eaves, balconies, bay windows, or uncovered deck 42 inches or less above grade.

Lot Depth. The average distance measured from the front lot line to the rear lot line. In the case of a corner lot, the depth shall be the length of its longest side lot line.

Lot, Estate. A lot in a subdivision that contains a house and outbuildings constructed prior to the subdivision. The estate lot cannot be larger than one acre in area, and is exempt from the minimum density requirements of any residential district.

Lot, Flag. A lot generally in the shape of a flag where access is typically by a narrow, private right-of-way or driveway.

Lot, Interior. A lot or parcels of land other than a corner lot.

Lot, Legal. A parcel of land used or which is capable of being used under the regulations of this title, lawfully created as such in accordance with the subdivision laws or ordinances in effect at the time of its creation.

Lot Line. Any line bounding a lot as herein defined.

Lot Line, Front. The property line abutting a street or the edge of a private street, or primary access. For corner lots the front line is that with the narrowest frontage. When the lot line abutting a street is curved, the front lot line is the chord or straight line connecting the ends of the curve. For a flag lot, the front lot line is the shortest lot line adjoining the pole portion of the lot, excluding the unbuildable portion of the pole.

Lot Line, Rear. A lot line not abutting a street that is opposite and most distant from the front lot line.

Lot Line, Side. Any lot line that is not a front or a rear lot line.

Lot of Record. A lot shown on the records of the County Auditor at the time of the passage of an ordinance or regulation establishing the zoning district in which the lot is located.

Lot Size, Minimum. The area determined to be the minimum average lot size for each underlying zoning district prior to application of any lot size reduction allowed.

Lot, Through. Lot having front and rear frontage on two streets and/or highways. Lots with rear alley frontage shall not be considered through lots.

Lot Width. The horizontal distance between the side lot lines measured within the lot boundaries or the average horizontal distance measured halfway between the front and rear setback lines.

Low Impact Development (LID). Low impact development is a stormwater and land management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.

Low Impact Development Best Management Practices (BMPs). Low impact development best management practices are distributed stormwater management practices, integrated into a project design, that emphasize pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration. LID BMPs include, but are not limited to, bioretention, rain gardens, permeable pavements, roof downspout controls, dispersion, soil quality and depth, vegetated roofs, minimum excavation foundations, and water re-use.

Low Impact Development Principles. Low impact development principles are land management strategies that emphasize conservation, use of onsite natural features, and site planning to minimize impervious surfaces, native vegetation loss, and stormwater runoff.

Lowest Floor. The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosed area below the base flood elevation, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of VMC 20.740.120(J)(8)(c), (J)(10)(d), or (J)(11)(e).

Low-Income Housing. Housing for which the monthly housing expense is no greater than thirty percent of eighty percent of the median family income adjusted for family size for Clark County, Washington, as reported by the United States Department of Housing and Urban Development. For multi-family housing, this definition shall apply only to the number of units within such housing development as are required to comply with this limitation on monthly housing expense.

Low-Intensity Land Use. Land uses which are associated with low levels of human activity or low habitat impacts, including Open Space Greenway: Lettuce Fields and Vancouver Lake Lowlands and Open Space Natural zoning districts.

Low Noise Impact. Interior noise levels of Ldn 45 or less, considered for the purposes of Chapter 20.520 VMC, Noise Impact Overlay District, as acceptable for residential purposes. (Ord. M-4179 § 63, 2016; Ord. M-4154 § 2, 2016; Ord. M-4034 § 2, 2012)

20.150.040D Meanings of Specific Words and Terms M through P.

Main. See Water Main.

Maintain. To allow to continue in existence. When the context indicates, the word shall mean to preserve and care for a structure, or to improve in condition an area to such an extent that it remains attractive, safe, and presentable and carries out the purpose for which it was installed, constructed or required.

Major Thoroughfare. The principal, minor, collector arterials, and State highways, as shown on the Arterial Street Plan adopted in compliance with Chapter 35.77 RCW.

Management Plan. A plan detailing how operations and maintenance activities subject to the provisions of VMC 20.740 will be performed.

Manufacture. Includes production, processing, assembling, packaging or treatment of semi-finished or finished products from raw materials or previously prepared materials or components.

Manufactured Home, Designated – means a manufactured home constructed after June 15, 1976, in accordance with state and federal requirements for manufactured homes. Conforms to federal Manufactured Home Construction and Safety Standards (HUD Code – “Red Label”) rather than to the Building Code (“Gold Label”) requirements.

Manufactured Home, Mobile – Means a structure transportable in one or more sections, which is built on a permanent chassis, and is designed for use with or without a permanent foundation when attached to the required utilities. (Generally built before June 15, 1976). "Mobile manufactured homes" are not "recreational vehicles".

Manufactured Home, Modular – Means any home built in modules at a factory. Modular homes conform to all state and local building codes. Modules are transported on truck beds, and then joined together at the site. They are inspected by local officials. (Regulated under the IBC standards – State Building Code).

Manufactured Home, New – means any manufactured home required to be titled under Title 46 RCW, which was not titled to retail purchaser before July 1, 2005, and was not a "used mobile home" as defined in RCW 82.45.032. (Regulated under the HUD construction and safety standards).

Manufactured Home Development. An existing site containing spaces with required improvements and utilities that are leased for the long-term placement of manufactured homes. This term shall also include "mobile home parks" as that term is used in other titled of the Vancouver Municipal Code (VMC).

Manufactured Home Subdivision. An existing subdivision created for the placement of manufactured homes on individual lots.

Marquee. A roofed structure attached to and supported by the building and projecting over public property.

Master Plan. A comprehensive, long-range site plan for a development project. The project may be located on a single parcel or on several contiguous parcels which are owned by one or more parties working cooperatively and collectively, and is usually implemented in phases.

Mean Sea Level. For purposes of the National Flood Insurance Program, the vertical datum to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

Meandering Sidewalks. Those sidewalks separated by a nonuniform planting strip from the back of the curb.

Micro Facility. Regarding wireless communication facilities, a single antenna, or group of antennae, co-located on an existing tower, building or other appurtenance that is small in size and visually unobtrusive.

Mitigation. Mitigation is a six-step sequencing process used to reduce the severity of effects from activities that potentially affect sensitive resources:

1. Avoiding the impact altogether by not taking a certain action or parts of an action;

2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;

3. Rectifying the impact by repairing, rehabilitating or restoring the affected environment;

4. Reducing or eliminating the impact over time by preservation, and maintenance operations during the life of the action;

5. Compensating for the impact by replacing, enhancing or providing substitute resources or environments; and/or

6. Monitoring the impact and taking appropriate corrective measures.

Mitigation, Compensatory. Compensation for potential impacts to functions and values of critical areas (including fish and wildlife habitat, frequently flooded areas, geologic hazard areas, and wetlands) and their buffers.

Mixed-Use Development. The development of a tract of land, building or structure with a variety of complementary and integrated uses, such as, but not limited to, residential, office, manufacturing, retail, public or entertainment, in a compact urban form.

Mixed-Use Structure. A single structure containing at least two complementary, integrated, or mutually-supporting uses (such as housing, offices, manufacturing, retail, public service, or entertainment). The structure must achieve physical and functional integration within itself.

Moderate-Intensity Land Use. Land uses which are associated with moderate levels of human activity or substantial habitat impacts including Open Space Parks and Open Space Greenways: General zoning districts.

Mode. Refers to the means of transportation used by employees, including single-occupant vehicle, carpool, vanpool, transit, bicycle, and walking.

Monopole Tower. A wireless communications support structure, consisting of a single pole to support antennae and connecting appurtenances.

National Register of Historic Places. The national listing of properties significant to the nation's cultural history because of their documented importance to history, architectural history, engineering or cultural heritage.

Naturally occurring ponds. Ponds less than twenty acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds. Naturally occurring ponds do not include ponds deliberately designed and created from dry sites, such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and landscape amenities, unless such artificial ponds were intentionally created for mitigation.

Native. Native plants are those species on the City of Vancouver's Native Plant Species list (available from the Planning Official).

Native Vegetation. Vegetation that encompasses both that occurring naturally and vegetation well adapted to current and anticipated environmental conditions in this region.

New Construction. For the purposes of VMC 20.740.120, Frequently Flooded Areas, "new construction" means structures for which the "start of construction" commenced on or after September 5, 2012.

New Manufactured Home Park or Subdivision (Applies in Frequently Flooded Areas). A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of adopted floodplain management regulations by the community.

Noise Contour. The graphic depiction of the spatial extent to which an average noise level affects the area surrounding a source of noise. The contour is a line depicting equal points of impact.

Noise Contour, 65 Ldn. The most current 65 Ldn Noise Contour, as annually updated by the Port of Portland for the Portland International Airport using the criteria and methodology adopted by the Federal Aviation Administration for the purpose of establishing noise contours as a part of airport planning, or as provided by other objective sources for noise generations other than the Portland International Airport.

Noise, Environmental. Shall mean the intensity, duration, and character of sounds from any land use, measured at the property line of the receiving property.

Noise Impact. The extent to which a level of noise interferes with the full utilization of land.

Nonconforming, Legal. A use of land, building, structure or use which lawfully existed at the time of the adoption of this title or of any amendment thereto, but which does not conform with the use or development regulations imposed by this title or such amendment thereto.

Noncontributing. A property which either does not date to the historic period or has not retained sufficient physical integrity so as to convey its historic character.

Normal water year. A twelve-month period (October 1-September 30) with average precipitation based upon data from the past 50 years.

Noxious weeds. Non-native plants which are destructive, competitive, and difficult to control as defined by the Washington State Noxious Weed Control Board.

Nudity. Regarding Adult Businesses, the showing of the human male or female genitals or pubic area, the showing of the female breast, with less than a fully opaque covering of any part of the nipple, or the showing of the covered male genitals in a discernibly turgid state.

Obligate, facultative wet, and facultative. Groupings of plants according to their frequency of occurrence in wetlands. Obligate wetland plants almost always (99 percent probability) occur in wetlands under natural conditions. Facultative wetland plants usually (67 percent-99 percent probability) occur in wetlands. Facultative plants are equally likely (34 percent-66percent probability) to occur in wetlands or nonwetlands. Such groupings are more fully defined in the Wetlands Delineation Manual defined in this chapter.

Obstruction. Any dam, wall, embankment, levee, dike, pile, abutment, projection, excavation, channel modification, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure or matter which is in, along, across or projecting into any channel, watercourse or regulatory flood hazard area; and which may impede, retard or change the direction of the flow of water, either in itself or by catching or collecting debris carried by such water or which is placed where the flow of water might carry the same downstream to the damage of life or property.

Occupant. Any individual living or sleeping in a building or having possession of a building or space therein. Unless otherwise stated, occupant is synonymous with tenant.

Occupancy Certificate. A city certificate allowing the use of a building or structure after it has been determined that all the requirements of applicable ordinances have been met.

Off-Site Impact. A condition that creates, imposes, aggravates or leads to inadequate, impractical, unsafe or unhealthy conditions on a site proposed for development or on off-site property or facilities. This includes, but is not limited to, noise, glare, and odor.

Off-Site Improvement. Improvements required to be made off-site to address impacts identified from an application for development and including, but not limited to, road widening and upgrading, storm water facilities, and traffic system improvements.

100-Year Flood. The flood having a 1 percent chance of being equaled or exceeded in any given year. Also referred to as the “base flood.”

100-Year Flood Elevation. The elevation that the 100-year flood is expected to reach. Also referred to as the “base flood elevation.”

Open Record Predecision Hearing. An open record hearing as defined by 197-11-775 WAC, which is held before the Planning Commission or Hearings Examiner prior to the closed record approval hearing before the City Council.

Oregon white oak woodland(s). In accordance with WDFW’s Priority Habitat & Species (PHS) List, these are stands of oak or oak/conifer associations where canopy coverage of the oak component of the stand is twenty-five percent, or where total canopy coverage of the stand is less than twenty-five percent, but oak accounts for at least fifty percent of the canopy coverage. The latter is often referred to as oak savanna. In non-urbanized areas west of the Cascades, priority oak habitat consists of stands less than one acre in size. In urban or urbanizing areas, single oaks or stands less than one acre may also be considered a priority when found to be particularly valuable to fish and wildlife.

Ordinary high water mark. (OHWM). That mark which is found by examining the bed and banks of a water body and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years that the soils and vegetation have a character distinct from that of the abutting upland area. It also can also be established by fluctuations of water and indicated by physical characteristics such as a clear, natural line

impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. Where the ordinary high water mark cannot be found, it shall be the line of mean high water in areas adjoining fresh water. [WAC 173-22-030(11)]

Ordinary Repair and Maintenance. The work for which a permit issued by the City of Vancouver is not required by law, and where the purpose and effect of such work is to correct any deterioration or decay of or damage to the real property or structure appurtenance therein and to restore the same, as nearly as may be practicable, to the condition prior to the occurrence of such deterioration, decay or damage.

Original Parcel. A lot, parcel or tract created in compliance with all regulations in effect at the time it was initially conveyed, that constitutes the basis for considering the appropriate provisions of this title for platting or short platting; provided, that any lot, parcel or tract conveyed in its present configuration prior to December 18, 1978 (the passage of the short plat ordinance, M-1930) which complies with current zoning requirements, shall be conclusively presumed to have been lawfully created.

Overlay Area. A special geographic area designated in a capital facilities plan to be served by a system improvement, which area is not generally contiguous with an established service area. An overlay area may be local (i.e., covering only a portion of a single service area), regional (i.e., covering portions or all of several service areas), or county wide (i.e., covering both incorporated and unincorporated areas).

Overlay Zone or District. A designated area within a base zoning district for which specific land use regulations apply, in addition to the base zoning requirements.

Owner. The owner of record of real property as shown on the tax rolls of the County, or a person purchasing a piece of property under contract. For the purpose of this title, in terms of violations and binding agreements between the city and the owner, the owner shall also mean a leaseholder, tenant, or other person in possession or control of the premises or property at the time of agreement, violation of agreement, or the provisions of this title.

Ownership Interest. A property interest in an existing single-family residence under a recorded deed or under a contract of purchase, recorded mortgage, recorded deed of trust or recorded lease by which the applicant is responsible under penalty of forfeiture, foreclosure or default for payment of real property taxes and/or local improvement district assessments. The

term shall also include a share ownership in a cooperative housing association, corporation or partnership if the applicant can establish that his or her share represents the specific unit or portion of such structure in which he or she resides.

Painted Wall or Wall Graphic. An advertisement painted directly on the wall of a building.

Parking Area, Public. An open area other than a street or other public way, used for the parking of automobiles and available to the public whether for a fee, free of charge or as an accommodation for clients or customers.

Parking Space. A permanently surfaced and marked area not less than that specified in Chapter 20.945 VMC Parking and Loading, excluding paved area necessary for access, for the parking of a motor vehicle.

Parking Storage. A location where vehicles are placed or left for maintenance, repair, sale, rental or future use.

Partition. See subdivision.

Party of Record. A person or group who makes an appearance in a proceeding through the submission of either written or verbal evidence. Groups shall designate one person as a representative or contact.

Pedestrian Area. Any sidewalk, walking trail, courtyard, plaza or other area intended primarily for use by pedestrians.

Perimeter. The boundaries or borders of a lot, tract or parcel of land.

Permitted Use. Those uses allowed as a matter of right within certain zoning districts provided that such use is in accordance with requirements of the particular district and general conditions stated elsewhere in this title.

Permittee. The person who is proposing to use or who is using the land pursuant to any permit required herein.

Person. Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns. This definition includes all federal, state or local governmental entities.

Person with Functional Disabilities. A person who, because of a recognized chronic physical, mental condition or disease, is functionally disabled to the extent of:

1. needing care, supervision or monitoring to perform activities of daily living or instrumental activities of daily living;
2. needing supports to ameliorate or compensate for the effects of the functional disability so as to lead as independent a life as possible;
3. having a physical or mental impairment which substantially limits one or more of such person's major life activities;
4. having a record of having such an impairment;
5. being regarded as having such an impairment, but such term does not include current, illegal use of or active addiction to a controlled substance.

Pervious Surface. Pervious surface is a surface material that allows stormwater to infiltrate into the ground. Examples include lawn, landscape, pasture, native vegetation areas, and permeable pavements.

Petroleum. Crude oil, gases (including natural gas), natural gasoline, and other related hydrocarbons, oil shale, and the products of any of such resources.

Petroleum/Oil Refinery. An industry engaged in refining crude petroleum/oil into refined petroleum/oil. Petroleum/oil refining involves one or more of the following activities: 1) fractionation; 2) straight distillation of crude oil; and 3) cracking.

Planned Action Ordinance. The applicable city ordinance establishing the geographic boundaries, impact thresholds, and mitigation measures for the particular planned action subarea in which a planned action project is located.

Planned Action Project or Development Application. A project or application for a project which meets the criteria for designation as a planned action under the provisions of Section 43.21.031 RCW, Section 197-11-164 WAC, Section 20.790.630, and the particular planned action ordinance for the planned action subarea in which the project is located.

Planned Action Subarea. A specific geographic area, less extensive than the city's jurisdictional boundaries, for which a subarea plan under Chapter 36.70A RCW and an EIS under Chapter

43.21C RCW have been prepared and adopted to provide for prospective environmental review and comprehensive planning for future development.

Planning Commission. The Planning Commission of the City of Vancouver, Washington.

Planning Official. The city official within the community development department charged with administratively approving land use permits or her/his designate.

Planting strip. The area from the back of curb and the front of sidewalk or the area in the raised median used for grass or approved landscaping plants.

Plat. A final map, diagram or written document containing all the descriptions, specifications, and provisions concerning a subdivision of land.

Plat, Final. The final drawing of the subdivision or short subdivision and dedication prepared for filing for record with the Clark County Auditor and containing all elements and requirements set forth in this title and in state law.

Plat, Preliminary. An orderly and approximate drawing to scale of either a proposed subdivision or short subdivision showing the general layout of streets and alleys, lots and blocks, and other required submittals which shall furnish a basis for the approval or disapproval.

Poultry. Domesticated fowl such as chickens, ducks, geese and similar, and all game birds which are legally held in captivity.

Predetermination, Archaeological. A procedure by which an archaeologist makes a determination of the probable existence (presence or absence) of an archaeological site in a disturbance area and a recommendation to proceed or not to proceed with an archaeological resource survey in compliance with the provisions of this chapter.

Predominant. Regarding Infill Development, the most frequently occurring residential design characteristic along both sides of the road frontage from intersection to intersection (or block face).

Predictive Model. The classification of property according to the probability of its having archaeological resources. The probability levels are low, low-moderate, moderate, moderate-high, and high, which are based on a combination of information from inventories and predictive models provided by DAHP, other agencies, tribal governments and local permit

review. The probability levels within the urban growth boundary of the city are generally shown on maps provided by Clark County Geographic Information Systems.

Premises. A lot or number of lots on which is situated a building or group of buildings designed as a unit, or on which a building or group of buildings are to be constructed.

Preserved. Leaving in the present condition.

Primary. The largest or most substantial use or element on the property, as in "primary" activity, residence, entrance, etc. All other similar elements are secondary in size or importance.

Priority Area: The area within a Priority Species' natural geographic distribution within which protective measures and/or management actions are need to (1) support viable populations over the long term and (2) avoid creating isolated subpopulations.

Priority Habitat: A State of Washington habitat type with unique or significant value to many species; an area with one or more of the following attributes: (1) comparatively high fish and wildlife density; (2) comparatively high species diversity; (3) important breeding habitat; (4) important seasonal ranges; (5) important movement corridors; (6) limited availability; (7) high vulnerability to habitat alteration; or (8) unique or dependent species. Examples of Priority Habitats include, but are not limited to, instream, riparian, Oregon white oak woodlands, and freshwater wetlands.

Priority Habitats and Species (PHS). Priority Habitats and Species are important fish and wildlife species and habitats as determined by the Washington State Department of Fish and Wildlife. Priority Habitats include endangered, threatened, sensitive, candidate, and vulnerable species and habitats deemed priorities of WDFW and reflective of best available science.

Priority Species. A State of Washington fish or wildlife species requiring protective measures and/or management actions to ensure its survival. A Priority Species fits one or more of the following criteria: (1) is a State-listed endangered, threatened, sensitive, or candidate species; (2) has vulnerable aggregations; or (3) is of recreational, commercial, and/or tribal importance. Examples of Priority Species include, but are not limited, to steelhead/rainbow trout, bull trout/Dolly Varden, great blue heron, cavity-nesting ducks, fisher, and elk.

Private Open Space. The space included within a development for recreational use.

Process Type. Shall mean the process by which a land use decision is rendered.

Process Type, Legislative. A legislative action or decision is the making of law, as opposed to the application of existing law to a particular use, such as the adoption of or amendment to a comprehensive plan or development regulation.

Process Type, Quasi-Judicial. Refers to an action or decision that requires substantial discretion or judgment in applying the standards or criteria of this title, and usually involves a public hearing.

Prohibited Use. A use that is not permitted in a base zoning, overlay or plan district. Any use that is not specifically enumerated in this title as a permitted or conditional use or has not been determined by the planning official to be a legal nonconforming use.

Project Area. The portion of a site where development activity will take place.

Project Improvements. Project improvements shall mean site improvements and facilities that are planned and designed to provide service for a particular development project and that are necessary for the use and convenience of the occupants or users of the project, and are not system improvements. No improvement or facility included in the capital facilities plan shall be considered a project improvement.

Project Permit. Any land use or environmental permit or approval for a proposed action which is subject to the procedural provisions of Chapter 20.210 VMC.

Protected Area. All land where no construction activity, tree removal, vegetation removal or soil compaction is allowed and includes the CRZ of those trees to be preserved.

Public Facilities. Regarding the Public Facilities Master Plan Ordinance:

1. Governmental facilities such as civic centers; libraries; auditoriums; police, fire and other public safety facilities; public streets; parks, open space and recreational facilities; and water, sewer; and storm water treatment facilities;
2. Public transit facilities including airports, train stations and transit centers;
3. Publicly and privately-owned medical centers;
4. Public and private elementary, middle and high schools;
5. Public and private colleges and universities; and

6. Religious institutions.

Public Improvement Plans. The technical drawings of the design and proposed construction of such items as streets, water and sewer systems, drainage and erosion control systems, meeting the requirements established by the City of Vancouver, Washington.

Public Place of Amusement, Public Amusement/Entertainment, and Public Entertainment. An amusement, diversion, entertainment, show, performance, exhibition, display or like activity, for the use or benefit of a member or members of the public, or advertised for the use or benefit of a member or members of the public, held, conducted, operated or maintained for a profit, either direct or indirect. (Ord. M-4402 § 3(C), 2023; Ord. M-4380 § 3, 2022; Ord. M-4325 § 3, 2020; Ord. M-4179 § 64, 2016; Ord. M-4170 § 6, 2016; Ord. M-4034 § 2, 2012)

20.150.040E Meanings of Specific Words and Terms Q through T.

Qualified Professional. A person with experience and training in the pertinent scientific discipline, and who is a qualified scientific expert with expertise appropriate for the relevant critical area subject in accordance with WAC 365-195-905(4).

1. *Urban Forestry.* Qualified professionals in urban forestry must have academic and field experience that makes them competent in urban forestry. This may include arborists certified by the International Society of Arboriculture or foresters certified by the Society of American Foresters. Qualified professionals in urban forestry must possess the ability to evaluate the health and hazard potential of existing trees, and the ability to prescribe appropriate measures necessary for the preservation of trees during land development.

2. *Critical Areas.* Qualified professionals in critical areas must have obtained a BS or BA or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology or a related field, and two years of related work experience. In addition:

    a. A qualified professional for frequently flooded areas or a must be a registered professional engineer or hydrogeologist licensed in the State of Washington with experience in the analyses required for the relevant

hazard(s). A qualified professional may also be an architect where provided by state or federal law.

b. A qualified professional or specialist for wetlands must have a minimum of five years experience in wetland science, including experience preparing wetland reports for review by regulatory agencies or professional certification (Professional Wetland Scientist Certification).

c. A qualified professional for Fish and Wildlife Habitat Conservation Areas must be a qualified ecologist; biologist; or person with an environmental science degree, professional experience, certification, and/or licensure related to the relevant type of habitat in question.

d. A qualified professional for Geologic Hazard Areas must be a Washington-licensed geologist or engineering geologist or a Washington-registered professional geotechnical engineer.

Reasonably Funded. A mitigation measure or other transportation system improvement scheduled for completion and designated as funded upon adoption of the most recent version of the Six-Year Street Plan.

Reasonably Safe from Flooding. Development that is designed and built to be safe from flooding based on consideration of current flood elevation studies, historical data, high water marks and other reliable data known to the community. In unnumbered A zones where flood elevation information is not available and cannot be obtained by practicable means, "reasonably safe from flooding" means that the lowest floor is at least two feet above the highest adjacent grade.

Recreational Vehicle. A vehicle which is built on a single chassis, 400 square feet or less when measured at the largest horizontal projection, designed to be self-propelled or permanently towable by a light-duty truck, and designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use.

Regional Industry. An industrial or commercial land use which provides significant community-wide or regional economic benefit through the creation of new economic growth and employment opportunity.

Regional Public Facility. A land use which is designed to serve the needs of the community or region affected by the impact(s) of development. Regional Public Facilities include: airports, colleges, hospitals, regional parks or community centers.

Regulatory Flood. The flood used to define the outer boundary lines of the Flood Fringe. The 100-year flood will be the regulatory flood for the purposes of regulations contained in this title, but a lesser or greater flood limit may be set in any ordinance applying FF (Flood Fringe) or FW (Floodway) zoning to any land. The regulatory flood shall be based upon Flood Insurance Rate Maps (FIRMs) provided by the Federal Insurance Administration (FIA).

Remodel. An internal or external modification to an existing building or structure that does not increase the site coverage.

Remove or Removal. The act of removing a tree by digging up, cutting down or any act which causes a tree to die, significantly impacts its natural growing condition and/or results in diminished environmental benefits or a hazard tree: including but not limited to, damage inflicted on the root system by machinery, storage of material or soil compaction, changing the ground level in the area of the tree's root system, damage inflicted on the tree permitting infections or infestation, excessive pruning, paving with concrete, asphalt or other impervious material within the drip-line or any other action deemed harmful to the tree.

Residential Care Center. Any state or federally approved facility, other than a clinic, used as a residence for the care or rehabilitation of dependent children, the elderly, and the physically and/or mentally handicapped. Residential care centers shall provide care to seven or more residents.

Residential Care Home. Any state or federally approved dwelling used as a residence for the care or rehabilitation of dependent children, the elderly, and the physically and/or mentally handicapped. Residential care homes shall provide care for eight or fewer residents.

Restoration. Measures taken to restore an altered or damaged natural feature including:

1. Active steps taken to restore damaged critical areas or their buffers to the functioning condition that existed prior to an unauthorized alteration; and

2. Actions performed to reestablish structural and functional characteristics of the critical area that have been lost by alteration, past management activities, or catastrophic events. See also wetland creation, re-establishment, and rehabilitation.

Right-of-Way, Public. The property held by the city or other governmental jurisdiction for existing and/or future public access including land occupied or intended to be occupied by a street, crosswalk, pedestrian and bike paths, railroad, road, electric transmission line, oil or gas pipeline, water main, sanitary or storm sewer main, street trees or other special use. The usage of the term right-of-way for land division purposes shall mean that every right-of-way hereafter established and shown on a plat or map is to be separate and distinct from the lots or parcels adjoining such right-of-way and not included within the dimensions or areas of such lots or parcels.

Riparian area. The area adjacent to aquatic systems with flowing water (e.g., rivers, perennial or intermittent streams, seeps, springs, or lakes) that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. Riparian areas are three dimensional: longitudinal up and down streams, lateral to the width of the riparian ecosystem, and vertical from below the water table to above the canopy of mature site-potential trees. Riparian areas are defined differently in and for the purposes of the Vancouver Shoreline Management Master Program.

Riparian Buffer The Riparian Buffer is the area extending from the Riparian Management Area outward a specified distance and functions to protect the Riparian Management Area and stream, river, or lake. In situations where a channel migration zone (CMZ) is present, this occurs within one site potential tree height (SPTH) measured from the edges of the CMZ. Together, the Riparian Management Area and Riparian Buffer are the areas that have the potential to provide full riparian functions and combine to form the Riparian Area. See Figure 20.740-1 or Figure 20.170.030-6.

Riparian Management Area. The regulated area that includes the land adjacent to a lake, stream, or river measured horizontally from the ordinary high water mark to a specified distance from the waterbody. Together, the Riparian Management Area and Riparian Buffer are the areas that have the potential to provide full riparian functions and combine to form the Riparian Area. See Figure 20.740-1 or Figure 20.170.030-6.

Road. Means the same as street.

Roof. The exterior surface and its supporting structure on the top of a building.

Roof Line. The uppermost line of the roof of a building or, in the case of an extended facade, the uppermost height of said facade.

Runway. A defined area at an airport designed and constructed to accommodate the landing and takeoff of aircraft along its length.

Satellite Earth Station. The facilities used for reception and processing of programming services from a satellite prior to transfer to terrestrial distribution systems or for processing of programming and services from a terrestrial source before transmission via satellite.

School. An institution primarily engaged in academic instruction for all or part of the K through 12 educational program, public, parochial or private, and recognized or approved as such by the state. A school may also include the following uses: common accessory uses such as associated meeting rooms, auditoriums, athletic facilities and support facilities related to school district operations (e.g., offices, kitchens, counseling centers, head start, childcare, adult education, and family support centers) except for transportation, warehouse/storage, and maintenance facilities.

School, Pre. An institution primarily in child training and academic instruction prior to the mandatory first grade.

School, Specialized Instructional. An institution providing instruction and training in a specific service, art, dance, driving, and music. Includes vocation or trade such as business, real estate, travel, auto machinery repair, welding, and skill center.

Search Ring. Regarding wireless communications facilities, a geographic area identified by the communications service provider as necessary within which to locate a wireless facility or to enhance or expand its service.

Secure Community Transition Facility. A residential facility for persons civilly committed and conditionally released from a total confinement facility, operated by the Secretary of Washington Social and Health Services or under contract with the secretary pursuant to RCW 71.09.020(10) as described in RCW 71.09.250 or as amended.

Seismic Hazard Area. These are areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, soil liquefaction, or debris flow. See VMC 20.740.140 for designation of seismic hazard areas.

Senior Housing. Housing limited to persons aged 62 years or older.

Sensitive Areas. For the purposes of Chapter 20.770 VMC Tree, Vegetation, and Soil Conservation, this includes streams, geologically hazardous areas, fish and wildlife habitat areas, wetlands, and their associated buffers.

Sensitive Resources. Any of the following types of sensitive areas and resources or cultural resources, when properly identified, designated or recorded as such by the applicable local, state or federal regulations:

1. Known archaeological and historical sites (to be recorded with the state);
2. FWHCAs (as identified in VMC 20.740.110);
3. Frequently Flooded Areas (as identified in VMC 20.740.120);
4. Geological Hazard Areas (as identified in VMC 20.740.130);
5. Wetlands (as identified in VMC 20.740.140); and
6. Tree tracts, set aside for the preservation of tree groves, as defined in VMC 20.770 and approved by the city's Urban Forester; and
7. Riparian areas, as identified in the Vancouver Shoreline Management Master Program.
8. Natural soils and native vegetation preserved as part of a low impact development.

SEPA. State Environmental Policy Act, as amended.

SEPA Rules. Chapter 197-11 WAC, as adopted, revised, and amended by Ecology.

Service Area. A geographic area described in the city capital facilities plan in which a defined set of public facilities provides service to development within the area, provided, that the service area for schools shall be the applicable school district. Service areas may be separately described for each type of public facility.

Serviceable. For the purposes of 20.775 VMC, Wetland and Water Bodies Protection, serviceable means presently usable.

Setback. The minimum allowable horizontal distance from a given point or line of reference, such as a property line, to the nearest vertical wall or other element of a building or structure or edge of vehicle parking area as defined herein. Where a sidewalk or private roadway is

placed in an easement, the setback shall be measured from the back of sidewalk or edge of easement if there is no sidewalk.

Sexually-Oriented Adult Arcade and Sexually Oriented Adult Arcade Premises. Any premises on which any sexually-oriented adult arcade device is located and to which patrons, customers, and/or members of the public are admitted.

Sexually-Oriented Adult Arcade Device. Also known as panorama, preview, picture arcade, or peep show, any device which, for payment of a fee, membership fee or other charge, is used to exhibit or display a picture, view, film, videotape or videodisc, live show or other graphic display of specified anatomical areas. All such devices are denominated under this ordinance by the term sexually-oriented adult arcade device.

Sexually-Oriented Adult Entertainment. Any entertainment conducted in a public place of amusement where such entertainment involves a person appearing or performing in a state of nudity, as defined herein.

Sexually-Oriented Adult Entertainment Premises. Any premises to which the public, patrons or members are invited or admitted and wherein an entertainer provides sexually-oriented adult entertainment on a regular basis and as a substantial part of the business operation.

Shorelines of the State. Shorelines as defined in the Shoreline Management Master Program.

Short Plat. A map or representation of a short subdivision.

Sidewalk. A facility made of concrete or other approved material for the conveyance of pedestrians usually adjacent to a street or between streets.

Sign. Any structure, device, advertisement, advertising device or visual representation intended to advertise, identify or communicate information to attract the attention of the public for any reason.

Sign Area. Means the entire area of a sign on which graphics, letters, figures, symbols, trademarks and/or text is to be placed, excluding sign structure, architectural embellishments and framework. Sign area is calculated by measuring the perimeter enclosing the extreme limits of the module or sign face containing the graphics, letters, figures, symbols, trademarks, and/or text; provided, however, the area of any sign using individual letters, numbers or symbols with a canopy, awning or wall as the background, without added decoration or change

in the canopy, awning or wall, shall be the area within the shortest line drawn to include all letters, design and tubing which are a part of the sign or structure. For illuminated awnings the area shall be limited to the area within the shortest line drawn to include all copy and graphics, excluding illuminated areas outside of these lines.

Sign, Awning. A sign attached to or incorporated into an awning.

Sign, Billboard. An outdoor advertising structure, 12 foot by 25 foot or larger, designed and constructed to carry posters.

Sign, Business Complex. A sign which is typically free-standing and is designed to identify multiple businesses in a business complex.

Sign, Canopy. A sign attached to or incorporated into a canopy.

Sign, Commercial. Any sign that advertises a product, service, entertainment or commodity sold or offered on the premises where it is located.

Sign, Complex. (Auto Dealership Plan District). A sign with the purpose of identifying the area and/or containing more than one manufacturers brand.

Sign, Construction. A temporary sign giving the name or names of principal contractors, architects, lending institutions, or other persons or firms responsible for construction on the site where the sign is located, together with other related information.

Sign, Directional. A sign designed and erected solely for the purpose of traffic or pedestrian direction, and which is placed on the property to which or on which the public is directed.

Sign, Electronic Message Center (EMC). Electronic message center (EMC) means an electrically activated sign whose message content, either in whole or in part, may be changed by means of electronic programming.

Sign, Elevation. Regarding sign regulations, the portion of any building exterior enclosing the applicant's place of business, measured horizontally by width of occupancy and vertically by height of occupancy on the street building frontage. In the case of a single-story building, vertical height of occupancy is measured to the eave or parapet line. For partial occupancy in a multi-story building, vertical height of occupancy is measured from floor line to floor line.

Sign Face. Means the portion of the sign on which the graphics, letters, figures, symbols, trademark or text is placed.

Sign, Fascia. A flat sign which projects less than one foot from the face or wall of the building, including parapet, upon which it is affixed, painted or attached, running parallel for its whole length to the face or wall of the building, and which does not extend beyond the horizontal width of such building.

Sign, Flashing. Any sign which contains an intermittent or flashing light source or which includes the illusion of intermittent or flashing light by means of animation or an externally-mounted intermittent light source. Time and temperature signs are excluded from this definition. For the purpose of this Title, EMC's (consistent with the standards of VMC Section 20.960.060 I and Section 20.960.070 I) shall not be considered flashing signs.

Sign, Franchise. (Auto Dealership Plan District). A sign that identifies the manufacturers brand and/or name.

Sign, Free Standing. (Pole Signs and Monument Signs). A sign that is not attached to a building and is erected on a frame connected to the ground. Pole signs and monument signs are specific types of freestanding signs. A freestanding sign does not include a portable sign.

Sign Height. The vertical distance measured from grade at the point of support to the top of the sign or the sign's structure.

Sign Maintenance. The repair or refurbishment of a sign, sign structure or any part of each.

Sign, Marquee. A sign attached to or incorporated into a marquee.

Sign, Messages Without a Cabinet, Area of. The area of any single geometric shape which encompasses all lettering and/or graphic message.

Sign, Monument. Means a sign and supporting structure which is attached to the ground and has similar top and bottom dimensions and is constructed as a solid structure or one which gives the appearance of a continuous and unbroken mass, with no separations between the sign and the base.

Sign, Multi-faced. A sign with more than one face. These types of signs shall be considered one (1) sign for the purpose of determining the number of signs allowed.

Sign, NIT. A measurement of brightness used to rate luminous displays. NIT is expressed in "candelas per square meter".

Sign, Official. Means the same as Public-Sector Sign.

Sign, Off-Premises. A third-party sign that advertises goods, products, services or facilities or directs persons to a location different from where the sign is installed.

Sign, On-Premises. A sign which carries only advertisement strictly incidental to a lawful use of the premises on which it is located, including signs or sign devices indicating the business transacted, services rendered, goods sold or produced on the premises, name of the business, and name of the person, firm or corporation occupying the premises.

Sign, Pole. A sign that is supported permanently upon the ground by poles or braces and not attached to any building.

Sign, Political Campaign. Any temporary sign which displays the name and/or picture of an individual seeking election or appointment to a public office or which pertains to a forthcoming public election or referendum or which advocates political views or policies.

Sign, Portable – Permanent. Permanent portable signs shall be defined as “onsite” signs placed in the right-of-way along the business frontage and on the same side of the street of the building or establishment which it advertises. Permanent portable signs shall be meant for continuous display during the hours the business is open and shall have the primary purpose of identifying the business.

Sign, Portable – Temporary. Temporary portable signs shall be defined as “off-site” signs placed in the right-of-way advertising an approved business or use. Temporary portable signs shall be displayed during the hours the business is open and shall have the sole purpose of identifying the business or providing directions.

Sign, Private Non-Commercial. Any sign under 6 square feet that does not advertise a product, service, entertainment, or commodity sold or offered on the premises where it is located.

Sign, Projecting. Shall mean any sign other than a wall sign, which is attached to or projects 12 inches or more from a structure or building face or wall.

Sign, Public-Sector. Any sign erected by any federal, state, county or city governmental agency or at the direction of any such governmental agency or court.

Sign, Public Service Information. A sign that provides general public service information to the public such as time, date, temperature, weather or directional information.

Sign, Reader Board. A sign constructed for the placing of advertising messages, which messages are changeable by use of manually removable or electrically changeable letters.

Sign, Rooftop. A sign erected upon the roof of a building, the entire face of which is situated above the roof line of the building to which it is attached, and which is wholly or partially supported by said building.

Sign, Rotating. A sign, any portion of which moves or is movable by any mechanical manner.

Sign, Secondary. A second free-standing sign on a given frontage in excess of 300 linear feet.

Sign, Sidewalk. A portable sign, typically in the shape of an inverted V, with two sign boards attached to each other at the top of the sign; also known as a sandwich board or A-frame sign. Each board shall be considered a separate sign face for purposes of determining allowable area of sign.

Sign, Temporary. Any sign that is not permanently installed or affixed to any sign structure or building, and not displayed for longer than 30 consecutive calendar days. In the case of construction project signs, they may be maintained for the duration of construction.

Sign, Time and Temperature. Means the same as Public Service Information Sign.

Sign, Vehicle. Any sign attached to or placed on a parked vehicle or trailer used principally for advertising purposes, rather than transportation, but excluding signs relating to the sale, lease, or rental of the vehicle or trailer and excluding signs which identify a firm or its product on a vehicle operated during the normal course of business.

Sign, Video. A sign providing information in both a horizontal and vertical format (as opposed to linear), through use of pixel and sub-pixel technology having the capacity to create continuously changing sign copy in a full spectrum of colors and light intensities.

Sign, Wall. Means the same as Painted Wall or Wall Graphic.

Sign, Window. Any sign affixed to (or painted on) the inside or outside of a window and intended to be viewed from the exterior of the structure.

Single Impact. An individual incidence of noise, actually measured in decibels, which may be heard on a property and which may be greater or lesser than the Ldn value, which is derived from the logarithmic averaging of single impacts within a period of time.

Significance. A quality of a property which helps one understand the history of the local area, state or nation by illuminating the local, statewide or nationwide impact of the events or persons associated with the property or its architectural type or style in information potential. The local area may be as large as Clark County or Southwest Washington or as small as a neighborhood. Local significance may apply to a property that illustrates a theme that is important to one or more localities; state significance to a theme important to the history of the state; and national significance to property of exceptional value in representing or illustrating an important theme in the history of the nation.

Single Room Occupancy (SRO). Occupancy by a single individual of a unit that contains no sanitary facilities or food preparation facilities or contains either but not both types of facilities.

Site. Any plot or parcel of land or combination of contiguous lots or parcels of land.

Site Class. The classification of a site based on the productivity of its dominant tree species. Site classes vary based on local differences in soil nutrients and moisture, light and temperature regimes, and topography. Site classes are typically described as most productive (I) through least productive (V).

Site Potential Tree Height (SPTH). The average maximum height of the tallest dominant trees for a given age and site class.

Six-Year Street Plan. That portion of the city's Capital Facilities Plan which inventories planned street and road construction and improvement, and which designates such construction projects and improvements as funded or nonfunded.

Slope. The deviation of a surface from horizontal, usually expressed in percent or degrees.

SMA. The State Shoreline Management Act of 1971, as amended.

Soft Armoring Techniques. Techniques that apply the principles of the biological, ecological, and soils sciences and structural engineering to build structures which, using live plant

materials as a main structural component, stabilize the soil against erosion, sedimentation, and flooding. Also referred to as “bioengineering techniques.”

Sound Transmission Reduction. Reduction of sound or noise from unit to unit utilizing the standards of the City Adopted Building Code(s).

Special Provisions. Street construction requirements peculiar to a special project that are not otherwise thoroughly or satisfactorily detailed and set forth in the standard specifications or standard plans.

Special Valuation Tax Incentive Program. The local option program that makes available to property owners a special tax valuation for rehabilitation of historic register properties under which the assessed value of an eligible historic property is determined at a rate that excludes, for up to ten years, the actual cost of the rehabilitation.

Specified Anatomical Areas. Regarding Adult Businesses, less than completely and opaquely covered: human genitals, pubic region, buttock and female breast below a point immediately above the top of the areola; and human male genitals in a discernibly turgid state even if completely and opaquely covered.

Specified Sexual Activities. Regarding Adult Businesses, human genitals in a state of sexual stimulation or arousal; acts of human masturbation, sexual intercourse or sodomy; and fondling or other erotic touching of human genitals, pubic region, buttock or female breast.

Standard Industrial Classification (SIC). A classification pursuant to the Standard Industrial Classification Manual issued by the United States Office of Management and Budget. This system was replaced by the North American Industrial Classification System (NAICS).

Start of Construction. The start of permanent construction or substantial improvement activity on a site within 180 days of the issuance of a building permit. Permanent construction activities include the pouring of slab or footings, the installation of pilings, construction of columns or any work beyond site preparation, excavation, setting of temporary forms or the placement of accessory buildings; or the placement of a manufactured home on a foundation. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

Stealth Design. A wireless communications facility's support structure, antennae or accessory equipment structure that is designed to blend in with the existing physical environment, and reduce visual impacts to the extent possible.

Storage, Open. Storage of property outside of a fully enclosed building.

Storage Space. Sufficient space, either in individual dwelling units or common storage rooms, to provide adequate, secure, and convenient storage for items owned by building tenants.

Stormwater. Stormwater is that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes and other features of a stormwater drainage system into a defined surface waterbody or a constructed infiltration facility.

Stormwater Conveyance. Parts of a stormwater facility (such as pipes, culverts, swales, etc.) that are constructed specifically to transport water from one point to another. See Stormwater Facility.

Stormwater Facility. A constructed component of a stormwater drainage system, designed or constructed to perform a particular function or multiple functions. Stormwater facilities include, but are not limited to, pipes, swales, ditches, culverts, street gutters, detention ponds, retention ponds, constructed wetlands, infiltration devices, catch basins, oil/water separators, biofiltration swales, bioretention, permeable pavement, and vegetated roofs.

Stormwater Manual. Stormwater Manual means the Stormwater Management Manual for Western Washington, which is the 5-volume technical manual prepared by the Washington State Department of Ecology Water Quality Program, December 2014, Publication No. 14-10-055 (a revision of Publication No. 12-10-030), 5 volumes, and as hereafter amended.

Stormwater Permit. Stormwater Permit means the City of Vancouver's National Pollutant Discharge Elimination System (NPDES) Western Washington Phase II Municipal Stormwater Permit issued August 1, 2013, which was modified, Effective January 16, 2014, by the Washington State Department of Ecology, and as hereafter amended or reissued.

Story. That portion of a building between the surface of any floor and the surface of the next floor above it; or, if there is no floor above it, the space between such floor and ceiling.

Stream. Water contained within a channel, either perennial or intermittent, and classified according to WAC 222-16-030 or WAC 222-16-031. Streams also include natural watercourses modified by humans. Streams do not include drainage ditches which are not modifications of natural watercourses.

Street. A private or public way designed primarily for vehicular traffic. It includes the terms road, highway, avenue, boulevard, thoroughfare, or other traffic way, and usually includes improvements, including curbs, sidewalks, and street pavement within the right-of-way.

Street Frontage. The linear frontage of a parcel of property abutting a single public street.

Street Functional Classification System. The adopted hierarchy of street use as it relates to volume, speed, regional, area-wide, and local characteristics.

Street, Private. A thoroughfare that is privately owned providing a means of access to a property or properties.

Street, Public. A thoroughfare or right-of-way dedicated, deeded, condemned or otherwise acquired by the public for use as such, other than an alley, which affords the principal means of access to abutting property including avenue, place, way, drive, lane, boulevard, highway, road, and any other thoroughfare.

Structure. Anything constructed or built, any edifice, building of any kind or any piece of work artificially built-up or composed of parts joined together in some definite manner, which requires location on the ground or is attached to something having a location on the ground, including swimming pools, wading pools and covered patios, excepting outdoor areas such as paved areas, walks, tennis courts and similar recreation areas. For the purposes of VMC 20.740.120, Frequently Flooded Areas, a structure is a walled and roofed building , or a gas or liquid storage tank that is principally above ground.

Subdivision. The division or re-division of land into ten or more lots for the purpose of sale, lease or transfer of ownership. The term subdivision also applies to an area or tract of land that has been subdivided.

Subdivision, Short. The division, re-division or partition of land into nine or fewer lots, tracts, parcels, sites or divisions for the purpose of sale, lease or transfer of ownership.

Substantial Damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial Disturbance. Disturbance such that little or no useful archaeological data could be obtained.

Substantial Improvement. Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

1. Before the improvement or repair is started; or
2. If the structure has been damaged and is being restored, before the damage occurred.

"Substantial improvement" is considered to occur at the start of construction. "Substantial improvement" does not include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
2. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

Substantial Noise Impact. Exterior noise levels greater than Ldn 65, which impact necessitates special sound insulation to produce noise levels of 45 Ldn or less within the interior of a residential structure.

Survey, Archaeological. Regarding archaeological resource protection, a procedure by which an archaeologist makes a determination of the presence or absence of an archaeological site in a disturbance area, a preliminary assessment of the site's potential significance, and a recommendation for further evaluation, avoidance, mitigation or recovery of resources in compliance with the provisions of 20.710 VMC.

System Development Charge (SDC). The connection fee charged so that the property upon which it is imposed will pay its equitable share of the costs of water-sewer system facilities which are system-wide in nature and are not site-specific needs, including such property's

equitable share of the amount required to upgrade such system to meet the demands imposed by the development.

System Improvements. Public facilities that are included in the capital facilities plan and are designed to provide service areas within the community at large, in contrast to project improvements.

Telecommuting. The use of telephones, computers or other similar technology to permit an affected employee to work at home or at a location closer to home than the affected employer's principal worksite.

Temporary. A period not to exceed one year except as otherwise provided in this title.

Tenant Improvements. Construction improvements typically made to the interior of a nonresidential building to fit the building to a particular tenant's needs, or to create separate tenant spaces. Typically it involves such things as adding or removing walls, ceilings and doors; re-wiring for electrical outlets and lighting; and providing plumbing, sprinklers, counters and walk-in coolers, often as part of a separate lease space in a building.

Through-Ventilation. The encouragement of natural cross-ventilation.

Total Developable Land (TDL). That portion of the subject property remaining once sensitive areas are subtracted from the total acreage of a property or collection of properties proposed for development.

Tract. A piece of land set aside in a separate area for dedication to the public, a homeowner's association, or other entity, (e.g., open space, recreational facilities, and tree preservation) wetland or other sensitive lands.

Traffic Study. A study of traffic behavior by a licensed engineer.

Transit. A multiple-occupant vehicle operated on a for-hire, shared-ride basis, including bus, ferry, rail, shared-ride taxi, shuttle bus or vanpool.

Transit Facility. A development provided by a public transportation provider, which is designed to aid or encourage community use or multi-modal public transportation system, such as bus and van/carpools.

Transitional Surfaces. An area extending outward at 90 degree angles to an airport's runway centerline at a slope of seven feet horizontally for each foot vertically.

Transitional Zone. The areas beneath the transitional surfaces.

Transplant. The relocation of a tree from one place to another on the same property.

Tree. Any self-supporting perennial woody plant that matures at a height greater than 26 feet and is generally referred to in the nursery and landscape industry as a tree.

Tree Farm. See Commercial Nursery.

Tree, Hazard. Any tree with a combination of structural defect and/or disease and a proximity to persons or property which makes it subject to a high probability of failure, as recommended by a qualified arborist.

Tree, Mitigation. A tree planted and retained to achieve the required tree density for a parcel or to replace a tree removed in violation of city ordinance.

Tree, Nuisance. A tree that is causing physical damage to property or has been damaged by past maintenance practices, and for which horticultural practices cannot correct the problem.

Tree Preservation. The retention of a tree or trees during and after construction.

Tree, Specimen. A tree that has been given greater than standard tree density value by the planning official through the evaluation process.

Tree, Street. A tree located within a street right-of-way or street tree easement, adjacent to public or private streets, including undeveloped areas.

Tree Tract. A separate deeded tract of land, specifically set aside for the preservation and/or planting of trees. Stormwater retention/detention facilities, sensitive areas, and other common areas may be considered tree tracts if they currently support the growth of trees.

Tree Unit. A unit of measurement based upon the size of the tree as set forth in Chapter 20.770 VMC, Tree, Vegetation, and Soil Conservation.

Tree, Vegetation and Soil Plan. A plan that contains specific information pertaining to the protection of healthy soil, and the preservation, and planting of trees and native vegetation pursuant to Chapter 20.770 VMC, Tree, Vegetation, and Soil Conservation.

Tree, Vegetation and Soil Protection Area (TVSPA). A separate tract of land, which may or may not be deeded as such, specifically set aside for the preservation of healthy soils and the preservation or planting of existing and/or native vegetation and trees. Stormwater retention/detention facilities, critical area buffers and other common areas may be considered TVSPA if they currently or are improved to an extent where they can support healthy soils and the growth of native vegetation and trees. The purpose of these areas for preserving healthy soils, preserving and/or planting native vegetation and trees is stated on the face of the plat when applicable.

Tribe or Tribes. Regarding Archaeological Preservation, any federally-recognized or other local Native American government organization which may consider the site to be of historic or cultural significance.

Truck, Heavy. Trucks, including truck tractors and similar vehicles, with two or more rear axles.

Truck, Light. Trucks and similar vehicles with single rear axles and single rear wheels.

Truck, Medium. Trucks and similar vehicles other than truck tractors with single rear axles and dual rear wheels. Truck tractors are in the Heavy Truck category. (Ord. M-4402 § 3(C), 2023; Ord. M-4325 § 3, 2020; Ord. M-4179 § 65, 2016; Ord. M-4034 § 2, 2012)

20.150.040F Meanings of Specific Words and Terms U through Z.

Undevelopable Area. An area that cannot be used practicably for a habitable structure because of natural conditions, such as slopes exceeding 20 percent; severe topographic relief; water bodies; or conditions that isolate one portion of a property under another portion so that access is not practicable to the unbuildable portion. Undevelopable area also includes man-made conditions such as existing development restrictions that prohibit development of a given area of a lot by law or private agreement; or existence or absence of easements or access rights that prevent development of a given area.

Undeveloped. Regarding the Tree Conservation Ordinance, a parcel of land on which no buildings or other facilities are located and which is to remain without improvements for a period of six years.

Uniform Plumbing Code. The current version of the Uniform Plumbing Code as adopted by the City of Vancouver at the time construction commences.

Urban Area. For the purposes of 20.775 VMC, Wetlands and Water Bodies Protection, urban area means the area within the Vancouver urban growth boundary.

Urban Forestry. The art and science of planning, managing, and protecting natural and planted vegetation in urban areas.

Urban Growth Boundary. The boundary of an urban growth area designated in the Clark County Comprehensive Land Use Plan.

Use. An activity or purpose for which land or premises or a building thereon is designed, arranged or intended, or for which it is occupied or maintained, let or leased.

Utility Facilities. All physical facilities necessary for the provision of the following services:

1. Sewer;
2. Water;
3. Electricity;
4. Natural gas;
5. Telephone;
6. Cable television;
7. Storm drainage; and
8. Transportation.

Utility Facilities, Essential. Those facilities which are necessary to support principal development and involve only minor structures such as:

1. Overhead lines and poles;
2. Underground lines and pipes;
3. Transformers and regulator stations; and

4. Private, on-site facilities such as septic tanks and wells.

Utility Facilities, Major. Those facilities which have a substantial public impact, including but not limited to:

1. Administrative offices and operation centers;
2. Sewage treatment plants and lagoons;
3. Electric generation facilities including biomass generating facilities; and
4. Essential public facilities as defined in Chapter 20.855 VMC, Essential Public Facilities.

Utility Facilities, Minor. Those facilities which have a local impact on surrounding properties and are necessary to provide essential services such as:

1. Transmission and distribution substations;
2. Pump stations;
3. Water towers and reservoirs;
4. Public wells;
5. Outfalls;
6. Telephone switching facilities;
7. Cable television receiver and transmission facilities, excluding wireless communications facilities as defined in Chapter 20.890 VMC Wireless Communications Facilities;
8. Catch basins, retention ponds and related facilities; and
9. Water treatment facilities.

Variance. An administrative or quasi-judicial decision to lessen or otherwise modify the requirements of the development code.

Vehicle, Accessory Recreational. A vehicle with or without motive power, which is designed for sport or recreational use or which is designed for human occupancy on an intermittent basis such as vacation trailers and fifth-wheel trailers. A camper is considered an accessory

recreation vehicle when it is standing alone. A recreational vehicle also includes vehicles designed for off-road use:

1. Off-road vehicles;
2. Dune buggies; and
3. Recreational boats.

Vehicle, Commercial. Any vehicle the principal use of which is the transportation of commodities, merchandise, produce, freight, animals, or passengers for hire. (Per RCW 46.04.140)

Vehicle, Featured Display (Auto Dealership Plan District). Featured Vehicle Display is the "showcasing" of motor vehicles outdoors within the plan district.

Vehicle, Motor. Vehicles that have their own motive power and are used for the transportation of people or goods on streets. Motor vehicle includes motorcycles, passenger vehicles, trucks, and recreational vehicles with motive power.

Vehicle, Passenger. A motor vehicle designed to carry ten persons or fewer including the driver. Passenger vehicle also includes motor vehicles designed to carry ten persons or fewer that are constructed on a truck chassis or with special features for occasional use. Passenger vehicles include cars, minivans, passenger vans, and jeeps. Passenger vehicle is intended to cover the vehicles identified as passenger cars and multi-purpose passenger vehicles by the National Highway Traffic Safety Administration in Title 49 of the Code of Federal Regulations, Chapter V, Section 571.3. See also Recreational Vehicle and Truck.

Vesting. A legal right of applicants to have their development application reviewed under the regulations in effect as of a certain date when the application has met certain timing and completeness requirements. For example, an application determined by the Review Authority to be fully complete is vested under the regulations in effect at the time of such determination, regardless of subsequent changes to development regulations.

Vesting, Contingent. A legal right of applicants to have their fully complete development application, when submitted within 180 days of the pre-application conference, reviewed under the development regulations, not including fees, in effect at the time of the pre-application conference.

Vision Clearance Triangle. An area, typically triangular in shape adjacent to a driveway or at a property corner where two streets (or an alley and street) intersect, that must be maintained clear of visual obstructions to provide visibility to motorists and pedestrians.

Visual Obstruction. An obstruction of vision through landscaping, structure or device in those areas near intersections of roadways and motor vehicle access points where a clear field of vision is necessary for traffic safety.

Walkway. A facility for pedestrian use to or through a parcel for the general public which may or may not be adjacent to the street. Walkways may differ from sidewalks in standards, alignment, shape, location, construction materials, and overall installation.

Washington Heritage Register. The state listing of properties that are significant to the community, state or nation, but which do not meet the criteria of the National Register of Historic Places [Ord. M-3243, 2 (part), M-1996].

Wastewater Facility. In Chapter 14.12.020 VMC, Water and Sewer Facilities, the City of Vancouver's industrial wastewater collection system and industrial wastewater pretreatment facility constructed in 1979, and sometimes known as the pretreatment lagoon.

Water-dependent. A use or portion of a use that requires direct contact with the water and cannot exist at a nonwater location due to the intrinsic nature of its operations. Also see the Vancouver Shoreline Management Master Program.

Water-enjoyment. A use or activity which facilitates or provides public access to the shoreline, and through its location, design, and operation assures the public's ability to enjoy the physical and aesthetic qualities of the shoreline. A water-enjoyment use or activity must be open to the general public, and space within it must be devoted to fostering public enjoyment of the shoreline. Parks, piers, restaurants, trails, promenades, museums, aquariums, reserves, and resorts are examples of water-enjoyment uses and activities. Also see the Vancouver Shoreline Management Master Program.

Water-related. A use or activity which must be located close to the land/water interface to support a water-dependent use or activity either by its own operation or by the provision of the services it houses. The economic viability of a water-related use or activity is dependent on a location near the waterfront. Warehousing of goods transported by water, seafood processing

plants, hydroelectric generating plants, and log storage are examples of water-related uses or activities. Also see the Vancouver Shoreline Management Master Program.

Watershed. A topographically delineated area draining to a single surface water system as identified and mapped by Clark County Public Works.

Weekday. Any day of the week except Saturday, Sunday, and legal holidays.

Wetland or wetlands. An aAreas that areis inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances does 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 those artificial wetlands intentionally created (but not as mitigation for impacts to wetlands) from nonwetland 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 shall may include those artificial wetlands intentionally created from nonwetland areas to mitigate conversion of wetlands.

Wetland Buffer. An area that surrounds and protects a wetland from adverse impacts to the functions and values of a regulated wetland.

Wetland Creation. The manipulation of the physical, chemical or biological characteristics present to develop a wetland on an upland or deepwater site where a biological wetland did not previously exist. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, hydric soils, and support the growth of hydrophytic plant species. Creation results in a gain in wetland acres and functions.

Wetland Enhancement. The manipulation of the physical, chemical or biological characteristics of a biological wetland to increase or improve specific functions or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention or wildlife habitat. Activities typically consist of planting vegetation, controlling nonnative or invasive species, modifying site elevations to result in open water ponds or some combination of these. Enhancement results in a change in certain wetland functions and can lead to a decline in other wetland functions. It does not result in a gain in wetland acres.

Wetland Preservation. The removal of a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This term includes activities commonly associated with the protection and maintenance of wetlands through the implementation of appropriate legal and physical mechanisms, such as recording conservation easements and providing structural protection like fences and signs. Preservation does not result in a gain of wetland acres or functions but may result in a gain in functions over the long term.

Wetland Re-establishment. The manipulation of the physical, chemical or biological characteristics of a site with the goal of returning natural or historic functions and environmental processes to a former wetland. Activities could include removing fill material, plugging ditches or breaking drain tiles. Re-establishment results in a gain in wetland acres and functions.

Wetland Rehabilitation. The manipulation of the physical, chemical or biological characteristics of a site with the goal of repairing natural or historic functions, and processes of a degraded wetland. Activities could involve breaching a dike to reconnect wetlands to a floodplain, restoring tidal influence to a wetland or breaking drain tiles and plugging drainage ditches. Rehabilitation results in a gain in wetland functions but not in wetland acres.

Wetland, Scrub-shrub. A wetland with at least 30 percent of its surface area covered by woody vegetation less than 20 feet in height as the uppermost strata.

Wetlands Delineation Manual. Approved federal wetland delineation manual and applicable regional supplements.

Wind-firm. A tree which has a high probability of withstanding windstorms.

Wireless Communications Facilities. The site, wireless communications support structures, antennae, accessory equipment structures, and appurtenances used to transmit, receive, distribute, provide or offer wireless telecommunications services. Wireless communications facilities include, but are not limited to, antennae, poles, towers, cables, wires, conduits, ducts, pedestals, vaults, buildings, electronic, and switching equipment.

Wireless Communications Support Structures. A structure erected to support wireless communications antennas and connecting appurtenances. Wireless communications support structures may include, but are not limited to lattice tower, monopoles, and guyed towers.

Wireless Communications Systems. The sending and receiving of radio frequency transmissions and the connection and/or relaying of these signals to land lines and other sending and receiving stations (cell sites), and including, but not limited to cellular radiotelephone, personal communications services (PCS), enhanced/specialized mobile radio (ESMR), commercial paging services, and any other technology which provides similar services.

Writing, Written or In Writing. These terms refer to original signed and dated documents. Facsimile (fax) transmissions are a temporary notice of action that must be followed via mail or delivery of the original and dated document.

Yard. Any open space on the same lot with a building or a dwelling group, which open space is unoccupied and unobstructed by any structure from the ground upward to the sky. Required setback areas shall be considered yards as defined herein.

Yard, Front. An open space defined by setbacks extending the full width of the lot between a setback line and the front lot line, unoccupied, and unobstructed from the ground upward, except as specified elsewhere in this title.

Yard, Rear. An open space defined by setbacks extending the full width of the lot between a setback line and the rear lot line, unoccupied, and unobstructed from the ground upward, except as specified elsewhere in this title.

Yard, Side. An open space defined by setbacks extending from the front yard to the rear yard between a setback line and the nearest side lot line, unoccupied, and unobstructed from the ground upward, except as specified elsewhere in this title.

Yard, Street Side. On corner lots where two streets intersect, an open space defined by setbacks extending from the front lot line to the rear lot line, along the side of the lot which fronts on a street and between the setback line and side street lot line, unoccupied, and unobstructed from the ground upward, except as specified in this title.

Zoning District. A geographic area which corresponds to a comprehensive plan designation and which specifies allowed and conditionally allowed uses and applicable standards for development within the district. Also referred to as Zone or District. (Ord. M-4380 § 4, 2022; Ord. M-4179 § 66, 2016; Ord. M-4176 § 4, 2016; Ord. M-4034 § 2, 2012)

The Vancouver Municipal Code is current through Ordinance M-4431, passed December 18, 2023.

Disclaimer: The city clerk's office has the official version of the Vancouver Municipal Code. Users should contact the city clerk's office for ordinances passed subsequent to the ordinance cited above.

City Website: www.cityofvancouver.us
City Telephone: (360) 487-8711

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Chapter 20.150
DEFINITIONS

Sections:

20.150.010 Meaning of Words Generally.

General. All of the terms in this title have their commonly accepted dictionary meaning unless they are specifically defined in this chapter, or the context in which they are used clearly indicates to the contrary. (Ord. M-3692 § 8, 02/28/2005; Ord. M-3643, 01/26/2004)

20.150.020 Meaning of Common Words.

A. *Tense.* All words used in the present tense include the future tense.

B. Singular/plural. All words used in the plural include the singular, and all words used in the singular include the plural unless the context indicates to the contrary.

C. *Gender.* All words used in the masculine gender include the feminine gender.

D. Use of shall, should, will and may. The words shall and will are mandatory, the word should is directory, and the word may is permissive.

E. *Use of building and structure.* The word building includes the word structure.

F. *Use of 'used for'.* The phrase used for includes the phrases arranged for, designed for, intended for, maintained for and occupied for.

G. *Use of land and property.* The words land and property are used interchangeably unless the context clearly indicates to the contrary.

H. *Use of occupied.* The word occupied shall included premises designed or intended to be occupied.

I. Use of person. The word person shall include persons, association, firm, partnership or corporation, as well as the individual. (Ord. M-3891 § 3, 11/03/2008 – Effective 12/3/08; Ord. M-3692 § 8, 02/28/2005; Ord. M-3643, 01/26/2004).

20.150.030 Common Acronyms.

ADA The Americans with Disability Act

ADA Also, Average Daily Attendance

ADT Average Daily Traffic

ADU Accessory Dwelling Unit

BAS Best Available Science

BFE Base Flood Elevation

BMPs Best Management Practices

CAP Critical Areas Permit

CAR Critical Areas Report

CARAs Critical Aquifer Recharge Areas

CDD Community Development Department

CFR Code of Federal Regulations

CMZ Channel Migration Zone

CRZ Critical Root Zone

CUP Conditional use permit

DAHP Washington State Department of Archaeology and Historic Preservation

DBH Diameter at Breast Height

DFIRM Digital Flood Insurance Rate Map

DNS Determination of Non-Significance

DNR Washington State Department of Natural Resources

DOE or **Ecology** Washington State Department of Ecology

DS Determination of Significance

EIS Environmental Impact Statement

ESA The Federal Endangered Species Act

FAA Federal Aviation Administration

FAR Floor Area Ratio

FBFM Flood Boundary-Floodway Maps

FCC Federal Communications Commission

FEMA Federal Emergency Management Agency

FIRM Flood Insurance Rate Map

FIS Flood Insurance Study

FTE Full-time Equivalent

FWHCAs Fish and Wildlife Habitat Conservation Areas

GLA Gross Leaseable Area

GMA The Washington State Growth Management Act of 1990

gsf Gross Square Feet

HGM Hydrogeomorphic

LOS Level of service

MDNS Mitigated Determination of Non-Significance

NAICS The North American Industrial Classification System

NFIP National Flood Insurance Program

OHWM Ordinary High Water Mark

PHS Priority Habitats and Species

PUD Planned Unit Development

RCW Revised Code of Washington

RMA Riparian Management Area

RB Riparian Buffer

~~**RMZ** Riparian Management Zone~~

SEPA State Environmental Policy Act

SF Square Feet. Also s.f. and sq.ft.

SPTH Site Potential Tree Height

SRO Single-Room Occupancy

SWCCA Southwest Washington Clean Air Agency (formerly SWAPCA)

TDL Total Developable Land

USC United States Code

USGS U.S. Geological Survey

VMC Vancouver Municipal Code

WAC Washington Administrative Code

WDFW Washington Department of Fish and Wildlife (Ord. M-4402 § 3(C), 2023; Ord. M-4017 § 10, 2012; Ord. M-3692 § 8, 2005; Ord. M-3643, 2004)

20.150.040A Meanings of Specific Words and Terms A through D.

Abutting. Contiguous or adjoining with a common boundary line, except that where two or more lots adjoin only at a corner or corners, they shall not be considered as "abutting" unless the common property line between the two parcels measures eight feet or more in a single direction. It shall include the terms "adjoining" and "contiguous."

Accept. To receive as complete and in compliance with all submittal requirements.

Access or Access Way. The place, means or the way by which pedestrians and vehicles shall have safe, adequate and usable ingress and egress to a property or use as required by this title.

Accessory Dwelling Unit (ADU). One or more rooms with private bath and kitchen facilities comprising an independent, self-contained dwelling unit within or attached to a single-family dwelling or in a detached building on the same lot as the primary dwelling unit. An ADU is distinguishable from a duplex in that, unlike a duplex, it is clearly subordinate to the primary dwelling unit, both in use and appearance.

Accessory Equipment Structure. An unstaffed structure that is subordinate and clearly incidental to the principal use or structure on the lot and may be used to house and protect the equipment necessary for processing wireless communications signals. Associated equipment may include air conditioning and emergency generators.

Accessory Structure. A building or structure which is clearly incidental to the primary structure on the same lot.

Accessory Use. A use of land or portion there of which is clearly incidental and subordinate to the principle use of the land located on the same lot or premises.

Acre. A measure of land area containing 43,560 square feet.

Actual Construction. The actual placing of building materials in their permanent position, fastened in a permanent manner, including any excavation.

Addition. Means the same as enlargement.

Adjacent. Abutting or located directly across a street right-of-way.

Adjoin. Means the same as abutting.

Adult Bookstore. Any premises from which minors are excluded and in which the retail sale of books, magazines, newspapers, movie films, devices, slides or other photographic or written reproductions distinguished or characterized by their emphasis on matter depicting, describing or relating to specified sexual activities or specified anatomical areas is conducted as a principal use of the premise; or as an adjunct to some other business activity, but which constitutes the primary or a major attraction to the premises.

Adult Entertainment Shows. Any premises from which minors are excluded and in which live entertainment is provided, or any device is provided in which the subject matter is distinguished or characterized by the emphasis on matter depicting, describing or relating to specified sexual activities or displaying specified anatomical areas as the principal use of the premises or is shown as an adjunct to some other business activity which is conducted on the premises and constitutes a major attraction; and wherein fees of any kind are charged.

Adult Motion Picture Theater. Any establishment from which minors are excluded in which motion pictures, slides or similar photographic reproductions are shown depicting adult entertainment as the principal use of the premises, or are shown as an adjunct to some other business activity which is conducted on the premises and constitutes a major attraction; and wherein fees of any kind are charged; and wherein such movies are shown on a regular basis, and not to include a theater showing adult movies less than 5~~%~~ percent of the total showing time of the theater.

Agent. Any person authorized in writing to act on behalf of the legal owner.

Agriculture, Existing and Ongoing. Those activities conducted on lands defined in RCW 84.34.020(2), and those activities involved in the production of crops or livestock, for example, the operation and maintenance of farm and stock ponds or drainage ditches; the operation and maintenance of ditches, irrigation systems (including irrigation laterals, canals, or irrigation drainage ditches); changes between agricultural activities; and normal maintenance, repair, or

operation of existing serviceable structures, facilities, or improved areas. Activities that bring an area into agricultural use are not part of an ongoing operation. An operation ceases to be ongoing when the area on which it is conducted is converted to a nonagricultural use or has lain idle for more than five years, unless the idle land is registered in a federal or state soils conservation program, or unless the activity is maintenance of irrigation ditches, laterals, canals, or drainage ditches related to an existing and ongoing agricultural activity. Forest practices are not included in this definition.

Airport Approach Surface. The surface which is longitudinally centered on an airport's extended runway centerline, extending outward and upward from the end of the primary surface. An approach surface is applied to each end of the runway based upon the type of approach procedure permitted. Because landings under instrument flight rules, using the Portland International Airport Localizer Directional Aid, are an approved procedure at Pearson Field, the following approach surface dimensions have been applied:

Width of approach surface: 500' at inner end, 4,000' at outer end (inner end begins at end of primary surface)

Length of approach surface: 10,000 feet

Slope of approach surface: 34:1 (one foot vertically for every 34 feet horizontally)

Airport Conical Surface. The conical surface is an inclined plane beginning at the edge of the horizontal surface and extending outward at a 20:1 slope for a distance of 4,000 feet.

Airport Horizontal Surface. The horizontal plane 150 feet above the established airport elevation. The shape of the plane is determined by striking arcs from the end of each primary surface. The radius of each arch is connected by lines tangent to the arcs. For Pearson Field, the radius of these arcs is 5,000 feet for runways 08 and 26.

Airport Transitional Surface. The transitional surface is an inclined plane extending outward from the primary and approach surfaces at a 7:1 slope. From the primary surface and approach surface, the transitional surface slopes upward to the horizontal surface. The transitional surface extends outward from the approach surface a distance of 5,000 feet.

Aisle. The corridor by which vehicles enter into and depart from parking spaces.

Alley. A public right-of-way or private easement not over 30 feet wide which provides a secondary means of access to abutting lots, not intended by the city for general traffic circulation.

Alteration of Watercourse. Any action that will change the location of the channel occupied by water within the banks of any portion of a riverine waterbody.

Alteration, Structural. Any change in a supporting member of a building, such as a bearing wall, column, beam or girder, floor or ceiling joist, roof rafts, roof diaphragms, foundations, piles, or retaining wall or similar components.

Altered. Structurally changed.

Alternative Mode. Refers to any means of commute transportation other than that in which the single-occupant vehicle is the dominant mode.

Alternative Work Schedules. Programs such as compressed work weeks that eliminate commuting trips for affected employees. For the purposes of this chapter, changing the time of when an affected employee begins his work shift shall not be considered an alternative work schedule if it only moves trips out of the peak period and does not eliminate trips.

Amateur or Ham Radio. Radio facilities operated for noncommercial purposes by individuals licensed by the FCC with an interest in construction and operation of radio equipment, usually as a hobby or avocation.

Amendment. A change in the wording, context or substance of this title or the comprehensive plan, or a change in the boundaries of a district upon the zoning district map or the boundaries of a designation on the comprehensive plan map.

Amenity. A natural or created feature that enhances the aesthetic and functional quality or makes more attractive or satisfying a particular property, place or area.

Americans with Disabilities Act (ADA). A 1990 federal law designed to bring disabled Americans into the economic mainstream by providing them equal access to jobs, transportation, public facilities and services. The ADA contains requirements for most developments including accessible parking stalls, entrances and exits, pathways, and public facilities such as restrooms.

Anadromous. Fish that migrate up rivers and streams from the ocean to breed in fresh water.

Annexation. The incorporation of a land area into the City of Vancouver with a resulting change in the boundaries of the city.

Annual Average Day/Night Sound Level (Ldn). Calculated in decibels, the Ldn is the 24-hour logarithmic average sound level from midnight to midnight, obtained after adding 10 decibels to sound levels in the night from midnight to 7 a.m., and from 10 p.m. to midnight (0000 to 0700, and 2200 to 2400 hours), and then logarithmically average day-to-day over a 12-month period.

Antenna. A device used to transmit and/or receive radio or electromagnetic waves between land- and/or satellite-based structures; any device commonly consisting of poles, panels, rods, reflecting discs or similar device use for the transmission or reception of radio frequency signals, typically mounted on a supporting tower, pole, mast or building.

Apartment. A dwelling unit in a multiple-family building.

Apartment House. Means the same as Dwelling, Multiple-Family.

Appeal. A request for an impartial review of a land use decision or interpretation of land use-related codes rendered by community development department, its employees or any review body of the city of Vancouver.

Applicable Pretreatment Standards. For any specified pollutant, city prohibitive standards, city specific pretreatment standards (local limits), State of Washington pretreatment standards, or EPA's Categorical Pretreatment Standards, whichever standard is most appropriate or most stringent.

Applicant. A person submitting an application for development.

Approach Surface. The surface which is longitudinally centered on an airport's extended runway centerline, extending outward and upward from the end of the primary surface at a slope of 20 feet horizontally for each foot vertically. In plan, the perimeter of the approach surface coincides with the perimeter of the approach zone.

Approach Zone. An area at the end of an airport's runway which is 250 feet wide and expands outward uniformly to a width of 1,250 feet at a horizontal distance of 5,000 feet. The centerline of the zone is a continuation of the centerline of the runway.

Approved Plan. A plan that has been granted final approval by the appropriate approval authority.

Archaeological Interest. Capable of providing scientific or humanistic understandings of past human behavior, cultural adaptation, and related topics through the application of scientific or scholarly techniques such as controlled observation, contextual measurement, controlled collection, analysis, interpretation, and explanation [WAC 25-48-020(12)].

Archaeological Object. An object that comprises the physical evidence of an indigenous and subsequent culture including material remains of past human life including monuments, symbols, tools, facilities, and technological by-products [WAC 25-48-020(8)].

Archaeological Resources. Any material remains of human life or activities that are of archaeological interest. This shall include all sites, objects, structures, artifacts, implements, and locations of prehistoric or archaeological interest, whether previously recorded or still unrecognized, including, but not limited to, those pertaining to prehistoric and historic American Indian or aboriginal burials, campsites, dwellings, and their habitation sites, including rock shelters and caves, their artifacts and implements of culture such as projectile points, arrowheads, skeletal remains, grave goods, basketry, pestles, mauls, and grinding stones, knives, scrapers, rock carvings and paintings, and other implements and artifacts of any material [WAC 25-48-020(10)]. This shall also include any material remains of human life or activities from historic periods which are located at least partially below the ground surface necessitating the use of archaeological methods for study or recovery.

Archaeological Resource Survey. A procedure by which an archaeologist makes a determination of the actual existence (presence or absence) of an archaeological site in a disturbance area, a preliminary assessment of the site's potential significance, and a recommendation for further evaluation, avoidance, mitigation, or recovery of resources in compliance with the provisions of this chapter.

Archaeological Site. Land or water areas that show evidence of artifacts of human, plant or animal activity, usually dating from periods of which only vestiges remain.

Archaeological Site, Known, Recorded. An archaeological site that has been recorded with the Washington State Department of Archaeology and Historic Preservation (DAHP) or its successor.

Archaeological Site, Potentially Significant. An archaeological site which:

1. contains archaeological objects at a density of at least 100 per cubic meter per stratigraphic or cultural unit; or
2. includes at least one feature; or
3. includes at least one relatively uncommon archaeological object; or
4. contains skeletal remains; or
5. is otherwise considered potentially significant by the archaeologist.

Archaeologist, Professional. "Professional archaeologist" means a person with qualifications meeting the federal secretary of the interior's standards for a professional archaeologist. Archaeologists not meeting this standard may be conditionally employed by working under the supervision of a professional archaeologist for a period of four years provided the employee is pursuing qualifications necessary to meet the federal secretary of the interior's standards for a professional archaeologist. During this four-year period, the professional archaeologist is responsible for all findings. The four-year period is not subject to renewal. RCW 27.53.030(8).

Area of Shallow Flooding. A designated zone AO, AH, AR/AO or AR/AH (or VO) on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow. Also referred to as the "sheet flow area."

Areas of Special Flood Hazards. Lands in the flood plain subject to a one percent or greater chance of flooding in any given year. Designations on Flood Insurance Rate Maps always include the letter A. Also referred to as "frequently flooded areas." "Special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard."

Arterial. Any principal arterial, minor arterial, or collector arterial streets.

ASCE 24. The most recently published version of ASCE 24, Flood Resistant Design and Construction, published by the American Society of Civil Engineers.

Assessed Value. The value at which property is appraised for tax purposes.

Attached Antenna. An antenna is that affixed to an existing structure other than a wireless communication support structure.

Attached Sidewalks. Those sidewalks abutting the back of a curb.

Automobile Wrecking. The dismantling or disassembling of motor vehicles, or the storage, sale, or dumping of dismantled, partially dismantled, obsolete, or wrecked vehicles or their parts. Three or more dismantled, obsolete or inoperable motor vehicles on one lot shall constitute a wrecking yard.

Average. The arithmetic mean.

Average Daily Attendance (ADA). Regarding School Impact Fees, the average number of students attending an elementary or secondary school and used for the design of the facility.

Awning. A hood or cover which projects from the wall of a building, of a type which may be retracted, folded or collapsed against the face of a supporting building.

Banner. An on-site sign such as those used to announce an open house or a grand opening, or to make a special announcement. Normally, it is constructed of fabric and is without a rigid frame.

Base Flood. The flood having a 1~~%~~ percent chance of being equaled or exceeded in any given year. Also referred to as the "100-year flood." Designated on Flood Insurance Rate Maps by the letter A.

Base Flood Elevation. The elevation that the base flood is expected to reach. Also referred to as the "100-year flood elevation."

Basement. A portion of a building included between a floor, with its level 2 feet or more below the level from which the height of the building is measured, and the ceiling next above said floor. For the purposes of VMC 20.740.120, Frequently Flooded Areas, basement means any area of a building having its floor subgrade (below ground level) on all sides.

Base zone. The zoning designation applicable to a parcel of property irrespective of an Overlay District as reflected on the Vancouver Zoning Map.

Beach Nourishment. With respect to bank erosion hazard areas, beach nourishment is the placement of sand or soil to fill an eroding bank.

Berm. A mound of earth, typically linear in form and generally used as a buffer between uses or properties.

Best Management Practices. Systems of practices and management measures that:

1. control soil loss and reduce water quality degradation caused by nutrients, animal waste, toxics, and sediment; and

2. minimize adverse impacts to surface water and groundwater flow, circulation patterns, and to the chemical, physical, and biological characteristics of Ffish and Wwildlife Hhabitat Cconservation Aareas (FWHCAs), wetlands and buffers.

Bike Lane. Lanes on an improved street which are designated for use by cyclists and separated from vehicular traffic either by striping or small concrete barrier.

Bikeway. A pathway, paved and separated from streets and sidewalks, designed to be used by cyclists.

Binding Site Plan. A type of land division that segregates a portion of a legal lot created for the sale or lease of commercially- or industrially-zoned property; placement of manufactured homes or travel trailers on leased sites; and creation of condominiums pursuant to 58.17.040 RCW.

Bioengineering Techniques. Techniques that apply the principles of the biological, ecological, and soils sciences and structural engineering to build structures which, using live plant materials as a main structural component, stabilize the soil against erosion, sedimentation, and flooding. Also referred to as "soft armoring techniques."

Biomass Generation. A major utility facility that provides for the production or collection of organic materials such as wood and agricultural residues and municipal solid waste that are primarily organic materials and the conversion or use of that material for the production of heat, electricity, or substitute fuels through several processes including, but not limited to, burning, pyrolysis, or anaerobic digestion.

Block. A group of lots, tracts or parcels within well defined and fixed boundaries.

Bog. A type of wetland where (1) organic (peat or muck) soil layers comprise at least 16 of the first 32 inches of the soil profile; or (2) there is more than 70% percent cover of mosses at ground level and more than 30% percent of the total shrub and herbaceous cover consists of

species listed in Table 3 – Characteristic Bog Species in Washington State found in Hruby, 2004, Washington State Wetlands Rating System for Western Washington, Ecology publication #04-06-025, or as revised by Ecology. Many bogs have soils classified as peat or muck, are nutrient poor, have a low pH (acidic), and are fed largely by rainfall rather than streams or groundwater.

Boundary Adjustment. The minor alteration of the boundary between two lots or tracts which does not result in the creation of any additional lot(s); also known as boundary line adjustment.

Breezeway. A structure for the principal purpose of connecting the main building or buildings on a property with other main buildings or accessory buildings.

Buffer. An area that is contiguous to and protects a critical area from incompatible uses and which is required for the continued maintenance, functioning, and/or structural stability of a critical area.

Building. Any structure having a roof and walls, used or built for the shelter or enclosure of persons, animals or property of any kind.

Building Envelope. That portion of a legal lot exclusive of the areas required for front, side, and rear yards and other required open spaces and which is available for siting and constructing a building or buildings.

Building Height. The vertical distance from the average grade to the average height of the roof peak of the building, except in a shoreline jurisdictional area, in which case the height shall be measured from average existing grade (prior to development) to the highest point of a structure (see also WAC 173-27-030). For exceptions subject to airport height limits located within the approach, transitional and horizontal surfaces refer to Airport definitions and Sections 20.570 and 20.630.050 VMC.

Building, Main. A building within which is conducted the principal use permitted on the lot, as provided in this title.

Building Permit. The permit required for new construction and additions pursuant to Title 17 of the Vancouver Municipal Code (VMC).

Business Complex. Any building containing more than one business, or any group of buildings in close proximity to one another sharing parking, ownership, and ingress or egress.

Caliper. The diameter of a tree trunk measured at 6 feet above the ground for up to and including 4 inches caliper size, and one foot above the ground for larger trees.

Canopy. A permanent roofed structure attached to and supported by the building.

Canopy, Auto Dealership Plan District. A structure, enclosure, or shelter constructed of fabric or pliable materials supported by any manner, except by air or the contents it protects, and open without sidewalls or drops on 75~~%~~ percent or more of the perimeter, consistent with Vancouver Fire Code Title 16, Section 16.04.060 and the International Fire Code (IFC).

Capital Facilities Plan. The City of Vancouver Capital Facilities Plan element of the Comprehensive Plan adopted pursuant to Chapter 36.70A RCW and RCW 82.02.050, and as such plan is amended.

Caretaker Residence. A single unit providing a complete independent living space for one or more persons, including permanent facilities for living, sleeping, eating, cooking and sanitation (same as Dwelling).

Central Business District. This area is the section of Vancouver defined as the commercial business district bounded by 4th Plain Boulevard to the north, Columbia River to the south, I-5 to the east, and Lincoln Avenue to the west. This can apply to other areas as developed in the city, with similar zoning.

Certificate of Concurrency. A document issued by the transportation manager pursuant to Section 20.980.120 VMC indicating: the location or other description of the property on which a development is proposed; the type of development application for which the certificate of concurrency is issued; an identification of any affected transportation corridor and TMZ; the specific uses, densities, intensities, and any transportation system improvements, strategies, or other mitigation measures that were considered in the determination to issue the certificate, and which are authorized or required for development of the property; the amount of capacity within the affected transportation corridor or TMZ that is reserved for the development described in the certificate, and a statement that the reservation of capacity is nontransferable to other development(s); any conditions required pursuant to Section 20.980.120 VMC; and an effective date.

Change of Use. Any use that differs from the previous use as defined in Chapter 20.160, Use Classifications.

Channel Migration Zone (CMZ): The area within which a river channel is likely to migrate and occupy over a specified time period.

Citizens Band Radio. Two-way radio facilities operated for a short-range personal and business communications, without necessity of a federal license, pursuant to 47 CFR Part 95.

City. The City of Vancouver, Washington.

City Council or Council. The City Council of the City of Vancouver, Washington.

City Standards. Shall mean standard specifications, technical drawings, detail drawings and other information the city has adopted as minimum standards.

Clark County Cultural Resources Inventory. The comprehensive inventory of historic resources within the boundaries of Clark County including resources identified in the Clark County cultural resources inventory and other inventories by local jurisdictions within Clark County.

Cleaner Fuels. Liquid or gaseous fuels produced from renewable sources or that have low or no emissions, including the following:

1. Carbon-free fuels that generate no carbon emissions including green hydrogen or fuels that are certified by state or federal responsible agencies as net-zero carbon emissions.
2. Any credit-generating fuel under the Washington State Low Carbon Fuel Standard (HB 1091 2021-2022) as allowed by the Washington State Department of Ecology.
3. Any biomass renewable fuels approved by the federal Environmental Protection Agency under the federal Renewable Fuel Standard (40 CFR Part 80) as regulation exists or may hereafter be amended and meeting any future federal renewable fuels regulations.
4. Alcohol fuels meeting the requirements of RCW 19.112.010(1) as that statute exists or may hereafter be amended.
5. Biodiesel fuel meeting the requirements of RCW 19.112.010(3), and renewable diesel meeting the requirements of RCW 19.112.010(9), as those statutes exist or may hereafter be amended.

6. E85 motor fuel which meets the requirements of RCW 19.112.010(2) exclusively for the propulsion of motor vehicles upon the roads, or RCW 19.112.010(6) for other motors, as those statutes exist or may hereafter be amended.

7. Alternative fuels that are not fossil fuels and that produce low or no carbon that meet state or federal requirements not otherwise listed above.

Clearing. The destruction or removal of vegetation from a site by physical, mechanical, chemical or other means. This does not include landscape maintenance or pruning consistent with accepted horticultural practices, such as those recommended by the Washington State University Extension Service, which does not impair the health or survival of the trees or native vegetation.

Closed Record Approval Hearing. An administrative hearing to approve or deny a project permit that is on the record to the City Council following an open record predecision hearing as defined by WAC 197-11-775 before the planning commission or hearings examiner.

Co-location. The use of a single wireless communications support structure or the use of a site by more than one wireless communications provider.

Commercial Nursery, or Tree Farm. A licensed plant or tree nursery or farm in relation to those trees planted and growing on the premises of the licensee, which are planted and grown for sale through retail or wholesale channels in the ordinary course of the licensee's business.

Commission or Planning Commission. Means the Planning Commission of the City of Vancouver, Washington.

Compatible. The capability of being able to function in a consistent and harmonious manner with others and surroundings.

Compatible Design. A building and/or site design which blends with the surrounding area. This might include a pitched roof of a similar pitch to surrounding roofs, trim, shutters or other architectural window detail; horizontal siding and/or brick exterior; and similar unit size or scale.

Comprehensive Plan. A long-range plan intended to guide the growth and development of a community or region that typically includes inventory and analytic sections leading to recommendations for the community's future economic development, housing, recreation and

open space, transportation, community facilities and land use, all related to the community's goals and objectives for these elements.

Concurrent. Means that the existing capacity of an affected transportation corridor or transportation management zone is sufficient to accommodate the projected transportation impacts of a proposed development; or that transportation system improvements, strategies, or other mitigation measures which will achieve or maintain an operating level at or above the applicable level of service for the affected transportation corridor or management zone: and are planned, reasonably funded, and scheduled for completion no later than six years after development approval as reflected in the most recent version of the Six-Year Street Plan; and will be available and complete no later than six years after development approval, as provided by a voluntary financial commitment (where appropriate) by the applicant that is in place at the time development is approved by the Development Review Authority.

Conditional Use. An activity specified by this title as a principal or an accessory use, permitted when authorized by the appropriate approval authority and subject to certain conditions.

Contiguous. Means the same as abutting.

Contributing. A property which dates to the historic period and retains sufficient physical integrity so as to convey its historic character.

Contributing Area. When referring to wetlands, the land and/or water area adjacent to a wetland that drains into that wetland.

Conversion Option Harvest. A timber harvest as established in ~~Washington State Department of Natural Resources~~DNR's Forest Practices Regulations and Chapter 20.770 VMC, Tree Conservation, whereby a property owner is allowed to harvest a limited amount of timber from their property within the City of Vancouver, while still maintaining the rights to convert their property to a use inconsistent with growing timber.

Conveyance. A mechanism for transporting water or other liquids from one point to another, including pipes, ditches, and channels.

Co-tenant. A person who resides with the applicant for the deferral and who has an ownership interest in the residence.

Court. An open, uncovered, and unoccupied space within an allotted property line.

Court Height. A measurement from the floor level of the lowest story in the building in which there are windows from rooms served by the court, to the highest point of the enclosing walls of the court.

Critical Aquifer Recharge Areas. Areas with a critical recharging effect on aquifers used for potable water as defined by the Washington State Growth Management Act. Critical aquifer recharge areas are regulated under VMC 14.26.

Critical Areas. Critical areas include ~~fish and wildlife habitat conservation areas~~FWHCAs, W~~w~~etlands, F~~f~~requently F~~f~~looded A~~a~~reas, ~~critical aquifer recharge areas~~CARAs, and G~~g~~eologic H~~h~~azard A~~a~~reas as defined by the Washington State Growth Management Act. Critical aquifer recharge areas are regulated under VMC 14.26. The others are regulated under VMC 20.740.

Critical Facility. Facilities that serve vulnerable populations, house emergency services, meet the definition of a Class I or Class II Operation under VMC 14.26, or perform other functions that would pose significant safety issues in even a slight landslide, flooding, erosion, seismic, or other natural hazard event. Critical facilities include, but are not limited to: schools, nursing homes, hospitals, police, fire, and emergency response installations, installations which produce, use, or store hazardous materials.

Critical Root Zone (CRZ). The area where the tree's roots are located. This root zone is generally the area surrounding a tree trunk at a distance equal to one foot for every inch of tree diameter at breast height (dbh). This area is described as the radius of a circle around the tree.

Crown. The area of a tree containing leaf- or needle-bearing branches.

Crown Cover. The area within the drip line or perimeter of the foliage of a tree.

Cul-de-Sac. The circular turnaround at the end of a dead-end street.

Cultural Resources. The historic or prehistoric or archeological sites and standing structures, cemeteries, burial grounds and funerary objects and distributions of cultural remains and artifacts.

DAHP. Washington State Department of Archaeology and Historic Preservation.

Decibels (dB). The measure of noise loudness on a scale weighted to approximate human ability to perceive sound (A). Each decibel is a measure of the difference in energy of a sound compared to another sound which is used as a reference. The reference sound is barely audible

to the human ear, and each interval of 10 decibels indicates sound energy ten times greater than before. The A-weighted scale generally places zero dB at the threshold of hearing and 135 dB at the threshold of pain.

Dedication. The limited grant by a property owner allowing the use of property by the public for specified purposes by means of a deed or transfer to the city.

Dedication, Fee In Lieu Of. Payments in cash as an alternative to dedication of land or construction of improvements.

Deed. A legal document conveying ownership of real property.

Demolish. To raze, destroy, dismantle, deface or in any other manner cause partial or total ruin of a structure or other improvement.

Density. A measurement of ratio comparing the number of dwelling units with land area in relationship to a specified amount of land, expressed as the number of residential dwelling units per acre of land or the amount of land area expressed in the square feet of land assignable to each dwelling unit in a residential development.

Density, Net. The development density derived by dividing the net buildable area of the subject property (gross area less the total aggregate area required by the city for public or private streets, schools or other public facilities, not including parks and public or private recreation facilities dedicated or created as an integral part of the development) by the applicable lot size or area per unit.

Density, Gross. The development density derived by dividing the gross area of the subject property by the applicable minimum lot size. Gross density is used to determine the maximum number of lots that may be achieved on a parcel being developed.

Department. The Development Review Services Department, Long Range Planning Department, Public Works Department, or any division, subdivision, or organizational unit of the city established by ordinance, rule or order.

Destroy any tree. To damage, disfigure or cause injury or death which may include, but not be limited to, topping, excessive pruning not consistent with nationally-accepted standards, poisoning, and trenching or excavating in such a manner as to make the tree root system no viable.

Detached Sidewalks. A sidewalk separated from the back of curb by a uniform width planting strip.

Developer. Any person, firm or corporation undertaking the development of any parcel of land.

Development. Any humanmade change to improved or unimproved real estate including but not limited to: mining, dredging, filling, drilling, grading, paving, or excavation, storage of equipment or materials; any subdivision or short platting of land; the construction or re-construction of residential, commercial, industrial, public or any other building or building space, and the placement of all types of manufactured homes defined herein. Development also includes the change in use of a building or land if approval is required pursuant to the Vancouver Municipal Code, Title 17 (Building Code). As related to the Tree Conservation Ordinance, development shall mean the division of a parcel of land into two or more parcels; the construction, reconstruction, conversion, structural alteration, relocation, or enlargement of any structure; any mining, excavation, landfill, clearing or land disturbance.

Development Application. Any application (including supporting materials) for approval of a development to which the provisions of Title 20 VMC apply.

Development Review Authority. The planning official, the City Hearings Examiner, the Planning Commission, or City Council, each having authority to approve a development application pursuant to Title 20 VMC.

Diameter at Breast Height (DBH). A tree's diameter in inches at 4 1/2 feet above the ground. On multi-stemmed or -trunk trees, the diameter shall be the diameter equivalent to the sum of trunk areas measured at 4 1/2 foot above the ground.

Direct-to-Home Satellite Service. The distribution or broadcasting of programming or services by satellite directly to the subscriber's premises without use of ground-receiving or distribution equipment, except at the subscriber's premises or in the uplink process to the satellite.

Disturbance Area. Regarding archaeological resource protection, the geographical area in which archaeological resources could potentially be adversely impacted by a proposed ground-disturbing action or activity. It includes equipment or material staging areas; utility installation areas; temporary roads or haul routes; or other areas outside of the proposed building footprint(s) that could be disturbed during construction. The disturbance area shall not be smaller, and will generally be larger than the area of the property proposed for development. In

no case shall the disturbance area be smaller than one acre or the area of the parcel(s) upon which the property proposed for development is located, whichever is less.

Regarding critical areas, a pronounced, temporary change in environmental conditions within an ecosystem. Disturbances often act quickly and can alter ecosystem composition, structure, and function.

Dog Day Care. A facility where dogs may be groomed, trained, exercised, and socialized, but not kept or bred, sold, or let for hire.

Domestic Animal. Any animal other than livestock that lives and breeds in a tame condition including, but not limited to: dogs, cats, small birds and other animals kept as pets.

Doorway Identification Nameplates. A nonelectric sign that is limited to the name, address, and number of the building, institution or person and is limited to the activity carried on in the building or institution or to the occupancy of the person.

Downed Woody Vegetation. Shrubs, trees, or their branches that have fallen and are on the ground or in, across, or dangling above streams, rivers, lakes, or ponds; also known as large woody debris.

Drive-Through Facility. A facility or structure that is designed and intended to allow drivers to remain in their vehicles before and during participation in an activity on the site.

Driveway. A private way providing ingress and egress from one or two lot parcels or tracts to a public or private street.

Dwelling. A single unit providing a complete independent living space for one or more persons, including permanent facilities for living, sleeping, eating, cooking and sanitation.

Dwelling, Efficiency Living Unit. Any room having cooking facilities, and used for combination living, dining, and sleeping purposes for not more than two persons, and designed as a separate apartment, not merely rooming accommodations. Each efficiency living unit shall be provided with a separate bathroom meeting the requirements of the Building Code.

Dwelling, Houseboat Moorage. A facility that provides moorings for houseboats.

Dwelling, Multiple-Family. A building or portion thereof designed or used as a residence by three or more households and containing three or more dwelling units.

Dwelling, Single-Family. A building designed or used for residence purposes by not more than one household and containing one dwelling unit only. Such dwelling units may be either detached (i.e., free-standing) or attached (i.e., sharing) common walls with other such units.

Dwelling, Single-Room Occupancy Housing (SRO). A building wherein furnished rooms without cooking facilities are rented for compensation to three or more nontransient persons not included in the family unit of the owner or tenant of the premises.

Dwelling, Two-Family, or Duplex. A building designed or used for residence purposes by not more than two households and containing two dwelling units. (Ord. M-4402 § 3(C), 2023; Ord. M-4380 § 2, 2022; Ord. M-4325 § 3, 2020; Ord. M-4289 § 4, 2019; Ord. M-4179 § 61, 2016; Ord. M-4170 § 5, 2016; Ord. M-4034 § 2, 2012; Ord. M-4024 § 4, 2012; Ord. M-4024 § 3, 2012; Ord. M-4017 § 11, 2012; Ord. M-4002 § 2, 2011; Ord. M-3959 § 3, 2010; Ord. M-3922 § 2, 2009; Ord. M-3868 § 2, 2008; Ord. M-3844 § 3, 2007; Ord. M-3840 § 3, 2007; Ord. M-3832 § 1, 2007; Ord. M-3733 § 2, 2006; Ord. M-3709 § 2, 2005; Ord. M-3701 § 2, 2005; Ord. M-3692 § 8, 2005; Ord. M-3667 § 2, 2004; Ord. M-3663 § 2, 2004; Ord. M-3643, 2004)

20.150.040B Meanings of Specific Words and Terms E through H.

Early Notice. The city's response to an applicant stating whether it considers issuance of a determination of significance likely for the applicant's proposal.

Easement. A grant of one or more of the property rights by the property owner to and/or for use by the public, a corporation or another person or entity.

Ecology. The Washington State Department of Ecology.

Egress. An exit from a building or site.

Electric Vehicle. Any on-road vehicle that operates, either partially or exclusively, on electrical energy from the grid, or an off-board source, that is stored on-board for locomotive purpose. "Electric vehicle" includes: 1) a battery electric vehicle; 2) a plug-in hybrid electric vehicle; 3) a neighborhood electric vehicle; 4) a medium-speed electric vehicle; and/or (5) a battery-powered scooter.

Elevated Building. For insurance purposes, a nonbasement building that has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

Elevation, Architectural. A scale drawing of the side, front or rear of a structure.

Elevation Certificate. An administrative tool of the National Flood Insurance Program (NFIP) that can be used to provide elevation information, to determine the proper insurance premium rate, and to support a request for a letter of map amendment (LOMA) or letter of map revision based on fill (LOMR-F).

Emergency Repair. The work necessary to prevent destruction or dilapidations to real property or structural appurtenances thereto immediately threatened or damaged by fire, flood, earthquake or other disaster.

Emergent wetland. A wetland with at least 30~~%~~ percent of the surface area covered by erect, rooted, herbaceous vegetation as the uppermost vegetative strata.

Employees. Refers to all persons, including proprietors, working on the premises.

Employer. A sole proprietorship, partnership, corporation, unincorporated association, cooperative, joint venture, agency, department, district or other individual or entity, whether public, nonprofit or private, that employs workers.

Endangered and Threatened Species, Federally Designated. Fish and wildlife species identified by the U.S. Fish and Wildlife Service or NOAA Fisheries as threatened or endangered under the Endangered Species Act, 16 USC Section 1531, et seq.

Endangered, Threatened and Sensitive Species, State Designated. Fish and wildlife species native to the State of Washington and identified by the Washington Department of Fish and Wildlife as sensitive, threatened, or endangered species.

Energy-Efficient Construction. A structure designed and built which encourages the efficient use of energy. Construction standards qualifying for this shall be as specified by the State Energy Code. Design or construction methods that can be proven to provide equivalent or better energy conservation performance may be allowed as an alternative.

Engineer. An individual licensed by the State of Washington to practice civil engineering.

Enhancement. Actions performed to improve the condition of an existing degraded critical area or buffer so that the functions provided are of a higher quality. See also Wetland Enhancement.

Enlargement. An increase in size of an existing structure or use, affecting the physical size of the property, building, parking, and other improvements.

Entertainment. Regarding Adult Businesses, any exhibition or dance of any type, pantomime, modeling or any other performance.

Entertainer. Regarding Adult Businesses, means any person who provides sexually-oriented adult entertainment within a public place of amusement whether or not a fee is charged or accepted for such entertainment.

Equity Value. The amount by which the fair market value of a residence as determined from the records of the county assessor exceeds the total amount of any liens or other obligations against the property.

Erect. To build, construct, attach, hang, place, inscribe, suspend or affix any sign or to paint any wall sign.

Erosion Control. The design and installation of measures to control erosion and sedimentation during and after construction and to permanently stabilize soil exposed during and after construction using a combination of structural control measures, cover measure, and construction practices.

Erosion hazard. These are areas containing soils which, according to the U.S. Department of Agriculture Natural Resources Conservation Service Soil Survey Program, may experience significant erosion. Erosion hazard areas also include channel migration zones. See VMC 20.740.130 for designation of erosion hazard areas.

Essential Facility (Applies in Frequently Flooded Areas). This term has the same meaning as "essential facility" defined in ASCE 24. Table 1-1 in ASCE 24-14 further identifies building occupancies that are essential facilities.

Essential Public Facilities. Public facilities and privately-owned or operated facilities serving a public purpose that are typically difficult to site. They include but are not limited to: airports, state education facilities, state or regional transportation facilities, prisons, jails, other correctional facilities, and solid waste handling facilities. These facilities are of state-wide and regional significance, as opposed to facilities which only serve Clark County. Therefore, local transit service is not considered an essential public facility. Essential public facilities will be allowed in locations appropriate for the services provided and the people served.

Exception. Permission to depart from a specific design standard in this title.

Existing Manufactured Home Park or Subdivision (Applies in Frequently Flooded Areas). A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by the community.

Exotic. Any species of plants or animals that are not native to the area.

Expansion to an Existing Manufactured Home Park or Subdivision (Applies in Frequently Flooded Areas). The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Extraordinary hardship. Extraordinary hardship occurs when strict application of the provisions of 20.775 VMC Wetlands and Water Bodies Protection would prevent all reasonable economic use of the subject parcel.

Façade. Any exterior building face, from corner to corner and finished floor to eave, exclusive of any roof area.

Face. To front upon.

Family. See Household.

Feature. An artifact or set of artifacts which, due to its size and complexity, loses its integrity when moved, and therefore, cannot be transported as a unit to a laboratory or museum for study or display (e.g., a hearth, an ash lens, a storage pit, a cache of related artifacts, or a house floor).

Fence, Sight-Obscuring. A fence or evergreen planting constructed or arranged in such a way as to obstruct vision.

Findings. A written statement of the facts determined to be relevant by the approval authority as the basis for making its decision. The approval authority applies the relevant facts to the approval criteria or standards to reach its decision.

Fish and Wildlife Habitat Conservation Areas (FWHCAs). ~~Fish and Wildlife Habitat Conservation Areas~~ FWHCAs are areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and that, 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, including locally designated important habitats and species. These areas also include habitat for Endangered, Threatened and Sensitive species; Priority Habitats and areas associated with Priority Species; Riparian Management Areas; Habitats of Local Importance, and water bodies,; water bodies; forage fish spawning areas; naturally occurring ponds less than 20 acres; waters of the state; natural area preserves; natural resource conservation areas; and state wildlife areas. Fish and Wildlife Habitat Conservation Areas do not include artificial features or constructs such as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company.

Fish Habitat. Habitat which is used by any fish at any life stage at any time of the year, including potential habitat likely to be used by fish which could be recovered by restoration or management and includes off-channel habitat.(WAC 222-16-030)

Flood or Flooding.

1. A general and temporary condition of partial or complete inundation of normally dry land areas from:
    a. The overflow of inland or tidal waters.
    b. The unusual and rapid accumulation or runoff of surface waters from any source.
    c. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in subsection (1)(b) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
2. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water

exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in subsection (1)(a) of this definition.

Flood Elevation Study. An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards. Also known as a Flood Insurance Study (FIS).

Flood Insurance Rate Map (FIRM). The official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

Floodplain. The relatively flat area or lowlands adjoining the channel of a river, stream, watercourse, or other similar body of water that has been or may be susceptible to being inundated by floodwater. The floodplain includes the areas of special flood hazards (frequently flooded areas).

Floodplain Administrator. The community official designated by title to administer and enforce the floodplain management regulations.

Floodplain or Flood-Prone Area. Any land area susceptible to being inundated by water from any source. See “Flood or flooding.”

Flood-Proofing. Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents. Flood-proofed structures are those that have the structural integrity and design to be impervious to floodwater below the base flood elevation.

Floodway. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Also referred to as “regulatory floodway.”

Floor Area. The area of all floors, finish wall-to-finish wall, included in surrounding walls of a building.

Floor Area, Gross. The total enclosed area of all floors of a building measured to the outside face of the structural members in exterior walls and including halls, stairways, elevator shafts at each floor level, service mechanical equipment rooms, habitable basement or attic areas, and structured (not surface) areas for vehicle parking and loading.

Floor Area Ratio (FAR). A mathematical expression determined by dividing the total floor area of a building by the total area of the lot. It is determined by dividing the total gross floor area of all the buildings on a lot by the area of that lot, excluding public easements and right-of-ways, landscaped areas required under the requirements of this chapter and Chapter 20.740, Wetlands and Drainage Areas. For example, a floor area ratio of 2 to 1 (or 2:1) means that there are 2 square feet of gross floor area for every 1 square foot of lot area.

Frequently Flooded Areas. Areas of special flood hazards.

Front. Each side of a lot abutting a public street except state or federally designated highways.

Frontage. That portion of a parcel of property that abuts a dedicated public street, highway or approved private street, from property line to property line.

Fronting Street. Shall mean a public or private road providing for vehicular access to the boundary of a parcel of real property being proposed for development.

Full-time Employee. A person other than an independent contractor scheduled to be employed on a continuous basis for fifty-two weeks a year for an average of thirty-five hours or more per week.

Full-time Equivalent (FTE). The equivalent number of full-time students attending a post secondary school such as a trade school, college or university.

Fully Complete. Regarding land use applications, the determination by the Review Authority that the application and associated documentation contain sufficient information and detail to reach a final decision; such determination shall not be interpreted to mean that the application meets applicable standards.

Functionally Dependent Use (Applies in Frequently Flooded Areas). A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The

term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long-term storage or related manufacturing facilities.

Functionally Disabled. With respect to a person who has a physical or mental impairment which substantially limits one or more of such person's major life activities; has a record of having such an impairment, or being regarded as having such an impairment. Such term does not include current, illegal use of or addiction to a controlled substance.

Functions or Functions and Values of ~~Fish and Wildlife Habitat Conservation Areas~~FWHCAs. Functions or functions and values are the beneficial roles served by ~~Fish and Wildlife Habitat Conservation Areas~~FWHCAs. ~~Fish and Wildlife Habitat Conservation Areas~~ FWHCAs provide habitat for breeding, rearing, foraging, protection and escape, migration, and over-wintering. ~~Fish and Wildlife Habitat Conservation Areas~~FWHCAs affect the quality of habitat by providing complexity of physical structure, supporting biological diversity, regulating stormwater runoff and infiltration, removing pollutants from water, and maintaining appropriate temperatures.

Functions or Functions and Values of Wetlands. Functions or functions and values are the beneficial roles served by wetlands. Wetlands improve water quality, maintain watershed hydrology (for example, by providing base stream flow during dry periods and controlling flooding), and provide habitat.

Garage, Private. A paved, covered, and enclosed motor vehicle parking space with a locking door, either attached or detached from the living unit. An accessory building or an enclosed accessory portion of the main building designed and/or used for shelter or storage of vehicles, boats and/or other vehicles owned or operated by the occupants of the main building.

Garage, Public. A structure or portion thereof other than a private or community garage used for the storage of self-propelled vehicles or trailers. Any garage, other than a private garage, open to use by members of the public.

Geographic Barrier. A natural or constructed land form or feature such as, but not limited to: a promontory, a ravine, a large or fast-moving body of water or a dike.

Geologic Hazard Areas. Geologic hazard areas include landslide, seismic, and erosion hazard areas designated pursuant to VMC 20.740.130(A)~~.~~ and are defined as areas that are not

generally suitable for the siting of commercial, residential, or industrial development consistent with public health or safety concerns unless determined otherwise with a critical areas report provided by a qualified professional in accordance with VMC 20.740.130(B) and in compliance with the performance standards of VMC 20.740.130(C).

Grab Sample. Regarding solid waste regulations, a single sample which is taken from a waste stream without regard to the flow in the waste stream and without consideration of time.

Grade. As defined in the City Adopted Building Code(s).

Grading. Any excavation, filling or combination thereof.

Grading Permit. The permit required under Chapter 70 of the City Adopted Building Code(s).

Gross Floor Area. Means the same as floor area.

Gross Leasable Area (GLA). The total floor area designed for both tenant occupancy and exclusive use. This includes both owned and leased areas.

Ground-disturbing Action or Activity. Any development, construction, or related operation which could alter the site, including but not limited to: tree or tree stump removal, road or building construction or grading.

Group Living. Living facilities for groups of unrelated individuals that include at least one person residing on the site who is responsible for supervising, managing, monitoring and/or providing care, training or treatment or residents

Guest House Dwelling. A detached accessory building designed, constructed and used for the purpose of providing temporary living accommodations for guest, or for members of the same household as that occupying the main structure, and containing no kitchen or kitchen facilities.

Guyed Tower. Any wireless communication support, using guy wires which are permanently anchored.

Habitable Floor Area. The total heated floor area in a structure devoted to living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces, and other similar areas are not counted as habitable floor area.

Habitat Corridor. Habitat corridors are areas of relatively undisturbed and unbroken tracts of vegetation that connect Fish and Wildlife Habitat Conservation Areas, priority habitats, areas

identified as biologically diverse, or valuable habitats within a city or urban growth area. Habitat corridors as required for Option 3A wetland buffers must meet the specific requirements outlined in VMC 20.740.140.

Habitats of Local Importance. ~~Fish and Wildlife Habitat Conservation Areas~~FHWCAs which are not designated as Priority Habitats and Species by the Washington Department of Fish and Wildlife but are designated as locally significant by the city.

Hard surface. Hard surface is an impervious surface, a permeable pavement or a vegetated roof.

Hazardous Material. Any product, substance, commodity or waste in liquid, solid or gaseous form that exhibits a characteristic that presents a risk to water resources. Risk may be due to ignitability, toxicity, reactivity, instability, corrosivity, or persistence. This definition extends to all "dangerous wastes" and "hazardous substances" that are defined in WAC 173-303 (State Dangerous Waste Regulations). It also includes the chemicals and/or substances that are defined in the Federal Emergency Planning and Community Right to Know Act (EPCRA) and/or the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

Hazardous Waste. Means all dangerous and extremely hazardous waste as defined in RCW 70.105.010 except for moderate risk waste.

Hazardous Waste Storage. The holding of dangerous waste for a temporary period as regulated by State Dangerous Waste Regulations, Chapter 173-303 WAC.

Hazardous Waste Treatment. The physical, chemical or biological processing of dangerous waste to make wastes nondangerous or less dangerous, safer for transport, amenable for energy or material resource recovery, amenable for storage, or reduced in volume.

Hazardous Waste Treatment and Storage Facility, Off-Site. The treatment and storage facilities that treat and store wastes from generators on properties other than those on which the off-site facilities are located.

Hazardous Waste Treatment and Storage Facility, On-Site. The treatment and storage facilities that treat and store wastes generated on the same geographically contiguous or bordering property.

Headwaters. Springs, lakes, ponds or wetlands that provide significant sources of water to a stream.

Healthy Soil. Soil that is of good quality with the capacity to sustain plant, animal, and human life by providing nutrients, air and water space to infiltrate, pollutant absorption and filtering, and habitat.

Heritage Tree. A tree or group of trees designated as such by the city in Chapter 20.770 VMC, Tree Conservation.

High-Intensity Land Use. Land uses which are associated with high levels of human activity or substantial habitat impacts including Residential, Commercial, and Industrial zoning districts.

Historic District. A geographically definable area possessing a significant concentration, linkage or continuity of sites, buildings, structures or objects united by past events or aesthetically by plan or physical development.

Historic Structure (Applies in Frequently Flooded Areas). Any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or

4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

    a. By an approved state program as determined by the Secretary of the Interior, or

    b. Directly by the Secretary of the Interior in states without approved programs.

Home Occupation. A use conducted entirely within a residential building, which use is clearly incidental and secondary to the use of the dwelling for dwelling purposes, and complies with the criteria established by 20.860 VMC Home Occupations.

Homeowners Association. A nonprofit corporation or association operating under a recorded land agreement through which:

1. Each person owning or purchasing a lot in a planned unit or other described land area is automatically by such ownership or purchase a member; and

2. Each lot is automatically subject to a charge for a proportionate share of the expenses for the organization's activities, such as maintaining a common area and improvements.

Household. An individual, two or more persons related by blood or marriage, a group of two or more disabled residents protected under the Federal Fair Housing Amendment Act of 1988, adult family homes as defined under Washington State law, or a group living arrangement where six or fewer residents receive supportive services such as counseling, foster care, or medical supervision at the dwelling unit by resident or nonresident staff. Up to six residents not related by blood or marriage who live together in a single-family dwelling or in conjunction with any of the above individuals or groups, shall also be considered a household. For purposes of this definition, minors living with parent or legal guardian shall not be counted as part of the maximum number of residents.

Hydric Soil. Soil that is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper part. The presence of hydric soil shall be determined following the methods described in the Wetlands Delineation Manual defined in this chapter.

~~Hydrogeomorhpic~~Hydrogeomorphic **(HGM) Classification.** System used to classify wetlands based on the position of the wetland in the landscape (geomorphic setting), the water source for the wetland, and the flow and fluctuation of the water once in the wetland.

Hydrophytic Vegetation. Macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. The presence of hydrophytic vegetation shall be determined following the methods described in the Wetlands Delineation Manual defined in this chapter. (Ord. M-4325 § 3, 2020; Ord. M-4179 § 62, 2016; Ord. M-4034 § 2, 2012)

20.150.040C Meanings of Specific Words and Terms I through L.

Impact. The effect of an activity on designated critical areas, their buffers or sensitive resources.

Impact Fee. The fee levied as a condition of issuance of a building permit or development approval to support necessary public improvements affected by the development such as the transportation system, park acquisition and development, and schools.

Impact, Indirect. Impacts resulting from activities in the environs of a designated critical area, its buffer or a sensitive resource. Indirect impacts can result from construction activities nearby (e.g., producing sediment that enters a wetland or noise that disturbs a species listed under the Endangered Species Act). Other examples of indirect impacts include: changing the hydrology of an area such that it reduces water flow to a wetland or water body; introducing a barrier to wildlife movement through an area (such as a road or facility with bright night lighting); or reducing the size of a resource such that it can no longer perform the functions at its former level. The relationship of a designated critical area, buffer or sensitive resource to its surroundings must be considered in evaluating indirect impacts.

Impact, Permanent. Impacts that result in the permanent loss of a designated critical area, its buffer or a sensitive resource.

Impact, Temporal. The long-term effects of an activity or development where functions can be replaced eventually but cannot and do not achieve a similar functionality in a short period of time. For example, replacing the functions of song bird habitat in a tree canopy provided by a 50 year-old palustrine forested wetland, may take over 20 years to develop at the impact site.

Impact, Temporary. Short-term effects lasting for a limited time and where functions can be replaced in a relatively short period of time (about one year). For example, replacing the functions of habitat for small mammals or water quality for palustrine emergent (PEM) wetlands (those principally vegetated with grasses and forbs) may be done in one growing season if the disturbance is not severe.

Impervious Surface. A nonvegetated surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A nonvegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common

impervious surfaces include, but are not limited to, structures, roof tops, walkways, patios, driveways, carports, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, haul roads and soil surface areas compacted by construction operations, and oiled or macadam or other surfaces which similarly impede the natural infiltration of stormwater.

Improvement. Any permanent structure including building, paving, or infrastructure that becomes part of, placed upon, or is affixed to property.

Infill Development. Development that occurs on underutilized or challenged parcels.

Infill Development Plan. A plan that is required to be submitted with infill development which identifies the existing and proposed lot characteristics, including applicable standards and incentives.

Infill Land Division. The division of an infill parent parcel using some or all of the standards contained in the Infill Development Ordinance.

Infill Parcels. Parcels that meet the eligibility criteria of this chapter or those parcels created by the land division of an infill parent parcel through the application of the standards in the Infill Ordinance.

Infill Parent Parcel. Regarding Infill Development, the larger parcel of land from which infill parcels are divided.

Ingress. Access or entry.

Inordinate Light Source. Lighting source that is exceptionally bright or outside normal industry standards as found by the planning official.

Integrated Pest Management. A sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks.

Intermittent stream. Surface streams with no observable flow during 30 consecutive calendar days in a normal water year.

Junkyard/Salvage Yard. A place where waste, discarded, or salvaged materials are bought, sold, exchanged, baled, packed, disassembled, or handled, including auto wrecking yards,

house wrecking yards, used lumber yards, and places where such uses are conducted entirely within a completely enclosed building, but not including pawn shops or establishments for the sale, purchase, or storage of used furniture and household equipment, used cars in operable condition, or salvaged materials incidental to manufacturing operations.

Kennel. Shall mean any premises on which four or more dogs older than 5 months are kept, excluding veterinary clinics, animal hospitals, and dog daycare facilities.

Kitchen. Any room or rooms, or portion thereof, used or intended to be used for cooking or the preparation of food.

Land-disturbing activity. Regarding erosion control regulations, any activity that results in a change in the existing soil cover (both vegetative and nonvegetative) or existing soil topography. Land-disturbing activities include, but are not limited to, demolition, reconstruction, construction, clearing, grading, filling, and excavation.

Land Form Alteration. Any man-made change to improved or unimproved property including, but not limited to, the addition of buildings or other structures; mining; quarrying; dredging; filling; grading; earthwork construction; stockpiling of rock, sand, dirt or gravel or other earth material; paving; excavation or drilling operations located within the area of special flood hazard.

Landscaping. To beautify or improve a section of ground by contouring the land and planting flowers, shrubs or trees. Landscaping may also include nonvegetative improvements such as courtyards, fountains, pedestrian walkways, plazas, and medians.

Landslide hazard areas. ~~These are a~~Areas subject to landslides based on a combination of geologic, topographic, and hydrologic factors, including ~~and include~~ areas susceptible to landslide because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors; this includes, at a minimum, the following ~~and at a minimum include the following: at risk of mass movement due to a combination of geologic, topographic, and hydrologic factors. See VMC 20.740.130 for designation of landslide hazard areas.~~

1. Areas of historic failures, such as:

    a. ~~Those a~~Areas delineated by the U.S. ~~nited States~~ Department of Agriculture Natural Resources Conservation Service as having a significant limitation for building site development;

b. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey (USGS) or ~~Washington State Department of Natural Resources (~~DNR~~);~~

c. Areas with all three of the following characteristics:

i. Slopes steeper than 15 percent;

ii. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and

iii. ~~–~~Springs or groundwater seepage.

2. Areas that have shown movement during the Holocene epoch (from 10,000 years ago to the present) or ~~which~~that are underlain or covered by mass wastage debris of this epoch.

3. Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;

4. Slopes having gradients steeper than 80 percent subject to rockfall during seismic shaking;

5. Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action, including stream channel migration zones;

6. Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and

~~1.~~7. Any area with a slope of 40 percent or steeper and ~~with~~ a vertical relief of 10 or more feet except areas composed of bedrock. A slope is delineated by establishing its toe and top and measured by averaging the inclination over at least 10 feet of vertical relief.

Lattice Tower. A wireless communications support structure, which consists of a network of vertical and horizontal supports and crossed metal braces, forming a tower that is usually triangular or square in cross-section.

Ldn. Annual Average Day/Night Sound Level. The "Ldn, Day/Night Sound Level," in decibels, is the 24-hour logarithmic average sound level, from midnight to midnight, obtained after adding 10 decibels to sound levels in the night from midnight to 7:00 a.m., and from 10:00 p.m. to midnight (0000 to 0700, and 2200 to 2400 hours), and then logarithmically averaged day-to-day over a 12-month period.

Legal Owner. The owner of record, as shown by the records of Clark County.

Livestock. Any horse, beef or dairy cattle, sheep, goat, llama, alpaca, mule, jack, jenney, burro, domesticated hare, rabbit, emu, ostrich, poultry or similar animal.

Liquefaction Hazard Areas. Liquefaction hazard areas are areas typically underlain by cohesionless soils of low density, usually in association with a shallow groundwater table, that lose substantial strength during earthquakes.

Load Space or Loading Area. An off-street space or berth on the same lot or parcel with a building or use, or contiguous to a group of buildings or uses, for the temporary parking of a vehicle which is loading or unloading, merchandise or materials.

Local Public Facility. A land use designed to serve the needs of the local neighborhood or community affected by the impact(s) of development. Local Public Facilities include, but are not limited to: elementary, middle, and high schools; fire stations; police stations; parks; and transit facilities. Local Public Facilities shall not include land use(s) of regional or community-wide significance, such as airports, colleges, hospitals, regional parks or community centers.

Logo. A group of letters, typically stylized, or symbols that represent a word, group of words or business name.

Lot Area. The computed area contained within the lot lines; said area to be exclusive of street or alley rights-of-way or access easements, Bonneville Power Administration (BPA) easements, water detention/retention ponds, wetlands and wetland buffers which are delineated and recorded on plats and short plats.

Lot, Corner. A lot abutting upon two or more streets at their intersection, or upon two parts of the same street; such street or parts of the same street forming an interior angle of less than 135° within the lot lines.

Lot Coverage. That percentage of the total lot area covered by structures, including all projections except eaves, balconies, bay windows, or uncovered deck 42 inches or less above grade.

Lot Depth. The average distance measured from the front lot line to the rear lot line. In the case of a corner lot, the depth shall be the length of its longest side lot line.

Lot, Estate. A lot in a subdivision that contains a house and outbuildings constructed prior to the subdivision. The estate lot cannot be larger than one acre in area, and is exempt from the minimum density requirements of any residential district.

Lot, Flag. A lot generally in the shape of a flag where access is typically by a narrow, private right-of-way or driveway.

Lot, Interior. A lot or parcels of land other than a corner lot.

Lot, Legal. A parcel of land used or which is capable of being used under the regulations of this title, lawfully created as such in accordance with the subdivision laws or ordinances in effect at the time of its creation.

Lot Line. Any line bounding a lot as herein defined.

Lot Line, Front. The property line abutting a street or the edge of a private street, or primary access. For corner lots the front line is that with the narrowest frontage. When the lot line abutting a street is curved, the front lot line is the chord or straight line connecting the ends of the curve. For a flag lot, the front lot line is the shortest lot line adjoining the pole portion of the lot, excluding the unbuildable portion of the pole.

Lot Line, Rear. A lot line not abutting a street that is opposite and most distant from the front lot line.

Lot Line, Side. Any lot line that is not a front or a rear lot line.

Lot of Record. A lot shown on the records of the County Auditor at the time of the passage of an ordinance or regulation establishing the zoning district in which the lot is located.

Lot Size, Minimum. The area determined to be the minimum average lot size for each underlying zoning district prior to application of any lot size reduction allowed.

Lot, Through. Lot having front and rear frontage on two streets and/or highways. Lots with rear alley frontage shall not be considered through lots.

Lot Width. The horizontal distance between the side lot lines measured within the lot boundaries or the average horizontal distance measured halfway between the front and rear setback lines.

Low Impact Development (LID). Low impact development is a stormwater and land management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.

Low Impact Development Best Management Practices (BMPs). Low impact development best management practices are distributed stormwater management practices, integrated into a project design, that emphasize pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration. LID BMPs include, but are not limited to, bioretention, rain gardens, permeable pavements, roof downspout controls, dispersion, soil quality and depth, vegetated roofs, minimum excavation foundations, and water re-use.

Low Impact Development Principles. Low impact development principles are land management strategies that emphasize conservation, use of onsite natural features, and site planning to minimize impervious surfaces, native vegetation loss, and stormwater runoff.

Lowest Floor. The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosed area below the base flood elevation, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of VMC 20.740.120(J)(8)(c), (J)(10)(d), or (J)(11)(e).

Low-Income Housing. Housing for which the monthly housing expense is no greater than thirty percent of eighty percent of the median family income adjusted for family size for Clark County, Washington, as reported by the United States Department of Housing and Urban Development. For multi-family housing, this definition shall apply only to the number of units within such housing development as are required to comply with this limitation on monthly housing expense.

Low-Intensity Land Use. Land uses which are associated with low levels of human activity or low habitat impacts, including Open Space Greenway: Lettuce Fields and Vancouver Lake Lowlands and Open Space Natural zoning districts.

Low Noise Impact. Interior noise levels of Ldn 45 or less, considered for the purposes of Chapter 20.520 VMC, Noise Impact Overlay District, as acceptable for residential purposes. (Ord. M-4179 § 63, 2016; Ord. M-4154 § 2, 2016; Ord. M-4034 § 2, 2012)

20.150.040D Meanings of Specific Words and Terms M through P.

Main. See Water Main.

Maintain. To allow to continue in existence. When the context indicates, the word shall mean to preserve and care for a structure, or to improve in condition an area to such an extent that it remains attractive, safe, and presentable and carries out the purpose for which it was installed, constructed or required.

Major Thoroughfare. The principal, minor, collector arterials, and State highways, as shown on the Arterial Street Plan adopted in compliance with Chapter 35.77 RCW.

Management Plan. A plan detailing how operations and maintenance activities subject to the provisions of VMC 20.740 will be performed.

Manufacture. Includes production, processing, assembling, packaging or treatment of semi-finished or finished products from raw materials or previously prepared materials or components.

Manufactured Home, Designated – means a manufactured home constructed after June 15, 1976, in accordance with state and federal requirements for manufactured homes. Conforms to federal Manufactured Home Construction and Safety Standards (HUD Code – “Red Label”) rather than to the Building Code (“Gold Label”) requirements.

Manufactured Home, Mobile – Means a structure transportable in one or more sections, which is built on a permanent chassis, and is designed for use with or without a permanent foundation when attached to the required utilities. (Generally built before June 15, 1976). "Mobile manufactured homes" are not "recreational vehicles".

Manufactured Home, Modular – Means any home built in modules at a factory. Modular homes conform to all state and local building codes. Modules are transported on truck beds, and then joined together at the site. They are inspected by local officials. (Regulated under the IBC standards – State Building Code).

Manufactured Home, New – means any manufactured home required to be titled under Title 46 RCW, which was not titled to retail purchaser before July 1, 2005, and was not a "used mobile home" as defined in RCW 82.45.032. (Regulated under the HUD construction and safety standards).

Manufactured Home Development. An existing site containing spaces with required improvements and utilities that are leased for the long-term placement of manufactured homes. This term shall also include "mobile home parks" as that term is used in other titled of the Vancouver Municipal Code (VMC).

Manufactured Home Subdivision. An existing subdivision created for the placement of manufactured homes on individual lots.

Marquee. A roofed structure attached to and supported by the building and projecting over public property.

Master Plan. A comprehensive, long-range site plan for a development project. The project may be located on a single parcel or on several contiguous parcels which are owned by one or more parties working cooperatively and collectively, and is usually implemented in phases.

Mean Sea Level. For purposes of the National Flood Insurance Program, the vertical datum to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

Meandering Sidewalks. Those sidewalks separated by a nonuniform planting strip from the back of the curb.

Micro Facility. Regarding wireless communication facilities, a single antenna, or group of antennae, co-located on an existing tower, building or other appurtenance that is small in size and visually unobtrusive.

Mitigation. Mitigation is a six-step sequencing process used to reduce the severity of effects from activities that potentially affect sensitive resources:

1. Avoiding the impact altogether by not taking a certain action or parts of an action;

2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;

3. Rectifying the impact by repairing, rehabilitating or restoring the affected environment;

4. Reducing or eliminating the impact over time by preservation, and maintenance operations during the life of the action;

5. Compensating for the impact by replacing, enhancing or providing substitute resources or environments; and/or

6. Monitoring the impact and taking appropriate corrective measures.

Mitigation, Compensatory. Compensation for potential impacts to functions and values of critical areas (including fish and wildlife habitat, frequently flooded areas, geologic hazard areas, and wetlands) and their buffers.

Mixed-Use Development. The development of a tract of land, building or structure with a variety of complementary and integrated uses, such as, but not limited to, residential, office, manufacturing, retail, public or entertainment, in a compact urban form.

Mixed-Use Structure. A single structure containing at least two complementary, integrated, or mutually-supporting uses (such as housing, offices, manufacturing, retail, public service, or entertainment). The structure must achieve physical and functional integration within itself.

Moderate-Intensity Land Use. Land uses which are associated with moderate levels of human activity or substantial habitat impacts including Open Space Parks and Open Space Greenways: General zoning districts.

Mode. Refers to the means of transportation used by employees, including single-occupant vehicle, carpool, vanpool, transit, bicycle, and walking.

Monopole Tower. A wireless communications support structure, consisting of a single pole to support antennae and connecting appurtenances.

National Register of Historic Places. The national listing of properties significant to the nation's cultural history because of their documented importance to history, architectural history, engineering or cultural heritage.

Naturally occurring ponds. Ponds less than twenty acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds. Naturally occurring ponds do not include ponds deliberately designed and created from dry sites, such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and landscape amenities, unless such artificial ponds were intentionally created for mitigation.

Native. Native plants are those species on the City of Vancouver's Native Plant Species list (available from the Planning Official).

Native Vegetation. Vegetation that encompasses both that occurring naturally and vegetation well adapted to current and anticipated environmental conditions in this region.

New Construction. For the purposes of VMC 20.740.120, Frequently Flooded Areas, "new construction" means structures for which the "start of construction" commenced on or after September 5, 2012.

New Manufactured Home Park or Subdivision (Applies in Frequently Flooded Areas). A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of adopted floodplain management regulations by the community.

Noise Contour. The graphic depiction of the spatial extent to which an average noise level affects the area surrounding a source of noise. The contour is a line depicting equal points of impact.

Noise Contour, 65 Ldn. The most current 65 Ldn Noise Contour, as annually updated by the Port of Portland for the Portland International Airport using the criteria and methodology adopted by the Federal Aviation Administration for the purpose of establishing noise contours as a part of airport planning, or as provided by other objective sources for noise generations other than the Portland International Airport.

Noise, Environmental. Shall mean the intensity, duration, and character of sounds from any land use, measured at the property line of the receiving property.

Noise Impact. The extent to which a level of noise interferes with the full utilization of land.

Nonconforming, Legal. A use of land, building, structure or use which lawfully existed at the time of the adoption of this title or of any amendment thereto, but which does not conform with the use or development regulations imposed by this title or such amendment thereto.

Noncontributing. A property which either does not date to the historic period or has not retained sufficient physical integrity so as to convey its historic character.

Normal water year. A twelve-month period (October 1-September 30) with average precipitation based upon data from the past 50 years.

Noxious weeds. Non-native plants which are destructive, competitive, and difficult to control as defined by the Washington State Noxious Weed Control Board.

Nudity. Regarding Adult Businesses, the showing of the human male or female genitals or pubic area, the showing of the female breast, with less than a fully opaque covering of any part of the nipple, or the showing of the covered male genitals in a discernibly turgid state.

Obligate, facultative wet, and facultative. Groupings of plants according to their frequency of occurrence in wetlands. Obligate wetland plants almost always (99~~%~~ percent probability) occur in wetlands under natural conditions. Facultative wetland plants usually (67~~%~~ percent-99~~%~~ percent probability) occur in wetlands. Facultative plants are equally likely (34~~%~~ percent-66~~%~~ percent probability) to occur in wetlands or nonwetlands. Such groupings are more fully defined in the Wetlands Delineation Manual defined in this chapter.

Obstruction. Any dam, wall, embankment, levee, dike, pile, abutment, projection, excavation, channel modification, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure or matter which is in, along, across or projecting into any channel, watercourse or regulatory flood hazard area; and which may impede, retard or change the direction of the flow of water, either in itself or by catching or collecting debris carried by such water or which is placed where the flow of water might carry the same downstream to the damage of life or property.

Occupant. Any individual living or sleeping in a building or having possession of a building or space therein. Unless otherwise stated, occupant is synonymous with tenant.

Occupancy Certificate. A city certificate allowing the use of a building or structure after it has been determined that all the requirements of applicable ordinances have been met.

Off-Site Impact. A condition that creates, imposes, aggravates or leads to inadequate, impractical, unsafe or unhealthy conditions on a site proposed for development or on off-site property or facilities. This includes, but is not limited to, noise, glare, and odor.

Off-Site Improvement. Improvements required to be made off-site to address impacts identified from an application for development and including, but not limited to, road widening and upgrading, storm water facilities, and traffic system improvements.

100-Year Flood. The flood having a 1~~%~~ percent chance of being equaled or exceeded in any given year. Also referred to as the "base flood."

100-Year Flood Elevation. The elevation that the 100-year flood is expected to reach. Also referred to as the "base flood elevation."

Open Record Predecision Hearing. An open record hearing as defined by 197-11-775 WAC, which is held before the Planning Commission or Hearings Examiner prior to the closed record approval hearing before the City Council.

Oregon white oak woodland(s). In accordance with WDFW's Priority Habitat & Species (PHS) List, these are stands of oak or oak/conifer associations where canopy coverage of the oak component of the stand is twenty-five percent, or where total canopy coverage of the stand is less than twenty-five percent, but oak accounts for at least fifty percent of the canopy coverage. The latter is often referred to as oak savanna. In non-urbanized areas west of the Cascades, priority oak habitat consists of stands less than one acre in size. In urban or urbanizing areas, single oaks or stands less than one acre may also be considered a priority when found to be particularly valuable to fish and wildlife.

Ordinary high water mark. (OHWM). That mark which is found by examining the bed and banks of a water body and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years that the soils and vegetation have a character distinct from that of the abutting upland area. It also can also be established by fluctuations of water and indicated by physical characteristics such as a clear, natural line

impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. Where the ordinary high water mark cannot be found, it shall be the line of mean high water in areas adjoining fresh water. [WAC 173-22-030(11)]

Ordinary Repair and Maintenance. The work for which a permit issued by the City of Vancouver is not required by law, and where the purpose and effect of such work is to correct any deterioration or decay of or damage to the real property or structure appurtenance therein and to restore the same, as nearly as may be practicable, to the condition prior to the occurrence of such deterioration, decay or damage.

Original Parcel. A lot, parcel or tract created in compliance with all regulations in effect at the time it was initially conveyed, that constitutes the basis for considering the appropriate provisions of this title for platting or short platting; provided, that any lot, parcel or tract conveyed in its present configuration prior to December 18, 1978 (the passage of the short plat ordinance, M-1930) which complies with current zoning requirements, shall be conclusively presumed to have been lawfully created.

Overlay Area. A special geographic area designated in a capital facilities plan to be served by a system improvement, which area is not generally contiguous with an established service area. An overlay area may be local (i.e., covering only a portion of a single service area), regional (i.e., covering portions or all of several service areas), or county wide (i.e., covering both incorporated and unincorporated areas).

Overlay Zone or District. A designated area within a base zoning district for which specific land use regulations apply, in addition to the base zoning requirements.

Owner. The owner of record of real property as shown on the tax rolls of the County, or a person purchasing a piece of property under contract. For the purpose of this title, in terms of violations and binding agreements between the city and the owner, the owner shall also mean a leaseholder, tenant, or other person in possession or control of the premises or property at the time of agreement, violation of agreement, or the provisions of this title.

Ownership Interest. A property interest in an existing single-family residence under a recorded deed or under a contract of purchase, recorded mortgage, recorded deed of trust or recorded lease by which the applicant is responsible under penalty of forfeiture, foreclosure or default for payment of real property taxes and/or local improvement district assessments. The

term shall also include a share ownership in a cooperative housing association, corporation or partnership if the applicant can establish that his or her share represents the specific unit or portion of such structure in which he or she resides.

Painted Wall or Wall Graphic. An advertisement painted directly on the wall of a building.

Parking Area, Public. An open area other than a street or other public way, used for the parking of automobiles and available to the public whether for a fee, free of charge or as an accommodation for clients or customers.

Parking Space. A permanently surfaced and marked area not less than that specified in Chapter 20.945 VMC Parking and Loading, excluding paved area necessary for access, for the parking of a motor vehicle.

Parking Storage. A location where vehicles are placed or left for maintenance, repair, sale, rental or future use.

Partition. See subdivision.

Party of Record. A person or group who makes an appearance in a proceeding through the submission of either written or verbal evidence. Groups shall designate one person as a representative or contact.

Pedestrian Area. Any sidewalk, walking trail, courtyard, plaza or other area intended primarily for use by pedestrians.

Perimeter. The boundaries or borders of a lot, tract or parcel of land.

Permitted Use. Those uses allowed as a matter of right within certain zoning districts provided that such use is in accordance with requirements of the particular district and general conditions stated elsewhere in this title.

Permittee. The person who is proposing to use or who is using the land pursuant to any permit required herein.

Person. Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns. This definition includes all federal, state or local governmental entities.

Person with Functional Disabilities. A person who, because of a recognized chronic physical, mental condition or disease, is functionally disabled to the extent of:

1. needing care, supervision or monitoring to perform activities of daily living or instrumental activities of daily living;
2. needing supports to ameliorate or compensate for the effects of the functional disability so as to lead as independent a life as possible;
3. having a physical or mental impairment which substantially limits one or more of such person's major life activities;
4. having a record of having such an impairment;
5. being regarded as having such an impairment, but such term does not include current, illegal use of or active addiction to a controlled substance.

Pervious Surface. Pervious surface is a surface material that allows stormwater to infiltrate into the ground. Examples include lawn, landscape, pasture, native vegetation areas, and permeable pavements.

Petroleum. Crude oil, gases (including natural gas), natural gasoline, and other related hydrocarbons, oil shale, and the products of any of such resources.

Petroleum/Oil Refinery. An industry engaged in refining crude petroleum/oil into refined petroleum/oil. Petroleum/oil refining involves one or more of the following activities: 1) fractionation; 2) straight distillation of crude oil; and 3) cracking.

Planned Action Ordinance. The applicable city ordinance establishing the geographic boundaries, impact thresholds, and mitigation measures for the particular planned action subarea in which a planned action project is located.

Planned Action Project or Development Application. A project or application for a project which meets the criteria for designation as a planned action under the provisions of Section 43.21.031 RCW, Section 197-11-164 WAC, Section 20.790.630, and the particular planned action ordinance for the planned action subarea in which the project is located.

Planned Action Subarea. A specific geographic area, less extensive than the city's jurisdictional boundaries, for which a subarea plan under Chapter 36.70A RCW and an EIS under Chapter

43.21C RCW have been prepared and adopted to provide for prospective environmental review and comprehensive planning for future development.

Planning Commission. The Planning Commission of the City of Vancouver, Washington.

Planning Official. The city official within the community development department charged with administratively approving land use permits or her/his designate.

Planting strip. The area from the back of curb and the front of sidewalk or the area in the raised median used for grass or approved landscaping plants.

Plat. A final map, diagram or written document containing all the descriptions, specifications, and provisions concerning a subdivision of land.

Plat, Final. The final drawing of the subdivision or short subdivision and dedication prepared for filing for record with the Clark County Auditor and containing all elements and requirements set forth in this title and in state law.

Plat, Preliminary. An orderly and approximate drawing to scale of either a proposed subdivision or short subdivision showing the general layout of streets and alleys, lots and blocks, and other required submittals which shall furnish a basis for the approval or disapproval.

Poultry. Domesticated fowl such as chickens, ducks, geese and similar, and all game birds which are legally held in captivity.

Predetermination, Archaeological. A procedure by which an archaeologist makes a determination of the probable existence (presence or absence) of an archaeological site in a disturbance area and a recommendation to proceed or not to proceed with an archaeological resource survey in compliance with the provisions of this chapter.

Predominant. Regarding Infill Development, the most frequently occurring residential design characteristic along both sides of the road frontage from intersection to intersection (or block face).

Predictive Model. The classification of property according to the probability of its having archaeological resources. The probability levels are low, low-moderate, moderate, moderate-high, and high, which are based on a combination of information from inventories and predictive models provided by DAHP, other agencies, tribal governments and local permit

review. The probability levels within the urban growth boundary of the city are generally shown on maps provided by Clark County Geographic Information Systems.

Premises. A lot or number of lots on which is situated a building or group of buildings designed as a unit, or on which a building or group of buildings are to be constructed.

Preserved. Leaving in the present condition.

Primary. The largest or most substantial use or element on the property, as in "primary" activity, residence, entrance, etc. All other similar elements are secondary in size or importance.

Priority Area: The area within a Priority Species' natural geographic distribution within which protective measures and/or management actions are need to (1) support viable populations over the long term and (2) avoid creating isolated subpopulations.

Priority Habitat: A State of Washington habitat type with unique or significant value to many species; an area with one or more of the following attributes: (1) comparatively high fish and wildlife density; (2) comparatively high species diversity; (3) important breeding habitat; (4) important seasonal ranges; (5) important movement corridors; (6) limited availability; (7) high vulnerability to habitat alteration; or (8) unique or dependent species. Examples of Priority Habitats include, but are not limited to, instream, riparian, Oregon white oak woodlands, and freshwater wetlands.

Priority Habitats and Species~~.~~ (PHS). Priority Habitats and Species are important fish and wildlife species and habitats as determined by the Washington State Department of Fish and Wildlife. Priority Habitats include endangered, threatened, sensitive, candidate, and vulnerable species and habitats deemed priorities of WDFW and reflective of best available science~~of state and federal listed species as well as other important species~~.

Priority Species. A State of Washington fish or wildlife species requiring protective measures and/or management actions to ensure its survival. A Priority Species fits one or more of the following criteria: (1) is a State-listed endangered, threatened, sensitive, or candidate species; (2) has vulnerable aggregations; or (3) is of recreational, commercial, and/or tribal importance. Examples of Priority Species include, but are not limited, to steelhead/rainbow trout, bull trout/Dolly Varden, great blue heron, cavity-nesting ducks, fisher, and elk.

Private Open Space. The space included within a development for recreational use.

Process Type. Shall mean the process by which a land use decision is rendered.

Process Type, Legislative. A legislative action or decision is the making of law, as opposed to the application of existing law to a particular use, such as the adoption of or amendment to a comprehensive plan or development regulation.

Process Type, Quasi-Judicial. Refers to an action or decision that requires substantial discretion or judgment in applying the standards or criteria of this title, and usually involves a public hearing.

Prohibited Use. A use that is not permitted in a base zoning, overlay or plan district. Any use that is not specifically enumerated in this title as a permitted or conditional use or has not been determined by the planning official to be a legal nonconforming use.

Project Area. The portion of a site where development activity will take place.

Project Improvements. Project improvements shall mean site improvements and facilities that are planned and designed to provide service for a particular development project and that are necessary for the use and convenience of the occupants or users of the project, and are not system improvements. No improvement or facility included in the capital facilities plan shall be considered a project improvement.

Project Permit. Any land use or environmental permit or approval for a proposed action which is subject to the procedural provisions of Chapter 20.210 VMC.

Protected Area. All land where no construction activity, tree removal, vegetation removal or soil compaction is allowed and includes the ~~critical root zone~~CRZ of those trees to be preserved.

Public Facilities. Regarding the Public Facilities Master Plan Ordinance:

1. Governmental facilities such as civic centers; libraries; auditoriums; police, fire and other public safety facilities; public streets; parks, open space and recreational facilities; and water, sewer; and storm water treatment facilities;

2. Public transit facilities including airports, train stations and transit centers;

3. Publicly and privately-owned medical centers;

4. Public and private elementary, middle and high schools;

5. Public and private colleges and universities; and

6. Religious institutions.

Public Improvement Plans. The technical drawings of the design and proposed construction of such items as streets, water and sewer systems, drainage and erosion control systems, meeting the requirements established by the City of Vancouver, Washington.

Public Place of Amusement, Public Amusement/Entertainment, and Public Entertainment. An amusement, diversion, entertainment, show, performance, exhibition, display or like activity, for the use or benefit of a member or members of the public, or advertised for the use or benefit of a member or members of the public, held, conducted, operated or maintained for a profit, either direct or indirect. (Ord. M-4402 § 3(C), 2023; Ord. M-4380 § 3, 2022; Ord. M-4325 § 3, 2020; Ord. M-4179 § 64, 2016; Ord. M-4170 § 6, 2016; Ord. M-4034 § 2, 2012)

20.150.040E Meanings of Specific Words and Terms Q through T.

Qualified Professional. A person with experience and training in the pertinent scientific discipline, and who is a qualified scientific expert with expertise appropriate for the relevant critical area subject in accordance with WAC 365-195-905(4).

1. *Urban Forestry.* Qualified professionals in urban forestry must have academic and field experience that makes them competent in urban forestry. This may include arborists certified by the International Society of Arboriculture or foresters certified by the Society of American Foresters. Qualified professionals in urban forestry must possess the ability to evaluate the health and hazard potential of existing trees, and the ability to prescribe appropriate measures necessary for the preservation of trees during land development.

2. *Critical Areas.* Qualified professionals in critical areas must have obtained a BS or BA or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology or a related field, and two years of related work experience. In addition:

    a. ~~1.~~ A qualified professional for frequently flooded areas or a ~~geologic hazard~~ must be a registered professional engineer~~, geologist, engineering geologist~~

or hydrogeologist licensed in the State of Washington with experience in the analyses required for the relevant hazard(s). ~~For frequently flooded areas, a~~ A qualified professional may also be an architect where provided by state or federal law.

b. ~~2.~~ A qualified professional or specialist for wetlands must have a minimum of five years experience in wetland science, including experience preparing wetland reports for review by regulatory agencies or professional certification (Professional Wetland Scientist Certification).

c. ~~3.~~ A qualified professional for F~~f~~ish and W~~w~~ildlife H~~h~~abitat C~~c~~onservation A~~a~~reas must be a qualified ecologist; biologist; or ~~a~~ person with an environmental science degree, professional experience, certification, and/or licensure related to the relevant type of habitat in question.

~~b.~~d. ~~4.~~ A qualified professional for Geologic Hazard Areas must be a Washington-licensed geologist or engineering geologist or a Washington-registered professional geotechnical engineer.

Reasonably Funded. A mitigation measure or other transportation system improvement scheduled for completion and designated as funded upon adoption of the most recent version of the Six-Year Street Plan.

Reasonably Safe from Flooding. Development that is designed and built to be safe from flooding based on consideration of current flood elevation studies, historical data, high water marks and other reliable data known to the community. In unnumbered A zones where flood elevation information is not available and cannot be obtained by practicable means, "reasonably safe from flooding" means that the lowest floor is at least two feet above the highest adjacent grade.

Recreational Vehicle. A vehicle which is built on a single chassis, 400 square feet or less when measured at the largest horizontal projection, designed to be self-propelled or permanently towable by a light-duty truck, and designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use.

Regional Industry. An industrial or commercial land use which provides significant community-wide or regional economic benefit through the creation of new economic growth and employment opportunity.

Regional Public Facility. A land use which is designed to serve the needs of the community or region affected by the impact(s) of development. Regional Public Facilities include: airports, colleges, hospitals, regional parks or community centers.

Regulatory Flood. The flood used to define the outer boundary lines of the Flood Fringe. The 100-year flood will be the regulatory flood for the purposes of regulations contained in this title, but a lesser or greater flood limit may be set in any ordinance applying FF (Flood Fringe) or FW (Floodway) zoning to any land. The regulatory flood shall be based upon Flood Insurance Rate Maps (FIRMs) provided by the Federal Insurance Administration (FIA).

Remodel. An internal or external modification to an existing building or structure that does not increase the site coverage.

Remove or Removal. The act of removing a tree by digging up, cutting down or any act which causes a tree to die, significantly impacts its natural growing condition and/or results in diminished environmental benefits or a hazard tree: including but not limited to, damage inflicted on the root system by machinery, storage of material or soil compaction, changing the ground level in the area of the tree's root system, damage inflicted on the tree permitting infections or infestation, excessive pruning, paving with concrete, asphalt or other impervious material within the drip-line or any other action deemed harmful to the tree.

Residential Care Center. Any state or federally approved facility, other than a clinic, used as a residence for the care or rehabilitation of dependent children, the elderly, and the physically and/or mentally handicapped. Residential care centers shall provide care to seven or more residents.

Residential Care Home. Any state or federally approved dwelling used as a residence for the care or rehabilitation of dependent children, the elderly, and the physically and/or mentally handicapped. Residential care homes shall provide care for eight or fewer residents.

Restoration. Measures taken to restore an altered or damaged natural feature including:

1. ~~A.~~ Active steps taken to restore damaged critical areas or their buffers to the functioning condition that existed prior to an unauthorized alteration; and

2. ~~B.~~ Actions performed to reestablish structural and functional characteristics of the critical area that have been lost by alteration, past management activities, or catastrophic events. See also wetland creation, re-establishment, and rehabilitation.

Right-of-Way, Public. The property held by the city or other governmental jurisdiction for existing and/or future public access including land occupied or intended to be occupied by a street, crosswalk, pedestrian and bike paths, railroad, road, electric transmission line, oil or gas pipeline, water main, sanitary or storm sewer main, street trees or other special use. The usage of the term right-of-way for land division purposes shall mean that every right-of-way hereafter established and shown on a plat or map is to be separate and distinct from the lots or parcels adjoining such right-of-way and not included within the dimensions or areas of such lots or parcels.

Riparian area. The area adjacent to aquatic systems with flowing water (e.g., rivers, perennial or intermittent streams, seeps, springs, or lakes) that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. Riparian areas are three dimensional: longitudinal up and down streams, lateral to the width of the riparian ecosystem, and vertical from below the water table to above the canopy of mature site-potential trees. Riparian areas are defined differently in and for the purposes of the Vancouver Shoreline Management Master Program.

Riparian Buffer The Riparian Buffer is the area extending from the Riparian Management Area outward a specified distance and functions to protect the Riparian Management Area and stream, river, or lake. In situations where a channel migration zone (CMZ) is present, this occurs within one site potential tree height (SPTH) measured from the edges of the CMZ. Together, the Riparian Management Area and Riparian Buffer are the areas that have the potential to provide full riparian functions and combine to form the Riparian Area. See Figure 20.740-1 ~~at VMC 20.740.110(A)~~ or Figure 20.170.030-6 ~~at VMC 20.170.030(I)~~.

~~**and**~~ **Riparian Management Area.** The regulated area~~s~~ that include~~s~~ the land ~~from~~ adjacent to a lake, stream, or river measured horizontally from the ordinary high water mark to a specified distance ~~as measured horizontally in each direction~~from the waterbody. Together, the Riparian Management Area and Riparian Buffer are the areas that have the potential to provide full riparian functions and combine to form the Riparian Area. ~~The Riparian Management Area is adjacent to the lake, stream or river, and~~ See Figure 20.740-1 ~~at VMC 20.740.110(A)~~ or Figure 20.170.030-6 ~~at VMC 20.170.030(I)~~. ~~The Riparian Buffer is the area extending from the Riparian~~

~~Management Area outward a specified distance and functions to protect the Riparian Management Area and stream, river, or lake. Together, the Riparian Management Area and Riparian Management Buffer are the areas that have the potential to provide full riparian functions the combined width which is the 200-year site-potential tree height (SPTH) measured from the edge of the stream or river channel or lake edge. In situations where a channel migration zone (CMZ) is present, this occurs within one SPTH measures from the edges of the CMZ.~~

Road. Means the same as street.

Roof. The exterior surface and its supporting structure on the top of a building.

Roof Line. The uppermost line of the roof of a building or, in the case of an extended facade, the uppermost height of said facade.

Runway. A defined area at an airport designed and constructed to accommodate the landing and takeoff of aircraft along its length.

Satellite Earth Station. The facilities used for reception and processing of programming services from a satellite prior to transfer to terrestrial distribution systems or for processing of programming and services from a terrestrial source before transmission via satellite.

School. An institution primarily engaged in academic instruction for all or part of the K through 12 educational program, public, parochial or private, and recognized or approved as such by the state. A school may also include the following uses: common accessory uses such as associated meeting rooms, auditoriums, athletic facilities and support facilities related to school district operations (e.g., offices, kitchens, counseling centers, head start, childcare, adult education, and family support centers) except for transportation, warehouse/storage, and maintenance facilities.

School, Pre. An institution primarily in child training and academic instruction prior to the mandatory first grade.

School, Specialized Instructional. An institution providing instruction and training in a specific service, art, dance, driving, and music. Includes vocation or trade such as business, real estate, travel, auto machinery repair, welding, and skill center.

Search Ring. Regarding wireless communications facilities, a geographic area identified by the communications service provider as necessary within which to locate a wireless facility or to enhance or expand its service.

Secure Community Transition Facility. A residential facility for persons civilly committed and conditionally released from a total confinement facility, operated by the Secretary of Washington Social and Health Services or under contract with the secretary pursuant to RCW 71.09.020(10) as described in RCW 71.09.250 or as amended.

Seismic Hazard Area. These are areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, soil liquefaction, or debris flow. See VMC 20.740.140 for designation of seismic hazard areas.

Senior Housing. Housing limited to persons aged 62 years or older.

Sensitive Areas. For the purposes of Chapter 20.770 VMC Tree, Vegetation, and Soil Conservation, this includes streams, geologically hazardous areas, fish and wildlife habitat areas, wetlands, and their associated buffers.

Sensitive Resources. Any of the following types of sensitive areas and resources or cultural resources, when properly identified, designated or recorded as such by the applicable local, state or federal regulations:

1. Known archaeological and historical sites (to be recorded with the state);
2. ~~Fish and Wildlife Habitat Conservation Areas~~FWHCAs (as identified in VMC 20.740.110);
3. Frequently Flooded Areas (as identified in VMC 20.740.120);
4. Geological Hazard Areas (as identified in VMC 20.740.130);
5. Wetlands (as identified in VMC 20.740.140); and
6. Tree tracts, set aside for the preservation of tree groves, as defined in VMC 20.770 and approved by the city's Urban Forester; and
7. Riparian areas, as identified in the Vancouver Shoreline Management Master Program.

8. Natural soils and native vegetation preserved as part of a low impact development.

SEPA. State Environmental Policy Act, as amended.

SEPA Rules. Chapter 197-11 WAC, as adopted, revised, and amended by Ecology.

Service Area. A geographic area described in the city capital facilities plan in which a defined set of public facilities provides service to development within the area, provided, that the service area for schools shall be the applicable school district. Service areas may be separately described for each type of public facility.

Serviceable. For the purposes of 20.775 VMC, Wetland and Water Bodies Protection, serviceable means presently usable.

Setback. The minimum allowable horizontal distance from a given point or line of reference, such as a property line, to the nearest vertical wall or other element of a building or structure or edge of vehicle parking area as defined herein. Where a sidewalk or private roadway is placed in an easement, the setback shall be measured from the back of sidewalk or edge of easement if there is no sidewalk.

Sexually-Oriented Adult Arcade and Sexually Oriented Adult Arcade Premises. Any premises on which any sexually-oriented adult arcade device is located and to which patrons, customers, and/or members of the public are admitted.

Sexually-Oriented Adult Arcade Device. Also known as panorama, preview, picture arcade, or peep show, any device which, for payment of a fee, membership fee or other charge, is used to exhibit or display a picture, view, film, videotape or videodisc, live show or other graphic display of specified anatomical areas. All such devices are denominated under this ordinance by the term sexually-oriented adult arcade device.

Sexually-Oriented Adult Entertainment. Any entertainment conducted in a public place of amusement where such entertainment involves a person appearing or performing in a state of nudity, as defined herein.

Sexually-Oriented Adult Entertainment Premises. Any premises to which the public, patrons or members are invited or admitted and wherein an entertainer provides sexually-oriented adult entertainment on a regular basis and as a substantial part of the business operation.

Shorelines of the State. Shorelines as defined in the Shoreline Management Master Program.

Short Plat. A map or representation of a short subdivision.

Sidewalk. A facility made of concrete or other approved material for the conveyance of pedestrians usually adjacent to a street or between streets.

Sign. Any structure, device, advertisement, advertising device or visual representation intended to advertise, identify or communicate information to attract the attention of the public for any reason.

Sign Area. Means the entire area of a sign on which graphics, letters, figures, symbols, trademarks and/or text is to be placed, excluding sign structure, architectural embellishments and framework. Sign area is calculated by measuring the perimeter enclosing the extreme limits of the module or sign face containing the graphics, letters, figures, symbols, trademarks, and/or text; provided, however, the area of any sign using individual letters, numbers or symbols with a canopy, awning or wall as the background, without added decoration or change in the canopy, awning or wall, shall be the area within the shortest line drawn to include all letters, design and tubing which are a part of the sign or structure. For illuminated awnings the area shall be limited to the area within the shortest line drawn to include all copy and graphics, excluding illuminated areas outside of these lines.

Sign, Awning. A sign attached to or incorporated into an awning.

Sign, Billboard. An outdoor advertising structure, 12 foot by 25 foot or larger, designed and constructed to carry posters.

Sign, Business Complex. A sign which is typically free-standing and is designed to identify multiple businesses in a business complex.

Sign, Canopy. A sign attached to or incorporated into a canopy.

Sign, Commercial. Any sign that advertises a product, service, entertainment or commodity sold or offered on the premises where it is located.

Sign, Complex. (Auto Dealership Plan District). A sign with the purpose of identifying the area and/or containing more than one manufacturers brand.

Sign, Construction. A temporary sign giving the name or names of principal contractors, architects, lending institutions, or other persons or firms responsible for construction on the site where the sign is located, together with other related information.

Sign, Directional. A sign designed and erected solely for the purpose of traffic or pedestrian direction, and which is placed on the property to which or on which the public is directed.

Sign, Electronic Message Center (EMC). Electronic message center (EMC) means an electrically activated sign whose message content, either in whole or in part, may be changed by means of electronic programming.

Sign, Elevation. Regarding sign regulations, the portion of any building exterior enclosing the applicant's place of business, measured horizontally by width of occupancy and vertically by height of occupancy on the street building frontage. In the case of a single-story building, vertical height of occupancy is measured to the eave or parapet line. For partial occupancy in a multi-story building, vertical height of occupancy is measured from floor line to floor line.

Sign Face. Means the portion of the sign on which the graphics, letters, figures, symbols, trademark or text is placed.

Sign, Fascia. A flat sign which projects less than one foot from the face or wall of the building, including parapet, upon which it is affixed, painted or attached, running parallel for its whole length to the face or wall of the building, and which does not extend beyond the horizontal width of such building.

Sign, Flashing. Any sign which contains an intermittent or flashing light source or which includes the illusion of intermittent or flashing light by means of animation or an externally-mounted intermittent light source. Time and temperature signs are excluded from this definition. For the purpose of this Title, EMC's (consistent with the standards of VMC Section 20.960.060 I and Section 20.960.070 I) shall not be considered flashing signs.

Sign, Franchise. (Auto Dealership Plan District). A sign that identifies the manufacturers brand and/or name.

Sign, Free Standing. (Pole Signs and Monument Signs). A sign that is not attached to a building and is erected on a frame connected to the ground. Pole signs and monument signs are specific types of freestanding signs. A freestanding sign does not include a portable sign.

Sign Height. The vertical distance measured from grade at the point of support to the top of the sign or the sign's structure.

Sign Maintenance. The repair or refurbishment of a sign, sign structure or any part of each.

Sign, Marquee. A sign attached to or incorporated into a marquee.

Sign, Messages Without a Cabinet, Area of. The area of any single geometric shape which encompasses all lettering and/or graphic message.

Sign, Monument. Means a sign and supporting structure which is attached to the ground and has similar top and bottom dimensions and is constructed as a solid structure or one which gives the appearance of a continuous and unbroken mass, with no separations between the sign and the base.

Sign, Multi-faced. A sign with more than one face. These types of signs shall be considered one (1) sign for the purpose of determining the number of signs allowed.

Sign, NIT. A measurement of brightness used to rate luminous displays. NIT is expressed in "candelas per square meter".

Sign, Official. Means the same as Public-Sector Sign.

Sign, Off-Premises. A third-party sign that advertises goods, products, services or facilities or directs persons to a location different from where the sign is installed.

Sign, On-Premises. A sign which carries only advertisement strictly incidental to a lawful use of the premises on which it is located, including signs or sign devices indicating the business transacted, services rendered, goods sold or produced on the premises, name of the business, and name of the person, firm or corporation occupying the premises.

Sign, Pole. A sign that is supported permanently upon the ground by poles or braces and not attached to any building.

Sign, Political Campaign. Any temporary sign which displays the name and/or picture of an individual seeking election or appointment to a public office or which pertains to a forthcoming public election or referendum or which advocates political views or policies.

Sign, Portable – Permanent. Permanent portable signs shall be defined as “onsite” signs placed in the right-of-way along the business frontage and on the same side of the street of the building or establishment which it advertises. Permanent portable signs shall be meant for continuous display during the hours the business is open and shall have the primary purpose of identifying the business.

Sign, Portable – Temporary. Temporary portable signs shall be defined as “off-site” signs placed in the right-of-way advertising an approved business or use. Temporary portable signs shall be displayed during the hours the business is open and shall have the sole purpose of identifying the business or providing directions.

Sign, Private Non-Commercial. Any sign under 6 square feet that does not advertise a product, service, entertainment, or commodity sold or offered on the premises where it is located.

Sign, Projecting. Shall mean any sign other than a wall sign, which is attached to or projects 12 inches or more from a structure or building face or wall.

Sign, Public-Sector. Any sign erected by any federal, state, county or city governmental agency or at the direction of any such governmental agency or court.

Sign, Public Service Information. A sign that provides general public service information to the public such as time, date, temperature, weather or directional information.

Sign, Reader Board. A sign constructed for the placing of advertising messages, which messages are changeable by use of manually removable or electrically changeable letters.

Sign, Rooftop. A sign erected upon the roof of a building, the entire face of which is situated above the roof line of the building to which it is attached, and which is wholly or partially supported by said building.

Sign, Rotating. A sign, any portion of which moves or is movable by any mechanical manner.

Sign, Secondary. A second free-standing sign on a given frontage in excess of 300 linear feet.

Sign, Sidewalk. A portable sign, typically in the shape of an inverted V, with two sign boards attached to each other at the top of the sign; also known as a sandwich board or A-frame sign. Each board shall be considered a separate sign face for purposes of determining allowable area of sign.

Sign, Temporary. Any sign that is not permanently installed or affixed to any sign structure or building, and not displayed for longer than 30 consecutive calendar days. In the case of construction project signs, they may be maintained for the duration of construction.

Sign, Time and Temperature. Means the same as Public Service Information Sign.

Sign, Vehicle. Any sign attached to or placed on a parked vehicle or trailer used principally for advertising purposes, rather than transportation, but excluding signs relating to the sale, lease, or rental of the vehicle or trailer and excluding signs which identify a firm or its product on a vehicle operated during the normal course of business.

Sign, Video. A sign providing information in both a horizontal and vertical format (as opposed to linear), through use of pixel and sub-pixel technology having the capacity to create continuously changing sign copy in a full spectrum of colors and light intensities.

Sign, Wall. Means the same as Painted Wall or Wall Graphic.

Sign, Window. Any sign affixed to (or painted on) the inside or outside of a window and intended to be viewed from the exterior of the structure.

Single Impact. An individual incidence of noise, actually measured in decibels, which may be heard on a property and which may be greater or lesser than the Ldn value, which is derived from the logarithmic averaging of single impacts within a period of time.

Significance. A quality of a property which helps one understand the history of the local area, state or nation by illuminating the local, statewide or nationwide impact of the events or persons associated with the property or its architectural type or style in information potential. The local area may be as large as Clark County or Southwest Washington or as small as a neighborhood. Local significance may apply to a property that illustrates a theme that is important to one or more localities; state significance to a theme important to the history of the state; and national significance to property of exceptional value in representing or illustrating an important theme in the history of the nation.

Single Room Occupancy (SRO). Occupancy by a single individual of a unit that contains no sanitary facilities or food preparation facilities or contains either but not both types of facilities.

Site. Any plot or parcel of land or combination of contiguous lots or parcels of land.

Site Class. The classification of a site based on the productivity of its dominant tree species. Site classes vary based on local differences in soil nutrients and moisture, light and temperature regimes, and topography. Site classes are typically described as most productive (I) through least productive (V).

Site Potential Tree Height (SPTH). The average maximum height of the tallest dominant trees for a given age and site class.

Six-Year Street Plan. That portion of the city's Capital Facilities Plan which inventories planned street and road construction and improvement, and which designates such construction projects and improvements as funded or nonfunded.

Slope. The deviation of a surface from horizontal, usually expressed in percent or degrees.

SMA. The State Shoreline Management Act of 1971, as amended.

Soft Armoring Techniques. Techniques that apply the principles of the biological, ecological, and soils sciences and structural engineering to build structures which, using live plant materials as a main structural component, stabilize the soil against erosion, sedimentation, and flooding. Also referred to as "bioengineering techniques."

Sound Transmission Reduction. Reduction of sound or noise from unit to unit utilizing the standards of the City Adopted Building Code(s).

Special Provisions. Street construction requirements peculiar to a special project that are not otherwise thoroughly or satisfactorily detailed and set forth in the standard specifications or standard plans.

Special Valuation Tax Incentive Program. The local option program that makes available to property owners a special tax valuation for rehabilitation of historic register properties under which the assessed value of an eligible historic property is determined at a rate that excludes, for up to ten years, the actual cost of the rehabilitation.

Specified Anatomical Areas. Regarding Adult Businesses, less than completely and opaquely covered: human genitals, pubic region, buttock and female breast below a point immediately above the top of the areola; and human male genitals in a discernibly turgid state even if completely and opaquely covered.

Specified Sexual Activities. Regarding Adult Businesses, human genitals in a state of sexual stimulation or arousal; acts of human masturbation, sexual intercourse or sodomy; and fondling or other erotic touching of human genitals, pubic region, buttock or female breast.

Standard Industrial Classification (SIC). A classification pursuant to the Standard Industrial Classification Manual issued by the United States Office of Management and Budget. This system was replaced by the North American Industrial Classification System (NAICS).

Start of Construction. The start of permanent construction or substantial improvement activity on a site within 180 days of the issuance of a building permit. Permanent construction activities include the pouring of slab or footings, the installation of pilings, construction of columns or any work beyond site preparation, excavation, setting of temporary forms or the placement of accessory buildings; or the placement of a manufactured home on a foundation. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

Stealth Design. A wireless communications facility's support structure, antennae or accessory equipment structure that is designed to blend in with the existing physical environment, and reduce visual impacts to the extent possible.

Storage, Open. Storage of property outside of a fully enclosed building.

Storage Space. Sufficient space, either in individual dwelling units or common storage rooms, to provide adequate, secure, and convenient storage for items owned by building tenants.

Stormwater. Stormwater is that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes and other features of a stormwater drainage system into a defined surface waterbody or a constructed infiltration facility.

Stormwater Conveyance. Parts of a stormwater facility (such as pipes, culverts, swales, etc.) that are constructed specifically to transport water from one point to another. See Stormwater Facility.

Stormwater Facility. A constructed component of a stormwater drainage system, designed or constructed to perform a particular function or multiple functions. Stormwater facilities include, but are not limited to, pipes, swales, ditches, culverts, street gutters, detention ponds, retention ponds, constructed wetlands, infiltration devices, catch basins, oil/water separators, biofiltration swales, bioretention, permeable pavement, and vegetated roofs.

Stormwater Manual. Stormwater Manual means the Stormwater Management Manual for Western Washington, which is the 5-volume technical manual prepared by the Washington State Department of Ecology Water Quality Program, December 2014, Publication No. 14-10-055 (a revision of Publication No. 12-10-030), 5 volumes, and as hereafter amended.

Stormwater Permit. Stormwater Permit means the City of Vancouver's National Pollutant Discharge Elimination System (NPDES) Western Washington Phase II Municipal Stormwater Permit issued August 1, 2013, which was modified, Effective January 16, 2014, by the Washington State Department of Ecology, and as hereafter amended or reissued.

Story. That portion of a building between the surface of any floor and the surface of the next floor above it; or, if there is no floor above it, the space between such floor and ceiling.

Stream. Water contained within a channel, either perennial or intermittent, and classified according to WAC 222-16-030 or WAC 222-16-031. Streams also include natural watercourses modified by humans. Streams do not include drainage ditches which are not modifications of natural watercourses.

Street. A private or public way designed primarily for vehicular traffic. It includes the terms road, highway, avenue, boulevard, thoroughfare, or other traffic way, and usually includes improvements, including curbs, sidewalks, and street pavement within the right-of-way.

Street Frontage. The linear frontage of a parcel of property abutting a single public street.

Street Functional Classification System. The adopted hierarchy of street use as it relates to volume, speed, regional, area-wide, and local characteristics.

Street, Private. A thoroughfare that is privately owned providing a means of access to a property or properties.

Street, Public. A thoroughfare or right-of-way dedicated, deeded, condemned or otherwise acquired by the public for use as such, other than an alley, which affords the principal means of access to abutting property including avenue, place, way, drive, lane, boulevard, highway, road, and any other thoroughfare.

Structure. Anything constructed or built, any edifice, building of any kind or any piece of work artificially built-up or composed of parts joined together in some definite manner, which requires location on the ground or is attached to something having a location on the ground,

including swimming pools, wading pools and covered patios, excepting outdoor areas such as paved areas, walks, tennis courts and similar recreation areas. For the purposes of VMC 20.740.120, Frequently Flooded Areas, a structure is a walled and roofed building , or a gas or liquid storage tank that is principally above ground.

Subdivision. The division or re-division of land into ten or more lots for the purpose of sale, lease or transfer of ownership. The term subdivision also applies to an area or tract of land that has been subdivided.

Subdivision, Short. The division, re-division or partition of land into nine or fewer lots, tracts, parcels, sites or divisions for the purpose of sale, lease or transfer of ownership.

Substantial Damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed 50~~%~~ percent of the market value of the structure before the damage occurred.

Substantial Disturbance. Disturbance such that little or no useful archaeological data could be obtained.

Substantial Improvement. Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50~~%~~ percent of the market value of the structure either:

1. Before the improvement or repair is started; or
2. If the structure has been damaged and is being restored, before the damage occurred.

“Substantial improvement” is considered to occur at the start of construction. “Substantial improvement” does not include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
2. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

Substantial Noise Impact. Exterior noise levels greater than Ldn 65, which impact necessitates special sound insulation to produce noise levels of 45 Ldn or less within the interior of a residential structure.

Survey, Archaeological. Regarding archaeological resource protection, a procedure by which an archaeologist makes a determination of the presence or absence of an archaeological site in a disturbance area, a preliminary assessment of the site's potential significance, and a recommendation for further evaluation, avoidance, mitigation or recovery of resources in compliance with the provisions of 20.710 VMC.

System Development Charge (SDC). The connection fee charged so that the property upon which it is imposed will pay its equitable share of the costs of water-sewer system facilities which are system-wide in nature and are not site-specific needs, including such property's equitable share of the amount required to upgrade such system to meet the demands imposed by the development.

System Improvements. Public facilities that are included in the capital facilities plan and are designed to provide service areas within the community at large, in contrast to project improvements.

Telecommuting. The use of telephones, computers or other similar technology to permit an affected employee to work at home or at a location closer to home than the affected employer's principal worksite.

Temporary. A period not to exceed one year except as otherwise provided in this title.

Tenant Improvements. Construction improvements typically made to the interior of a nonresidential building to fit the building to a particular tenant's needs, or to create separate tenant spaces. Typically it involves such things as adding or removing walls, ceilings and doors; re-wiring for electrical outlets and lighting; and providing plumbing, sprinklers, counters and walk-in coolers, often as part of a separate lease space in a building.

Through-Ventilation. The encouragement of natural cross-ventilation.

Total Developable Land (TDL). That portion of the subject property remaining once sensitive areas are subtracted from the total acreage of a property or collection of properties proposed for development.

Tract. A piece of land set aside in a separate area for dedication to the public, a homeowner's association, or other entity, (e.g., open space, recreational facilities, and tree preservation) wetland or other sensitive lands.

Traffic Study. A study of traffic behavior by a licensed engineer.

Transit. A multiple-occupant vehicle operated on a for-hire, shared-ride basis, including bus, ferry, rail, shared-ride taxi, shuttle bus or vanpool.

Transit Facility. A development provided by a public transportation provider, which is designed to aid or encourage community use or multi-modal public transportation system, such as bus and van/carpools.

Transitional Surfaces. An area extending outward at 90 degree angles to an airport's runway centerline at a slope of seven feet horizontally for each foot vertically.

Transitional Zone. The areas beneath the transitional surfaces.

Transplant. The relocation of a tree from one place to another on the same property.

Tree. Any self-supporting perennial woody plant that matures at a height greater than 26 feet and is generally referred to in the nursery and landscape industry as a tree.

Tree Farm. See Commercial Nursery.

Tree, Hazard. Any tree with a combination of structural defect and/or disease and a proximity to persons or property which makes it subject to a high probability of failure, as recommended by a qualified arborist.

Tree, Mitigation. A tree planted and retained to achieve the required tree density for a parcel or to replace a tree removed in violation of city ordinance.

Tree, Nuisance. A tree that is causing physical damage to property or has been damaged by past maintenance practices, and for which horticultural practices cannot correct the problem.

Tree Preservation. The retention of a tree or trees during and after construction.

Tree, Specimen. A tree that has been given greater than standard tree density value by the planning official through the evaluation process.

Tree, Street. A tree located within a street right-of-way or street tree easement, adjacent to public or private streets, including undeveloped areas.

Tree Tract. A separate deeded tract of land, specifically set aside for the preservation and/or planting of trees. Stormwater retention/detention facilities, sensitive areas, and other common areas may be considered tree tracts if they currently support the growth of trees.

Tree Unit. A unit of measurement based upon the size of the tree as set forth in Chapter 20.770 VMC, Tree, Vegetation, and Soil Conservation.

Tree, Vegetation and Soil Plan. A plan that contains specific information pertaining to the protection of healthy soil, and the preservation, and planting of trees and native vegetation pursuant to Chapter 20.770 VMC, Tree, Vegetation, and Soil Conservation.

Tree, Vegetation and Soil Protection Area (TVSPA). A separate tract of land, which may or may not be deeded as such, specifically set aside for the preservation of healthy soils and the preservation or planting of existing and/or native vegetation and trees. Stormwater retention/detention facilities, critical area buffers and other common areas may be considered TVSPA if they currently or are improved to an extent where they can support healthy soils and the growth of native vegetation and trees. The purpose of these areas for preserving healthy soils, preserving and/or planting native vegetation and trees is stated on the face of the plat when applicable.

Tribe or Tribes. Regarding Archaeological Preservation, any federally-recognized or other local Native American government organization which may consider the site to be of historic or cultural significance.

Truck, Heavy. Trucks, including truck tractors and similar vehicles, with two or more rear axles.

Truck, Light. Trucks and similar vehicles with single rear axles and single rear wheels.

Truck, Medium. Trucks and similar vehicles other than truck tractors with single rear axles and dual rear wheels. Truck tractors are in the Heavy Truck category. (Ord. M-4402 § 3(C), 2023; Ord. M-4325 § 3, 2020; Ord. M-4179 § 65, 2016; Ord. M-4034 § 2, 2012)

20.150.040F Meanings of Specific Words and Terms U through Z.

Undevelopable Area. An area that cannot be used practicably for a habitable structure because of natural conditions, such as slopes exceeding 20~~%;~~ percent; severe topographic relief; water bodies; or conditions that isolate one portion of a property under another portion so that access is not practicable to the unbuildable portion. Undevelopable area also includes man-made conditions such as existing development restrictions that prohibit development of a given area of a lot by law or private agreement; or existence or absence of easements or access rights that prevent development of a given area.

Undeveloped. Regarding the Tree Conservation Ordinance, a parcel of land on which no buildings or other facilities are located and which is to remain without improvements for a period of six years.

Uniform Plumbing Code. The current version of the Uniform Plumbing Code as adopted by the City of Vancouver at the time construction commences.

Urban Area. For the purposes of 20.775 VMC, Wetlands and Water Bodies Protection, urban area means the area within the Vancouver urban growth boundary.

Urban Forestry. The art and science of planning, managing, and protecting natural and planted vegetation in urban areas.

Urban Growth Boundary. The boundary of an urban growth area designated in the Clark County Comprehensive Land Use Plan.

Use. An activity or purpose for which land or premises or a building thereon is designed, arranged or intended, or for which it is occupied or maintained, let or leased.

Utility Facilities. All physical facilities necessary for the provision of the following services:

1. Sewer;
2. Water;
3. Electricity;
4. Natural gas;
5. Telephone;

6. Cable television;
7. Storm drainage; and
8. Transportation.

Utility Facilities, Essential. Those facilities which are necessary to support principal development and involve only minor structures such as:

1. Overhead lines and poles;
2. Underground lines and pipes;
3. Transformers and regulator stations; and
4. Private, on-site facilities such as septic tanks and wells.

Utility Facilities, Major. Those facilities which have a substantial public impact, including but not limited to:

1. Administrative offices and operation centers;
2. Sewage treatment plants and lagoons;
3. Electric generation facilities including biomass generating facilities; and
4. Essential public facilities as defined in Chapter 20.855 VMC, Essential Public Facilities.

Utility Facilities, Minor. Those facilities which have a local impact on surrounding properties and are necessary to provide essential services such as:

1. Transmission and distribution substations;
2. Pump stations;
3. Water towers and reservoirs;
4. Public wells;
5. Outfalls;
6. Telephone switching facilities;

7. Cable television receiver and transmission facilities, excluding wireless communications facilities as defined in Chapter 20.890 VMC Wireless Communications Facilities;

8. Catch basins, retention ponds and related facilities; and

9. Water treatment facilities.

Variance. An administrative or quasi-judicial decision to lessen or otherwise modify the requirements of the development code.

Vehicle, Accessory Recreational. A vehicle with or without motive power, which is designed for sport or recreational use or which is designed for human occupancy on an intermittent basis such as vacation trailers and fifth-wheel trailers. A camper is considered an accessory recreation vehicle when it is standing alone. A recreational vehicle also includes vehicles designed for off-road use:

1. Off-road vehicles;

2. Dune buggies; and

3. Recreational boats.

Vehicle, Commercial. Any vehicle the principal use of which is the transportation of commodities, merchandise, produce, freight, animals, or passengers for hire. (Per RCW 46.04.140)

Vehicle, Featured Display (Auto Dealership Plan District). Featured Vehicle Display is the "showcasing" of motor vehicles outdoors within the plan district.

Vehicle, Motor. Vehicles that have their own motive power and are used for the transportation of people or goods on streets. Motor vehicle includes motorcycles, passenger vehicles, trucks, and recreational vehicles with motive power.

Vehicle, Passenger. A motor vehicle designed to carry ten persons or fewer including the driver. Passenger vehicle also includes motor vehicles designed to carry ten persons or fewer that are constructed on a truck chassis or with special features for occasional use. Passenger vehicles include cars, minivans, passenger vans, and jeeps. Passenger vehicle is intended to cover the vehicles identified as passenger cars and multi-purpose passenger vehicles by the

National Highway Traffic Safety Administration in Title 49 of the Code of Federal Regulations, Chapter V, Section 571.3. See also Recreational Vehicle and Truck.

Vesting. A legal right of applicants to have their development application reviewed under the regulations in effect as of a certain date when the application has met certain timing and completeness requirements. For example, an application determined by the Review Authority to be fully complete is vested under the regulations in effect at the time of such determination, regardless of subsequent changes to development regulations.

Vesting, Contingent. A legal right of applicants to have their fully complete development application, when submitted within 180 days of the pre-application conference, reviewed under the development regulations, not including fees, in effect at the time of the pre-application conference.

Vision Clearance Triangle. An area, typically triangular in shape adjacent to a driveway or at a property corner where two streets (or an alley and street) intersect, that must be maintained clear of visual obstructions to provide visibility to motorists and pedestrians.

Visual Obstruction. An obstruction of vision through landscaping, structure or device in those areas near intersections of roadways and motor vehicle access points where a clear field of vision is necessary for traffic safety.

Walkway. A facility for pedestrian use to or through a parcel for the general public which may or may not be adjacent to the street. Walkways may differ from sidewalks in standards, alignment, shape, location, construction materials, and overall installation.

Washington Heritage Register. The state listing of properties that are significant to the community, state or nation, but which do not meet the criteria of the National Register of Historic Places [Ord. M-3243, 2 (part), M-1996].

Wastewater Facility. In Chapter 14.12.020 VMC, Water and Sewer Facilities, the City of Vancouver's industrial wastewater collection system and industrial wastewater pretreatment facility constructed in 1979, and sometimes known as the pretreatment lagoon.

Water-dependent. A use or portion of a use that requires direct contact with the water and cannot exist at a nonwater location due to the intrinsic nature of its operations. Also see the Vancouver Shoreline Management Master Program.

Water-enjoyment. A use or activity which facilitates or provides public access to the shoreline, and through its location, design, and operation assures the public's ability to enjoy the physical and aesthetic qualities of the shoreline. A water-enjoyment use or activity must be open to the general public, and space within it must be devoted to fostering public enjoyment of the shoreline. Parks, piers, restaurants, trails, promenades, museums, aquariums, reserves, and resorts are examples of water-enjoyment uses and activities. Also see the Vancouver Shoreline Management Master Program.

Water-related. A use or activity which must be located close to the land/water interface to support a water-dependent use or activity either by its own operation or by the provision of the services it houses. The economic viability of a water-related use or activity is dependent on a location near the waterfront. Warehousing of goods transported by water, seafood processing plants, hydroelectric generating plants, and log storage are examples of water-related uses or activities. Also see the Vancouver Shoreline Management Master Program.

Watershed. A topographically delineated area draining to a single surface water system as identified and mapped by Clark County Public Works.

Weekday. Any day of the week except Saturday, Sunday, and legal holidays.

Wetland or wetlands. An aAreas that areis inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances does 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 those artificial wetlands intentionally created (but not as mitigation for impacts to wetlands) from nonwetland 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 shall may include those artificial wetlands intentionally created from nonwetland areas to mitigate conversion of wetlands.

Wetland Buffer. An area that surrounds and protects a wetland from adverse impacts to the functions and values of a regulated wetland.

Wetland Creation. The manipulation of the physical, chemical or biological characteristics present to develop a wetland on an upland or deepwater site where a biological wetland did

not previously exist. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, hydric soils, and support the growth of hydrophytic plant species. Creation results in a gain in wetland acres and functions.

Wetland Enhancement. The manipulation of the physical, chemical or biological characteristics of a biological wetland to increase or improve specific functions or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention or wildlife habitat. Activities typically consist of planting vegetation, controlling nonnative or invasive species, modifying site elevations to result in open water ponds or some combination of these. Enhancement results in a change in certain wetland functions and can lead to a decline in other wetland functions. It does not result in a gain in wetland acres.

Wetland Preservation. The removal of a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This term includes activities commonly associated with the protection and maintenance of wetlands through the implementation of appropriate legal and physical mechanisms, such as recording conservation easements and providing structural protection like fences and signs. Preservation does not result in a gain of wetland acres or functions but may result in a gain in functions over the long term.

Wetland Re-establishment. The manipulation of the physical, chemical or biological characteristics of a site with the goal of returning natural or historic functions and environmental processes to a former wetland. Activities could include removing fill material, plugging ditches or breaking drain tiles. Re-establishment results in a gain in wetland acres and functions.

Wetland Rehabilitation. The manipulation of the physical, chemical or biological characteristics of a site with the goal of repairing natural or historic functions, and processes of a degraded wetland. Activities could involve breaching a dike to reconnect wetlands to a floodplain, restoring tidal influence to a wetland or breaking drain tiles and plugging drainage ditches. Rehabilitation results in a gain in wetland functions but not in wetland acres.

Wetland, Scrub-shrub. A wetland with at least 30 percent of its surface area covered by woody vegetation less than 20 feet in height as the uppermost strata.

Wetlands Delineation Manual. Approved federal wetland delineation manual and applicable regional supplements.

Wind-firm. A tree which has a high probability of withstanding windstorms.

Wireless Communications Facilities. The site, wireless communications support structures, antennae, accessory equipment structures, and appurtenances used to transmit, receive, distribute, provide or offer wireless telecommunications services. Wireless communications facilities include, but are not limited to, antennae, poles, towers, cables, wires, conduits, ducts, pedestals, vaults, buildings, electronic, and switching equipment.

Wireless Communications Support Structures. A structure erected to support wireless communications antennas and connecting appurtenances. Wireless communications support structures may include, but are not limited to lattice tower, monopoles, and guyed towers.

Wireless Communications Systems. The sending and receiving of radio frequency transmissions and the connection and/or relaying of these signals to land lines and other sending and receiving stations (cell sites), and including, but not limited to cellular radiotelephone, personal communications services (PCS), enhanced/specialized mobile radio (ESMR), commercial paging services, and any other technology which provides similar services.

Writing, Written or In Writing. These terms refer to original signed and dated documents. Facsimile (fax) transmissions are a temporary notice of action that must be followed via mail or delivery of the original and dated document.

Yard. Any open space on the same lot with a building or a dwelling group, which open space is unoccupied and unobstructed by any structure from the ground upward to the sky. Required setback areas shall be considered yards as defined herein.

Yard, Front. An open space defined by setbacks extending the full width of the lot between a setback line and the front lot line, unoccupied, and unobstructed from the ground upward, except as specified elsewhere in this title.

Yard, Rear. An open space defined by setbacks extending the full width of the lot between a setback line and the rear lot line, unoccupied, and unobstructed from the ground upward, except as specified elsewhere in this title.

Yard, Side. An open space defined by setbacks extending from the front yard to the rear yard between a setback line and the nearest side lot line, unoccupied, and unobstructed from the ground upward, except as specified elsewhere in this title.

Yard, Street Side. On corner lots where two streets intersect, an open space defined by setbacks extending from the front lot line to the rear lot line, along the side of the lot which fronts on a street and between the setback line and side street lot line, unoccupied, and unobstructed from the ground upward, except as specified in this title.

Zoning District. A geographic area which corresponds to a comprehensive plan designation and which specifies allowed and conditionally allowed uses and applicable standards for development within the district. Also referred to as Zone or District. (Ord. M-4380 § 4, 2022; Ord. M-4179 § 66, 2016; Ord. M-4176 § 4, 2016; Ord. M-4034 § 2, 2012)

Chapter 20.740
CRITICAL AREAS PROTECTION

Sections:

20.740.010 Purpose.

A. The purpose of this chapter is to designate and protect critical areas and their functions and values, while also allowing reasonable use of property. Critical areas are ecologically sensitive and hazardous areas~~,~~ and protecting them or mitigating any impacts to them is important for protection of the environment and quality of life for the citizens of Vancouver, and is mandated by the Washington Growth Management Act (GMA~~)~~(~~)~~ (RCW 36.70A).

B. This chapter provides protection for the following critical areas: Wetlands, Fish and Wildlife Habitat Conservation Areas, Geologically Hazardous Areas, and Frequently Flooded Areas. Critical Aquifer Recharge Areas are covered in VMC Chapter 14.26.

C. This chapter implements the goals and policies of the Vancouver Comprehensive Plan, 2003-2023, under the GMA and other related state and federal laws. (Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.020 General Provisions.

A. *No Net Loss of Functions.* Development activity shall result in no net loss of the functions and values of critical areas. The beneficial functions provided by each type of critical area include, but are not limited to:

1. *Fish and Wildlife Habitat Conservation Areas.* Providing habitat for breeding, rearing, foraging, protection and escape, migration, and over-wintering; and providing complexity of physical structure, supporting biological diversity, regulating stormwater runoff and infiltration, providing wave attenuation, removing pollutants from water, and maintaining appropriate water temperatures.

2. *Frequently Flooded Areas*. Providing flood storage, conveyance, and attenuation of flood waters; minimizing the amount of development at risk in such areas to protect human life and safety, including reducing damage to homes, places of business, public facilities, and utilities; and minimizing business interruptions.

3. *Geologic Hazard Areas.* Providing erosion control and protecting public safety, including people, structures, and infrastructure, from damage during earthquakes and landslides.

4. *Wetlands.* Providing carbon sequestration, cleansing surface water, storing and conveying floodwater, and providing fish and wildlife habitat.

B. *Temporary and Permanent Markers and Signs.* With the exception of Frequently Flooded Areas and Seismic Hazard Areas, temporary and permanent markers and signs shall be installed for critical areas as follows:

1. The location of the outer perimeter of the critical area(s) and buffer(s) shall be marked in the field and approved by the Planning Official prior to the commencement of permitted activities and maintained throughout the duration of the construction.

2. A permanent physical demarcation along the outer/upland boundary of the critical area buffer(s) shall be installed and thereafter maintained. Such demarcation may consist of fencing, hedging, or other prominent physical marking that allows wildlife passage, blends with the critical area environment, and is approved by the Planning Official. If the function and values of the critical area would be degraded by the

existing or proposed activity, such as the presence of grazing animals, a fence shall be erected and maintained.

3. Permanent signs are posted at intervals of one every 50 feet, or, if this interval cannot be met, an interval of one per lot for single-family residential uses or at a maximum interval of 200 feet, or as otherwise determined by the Planning Official, and must be perpetually maintained by the property owner. The sign shall be worded as follows or with alternative language approved by the Planning Official: "The area beyond this sign is a critical area or critical area buffer. Alteration or disturbance is prohibited by law. Please call the City of Vancouver for more information."

4. Additional standards for temporary and permanent marking of geologic hazards are contained in VMC 20.740.130.

C. *Relationship to Other Regulations.*

1. The critical areas regulations apply in addition to zoning and other regulations adopted by the City.

2. When more than one critical area is located on a project site, regulations protecting each critical area apply to the site. Where critical areas overlap (e.g., a wetland buffer and a riparian buffer), the most restrictive regulations that provide the most protection for the critical areas present establish the outer boundary of the regulated critical areas.

3. When there is a conflict between any provisions of this chapter and any other regulations, the requirement that provides the most protection to the critical area(s) applies.

4. Compliance with the provisions of this chapter does not constitute compliance with other federal, state, and local regulations and permit requirements. The applicant is responsible for complying with other state and federal requirements in addition to the requirements of this chapter.

D. *Jurisdiction.*

1. All areas within the city meeting the definition of one or more critical areas and their buffers, whether mapped or not, are hereby designated critical areas and are subject to the provisions of this chapter.

E. *Warning and Disclaimer of Liability.* Critical areas development should be based on sound scientific and engineering considerations that may be more stringent than those presented in this chapter. The City assumes no liability if these established standards prove to be insufficient protection of property or the environment.

20.740.030 Applicability and Exemptions from Requirement to Obtain Permit.

A. *Applicability*.

1. No person, company, agency, or applicant shall alter a critical area or buffer except as consistent with the requirements of this chapter, whether or not a permit is required.

B. *Statements of Exemption Process.* For activities listed in subsection (C)(1) of this section, a written Statement of Exemption from the requirement to obtain a Critical Areas Permit is required prior to undertaking the activity. Activities listed in subsection (C)(2) of this section do not require a statement of exemption.

1. Exempt activities are not required to obtain a Critical Areas Permit. However, all activities in critical areas, including exempt activities, are subject to the policies and regulations of this chapter. If a land use permit is not required, the Planning Official may attach conditions to building and engineering permits, as necessary, to enforce the provisions of this chapter.

2. The request for the Statement of Exemption shall be in writing, on forms required by the Planning Official, and include the information required by the Planning Official. Statements of Exemption shall be processed as a Type I procedure per Chapter 20.210 Decision Making Procedures.

C. *Exemptions from Requirement to Obtain a Critical Areas Permit.*

1. *Activities requiring a Statement of Exemption.*

a. *Existing Structure Remodel – Impervious Surface Increase of 500 Square Feet or Less.* Development or clearing inside a Critical Area or buffer as necessary to remodel an existing structure, provided:

   i. The activity will increase the footprint of structures with impervious surfaces by 500 square feet or less;

   ii. The distance from the nearest structure or impervious surface to a critical area is not decreased;

   iii. All native vegetation disturbed as a result of the development shall be replaced one-to-one, except that trees shall be replaced using tree units derived from VMC Chapter 20.770, Tree, Vegetation, and Soil Conservation. Native vegetation shall be used where feasible;

   iv. Impacts to critical areas and buffers shall be minimized and mitigated in accordance with the City's critical areas approval criteria; and

   v. No adverse impacts to priority Oregon white oak trees may result.

b. *No Impervious Surface Increase in the Riparian Management Area (RMA) or Riparian Buffer (RB) and Located outside Frequently Flooded Areas.* Development activity on a site within the footprint of existing structures or impervious surfaces that does not increase the impervious surface area in the RMA or RB, not located in Frequently Flooded Areas, and that is not otherwise exempt under subsection B of this section shall be exempt from the provisions of VMC 20.740.110 (Fish and Wildlife Habitat Conservation Areas).

   The applicant is encouraged to provide enhancement to the extent feasible. Such enhancement activities may include, but are not limited to, landscaping using native plants, additional treatment of stormwater as appropriate, and implementation of best management practices (BMPs) that would enhance habitat functions.

c. *Approved Subarea Plan with EIS.* Development activity covered by and in compliance with all the conditions of an approved subarea plan that contains:

i. Baseline information on existing critical areas and their functions at the level of detail required for an Environmental Impact Statement (EIS) under the State Environmental Policy Act (SEPA);

ii. An analysis of the impacts of full development at the level of detail required for an EIS under SEPA and in keeping with the plan; and

iii. Mitigation for those impacts consistent with the requirements of this chapter.

d. *Fence.* A fence may be installed in a critical area buffer (not in a critical area) where:

i. The fence is necessary for safety and security;

ii. The property was developed prior to the effective date of VMC Chapter 20.740 (April 29, 2005); and/or

iii. The fence is designed and installed in a manner that protects the critical area and buffer functions and blends with the critical area environment.

e. *On-site Critical Area Will Be Avoided.* Development may be permitted on a site containing a critical area or buffer when the Planning Official determines that impacts to critical areas and buffers will be avoided. In making this determination, the Planning Official may utilize any of the following procedures and criteria or other methods as necessary to determine that the adverse impacts will be avoided.

i. The critical area(s) and buffer(s) has/have been identified in the field, clearly mapped by a qualified professional, and documented by a limited-scope critical areas report (for example, a wetland boundary delineation without categorization or functional assessment, but with the minimum documentation necessary to justify the boundary location).

ii. The site plan and preliminary plat show a development envelope that demonstrates that all activity will take place outside critical areas and buffers.

iii. The boundaries of the development envelope are clearly outside of all maximum critical areas and all maximum buffers.

f. *Maintaining Fire-Defensible Space.* Maintaining fire-defensible space around a structure to reduce fire hazards, involving regular maintenance of existing trees at least 6 inches in diameter at breast height, grasses, and underbrush, not tree removal or other ground-disturbing or soil-destabilizing activities. Creating fire-defensible space or undertaking other development requires a Critical Areas Permit per the critical areas approval process and could require other permits as well.

i. Pruning trees, grasses, and brush within a critical area or buffer to maintain fire-defensible space around a structure may be permitted when one or more of the following criteria are met:

(A) The structure nearest the property line is within 30 feet of a slope of at least 25 percent (also designated as a Landslide Hazard Area under this chapter);

(B) The nearest structure is within 30 feet of a forested area;

(C) The vegetation within 30 feet of the structure is comprised of less than 50 percent native species;

(D) The vegetation within 30 feet of the structure is higher than 12 inches;

(E) Trees are crowded within 30 feet of the structure or overhanging the structure's roof; or

(F) The structure is located in an area designated by the Fire Marshal as a "Wildfire Safety Area."

ii. When maintenance of a fire-defensible space is permitted, the following standards shall apply:

(A) Trees may be pruned or limbed-up to mitigate a hazard, but trees may not be removed without a Critical Areas Permit and any other necessary permit(s).

(B) Topping trees is prohibited.

(C) Grasses and underbrush shall be maintained between 8 inches and 12 inches in height.

(D) Any debris from pruning shall be disposed of promptly and properly.

g. *Development Located within Soil Erosion Hazard Areas Only.* When no other type of critical area, including other types of geologic hazards is present, development within Soil Erosion Hazard Areas shall meet the requirements of VMC Chapter 14,24, Erosion Control, including preparation of . a Stormwater Report, if required,. In addition, the applicant shall file a limited scope Geotechnical Report prepared by a qualified professional as defined by VMC Chapter 20.150, which shall be provided to the Planning Official for review at the earlier of development application, engineering document review, or building permit review. Upon review of the limited scope Geotechnical Report, the Planning Official may exempt the development from the need for a Critical Areas Permit.

h. *Development/Expansion of a Single-Family Residence with a Loss of a Single, Standalone Oregon white oak.* The loss of a single, standalone Oregon white oak tree that meets the WDFW PHS status (must not be part of a woodland that includes off-site trees) and in accordance with the definition listed in VMC 20.150.150(D) that is equal to or less than 12 inches dbh for the purpose of developing a single-family residence or expansion of an existing single-family residence structure (does not include expansion of detached garages, outbuildings, accessory dwellings, decks, gardens, etc.).

2. *Activities for which a Statement of Exemption is not required.* Reasonable methods shall be used to avoid potential impacts to critical areas. Any damage to, or alteration of, a critical area that is not a necessary outcome of the exempt activity shall be corrected at the property owner's expense.

The following activities are exempt from needing a Critical Areas Permit and do not require a statement of exemption:

a. *Emergencies.* Those activities necessary to prevent an immediate threat to public health, safety, or welfare, or that pose an immediate risk of property damage and that require remedial or preventative action in a time frame too short to allow for compliance with the requirements of this chapter, so long as all of the following apply:

    i. The emergency action uses reasonable methods to address the emergency.

    ii. The emergency action must have the minimum possible impact to the critical area or its buffer.

    iii. The property owner, person, or agency undertaking such action shall notify the City within 10 working days following commencement of the emergency activity.

    iv. Within 14 days the Planning Official shall determine if the action taken was within the scope of the emergency actions allowed in this section. If the Planning Official determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then the critical areas enforcement provisions shall apply.

    v. After the emergency, the property owner, person or agency undertaking the action shall fully fund and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved Critical Areas Report and mitigation plan. The property owner, person or agency undertaking the action shall apply for review. The alteration, Critical Areas Report, and mitigation plan shall be reviewed by the City in accordance with the review procedures contained in this chapter.

vi. Restoration and/or mitigation activities must be initiated within three months of the date of an approved Critical Areas Report and mitigation planor as otherwise determined by the Planning Official and completed in a timely manner.

b. *Hazard Tree.* Emergency or hazard tree removal (as defined in VMC Chapter 20.770) conducted so that critical area impacts are minimized.

c. *Landscape Maintenance.* Landscape maintenance (other than tree removal) consistent with accepted horticultural practices, such as those recommended by the Washington State University Extension Service, within the boundaries of an existing lawn, garden or landscaped area and not associated with development.

d. *Noxious or Invasive Plants.* Clearing of noxious or invasive plants using hand-held equipment such as a weed-whacker, provided (1) fueling and maintenance take place outside the critical area and buffer; (2) all cleared vegetation is taken away and disposed of properly; and (3) denuded soils are stabilized with native vegetation. The City of Vancouver's Noxious or Invasive Plants List and Native Plant Species List are available from the Planning Official.

e. *Pesticides, Herbicides, Fungicides, or Fertilizers.* Application of pesticides, herbicides, fungicides, or fertilizers, when done as directed in the package instructions as required by state and federal laws.

f. *State or Federally Approved Conservation or Preservation.* State or federally approved conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife that does not entail changing the structure or functions of the existing critical area or buffer.

g. *Harvesting Wild Crops.* The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops or other native vegetation and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the critical area or buffer by changing existing topography, water conditions or water sources.

h. *Passive Activities.* Passive outdoor recreation, education, and scientific research activities such as fishing, hiking, and bird watching that do not degrade the critical area or buffer.

i. *Land surveys, soil sampling, percolation tests, and other related activities.* In every case, impacts to the critical area or buffer shall be minimized and disturbed areas shall be stabilized and replanted immediately.

j. *Navigational Aids and Boundary Markers.* Construction or modification of navigational aids and boundary markers. Impacts to the critical area or buffer shall be minimized and disturbed areas shall be restored within 72 hours.

k. *Agricultural Activities.* Existing and ongoing agricultural activities protected under the federal Food Security Act occurring in wetland areas.

Existing and ongoing agriculture within Fish and Wildlife Habitat Conservation Areas so long as livestock and application of pesticides, herbicides, fungicides, and fertilizers is done in accordance with package instructions.

l. *State or Federally Approved Restoration or Enhancement Project.* Implementation of a state or federally approved restoration or enhancement project not related to any development project.

m. *Operation, Repair and Maintenance.* Operation, repair and maintenance of existing structures, infrastructure, roads, sidewalks, railroads, trails, dikes, or levees or water, sewer, stormwater, power, gas, telephone, cable, or fiber optic facilities if the activity does not further increase the impact to, or encroach farther within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed operation, repair, or maintenance.

n. *Public Improvement Projects.* Public improvement projects located within existing impervious surface areas.

o. *City, State or Federally Approved Stand-alone "Critical Area" Creation Project.* Implementation of a City, State or federally approved stand-alone "critical

area" creation project that is not mitigation. Also see the definition of "Wetlands" in VMC Chapter 20.150.

p. *Clearing in Frequently Flooded Areas and Seismic Hazard Areas Only.* Clearing vegetation within the floodplain and within a Seismic Hazard Area, but outside other types of critical areas.

q. *Vegetation Clearing.* Clearing vegetation in critical areas that are only Seismic Hazard Areas

r. *Fence Repair.* Maintenance, repair, and in-kind replacement of existing fences.

s. *Seismic Hazard Areas Only.* Sites identified as located within only a Seismic Hazard Area (VMC 20.740.130 – Geologic Hazard Areas) shall be exempt from needing to obtain a Critical Areas Permit. All projects within the Seismic Hazard Area must comply with the Building Code at time of building permit review, including providing a Geotechnical Report. (Ord. M-4034 § 23, 12/03/2012; Ord. M-4017 § 5, 07/16/2012; Ord. M-3931 § 22, 11/02/2009; Ord. M-3922 § 36, 07/06/2009; Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.040 Approval Process.

A. *Critical Areas Permit Process.*

1. *Pre-application Conference Required.* A pre-application meeting or waiver per VMC Chapter 20.210 is required prior to submitting a Critical Areas Permit. Pre-application conferences shall not be required for the following:

    a. Activities and developments listed as exempted from critical areas standards and permits.

    b. Proposals involving only an addition to an existing single-family or duplex house, including accessory structures, such as accessory dwelling units, attached and detached garages, and/or carports, shops, and sheds.

    c. Other minor improvements determined by the Planning Official to not warrant a pre-application meeting or waiver.

2. *Critical Areas Permit.* If a proposed development activity is determined not to be exempt per the listed critical areas exemptions, the applicant and/or owner shall obtain a Critical Areas Permit prior to commencing the development activity. Critical Areas Permits shall be processed as a Type I permit when no other permits are filed concurrently or reviewed according to the procedures of the underlying land use application pursuant to VMC Chapter 20.210.

3. *Review Procedure.* The Planning Official shall make a determination as to whether the proposed activity and mitigation, if any, are consistent with the critical areas

approval criteria of VMC Chapter 20.740 and in compliance with the performance standards for the type(s) of critical area(s) involved.

4. *Expiration of Permit.* The Critical Areas Permit shall be valid for as long as the underlying land use permit is in effect or as otherwise specified by the Planning Official.

B. *Notice on Title – Covenant and Tracts.*

1. *Covenants.* This section applies to all nonexempt projects that involve critical areas and buffers, with the exception of Frequently Flooded Areas.

a. The owner of any property containing a critical area or buffer on which a development proposal is approved shall file a covenant with the county records and elections division according to the direction of the City. The covenant shall state the presence of the critical area and/or buffer on the property, the application of this chapter to the property, and the fact that limitations on actions in or affecting the critical area or buffer may exist, including that the area(s) within the conservation covenant be maintained in a natural state without disturbance to vegetation or other features unless otherwise approved by the City. The covenant shall "run with the land" in perpetuity. The covenant shall include a map and legal description of the critical area, with wording in the notice substantially similar to the following:

"Prior to and during the course of any grading, building construction or other development activity on this property containing or abutting a critical area, the area of development activity must be fenced or otherwise marked to the satisfaction of the City. The critical area shall be maintained in its natural state without disturbance to vegetation or other features, except as provided for by VMC Chapter 20.740 , Critical Areas Protection. Yard waste, debris, fill, equipment, vehicles, and materials shall not be placed in the critical area."

b. The applicant shall submit proof that the covenant has been filed for public record before the City approves any site development or construction for the property or, in the case of subdivisions, short subdivisions, planned unit

developments, binding site plans, and other developments that involve platting, at or before recording of the plat.

c. Any modifications to an established and recorded conservation covenant shall be consistent with the standards of this chapter and the originally issued Critical Areas Permit that established the subject conservation covenant. The modification shall be processed as under a Type I review process. Any modification of the covenant that is inconsistent with the originally issued Critical Areas Permit or with the standards of this chapter shall be subject to a review and receive a Critical Areas Permit consistent with the standards of this chapter.

2. *Tracts.* This section applies in ,addition to subsection (B)(1) of this section, to projects that involve platting on properties containing Fish and Wildlife Habitat Conservation Areas, Wetlands, Geologic Hazard Areas, and their buffers.

a. The property owner shall place the subject critical areas and buffers in one or more nondevelopable tracts except when the responsible official determines that a tract cannot be provided given the constraints of the site, such as size of the property in question, while meeting all other standards of VMC Title 20.

b. When the exception in subsection (B)(2)(a) of this section applies, residential lots may extend into the critical area(s) or buffer(s) provided:

i. Temporary and permanent markers and signs are installed in compliance with the requirements of VMC 20.740.020, General Provisions.

i. The applicant records a conservation covenant protecting the critical area in perpetuity in conformance with VMC 20.740.040(B)(1).

C. *Financial Assurances.*

1. When mitigation required pursuant to a development proposal is not completed prior to the City's final permit approval, such as final plat approval or final building inspection, the City shall require the applicant to provide security in a form deemed

acceptable by the City, including to ensure that mitigation is fully functional taking into account remaining construction, maintenance, and monitoring.

2. The security shall be in the amount of 125 percent of the estimated cost of restoring the functions of the critical area that are at risk.

3. The security shall remain in effect until the City determines, in writing, that the applicable standards have been met. The security shall be held by the City for a minimum of five years to ensure fully functional mitigation.

4. Depletion, failure, or collection of bond funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring, or restoration.

5. Public development proposals shall be relieved from having to comply with the bonding requirements of this section if public funds have previously been committed for mitigation, maintenance, monitoring, or restoration.

6. Failure to satisfy any critical area requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within 30 days after it is due or comply with other provisions of an approved mitigation plan shall constitute a default, and the City may demand payment of any financial guarantees or require other action authorized by the City code or any other law.

7. Any funds recovered pursuant to this section shall be used to complete the required mitigation. Excess funds shall be returned to the applicant.

D. *Critical Area Inspections.* Reasonable access to the site shall be provided to the City, State, and federal agency review staff for the purpose of inspections during any proposal review, delineation, restoration, emergency action, or monitoring period.

E. *Burden of Proof.* The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the exemption, Critical Areas Permit, Minor Exception, Reasonable Use Exception, or any other approval requested under this chapter.

F. *Appeals.* Any decision to approve, condition, or deny a development proposal or other activity based on the requirements of this chapter may be appealed according to VMC 20.210.130.

G. *Programmatic Permits.* The purpose of a programmatic permit is to provide for ongoing, routine maintenance, operation, or repair activities on sites containing critical areas or buffers (1) so as not to impair an agency's or business's ability to operate effectively and efficiently by requiring separate Critical Areas Permits for each activity; and (2) at the same time protect critical areas and buffers in accordance with this chapter.

1. In addition to the submittal requirements in VMC 20.740.050 and any additional Critical Areas report requirements under VMC 20.740.110-140, applicants for a programmatic permit shall submit a proposed management plan. The management plan shall contain:

    a. A narrative explaining the need for the programmatic permit;

    b. A list of the ongoing, routine, maintenance, operation, or repair activities that impact or potentially impact critical areas and buffers;

    c. A description of the potentially impacted critical area and buffer functions;

    d. Proposed measures and standards for avoiding impacts to critical area and buffer functions and, where unavoidable, mitigating those impacts to achieve no net loss of functions; and

    e. A training program ensuring that all employees, contractors, and individuals under the supervision of the applicant who are involved in permitted activities understand and perform them in accordance with the terms of the permit.

2. A programmatic permit may be approved for up to seven years. The permit duration may be tied to other permits or processes.

3. Every two years for the duration of the programmatic permit 30 days prior to the original date of permit issuance, the applicant shall submit a report to the Planning Official summarizing activities undertaken. The report shall also document the training provided in accordance with subsection (G)(1)(e) of this section.

4. The applicant or the City may initiate an amendment to the programmatic permit if anticipated activities, terms, or conditions of the programmatic permit will change. An amendment shall be considered through a Type 1 process following a pre-application conference.

5. An application for reauthorization of a programmatic permit shall be submitted at least 90 days prior to the date the current permit expires. Programmatic permits may be reauthorized through a Type 1 process following a required pre-application conference. Permit standards and conditions may be modified to conform to the current codes, policies, and standards or based on past performance. Where the review of the reauthorization application will extend beyond the expiration date of the current programmatic permit, the Planning Official may extend the duration of the current permit for up to 60 days at a time, not to exceed 180 days.

20.740.050 Submittal Requirements.

A. *Preparation by Qualified Professional.* Any required critical areas report shall be prepared by a qualified professional as defined in VMC Chapter 20.150.

B. *General Critical Areas Report Contents.* At a minimum, the critical areas report shall contain the following:

1. The name and contact information of the applicant, a description of the proposal, and identification of the permit requested;

2. A copy of the site plan for the development proposal, including:

   a. A map to scale depicting critical areas, buffers, the development proposal, and any areas to be altered or developed; and

   b. A proposed stormwater management and sediment control plan for the development, including a description of any impacts to drainage alterations;

3. The dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site. Critical Areas Reports shall be prepared by a qualified professional for the type of critical area involved;

4. *Identification and scientific characterization of all critical areas and buffers.* The scientific characterization shall include a detailed assessment of the functional characteristics of the critical areas;

5. An assessment of the probable impacts to critical areas and buffers and risk of injury or property damage including permanent, temporary, and indirect impacts resulting from development of the site and the operations of the proposed development;

6. A written response to each of the approval criteria in VMC 20.740.060;

7. Plans for adequate mitigation, as needed, to offset any impacts, in accordance with VMC 20.740.050(F) Mitigation Plan Requirements; and

8. *Additional Information.* Any additional information required for the specific critical areas and buffers as specified in VMC 20.740.110 Fish and Wildlife Habitat Conservation Area, VMC 20.740.120 Frequently Flooded Areas, VMC 20.740.130 Geologic Hazard Areas, and VMC 20.740.140 Wetlands.

C. *Other Reports or Studies.* Unless otherwise provided, a Critical Areas Report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the Planning Official. Provided, the site conditions shall not have changed since the earlier report or study was completed.

D. *Critical Areas Report – Modifications to Requirements.* The applicant may consult with the Planning Official prior to or during preparation of the Critical Areas Report when the Planning Official determines and a qualified professional recommends that less information is necessary to adequately address the potential impacts to any critical areas or buffers and the required mitigation. In such case the Planning Official may allow a reduced scoped critical areas report.

E. *Mitigation Plan Requirements.* When mitigation is required, the applicant shall submit a mitigation plan as part of the Critical Areas Report. The mitigation plan shall include:

1. Mitigation rationale: A discussion of the rationale for the proposed mitigation that includes other mitigation options and why the proposed method best achieves the approval criteria in 20.740.060 as compared with other forms and locations for mitigation.

2. 1. *Detailed Construction Plans.* The mitigation plan shall include descriptions and plans of the mitigation proposed, such as:

    a. The proposed construction sequence, timing, and duration;

    b. Grading and excavation details;

    c. Erosion and sediment control features;

    d. A planting plan specifying plant species, quantities, locations, size, spacing, and density;

    e. Measures to protect and maintain plants until established; and

    f. Detailed site diagrams, scaled cross sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

3. *Adaptive Management.* The mitigation plan shall include identification of potential courses of action and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.

4. *Monitoring Program.* The mitigation plan shall include a program for monitoring construction of the mitigation project and for assessing a completed project.

    a. A protocol shall be included outlining the schedule for site monitoring, and how the monitoring data will be evaluated to determine if the performance standards are being met.

    b. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the mitigation project. The mitigation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five years or more than 10 years, unless otherwise specified in this code.

    c. When the applicant believes that the conditions of the monitoring plan are met, the applicant shall contact the City and request that the City certify so in writing. The City shall conduct an on-site assessment as part of the verification process.

d. When the City has verified and certified that the conditions of the monitoring plan have been met, the critical area shall no longer be considered as mitigation, but as a critical area when processing a future development permit application(s).

F. Development may be permitted on a site containing a critical area(s) or buffer(s) which may also be subject to state or federal permits prior to all necessary state or federal permits being obtained when all of the following criteria are met:

1. A phased master plan is submitted under VMC Chapter 20.260 or Chapter 20.268 as appropriate, demonstrating:

a. How the maximum critical area(s) and maximum buffer(s) will be clearly avoided until all local, state, or federal permits are obtained;

b. How each phase could be permitted as an individual project not relying on development of any other phases in any way;

c. How each phase could be developed regardless of whether any or all of the pending state or federal permits are ever obtained; and

d. The applicant demonstrates that there will be no net loss of critical area functions for each phase or for the project as a whole even if state and/or federal permits are not obtained.

2. Development is permitted only in the area that clearly avoids the maximum critical area(s) and buffer(s). (Ord. M-4105 § 3, 11/17/2014; Ord. M-4017 § 6, 07/16/2012; Ord. M-3959 § 37, 07/19/2010; Ord. M-3931 § 23, 11/02/2009; Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.060 Approval Criteria.

Any activity or development subject to this chapter shall be reviewed and approved, approved with conditions, or denied based on the proposal's ability to comply with all of the following criteria. The City may condition the proposed activity as necessary to mitigate impacts to critical areas and their buffers and to conform to the standards required by this chapter.

A. *Avoid Impacts.* The Applicant shall first seek to avoid all impacts that degrade the functions and values of (a) critical area(s). This may necessitate a redesign of the proposal.

B. *Minimize Impacts.* Where avoidance is not feasible, the applicant shall minimize the impact of the activity. The applicant shall seek to minimize the fragmentation of the resource to the greatest extent possible.

C. *Rectifying*. Rectify the impact by repairing, rehabilitating, or restoring the affected environment.

D. *Reducing*. Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action.

E. *Compensatory Mitigation.* The applicant shall compensate for the unavoidable impacts by replacing each of the affected functions. The compensatory mitigation shall be designed to achieve the functions as soon as practicable. Compensatory mitigation shall be in-kind and on-site, when feasible, and sufficient to maintain the functions of the critical area, and to prevent risk from a hazard posed by a critical area to a development or by a development to a critical area. Compensatory mitigation priority for wetlands is specified in VMC 20.740.140(C)(3)(b). Compensatory mitigation shall offset both permanent and temporal impacts.

F. D. *No Net Loss.* The proposal protects the critical area functions and values and results in no net loss of critical area functions and values. If loss of critical area functions are expected, adequate mitigation is provided to offset impacts of anticipated loss.

G. E. *Consistency with General Purposes.* The proposal is consistent with the general purposes of this chapter and does not pose a significant threat to the public health, safety, or welfare on or off the development proposal site.

H. *Performance Standards.* The proposal meets the specific performance standards of VMC 207.40.110 Fish and Wildlife Habitat Conservation Areas, VMC 20.740.120 Frequently Flooded Areas, VMC 20.740.130 Geologic Hazard Areas and VMC 20.740.140 Wetlands, as applicable.

20.740.070 Minor Exceptions.

A. *Minor Exceptions Authorized.* Minor exceptions of no greater than 10 percent from the numeric standards of this chapter may be authorized by the City in accordance with the Type II procedures set forth in VMC Chapter 20.210. Minor exceptions shall not be combined with buffer averaging or buffer reduction for Fish and Wildlife Habitat Conservation Areas or Wetlands. Minor exceptions from the National Flood Insurance Program development standards of VMC 20.740.120, Frequently Flooded Areas, are prohibited.

B. *Minor Exception Criteria.* A minor exception from the standards of this chapter may be granted only if the applicant demonstrates that the requested action conforms to all of the following criteria:

1. Unusual conditions or circumstances exist that are specific to the intended use, the land, the lot, or something inherent in the land, and that are not applicable to all other lands in the same vicinity or zoning district;

2. The unusual conditions or circumstances do not result from the actions of the applicant;

3. Granting the minor exception requested will not confer on the applicant any special privilege that is denied by this chapter to other lands, structures, or buildings under similar circumstances;

4. The minor exception is necessary for the preservation and enjoyment of a substantial property right of the applicant such as is possessed by the owners of other properties in the same vicinity or district;

5. The minor exception requested is the least necessary and no greater than 10 percent of the subject standard to relieve the unusual circumstances or conditions identified in Subsection VMC 20.740.070(B)(1) above;

6. The granting of the minor exception or the cumulative effect of granting more than one minor exception is consistent with the general purpose and intent of the City of Vancouver Comprehensive Plan, this title, this chapter, and the underlying zoning district;

7. Degradation of the functions (including public health and safety) of the subject critical areas and any other adverse impacts resulting from granting the minor exception will be minimized and mitigated to the extent feasible in accordance with the provision of this chapter;

8. Granting the minor exception will not otherwise be materially detrimental to the public welfare or injurious to the property or improvements in the vicinity of the subject property; and

9. The proposed development complies with all other applicable standards.

C. *Conditions May Be Required.* In granting any minor exception, the City may attach such conditions and safeguards as are necessary to secure adequate protection of critical areas and developments from adverse impacts, and to ensure conformity with this chapter.

20.740.080 Reasonable Economic Use Exceptions.

A. *Exception Request and Review Process.* If the application of this chapter would deny all reasonable economic use of the subject property, the City shall determine if compensation is an appropriate action, or the property owner may apply for an exception pursuant to this section. Exceptions from the standards of this chapter may be authorized by the City in accordance with the Type III procedures set forth in VMC 20.210.

An application for a reasonable economic use exception shall be made to the City and shall include a Critical Areas Report with a mitigation plan and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (RCW 43.21C). The Planning Official shall prepare a recommendation to the Hearings Examiner based on review of the submitted information, a site inspection, and the proposal's ability to comply with the critical areas reasonable use exception criteria.

B. *Reasonable Use Review Criteria.* The City shall approve applications for reasonable use exceptions when all of the following criteria are met:

1. The application of this chapter would deny all reasonable economic use of the property;

2. No other reasonable economic use of the property has less impact on the critical area;

3. The proposed impact to the critical area is the minimum necessary to allow for reasonable economic use of the property;

4. The inability of the applicant to derive reasonable economic use of the property is not the result of actions by the applicant after the effective date of this chapter, or its predecessor;

5. The proposal does not pose a significant threat to the public health, safety, or welfare on or off the development proposal site;

6. The proposal mitigates for the loss of critical area functions to the greatest extent feasible; and

7. The proposal is consistent with other applicable regulations and standards.

20.740.090 Unauthorized Critical Areas Alterations and Enforcement.

A. *Enforcement.*

1. It shall be unlawful to violate the provisions of VMC Chapter 20.740. Any violation of this chapter shall constitute a public nuisance.

2. VMC Title 22 shall provide the enforcement provisions for VMC Chapter 20.740. VMC Title 22 may impose any of the remedies, requirements or corrective actions contained in this chapter. In lieu of or in addition to the enforcement provisions contained in VMC Title 22, the City may also seek injunctive or other relief from any court of competent jurisdiction.

B. *Requirement for Restoration Plan.* In the event the City initiates enforcement action under VMC Title 22 or files a complaint in court, the City may require a restoration plan consistent with the requirements of this chapter. Such a plan shall be prepared by a qualified professional using the best available science and shall describe how the actions proposed meet the minimum performance standards for restoration requirements. The Planning Official shall, at the violator's expense, seek expert advice in determining whether the plan restores the affected area to its pre-existing condition or, where that is not possible,

restores the functions of the affected area. Inadequate plans shall be returned to the applicant or violator for revision and re-submittal.

C. *Minimum Performance Standards for Restoration.*

1. For alterations to Frequently Flooded Areas, Wetlands, and Fish and Wildlife Habitat Conservation Areas, the following minimum performance standards shall be met for the restoration of a critical area, provided that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:

    a. The structure and functions of the critical area or buffer prior to violation shall be restored, including water quality and habitat functions;

    b. The soil types and configuration prior to violation shall be replicated;

    c. The critical area and buffers shall be replanted with native vegetation (a list of native species is available from the Planning Official). If the critical area or buffer is on a site that meets the criteria of VMC 20.740.030(C)(1)(f)(i), the vegetation for replanting must be not only native but also fire-resistant. A list of native, fire-resistant species is available from the Planning Official; and

    d. Information demonstrating compliance with this chapter's Mitigation Plan Requirements shall be submitted to the Planning Official.

2. For alterations to Frequently Flooded and Geologic Hazard Areas, the following minimum performance standards shall be met for the restoration of a critical area or buffer, provided that, if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

    a. The hazard shall be reduced to a level equal to, or less than, the pre-violation hazard;

    b. The risk of personal injury resulting from the alteration shall be eliminated or minimized;

    c. Drainage patterns shall be restored to those existing before the alteration; and

d. The hazard area and buffers shall be replanted consistent with pre-violation conditions with native vegetation sufficient to minimize the hazard. If the critical area or buffer is on a site that meets the criteria of VMC 20.740.030(C)(1)(f)(i), the vegetation for replanting must be not only native but also fire-resistant. A list of native, fire-resistant species is available from the Planning Official.

D. *Site Investigations.* The Planning Official is authorized to make site inspections and take such actions as are necessary to enforce this chapter.

E. *Noncompliance in Frequently Flooded Areas.* No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this chapter and other applicable regulations. Violations of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this chapter or fails to comply with any of its requirements shall upon conviction be subject to enforcement under subsection A of this section. Nothing herein contained shall prevent the City from taking such other lawful action as is necessary to prevent or remedy any violation. (Ord. M-4325 § 3, 2020; Ord. M-3844 § 2, 2007; Ord. M-3692 § 2, 2005)

20.740.100 Designation Process for Habitats of Local Importance.

A. *Eligibility and Approval Criteria.* Habitats of Local Importance are Fish and Wildlife Habitat Conservation Areas that are not designated under VMC 20.740.110, but are designated as locally significant by the City. Criteria for designation include all of the following:

1. A need for protection exists due to a high diversity of fish or wildlife species, declining populations, scarcity of the habitat type, sensitivity to disturbance from human activity or development, or other unique local habitat functions.

2. The area is sufficient in size to support the species or habitat functions for which it is designated.

3. The designation will not compromise the ability of the City to achieve the goals of the Comprehensive Plan.

4. There is a proposed management strategy describing how the functions of the habitat will be protected after designation.

5. The area and habitat are not otherwise protected under other critical areas regulations.

B. *Designation Process.* Habitats of Local Importance may be proposed by the property owner or the City and shall be designated according to a Type IV legislative procedure (VMC Chapter 20.210). (Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.110 Fish and Wildlife Habitat Conservation Areas.

A. *Designation and Location.*

1. The City designates the following identified areas as Fish and Wildlife Habitat Conservation Areas. Final designations shall be based on site conditions and other available data or information (see VMC 20.740.020[C][1]).

a. Areas where endangered, threatened, and sensitive species have a primary association, including priority habitats and areas associated with priority species as listed by the Washington Department of Fish and Wildlife (WDFW). Within the city, these areas and species primarily include, but may not be limited to, the following:

i. Riparian areas composed of Riparian Management Areas (RMA's) and Riparian Buffers (RB's);

ii. Priority Oregon white oak habitat;

iii. Biodiversity areas;

iv. Waterfowl concentrations: and

v. Aquatic habitat.

b. Forage fish spawning areas;

c. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish and wildlife habitat;

d. Waters of the state;

e. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;

f. State natural area preserves, natural resource conservation areas, and state wildlife areas; and

g. d *Habitats and Species of Local Importance.* Fish and Wildlife Habitat Conservation Areas or individual species that are designated as locally significant by the City in accordance with VMC 20.740.100.

g. *Fish and Wildlife Habitat Conservation Area Locations .* Information on the approximate location and extent of Fish and Wildlife Habitat Conservation Areas is available from the following sources:

h. U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries species list;

i. a. WDFW Priority Habitat and Species Maps;

j. WDFW Anadromous and Resident Salmonid Distribution Maps in the Salmon and Steelhead Habitat Inventory Assessment Program (SSHIAP);

k. StreamNet.org maps from the Pacific States Marine Fisheries Commission;

l. Washington State Department of Natural Resources (DNR) Official Water Type Reference Maps; and

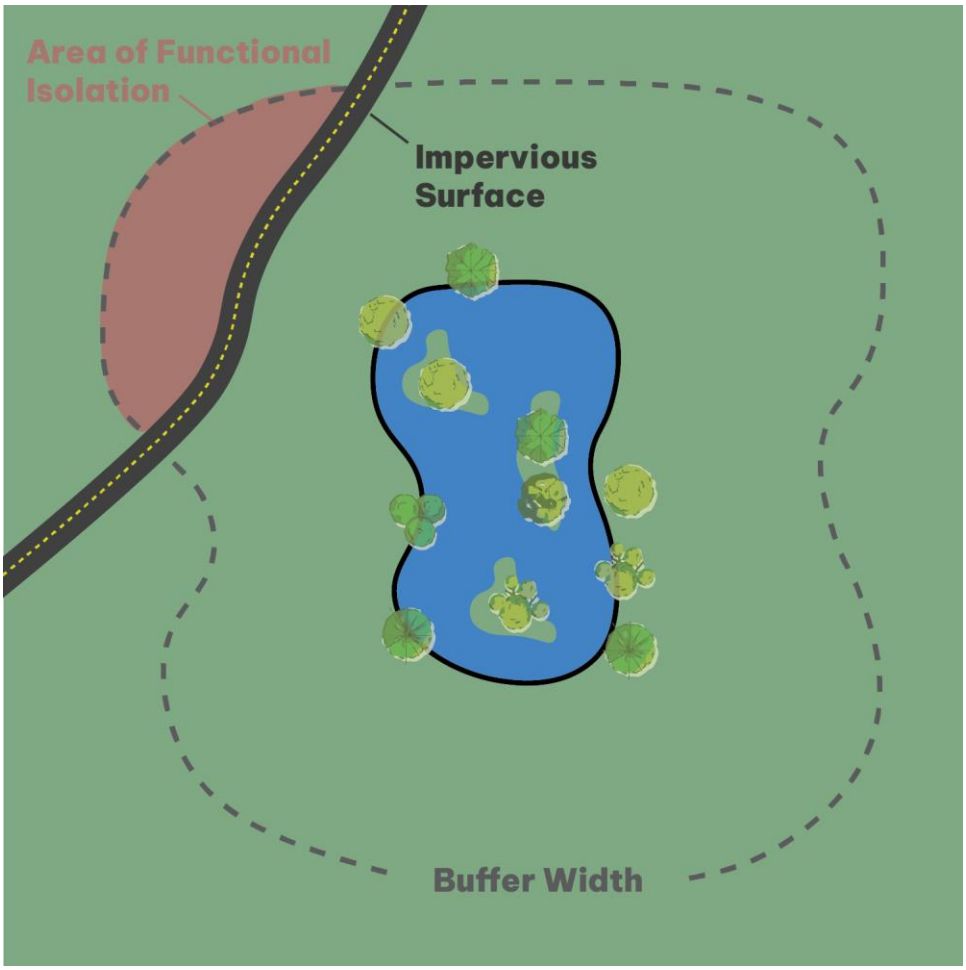
m. Other information acquired by the City such as site-specific or area-specific delineations or studies.

B. *Development activities that functionally or physically isolate the RMA or RMB buffer*.

When existing impervious surfaces or other built structures, such as a levee or railroad corridor, functionally or physically isolate the RMA or RB buffer from the waterbody, the regulated RMA or RB wetland buffer shall extend landward from the ordinary high water mark (OHWM) or channel migration zone (CMZ), whichever is greater and terminate at the waterward edge of the impervious surface or manmade structure. Development activities that occur within the area

of functional isolation, or further landward, are exempt from the requirement to obtain a Critical Areas Permit.

Figure 20.740.110-1: Functional Isolation



The Planning Official shall rely on a site visit, aerial photographs, or other evidence provided by the applicant or the applicant's qualified professional in making a determination to reduce the width of the RMA, RB, or wetland buffer based on functional and/or physical isolation.

Note: RMA's and RB's are measured from the OHWM or the edge of a channel migration zone (CMZ), whichever is further landward. However, no CMZs have been identified within the city limits as of the date this chapter was adopted.

C. *Performance Standards.*

1. *Development Standards*

a. *Development and Clearing Activities.*

i. Development or clearing activities shall protect the functions of the Fish and Wildlife Habitat Conservation Areas on the site and shall result in no net loss of functions, as required by the approval criteria of this chapter.

ii. If development or clearing activity is within a Priority Habitat and Species area, the applicant shall follow WDFW Management Guidelines, Management Recommendations, or other standards approved by WDFW.

iii. Functionally significant habitat, defined as habitat that cannot be replaced or restored within 20 years, shall be preserved unless the activity meets the conditions of VMC 20.740.110(B)(2)(b). An example of habitat that cannot be replaced within 20 years would be a stand of mature trees or a peat bog.

b. *Mitigation*.

i. Mitigation for impacts within Fish and Wildlife Habitat Conservation Areas shall follow the sequence specified in this chapter's approval criteria.

ii. Disrupted functions and values shall be mitigated on site as a first priority, and off site thereafter.

iii. An up-to-date science-based guide, such as applicable watershed, fish recovery, sub-basin, or other science-based plans should be used to guide the proposed mitigation. Any science used to guide mitigation actions, whether on site or off site, must meet the criteria and characteristics of best available science listed in WAC 365-195-905 (Criteria for determining which information is the "best available science"), or the state standards in effect at the time of application.

c. d. *Signs for Fish and Wildlife Conservation Areas.*

i. Temporary and permanent markers and signs shall be installed as required by this chapter's General Provisions.

2. Standards for *RMAs RBs*.

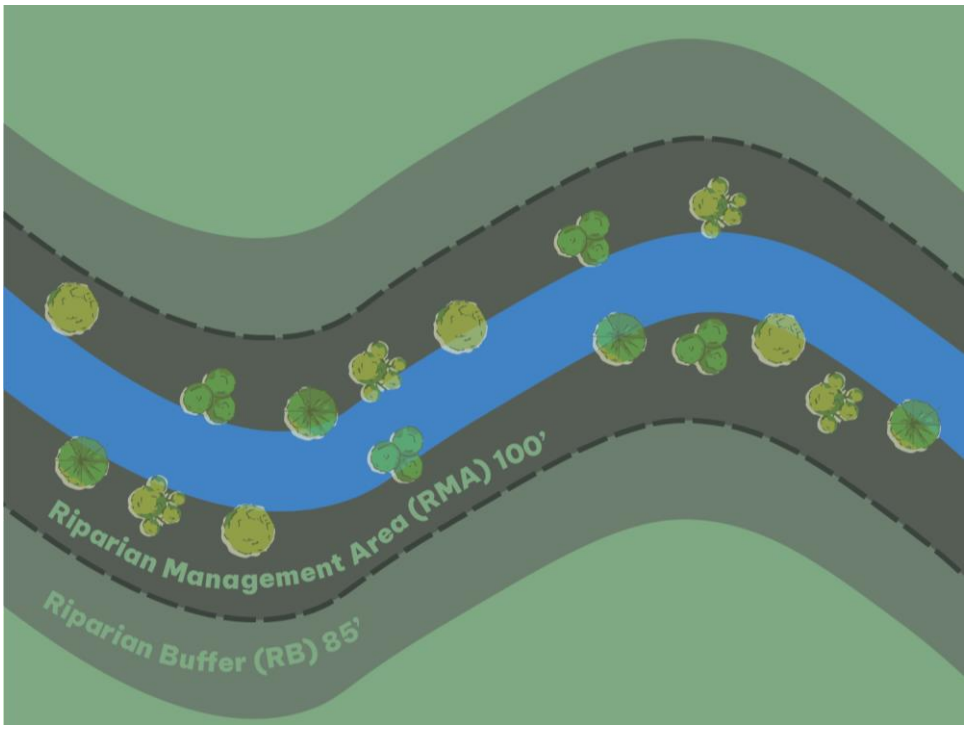
a. RMA and RB Location and Width.

i. *Standard Width.* Standard RMA widths are 100 feet for Shorelines of the State (Type S), for both fish-bearing and non-fish-bearing waterbodies and for unclassified streams. The RB is 85 feet for all classified and unclassified waterbody types. The RMA and RB widths shall be combined for a total regulated riparian area width of 185 feet.

ii. *Site Potential Tree Height (SPTH) RMA and RB Width.* If the applicant cannot accommodate the standard-width RMA and RB on the project site for the proposed development, , applicants may use the 200-year SPTH mapping tool referenced in WDFW's Riparian Ecosystems, Volume 2: Management Recommendations and justify a lesser-width RMA and/or RB in the project's Critical Areas Report. For project locations with multiple SPTH values, the largest SPTH value shall be used to establish the riparian area width. If the tool does not have data available to establish SPTH, the minimum combined RMA and RB width shall be the standard width as established in subsection (2)(a)(i).

iii. *Measurement.* Whether the standard or SPTH RMA and RB is used, the RMA is measured horizontally from the OHWM of the stream, river, or lake or from the CMZ, where present, to the specified width. The RB is measured horizontally from the landward boundary of the RMA as shown in Figure 20.740.110-1.

Figure 20.740.110-2



b. *Riparian Management Area Width Averaging.* The width of the RMA may be modified (see VMC 20.170.080[B][1]) if all the following are met:

   i. The total square footage of the Riparian Management Area RMA (VMC 20.740.110[B][2][a][i]) is not reduced;

   ii. There is no net loss of functions as a result of the averaging; and

   iii. The reduction of the Riparian Management Area RMA width at any location is no greater than 25 percent of the required standard or SPTH width under VMC 20.740.110(2)(a)(i or ii).

c. *Permitted Development and Uses within RMAs and RBs and Development Standards.*

   i. *Development and Uses within the Riparian Buffer.* Development or clearing activity is permitted in the RB that meets the general performance standards in VMC 20.740.110(B).

ii. *Development and Uses within the RMA .* No development or clearing activity is allowed within the RMA unless such activity is:

(A) A water-dependent, water-related or water-enjoyment activity for which there are no feasible alternatives that would have a less adverse impact on the RMA ;

(B) Infrastructure, including a road, railroad, trail, dike, or levee or a water, sewer, stormwater conveyance, gas, power, cable, fiber optic, or telephone facility that cannot feasibly be located outside of the RMA.;

(C) Mitigation for activities allowed by this chapter, providing the activity results in no net loss of riparian habitat functions on the site; or

(D) Trails and wildlife viewing structures, provided that the trails and structures minimize the impact and are constructed so that they do not interfere with hydrology of the waterbody and do not result in increased sediment entering the waterbody.

iii. *Modifications to Existing Development.* When replacing or removing existing development within an RMA or RB, the applicant shall implement the following, where applicable, during site construction:

(A) Evaluate the RMA and RB to pinpoint the best sites to restore and consider connectivity and adjacency to other priority habitats;

(B) Improve aquatic connectivity by replacing culverts and removing barriers to movement;

(C) Revegetate with native plants and consider improvements for wildlife by integrating structures necessary for nesting, breeding, and foraging;

(D) As existing development is remodeled or replaced, incorporate additional setbacks for streams;

(E) Control access to RMAs and RBs during construction to limit soil compaction. Avoid operating equipment near waterbodies to reduce sedimentation and soil compaction; and

(F) Avoid using chemicals in the RMA and RB that are not approved by the Washington State Department of Ecology (Ecology).

iv. *Mitigation.* When mitigating on-site impacts, the following guidelines, where applicable, shall be implemented when designing mitigation for impacted riparian areas, if a restoration opportunity is available on site and within the RMA or RB:

(A) Protect riparian functions that remain, especially in places that are high functioning and implement actions that enhance degraded functions;

(B) Increase riparian width in areas of high function; and

(C) Prioritize opportunities to maintain and restore in-stream and riparian connectivity.

D. *Additional Critical Areas Report Requirements.*

1. A Critical Areas Report for an RMA or RB shall include:

a. The SPTH riparian area width in the mapping tool referenced in WDFW's Riparian Ecosystems, Volume 2: Management Recommendations document, if the applicant is not proposing to use the standard-width RMA and RB.

b. Evaluation of the habitat functions using a habitat evaluation tool approved by WDFW.

c. In addition to the standards of VMC 20.740.050(F), where a mitigation plan is required as part of the Critical Areas Report for a Fish and Wildlife Habitat

Conservation Area that involves a waterbody, RMA, or RB, the monitoring program protocol shall include, where relevant to the impacted functions:

i. Observations and measurements of riparian integrity and quality (buffer width, riparian corridor continuity or fragmentation, species diversity, stand age, plant survival rates);

ii. Large woody debris surveys; and

iii. Streamflow monitoring.

iv. Water quality monitoring to detect pollution impacts.

v. Biological monitoring (including fish surveys and benthic macroinvertebrate sampling.

2. If the clearing or development activity is in the RMA, the Critical Areas Report shall contain all the following information, if applicable:

   a. How the clearing or development activity constitutes a water-dependent, water-related, or water-enjoyment use;

   b. How the clearing or development activity cannot feasibly be located on the site outside of the RMA;

   c. How the proposal meets the RMA width averaging standard (VMC 20.740.110(B)(2)(b)); and

   d. How the proposal will not adversely affect the connectivity of habitat functions.

3. For land use and development-related activities on a site with PHS-designated priority Oregon white oak woodland habitat, the applicant shall be required to demonstrate compliance with WDFW's latest guidance: *Best Management Practices for Mitigating Oregon White Oak Priority Habitat* (January 2024) the Washington Department of Fish and Wildlife WDFW's latest guidance: Best Management Practices for Mitigating Oregon White Oak Priority Habitat (January 2024) and any subsequent revisions. The report shall include mapping and an evaluation of the habitat functions.

a. The critical areas report shall also identify protection and mitigation for the impacted Oregon white oaks on the site. In circumstances where it is demonstrated that preservation or mitigation of impacts on-site is not practicable, the applicant shall provide a minimum of two alternative site designs and layouts to demonstrate that impacts cannot be avoided or be reduced to result in less impacts. The planning director may approve reductions to numerical standards including parking and setbacks under the minor exception process in VMC 20.740.070 to avoid or reduce impacts.

b. If compensation is determined to be the only available option for the proposed impact, the report shall include the quantity and method of mitigation to compensate for permanent and temporal impacts in accordance with WDFW's Best Management Practices for Mitigating Impacts to Oregon White Oak Priority Habitat, including the following:

i. Assessment of priority Oregon white oak woodlands and individuals to determine if they meet the designation criteria for priority habitat and species, the size of each woodland or individual, and the level of ecological function provided;

ii. Analysis of the physical and temporal loss of the impacted Oregon white oak woodland habitat;

iii. The corresponding mitigation ratios for both physical and temporal loss of the impacted Oregon white oak habitat and the location of such mitigation; and

iv. Description of monitoring as outlined by WDFW's guidance.

20.740.130 Geologic Hazard Areas.

A. *Designation and Location.*

1. Designated or potential Geologic Hazard Areas include Landslide, Seismic, and Erosion Hazard Areas. With the exception of Bank Erosion Hazard Areas and Fault Rupture Hazard Areas, their potential locations are shown on maps available from the City of Vancouver, Clark County, and the State of Washington. Final designations

shall be based on site conditions and other available data or information (see this chapter's General Provisions section).

2. *Landslide Hazard Areas.* These areas are subject to landslides due to a combination of geologic, topographic, and hydrologic factors. They include any areas susceptible to landslide because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors as defined in VMC Chapter 20.150. Landslides are areas shown as "areas of historic or active landslides," "areas of potential instability," and "areas of older landslide debris" on maps available from Clark County Maps Online ("Slope Stability of Clark County" report [1975] and "Geologic Map of Vancouver Quadrangle" map [1987]) and maps available through the DNR's Geologic Information Portal, including the "Washington Geologic Survey-Protocol Landslide Mapping" and "Other Compiled Landslide Mapping" layers.

3. *Seismic Hazard Areas.* Seismic Hazard Areas include Liquefaction, Ground Shaking Amplification, and Fault Rupture Hazard Areas as designated below and defined in VMC Chapter 20.150.

    a. *Liquefaction Hazard Areas.* Settlement and soil liquefaction conditions occur in areas underlain by cohesionless soils of low density, typically in association with a shallow groundwater table. The following are designated Liquefaction Hazard Areas:

        i. Areas with Low to Moderate,, Moderate, Moderate to High, or High liquefaction susceptibility or Peat Deposits as indicated on liquefaction susceptibility maps from the DNR Geologic Information Portal as revised or superseded.

    b. *Ground-Shaking Amplification Areas.* The following are designated Ground Shaking Amplification Hazard Areas:

        Site Classes C to D, D, D to E, E and F, as shown on the National Earthquake Hazard Reduction Program (NEHRP) Seismic Site Class layer available on the DNR Geologic Information Portal.

    c. *Fault Rupture Hazard Areas.* Potential Fault Rupture Hazard Areas are faults identified by the DNR Geologic Information Portal "Seismogenic Folds, Known

or Suspected" and "Active Faults, Known or Suspected" layers; USGS, on geologic maps available from the Oregon Department of Geology and Mineral Industries (DOGAMI), Clark County Maps Online, or identified from other available data or in the field by a qualified professional and adjacent areas within 100 feet.

4. *Erosion Hazard Areas.* Erosion Hazard Areas include Soil Erosion and Bank Erosion Hazard Areas and as defined in VMC Chapter 20.150. These are also areas that are likely to become unstable, such as bluffs, steep slopes, and areas with unconsolidated soils.

    a. *Soil Erosion Hazard Areas.* The following are designated Soil Erosion Hazard Areas:

        i. *Severe or Very Severe Erosion Hazard Areas.* Areas with soils identified as having a severe or very severe erosion hazard by the 1972 U.S. Department of Agriculture (USDA) Soil Conservation Service Soil Survey of Clark County, Washington.

        ii. *Bank Erosion Hazard Areas.* Bank Erosion Hazard Areas are areas along lakes, streams, and rivers that are subject to regression or retreat due to lacustrine or fluvial processes and adjacent land within 100 feet.

B. *Performance Standards.*

1. *General Standards.*

    a. Critical facilities, as defined in VMC Chapter 20.150, are prohibited in the following areas unless there is no other location available, a mitigation proposal is included in the development plan, and a Critical Areas Report prepared by a qualified professional for geologically hazardous areas establishes that the area is safe for development for the type of facility proposed and the type of hazard:

        i. Landslide Hazard Areas

        ii. Bank Erosion Hazard Areas

        iii. Fault Rupture Hazard Areas

b. Buffer width shall be measured on a horizontal plane from a perpendicular line established at all edges of the geologic hazard area (see VMC Chapter 20.170).

c. The applicant shall demonstrate that, during construction and for the anticipated life of the proposed development, the proposed use(s), activity(ies), and structure(s):

i. Are designed so that the hazard to the proposed project is eliminated or mitigated to a level equal to or less than pre-development conditions;

ii. Will not adversely impact other critical areas, if avoidable, given the type of critical areas involved and the characteristics of the site;

iii. Are designed to minimize or eliminate life safety risk; and

iv. Are certified by a qualified professional as safe as designed and under anticipated conditions.

2. *Landslide and Erosion Hazard Areas.* Development in non-disturbance areas shall be prohibited. In other areas, development in Landslide and Erosion Hazard Areas and their buffers shall be prohibited except where the applicant has demonstrated compliance with the following standards or requirements.

a. Landslide Hazard Areas may be able to be mitigated through grading based on a Critical Areas Report that demonstrates that the slope will be stabilized as described in Additional Critical Areas Report Requirements for Geologic Hazards.

i. The Critical Areas Permit shall be conditioned on a final inspection approval confirming that the grading and site are stable. At the applicant's expense, after site grading, the applicant shall:

(A) Provide inspection specifications from the qualified professional who prepared the Critical Areas Report; and

(B) Inspect the grading and the site using an inspector acceptable to the City Building Official and submit a report to the City indicating whether the site is stable.

ii. Clearing, grading, uprooting, or otherwise impairing the soil stabilizing function of vegetation shall be prohibited during the wet season (November 1 to May 1), except as authorized under a valid state or federal permit or a City Type I permit.

b. Any required erosion mitigation work is to be performed by a certified erosion and sediment control lead in accordance with Ecology requirements.

c. The requirements of VMC Chapter 14.24, Erosion Control, shall be met.

d. Drainage patterns shall not be altered such that potential for damage or risk to the proposed project, the Geologic Hazard Area, or other critical areas or buffers is increased.

e. Trails shall be for pedestrian and nonmotorized vehicular use only and shall be the minimum width necessary to meet applicable regulations.

f. *Roads in Landslide and Bank Erosion Hazard Areas.* A road through or across a Landslide or Bank Erosion Hazard Area shall meet the standards of VMC 20.740.130(B)(2) and shall not be:

i. The sole access for a proposed subdivision (not including short subdivision) or critical facility;

ii. Longer than 200 feet; or

iii. Steeper than a 15 percent grade.

g. *Markers and Signs in Landslide Hazard Areas.*

i. The boundary at the outer edge of the furthest of the Landslide Hazard Area, non-disturbance area (see this chapter's additional Critical Areas Report requirements for Geologic Hazard Areas), or buffer shall be identified with temporary signs prior to any site alteration.

ii. The boundary at the outer edge of landslide area tracts and easements shall be delineated with permanent survey stakes, using iron or concrete markers as established by local survey standards.

iii. These provisions may be modified by the Planning Official as necessary to ensure protection of people and structures from the hazard.

h. *Stabilization in Bank Erosion Hazard Areas.*

i. Bank stabilization measures may be employed to protect an existing structure when a Critical Areas Report conclusively demonstrates all of the following:

(A) Bank erosion threatens an established use or existing structure(s) within a three-year timeframe;

(B) The threatened use or structure(s) cannot be relocated landward of any non-disturbance area (VMC 20.740.130(B)(7)(a)(2));

(C) Bank stabilization measures will not cause a significant adverse impact on upstream or downstream properties or an impact that cannot be mitigated without developing bank stabilization measures for those properties; and

(D) Bank stabilization measures will not cause a significant adverse impact on a Fish and Wildlife Habitat Conservation Area protected by this chapter.

i. When bank stabilization is allowed, it shall be accomplished using beach nourishment, bioengineering (soft armoring) techniques, or a combination of the two. Other techniques may be used when an approved Critical Areas Report demonstrates conclusively that beach nourishment, bioengineering (soft armoring) techniques, or a combination of the two will not provide sufficient protection for the remaining useful life of the structure(s) to be protected.

j. *Buffer.* The following regulations apply to Landslide and Bank Erosion Hazard Area buffers:

i. Buffer widths

(A) No buffer is required for Soil Erosion Hazard Areas.

(B) The minimum buffer width from the top and bottom of slope for Landslide and Bank Erosion Hazard Areas shall be equal to two times the slope height or as recommended by a qualified professional in a geotechnical report.

(C) A larger buffer width may be required for Landslide and Bank Erosion Hazard Areas at the discretion of the Planning Official when:

(1) The adjacent land is susceptible to severe erosion and erosion control measures will not effectively prevent adverse impacts;

(2) The area has a severe risk of slope failure or downslope stormwater drainage impacts;

(3) The area is directly adjacent to a riparian area, or wetland; or

(4) Recommended in an approved Critical Areas Report.

ii. Buffers may be included in non-disturbance areas (VMC 20.740.130(B)(7)(a)(2)) and required planting and maintenance activities may be undertaken within them.

iii. The buffer around Landslide and Bank Erosion Hazard Areas shall be vegetated and shall be maintained by the property owner. New plantings shall consist of native vegetation.

iv. No alteration to the buffer that involves clearing of vegetation shall be undertaken without an erosion control plan approved pursuant to the provisions of VMC 14.24, Erosion Control and this chapter.

3. *Seismic Hazard Areas.*

    a. *Liquefaction or Dynamic Settlement and Ground Shaking Amplification Hazard Areas.* All building structures in Liquefaction or Ground Shaking Amplification Hazard Areas shall comply with the requirements of VMC Title 17, Building and Construction. No buffer is required for Liquefaction or Ground Shaking Amplification Hazard Areas.

    b. *Fault Rupture Hazard Areas.*

        i. A road through or across a fault rupture hazard area shall not be:

            (A) The sole access for a proposed subdivision (not including short subdivision) or critical facility;

            (B) Longer than 200 feet; or

            (C) Steeper than a 15 percent grade.

        ii. Buffer.

            (A) The buffer width shall be the greater of the following distances:

                (1) 50 feet from all edges of a Fault Rupture Hazard Area, except where critical facilities are involved, the minimum buffer distance shall be 100 feet (see VMC 20.170.030[L]); or

                (2) The minimum distance recommended in an approved Critical Areas Report.

            (B) A larger buffer width may be required when the Planning Official determines that the buffer is not adequate to protect the proposed development.

        iii. Structures for human habitation shall be prohibited within Fault Rupture Hazard Areas and buffers.

C. *Additional Critical Areas Report Requirements.* In addition to the requirements of VMC 20.740.050, the following are Critical Areas Report requirements for development proposals in potential Geologic Hazard Areas. These requirements may be adjusted as appropriate by the Planning Official. The Critical Areas Report will result in a conclusion as to whether the potential geologic hazard area is an actual geologic hazard area (see VMC 20.740.130[B][6]). If it is, the Critical Areas Report requires the following additional information, mapping, and analysis (see VMC 20.740.130[B][7]):

1. Identification of the site and project area (defined at VMC 20.150); topography of the site in 2-foot contours (or other increment at the discretion of the Planning Official);planned gas, power, cable, fiber optic, telephone, sewer, water, and stormwater management facilities, wells, on-site septic systems, dikes, levees; and existing structures on the site plan required by VMC 20.740.050;

2. Detailed review of field investigations, published data and references, data and conclusions from past geologic studies or investigations, site-specific measurements, tests, investigations, or studies, and the methods of data analysis and calculations that support the results, conclusions, and recommendations;

3. Field investigation and evaluation of the areas on Landslide, Erosion, Liquefaction or dynamic settlement, Ground Shaking Amplification, and Fault Rupture Hazard Areas on or within 100 feet of the site;

4. A description of the surface and subsurface geology, hydrology, drainage patterns, soils, and vegetation for Liquefaction or dynamic settlement, Ground Shaking Amplification, Fault Rupture, Soil Erosion Hazards, Landslide, and Bank Erosion Hazard Areas on or within 100 feet of the site;

5. Identification of any hazard area indicators that were found on site for Liquefaction or dynamic settlement, Ground Shaking Amplification, Fault Rupture, and Soil Erosion Hazards Areas and on or within 100 feet of the site for Landslide and Bank Erosion Hazard Areas;

6. Conclusion as to whether there is a geologic hazard area on site or within 100 feet of the site; and

7. If a geologic hazard is found to exist on site or if a landslide or bank erosion hazard is found to exist on or within 100 feet of the site, the report must include the following:

    a. Labeling and showing the following on the site plan required by VMC 20.740.050:

        i. The location(s), extent, and type(s) of geologic hazard area(s) identified;

        ii. The location(s) and extent of any area(s) that must be left undisturbed to protect the proposed development from damage or destruction and to protect the hazard area(s) from the impacts of the proposed development;

        iii. The boundaries of the area that may be disturbed;

        iv. The dimension of the closest distance(s) between the geologic hazard area(s) and non-disturbance area and the project area;

        v. For Bank Erosion Hazard Areas, show these areas, boundaries, and dimensions based upon natural processes and, if applicable, proposed bank stabilization measures; and

        vi. The recommended buffer for Bank Erosion Hazard Areas.

    b. Analysis of the erosion processes on site for Soil Erosion Hazard Areas and on or within 100 feet of the site for Bank Erosion Hazard Areas;

    c. Evaluation of the impact of the Geologic Hazard Area(s) on the proposed development, other properties, and other critical areas, as follows:

        i. *Landslide Hazard Areas.* The impact of the run-out hazard of landslide debris from both upslope and downslope shall be included in the evaluation.

        ii. *Bank Erosion Hazard Areas.* Evaluation of impacts on other properties shall include properties both upstream and downstream of the subject property.

d. Evaluation of the impact of the proposed development on the geologic hazard area(s);

e. Assessments and conclusions regarding geologic hazard(s) for both existing and proposed (post-development) site conditions. The ultimate build-out scenarios must be considered and addressed in cases such as land division and master planning where build-out is not scheduled to occur as a direct or immediate result of project approval.

f. Written discussion of:

    i. The risk of damage or destruction from the geologic hazard(s) with respect to human health and safety; infrastructure; the proposed development; other properties (both upstream and downstream for Bank Erosion Hazard Areas); and other critical areas; and

    ii. Whether and to what degree the proposed development would increase the risk from the geologic hazard(s), such as the occurrence of a landslide or the rate of regression.

g. Recommendations for mitigation of impacts to protect:

    i. Human health and safety;

    ii. Infrastructure;

    iii. The proposed development;

    iv. Other properties (both upstream and downstream for Bank Erosion Hazard Areas);

    v. Other critical areas; and

    vi. The hazard area during construction and for the anticipated life of the proposed development. The ultimate build-out scenarios must be considered and addressed in cases such as land division and master planning where build-out is not scheduled to occur as a direct or immediate result of project approval.

h. A demonstration of how the standards of VMC 20.740.130(C) applicable to each geologic hazard area will be met.

20.740.140 Wetlands.

A. *Designating and Rating Wetlands.*

1. *Designating Wetlands.* Wetlands are areas that have been designated in accordance with the 1987 Federal Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains Valleys and Coast Region Version 2.0 (2010 or as further updated) and are defined in VMC 20.150.. Wetlands are subject to a local government's regulatory authority if they meet the definition of wetlands, including non-federally regulated (isolated) wetlands. Final designations shall be based on site conditions as documented in a Wetland Critical Areas Report, and other available data or information (see VMC 20.740.020[C][1]).

2. *Wetland Ratings.* Wetlands shall be rated according to the Ecology wetland rating system, *Ecology Publication No. 23-06-009, Washington State Wetland Rating System for Western Washington: 2014 Update, published July 2023*, or as revised by Ecology. The rating system document contains the definitions and methods for determining if the criteria below are met. The most recent version of the rating system form must be used.

a. *Wetland Rating Categories.*

i. *Category I.* Category I Wetlands are:

(A) Wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program of the DNR;

(B) Bogs;

(C) Mature and old-growth forested wetlands larger than one acre

(D) Wetlands that perform functions at a high level, scoring 23 points or more.

ii. *Category II.* Category II Wetlands function at a moderately high function and are difficult, though not impossible to replace, scoring between 20 and 22 points.

iii. *Category III.* Category III Wetlands have generally been disturbed in some way and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. Category III wetlands:

(A) Have a moderate level of functions, scoring between 16 and 19 points; and

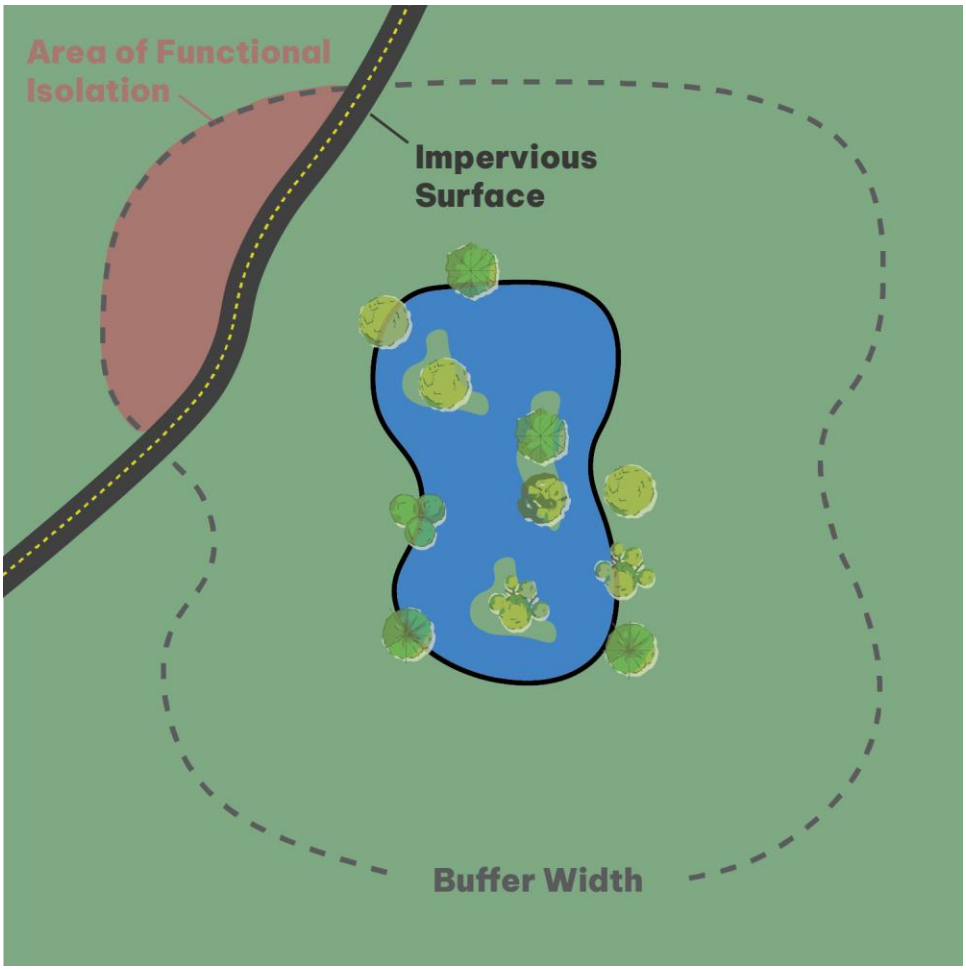
(B) Can often be adequately replaced with a well-planned mitigation project.

iv. *Category IV.* Category IV Wetlands have the lowest levels of functions (scoring fewer than 16 points) and are often heavily disturbed. These are wetlands that should be able to be replaced, or in some cases improved. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions and should be protected to some degree.

B. *Development activities that functionally or physically isolate the wetland buffer.*

When existing impervious surfaces or other built structures, such as a levee or railroad corridor, functionally or physically isolate the wetland buffer from the waterbody or wetland, the regulated wetland buffer shall extend landward from the ordinary high water mark (OHWM) or channel migration zone (CMZ), whichever is greater and terminate at the waterward edge of the impervious surface or manmade structure. Development activities that occur within the area of functional isolation, or further landward, are exempt from the requirement to obtain a Critical Areas Permit.

Figure 20.740.140-1: Functional Isolation



The Planning Official shall rely on a site visit, aerial photographs, or other evidence provided by the applicant or the applicant's qualified professional in making a determination to reduce the width of the wetland buffer based on functional and/or physical isolation.

C. *Performance Standards.*

1. *General Requirements.* Development or clearing activities shall protect the functions of wetlands and wetland buffers on the site. Activities shall result in no net loss of wetland or buffer functions. Protection may be provided by avoiding (preferred) or minimizing and mitigating as described in the general critical areas performance standards (VMC 20.740.060).

    a. *Uses in Wetlands.*

i. In Category I Wetlands, only the following activities may be allowed:

(A) A road, railroad, trail, dike, or levee or a water, sewer, stormwater conveyance, gas, power, cable, fiber optic or telephone facility that cannot feasibly be located outside of the wetland, that minimizes the impact, and that mitigates for any unavoidable impact to functions;

(B) Trails and wildlife viewing structures, provided that the trails and structures minimize the impact and are constructed so that they do not interfere with wetland hydrology and do not result in increased sediment entering the wetland;

(C) Enhancement and restoration activities aimed at protecting the soil, water, vegetation, or wildlife; and

(D) Repair and maintenance of legally established non-conforming uses or structures, provided they do not increase the degree of nonconformity.

ii. In Category II Wetlands, only the following activities may be allowed:

(A) Activities allowed in Category I Wetlands pursuant to subsection (C)(1)(a)(i) of this section;

(B) A water-dependent, water-related or water-enjoyment activity where there are not feasible alternatives that would have less impact on the wetland; or

iii. Where non-water-dependent, related, or enjoyment activities are proposed, it shall be presumed that alternative locations are available, and activities and uses shall be prohibited unless the applicant demonstrates that the basic project purpose cannot reasonably be accomplished and successfully avoid or result in less adverse impacts on a wetland on another site or sites in the City or Vancouver urban growth area. In Category III Wetlands, only the following activities may be allowed:

(A) Activities allowed in Category II Wetlands pursuant to subsection (C)(1)(a)(ii) of this section;

(B) *Stormwater management facilities.* A Category III wetland can be physically or hydrologically altered to meet the requirements of a Low Impact Development (LID) methodology or Flow Control BMP, if all of the following criteria are met:

(1) If proposed, an LID BMP is determined to be feasible through a site-specific characterization;

(2) The wetland has a habitat score of 3 to 5 points;

(3) There will be no net loss of functions and values of the wetland;

(4) The wetland does not contain a breeding population of any native amphibian species;

(5) The hydrologic functions of the wetland can be improved as outlined in questions 3, 4, and 5 of Chart 4 and questions 2, 3, and 4 of Chart 5 in Selecting Mitigation Sites Using a Watershed Approach, (Western Washington) (Ecology Publication [#09-06-032 or #10-06-007], or as revised); or the wetland is part of a restoration plan intended to achieve restoration goals identified in the City of Vancouver's Shoreline Master Program or a local or regional watershed plan;

(6) The wetland lies in the natural routing of the runoff, and the discharge follows the natural routing.

(7) All regulations regarding stormwater and wetland management are followed, including in this chapter and VMC 14.24, Erosion Control; and

(8) Modifications that alter the structure of a wetland or its soils will require permits. Existing functions and values that are lost will need to be compensated for in accordance with the requirements of this chapter.

(C) Other activities may be allowed if the applicant demonstrates that the basic project purpose cannot reasonably be accomplished and avoid or result in less adverse impacts on a wetland or its buffer than alternative uses or designs (including reduction in the size, scope, configuration or density of the project).

iv. In Category IV Wetlands, activities and uses that result in impacts may be permitted in accordance with an approved Critical Areas Report and mitigation plan if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full mitigation for the loss of acreage and functions shall be provided under the terms established pursuant to subsection (C)(2) of this section.

(A) If stormwater management facilities are proposed, they must meet the requirements of an LID or flow control BMP as specified for Category III Wetlands.

b. *Wetland Buffers.*

i. *Required Buffer Widths.* Standard buffer widths are measured in feet from the edge of the wetland (see VMC 20.170.030[B]) and [H]). Applicants are required to implement the wetland buffer widths by wetland category as shown in Table 20.740.140-1.

ii. If the applicant is unable to implement the full width buffers from Table 20.740.140-1 and avoid impacts as a result of proposed development, the planning director shall permit the applicant to use the alternative buffer widths in subsection (v)(B) and (v)(C) below, if the Applicant has first demonstrated they have met the following criteria:

(A) The applicant has met the mitigation sequencing in VMC 20.740.060 (A-E).

(B) The applicant shall provide a minimum of two alternative site designs and layouts to demonstrate that impacts cannot be avoided or be reduced to result in less impacts. The planning director may approve reductions to numerical standards including parking and setbacks under the minor exception process in VMC 20.740.070 to avoid or reduce impacts.

iii. The required and alternative -buffer widths assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is un-vegetated, sparsely vegetated, and/or vegetated with invasive species that do not perform needed functions, the buffer must either be planted to create the appropriate native plant community or be widened to ensure that the buffer provides adequate functions to protect the wetland.

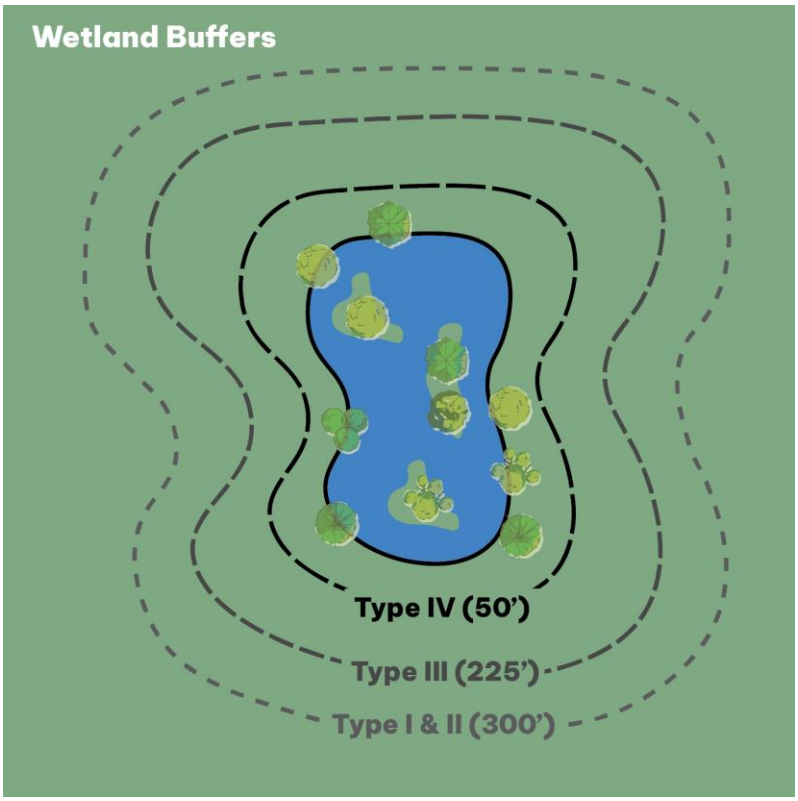
iv. If the buffer is functionally isolated by an existing impervious surface or built structure, the remaining buffer area must be revegetated with native species, but the buffer does not need to be widened to exceed widths greater than those listed in Tables 20.740.140-1, 20.740-140-2, and 20.740.140-4.

(A) Required Buffers Based on Wetland Category – see Table 20.740.140-1.

Table 20.740.140-1. WETLAND BUFFER WIDTH REQUIREMENTS

Wetland Category	Buffer Width (Feet)
I	300
II	300
III	225
IV	50

Figure 20.740.140-2. WETLAND BUFFER WIDTH REQUIREMENTS



(B) Alternative 1 Wetland Buffers: Buffers based on wetland category, wetland type, and habitat score and providing a habitat corridor and implementing minimization measures.

(1) In order for an applicant to use the buffer widths of Table 20.740.140-2, the applicant must provide a habitat corridor as outlined in this subsection and implement the impact minimization measures listed in Table 20.740.140-3. Not all impact minimization measures are applicable. An undisturbed vegetated corridor at least 100 feet wide must be provided between the wetland and another priority area for preservation that meets the following:

(a) A legally protected, high-functioning vegetated area (priority habitats; other compensation sites; wildlife areas/refuges; or national, county, and state parks that have

management plans with identified areas designated as Natural, Natural Forest, or Natural Area Preserve);

(b) An area that is the site of a Watershed Project identified within and fully consistent with a Watershed Plan, as these terms are defined by RCW 89-08-460;

(c) An area where development is prohibited under the provisions of the local shoreline master program;

(d) An area with equivalent habitat quality that has conservation status in perpetuity, in consultation with WDFW;

(e) The corridor is permanently protected for the entire distance between the wetland and the legally protected area by a conservation easement, deed restriction, or other legal means;

(f) Presence of the shoreline or Priority Habitat must be confirmed by a qualified biologist or the Planning Official;

(g) If a wetland scores five or fewer habitat points, only the impact minimization measures listed in Table 20.740.140-3 are required, in order to use the buffers in Table 20.740.140-2;or

(h) If an applicant does not apply the mitigation measures in Table 20.740.140-3 and is unable to provide a protected corridor, then the

buffers in Tables 20.740.140-1 or 20.740.140-4 shall be used.

Table 20.740.140-2. ALTERNATIVE 1: WETLAND BUFFER WIDTH REQUIREMENTS

Category of Wetland	Habitat Score 3 to 5 Points (corridor not required)	Habitat Score 6 to 7 Points	Habitat Score of 8 to 9 Points	Buffer width Based on Special Characteristics
Category I: Bogs and Wetlands of High Conservation Value	NA	NA	225 feet	190 feet
Category I: Forested	75 feet	110 feet	225 feet	NA
Category I or II: Based on Rating of Wetland Functions (and not listed above)	75 feet	110 feet	225 feet	NA
Category III: All Types	60 feet	110 feet	225 feet	NA
Category IV: All Types	40 feet	40 feet	40 feet	NA

Note: Special characteristics are defined in the Washington State Wetland Rating System for Western Washington: 2014 Update, published July 2023 or as revised by Ecology.

Table 20.740.140-3. IMPACT MINIMIZATION MEASURES REQUIRED TO IMPLEMENT ALTERNATIVE 1 WETLAND BUFFERS.

Examples of Disturbance	Uses and Activities that Cause the Disturbance	Examples of Measures to Minimize Impacts
Lights	Parking lots, warehouses, manufacturing, residential, recreational	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.
Noise	Manufacturing and other industrial, residential, commercial, recreational	Locate activity that generates noise away from wetland. Construct a fence to reduce noise impacts on adjacent wetland and buffer. Plant a strip of dense shrub vegetation adjacent to wetland buffer.
Toxic runoff	Parking lots, roads, manufacturing, residential, application of agricultural or landscaping chemicals, landscaping	Route only treated runoff to a wetland and route untreated runoff away from wetland while ensuring wetland is not dewatered. Establish covenants limiting use of toxic chemicals within 150 feet of wetland. Apply integrated pest management.

Examples of Disturbance	Uses and Activities that Cause the Disturbance	Examples of Measures to Minimize Impacts
Stormwater runoff	Parking lots, roads, residential, commercial/industrial, recreational, landscaping/lawns, and other impermeable surfaces/compacted soils	Retrofit stormwater detention and treatment for roads and existing adjacent development. Prevent channelized or sheet flow from lawns that directly enters the buffer. Infiltrate or treat, detain, and disperse new runoff from impervious surfaces and lawns.
Change in water regime	Impervious surfaces, lawns, tilling	Infiltrate or treat, detain, and disperse new runoff into buffer.
Pets and human disturbance	Residential, recreational, commercial, industrial	Plant dense vegetation around buffer, such as rose or hawthorn, to delineate buffer edge and discourage disturbance. Place wetland and its buffer in a separate tract. Place signs around the wetland buffer every 50 to 200 feet and for subdivisions place signs at the back of each residential lot. When platting new subdivisions, locate greenbelts, stormwater facilities, and other lower intensity uses adjacent to wetland buffers.
Human disturbance	Residential, commercial, industrial	Plant dense vegetation around buffer, such as rose or hawthorn
Dust	Tilled fields, roads	Utilize best management practices BMPs to control dust.

(C) Alternative 2 Wetland Buffer Widths: Buffers based on wetland category wetland type, and habitat score (see Table 20.740.140-4) without providing a habitat corridor or minimization measures as outlined in subsection (B) above.

Table 20.740.140-4. ALTERNATIVE 2 WETLAND BUFFER WIDTH REQUIREMENTS

Category of Wetland	Habitat Score 3 to 5 Points (corridor not required)	Habitat Score 6 to 7 Points	Habitat Score of 8 to 9 Points	Buffer width Based on Special Characteristics
Category I: Bogs and Wetlands of High Conservation Value	NA	NA	300 feet	250 feet
Category I: Forested	100 feet	150 feet	300 feet	NA
Category I or II: Based on rating of wetland functions (and not listed above)	100 feet	150 feet	300 feet	NA
Category III: All types	80 feet	150 feet	300 feet	NA
Category IV: All Types	50 feet	50 feet	50 feet	50 feet

v. *Wetland Buffer Width Averaging.* The Planning Official may allow modification of the standard wetland buffer width in accordance with an approved Critical Areas Report by averaging buffer widths. Buffer width averaging shall not be used in combination with buffer width reduction or a minor exception (VMC 20.740.070). Averaging of buffer widths (see VMC 20.170.080(B)(2)) may only be allowed when

implementing the impact minimization measures, as applicable, in Table 20.740.140-3 and where a qualified professional wetland scientist demonstrates that:

(A) Such averaging will not reduce wetland functions or functional performance;

(B) The wetland varies in sensitivity due to existing physical characteristics, or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;

(C) The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

(D) The buffer width is not reduced at any point by more than 25 percent of the standard width and is no less than 30 feet wide.

vi. *Buffer Maintenance.* Except as otherwise specified or allowed in accordance with this chapter, wetland buffers shall be maintained and fully vegetated according to the approved Critical Areas Permit.

vii. *Buffer Uses.* The following uses may be permitted within a wetland buffer in accordance with the review procedures of this chapter, provided they are not prohibited by any other applicable laws or regulations and they are conducted in a manner so as to minimize impacts to the buffer and the wetland:

(A) Activities allowed under the same terms and conditions as in the associated wetlands pursuant to subsection (C)(1)(a) of this section;

(B) Enhancement and restoration activities aimed at protecting the soil, water, vegetation or wildlife;

(1) Removal of invasive plant species shall be restricted to hand removal. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the City's Noxious Weed list should be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

(C) Passive recreation facilities, including trails and wildlife viewing structures, provided that the trails and structures are constructed with a surface that does not interfere with wetland hydrology;

(1) Trails shall be located in the outer 25 to 50 percent of the buffer, when feasible.

(D) Stormwater management facilities are not allowed in Category I or II Wetland buffers. Stormwater management facilities must meet the requirements of an LID or flow control BMP as specified for uses in Category III wetlands.

(E) Educational and scientific research activities;

(F) Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way, provided that the maintenance or repair does not increase the footprint or use of the facility or right-of-way;

(G) The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided that the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources; and

(H) Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary, provided that the drilling does not alter the ground water connection to the wetland or percolation of surface water down through the soil column.

(1) Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column would be disturbed.

c. *Temporary and permanent markers and signs for wetlands.*

i. Temporary and permanent markers and signs are installed in compliance with the requirements of VMC 20.740.020, General Provisions.

2. *Compensatory Mitigation.* Compensatory mitigation for impacts to wetlands shall be provided pursuant to VMC 20.740.060 and shall be consistent with Ecology's Wetland Mitigation in Washington State, Part 1: Agency Policies and Guidance, Version 2, Ecology Publication No. 21-06-003 April 2021, and Part 2: Developing Mitigation Plans, Version 1, Ecology Publication No. 06-06-011b, March 2006, or as revised by Ecology. Watersheds are defined in VMC 20.740.020(C)(2) and Chapter 20.150 VMC.

a. *Mitigation for Lost or Affected Functions.* Compensatory mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement and shall provide wetland or buffer functions similar to those lost, except when:

i. The lost wetland or buffer provides minimal functions as determined by a site-specific functional assessment, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limited within a watershed through a formal Washington State watershed assessment plan or protocol; or

ii. Out-of-kind replacement will best meet formally identified watershed goals, such as replacement of historically diminished wetland types.

b. *Compensatory Mitigation Actions.* If, through mitigation sequencing in accordance with VMC 20.740.060, it is determined that compensatory mitigation is necessary, the applicant must provide an alternative approach to compensation. Compensation is prioritized as follows:

i. *Mitigation bank credits:* Allows applicants to compensate for wetland loss by purchasing credits from a bank that is commissioned to restore, create, enhance, or preserve wetland areas in providing compensatory mitigation for authorized impacts to wetlands;

ii. *In-lieu fee program credits*: Allows applicants to compensate for wetland losses by paying a fee to a third party, such as a government agency or conservation organization, where the fee is used to ensure protection, creation, and enhancement of wetlands;

iii. Permittee-responsible mitigation (PRM) under a watershed approach*;*

iv. PRM that is on site and in-kind;

v. *PRM* that is off site and/or out-of-kind*.*

c. PRM includes the following approaches:

i. *Creation.* The manipulation of the physical, chemical, or biological characteristics present to develop a wetland where a biological wetland did not previously exist. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, create hydric soils, and support the growth of hydrophytic plant species. Creation results in a gain in wetland acres and functions.

ii. *Reestablishment.* The manipulation of the physical, chemical or biological characteristics of a site with the goal of returning natural or historic functions and environmental processes to a former wetland. Activities could include removing fill material, plugging ditches or

breaking drain tiles. Reestablishment results in a gain in wetland acres and functions.

iii. *Rehabilitation.* The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions and processes of a degraded wetland. Activities could involve breaching a dike to reconnect wetlands to a floodplain, restoring tidal influence to a wetland, or breaking drain tiles and plugging drainage ditches. Rehabilitation results in a gain in wetland functions but not in wetland acres.

iv. *Preservation.* The removal of a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This term includes activities commonly associated with the protection and maintenance of wetlands through the implementation of appropriate legal and physical mechanisms (such as recording conservation easements and providing structural protection like fences and signs). Preservation does not result in a gain of wetland area and functions (but may result in a gain in functions over the long term).

v. *Enhancement.* The manipulation of the physical, chemical, or biological characteristics of a biological wetland to increase or improve specific functions or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention or wildlife habitat. Activities typically consist of planting vegetation, controlling nonnative or invasive species, modifying site elevations to result in open water ponds, or some combination of these. Enhancement results in a change in certain wetland functions and can lead to a decline in other wetland functions. It does not result in a gain in wetland acres.

vi. *Mixed Compensatory Mitigation*. Involves more than one of the listed types of compensatory mitigation.

d. *Mitigation Ratios.*

i. *Replacement Ratios.*

(A) The replacement ratios shall apply to wetland mitigation that: (1) is for the same hydrogeomorphic subclass (e.g., riverine flow-through, depressional outflow, or flats), and Cowardin class (e.g., palustrine emergent, palustrine forested or estuarine wetlands); (2) is on site; (3) is in the same category; (4) is implemented prior to or concurrent with alteration; and (5) has a high probability of success.

(B) *Mitigation Ratios.* Mitigation ratios are as follows (see subsection of this section for definitions of mitigation actions):

Table 20.740.140-5. MITIGATION REPLACEMENT RATIOS

Wetland Category and Type	Reestablishment or Creation	Rehabilitation	Preservation	Enhancement
Category I forested	6:1	12:1	24:1	24:1
Bog	NA	NA	24:1	NA
Wetlands of High Conservation Value	Consult with DNR	Consult with DNR	24:1	Consult with DNR
Category II	3:1	6:1	12:1	12:1
Category III	2:1	4:1	8:1	8:1

Wetland Category and Type	Reestablishment or Creation	Rehabilitation	Preservation	Enhancement
Category IV	1.5:1	3:1	6:1	6:1

ii. *Adjustment of Replacement Ratios.* The Planning Official may adjust the replacement ratios to compensate for deviations from the requirements under this section, subject to the following:

(A) In most cases, adjustments to the replacement ratios will increase the required amount of mitigation. The required mitigation may be decreased under exceptional circumstances—for example, if programmatic out-of-kind mitigation yields watershed-scale benefits that would not be realized from in-kind mitigation, or if out-of-kind mitigation would protect irreplaceable wetlands.

e. *Mitigation Timing.* The mitigation shall be implemented prior to or concurrent with alterations. If mitigation is implemented after alteration is allowed, the Planning Official may require additional mitigation to compensate for temporal losses of wetland functions.

f. *Buffers for Mitigation Wetlands.* Refer to Wetland Buffer Tables 20.7470.140-1, 20.740.140-1, 20.740.140-2, and through 20.740.140-4.

g. *Wetland Mitigation Banks.*

i. Credits from a wetland mitigation bank may be approved for use as mitigation for unavoidable impacts to wetlands when:

(A) The bank is certified under Chapter 173-700 WAC;

(B) The Planning Official determines that the wetland mitigation bank provides appropriate mitigation for the authorized impacts; and

(C) The proposed use of credits is consistent with the terms and conditions of the bank's certification.

ii. Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank's certification.

iii. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the bank's certification. In some cases, bank service areas may include portions of more than one adjacent drainage basin for specific wetland functions.

E. *Additional Critical Areas Report Requirements.* A Critical Areas Report for wetlands shall be prepared according to the Washington State Wetland Rating System for Western Washington – 2014 Update, Ecology Publication No. 14-06-02923-06-009, Washington State Wetland Rating System For Western Washington: 2014 Update, published July 2023October 2014 or as revised by Ecology. The Critical Areas Report shall contain an analysis of the wetlands including the following site- and proposal-related information:

1. A written assessment, data sheets, and accompanying maps of any wetlands or buffers on the site, including the following information:

   a. Hydrogeomorphic (HGM) subclassification and Cowardin class;

   b. Wetland category;

   c. Wetland delineation and required buffers;

   d. Existing wetland acreage;

   e. Vegetative, faunal, and hydrologic characteristics;

   f. Soil types and substrate conditions;

   g. Topographic elevations, at one-foot contours; and

   h. A discussion of the water sources supplying the wetland and documentation of hydrologic regime (locations of inlet and outlet features, water depths throughout the wetland, evidence of recharge or discharge, or evidence of

water depths throughout the year, including drift lines, algal layers, moss lines, and sediment deposits).

2. Functional evaluation for the wetland and buffer using Ecology's most current approved data sheets. method and including the reference of the method and all data sheets.

3. Proposed mitigation, if needed, including a discussion of alternatives and trade-offs of the various alternatives (for example, where enhancement for one function would adversely affect another) and a written description and accompanying maps of the mitigation area, including the following information:

    a. Existing and proposed wetland acreage;

    b. Existing and proposed vegetative and faunal conditions;

    c. Surface and subsurface hydrological conditions of existing and proposed wetlands and hydrologically associated wetlands, including an analysis of existing hydrologic regime and proposed hydrologic regime for enhanced, created, or restored mitigation areas;

    d. Relationship to lakes, streams, and rivers in the watershed;

    e. Soil type and substrate conditions;

    f. Topographic elevations, at one-foot contours;

    g. Required wetland buffers including existing and proposed vegetation;

    h. Identification of the wetland's contributing area; and

    i. A functional assessment of proposed mitigation to ensure no net loss of shoreline ecological function.

Chapter 20.740
CRITICAL AREAS PROTECTION

Sections:

20.740.010 Purpose.

~~A.~~ The purpose of this chapter is to designate and protect ~~ecologically sensitive and hazardous areas (~~critical areas~~)~~ and their functions and values, while also allowing ~~for~~ reasonable use of property.

A. ~~B. As~~ Critical areas are ecologically sensitive and hazardous areas and protecting them or mitigating any impacts to them is important for protection of the environment and quality of life for the citizens of Vancouver, and is mandated by the Washington Growth Management Act (GMA) (RCW ~~36.70A), this~~36.70A).

B. This chapter provides protection for the following critical areas ~~of wetlands, fish and wildlife habitat conservation areas, geologically hazardous areas, and frequently flooded areas. Critical aquifer recharge areas area~~: Wetlands, Fish and Wildlife Habitat Conservation Areas, Geologically Hazardous Areas, and Frequently Flooded Areas. Critical Aquifer Recharge Areas are covered in VMC ~~14.26~~Chapter 14.26.

C. ~~C.~~ This chapter implements the goals and policies of the Vancouver Comprehensive Plan, 2003-2023, under the ~~Washington Growth Management Act~~GMA and other related state and federal laws. (Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.020 General Provisions.

A. ~~A.~~ *No Net Loss of Functions.* ~~Activity~~Development activity shall result in no net loss of the functions and values ~~in the~~of critical areas. ~~Since values are difficult to measure no net loss of functions and values means no net loss of functions.~~ The beneficial functions provided by each type of critical ~~areas~~area include, but are not limited to~~, water quality:~~

1. *Fish and Wildlife Habitat Conservation Areas.* Providing habitat for breeding, rearing, foraging, protection and ~~enhancement; fish and wildlife habitat; food chain support; flood storage; conveyance~~escape, migration, and over-wintering; and providing complexity of physical structure, supporting biological diversity, regulating stormwater runoff and infiltration, providing wave attenuation, removing pollutants from water, and maintaining appropriate water temperatures.

2. *Frequently Flooded Areas*. Providing flood storage, conveyance, and attenuation of flood waters; ~~ground water recharge and discharge; erosion control; and wave attenuation. These beneficial functions are not listed in order of priority. This chapter is also intended to protect residents from hazards and minimize risk~~ minimizing the amount of ~~injury or property damage.~~development at risk in such areas to protect human life and safety, including reducing damage to homes, places of business, public facilities, and utilities; and minimizing business interruptions.

3. *Geologic Hazard Areas.* Providing erosion control and protecting public safety, including people, structures, and infrastructure, from damage during earthquakes and landslides.

4. *Wetlands.* Providing carbon sequestration, cleansing surface water, storing and conveying floodwater, and providing fish and wildlife habitat.

B. *Temporary and Permanent Markers and Signs*. With the exception of Frequently Flooded Areas and Seismic Hazard Areas, temporary and permanent markers and signs shall be installed for critical areas as follows:

1. The location of the outer perimeter of the critical area(s) and buffer(s) shall be marked in the field and approved by the Planning Official prior to the commencement of permitted activities and maintained throughout the duration of the construction.

2. A permanent physical demarcation along the outer/upland boundary of the critical area buffer(s) shall be installed and thereafter maintained. Such demarcation may consist of fencing, hedging, or other prominent physical marking that allows wildlife passage, blends with the critical area environment, and is approved by the Planning Official. If the function and values of the critical area would be degraded by the existing or proposed activity, such as the presence of grazing animals, a fence shall be erected and maintained.

3. Permanent signs are posted at intervals of one every 50 feet, or, if this interval cannot be met, an interval of one per lot for single-family residential uses or at a maximum interval of 200 feet, or as otherwise determined by the Planning Official, and must be perpetually maintained by the property owner. The sign shall be worded as follows or with alternative language approved by the Planning Official: "The area beyond this sign is a critical area or critical area buffer. Alteration or disturbance is prohibited by law. Please call the City of Vancouver for more information."

4. Additional standards for temporary and permanent marking of geologic hazards are contained in VMC 20.740.130.

C. *Relationship to Other Regulations.*

~~A.~~ ~~B.~~ ~~*Relationship to Other Regulations.*~~

1. ~~1. These~~The critical areas regulations ~~shall~~ apply in addition to zoning and other regulations adopted by the ~~city.~~City.

2. ~~2. Any individual~~When more than one critical area ~~that overlaps another type of~~ is located on a project site, regulations protecting each critical area ~~shall meet the requirements~~apply to the site. Where critical areas overlap (e.g., a wetland buffer and a riparian buffer), the most restrictive regulations that provide the most

protection ~~to~~for the critical areas ~~involved~~present establish the outer boundary of the regulated critical areas.

3. ~~3.~~ When there is a conflict between any provisions of this chapter ~~or~~and any other regulations, the requirement that ~~which~~ provides the most protection to the ~~subject~~ critical area ~~shall apply.~~(s) applies.

~~4. Conditions of approval of a project affecting critical areas may be supplemented by a review under the State Environmental Policy Act (SEPA), as locally adopted.~~

4. ~~5.~~ Compliance with the provisions of this chapter does not constitute compliance with other federal, state, and local regulations and permit requirements. The applicant is responsible for complying with other state and federal requirements in addition to the requirements of this chapter. ~~(for example, Shoreline Substantial Development Permits, Hydraulic Project Approval [HPA] permits, Section 106 of the National Historic Preservation Act, U.S. Army Corps of Engineers Section 404 permits, or National Pollution Discharge Elimination System permits). The applicant is responsible for complying with other state and federal requirements in addition to the requirements of this chapter. Obtaining all applicable state and federal permits shall be made a condition of a Critical Areas Permit. Such permits shall be obtained prior to issuance of permits for development, construction or site disturbance except under the circumstances set forth in VMC 20.740.040(I).~~

D. ~~C.~~ *Jurisdiction.*

1. ~~1.~~ All areas within the city meeting the definition of one or more critical areas and their buffers, whether mapped or not, are hereby designated critical areas and ~~with their buffers~~ are subject to the provisions of this chapter.

~~2. Watersheds (Chapter 20.150 VMC) are those most recently identified and mapped by Clark County Public Works. Watershed maps are available from the planning official. Burnt Bridge Creek, Columbia Slope, and Vancouver Lake/Lake River are the primary watersheds in Vancouver.~~

E. ~~D.~~ *Warning and Disclaimer of Liability.* ~~The standards established herein are minimum standards. The standards are established for regulatory purposes only. Minimum compliance with these standards may not be sufficient protection from identified or~~

~~unidentified hazards. City establishment of these minimum standards is not a representation that these standards are sufficient protection from any hazard.~~ Critical areas development should be based on sound scientific and engineering considerations that may be more stringent than those presented in this chapter. The ~~city~~City assumes no liability if these established standards prove to be insufficient protection of property or the environment.

20.740.030 Applicability and Exemptions from Requirement to Obtain Permit.

~~E. *Interpretation of Critical Area Boundaries.* The planning official shall be authorized to interpret the exact location of the critical area boundary. Final designations shall be based on site conditions and other available data or information. A person who disagrees with the interpretation may appeal the interpretation pursuant to VMC 20.255.020(D). (Ord. M-4017 § 4, 07/16/2012; Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)~~

~~*20.740.030 Applicability and Exemptions from Requirement to Obtain Permit.*~~

A. ~~A.~~ *Applicability*.

~~1. Unless exempted by this chapter the provisions of this chapter shall apply to all lands, all land uses, clearing and development activity, and all structures and facilities in the city located within a critical area or buffer or on a site containing a critical area or buffer including single-family residential lots platted prior to April 29, 2005, and developments such as play structures that require no other permits.~~

~~2. The provisions of this chapter shall apply whether or not a permit or authorization is required.~~

1. ~~3.~~ No person, company, agency, or applicant shall alter a critical area or buffer ~~(including removal of downed woody vegetation or application of chemicals harmful to fish and wildlife within 25 feet of wetlands, ponds, lakes, streams or rivers)~~ except as consistent with the requirements of this chapter, whether or not a permit is required.

~~4. The Critical Areas Permit required pursuant to this chapter shall be obtained prior to undertaking any activity or development regulated by this chapter, unless exempted by this chapter.~~

B. ~~B.~~ *Statements of Exemption Process.* For ~~exempt~~ activities listed in subsection ~~(C)~~(1)(C)(1) of this section, a written Statement of Exemption from ~~securing~~the requirement to obtain a Critical Areas Permit ~~must be obtained~~is required prior to undertaking ~~any development~~the activity. Activities ~~exempt from~~listed in subsection ~~(C)~~(2)(C)(2) of this section do not require a statement of exemption.

1. ~~All~~Exempt activities are not required to obtain a Critical Areas Permit. However, all activities in critical areas, including exempt activities, are ~~still~~ subject to the policies and regulations of this chapter. ~~The planning official shall~~If a land use permit is not required, the Planning Official may attach ~~Critical Areas Ordinance~~ conditions to ~~the~~ building and engineering permits ~~and other permits and approval~~, as necessary, to enforce the ~~policies and regulations~~provisions of this chapter.

The request for the Statement of Exemption shall be in writing, on forms required by the ~~planning official~~Planning Official, and include the information required by the ~~planning official.~~

2. ~~The planning official shall issue a decision on a request for a Statement~~Planning Official. Statements of Exemption ~~in writing within 21 calendar days of receiving the request~~shall be processed as a Type I procedure per Chapter 20.210 Decision Making Procedures.

C. ~~C.~~ *Exemptions from Requirement to Obtain a Critical Areas Permit.*

1. ~~1.~~ *Activities ~~for which~~requiring a Statement of Exemption ~~is required.~~* ~~The following activities shall obtain a Statement of Exemption under subsection B of this section:~~.

a. ~~a.~~ *Existing Structure Remodel – Impervious Surface Increase ~~Less than~~of 500 Square Feet or Less.* Development or clearing~~, outside areas of special flood hazards and other than tree removal, as minimally~~ inside a Critical Area or buffer as necessary to remodel an existing structure, provided:

i. ~~i.~~ The activity will increase the footprint of structures ~~including~~with impervious surfaces by ~~less than~~ 500 square feet ~~from the footprint size at the time of the adoption of this chapter; and~~or less;

ii. ~~ii. If the structure or impervious surface is within a critical area or buffer, the~~The distance from the nearest structure or impervious

surface to ~~lakes, streams, rivers, wetlands or geological hazards~~a critical area is not decreased; ~~and~~

iii. ~~iii.~~ All native vegetation disturbed as a result of the development shall be replaced one-to-one, except that trees shall be replaced using tree units derived from VMC Chapter ~~20.770 VMC,~~20.770, Tree, Vegetation, and Soil Conservation. Native vegetation shall be used where feasible~~.~~;

iv. ~~iv.~~ Impacts to critical areas and buffers shall be minimized and mitigated~~.~~ in accordance with the City's critical areas approval criteria; and

v. ~~b.~~ No adverse impacts to priority Oregon white oak trees may result.

b. *No Impervious Surface Increase in the Riparian Management Area (RMA) or Riparian Buffer~~.~~ (RB) and Located outside Frequently Flooded Areas.* Development activity on a site within the ~~portions~~footprint of ~~sites with~~ existing structures or impervious surfaces ~~which~~that does not increase the impervious surface area ~~within~~in the ~~Riparian Management Area~~RMA or ~~Riparian Buffer~~RB, not located in Frequently Flooded Areas, and ~~which~~that is not otherwise exempt under subsection ~~B~~B of this section shall be exempt from the provisions of VMC ~~20.740.110~~20.740.110 (Fish and Wildlife Habitat Conservation Areas).

The applicant is encouraged to provide enhancement to the extent feasible. ~~The applicant is encouraged to provide enhancement to the extent feasible.~~ Such enhancement activities may include, but are not limited to, landscaping using native plants, additional treatment of stormwater as appropriate, and implementation of best management practices (BMPs) that would enhance habitat functions.

c. *Approved Subarea Plan with EIS.* Development activity covered by and in compliance with all the conditions of an approved subarea plan that contains:

i. Baseline information on existing critical areas and their functions at the level of detail required for an Environmental Impact Statement (EIS) under the State Environmental Policy Act (SEPA);

ii. An analysis of the impacts of full development at the level of detail required for an EIS under SEPA and in keeping with the plan; and

~~a.~~ c. *Approved Subarea Plan with EIS.* ~~Development activity covered by and in compliance with all the conditions of an approved subarea plan that contains:~~

~~i. i. Baseline information on existing critical areas and their functions at the level of detail required for an Environmental Impact Statement (EIS) under the State Environmental Policy Act (SEPA);~~

~~i. ii. An analysis of the impacts of full development at the level of detail required for an EIS under SEPA and in keeping with the plan; and~~

iii. ~~iii.~~ Mitigation for those impacts consistent with the requirements of this chapter.

d. ~~d.~~ *Fence.* A fence may be installed in a critical area buffer (not in a critical area) where:

i. ~~i.~~ The fence is necessary for safety and security;

ii. ~~ii.~~ The property was developed prior to the effective date of VMC Chapter ~~20.740 VMC~~20.740 (April 29, 2005); and/or

iii. The fence is designed and installed in a manner that protects the critical area and buffer functions and blends with the critical area environment.

~~i. iii. The fence is designed and installed in a manner that protects the critical area and buffer functions and blends with the critical area environment.~~

e. ~~e.~~ *On-site Critical Area ~~will be~~Will Be Avoided.* Development may be permitted on a site containing a critical area or buffer ~~not also subject to state or~~

federal permits wherewhen the Planning Official determines that theimpacts to critical areas and buffers will be clearly avoided using. In making this determination, the Planning Official may utilize any of the following procedures and criteria: or other methods as necessary to determine that the adverse impacts will be avoided.

i. The planning official has visited the site;

i. ii. The critical area(s) and buffer(s) has/have been identified in the field and, clearly mapped by a qualified professional through an approved,, and documented by a limited-scope Critical Areas Reportcritical areas report (for example, a wetland boundary delineation without categorization or functional assessment, but with the minimum documentation necessary to justify the boundary location); except that for a single-family or duplex residential development on a property with a stream not regulated under the state Shoreline Management Act, its Riparian Management Area or Riparian Buffer, the planning official may accept an aerial photo overlain with two-foot contour lines from the Clark County Digital Atlas with the required information drawn to scale by someone other than a qualified professional;).

ii. iii. The site plan and finalpreliminary plat show a development envelope within whichthat demonstrates that all development activity will take place, and a note identifying the development envelope and its purpose is placed on the face of the site plan and the final plat; outside critical areas and buffers.

iii. The boundaries of the development envelope are clearly outside of all maximum critical areas and all maximum buffers. iv. The boundaries of the development envelope are clearly outside of all maximum critical areas and all maximum buffers. The maximum critical area and maximum buffer are the greatest that may be applied under any circumstances. (For example, under this chapter, the maximum wetland buffer that could be applied under any circumstance is 300

feet; the maximum Riparian Management Area is 100 feet, and the maximum Riparian Buffer is

*Maintaining*75 feet from the outer boundary of the Riparian Management Area.)

f. f. *Fire-Defensible Space.* Maintaining fire-defensible space around a structure to reduce fire hazards, involving regular maintenance of existing trees at least six-inch6 inches in diameter at breast height, grasses, and underbrush, not tree removal or other ground-disturbing or soil-destabilizing activities. Creating fire-defensible space (see VMC 20.740.040(H)) or undertaking other development requires a Critical Areas Permit under VMC 20.740.040(A)(2)(f)per the critical areas approval process and could require other permits as well.

i. Pruning trees, grasses, and brush within a critical area or buffer to maintain fire-defensible space around a structure may be permitted when one or more of the following criteria are met:

i. i. Pruning trees, grasses, and brush within a critical area or buffer to maintain fire-defensible space around a structure may be permitted when one or more of the following criteria are met:

(A) A. The structure nearest the property line is within 30 feet of a slope of at least 25 percent (also designated as a landslide hazard areaLandslide Hazard Area under this chapter);

(B) B. The nearest structure is within 30 feet of a forested area;

(C) C. The vegetation within 30 feet of the structure is comprised of less than 50 percent native species;

(D) D. The vegetation within 30 feet of the structure is higher than 12 inches;

(E) E. Trees are crowded within 30 feet of the structure or overhanging the structure's roof; or

(F) ~~F.~~ The structure is located in an area designated by the Fire Marshal as a "Wildfire Safety Area."

ii. ~~ii.~~ When maintenance of a fire-defensible space is permitted, the following standards shall apply:

Trees may be pruned or limbed-up to mitigate a hazard, but trees may not be removed without a Critical Areas Permit and any other necessary permit(s). ~~A. Trees may be pruned or limbed-up to mitigate a hazard, but trees may not be removed without a Critical Areas Permit and any other necessary permit(s).~~ ~~(See VMC 20.740.040(A)(2)(f) and 20.740.040(H) on creating fire-defensible space.)~~

(A) ~~B.~~

(B) Topping trees is prohibited.

(C) Grasses and underbrush shall be maintained between ~~eight~~8 inches and 12 inches in height.

~~(A) C. Topping trees is prohibited.~~

(D) ~~D.~~ Any debris from pruning shall be disposed of promptly and properly.

g. ~~2.~~ *Development Located within Soil Erosion Hazard Areas Only.* When no other type of critical area, including other types of geologic hazards is present, development within Soil Erosion Hazard Areas shall meet the requirements of VMC Chapter 14,24, Erosion Control, including preparation of . a Stormwater Report, if required,. In addition, the applicant shall file a limited scope Geotechnical Report prepared by a qualified professional as defined by VMC Chapter 20.150, which shall be provided to the Planning Official for review at the earlier of development application, engineering document review, or building permit review. Upon review of the limited scope Geotechnical Report, the Planning Official may exempt the development from the need for a Critical Areas Permit.

h. *Development/Expansion of a Single-Family Residence with a Loss of a Single, Standalone Oregon white oak.* The loss of a single, standalone Oregon white

oak tree that meets the WDFW PHS status (must not be part of a woodland that includes off-site trees) and in accordance with the definition listed in VMC 20.150.150(D) that is equal to or less than 12 inches dbh for the purpose of developing a single-family residence or expansion of an existing single-family residence structure (does not include expansion of detached garages, outbuildings, accessory dwellings, decks, gardens, etc.).

2. *Activities for which a Statement of Exemption is not required.* Reasonable methods shall be used to avoid potential impacts to critical areas. Any damage to, or alteration of, a critical area that is not a necessary outcome of the exempt activity shall be corrected at the property owner's expense.

The following activities are exempt from needing a Critical Areas Permit and do not require a statement of exemption:

a. ~~a.~~ *Emergencies.* Those activities necessary to prevent an immediate threat to public health, safety, or welfare, or that pose an immediate risk of property damage and that require remedial or preventative action in a time frame too short to allow for compliance with the requirements of this chapter, so long as all of the following apply:

i. ~~i.~~ The emergency action uses reasonable methods to address the emergency.

ii. ~~ii.~~ The emergency action must have the minimum possible impact to the critical area or its buffer.

iii. ~~iii.~~ The property owner, person, or agency undertaking such action shall notify the ~~city~~City within ~~one~~10 working ~~day~~days following commencement of the emergency activity.

iv. ~~iv.~~ Within 14 days the ~~planning official~~Planning Official shall determine if the action taken was within the scope of the emergency actions allowed in this section. If the ~~planning official~~Planning Official determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then the critical areas enforcement provisions ~~of VMC 20.740.090~~ shall apply.

v. v. After the emergency, the property owner, person or agency undertaking the action shall fully fund and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved Critical Areas Report and mitigation plan. The property owner, person or agency undertaking the action shall apply for review. The alteration, Critical Areas Report, and mitigation plan shall be reviewed by the cityCity in accordance with the review procedures contained in this chapter.

vi. vi. Restoration and/or mitigation activities must be initiated within three months of the date of the emergency oran approved Critical Areas Report and mitigation planor as otherwise determined by the planning official,Planning Official and completed in a timely manner.

b. *Valid Critical Areas Permit.* Any development proposed on property pursuant to a currently valid Critical Areas Permit, provided all conditions and requirements of the Critical Areas Permit are met and the proposed activity is within the scope of the original permit.

b. c. *Hazard Tree.* Emergency or hazard tree removal (as defined in VMC Chapter 20.770 VMC)20.770) conducted so that critical area impacts are minimized.

c. d. *Landscape Maintenance.* Landscape maintenance (other than tree removal or use of pesticides, herbicides, fungicides or fertilizers applied into or within 25 feet of water bodies) consistent with accepted horticultural practices, such as those recommended by the Washington State University Extension Service, within the boundaries of an existing lawn, garden or landscaped area and not associated with development.

d. e. *Noxious or Invasive Plants.* Clearing of noxious or invasive plants using hand-held equipment such as a weed-whacker, provided (1) fueling and maintenance take place outside the critical area and buffer; (2) all cleared vegetation is taken away and disposed of properly; and (3) denuded soils are stabilized with native vegetation. The cityCity of Vancouver's Noxious or

Invasive Plants List and Native Plant Species List are available from the ~~planning official~~Planning Official.

e. ~~f.~~ *Pesticides, Herbicides, Fungicides, or Fertilizers ~~25 feet from Critical Area.~~.* Application of pesticides, herbicides, fungicides, or fertilizers ~~farther than 25 feet from any wetland, pond, lake, stream or river or~~, when done as directed in ~~a manner specified in a valid permit~~the package instructions as required by state and federal laws.

f. ~~g.~~ *State or Federally Approved Conservation or Preservation.* State or federally approved conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife that does not entail changing the structure or functions of the existing critical area or buffer.

g. ~~h.~~ *Harvesting Wild Crops.* The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops or other native vegetation and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the critical area or buffer by changing existing topography, water conditions or water sources.

h. ~~i.~~ *Passive Activities.* Passive outdoor recreation, education, and scientific research activities such as fishing, hiking, and bird watching that do not degrade the critical area or buffer.

i. ~~j.~~ *Land surveys, soil sampling, percolation tests, and other related activities.* In every case, impacts to the critical area or buffer shall be minimized and disturbed areas shall be stabilized and replanted immediately.

j. ~~k.~~ *Navigational Aids and Boundary Markers.* Construction or modification of navigational aids and boundary markers. Impacts to the critical area or buffer shall be minimized and disturbed areas shall be restored within 72 hours.

k. ~~l.~~ *Agricultural Activities.* Existing and ongoing agricultural activities protected under the federal Food Security Act occurring in wetland areas.

Existing and ongoing agriculture within ~~fish~~Fish and ~~wildlife habitat conservation areas~~Wildlife Habitat Conservation Areas so long as livestock

and application of pesticides, herbicides, fungicides, and fertilizers ~~are kept 25 feet from any water body~~is done in accordance with package instructions.

l. ~~m.~~ *State or Federally Approved Restoration or Enhancement Project.* Implementation of a state or federally approved restoration or enhancement project not related to any development project.

m. ~~n.~~ *Operation, Repair and Maintenance.* Operation, repair and maintenance of existing structures, infrastructure, roads, sidewalks, railroads, trails, dikes, or levees or water, sewer, stormwater, power, gas, telephone, cable, or fiber optic facilities if the activity does not further increase the impact to, or encroach farther within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed operation, repair, or maintenance.

~~o. *Areas with only ground shaking or liquefaction hazards.* In areas with only ground shaking or liquefaction hazards, repair or construction of roads, sidewalks or trails (except where there are structures), or water, sewer, stormwater, gas, power, cable, or fiber optic facilities shall be exempt from the ground shaking and liquefaction permitting requirements.~~

n. ~~p.~~ *Public Improvement Projects.* Public improvement projects located within existing impervious surface areas.

o. ~~q.~~ *City, State or Federally Approved Stand-alone "Critical Area" Creation Project.* Implementation of a ~~city, state~~City, State or federally approved stand-alone "critical area" creation project that is not mitigation. ~~A "Critical Area" created under these circumstances that would not otherwise have met the definition of that type of critical area is exempt from the provisions of this chapter.~~ Also see the definition of "Wetlands" ~~at~~in VMC Chapter ~~20.150 VMC.~~20.150.

p. ~~r.~~ *Clearing in Frequently Flooded ~~Area~~Areas and~~/or~~ Seismic Hazard ~~Area~~Areas Only.* Clearing vegetation within the floodplain ~~but outside the Riparian Management Area or Riparian Buffer (see VMC 20.740.040(A)(2)(f)).~~and within a Seismic Hazard Area, but outside other types of critical areas.

q. *Vegetation Clearing.* Clearing vegetation in critical areas that are only ~~seismic hazard areas (see VMC 20.740.040(A)(2)(f)).~~Seismic Hazard Areas

r. ~~s.~~ *Fence Repair.* Maintenance, repair, and in-kind replacement of existing fences.

s. ~~t.~~ *Seismic Hazard Areas Only.* Sites identified as located within only a Seismic Hazard Area (VMC ~~20.740.130~~20.740.130 – Geologic Hazard Areas) shall be exempt from needing to obtain a ~~critical areas permit~~Critical Areas Permit. All projects within the Seismic Hazard Area must comply with the Building Code at time of building permit review, including providing a ~~geotechnical report~~Geotechnical Report. (Ord. M-4034 § 23, 12/03/2012; Ord. M-4017 § 5, 07/16/2012; Ord. M-3931 § 22, 11/02/2009; Ord. M-3922 § 36, 07/06/2009; Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.040 Approval Process.

A. ~~A.~~ *Critical Areas Permit Process.*

1. ~~1.~~ *Pre-application Conference Required.* A pre-application meeting or waiver per VMC Chapter ~~20.210 VMC~~20.210 is required prior to submitting a ~~critical areas permit. Provided, pre~~Critical Areas Permit. Pre-application conferences shall not be required for the following:

~~a. Proposed activities within only ground shaking and/or liquefaction areas.~~

a. ~~b.~~ Activities and developments listed as exempted from critical areas standards and permits.

b. Proposals involving only an addition to an existing single-family ~~home~~or duplex house, including accessory structures, such as accessory dwelling units, attached and detached garages, and/or carports, shops, and sheds.

c. ~~c.~~ Other minor improvements determined by the ~~planning official~~Planning Official to not warrant a pre-application meeting or waiver.

2. ~~2. *Critical Areas Permit.* All~~*Critical Areas Permit.* If a proposed development activity is determined not to be exempt per the listed critical areas exemptions, the applicant

and/or owner shall obtain a Critical Areas Permit prior to commencing the development activity. Critical Areas Permits ~~as determined to be necessary under Chapter 20.740 VMC and as stated below shall~~ shall be processed as a Type I permit ~~or,~~ when ~~submitted with another land use application,~~no other permits are filed concurrently or reviewed according to the procedures of the underlying land use application pursuant to VMC Chapter ~~20.210 VMC.~~20.210.

~~a. New single-family and duplex residences, alterations to existing single-family and duplex residences, or new accessory structures located within a critical area or buffer, or on a property containing a critical area or buffer.~~

~~b. Application of pesticides, herbicides, fungicides or fertilizers within 25 feet of ponds, lakes, streams, rivers or wetlands.~~

~~c. Approval of agricultural activities within 25 feet of ponds, lakes, streams or rivers.~~

~~d. Critical Area restoration or enhancement projects not related to any development project; and establishment of mitigation banks.~~

~~e. Public improvement projects located entirely within the previously improved portion of the right-of-way, not otherwise exempted by this chapter.~~

~~f. Clearing vegetation within a critical area or buffer, including: (i) grading, uprooting or other activities that impair the soil stabilization function of vegetation in landslide hazard areas (VMC 20.740.130); (ii) removal of downed woody vegetation from wetlands, lakes, streams or rivers; and (iii) removal of trees, grasses, or brush to create fire-defensible space (subsection H of this section). However, clearing vegetation within the area of special flood hazard outside of the Riparian Management Area and Buffer and in seismic hazard areas shall not require a permit (see VMC 20.740.030).~~

~~g. Approval of programmatic permits (subsection G of this section) for activities within critical areas or buffers.~~

3. ~~3.~~ *Review Procedure.* The ~~planning official~~Planning Official shall make a determination as to whether the proposed activity and mitigation, if any, are consistent with the ~~provisions of VMC Title 20. The planning official's determination shall be based on the approval criteria of VMC 20.740.060. The Critical Areas Permit shall be valid for as long as the underlying land use permit or as otherwise specified~~

~~by the planning official.~~critical areas approval criteria of VMC Chapter 20.740 and in compliance with the performance standards for the type(s) of critical area(s) involved.

4. ~~B.~~ *Expiration of Permit.* The Critical Areas Permit shall be valid for as long as the underlying land use permit is in effect or as otherwise specified by the Planning Official.

B. *Notice on Title – Covenant and Tracts.*

~~1.~~ *Covenants.* This section applies to all nonexempt projects that involve critical areas and buffers~~.~~

1. ~~a. In order to inform subsequent purchasers of real property~~, with the exception of ~~the existence of critical areas, the~~Frequently Flooded Areas.

a. The owner of any property containing a critical area or buffer on which a development proposal is approved shall file a covenant with the county records and elections division according to the direction of the ~~city~~City. The covenant shall state the presence of the critical area and/or buffer on the property, the application of this chapter to the property, and the fact that limitations on actions in or affecting the critical area or buffer may exist~~. The covenant shall "run with the land."~~, including that the area(s) within the conservation covenant be maintained in a natural state without disturbance to vegetation or other features unless otherwise approved by the City. The covenant shall "run with the land" in perpetuity. The covenant shall include a map and legal description of the critical area, with wording in the notice substantially similar to the following:

~~b.~~ "Prior to and during the course of any grading, building construction or other development activity on this property containing or abutting a critical area, the area of development activity must be fenced or otherwise marked to the satisfaction of the City. The critical area shall be maintained in its natural state without disturbance to vegetation or other features, except as provided for by VMC Chapter 20.740 , Critical Areas Protection. Yard waste,

debris, fill, equipment, vehicles, and materials shall not be placed in the critical area."

b. The applicant shall submit proof that the covenant has been filed for public record before the ~~city~~City approves any site development or construction for the property or, in the case of subdivisions, short subdivisions, planned unit developments, binding site plans, and other developments that involve platting, at or before recording of the plat.

c. ~~2.~~ Any modifications to an established and recorded conservation covenant shall be consistent with the standards of this chapter and the originally issued Critical Areas Permit that established the subject conservation covenant. The modification shall be processed as under a Type I review process. Any modification of the covenant that is inconsistent with the originally issued Critical Areas Permit or with the standards of this chapter shall be subject to a review and receive a Critical Areas Permit consistent with the standards of this chapter.

2. *Tracts.* This section applies in ,addition to subsection ~~(B)(1)~~(B)(1) of this section, to projects that involve platting on properties containing ~~fish and wildlife habitat conservation areas, wetlands~~Fish and Wildlife Habitat Conservation Areas, Wetlands, Geologic Hazard Areas, and their buffers. ~~The planning official may also apply this section to developments that involve platting on properties containing geologic hazard areas and their buffers. The location of the tract, critical area(s), and buffer(s) shall be shown on the face of the plat. See subsection (B)(2)(b) of this section for exceptions.~~

a. ~~a.~~ The property owner shall place the subject critical areas and buffers in one or more nondevelopable tracts except when~~:~~ the responsible official determines that a tract cannot be provided given the constraints of the site, such as size of the property in question, while meeting all other standards of VMC Title 20.

~~i. Creation of a nonbuildable tract would result in violation of minimum lot depth standards; or~~

~~ii. The responsible official determines a tract is impractical.~~

b. b. When anthe exception in subsection (B)(2)(a)(B)(2)(a) of this section applies, residential lots may extend into the critical area(s) or buffer(s) provided:

i. The location of the outer perimeter of the critical area(s) and buffer(s) is marked in the field and approved by the planning official prior to the commencement of permitted activities and maintained throughout the duration of the permit.

ii. A permanent physical demarcation along the outer/upland boundary of the critical area buffer(s) is installed and thereafter maintained. Such demarcation may consist of fencing, hedging or other prominent physical marking that allows wildlife passage, blends with the critical area environment, and is approved by the planning official.

1. iii. Permanent signs are posted at an interval of one per lot for single-family residential uses or at a maximum interval of 200 feet, or as otherwise determined by the planning official, and must be perpetually maintained by the property owner. The sign shall be worded as follows or with alternative language approved by the planning official: "The area beyond this sign is a critical area or critical area buffer. Alteration or disturbance is prohibited by law. Please call the City of Vancouver for more information."

i. C. Temporary and permanent markers and signs are installed in compliance with the requirements of VMC 20.740.020, General Provisions.

i. The applicant records a conservation covenant protecting the critical area in perpetuity in conformance with VMC 20.740.040(B)(1).

C. *Financial Assurances.*

1. 1. When mitigation required pursuant to a development proposal is not completed prior to the cityCity's final permit approval, such as final plat approval or final building inspection, the cityCity shall require the applicant to provide security in a form and amount deemed acceptable by the city. If the development proposal is subject to mitigation, the applicant shall provide security in a form and amount deemed acceptable by the city City, including to ensure that mitigation is fully

functional ~~(including but not limited to~~taking into account remaining construction, maintenance, and monitoring~~).~~.

2. ~~2.~~ The security shall be in the amount of 125 percent of the estimated cost of restoring the functions of the critical area that are at risk.

3. ~~3.~~ The security ~~authorized by this section~~ shall remain in effect until the ~~city~~City determines, in writing, that the applicable standards ~~for which the security is required~~ have been met. ~~Bonds or other~~The security shall be held by the ~~city~~City for a minimum of five years to ensure ~~that the required~~fully functional mitigation ~~has been fully implemented and demonstrated to function, and may be held for longer periods when necessary.~~.

4. ~~4.~~ Depletion, failure, or collection of bond funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring, or restoration.

5. ~~5.~~ Public development proposals shall be relieved from having to comply with the bonding requirements of this section if public funds have previously been committed ~~in the project budget or capital improvement budget~~ for mitigation, maintenance, monitoring, or restoration.

6. ~~6.~~ Failure to satisfy any critical area requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within 30 days after it is due or comply with other provisions of an approved mitigation plan shall constitute a default, and the ~~city~~City may demand payment of any financial guarantees or require other action authorized by the ~~city~~City code or any other law.

7. ~~7.~~ Any funds recovered pursuant to this section shall be used to complete the required mitigation. Excess funds shall be returned to the applicant.

D. ~~D.~~ *Critical Area Inspections.* Reasonable access to the site shall be provided to the ~~city, state~~City, State, and federal agency review staff for the purpose of inspections during any proposal review, delineation, restoration, emergency action, or monitoring period.

Burden of Proof. ~~E. *Reconsideration of planning official's determination.* If, within five days following the date of mailing of a Critical Areas Permit, new information relevant to the decision is made available, any party may request that the decision be reconsidered. If the new~~

information is found to be substantial and relevant to the critical area review, the planning official may reopen the critical area review and make a new determination based on the revised report. The Critical Areas Permit shall not be considered final and subject to appeal until the decision on the request for reconsideration, if applied for, has been issued.

E. F. The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the exemption, Critical Areas Permit, Minor Exception, Reasonable Use Exception, or any other approval requested under this chapter.

F. *Appeals.* Any decision to approve, condition, or deny a development proposal or other activity based on the requirements of this chapter may be appealed according to VMC 20.210.13020.210.130.

G. G. *Programmatic Permits.* The purpose of a programmatic permit is to provide for ongoing, routine maintenance, operation, or repair activities on sites containing critical areas or buffers (1) so as not to impair an agency's or business's ability to operate effectively and efficiently by requiring separate Critical Areas Permits for each activity; and (2) at the same time protect critical areas and buffers in accordance with this chapter.

1. 1. In addition to the submittal requirements in VMC 20.740.050,20.740.050 and any additional Critical Areas report requirements under VMC 20.740.110-140, applicants for a programmatic permit shall submit a proposed management plan. The management plan shall contain:

a. a. A narrative explaining the need for the programmatic permit.;

b. b. A list of the ongoing, routine, maintenance, operation, or repair activities that impact or potentially impact critical areas and buffers.;

c. c. A description of the potentially impacted critical area and buffer functions.;

d. d. Proposed measures and standards for avoiding impacts to critical area and buffer functions and, where unavoidable, minimizing and mitigating those impacts to achieve no net loss of functions.; and

e. e. A training program ensuring that all employees, contractors, and individuals under the supervision of the applicant who are involved in permitted activities understand and perform them in accordance with the terms of the permit.

2. 2. A programmatic permit may be approved for up to seven years. The permit duration may be tied to other permits or processes.

3. 3. Every two years within for the duration of the programmatic permit 30 days ofprior to the anniversaryoriginal date of permit issuance for the duration of the permit, the applicant shall submit a report to the planning officialPlanning Official summarizing activities undertaken under the programmatic permit including any issues to be resolved. The report shall also document the training provided in accordance with subsection (G)(1)(e)(G)(1)(e) of this section.

4. 4. The applicant or the cityCity may initiate an amendment to the programmatic permit to respond toif anticipated activities, terms, or conditions of the programmatic permit performance issues.will change. An amendment shall be considered through a Type 1 process following a pre-application conference.

5. 5. An application for reauthorization of a programmatic permit shall be submitted at least 90 days prior to the date the current permit expires. Programmatic permits may be reauthorized through a Type 1 process following a required pre-application conference. Permit standards and conditions may be modified to conform to the current codes, policies, and standards or based on past performance. Where the review of the reauthorization application will extend beyond the expiration date of the current programmatic permit, the planning officialPlanning Official may extend the duration of the current permit for 30up to 60 days at a time, not to exceed 180 days.

H. Trees, grasses, and brush in a critical area or buffer may be pruned or removed to create fire-defensible space around a structure (see subsection (A)(2)(f) of this section) when one or more of the criteria in VMC 20.740.030(C)(1)(f)(i)(A) through (C)(1)(f)(i)(F) are met. When creating fire-defensible space is permitted, the following standards shall apply:

1. Grasses and underbrush shall be maintained between eight inches and 12 inches in height.

2. Trees may be pruned, limbed-up, or removed. Topping trees is prohibited.

3. Removal of vegetation in a landslide hazard area is prohibited during the wet season (November 1st to May 1st). The area must be immediately replanted to ensure soil stability. The property owner shall maintain the newly planted vegetation to ensure its survival.

4. Any debris from vegetation removal shall be disposed of promptly and properly.

5. Required replantings shall be of native, fire-resistant species. A list of native, fire-resistant species is available from the planning official.

A. l. Development may be permitted on a site containing a critical area(s) or buffer(s) which may also be subject to state or federal permits prior to all necessary state or federal permits being obtained when all of the following criteria are met:

1. A phased master plan is submitted under Chapter 20.260 or 20.268 VMC as appropriate, demonstrating:

a. a. How the maximum critical area(s) and maximum buffer(s) will be clearly avoided until all local, state, or federal permits are obtained;

a. b. How each phase could be permitted as an individual project not relying on development of any other phases in any way;

c. How each phase could be developed regardless of whether any or all of the pending state or federal permits are ever obtained;

d. No net loss of critical area functions for each phase and for the project as a whole, regardless of whether any or all of the pending state or federal permits are ever obtained.

1. 2. Development is permitted only in the area that clearly avoids (VMC 20.740.030(B)(2)(f)(i)(A)) the maximum critical area(s) and buffer(s). (Ord. M-4105 § 3, 11/17/2014; Ord. M-4017 § 6, 07/16/2012; Ord. M-3959 § 37, 07/19/2010; Ord. M-3931 § 23, 11/02/2009; Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.050 Submittal Requirements.

A. ~~A.~~ *Preparation by Qualified Professional.* Any required ~~Critical Areas Report~~critical areas report shall be prepared by a qualified professional as defined ~~herein~~in VMC Chapter 20.150.

B. ~~B.~~ *General Critical Areas Report Contents.* At a minimum, the ~~Critical Areas Report~~critical areas report shall contain the following:

1. ~~1.~~ The name and contact information of the applicant, a description of the proposal, and identification of the permit requested;

2. ~~2.~~ A copy of the site plan for the development proposal, including:

a. ~~a.~~ A map to scale depicting critical areas, buffers, the development proposal, and any areas to be ~~cleared~~altered or developed; and

b. ~~b. Proposed~~A proposed stormwater management and sediment control plan for the development, including a description of any impacts to drainage alterations; ~~and~~

~~c. A digital map of the geographic information required pursuant to the applicable provisions of this chapter for each critical area and buffer on site. The digital map(s) must be based on the same coordinate system as the Clark County GIS database: state plane coordinates using the NAD 1983 datum and the Washington South zone (also referred to as the FIPS Zone 4602). The digital map(s) must also conform to other Clark County GIS digital mapping standards and specifications available from the Planning Official or directly from Clark County's Department of Assessment and GIS.~~

3. ~~3.~~ The dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site. Critical Areas Reports shall be prepared by a qualified professional for the type of critical area involved;

4. ~~4.~~ *Identification and scientific characterization of all critical areas and buffers.* The scientific characterization shall include a detailed assessment of the functional characteristics of the critical areas;

5. ~~5.~~ An assessment of the probable impacts to critical areas and buffers and risk of injury or property damage including permanent, temporary, ~~temporal,~~ and indirect

impacts resulting from development of the site and the operations of the proposed development;

6. 6. A written response to each of the approval criteria in VMC 20.740.06020.740.060;

7. 7. Plans for adequate mitigation, as needed, to offset any impacts, in accordance with VMC 20.740.050(F)20.740.050(F) Mitigation Plan Requirements.; and

8. C. *Additional Information.* Any additional information required for the specific critical areas and buffers as specified in VMC 20.740.11020.740.110 Fish and Wildlife Habitat Conservation Area, VMC 20.740.12020.740.120 Frequently Flooded Areas, VMC 20.740.13020.740.130 Geologic Hazard Areas, and VMC 20.740.14020.740.140 Wetlands.

C. D. *Other Reports or Studies.* Unless otherwise provided, a Critical Areas Report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the planning official.Planning Official. Provided, the site conditions shall not have changed since the earlier report or study was completed.

D. E. *Critical Areas Report – Modifications to Requirements.* Modifications to Required Contents. The applicant may consult with the planning officialPlanning Official prior to or during preparation of the Critical Areas Report to obtain city approval of modifications towhen the required contents of the report where, in the judgment of Planning Official determines and a qualified professional, more or recommends that less information is requirednecessary to adequately address the potential impacts to any critical areas or buffers and the required mitigation. The planning officialIn such case the Planning Official may also initiateallow a modification to the required report contents by requiring either additional or less information, when determined to be necessary to the review of the proposed activity in accordance with this chapter.reduced scoped critical areas report.

E. F. *Mitigation Plan Requirements.* When mitigation is required, the applicant shall submit a mitigation plan as part of the Critical Areas Report. The mitigation plan shall include:

1. Mitigation rationale: A discussion of the rationale for the proposed mitigation that includes other mitigation options and why the proposed method best achieves the

approval criteria in 20.740.060 as compared with other forms and locations for mitigation.

2. ~~1.~~ *Detailed Construction Plans.* The mitigation plan shall include descriptions and plans of the mitigation proposed, such as:

a. ~~a.~~ The proposed construction sequence, timing, and duration;

b. ~~b.~~ Grading and excavation details;

c. ~~c.~~ Erosion and sediment control features;

d. ~~d.~~ A planting plan specifying plant species, quantities, locations, size, spacing, and density; ~~and~~

e. ~~e.~~ Measures to protect and maintain plants until established~~.~~; and

f. ~~These written descriptions shall be accompanied by detailed~~Detailed site diagrams, scaled cross sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

3. *Adaptive Management.* ~~2.~~ The mitigation plan shall include identification of potential courses of action and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.

4. *Monitoring Program.* ~~*Monitoring Program.*~~ The mitigation plan shall include a program for monitoring construction of the mitigation project and for assessing a completed project.

a. A protocol shall be included outlining the schedule for site monitoring, and how the monitoring data will be evaluated to determine if the performance standards are being met.

b. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the mitigation project. The mitigation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five ~~(5)~~ years. ~~For example, ten (10) years or more of monitoring are typically needed~~

for forested wetlands or scrub-shrub communities.years or more than 10 years, unless otherwise specified in this code.

c. When the applicant believes that the conditions of the monitoring plan are met, the applicant shall contact the City and request that the City verify and certify so in writing. The City shall conduct an on-site assessment as part of the verification process. The applicant shall provide reasonable access to the property as necessary for verification and certification.

d. When the City has verified and certified that the conditions of the monitoring plan have been met, the critical area shall no longer be considered as mitigation, but as a naturally-occurring critical area when processing a future development permit application(s).

3. *Adaptive Management.* The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met. (Ord. M-3931 § 24, 11/02/2009; Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)

F. Development may be permitted on a site containing a critical area(s) or buffer(s) which may also be subject to state or federal permits prior to all necessary state or federal permits being obtained when all of the following criteria are met:

1. A phased master plan is submitted under VMC Chapter 20.260 or Chapter 20.268 as appropriate, demonstrating:

a. How the maximum critical area(s) and maximum buffer(s) will be clearly avoided until all local, state, or federal permits are obtained;

b. How each phase could be permitted as an individual project not relying on development of any other phases in any way;

c. How each phase could be developed regardless of whether any or all of the pending state or federal permits are ever obtained; and

d. The applicant demonstrates that there will be no net loss of critical area functions for each phase or for the project as a whole even if state and/or federal permits are not obtained.

2. Development is permitted only in the area that clearly avoids the maximum critical area(s) and buffer(s). (Ord. M-4105 § 3, 11/17/2014; Ord. M-4017 § 6, 07/16/2012; Ord. M-3959 § 37, 07/19/2010; Ord. M-3931 § 23, 11/02/2009; Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.060 Approval Criteria.

Any activity or development subject to this chapter~~, unless otherwise provided for in this chapter,~~ shall be reviewed and approved, approved with conditions, or denied based on the proposal's ability to comply with all of the following criteria. The ~~city~~City may condition the proposed activity as necessary to mitigate impacts to critical areas and their buffers and to conform to the standards required by this chapter. ~~Activities shall protect the functions of the critical areas and buffers on the site.~~

A. ~~A.~~ *Avoid Impacts.* The Applicant shall first seek to avoid all impacts that degrade the functions and values of (a) critical area(s). This may necessitate a redesign of the proposal.

B. ~~B.~~ *Minimize Impacts.* Where avoidance is not feasible, the applicant shall minimize the impact of the activity ~~and mitigate to the extent necessary to achieve the activity's purpose and the purpose of this ordinance.~~. The applicant shall seek to minimize the fragmentation of the resource to the greatest extent possible.

C. ~~C.~~ *Rectifying*. Rectify the impact by repairing, rehabilitating, or restoring the affected environment.

D. *Reducing*. Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action.

E. *Compensatory Mitigation.* The applicant shall compensate for the unavoidable impacts by replacing each of the affected functions ~~to the extent feasible.~~. The compensatory mitigation shall be designed to achieve the functions as soon as practicable. Compensatory mitigation shall be in-kind and on-site, when feasible, and sufficient to maintain the functions of the critical area, and to prevent risk from a hazard posed by a critical area to a development or by a development to a critical area. Compensatory mitigation priority for wetlands is specified in VMC 20.740.140(C)(3)(b). Compensatory mitigation shall offset both permanent and temporal impacts.

F. D. *No Net Loss.* The proposal protects the critical area functions and values and results in no net loss of critical area functions and values. If loss of critical area functions are expected, adequate mitigation is provided to offset impacts of anticipated loss.

G. E. *Consistency with General Purposes.* The proposal is consistent with the general purposes of this chapter and does not pose a significant threat to the public health, safety, or welfare on or off the development proposal site;.

H. F. *Performance Standards.* The proposal meets the specific performance standards of VMC 207.40.110 Fish and Wildlife Habitat Conservation Areas VMC 20.740.110, VMC 20.740.120 Frequently Flooded Areas VMC 20.740.120, VMC 20.740.130 Geologic Hazard Areas VMC 20.740.130, and VMC 20.740.140 Wetlands VMC 20.740.140, as applicable. (Ord. M-4017 § 7, 07/16/2012; Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.070 Minor Exceptions.

A. A. *Minor Exceptions Authorized.* Minor exceptions of no greater than 10% percent from the numeric standards of this chapter may be authorized by the cityCity in accordance with the Type II procedures set forth in VMC 20.210.050, Type II Applications.Chapter 20.210. Minor exceptions shall not be combined with buffer averaging [(20.740.140(C)(1)(b)(ii)] or buffer reduction (20.740.140(C)(1)(b)(iii)].for Fish and Wildlife Habitat Conservation Areas or Wetlands. Minor exceptions from the NFIPNational Flood Insurance Program development standards of VMC 20.740.12020.740.120, Frequently Flooded Areas, are prohibited (VMC 20.740.120(K)).

B. B. *Minor Exception Criteria.* A minor exception from the standards of this chapter may be granted only if the applicant demonstrates that the requested action conforms to all of the following criteria.:

1. 1. Unusual conditions or circumstances exist that are peculiarspecific to the intended use, the land, the lot, or something inherent in the land, and that are not applicable to all other lands in the same vicinity or zoning district;

2. 2. The unusual conditions or circumstances do not result from the actions of the applicant;

3. ~~3.~~ Granting the minor exception requested will not confer on the applicant any special privilege that is denied by this chapter to other lands, structures, or buildings under similar circumstances;

4. ~~4.~~ The minor exception is necessary for the preservation and enjoyment of a substantial property right of the applicant such as is possessed by the owners of other properties in the same vicinity or district;

5. ~~5.~~ The minor exception requested is the least necessary and no greater than 10~~%~~ percent of the subject standard to relieve the unusual circumstances or conditions identified in Subsection VMC ~~20.740.070(B)(1)~~20.740.070(B)(1) above;

6. ~~6.~~ The granting of the minor exception or the cumulative effect of granting more than one minor exception is consistent with the general purpose and intent of the City of Vancouver Comprehensive Plan, this ~~Title~~title, this chapter, and the underlying zoning district;

7. ~~7.~~ Degradation of the functions (including public health and safety) of the subject critical areas and any other adverse impacts resulting from granting the minor exception will be minimized and mitigated to the extent feasible in accordance with the provision of this chapter;

8. ~~8.~~ Granting the minor exception will not otherwise be materially detrimental to the public welfare or injurious to the property or improvements in the vicinity of the subject property; and

9. ~~9.~~ The proposed development complies with all other applicable standards.

C. ~~C.~~ *Conditions May Be Required.* In granting any minor exception, the ~~city~~City may attach such conditions and safeguards as are necessary to secure adequate protection of critical areas and developments from adverse impacts, and to ensure conformity with this chapter.

~~D. *Time Limit.* The city shall prescribe a time limit within which the action for which the minor exception is required shall be begun, completed, or both. Failure to begin or complete such action within the established time limit shall void the minor exception.~~

E. ***Burden of Proof.*** The burden of proof shall be on the applicant to bring forth evidence in support of the application and upon which any decision has to be made on the application. (Ord. M-4017 § 8, 07/16/2012; Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.080 Reasonable Economic Use Exceptions.

A. A. *Exception Request and Review Process.* If the application of this chapter would deny all reasonable economic use of the subject property, the cityCity shall determine if compensation is an appropriate action, or the property owner may apply for an exception pursuant to this section. Exceptions from the standards of this chapter may be authorized by the cityCity in accordance with the Type III procedures set forth in VMC 20.210.060, Type III Applications.20.210.

An application for a reasonable economic use exception shall be made to the cityCity and shall include a Critical Areas Report, including with a mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (RCW 43.21C). The planning official43.21C). The Planning Official shall prepare a recommendation to the Hearings Examiner based on review of the submitted information, a site inspection, and the proposal's ability to comply with the critical areas reasonable use exception criteria in VMC 20.740.080(B).

B. B. *Reasonable Use Review Criteria.* The cityCity shall approve applications for reasonable use exceptions when all of the following criteria are met:

1. 1. The application of this chapter would deny all reasonable economic use of the property;

2. 2. No other reasonable economic use of the property has less impact on the critical area;

3. 3. The proposed impact to the critical area is the minimum necessary to allow for reasonable economic use of the property;

4. 4. The inability of the applicant to derive reasonable economic use of the property is not the result of actions by the applicant after the effective date of this chapter, or its predecessor;

5. 5. The proposal does not pose a significant threat to the public health, safety, or welfare on or off the development proposal site;

6. 6. The proposal mitigates for the loss of critical area functions to the greatest extent feasible; and contributes to the Critical Areas Restoration Fund for any impacts that cannot be mitigated.

7. 7. The proposal is consistent with other applicable regulations and standards.

C. *Burden of Proof.* The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application. (Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.090 Unauthorized Critical Areas Alterations and Enforcement.

A. A. *Enforcement.*

1. 1. It shall be unlawful to violate the provisions of VMC Chapter 20.740.20.740. Any violation of this chapter shall constitute a public nuisance.

2. 2. VMC Title 2222 shall provide the enforcement provisions for VMC Chapter 20.74020.740. VMC Title 2222 may impose any of the remedies, requirements or corrective actions contained in this chapter. In lieu of or in addition to the enforcement provisions contained in VMC Title 22, the city22, the City may also seek injunctive or other relief from any court of competent jurisdiction.

3. The city shall deposit all monetary penalties collected pursuant to VMC Title 22 into the Critical Areas Restoration Fund. Accrued monies in the Critical Areas Restoration Fund shall be used to protect and restore critical areas within the City of Vancouver.

B. B. *Requirement for Restoration Plan.* In the event the cityCity initiates enforcement action under VMC Title 2222 or files a complaint in court, the cityCity may require a restoration plan consistent with the requirements of this chapter. Such a plan shall be prepared by a qualified professional using the best available science and shall describe how the actions proposed meet the minimum performance standards for restoration requirements described in VMC 20.740.090(C).. The planning officialPlanning Official shall, at the violator's expense, seek expert advice in determining whether the plan restores the affected area to its pre-existing condition or, where that is not possible, restores the functions of the

affected area. Inadequate plans shall be returned to the applicant or violator for revision and re-submittal.

C. ~~C.~~ *Minimum Performance Standards for Restoration.*

1. ~~1.~~ For alterations to ~~frequently flooded areas, wetlands~~Frequently Flooded Areas, Wetlands, and ~~fish~~Fish and ~~wildlife habitat conservation areas~~Wildlife Habitat Conservation Areas, the following minimum performance standards shall be met for the restoration of a critical area, provided that if the violator can demonstrate that greater functional and habitat values can be obtained, these standards may be modified:

   a. ~~a.~~ The structure and functions of the critical area or buffer prior to violation shall be restored, including water quality and habitat functions;

   b. ~~b.~~ The soil types and configuration prior to violation shall be replicated;

   c. ~~c.~~ The critical area and buffers shall be replanted with native vegetation (a list of native species is available from the Planning Official). If the critical area or buffer is on a site that meets the criteria of VMC ~~20.740.030(C)(1)(f)(i)~~20.740.030(C)(1)(f)(i), the vegetation for replanting must be not only native but also fire-resistant. A list of native, fire-resistant species is available from the Planning Official; and

   d. ~~d.~~ Information demonstrating compliance with ~~the requirements in VMC 20.740.050(F)~~this chapter's Mitigation Plan Requirements shall be submitted to the ~~planning official~~Planning Official.

2. ~~2.~~ For alterations to ~~frequently flooded~~Frequently Flooded and ~~geologic hazard areas~~Geologic Hazard Areas, the following minimum performance standards shall be met for the restoration of a critical area or buffer, provided that, if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

   a. ~~a.~~ The hazard shall be reduced to a level equal to, or less than, the pre-violation hazard;

b. ~~b.~~ The risk of personal injury resulting from the alteration shall be eliminated or minimized;

c. ~~c.~~ Drainage patterns shall be restored to those existing before the alteration; and

d. ~~d.~~ The hazard area and buffers shall be replanted consistent with pre-violation conditions with native vegetation sufficient to minimize the hazard. If the critical area or buffer is on a site that meets the criteria of VMC ~~20.740.030(C)(1)(f)(i)~~20.740.030(C)(1)(f)(i), the vegetation for replanting must be not only native but also fire-resistant. A list of native, fire-resistant species is available from the Planning Official.

D. ~~D.~~ *Site Investigations.* The ~~planning official~~Planning Official is authorized to make site inspections and take such actions as are necessary to enforce this chapter. ~~As a condition of the restoration plan, the applicant shall grant reasonable access to the property.~~

E. ~~E.~~ *Noncompliance in Frequently Flooded Areas.* No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this chapter and other applicable regulations. Violations of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this chapter or fails to comply with any of its requirements shall upon conviction be subject to enforcement under subsection ~~A~~A of this section. Nothing herein contained shall prevent the ~~city of Vancouver~~City from taking such other lawful action as is necessary to prevent or remedy any violation. (Ord. M-4325 § 3, 2020; Ord. M-3844 § 2, 2007; Ord. M-3692 § 2, 2005)

20.740.100 Designation Process for Habitats of Local Importance.

A. ~~A.~~ *Eligibility and Approval Criteria.* Habitats of Local Importance are Fish and Wildlife Habitat Conservation Areas ~~which~~that are not designated ~~as Priority Habitats and Species by the state~~under VMC 20.740.110, but are designated as locally significant by the ~~city~~City. Criteria for designation include all of the following:

1. 1. A need for protection exists due to a high diversity of fish or wildlife species, declining populations, scarcity of the habitat type, sensitivity to disturbance from human activity or development, or other unique local habitat functions.

2. 2. The area is sufficient in size to support the species or habitat functions for which it is designated.

3. 3. The designation will not compromise the ability of the cityCity to achieve the goals of the Comprehensive Plan.

4. 4. There is a proposed management strategy describing how the functions of the habitat will be protected after designation.

5. B. The area and habitat are not otherwise protected under other critical areas regulations.

B. *Designation Process.* Habitats of Local Importance may be proposed by the property owner or the cityCity and shall be designated according to a Type IV legislative procedure (VMC 20.210.070).Chapter 20.210). (Ord. M-3692, Added, 02/28/2005, Sec 2)

20.740.110 Fish and Wildlife Habitat Conservation Areas.

A. A. *Designation and Location.*

1. 1. The City designates the following identified areas as Fish and Wildlife Habitat Conservation Areas. Final designations shall be based on site conditions and other available data or information (Seesee VMC 20.740.020(C)(1)). There are established in the city the following identified Fish and Wildlife Habitat Conservation Areas:20.740.020[C][1]).

a. Habitat used by any life stage of state or federally designatedAreas where endangered, threatened, and sensitive fish or wildlife species. A current list of federally and state identified species is available from the planning official.

a. b. *Priority Habitats and* have a primary association, including priority habitats and areas associated with *Priority Species.* Current lists of Priority Habitats and Species and applicable Management Recommendations promulgatedpriority species as listed by the Washington Department of Fish

and Wildlife ~~are available from the planning official.~~(WDFW). Within the city, these areas and species primarily include, but may not be limited to, the following:

i. ~~c. Water bodies including lakes, streams, rivers,~~Riparian areas composed of Riparian Management Areas (RMA's) and ~~naturally~~Riparian Buffers (RB's);

ii. Priority Oregon white oak habitat;

iii. Biodiversity areas;

iv. Waterfowl concentrations: and

v. Aquatic habitat.

b. Forage fish spawning areas;

c. Naturally occurring ponds~~.~~ under 20 acres and their submerged aquatic beds that provide fish and wildlife habitat;

d. Waters of the state;

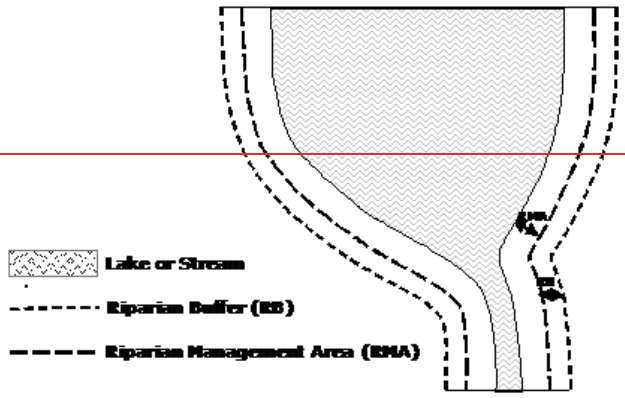
e. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;

f. State natural area preserves, natural resource conservation areas, and state wildlife areas; and

~~g.~~ d. ~~-~~ *Habitats and Species of Local Importance.* Fish and Wildlife Habitat Conservation Areas ~~which are not designated as Priority Habitats and Species by the state but~~ or individual species that are designated as locally significant by the ~~city~~City in accordance with VMC ~~20.740.100~~20.740.100.

~~e. *Riparian Management Areas and Riparian Buffers.* The regulated areas include the land from the ordinary high water mark to a specified distance as measured horizontally in each direction. The Riparian Management *Fish and Wildlife Habitat Conservation Area* is adjacent to the lake, stream or river, and the Riparian Buffer is adjacent to the Riparian Management Area.~~

Figure 20.740.110-1
Riparian Management Area and Riparian Buffer



(1) The Riparian Management Areas and Riparian Buffers are as follows:

Table TABLE 20.740.110-1. RIPARIAN MANAGEMENT AREAS & BUFFERS

DNR/Vancouver Stream Type	Description	Land Use Intensity[1]	RMA	RB[2]
S	Shorelines-of-the-State	High/Moderate/Low	100′	75′
F	Lakes, streams, and rivers that contain fish habitat	High/Moderate/Low	100′	75′
Np or Ns, large	Streams and rivers that: (1) are not shorelines-of-the-state; (2) do not contain fish habitat;	High/Moderate/Low	100′	75′

DNR/Vancouver Stream Type	Description	Land Use Intensity[1]	RMA	RB[2]
	(3) are wider than 5′ between the ordinary high water marks on the banks.			
Np, small, connected	Streams and rivers that: (1) are not shorelines-of-the-state; (2) do not contain fish habitat; (3) are not more than 5′ wide; (4) do connect via surface water to another stream or river (whether perennial or seasonal) even if the connection traverses a culvert, wetland, or other feature; and (5) are perennial	High/Moderate Low	100′ 100′	50′ 25′
Ns, small, connected	Streams and rivers that: (1) are not shorelines-of-the-state; (2) do not contain fish habitat; (3) are not more than 5′ wide; (4) do connect via surface water to another stream or river (whether perennial or seasonal) even if the connection traverses a culvert, wetland, or other feature; and	High/Moderate Low	100′ 100′	25′ 0′

DNR/Vancouver Stream Type	Description	Land Use Intensity[1]	RMA	RB[2]
	(5) are seasonal			
Np or Ns, small, not connected	Streams and rivers that: (1) are not shorelines-of-the-state; (2) do not contain fish habitat; (3) are not more than 5' wide; (4) do not connect via surface water to another stream or river; and (5) are either perennial or seasonal	High/Moderate/Low	25'	0'

1 Refer to Table 20.740.140-1.

2 The RB is the distance shown or the full extent of the 100-year floodplain, whichever is farther landward.

(A) When impervious surfaces from previous development completely functionally isolate the Riparian Management Area or the Riparian Buffer from the waterbody, the regulated riparian area shall extend from the ordinary high water mark to the impervious surfaces. If the waterbody is not completely physically isolated, but is completely functionally isolated, the Planning Official may adjust the regulated riparian area to reflect site conditions and sound science.

g. 2. *Habitat Location Information.Locations .* Information on the approximate location and extent of Fish and Wildlife Habitat Conservation Areas is available from the planning official. following sources:

The habitat location information is based on:

h. a. Washington Department ofU.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries species list;

i. a. WDFW Priority Habitat and Species Maps;

j. b. Washington Department of Fish and WildlifeWDFW Anadromous and Resident Salmonid Distribution Maps in the Salmon and Steelhead Habitat Inventory Assessment Program (SSHIAP);

k. c. StreamNet.org maps from the Pacific States Marine Fisheries Commission;

l. Washington State Department of Natural Resources (DNR) Official Water Type Reference Maps; and

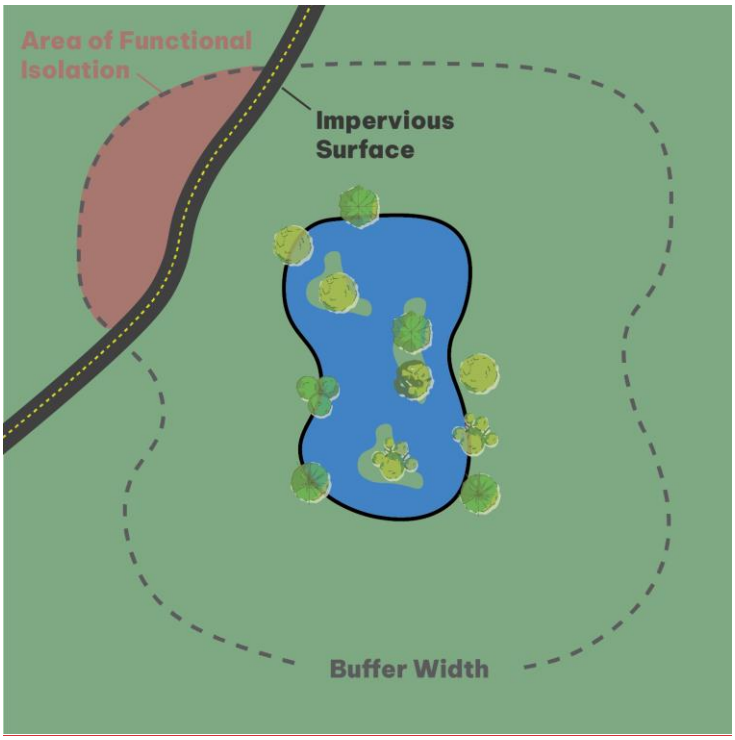
d. City-designated Habitats of Local Importance;

m. e. Other information acquired by the cityCity such as site-specific or area-specific delineations or studies.

B. B. *Development activities that functionally or physically isolate the RMA or RMB buffer*.

When existing impervious surfaces or other built structures, such as a levee or railroad corridor, functionally or physically isolate the RMA or RB buffer from the waterbody, the regulated RMA or RB wetland buffer shall extend landward from the ordinary high water mark (OHWM) or channel migration zone (CMZ), whichever is greater and terminate at the waterward edge of the impervious surface or manmade structure. Development activities that occur within the area of functional isolation, or further landward, are exempt from the requirement to obtain a Critical Areas Permit.

Figure 20.740.110-1: Functional Isolation



The Planning Official shall rely on a site visit, aerial photographs, or other evidence provided by the applicant or the applicant's qualified professional in making a determination to reduce the width of the RMA, RB, or wetland buffer based on functional and/or physical isolation.

Note: RMA's and RB's are measured from the OHWM or the edge of a channel migration zone (CMZ), whichever is further landward. However, no CMZs have been identified within the city limits as of the date this chapter was adopted.

A. *Additional Critical Areas Report Requirements.*

1. A Critical Areas Report for a Riparian Management Area or Riparian Buffer shall include evaluation of the habitat functions using the Clark County Habitat Conservation Ordinance Riparian Habitat Field Rating Form or another habitat evaluation tool approved by the Washington Department of Fish and Wildlife.

a. In addition to the standards of (VMC 20.740.050(F)), where a mitigation plan is required as part of the Critical Areas Report for a fish and wildlife habitat conservation area that involves a water body, Riparian Management Area or Riparian Buffer, the monitoring program protocol shall include where relevant to the impacted functions:

1. Observations and measurements of riparian integrity and quality (buffer width, riparian corridor continuity or fragmentation, species diversity, stand age, plant survival rates)

2. Large woody debris surveys

3. Streamflow monitoring

4. Water quality monitoring to detect pollution impacts

5. Biological monitoring (including fish surveys and benthic macroinvertebrate sampling)

2. If the clearing or development activity is in the Riparian Management Area, the Critical Areas Report shall contain the following information, if applicable, in addition to the general Critical Areas Report requirements of VMC 20.740.050:

a. How the clearing or development activity constitutes a water-dependent, water-related or water-enjoyment use; or

b. How the clearing or development activity cannot feasibly be located on the site outside of the Riparian Management Area; and

c. How the proposal meets the Riparian Management Area width averaging standard (VMC 20.740.110(C)(2)(c)); and

a. d. How the proposal will not adversely affect the connectivity of habitat functions.

C. ~~C.~~ *Performance Standards.*

~~1. *General.*~~

1. ~~a.~~ *Development Standards*

a. *Development and Clearing Activities.*

i. Development or clearing activities shall protect the functions of the Fish and Wildlife Habitat Conservation Areas on the site~~. The activity~~ and shall result in no net loss of functions~~. Protection can be provided by avoiding (the preferred protection) or minimizing and mitigating as described in the general critical areas~~, as required by the approval criteria ~~(VMC 20.740.060). Functions include:~~of this chapter.

~~1. Providing habitat for breeding, rearing, foraging, protection and escape, migration, and over-wintering; and~~

~~2. Providing complexity of physical structure, supporting biological diversity, regulating stormwater runoff and infiltration, removing pollutants from water, and maintaining appropriate temperatures.~~

~~b. An applicant shall replace any lost functions preferably by restoring or if not, then by enhancing other habitat functions, so long as the applicant demonstrates that enhancement of the other functions provides no net loss in overall functions and maintains habitat connectivity. An example of unavoidable loss of function would be interruption of a travel corridor in a Riparian Management Area or Buffer. To the maximum extent feasible, enhancement shall be undertaken on-site.~~

ii. ~~c.~~ If development or clearing activity is within a Priority Habitat and Species area, the applicant shall follow ~~Washington Department of Fish and Wildlife~~WDFW Management Guidelines, Management Recommendations, or other standards approved by ~~the Washington Department of Fish and Wildlife. Where there are no guidelines, recommendations or other standards, development or clearing may occur provided that:~~WDFW.

1. The development or clearing results in no net loss of habitat function on the site; and

2. Functionally significant habitat, defined as habitat that cannot be replaced or restored within 20 years, shall be preserved.

d. Signs for Fish and Wildlife Conservation Areas

1. *Temporary markers.* The location of the outer perimeter of the fish and wildlife habitat conservation area shall be marked in the field, and such marking shall be approved by the planning official prior to the commencement of permitted activities. Such field markings shall be maintained throughout the duration of the permit.

2. *Permanent signs.* Permanent signs shall be posted on public and private properties at an interval of one per lot for single family residential uses or at a maximum interval of 200 feet or as otherwise determined by the planning official, and must be perpetually maintained by the property owner. The sign shall be worded as follows or with alternative language approved by the planning official: "The area beyond this sign is a fish and wildlife habitat conservation area. Alteration or disturbance is prohibited by law. Please call the City of Vancouver for more information."

2. Riparian Management Areas and Riparian Buffers.

In addition to the standards in VMC 20.740.060 and VMC 20.740.110(C)(1) the standards in this section shall apply in Riparian Management Areas and Buffers.

a. *Riparian Buffer.* Development or clearing activity may occur in the Riparian Buffer, providing that:

1. The planned mitigation results in no net loss of riparian habitat functions on the site, and

iii. 2. Functionally significant habitat, defined as habitat that cannot be replaced or restored within 20 years, shall be preserved unless the activity meets the conditions of VMC 20.740.110(C)(2)(b).20.740.110(B)(2)(b). An example of habitat that

cannot be replaced within 20 years would be a stand of mature trees or a peat bog.

b. *Mitigation.* b.

i. Mitigation for impacts within Fish and Wildlife Habitat Conservation Areas shall follow the sequence specified in this chapter's approval criteria.

ii. Disrupted functions and values shall be mitigated on site as a first priority, and off site thereafter.

iii. An up-to-date science-based guide, such as applicable watershed, fish recovery, sub-basin, or other science-based plans should be used to guide the proposed mitigation. Any science used to guide mitigation actions, whether on site or off site, must meet the criteria and characteristics of best available science listed in WAC 365-195-905 (Criteria for determining which information is the "best available science"), or the state standards in effect at the time of application.

c. d. *Signs for Fish and Wildlife Conservation Areas.*

i. Temporary and permanent markers and signs shall be installed as required by this chapter's General Provisions.

2. Standards for *RMAs RBs*.

a. RMA and RB Location and Width.

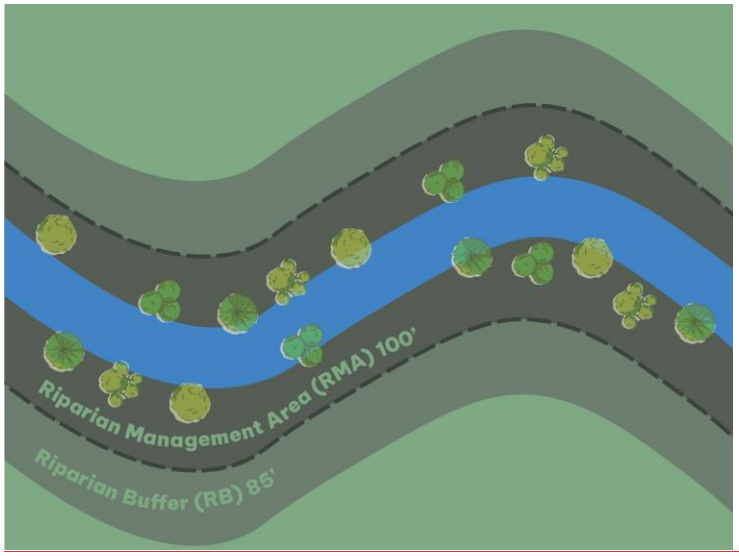
i. *Standard Width.* Standard RMA widths are 100 feet for Shorelines of the State (Type S), for both fish-bearing and non-fish-bearing waterbodies and for unclassified streams. The RB is 85 feet for all classified and unclassified waterbody types. The RMA and RB widths shall be combined for a total regulated riparian area width of 185 feet.

ii. *Site Potential Tree Height (SPTH) RMA and RB Width.* If the applicant cannot accommodate the standard-width RMA and RB on the project site for the proposed development, , applicants may use the 200-year

SPTH mapping tool referenced in WDFW's Riparian Ecosystems, Volume 2: Management Recommendations and justify a lesser-width RMA and/or RB in the project's Critical Areas Report. For project locations with multiple SPTH values, the largest SPTH value shall be used to establish the riparian area width. If the tool does not have data available to establish SPTH, the minimum combined RMA and RB width shall be the standard width as established in subsection (2)(a)(i).

iii. *Measurement.* Whether the standard or SPTH RMA and RB is used, the RMA is measured horizontally from the OHWM of the stream, river, or lake or from the CMZ, where present, to the specified width. The RB is measured horizontally from the landward boundary of the RMA as shown in Figure 20.740.110-1.

Figure 20.740.110-2



b. *Riparian Management Area Width Averaging.* The width of the RMA may be modified (see VMC 20.170.080[B][1]) if all the following are met:

i. The total square footage of the Riparian Management Area RMA (VMC 20.740.110[B][2][a][i]) is not reduced;

ii. There is no net loss of functions as a result of the averaging; and

iii. ~~*Area.*~~The reduction of the Riparian Management Area RMA width at any location is no greater than 25 percent of the required standard or SPTH width under VMC 20.740.110(2)(a)(i or ii).

c. *Permitted Development and Uses within RMAs and RBs and Development Standards.*

i. *Development and Uses within the Riparian Buffer.* Development or clearing activity is permitted in the RB that meets the general performance standards in VMC 20.740.110(B).

ii. *Development and Uses within the RMA .* No development or clearing activity is allowed within the ~~Riparian Management Area~~ RMA unless such activity is:

(A) ~~1.~~ A water-dependent, water-related or water-enjoyment activity ~~where~~for which there are no feasible alternatives that would have a less adverse impact on the ~~Riparian Management Area or Riparian Buffer. The applicant shall minimize the impact and mitigate for any unavoidable impact to functions; Cost may be considered, but shall not be overriding; or~~RMA ;

(B) ~~2. A~~Infrastructure, including a road, railroad, trail, dike, or levee or a water, sewer, stormwater conveyance, gas, power, cable, fiber optic, or telephone facility that cannot feasibly be located outside of the ~~Riparian Management Area, that minimizes impacts, and that mitigates for any unavoidable impact to functions. Cost may be considered, but shall not be overriding; or~~RMA.;

(C) ~~3.~~ Mitigation for activities allowed by this chapter, providing the activity ~~provides~~results in no net loss of riparian habitat functions on the site~~.~~; or

c. *Modification of the Riparian Management Area Width.* The width of the Riparian Management Area may be modified (See VMC 20.170.080(B)(1)) if all the following are met:

1. The square footage of the area meeting the performance standards of the Riparian Management Area (VMC 20.740.110(C)(2)(b)) is not reduced;Trails and

i. 2. wildlife viewingThere is no net loss of functions as a result of the averaging; and

3. Notwithstanding any other provision, the reduction of the Riparian Management Area width at any location may be no greater than 25%.

d. Owners of developed properties within the Riparian Management Area or Riparian Buffer are encouraged to enhance the area by planting native plants and to apply integrated pest management.

e. Agricultural activities in the Riparian Management Area or Riparian Buffer are encouraged to develop farm conservation plans. (Ord. M-3931 § 25, 11/02/2009; Ord. M-3844 § 2, 10/01/2007; M-3692, Added, 02/28/2005, Sec 2)

(D) c. Enclosed areas below the BFE shall not be considered to be the lowest floor when so that they are not part of a basement and meet the requirements of subsection (J)(10)(d) of this sectiondo not interfere with hydrology of the waterbody and do not result in increased sediment entering the waterbody.

iii. *Modifications to Existing Development.* When replacing or removing existing development within an RMA or RB, the applicant shall implement the following, where applicable, during site construction:

(A) Evaluate the RMA and RB to pinpoint the best sites to restore and consider connectivity and adjacency to other priority habitats;

(B) Improve aquatic connectivity by replacing culverts and removing barriers to movement;

(C) Revegetate with native plants and consider improvements for wildlife by integrating structures necessary for nesting, breeding, and foraging;

(D) As existing development is remodeled or replaced, incorporate additional setbacks for streams;

(E) Control access to RMAs and RBs during construction to limit soil compaction. Avoid operating equipment near waterbodies to reduce sedimentation and soil compaction; and

(F) Avoid using chemicals in the RMA and RB that are not approved by the Washington State Department of Ecology (Ecology).

iv. *Mitigation.* When mitigating on-site impacts, the following guidelines, where applicable, shall be implemented when designing mitigation for impacted riparian areas, if a restoration opportunity is available on site and within the RMA or RB:

(A) Protect riparian functions that remain, especially in places that are high functioning and implement actions that enhance degraded functions;

(B) Increase riparian width in areas of high function; and

(C) Prioritize opportunities to maintain and restore in-stream and riparian connectivity.

D. *Additional Critical Areas Report Requirements.*

1. A Critical Areas Report for an RMA or RB shall include:

   a. The SPTH riparian area width in the mapping tool referenced in WDFW's Riparian Ecosystems, Volume 2: Management Recommendations document, if the applicant is not proposing to use the standard-width RMA and RB.

   b. Evaluation of the habitat functions using a habitat evaluation tool approved by WDFW.

   c. In addition to the standards of VMC 20.740.050(F), where a mitigation plan is required as part of the Critical Areas Report for a Fish and Wildlife Habitat Conservation Area that involves a waterbody, RMA, or RB, the monitoring program protocol shall include, where relevant to the impacted functions:

      i. Observations and measurements of riparian integrity and quality (buffer width, riparian corridor continuity or fragmentation, species diversity, stand age, plant survival rates);

      ii. Large woody debris surveys; and

      iii. Streamflow monitoring.

      iv. Water quality monitoring to detect pollution impacts.

      v. Biological monitoring (including fish surveys and benthic macroinvertebrate sampling.

2. If the clearing or development activity is in the RMA, the Critical Areas Report shall contain all the following information, if applicable:

   a. How the clearing or development activity constitutes a water-dependent, water-related, or water-enjoyment use;

   b. How the clearing or development activity cannot feasibly be located on the site outside of the RMA;

   c. How the proposal meets the RMA width averaging standard (VMC 20.740.110(B)(2)(b)); and

d. How the proposal will not adversely affect the connectivity of habitat functions.

d. *Crawlspace Construction.* Crawlspaces are a type of enclosed area below the BFE. Crawlspaces constructed at or above the lowest adjacent exterior grade are preferred. (Note: Insurance premiums for structures with below-grade crawlspaces will be higher than those with the interior elevation at or above the lowest adjacent exterior grade.) Refer to the most current FEMA Technical Bulletin 11, Crawlspace Construction for Buildings Located in Special Flood Hazard Areas (available from the planning official) for more information. Crawlspaces:

i. Are prohibited in areas with flood velocities greater than five feet per second unless designed by a qualified professional (in this case an architect or professional engineer).

ii. Shall meet the requirements of subsections (J)(8)(a) through (J)(8)(c) of this section, Enclosed Areas Below the Base Flood Elevation.

3. Shall not be considered "basements" for the purposes of this section when constructed according to the following standards:

a. The interior grade of a crawlspace below the base flood elevation must not be more than two feet below the lowest adjacent exterior grade.

b. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four feet at any point.

c. The crawlspace must be equipped with a drainage system that removes floodwaters from the interior area of the crawlspace in a reasonable period of time after a base flood event.

9. *Subdivisions.*

a. All subdivisions shall be designed:

i. To ensure that no residential structure or other structures for human habitation are located in the floodway even though lots may extend into the floodway;

ii. To avoid placement of any structures in areas of special flood hazards and in CMZs;

iii. Where it is not possible to design a subdivision in a manner to avoid placement of any structures in areas of special flood hazards or CMZs, the subdivision shall be designed to minimize or eliminate potential flood damage.

b. All subdivisions shall have facilities such as sewer, gas, power, cable, fiber optic, telephone, stormwater and water systems located and constructed to minimize or eliminate flood damage. (See subsection (J)(2) of this section, Property Damage; subsection (J)(4) of this section, Water; subsection (J)(5) of this section, Waste; subsection (J)(6) of this section, Construction Materials and Methods; and subsection (J)(7) of this section, Anchoring.)

c. All subdivisions shall have adequate drainage provided to reduce exposure to flood damage. (See subsection (J)(3) of this section, Drainage.)

10. *Residential Construction (Including Manufactured Homes).*

a. *Residential Construction in the Floodway.*

i. New construction and reconstruction of residential development including placement and replacement of all types of manufactured homes is prohibited in the floodway, unless sited as a temporary use in accordance with requirements listed in this section.

ii. Existing residential structures and manufactured homes in the floodway are nonconforming, but may be repaired or improved, provided:

A. The repair or improvement does not increase the ground floor area of the structure; and

B. The repair or improvement does not result in adverse impacts to other properties either upstream or downstream; and

C. The cost of the repair or improvement does not exceed 50 percent of the market value of the structure either:

1. Before the start of repair or improvement where there is no damage to the structure; or

2. Before flood or other damage to the structure occurred.

D. Any project for improvement of a structure to correct existing violations of local health, sanitary, or safety code specifications which have been identified by the planning official and which are the minimum necessary to assure safe living conditions may be excluded from the 50 percent.

E. Any project for improvement to a structure identified as a historic place may be excluded from the 50 percent.

b. *Residential Construction in Other Areas of Special Flood Hazards and CMZs.* In areas of special flood hazards except the floodway and in channel migration zones:

i. New residential construction and reconstruction, including all types of manufactured homes and other structures for human habitation shall meet all the provisions of this chapter, including subsections (J)(8) and (J)(10)(c) through (J)(10)(d) of this section.

ii. New placement or replacement of all types of manufactured homes shall meet the standards of subsection (J)(7) of this section, Anchoring.

iii. *Repair or Substantial Improvement.* All provisions of this chapter (including the elevation standards of subsections (J)(8), (J)(10)(c) and (J)(10)(d) of this section), all state and local health, sanitary, safety codes, and where applicable, historic preservation codes shall be met when the cost of repair or improvement of an existing residential structure exceeds 50 percent of the market value of the structure either:

A. Before the start of repair or improvement where there is no damage to the structure; or

B. Before flood or other damage to the structure occurred.

c. *Elevation.*

i. *BFE Established.* The lowest floor (including basement) of new residential structures (including but not limited to reconstruction, substantial improvement, the placement or replacement of all types of manufactured homes) shall be elevated at least one foot above base flood elevation. Structures shall be elevated using means other than fill (such as extended foundation or other enclosure walls, piles, or columns) whenever feasible. Mechanical equipment and utilities shall be waterproofed or elevated at least one foot above the BFE.

ii. *No BFE.* In areas where the base flood elevation has not been provided or is not available from an authorized source (subsections A and (I)(5) of this section) and the critical areas report demonstrates to the satisfaction of the planning official that the proposed development would be reasonably safe from flooding, new residential construction (including but not limited to substantial improvement and the placement of manufactured homes) shall be elevated at least two feet above the highest adjacent grade. (Note: Failure to elevate at least two feet above the highest adjacent grade may result in higher insurance rates.)

d. *Fully Enclosed Areas Below Lowest Floor.* Fully enclosed areas below the lowest floor that are subject to flooding are prohibited unless designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must be certified by a qualified professional (in this case, a registered professional engineer or architect), or must meet or exceed the following minimum criteria:

i. Contain a minimum of two openings having a total net area of not less than one square inch for every one square foot of enclosed area subject to flooding;

ii. The bottom of all openings are no higher than one foot above grade; and

iii. Openings permit the automatic entry and exit of floodwaters even when equipped with screens, louvers, or other coverings or devices.

For guidance on flood openings, see FEMA Technical Bulletin 1-93, Openings in Foundation Walls.

iv. A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for automatic entry and exit of floodwaters.

11. *Nonresidential Construction.* New construction and substantial improvement of any nonresidential structure shall either be elevated (subsection (J)(11)(a) or (J)(11)(b) of this section) or flood-proofed (subsection (J)(11)(c) of this section):

a. *Be Elevated: BFE Established.*

i. Have the lowest floor, including basement, elevated at least one foot above the base flood elevation or elevated as required by ASCE 24, whichever is greater;

ii. Meet the same standards for space below the lowest floor as described in subsections (J)(8)(d) and (J)(10)(d)(i) through (J)(10)(d)(iii) of this section; and

iii. Have mechanical equipment and utilities waterproofed or elevated at least one foot above the BFE, or as required by ASCE 24, whichever is greater.

b. *Be Elevated: No BFE.*

i. In areas where the base flood elevation has not been provided or is not available from mapped data from federal or state sources and the critical areas report demonstrates to the satisfaction of the planning official that the proposed development would be reasonably safe from flooding, new nonresidential construction shall be elevated at least two feet above the highest adjacent grade. Failure to elevate at least two feet above the highest adjacent grade may result in higher insurance rates; and

ii. Meet the same standards for space below the lowest floor as described in subsections (J)(8)(d) and (J)(10)(d) of this section; or

c. *Be Flood-Proofed.* Together with attendant utility and sanitary facilities shall:

i. Be flood-proofed so that below one foot (or more) above the base flood elevation, the structure is watertight with walls substantially impermeable to the passage of water or dry flood-proofed to the elevation required by ASCE 24, whichever is greater;

ii. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

iii. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the planning official as set forth in subsection L of this section.

12. *Critical Facilities.*

a. Critical facilities housing vulnerable populations and emergency services shall be prohibited in the floodway.

b. In areas of special flood hazards except the floodway and in CMZs, construction of new critical facilities shall be prohibited unless the applicant demonstrates that:

i. No feasible alternative site is available; and either:

A. The lowest floor, entrances, egresses, and to the extent feasible access routes are elevated to three feet above the base flood elevation or to the elevation of the 500-year flood, whichever is higher; or

B. The applicant demonstrates that other measures would ensure that in the event of a flood, the facility would remain safe and fully operational and that potentially harmful materials would not be displaced by or released into floodwaters. Such measures shall be conditions of approval of the critical areas permit.

13. *Recreational Vehicles.*

a. Recreational vehicles shall be located outside the floodway.

b. Recreational vehicles in areas of special flood hazard except the floodway and in CMZs shall either:

i. Be on the site for fewer than 180 consecutive days;

ii. Be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by quick disconnect-type water, sewer, stormwater, gas,

power, cable, fiber optic, telephone, and security devices, and have no permanently attached additions; or

iii. Meet the requirements of subsection (J)(7) of this section, Anchoring; subsection (J)(8) of this section, Enclosed Areas below the Base Flood Elevation; and subsection (J)(10)(c) of this section, Elevation.

14. *Appurtenant Structures (Detached Garages and Small Storage Structures).* For A zones:

a. Appurtenant structures used solely for parking of vehicles or limited storage may be constructed such that the floor is below the BFE, provided the structure is designed and constructed in accordance with the following requirements:

i. Use of the appurtenant structure must be limited to parking of vehicles or limited storage;

ii. The portions of the appurtenant structure located below the BFE must be built using flood-resistant materials;

iii. The appurtenant structure must be adequately anchored to prevent flotation, collapse, and lateral movement;

iv. Any machinery or equipment servicing the appurtenant structure must be elevated or flood-proofed to or above the BFE;

v. The appurtenant structure must comply with floodway encroachment provisions in Section 5.4-1;

vi. The appurtenant structure must be designed to allow for the automatic entry and exit of floodwaters in accordance with Section 5.2-1(5);

vii. The structure shall have low damage potential;

viii. If the structure is converted to another use, it must be brought into full compliance with the standards governing such use; and

ix. The structure shall not be used for human habitation.

b. Detached garages, storage structures, and other appurtenant structures not meeting the above standards must be constructed in accordance with all applicable standards in Section 5.2-1.

c. Upon completion of the structure, certification that the requirements of this section have been satisfied shall be provided to the floodplain administrator for verification.

15. *Alteration of Watercourse.*

a. The planning official shall notify adjacent communities and the state coordinating agency, Washington State Department of Ecology, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administrator.

b. Alteration or relocation of a watercourse shall be allowed only after:

i. Certification by a qualified professional that the alteration or relocation:

A. Is the only feasible alternative or is part of a restoration project approved by the appropriate state or federal agencies;

B. Will not diminish the flood-carrying capacity of the watercourse;

C. Will not block side channels;

D. Will be accomplished using soft armoring techniques wherever possible;

E. Will avoid to the extent possible and then minimize and mitigate removal of vegetation including downed woody vegetation; and

F. Will not endanger development in the channel migration zone.

ii. The applicant provides assurance acceptable to the planning official of maintenance of the relocated channel such that the flood carrying capacity of the watercourse is not diminished.

16. *Changes to Special Flood Hazard Area.*

a. If a project will alter the BFE or boundaries of the SFHA, then the project proponent shall provide the community with engineering documentation and analysis regarding the proposed change. If the change to the BFE or boundaries of the SFHA would

normally require a letter of map change, then the project proponent shall initiate within 180 days of the information being made available, and receive approval of, a conditional letter of map revision (CLOMR) prior to approval of the development permit. The project shall be constructed in a manner consistent with the approved CLOMR.

b. If a CLOMR application is made, then the project proponent shall also supply the full CLOMR documentation package to the floodplain administrator to be attached to the floodplain development permit, including all required property owner notifications.

K. *Variances and Minor Exceptions.* Variances as interpreted in the National Flood Insurance Program are based on the principle that they pertain to a physical piece of property. They apply to the land and are not personal in nature, do not pertain to the structure, its inhabitants, or economic or financial circumstances. The development standards contained in this section are required by the Federal Emergency Management Agency (FEMA) under the National Flood Insurance Program (NFIP) to protect life and property from flood damage.

Variances from the NFIP standards of this section shall meet the approval criteria and other requirements of this subsection in addition to any other applicable variance criteria or requirements (e.g., Chapter 20.290 or 20.760 VMC). Variances from the NFIP standards of this section shall be processed as Type I or II variances or shoreline variances as appropriate, not as minor exceptions (VMC 20.740.070).

Variances or minor exceptions from other critical area standards (any standards of this chapter not in this section) shall meet the applicable criteria and follow the applicable procedures for the relief requested (VMC 20.740.070, or Chapter 20.290 or 20.760VMC).

1. NFIP variances may be allowed:

a. For historic structures. NFIP variances may be issued for the repair, reconstruction, rehabilitation or restoration of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure. This variance possibility is only available to those structures that are:

i. Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

ii. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

iii. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior;

iv. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

A. By an approved state program as determined by the Secretary of the Interior; or

B. Directly by the Secretary of the Interior in states without approved programs.

v. The proposed development will not preclude the structure's continued designation as a historic structure.

b. From the elevation standard. An NFIP variance from the elevation standard may be issued for new construction and substantial improvements to be erected on a small or irregularly shaped lot contiguous to and surrounded by lots with existing structures constructed below the base flood elevation. As the lot size increases the technical justification required for issuing the variance increases.

c. From the flood-proofing standard for nonresidential buildings. NFIP variances may be issued for nonresidential buildings to allow a lesser degree of flood-proofing than watertight or dry flood-proofing where it can be determined that such action:

i. Will have low damage potential;

ii. Complies with all other NFIP variance criteria except subsection (K)(1)(a)(ii) of this section;

iii. Complies with subsection (J)(4) of this section, Water; subsection (J)(5) of this section, Waste; subsection (J)(7) of this section, Anchoring; and subsection (J)(9) of this section, Subdivisions.

d. For allowed development within the floodway. NFIP variances may be issued for development within a floodway only when the requirements of subsection (J)(1)(b) of this section are met.

2. *NFIP Variance Approval Criteria.* NFIP variances from elevation and flood-proofing standards, and for development in the floodway (subsections (K)(1)(a)(ii) through (iv) of this section may be granted only if the applicant demonstrates that the requested action conforms to all of the following criteria:

a. The NFIP variance is the minimum necessary, considering the flood hazard, to afford relief.

b. The applicant has demonstrated good and sufficient cause.

c. Failure to grant the NFIP variance would result in exceptional hardship to the applicant. (Exceptional hardship for an NFIP variance is described in a FEMA memorandum dated July 22, 1986, entitled Resource Materials on NFIP Variance Criteria available from the planning official.)

d. Granting the NFIP variance will not result in increased flood heights or velocities, additional threats to public safety, significantly increased property damage potential, extraordinary public expense, or conflict with existing local laws or ordinances.

e. Demonstration that the following factors have been considered:

i. The danger that materials may be swept onto other lands to the injury of others;

ii. The danger to life and property due to flooding or erosion damage;

iii. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

iv. The importance of the services provided by the proposed facility to the community;

v. The necessity to the facility of a waterfront location, where applicable;

vi. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

vii. The compatibility of the proposed use with existing and anticipated development;

viii. The relationship of the proposed use to the comprehensive plan;

ix. The safety of access to the property in times of flood for ordinary and emergency vehicles;

x. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and

xi. The costs of providing governmental services during and after flood conditions, including maintenance and repair of facilities such as sewer, gas, electrical, stormwater, and water systems, and streets and bridges.

3. *Notices Required.* A notice to the applicant is required whenever a variance is approved, approved with conditions, or denied. Such notice shall include the decision and the reasons for the decision. When a variance from the elevation standard is approved or approved with conditions, such notice shall state that the structure will be permitted to be built with a lowest floor elevation below that normally required with respect to the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

L. *Information to Be Obtained and Maintained.*

1. For all new and substantially improved structures and development, the planning official shall complete Section B of a current elevation certificate and obtain and record on that certificate:

a. For elevated (rather than flood-proofed) structures and development, the actual (as-built) elevation in relation to mean sea level of the lowest floor (including basement), and whether or not the structure contains a basement.

b. For nonresidential, flood-proofed structures, the elevation to which the structure was flood-proofed. All flood-proofing certifications shall also be maintained.

c. Maintain all records pertaining to development in frequently flooded areas subject to the provisions of this chapter for public inspection.

2. *Records of Variance Actions.* The planning official shall keep records of all variance actions and report any approved variances to the Federal Insurance Administrator upon request.

3. *Records of Appeal Actions.* The planning official shall keep records of all appeal actions. (Ord. M-4438 § 4(J), 2023; Ord. M-4325 § 3, 2020; Ord. M-4020 § 2, 2012; Ord. M-4017 § 9, 2012; Ord. M-3844 § 2, 2007; Ord. M-3692 § 2, 2005)

3. For land use and development-related activities on a site with PHS-designated priority Oregon white oak woodland habitat, the applicant shall be required to demonstrate compliance with WDFW's latest guidance: *Best Management Practices for Mitigating Oregon White Oak Priority Habitat* (January 2024) the Washington Department of Fish and Wildlife WDFW's latest guidance: Best Management Practices for Mitigating Oregon White Oak Priority Habitat (January 2024) and any subsequent revisions. The report shall include mapping and an evaluation of the habitat functions.

   a. The critical areas report shall also identify protection and mitigation for the impacted Oregon white oaks on the site. In circumstances where it is demonstrated that preservation or mitigation of impacts on-site is not practicable, the applicant shall provide a minimum of two alternative site designs and layouts to demonstrate that impacts cannot be avoided or be reduced to result in less impacts. The planning director may approve reductions to numerical standards including parking and setbacks under the minor exception process in VMC 20.740.070 to avoid or reduce impacts.

   b. If compensation is determined to be the only available option for the proposed impact, the report shall include the quantity and method of mitigation to compensate for permanent and temporal impacts in accordance with WDFW's Best Management Practices for Mitigating Impacts to Oregon White Oak Priority Habitat, including the following:

i. Assessment of priority Oregon white oak woodlands and individuals to determine if they meet the designation criteria for priority habitat and species, the size of each woodland or individual, and the level of ecological function provided;

ii. Analysis of the physical and temporal loss of the impacted Oregon white oak woodland habitat;

iii. The corresponding mitigation ratios for both physical and temporal loss of the impacted Oregon white oak habitat and the location of such mitigation; and

iv. Description of monitoring as outlined by WDFW's guidance.

20.740.130 Geologic Hazard Areas.

A. ~~A.~~ *Designation.* ~~and Location.~~

1. Designated or potential Geologic Hazard Areas include Landslide, Seismic, and Erosion Hazard Areas. With the exception of ~~bank erosion hazard areas and fault rupture hazard areas~~Bank Erosion Hazard Areas and Fault Rupture Hazard Areas, their potential locations are shown on maps available from the ~~planning official.~~City of Vancouver, Clark County, and the State of Washington. Final designations shall be based on site conditions and other available data or information ~~[See VMC 20.740.020(C)(1)].~~(see this chapter's General Provisions section).

~~1.~~ *Landslide Hazard Areas.* ~~Potential~~These areas are subject to landslides due to a combination of geologic, topographic, and hydrologic factors. They include any areas susceptible to landslide ~~hazard areas are identified from the sources listed below.~~

~~a. Slopes greater than 25% on the property and adjacent areas within 100 feet, except engineered slopes such as cut and fill slopes along transportation routes (including trails), railroad and other berms, or dikes.~~

2. ~~b. Areas~~ because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors as defined in VMC Chapter 20.150. Landslides are areas shown as "areas of historic or active landslides~~,~~," "areas of potential instability~~, or~~," and "areas of older landslide debris ~~identified on the 1975 map by~~

Allen Fiksdal of the Washington State Department of Natural Resources entitled, " on maps available from Clark County Maps Online ("Slope Stability: of Clark County-" report [1975] and "Geologic Map of Vancouver Quadrangle" map [1987]) and maps available through the DNR's Geologic Information Portal, including the "Washington as revised or superseded, or identified from other available data or in the field by a qualified professional and adjacent areas within 100 feet.Geologic Survey-Protocol Landslide Mapping" and "Other Compiled Landslide Mapping" layers.

3. 2. *Seismic Hazard Areas.* Seismic Hazard Areas include Liquefaction or Dynamic Settlement, Ground Shaking Amplification, and Fault Rupture Hazard Areas. as designated below and defined in VMC Chapter 20.150.

a. a. *Liquefaction or Dynamic Settlement.Hazard Areas.* Settlement and soil liquefaction conditions occur in areas underlain by cohesionless soils of low density, typically in association with a shallow groundwater table. The following are designated Liquefaction or Dynamic Settlement Hazard Areas:

i. 1. Areas with Low to Moderate,, Moderate, Moderate to High, or High liquefaction susceptibility or Peat Deposits as indicated on the Alternative Liquefaction Susceptibility Map of Clark County, Washington based on Swanson's Groundwater Model by Stephen P. Palmer, Sammantha L. Magsino, James L. Poelstra, and Rebecca A. Niggemann, September, 2004,liquefaction susceptibility maps from the DNR Geologic Information Portal as revised or superseded.

2. Areas of fill (Fn) identified by the 1972 USDA Soil Conservation Service Soil Survey of Clark County Washington and by the planning official, based on other reliable evidence.

b. b. *Ground- Shaking Amplification Areas.* The following are designated Ground Shaking Amplification Hazard Areas:

Site Classes C to D, D, D to E, E and F as indicated on the Site Class Map of Clark County, Washington by Stephen P. Palmer, Sammantha L. Magsino, James L. Poelstra, and Rebecca A. Niggemann, September, 2004 as revised or superseded, as shown on the National Earthquake Hazard Reduction

Program (NEHRP) Seismic Site Class layer available on the DNR Geologic Information Portal.

c. ~~c.~~ *Fault Rupture Hazard Areas.* Potential Fault Rupture Hazard Areas are faults identified ~~on geological maps prepared and maintained~~ by the ~~Washington Department of Natural Resources (~~DNR~~), U.S. Geological Survey (~~ Geologic Information Portal "Seismogenic Folds, Known or Suspected" and "Active Faults, Known or Suspected" layers; USGS~~),~~ on geologic maps available from the Oregon Department of Geology and Mineral Industries (DOGAMI), Clark County~~, Washington~~ Maps Online, or identified from other available data or in the field by a qualified professional and adjacent areas within 100 feet.

4. ~~3.~~ *Erosion Hazard Areas.* Erosion Hazard Areas include Soil Erosion and Bank Erosion Hazard Areas and as defined in VMC Chapter 20.150. These are also areas that are likely to become unstable, such as bluffs, steep slopes, and areas with unconsolidated soils.

a. ~~a.~~ *Soil Erosion Hazard Areas.* The following are designated Soil Erosion Hazard Areas:

i. *Severe or Very Severe Erosion Hazard Areas.* Areas with soils identified as having a severe or very severe erosion hazard by the 1972 U.S. Department of Agriculture (USDA) Soil Conservation Service Soil Survey of Clark County, Washington.

ii. ~~b.~~ *Bank Erosion Hazard Areas.* Bank Erosion Hazard Areas are areas along lakes, streams, and rivers that are subject to regression or retreat due to lacustrine or fluvial processes and adjacent land within 100 feet.

B. *Performance Standards.*

1. *General Standards.*

a. Critical facilities, as defined in VMC Chapter 20.150, are prohibited in the following areas unless there is no other location available, a mitigation proposal is included in the development plan, and a Critical Areas Report

prepared by a qualified professional for geologically hazardous areas establishes that the area is safe for development for the type of facility proposed and the type of hazard:

i. Landslide Hazard Areas

ii. Bank Erosion Hazard AreasB.

iii. Fault Rupture Hazard Areas

b. Buffer width shall be measured on a horizontal plane from a perpendicular line established at all edges of the geologic hazard area (see VMC Chapter 20.170).

The applicant shall demonstrate that,~~*Additional Critical Areas Report Requirements.* In addition to the requirements of VMC 20.740.050, the following are Critical Areas Report requirements for development proposals in potential geologic hazard areas. These requirements may be adjusted as appropriate by the planning official. The Critical Areas Report will result in a conclusion as to whether the potential geologic hazard area is an actual geologic hazard area (See VMC 20.740.130(B)(6)). If it is, the Critical Areas Report requires additional information, mapping, and analysis (See VMC 20.740.130(B)(7)).~~

~~1. Identification of the site and project area (defined at VMC 20.150), topography in 2-foot contours (or other increment at the discretion of the planning official), gas, power, cable, fiber optic, telephone, sewer, water, and stormwater management facilities, wells, on-site septic systems, dikes, levees, and existing structures on the site plan required by VMC 20.740.050; and~~

~~2. Detailed review of field investigations, published data and references, data and conclusions from past geologic studies or investigations, site-specific measurements, tests, investigations, or studies, and the methods of data analysis and calculations that support the results, conclusions, and recommendations; and~~

~~3. Field investigation and evaluation of the areas on site for liquefaction or dynamic settlement, ground shaking amplification, fault rupture, and soil erosion hazards; and on or within 100 feet of the site for landslide and bank erosion hazards; and~~

4. A description of the surface and subsurface geology, hydrology, drainage patterns, soils, and vegetation on site for liquefaction or dynamic settlement, ground shaking amplification, fault rupture, and soil erosion hazards; and on or within 100 feet of the site for landslide and bank erosion hazards; and

5. Identification of the hazard area indicators that were found (if any) on site for liquefaction or dynamic settlement, ground shaking amplification, fault rupture, and soil erosion hazards; and on or within 100 feet of the site for landslide and bank erosion hazards; and

6. Conclusion as to whether there is a geologic hazard area on site or for landslide and bank erosion hazards on or within 100 feet of the site; and

7. If a liquefaction, dynamic settlement, ground shaking amplification, fault rupture, or soil erosion hazard is found to exist on site or if a landslide or bank erosion hazard is found to exist on or within 100 feet of the site:

a. Label and show on the site plan required by VMC 20.740.050:

1. The location(s), extent, and type(s) of geologic hazard area(s) identified; and

2. The location(s) and extent of any area(s) that must be left undisturbed to protect the proposed development from damage or destruction and to protect the hazard area(s) from the impacts of the proposed development; and

3. The boundaries of the area that may be disturbed.

4. The dimension of the closest distance(s) between the geologic hazard area(s) and the project area.

5. The dimension of the closest distance(s) [See VMC 20.170.030(C)] between any nondisturbance area [VMC 20.740.130(B)(7)(a)(2)] and the project area.

For bank erosion hazard areas, show these areas, boundaries, and dimensions based upon natural processes and, if applicable, proposed bank stabilization measures.

b. Analysis of the erosion processes on site for soil erosion hazard areas and on or within 100 feet of the site for bank erosion hazard areas.

c. Evaluation of the impact of the geologic hazard area(s) on the proposed development, other properties, and other critical areas.

i. 1. *Landslide hazard areas.* The impact of the run-out hazard of landslide debris from both upslope and downslope shall be included in the evaluation.

2. *Bank erosion hazard areas.* Evaluation of impacts on other properties shall include properties both upstream and downstream of the subject property.

d. Evaluation of the impact of the proposed development on the geologic hazard area(s).

a. e. Assessments and conclusions regarding geologic hazard(s) for both existing and proposed (post-development) site conditions. The ultimate build-out scenarios must be considered and addressed in cases such as land division and master planning where build-out is not scheduled to occur as a direct or immediate result of project approval.

a. f. Written discussion of:

1. The risk of damage or destruction from the geologic hazard(s) with respect to human health and safety; infrastructure; the proposed development; other properties (both upstream and downstream for bank erosion hazard areas); and other critical areas; and

i. 2. Whether and to what degree the proposed development would increase the risk from the geologic hazard(s), such as the occurrence of a landslide or the rate of regression.

g. Recommendations for mitigation of impacts to protect:

i. 1. Human health and safety;

2. Infrastructure;

3. The proposed development;

4. Other properties (both upstream and downstream for bank erosion hazard areas);

5. Other critical areas; and

i. 6. The hazard area during construction and for the anticipated life of the proposed development. The ultimate build-out scenarios must be considered and addressed in cases such as land division and master planning where build-out is not scheduled to occur as a direct or immediate result of project approval.

h. A demonstration of how the standards of VMC 20.740.130(C) applicable to each geologic hazard area will be met.

C. *Performance Standards.*

1. *Landslide, Soil Erosion, and* Bank Erosion Hazard Areas. Development in nondisturbance areas (VMC 20.740.130(B)(7)(a)(2)) shall be prohibited. In other areas, development in landslide, soil erosion, and bank erosion hazard areas and their buffers [VMC 20.740.130(C)(1)(j)] shall be prohibited except where the applicant has demonstrated compliance with or satisfaction of the following standards or requirements.

c. a. The applicant has demonstrated that during construction and for the anticipated life of the proposed development, the proposed use(s), activity(ies), and structure(s):

1. Will not increase the threat of the geological hazard beyond pre-development conditions; and

2. Will not adversely impact other critical areas wherever feasible given the type of critical areas involved and the characteristics of the site; and

i. 3. Are designed so that the hazard to the proposed project is eliminated or mitigated to a level equal to or less than pre-development conditions; and

ii. 4. TheWill not adversely impact other critical areas, if avoidable, given the type of critical areas involved and the characteristics of the site;

iii. Are designed to minimize or eliminate life safety risk is minimal or eliminated; and

iv. ~~5.~~ Are certified by a qualified professional as safe as designed and under anticipated conditions.

2. *Landslide* ~~hazard~~*and Erosion Hazard Areas.* Development in non-disturbance areas shall be prohibited. In other areas, development in Landslide and Erosion Hazard Areas and their buffers shall be prohibited except where the applicant has demonstrated compliance with the following standards or requirements.

a. Landslide Hazard Areas may be ~~eliminated~~able to be mitigated through grading based on a Critical Areas Report ~~which~~that demonstrates that the slope will be stabilized ~~prepared by a qualified professional (in this case a licensed Engineering Geologist or Professional Engineer).~~ as described in Additional Critical Areas Report Requirements for Geologic Hazards.

i. The Critical Areas Permit shall be conditioned on a final inspection approval confirming that the grading and site are stable. At the applicant's expense, after site grading, ~~(a) the qualified professional who prepared the Critical Areas Report shall provide inspection specifications; and (b) an inspector acceptable to the City Building Official shall inspect the grading and the site and submit a report to the City indicating whether the site is stable.~~the applicant shall:

~~b. A plan for revegetation and landscape maintenance to ensure soil stabilization shall be developed and implemented in accordance with the mitigation plan requirements of VMC 20.740.050(F).~~

(A) ~~c.~~ Provide inspection specifications from the qualified professional who prepared the Critical Areas Report; and

(B) Inspect the grading and the site using an inspector acceptable to the City Building Official and submit a report to the City indicating whether the site is stable.

ii. Clearing, grading, uprooting, or otherwise impairing the soil stabilizing function of vegetation shall be prohibited during the wet season (November ~~1st~~1 to May ~~1st~~1), except as authorized under a

valid state or federal permit or a City Type I permit [VMC 20.740.040(A)(2)(f)].

b. d. Any required erosion mitigation work is to be performed by a certified erosion and sediment control lead in accordance with Ecology requirements.

c. The requirements of VMC Chapter 14.24, Erosion Control, shall be met.

d. Drainage patterns shall not be altered such that potential for damage or risk to the proposed project, the geologic hazard areaGeologic Hazard Area, or other critical areas or buffers is increased.

e. The requirements of VMC 14.24, Erosion Control shall be met.

e. f. Trails shall be for pedestrian and nonmotorized vehicular use only and shall be the minimum width necessary to meet applicable regulations.

f. g. *Roads in Landslide and Bank Erosion Hazard Areas.* A road through or across a landslideLandslide or bank erosion hazard area Bank Erosion Hazard Area shall meet the standards of VMC 20.740.13020.740.130(C)(1)(a)-(fB)(2) and shall not be:

i. 1. The sole access for a proposed subdivision (not including short subdivision) or critical facility;

ii. 2. Longer than 200 feet; or

iii. 3. Steeper than a 15% percent grade.

g. h. *Markers and Signs in Landslide Hazard Areas.*

i. 1. The boundary at the outer edge of the furthest of the Landslide Hazard Area, non-disturbance area (see this chapter's additional Critical Areas Report requirements for Geologic Hazard Areas), or buffer shall be identified with temporary signs prior to any site alteration.

ii. The boundary at the outer edge of landslide area tracts and easements shall be delineated with permanent survey stakes, using iron or concrete markers as established by local survey standards.

~~2. The boundary at the outer edge of the furthest of the landslide hazard area, nondisturbance area [VMC 20.740.130(B)(7)(a)(2)], or buffer shall be identified with temporary signs prior to any site alteration. Such temporary signs shall be replaced with permanent signs prior to occupancy or use of the site.~~

iii. ~~3.~~ These provisions may be modified by the ~~planning official~~Planning Official as necessary to ensure protection of ~~sensitive features or wildlife needs~~people and structures from the hazard.

h. ~~i. Bank~~ *Stabilization* ~~for Existing Development~~ *in Bank Erosion Hazard Areas.*

i. ~~1.~~ Bank stabilization measures may be employed to protect an existing structure when a Critical Areas Report conclusively demonstrates all of the following:

(A) ~~a.~~ Bank erosion threatens an established use or existing structure(s~~); and~~) within a three-year timeframe;

(B) ~~b.~~ The threatened use or structure(s) cannot be relocated landward of any ~~nondisturbance~~non-disturbance area ~~[~~(VMC ~~20.740.130(B)(7)(a)(2)]; and~~20.740.130(B)(7)(a)(2));

~~c. Where applicable, bank stabilization measures are necessary to the operation and location of water-dependent, water-related, or water enjoyment activities consistent with the City of Vancouver Shoreline Management Master Program; and~~

(C) ~~d.~~ Bank stabilization measures will not cause a significant adverse impact on upstream or downstream properties or an impact that cannot be mitigated without developing bank stabilization measures for those properties; and

(D) ~~e.~~ Bank stabilization measures will not cause a significant adverse impact on ~~fish, wildlife, or their habitats~~ a Fish and Wildlife Habitat Conservation Area protected by this chapter.

j. ~~2.~~ When bank stabilization is allowed, it shall be accomplished using beach nourishment, bioengineering (soft armoring) techniques, or a combination of

the two. Other techniques may be used when an approved Critical Areas Report demonstrates conclusively that beach nourishment, bioengineering (soft armoring) techniques, or a combination of the two will not provide sufficient protection for the remaining useful life of the structure(s) to be protected.

~~3. When bank stabilization is allowed, the pertinent policies and regulations of the City of Vancouver Shoreline Management Master Program shall apply in addition to the requirements of this section. The terms and conditions of any other required state or federal permit or approval shall also apply.~~

j. ~~j.~~ *Buffer.* The following regulations apply to ~~landslide~~Landslide and ~~bank erosion hazard area~~Bank Erosion Hazard Area buffers~~.~~:

i. Buffer widths

(A) No buffer is required for ~~soil erosion hazard areas. Buffers may be included in nondisturbance areas [VMC 20.740.130(B)(7)(a)(2)] and required planting and maintenance activities may be undertaken within them~~Soil Erosion Hazard Areas.

~~1. Buffer width shall be measured on a horizontal plane from a perpendicular line established at all edges of the geologic hazard area [See VMC 20.170.030(B) and (K)].~~

~~2. A vegetated buffer shall be maintained around all landslide and bank erosion hazard areas. No alteration to the buffer shall be undertaken without an erosion control plan approved pursuant to the provisions of VMC 14.24, Erosion Control and this chapter. New plantings shall consist of native vegetation. Maintenance shall be the responsibility of the property owner.~~

~~3.~~ The minimum buffer width ~~for bank erosion hazard areas shall be the distance recommended in an approved Critical Areas Report.~~

~~4. The minimum buffer width for landslide hazard areas shall be the greatest of the following distances:~~

a. from 50 feet from all edges of the landslide hazard area; or

b. A distance of 1/3 the height of the slope at the top of the slope and a distance of 1/2 the height of the slope at the and bottom of the slope [See VMC 20.170.030(J)]; or

(B) c. The minimum distance(s) recommended in an approved Criticalslope for Landslide and Bank Erosion Hazard Areas Reportshall be equal to two times the slope height or as recommended by a qualified professional in a geotechnical report.

(C) 5. A larger buffer width may be required for landslideLandslide and bank erosion hazard areasBank Erosion Hazard Areas at the discretion of the planning officialPlanning Official when:

(1) a. The adjacent land is susceptible to severe erosion and erosion control measures will not effectively prevent adverse impacts; or

(2) b. The area has a severe risk of slope failure or downslope stormwater drainage impacts; or

(3) c. The area is directly adjacent to a riparian management area, or wetland; or

(4) d. Recommended in an approved Critical Areas Report.

ii. Buffers may be included in non-disturbance areas (VMC 20.740.130(B)(7)(a)(2)) and required planting and maintenance activities may be undertaken within them.

The buffer around Landslide and Bank Erosion Hazard Areas shall be vegetated and shall be maintained by the property owner. New plantings shall consist of native vegetation. 6. The buffer width for landslide hazard areas may be reduced to as little as the smallest of the distances identified in VMC 20.740.130(C)(1)(j)(4) at the discretion of

~~the planning official when the dimensions of the landslide hazard area are smaller than those distances.~~

iii. ~~2.~~

iv. No alteration to the buffer that involves clearing of vegetation shall be undertaken without an erosion control plan approved pursuant to the provisions of VMC 14.24, Erosion Control and this chapter.

3. *Seismic Hazard Areas*.

~~a. *Liquefaction or Dynamic Settlement Hazard Areas.* All building structures in liquefaction or dynamic settlement hazard areas shall comply with the requirements of VMC Title 17, Building and Construction. No buffer is required for liquefaction or dynamic settlement hazard areas.~~

a. ~~b.~~ *Liquefaction or Dynamic Settlement and Ground Shaking Amplification Hazard Areas.* All building structures in ~~ground shaking amplification hazard areas~~Liquefaction or Ground Shaking Amplification Hazard Areas shall comply with the requirements of VMC Title ~~17~~17, Building and Construction ~~applicable to the NEHRP soil classification of the subject property.~~. No buffer is required for ~~ground shaking amplification hazard areas~~Liquefaction or Ground Shaking Amplification Hazard Areas.

b. ~~c.~~ *Fault Rupture Hazard Areas.*

i. ~~1.~~ A road through or across a fault rupture hazard area shall not be:

(A) ~~a.~~ The sole access for a proposed subdivision (not including short subdivision) or critical facility;

(B) ~~b.~~ Longer than 200 ~~feet';~~feet; or

(C) ~~c.~~ Steeper than a 15~~%~~ percent grade.

~~2. Structures for human habitation and critical facilities shall be prohibited within fault rupture hazard areas and buffers.~~

ii. ~~3.~~ Buffer.

a. Buffer width shall be measured on a horizontal plane from a perpendicular line established at all edges of the geologic hazard area [See VMC 20.170.030(B)].

(A) b. The buffer width shall be the greater of the following distances:

(1) i. 50 feet from all edges of a fault rupture hazard areaFault Rupture Hazard Area, except where critical facilities are involved, the minimum buffer distance shall be 100 feet [See VMC 20.170.030(L)];(see VMC 20.170.030[L]); or

(2) ii. The minimum distance recommended in an approved Critical Areas Report.

(B) c. A larger buffer width may be required when the planning officialPlanning Official determines that the buffer is not adequate to protect the proposed development. (Ord. M-3844 § 2, 10/01/2007; Ord. M-3692, Added, 02/28/2005, Sec 2)

iii. Structures for human habitation shall be prohibited within Fault Rupture Hazard Areas and buffers.

C. *Additional Critical Areas Report Requirements.* In addition to the requirements of VMC 20.740.050, the following are Critical Areas Report requirements for development proposals in potential Geologic Hazard Areas. These requirements may be adjusted as appropriate by the Planning Official. The Critical Areas Report will result in a conclusion as to whether the potential geologic hazard area is an actual geologic hazard area (see VMC 20.740.130[B][6]). If it is, the Critical Areas Report requires the following additional information, mapping, and analysis (see VMC 20.740.130[B][7]):

1. Identification of the site and project area (defined at VMC 20.150); topography of the site in 2-foot contours (or other increment at the discretion of the Planning Official);planned gas, power, cable, fiber optic, telephone, sewer, water, and stormwater management facilities, wells, on-site septic systems, dikes, levees; and existing structures on the site plan required by VMC 20.740.050;

2. Detailed review of field investigations, published data and references, data and conclusions from past geologic studies or investigations, site-specific measurements, tests, investigations, or studies, and the methods of data analysis and calculations that support the results, conclusions, and recommendations;

3. Field investigation and evaluation of the areas on Landslide, Erosion, Liquefaction or dynamic settlement, Ground Shaking Amplification, and Fault Rupture Hazard Areas on or within 100 feet of the site;

4. A description of the surface and subsurface geology, hydrology, drainage patterns, soils, and vegetation for Liquefaction or dynamic settlement, Ground Shaking Amplification, Fault Rupture, Soil Erosion Hazards, Landslide, and Bank Erosion Hazard Areas on or within 100 feet of the site;

5. Identification of any hazard area indicators that were found on site for Liquefaction or dynamic settlement, Ground Shaking Amplification, Fault Rupture, and Soil Erosion Hazards Areas and on or within 100 feet of the site for Landslide and Bank Erosion Hazard Areas;

6. Conclusion as to whether there is a geologic hazard area on site or within 100 feet of the site; and

7. If a geologic hazard is found to exist on site or if a landslide or bank erosion hazard is found to exist on or within 100 feet of the site, the report must include the following:

    a. Labeling and showing the following on the site plan required by VMC 20.740.050:

        i. The location(s), extent, and type(s) of geologic hazard area(s) identified;

        ii. The location(s) and extent of any area(s) that must be left undisturbed to protect the proposed development from damage or destruction and to protect the hazard area(s) from the impacts of the proposed development;

        iii. The boundaries of the area that may be disturbed;

iv. The dimension of the closest distance(s) between the geologic hazard area(s) and non-disturbance area and the project area;

v. For Bank Erosion Hazard Areas, show these areas, boundaries, and dimensions based upon natural processes and, if applicable, proposed bank stabilization measures; and

vi. The recommended buffer for Bank Erosion Hazard Areas.

b. Analysis of the erosion processes on site for Soil Erosion Hazard Areas and on or within 100 feet of the site for Bank Erosion Hazard Areas;

c. Evaluation of the impact of the Geologic Hazard Area(s) on the proposed development, other properties, and other critical areas, as follows:

i. *Landslide Hazard Areas.* The impact of the run-out hazard of landslide debris from both upslope and downslope shall be included in the evaluation.

ii. *Bank Erosion Hazard Areas.* Evaluation of impacts on other properties shall include properties both upstream and downstream of the subject property.

d. Evaluation of the impact of the proposed development on the geologic hazard area(s);

e. Assessments and conclusions regarding geologic hazard(s) for both existing and proposed (post-development) site conditions. The ultimate build-out scenarios must be considered and addressed in cases such as land division and master planning where build-out is not scheduled to occur as a direct or immediate result of project approval.

f. Written discussion of:

i. The risk of damage or destruction from the geologic hazard(s) with respect to human health and safety; infrastructure; the proposed development; other properties (both upstream and downstream for Bank Erosion Hazard Areas); and other critical areas; and

ii. Whether and to what degree the proposed development would increase the risk from the geologic hazard(s), such as the occurrence of a landslide or the rate of regression.

g. Recommendations for mitigation of impacts to protect:

i. Human health and safety;

ii. Infrastructure;

iii. The proposed development;

iv. Other properties (both upstream and downstream for Bank Erosion Hazard Areas);

v. Other critical areas; and

vi. The hazard area during construction and for the anticipated life of the proposed development. The ultimate build-out scenarios must be considered and addressed in cases such as land division and master planning where build-out is not scheduled to occur as a direct or immediate result of project approval.

h. A demonstration of how the standards of VMC 20.740.130(C) applicable to each geologic hazard area will be met.

20.740.140 Wetlands.

A. ~~A.~~ *Designating and Rating Wetlands.*

~~1.~~ *Designating Wetlands.* Wetlands are ~~those~~ areas~~,~~ that have been designated in accordance with the ~~approved federal wetland delineation manual and applicable regional supplements, that are inundated or saturated by surface or ground water 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.~~1987 Federal Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains Valleys and Coast Region Version 2.0 (2010 or as further updated) and are defined in VMC 20.150.. Wetlands ~~generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial~~are subject to a local government's

regulatory authority if they meet the definition of wetlands intentionally created (but not as mitigation for impacts to wetlands) from nonwetland 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 1990 that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands shall include those artificial wetlands intentionally created from nonwetland areas to mitigate conversion of wetlands.

1. non-federally regulated (isolated) wetlands. Final designations shall be based on site conditions as documented in a Wetland Critical Areas Report, and other available data or information (see VMC 20.740.020(C)(1)).20.740.020[C][1]).

2. 2. *Wetland Ratings.* Wetlands shall be rated according to the Washington State Department of Ecology (Ecology) wetland rating system, *Ecology Publication No. 23-06-009, Washington State Wetland Rating System for Western Washington –: 2014 Update,* Ecology Publication No. 14-06-029, October 2014*published July 2023*, or as revised by Ecology. The rating system document contains the definitions and methods for determining if the criteria below are met. The most recent version of the rating system form must be used.

a. a. *Wetland Rating Categories.*

i. i. *Category I.* Category I wetlandsWetlands are:

A. Relatively undisturbed estuarine wetlands larger than one acre;

(A) B. Wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program of the Department of Natural ResourcesDNR;

(B) C. Bogs;

(C) D. Mature and old-growth forested wetlands larger than one acre;

(D) E. Wetlands that perform many functions wellat a high level, scoring twenty-three23 points or more. These wetlands are those that:

~~1. Represent unique or rare wetland types;~~

~~2. Are more sensitive to disturbance than most wetlands;~~

~~3. Are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or~~

~~4. Provide a high level of functions.~~

ii. ~~ii.~~ *Category II.* Category II ~~wetlands~~Wetlands function at a moderately high function and are difficult, though not impossible to replace, scoring between ~~twenty~~20 and ~~twenty-two~~22 points.

~~iii. *Category III.* Category III wetlands are:~~

iii. ~~A.~~ Wetlands ~~with~~have generally been disturbed in some way and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. Category III wetlands:

(A) Have a moderate level of functions, scoring between ~~sixteen~~16 and ~~nineteen~~19 points; and

(B) ~~B.~~ Can often be adequately replaced with a well~~-~~planned mitigation project.

iv. ~~iv.~~ *Category IV.* Category IV ~~wetlands~~Wetlands have the lowest levels of functions (scoring fewer than ~~sixteen~~16 points) and are often heavily disturbed. These are wetlands that should be able to be replaced, or in some cases improved. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions~~,~~ and should be protected to some degree.

~~B. *Additional Critical Areas Report Requirements.* A critical areas report for wetlands shall be prepared according to the Washington State Wetland Rating System for Western Washington – 2014 Update, Ecology Publication No. 14-06-029, October 2014 or as revised by Ecology. The critical areas report shall contain an analysis of the wetlands including the following site- and proposal-related information:~~

1. A written assessment, data sheets and accompanying maps of any wetlands or buffers on the site including the following information:

a. a. Hydrogeomorphic (HGM) subclassification and Cowardin class;

b. Wetland category;

c. Wetland delineation and required buffers;

a. d. Existing wetland acreage;

a. e. Vegetative, faunal, and hydrologic characteristics;

f. Soil types and substrate conditions;

a. g. Topographic elevations, at one-foot contours; and

h. A discussion of the water sources supplying the wetland and documentation of hydrologic regime (locations of inlet and outlet features, water depths throughout the wetland, evidence of recharge or discharge, evidence of water depths throughout the year – drift lines, algal layers, moss lines, and sediment deposits).

2. Functional evaluation for the wetland and buffer using Ecology's most current approved method and including the reference of the method and all data sheets.

3. Proposed mitigation, if needed, including a discussion of alternatives and trade-offs inherent in the various alternatives (for example, where enhancement for one function would adversely affect another), a written description and accompanying maps of the mitigation area, including the following information:

a. a. Existing and proposed wetland acreage;

a. b. Existing and proposed vegetative and faunal conditions;

c. Surface and subsurface hydrological conditions of existing and proposed wetlands and hydrologically associated wetlands including an analysis of existing hydrologic regime and proposed hydrologic regime for enhanced, created, or restored mitigation areas;

d. Relationship to lakes, streams and rivers in the watershed;

~~e. Soil type and substrate conditions;~~

~~a.~~ ~~f. Topographic elevations, at one-foot contours;~~

~~g. Required wetland buffers including existing and proposed vegetation;~~

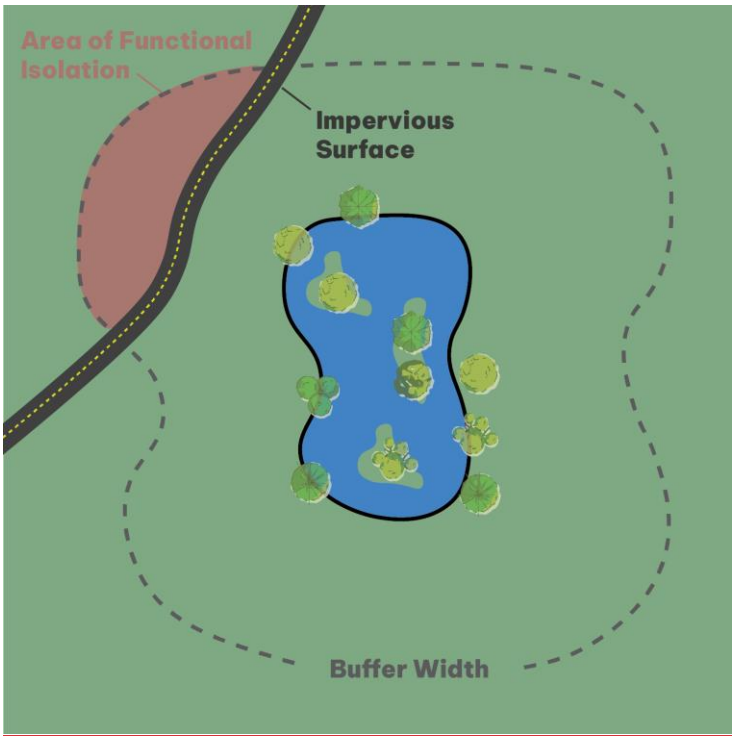
~~a.~~ ~~h. Identification of the wetland's contributing area; and~~

~~i. A functional assessment of proposed mitigation to ensure no net loss of shoreline ecological function.~~

B. ~~C.~~ *Development activities that functionally or physically isolate the wetland buffer.*

When existing impervious surfaces or other built structures, such as a levee or railroad corridor, functionally or physically isolate the wetland buffer from the waterbody or wetland, the regulated wetland buffer shall extend landward from the ordinary high water mark (OHWM) or channel migration zone (CMZ), whichever is greater and terminate at the waterward edge of the impervious surface or manmade structure. Development activities that occur within the area of functional isolation, or further landward, are exempt from the requirement to obtain a Critical Areas Permit.

Figure 20.740.140-1: Functional Isolation



The Planning Official shall rely on a site visit, aerial photographs, or other evidence provided by the applicant or the applicant's qualified professional in making a determination to reduce the width of the wetland buffer based on functional and/or physical isolation.

C. *Performance Standards.*

1. ~~1.~~ *General Requirements.* Development or clearing activities shall protect the functions of wetlands and wetland buffers on the site. Activities shall result in no net loss of wetland or buffer functions. Protection may be provided by avoiding (~~the~~ preferred ~~protection~~) or minimizing and mitigating as described in the general critical areas performance standards (VMC ~~20.740.060~~20.740.060).

a. ~~a.~~ *Uses in Wetlands.*

i. ~~i.~~ In Category I ~~wetlands~~Wetlands, only the following activities may be allowed:

(A) ~~A.~~ A road, railroad, trail, dike, or levee or a water, sewer, stormwater conveyance, gas, power, cable, fiber optic or telephone facility that cannot feasibly be located outside of the wetland, that minimizes the impact, and that mitigates for any unavoidable impact to functions~~. Cost may be considered, but shall not be overriding; or~~;

(B) ~~B.~~ Trails and wildlife viewing structures~~;~~, provided~~,~~ that the trails and structures minimize the impact and are constructed so that they do not interfere with wetland hydrology and do not result in increased sediment entering the wetland.~~;~~

(C) ~~ii.~~ Enhancement and restoration activities aimed at protecting the soil, water, vegetation, or wildlife; and

(D) Repair and maintenance of legally established non-conforming uses or structures, provided they do not increase the degree of nonconformity.

ii. In Category II ~~wetlands~~Wetlands, only the following activities may be allowed:

(A) ~~A.~~ Activities allowed in Category I ~~wetlands~~Wetlands pursuant to subsection ~~(C)(1)(a)(i)~~(C)(1)(a)(i) of this section.~~;~~

~~B. Enhancement and restoration activities aimed at protecting the soil, water, vegetation or wildlife.~~

(B) ~~C. Within shoreline jurisdiction (VMC 20.760.020),~~A water-dependent, water-related or water-enjoyment ~~activities~~activity where there are ~~no~~not feasible alternatives that would have ~~a~~ less ~~adverse~~ impact on the wetland~~, its buffers and other critical areas.~~; or

iii. D. Where non-water-dependent, related, or enjoyment activities are proposed, it shall be presumed that alternative locations are available, and activities and uses shall be prohibited unless the applicant demonstrates that the basic project purpose cannot reasonably be accomplished and successfully avoid or result in less adverse impacts on a wetland on another site or sites in the city of VancouverCity or Vancouver urban growth area. In Category III Wetlands, only the following activities may be allowed:

iii. In Category III wetlands only the following activities may be allowed:

(A) A. Activities allowed in Category II wetlandsWetlands pursuant to subsection (C)(1)(a)(ii)(C)(1)(a)(ii) of this section.;

(B) B. *Stormwater management facilities.* A Category III wetland can be physically or hydrologically altered to meet the requirements of a Low Impact Development (LID) methodology or Flow Control BMP, if all of the following criteria are met:

(1) If proposed, an LID BMP is determined to be feasible through a site-specific characterization;

(2) The wetland has a habitat score of 3 to 5 points;

(3) There will be no net loss of functions and values of the wetland;

(4) The wetland does not contain a breeding population of any native amphibian species;

(5) The hydrologic functions of the wetland can be improved as outlined in questions 3, 4, and 5 of Chart 4 and questions 2, 3, and 4 of Chart 5 in Selecting Mitigation Sites Using a Watershed Approach, (Western Washington) (Ecology Publication [#09-06-032 or #10-06-007], or as revised); or the wetland is part of a restoration plan

intended to achieve restoration goals identified in the City of Vancouver's Shoreline Master Program or a local or regional watershed plan;

(6) The wetland lies in the natural routing of the runoff, and the discharge follows the natural routing.

(7) All regulations regarding stormwater and wetland management are followed, including in this chapter and VMC 14.24, Erosion Control; and

(8) Modifications that alter the structure of a wetland or its soils will require permits. Existing functions and values that are lost will need to be compensated for in accordance with the requirements of this chapter.

(C) Other activities may be allowed if the applicant demonstrates that the basic project purpose cannot reasonably be accomplished and avoid or result in less adverse impacts on a wetland or its buffer than alternative uses or designs (including reduction in the size, scope, configuration or density of the project).

iv. ~~iv.~~ In Category IV ~~wetlands~~Wetlands, activities and uses that result in impacts may be permitted in accordance with an approved ~~critical areas report~~Critical Areas Report and mitigation plan if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full mitigation for the loss of acreage and functions shall be provided under the terms established pursuant to subsection ~~(C)(2)~~(C)(2) of this section.

(A) ~~b.~~ If stormwater management facilities are proposed, they must meet the requirements of an LID or flow control BMP as specified for Category III Wetlands.

b. *Wetland Buffers.*

i. ~~*Standard*~~*Required* *Buffer Widths.* Standard buffer widths are ~~those determined by Ecology~~measured in feet from the edge of the wetland (see VMC 20.170.030[B]) and ~~described in Freshwater Wetlands in Washington State, Volume 2: Managing and Protecting Wetlands, Ecology Publication No. 05-06-008, April 2005 or as revised by Ecology. Buffer~~[H]). Applicants are required to implement the wetland buffer widths ~~are based on~~by wetland category~~, wetland characteristics and land use intensity.~~

~~A. Land use intensities are as follows:~~

i. as shown in Table 20.740.140-1~~. **LAND USE INTENSITIES**~~.

ii. If the applicant is unable to implement the full width buffers from Table 20.740.140-1 and avoid impacts as a result of proposed development, the planning director shall permit the applicant to use the alternative buffer widths in subsection (v)(B) and (v)(C) below, if the Applicant has first demonstrated they have met the following criteria:

(A) The applicant has met the mitigation sequencing in VMC 20.740.060 (A-E).

(B) The applicant shall provide a minimum of two alternative site designs and layouts to demonstrate that impacts cannot be avoided or be reduced to result in less impacts. The planning director may approve reductions to numerical standards including parking and setbacks under the minor exception process in VMC 20.740.070 to avoid or reduce impacts.

iii. The required and alternative buffer widths assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is un-vegetated, sparsely vegetated, and/or vegetated with invasive species that do not perform needed functions, the buffer must either be planted to create the appropriate native plant community or be widened to ensure that the buffer provides adequate functions to protect the wetland.

iv. If the buffer is functionally isolated by an existing impervious surface or built structure, the remaining buffer area must be revegetated with native species, but the buffer does not need to be widened to exceed widths greater than those listed in Tables 20.740.140-1, 20.740-140-2, and 20.740.140-4.

(A) Required Buffers Based on Wetland Category – see Table 20.740.140-1.

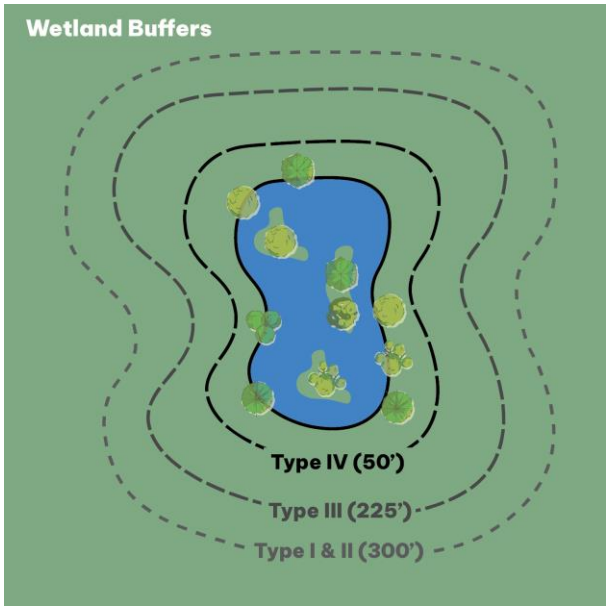
Table 20.740.140-1. WETLAND BUFFER WIDTH REQUIREMENTS

~~Land Use Intensity~~Wetland	~~VMC Title 20 Zoning Districts~~Buffer Width
~~High~~I	~~All Residential,~~
~~Moderate~~II	~~Open Space Park or~~
~~Low~~III	~~Open Space Greenway:~~
IV	50

~~B. Level of function for habitat based on the Washington State Wetland Rating System is as follows:~~

~~**Table 20.740.140-2. RATING SYSTEM**~~

Figure 20.740.140-2. WETLAND BUFFER WIDTH REQUIREMENTS



(B) Alternative 1 Wetland Buffers: Buffers based on wetland category, wetland type, and habitat score and providing a habitat corridor and implementing minimization measures.

(1) In order for an applicant to use the buffer widths of Table 20.740.140-2, the applicant must provide a habitat corridor as outlined in this subsection and implement the impact minimization measures listed in Table 20.740.140-3. Not all impact minimization measures are applicable. An undisturbed vegetated corridor at least 100 feet wide must be provided between the wetland and another priority area for preservation that meets the following:

(a) A legally protected, high-functioning vegetated area (priority habitats; other compensation sites; wildlife areas/refuges; or national, county, and state parks that have

management plans with identified areas designated as Natural, Natural Forest, or Natural Area Preserve);

(b) An area that is the site of a Watershed Project identified within and fully consistent with a Watershed Plan, as these terms are defined by RCW 89-08-460;

(c) An area where development is prohibited under the provisions of the local shoreline master program;

(d) An area with equivalent habitat quality that has conservation status in perpetuity, in consultation with WDFW;

(e) The corridor is permanently protected for the entire distance between the wetland and the legally protected area by a conservation easement, deed restriction, or other legal means;

(f) Presence of the shoreline or Priority Habitat must be confirmed by a qualified biologist or the Planning Official;

(g) If a wetland scores five or fewer habitat points, only the impact minimization measures listed in Table 20.740.140-3 are required, in order to use the buffers in Table 20.740.140-2;or

(h) If an applicant does not apply the mitigation measures in Table 20.740.140-3 and is unable to provide a protected corridor, then the

buffers in Tables 20.740.140-1 or 20.740.140-4 shall be used.

Table 20.740.140-2. ALTERNATIVE 1: WETLAND BUFFER WIDTH REQUIREMENTS

~~Level~~Category of ~~Function~~Wetland	Habitat Score ~~in Rating System~~3 to 5 Points (corridor not required)	Habitat Score 6 to 7 Points	Habitat Score of 8 to 9 Points	Buffer width Based on Special Characteristics
~~High~~Category I: Bogs and Wetlands of High Conservation Value	~~8 – 9~~NA	NA	225 feet	190 feet
~~Moderate~~Category I: Forested	~~6 – 7~~75 feet	110 feet	225 feet	NA
~~Low~~Category I or II: Based on Rating of Wetland Functions (and not listed above)	~~3 – 5~~75 feet	110 feet	225 feet	NA
Category III: All Types	60 feet	110 feet	225 feet	NA

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Category IV: All Types	40 feet	40 feet	40 feet	NA

~~C. Buffer widths are measured horizontally from the edge of the wetland (see VMC 20.170.030(B) and (H)) and are as follows:~~

~~1. *Category I Wetlands.*~~

Note: Special characteristics are defined in the Washington State Wetland Rating System for Western Washington: 2014 Update, published July 2023 or as revised by Ecology.

Table 20.740.140-3. ~~CATEGORY I~~ IMPACT MINIMIZATION MEASURES REQUIRED TO IMPLEMENT ALTERNATIVE 1 WETLAND ~~BUFFER WIDTHS~~BUFFERS.

Examples of Disturbance	Uses and Activities that Cause the Disturbance	Examples of Measures to Minimize Impacts
~~**Wetland Characteristics**~~Lights	~~**Land Use Intensity**~~Parking lots, warehouses, manufacturing, residential, recreational	~~**Buffer Width**~~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.
Noise	Manufacturing and other industrial, residential, commercial, recreational	Locate activity that generates noise away from wetland.

Examples of Disturbance	Uses and Activities that Cause the Disturbance	Examples of Measures to Minimize Impacts
		Construct a fence to reduce noise impacts on adjacent wetland and buffer. Plant a strip of dense shrub vegetation adjacent to wetland buffer.
~~Wetlands of High Conservation Value~~Toxic runoff	~~High~~ ~~Moderate~~ ~~Low~~Parking lots, roads, manufacturing, residential, application of agricultural or landscaping chemicals, landscaping	~~250'~~ ~~190'~~ ~~125'~~Route only treated runoff to a wetland and route untreated runoff away from wetland while ensuring wetland is not dewatered. Establish covenants limiting use of toxic chemicals within 150 feet of wetland. Apply integrated pest management.
~~Forested Wetlands~~ ~~High Habitat Function~~Stormwater runoff	~~High~~ ~~Moderate~~ ~~Low~~Parking lots, roads, residential, commercial/industrial, recreational, landscaping/lawns, and other impermeable surfaces/compacted soils	~~300'~~ ~~225'~~ ~~150'~~Retrofit stormwater detention and treatment for roads and existing adjacent development. Prevent channelized or sheet flow from lawns that directly enters the buffer. Infiltrate or treat, detain, and disperse new runoff from impervious surfaces and lawns.

Examples of Disturbance	Uses and Activities that Cause the Disturbance	Examples of Measures to Minimize Impacts
~~Moderate Habitat Function~~Change in water regime	~~High~~ ~~Moderate~~ ~~Low~~Impervious surfaces, lawns, tilling	~~150'~~ ~~110'~~ ~~75'~~Infiltrate or treat, detain, and disperse new runoff into buffer.
~~Low Habitat Function~~Pets and human disturbance	~~High~~ ~~Moderate~~ ~~Low~~Residential, recreational, commercial, industrial	~~100'~~ ~~75'~~ ~~50'~~Plant dense vegetation around buffer, such as rose or hawthorn, to delineate buffer edge and discourage disturbance. Place wetland and its buffer in a separate tract. Place signs around the wetland buffer every 50 to 200 feet and for subdivisions place signs at the back of each residential lot. When platting new subdivisions, locate greenbelts, stormwater facilities, and other lower intensity uses adjacent to wetland buffers.
~~Other Category I Wetlands~~ ~~High Habitat Function~~Human disturbance	~~High~~ ~~Moderate~~ ~~Low~~Residential, commercial, industrial	~~300'~~ ~~225'~~ ~~150'~~Plant dense vegetation around buffer, such as rose or hawthorn

Examples of Disturbance	Uses and Activities that Cause the Disturbance	Examples of Measures to Minimize Impacts
~~Moderate Habitat Function~~Dust	~~High~~ ~~Moderate~~ ~~Low~~Tilled fields, roads	~~150'~~ ~~110'~~ ~~75'~~Utilize best management practices BMPs to control dust.
~~Low Habitat Function~~	~~High~~ ~~Moderate~~ ~~Low~~	~~100'~~ ~~75'~~ ~~50'~~

~~2. *Category II Wetlands.*~~

~~**Table 20.740.140-4. CATEGORY II**~~

(C) Alternative 2 Wetland Buffer Widths: Buffers based on wetland category wetland type, and habitat score (see Table 20.740.140-4) without providing a habitat corridor or minimization measures as outlined in subsection (B) above.

Table 20.740.140-4. ALTERNATIVE 2 WETLAND BUFFER ~~WIDTHS~~WIDTH REQUIREMENTS

Category of Wetland	Habitat Score 3 to 5 Points (corridor not required)	Habitat Score 6 to 7 Points	Habitat Score of 8 to 9 Points	~~Wetland~~Buffer width Based on Special Characteristics	~~Land Use Intensity~~	~~Buffer Width~~
~~High Habitat Function~~**Category I: Bogs and Wetlands of High Conservation Value**	~~High~~ ~~Moderate~~ ~~Low~~NA	~~300'~~ ~~225'~~ ~~150'~~NA	300 feet	250 feet		
~~Moderate Habitat Function~~**Category I: Forested**	~~High~~ ~~Moderate~~ ~~Low~~100 feet	~~150'~~ ~~110'~~ ~~75'~~150 feet	300 feet	NA		
~~Low Habitat Function~~**Category I or II: Based on rating of wetland**	~~High~~ ~~Moderate~~ ~~Low~~100 feet	~~100'~~ ~~75'~~ ~~50'~~150 feet	300 feet	NA		

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Category of Wetland	Habitat Score 3 to 5 Points (corridor not required)	Habitat Score 6 to 7 Points	Habitat Score of 8 to 9 Points	~~Wetland~~Buffer width Based on Special Characteristics	~~Land Use Intensity~~	~~Buffer Width~~
functions (and not listed above)						
Category III: All types	80 feet	150 feet	300 feet	NA		
Category IV: All Types	50 feet	50 feet	50 feet	50 feet		

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~~3. Category III Wetlands.~~

~~Table 20.740.140-5. CATEGORY III WETLAND BUFFER WIDTHS~~

~~Wetland Characteristics~~	~~Land Use Intensity~~	~~Buffer Width~~
~~Moderate Habitat Function~~	~~High~~ ~~Moderate~~ ~~Low~~	~~150'~~ ~~110'~~ ~~75'~~
~~Low Habitat Function~~	~~High~~ ~~Moderate~~	~~80'~~ ~~60'~~

~~Wetland Characteristics~~	~~Land Use Intensity~~	~~Buffer Width~~
	~~Low~~	~~40′~~

~~4. *Category IV Wetlands.*~~

~~**Table 20.740.140-6. CATEGORY IV WETLAND BUFFER WIDTHS**~~

~~Wetland Characteristics~~	~~Land Use Intensity~~	~~Buffer Width~~
~~All Category IV Wetlands~~	~~High~~ ~~Moderate~~ ~~Low~~	~~50′~~ ~~40′~~ ~~25′~~

~~D. All buffers shall be measured from the wetland boundary as surveyed in the field.~~

~~E. Areas which are completely functionally separated from a wetland and do not protect the wetland from adverse impacts may be excluded from buffers otherwise required.~~

v. ~~ii.~~ *Wetland Buffer Width Averaging.* The ~~shoreline administrator~~Planning Official may allow modification of the standard wetland buffer width in accordance with an approved ~~critical areas report on a case-by-case basis~~Critical Areas Report by averaging buffer widths. Buffer width averaging shall not be used in combination with buffer width reduction or a minor exception~~.~~ (VMC 20.740.070). Averaging of buffer widths (see VMC ~~20.170.080(B)(2)~~20.170.080(B)(2)) may only be allowed when implementing the impact minimization measures, as applicable, in Table 20.740.140-3 and where a qualified professional wetland scientist demonstrates that:

(A) ~~A.~~ Such averaging will not reduce wetland functions or functional performance; ~~and~~

(B) ~~B.~~ The wetland varies in sensitivity due to existing physical characteristics, or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places; ~~and~~

(C) ~~C.~~ The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

~~D.~~ The buffer width is not reduced at any point by ~~no~~ more than ~~twenty-five~~25 percent of the standard width and ~~at~~is no ~~point to~~ less than ~~twenty-five feet.~~

~~iii. *Buffer Width Reduction Based on Reducing the Intensity of Impacts from Land Uses.* Buffer widths required for high intensity land uses may be reduced to those required for moderate land use intensity under the following conditions:~~

~~A. For wetlands with moderate or high habitat function:~~

(D) ~~1. A relatively undisturbed vegetated corridor at least one hundred~~30 feet wide ~~is protected between the wetland and any other priority habitats and areas associated with priority species (VMC 20.740.110(A)(1)(b); and.~~

~~2. Measures to minimize the impacts of different land uses on wetlands are applied, as approved by the shoreline administrator. Such measures include, but are not limited to, the examples summarized below.~~

~~Table 20.740.140-7. EXAMPLES OF MEASURES TO MINIMIZE LAND USE IMPACTS~~

Examples of Disturbance	Uses and Activities that Cause the Disturbance	Examples of Measures to Minimize Impacts
Lights	Parking lots, warehouses, manufacturing, residential	Direct lights away from wetland
Noise	Manufacturing, residential, commercial	Locate activity that generates noise away from wetland
Toxic runoff	Parking lots, roads, manufacturing, residential, application of agricultural or landscaping chemicals	Route only treated runoff to a wetland Establish covenants limiting use of toxic chemicals within 150' of wetland Apply integrated pest management
Change in water regime	Impervious surfaces, lawns, tilling	Infiltrate or treat, detain, and disperse new runoff into buffer
Pets	Residential	Plant dense vegetation around buffer, such as rose or hawthorn
Human disturbance	Residential, commercial, industrial	Plant dense vegetation around buffer, such as rose or hawthorn
Dust	Tilled fields	Utilize best management practices to control dust

~~B. For wetlands with low habitat function measures to minimize the impacts of different land uses on wetlands (subsection (C)(1)(b)(iii)(A)(2) of this section) are applied.~~

~~C. Buffer width reduction shall not be used in combination with buffer width averaging (subsection (C)(1)(b)(ii) of this section) or a minor exception (VMC 20.740.070).~~

vi. ~~iv.~~ *Buffer Maintenance.* Except as otherwise specified or allowed in accordance with this chapter, wetland buffers shall be maintained and fully vegetated according to the approved ~~critical areas permit~~Critical Areas Permit.

vii. ~~v.~~ *Buffer Uses.* The following uses may be permitted within a wetland buffer in accordance with the review procedures of this chapter~~;~~, provided~~,~~ they are not prohibited by any other applicable ~~law~~laws or ~~regulation~~regulations and they are conducted in a manner so as to minimize impacts to the buffer and the wetland:

(A) ~~A.~~ Activities allowed under the same terms and conditions as in the associated wetlands pursuant to subsection ~~(C)(1)(a) of this section, provided trails shall be located in the outer twenty-five percent to fifty percent of the buffer when feasible and consistent with the public access provisions of this program.~~(C)(1)(a) of this section;

(B) ~~B.~~ Enhancement and restoration activities aimed at protecting the soil, water, vegetation or wildlife.~~;~~

(1) ~~C.~~ Removal of invasive plant species shall be restricted to hand removal. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the City's Noxious Weed list should be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is

allowed in conjunction with removal of invasive plant species.

(C) Passive recreation facilities, including trails and wildlife viewing structures~~;~~, provided~~,~~ that the trails and structures are constructed with a surface that does not interfere with wetland hydrology~~.~~:

(1) ~~D.~~ Trails shall be located in the outer 25 to 50 percent of the buffer, when feasible.

(D) Stormwater management facilities are not allowed in ~~buffers of~~ Category I or II ~~wetlands.~~Wetland buffers. Stormwater management facilities~~, limited to detention~~ must meet the requirements of an LID or flow control BMP as specified for uses in Category III wetlands.

(E) Educational and scientific research activities;

(F) Normal and routine maintenance and repair of any existing public or private facilities~~, constructed wetlands, stormwater dispersion outfalls and bioswales, may be constructed in accordance with an approved critical areas report~~ within ~~the buffers of Category III or IV wetlands;~~an existing right-of-way, provided~~, that:~~ that the maintenance or repair does not increase the footprint or use of the facility or right-of-way;

~~1. No other location is feasible; and~~

~~2. The location of such facilities will not degrade the functions of the wetland or buffer.~~

~~c. *Signs and Fencing of Wetlands.*~~

~~i. The location of the outer perimeter of the wetland and buffer shall be marked in the field, and such marking shall be approved by the shoreline administrator prior to the commencement of permitted activities. Such field markings shall be maintained throughout the duration of the permit.~~

~~ii. A permanent physical demarcation along the upland boundary of the wetland buffer shall be installed and thereafter maintained. Such demarcation may consist of fencing, hedging or other prominent physical marking that allows wildlife passage, blends with the wetland environment, and is approved by the shoreline administrator.~~

~~iii. Permanent fencing of the wetland buffer on the outer perimeter shall be erected and thereafter maintained when there is a substantial likelihood of the presence of domestic grazing animals within the property unless the shoreline administrator determines that the animals would not degrade the functions of the wetland or buffer.~~

~~iv. Permanent signs shall be posted at an interval of one per lot for single-family residential uses or at a maximum interval of two hundred feet, or as otherwise determined by the shoreline administrator, and must be perpetually maintained by the property owner. The sign shall be worded as follows or with alternative language approved by the shoreline administrator: "The area beyond this sign is a wetland or wetland buffer. Alteration or disturbance is prohibited by law. Please call the City of Vancouver for more information."~~

(G) ~~2.~~ The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided that the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources; and

(H) Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary, provided that the drilling does not alter the ground water connection to the wetland or percolation of surface water down through the soil column.

(1) Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column would be disturbed.

c. *Temporary and permanent markers and signs for wetlands.*

i. Temporary and permanent markers and signs are installed in compliance with the requirements of VMC 20.740.020, General Provisions.

2. *Compensatory Mitigation.* Compensatory mitigation for impacts to wetlands shall be provided pursuant to VMC ~~20.740.060~~20.740.060 and shall be consistent with ~~the Department of Ecology~~Ecology's Wetland Mitigation in Washington State, Part 1: Agency Policies and Guidance, Version 2, Ecology Publication No. 21-06-003 April 2021, and Part 2: Developing Mitigation Plans, Version 1, Ecology Publication No. ~~06-~~06-~~011a~~06-011b, March 2006, or as revised by Ecology. Watersheds are defined in VMC ~~20.740.020(C)(2)~~20.740.020(C)(2) and Chapter ~~20.150~~20.150 VMC.

a. ~~a.~~ *Mitigation for Lost or Affected Functions.* Compensatory mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement and shall provide ~~similar~~ wetland or buffer functions ~~as~~similar to those lost, except when:

i. ~~i.~~ The lost wetland or buffer provides minimal functions as determined by a site-specific ~~function~~functional assessment, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limited within a watershed through a formal Washington State watershed assessment plan or protocol; or

ii. ~~ii.~~ Out-of-kind replacement will best meet formally identified watershed goals, such as replacement of historically diminished wetland types.

~~b. *Mitigation Actions.*~~

b. ~~i.~~ *Compensatory Mitigation Actions.* If, through mitigation sequencing in accordance with VMC 20.740.060, it is determined that compensatory mitigation is necessary, the applicant must provide an alternative approach to compensation. Compensation is prioritized as follows:

i. *Mitigation bank credits:* Allows applicants to compensate for wetland loss by purchasing credits from a bank that is commissioned to restore, create, enhance, or preserve wetland areas in providing compensatory mitigation for authorized impacts to wetlands;

ii. *In-lieu fee program credits*: Allows applicants to compensate for wetland losses by paying a fee to a third party, such as a government agency or conservation organization, where the fee is used to ensure protection, creation, and enhancement of wetlands;

iii. Permittee-responsible mitigation (PRM) under a watershed approach;

iv. PRM that is on site and in-kind;

v. *PRM* that is off site and/or out-of-kind.

c. PRM includes the following approaches:

i. *Creation.* The manipulation of the physical, chemical, or biological characteristics present to develop a wetland ~~on an upland or deepwater site~~ where a biological wetland did not previously exist. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, create hydric soils, and support the growth of hydrophytic plant species. Creation results in a gain in wetland acres and functions.

ii. ~~ii.~~ *Reestablishment.* The manipulation of the physical, chemical or biological characteristics of a site with the goal of returning natural or historic functions and environmental processes to a former wetland. Activities could include removing fill material, plugging ditches or breaking drain tiles. Reestablishment results in a gain in wetland acres and functions.

iii. ~~iii.~~ *Rehabilitation.* The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions and processes of a degraded wetland. Activities could involve breaching a dike to reconnect wetlands to a floodplain, restoring tidal influence to a wetland, or breaking drain tiles and

plugging drainage ditches. Rehabilitation results in a gain in wetland functions but not in wetland acres.

iv. ~~iv.~~ *Preservation.* The removal of a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This term includes activities commonly associated with the protection and maintenance of wetlands through the implementation of appropriate legal and physical mechanisms (such as recording conservation easements and providing structural protection like fences and signs). Preservation does not result in a gain of wetland area and functions (but may result in a gain in functions over the long term).

v. *Enhancement.* The manipulation of the physical, chemical, or biological characteristics of a biological wetland to increase or improve specific functions or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention or wildlife habitat. Activities typically consist of planting vegetation, controlling nonnative or invasive species, modifying site elevations to result in open water ponds, or some combination of these. Enhancement results in a change in certain wetland functions and can lead to a decline in other wetland functions. It does not result in a gain in wetland acres.

vi. ~~c. *Type and Location of*~~ *Mixed Compensatory Mitigation*. Involves more than one of the listed types of compensatory mitigation.

~~***Mitigation.*** Compensatory mitigation for ecological functions shall be in kind. Compensatory mitigation shall be on site or within the impacted wetland's: (i) contributing area; (ii) stream reach; (iii) sub-watershed; or (iv) watershed. (Sub-watersheds and watersheds are identified on the Clark County Digital Atlas.) The mitigation site shall be where the greatest level of wetland functions can be achieved. Mitigation actions may be conducted in a different watershed when:~~

~~i. Based on a determination of the natural capacity of the potential mitigation sites to mitigate for the impacts, there are no reasonable on-site or in-watershed opportunities, or those opportunities do not have a high likelihood of success.~~

~~Consideration shall include: anticipated wetland mitigation replacement ratios, buffer conditions and proposed widths, hydrogeomorphic classes of on-site wetlands when restored, proposed flood storage capacity, and potential to impact riparian fish and wildlife habitat including connectivity; or~~

~~ii. Watershed goals for water quality, flood or conveyance, habitat or other wetland functions have been established and strongly justify location of mitigation at another site; or~~

~~iii. Credits from a certified wetland mitigation bank are used as mitigation and the use of credits is consistent with the terms of the bank's certification.~~

d. ~~d.~~ *Mitigation Ratios.*

i. ~~i.~~ *Replacement Ratios.*

(A) ~~A.~~ The replacement ratios shall apply to wetland mitigation that: (1) is for the same hydrogeomorphic subclass (e.g., riverine flow-through, depressional outflow, or flats), and Cowardin class (e.g., palustrine emergent, palustrine forested or estuarine wetlands); (2) is on site; (3) is in the same category; (4) is implemented prior to or concurrent with alteration; and (5) has a high probability of success.

~~B. The replacement ratios are based on replacing the affected wetland with a compensation wetland of the same category, and hydrogeomorphic (HGM) subclass and Cowardin class.~~

~~C. The replacement ratios do not apply to the use of credits from a state-certified wetland mitigation bank. When credits from a certified bank are used, replacement ratios should be consistent with the requirements of the bank's certification.~~

(B) ~~D.~~ *Mitigation Ratios.* Mitigation ratios are as follows (see subsection ~~(C)(2)(b)~~ of this section for definitions of mitigation actions):

Table 20.740.140-~~8~~5. MITIGATION REPLACEMENT RATIOS

Wetland Category and Type	Reestablishment or Creation	Rehabilitation	~~Reestablishment or Creation (R/C) plus Rehabilitation (RH)~~Preservation	~~Reestablishment or Creation (R/C) plus~~ Enhancement ~~(E)~~	~~Enhancement Only~~
~~Category I Bog~~	~~Not Considered Possible~~	~~6:1 Rehabilitation of a Bog~~	~~R/C Not Considered Possible~~	~~R/C Not Considered Possible~~	~~Case-by-Case~~
~~Category I Natural Heritage Site~~	~~Not Considered Possible~~	~~6:1 Rehabilitation of a Natural Heritage Site~~	~~R/C Not Considered Possible~~	~~R/C Not Considered Possible~~	~~Case-by-Case~~
Category I ~~Forested~~forested	6:1	12:1	~~1:1 R/C and 10:1 RH~~24:1	~~1:1 R/C and 20:1 E~~24:1	~~24:1~~
Bog	NA	NA	24:1	NA	
Wetlands of High Conservation Value	Consult with DNR	Consult with DNR	24:1	Consult with DNR	

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Wetland Category and Type	Reestablishment or Creation	Rehabilitation	~~Reestablishment or Creation (R/C) plus Rehabilitation (RH)~~Preservation	~~Reestablishment or Creation (R/C) plus~~ Enhancement ~~(E)~~	~~Enhancement Only~~
Category ~~I Based on Score for Functions~~II	~~4~~3:1	~~8:1~~ ~~1:1 R/C and~~ 6:1 ~~RH~~	~~1:1 R/C and~~ 12:1 ~~E~~	~~16~~12:1	
~~Category II~~	~~3:1~~	~~6:1~~	~~1:1 R/C and 4:1 RH~~	~~1:1 R/C and 8:1 E~~	~~12:1~~
Category III	2:1	4:1	~~1:1 R/C and 2:1 RH~~8:1	~~1:1 R/C and 4:1 E~~	8:1
Category IV	1.5:1	3:1	~~1:1 R/C and 1:1 RH~~6:1	~~1:1 R/C and 2:1 E~~	6:1

~~ii.~~

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ii. *Adjustment of Replacement Ratios.* The ~~shoreline administrator~~Planning Official may adjust the replacement ratios to compensate for deviations from the requirements under ~~subsection (C)(2)(d)(i)(A) of~~ this section, subject to the following:

(A) ~~A.~~ In most cases, adjustments to the replacement ratios will increase the required amount of mitigation. The required mitigation may be decreased under exceptional circumstances~~,~~ ~~—~~for example, if programmatic out-of-kind mitigation yields watershed-scale benefits that would not be realized from in-kind mitigation, or if out-of-kind mitigation would protect irreplaceable wetlands.

e. ~~e.~~ *Mitigation Timing.* The mitigation shall be implemented prior to or concurrent with alterations. If mitigation is implemented after alteration is allowed, the ~~planning official~~Planning Official may require additional mitigation to compensate for temporal losses of wetland functions.

f. ~~f.~~ *Buffers for Mitigation Wetlands.* Refer to Wetland Buffer Tables 20.7470.140-1, 20.740.140-~~3~~1, 20.740.140-2, and through 20.740.140-~~6~~4.

g. ~~g.~~ *Wetland Mitigation Banks.*

i. ~~i.~~ Credits from a wetland mitigation bank may be approved for use as mitigation for unavoidable impacts to wetlands when:

(A) ~~A.~~ The bank is certified under Chapter ~~173-700~~173-700 WAC;

(B) ~~B.~~ The ~~shoreline administrator~~Planning Official determines that the wetland mitigation bank provides appropriate mitigation for the authorized impacts; and

(C) ~~C.~~ The proposed use of credits is consistent with the terms and conditions of the bank's certification.

ii. ~~ii.~~ Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank's certification.

iii. ~~iii.~~ Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the bank's certification. In some cases, bank service areas may include portions of more than one adjacent drainage basin for specific wetland functions.

E. *Additional Critical Areas Report Requirements.* A Critical Areas Report for wetlands shall be prepared according to the Washington State Wetland Rating System for Western Washington – 2014 Update, Ecology Publication No. 14-06-02923-06-009, Washington State Wetland Rating System For Western Washington: 2014 Update, published July 2023October 2014 or as revised by Ecology. The Critical Areas Report shall contain an analysis of the wetlands including the following site- and proposal-related information:

1. A written assessment, data sheets, and accompanying maps of any wetlands or buffers on the site, including the following information:

   a. Hydrogeomorphic (HGM) subclassification and Cowardin class;

   b. Wetland category;

   c. Wetland delineation and required buffers;

   d. Existing wetland acreage;

   e. Vegetative, faunal, and hydrologic characteristics;

   f. Soil types and substrate conditions;

   g. Topographic elevations, at one-foot contours; and

   h. A discussion of the water sources supplying the wetland and documentation of hydrologic regime (locations of inlet and outlet features, water depths throughout the wetland, evidence of recharge or discharge, or evidence of water depths throughout the year, including drift lines, algal layers, moss lines, and sediment deposits).

2. Functional evaluation for the wetland and buffer using Ecology's most current approved data sheets. method and including the reference of the method and all data sheets.

3. Proposed mitigation, if needed, including a discussion of alternatives and trade-offs of the various alternatives (for example, where enhancement for one function would adversely affect another) and a written description and accompanying maps of the mitigation area, including the following information:

   a. Existing and proposed wetland acreage;

   b. Existing and proposed vegetative and faunal conditions;

   c. Surface and subsurface hydrological conditions of existing and proposed wetlands and hydrologically associated wetlands, including an analysis of existing hydrologic regime and proposed hydrologic regime for enhanced, created, or restored mitigation areas;

   d. Relationship to lakes, streams, and rivers in the watershed;

   e. Soil type and substrate conditions;

   f. Topographic elevations, at one-foot contours;

   g. Required wetland buffers including existing and proposed vegetation;

   h. Identification of the wetland's contributing area; and

~~**The Vancouver Municipal Code is current through Ordinance M-4438, passed December 18, 2023.**~~

~~Disclaimer: The city clerk's office has the official version of the Vancouver Municipal Code. Users should contact the city clerk's office for ordinances passed subsequent to the ordinance cited above.~~

~~City Website: www.cityofvancouver.us~~

~~City Telephone: (360) 487-8711~~

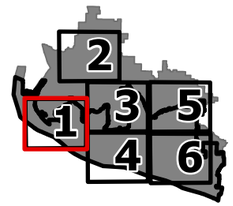
i. ~~Hosted by Code Publishing Company, A General Code Company.~~A functional assessment of proposed mitigation to ensure no net loss of shoreline ecological function.

City of Vancouver Critical Areas: Fish and Wildlife Habitat Conservation Area

- Vancouver City Boundary
- Urban Growth Area
- Roads
- Taxlots
- Water
- Priority Habitat Areas
- Priority Species Area
- Adopted Riparian Buffers

Priority Habitat and Species Areas are specific habitats identified by the Washington State Department of Fish and Wildlife with unique or significant value to a large number of species. These habitats may consist of unique plant species or specific habitat features like cliffs or oak habitat.

Riparian Buffers are regulated areas within a horizontal distance from the ordinary high water mark of water bodies which include lakes, streams, or rivers.



CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR

City of Vancouver Critical Areas: Fish and Wildlife Habitat Conservation Area

2

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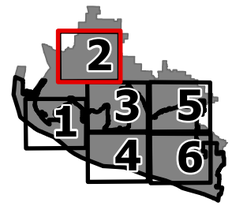

CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR

City of Vancouver Critical Areas: Fish and Wildlife Habitat Conservation Area

3

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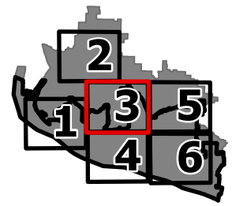

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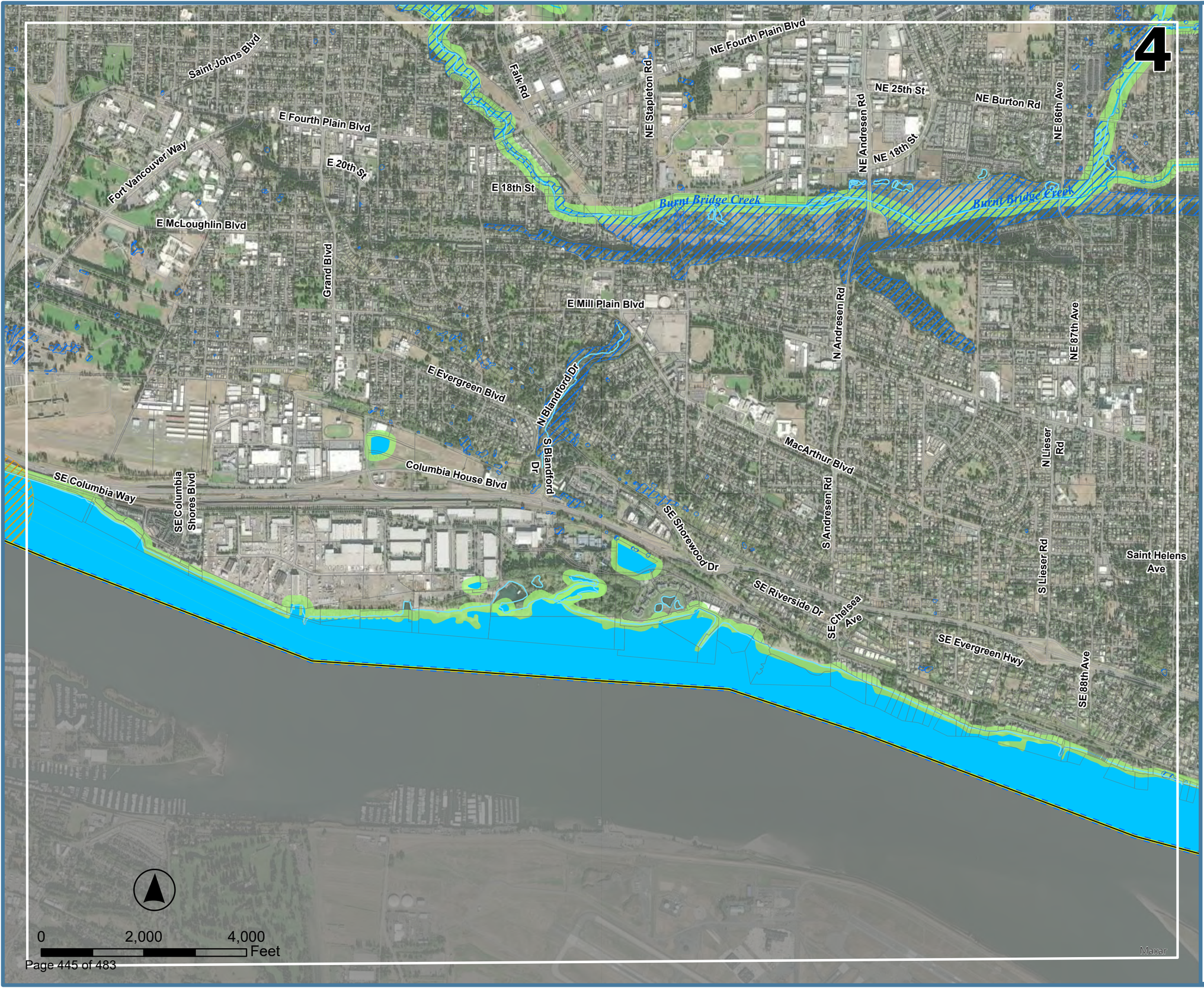

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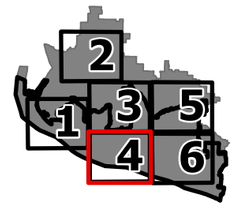

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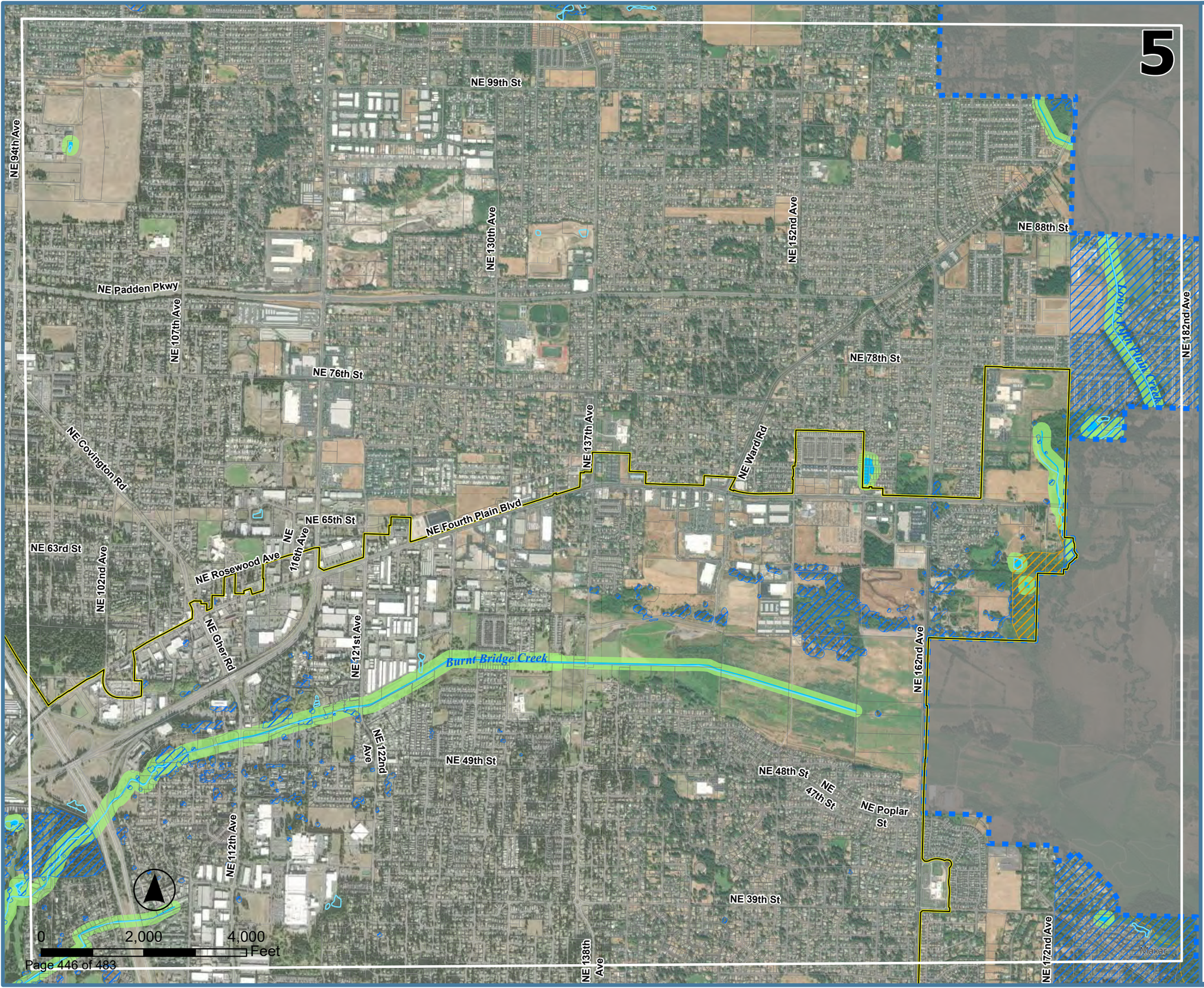

City of Vancouver Critical Areas: Fish and Wildlife Habitat Conservation Area

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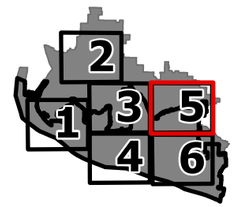

CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR

City of Vancouver Critical Areas: Fish and Wildlife Habitat Conservation Area

6

- Vancouver City Boundary
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- Roads
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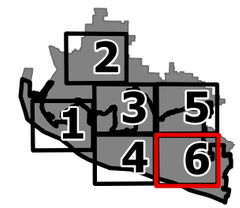

CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR

City of Vancouver Critical Areas: Fish and Wildlife Habitat Conservation Area

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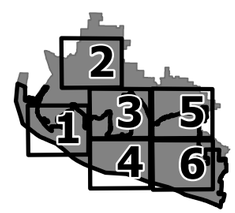

CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR

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Earthstar Geographics

City of Vancouver Critical Areas: Geologically Hazardous Areas

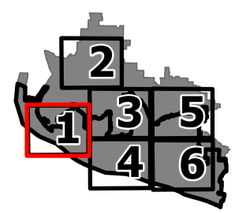
- Vancouver City Boundary
- Urban Growth Area
- Taxlots
- Roads
- Water
- Severe Erosion Hazards

Landslide Hazards

- Historical unstable slopes
- Potential unstable slopes
- Active unstable slopes

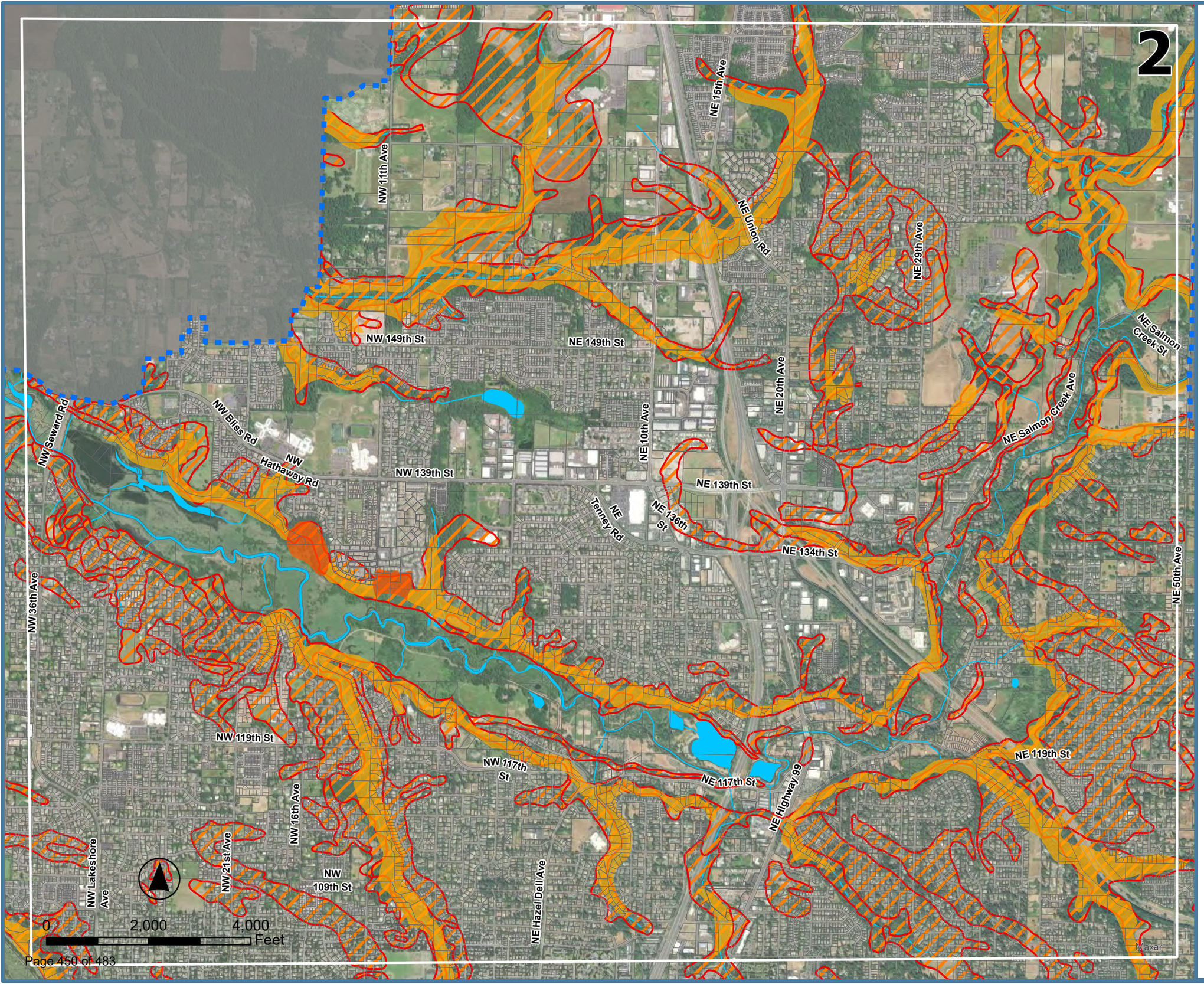
Severe Erosion Hazards: Areas with soils identified as having a severe erosion hazard by the 1972 USDA Soil Conservation Service Soil Survey of Clark County Washington.

Landslide Hazards : Areas mapped by the Washington State Department of Natural Resources (DNR) and the U.S. Geological Survey (USGS) with slopes greater than 15% and soil and geologic characteristics that are susceptible to landslides.



CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR, NRCS



City of Vancouver Critical Areas: Geologically Hazardous Areas

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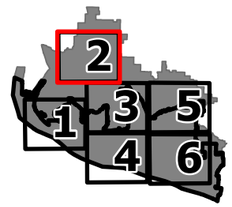

CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR, NRCS

City of Vancouver Critical Areas: Geologically Hazardous Areas

3

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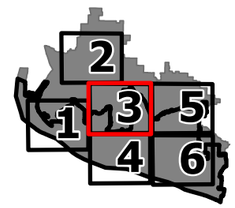

CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR, NRCS

City of Vancouver Critical Areas: Geologically Hazardous Areas

4

- Vancouver City Boundary
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- Roads
- Water
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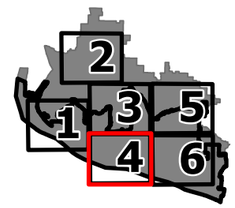

CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR, NRCS

5

City of Vancouver Critical Areas: Geologically Hazardous Areas

- Vancouver City Boundary
- Urban Growth Area
- Taxlots
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- Water
- Severe Erosion Hazards

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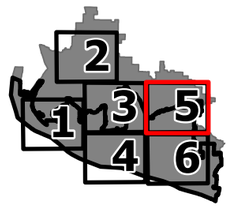

CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR, NRCS

City of Vancouver Critical Areas: Geologically Hazardous Areas

6

- Vancouver City Boundary
- Urban Growth Area
- Taxlots
- Roads
- Water
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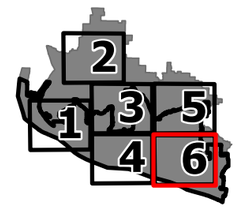


CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR, NRCS

City of Vancouver Critical Areas: Geologically Hazardous Areas

- Vancouver City Boundary
- Urban Growth Area
- Water
- Severe Erosion Hazards

Landslide Hazards

- Historical unstable slopes
- Potential unstable slopes
- Active unstable slopes

CITY OF Vancouver WASHINGTON

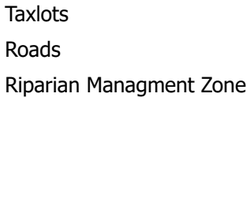
0 1 2 Miles

Source: Clark County, WDNR

City of Vancouver Critical Areas: Fish and Wildlife Riparian Habitat

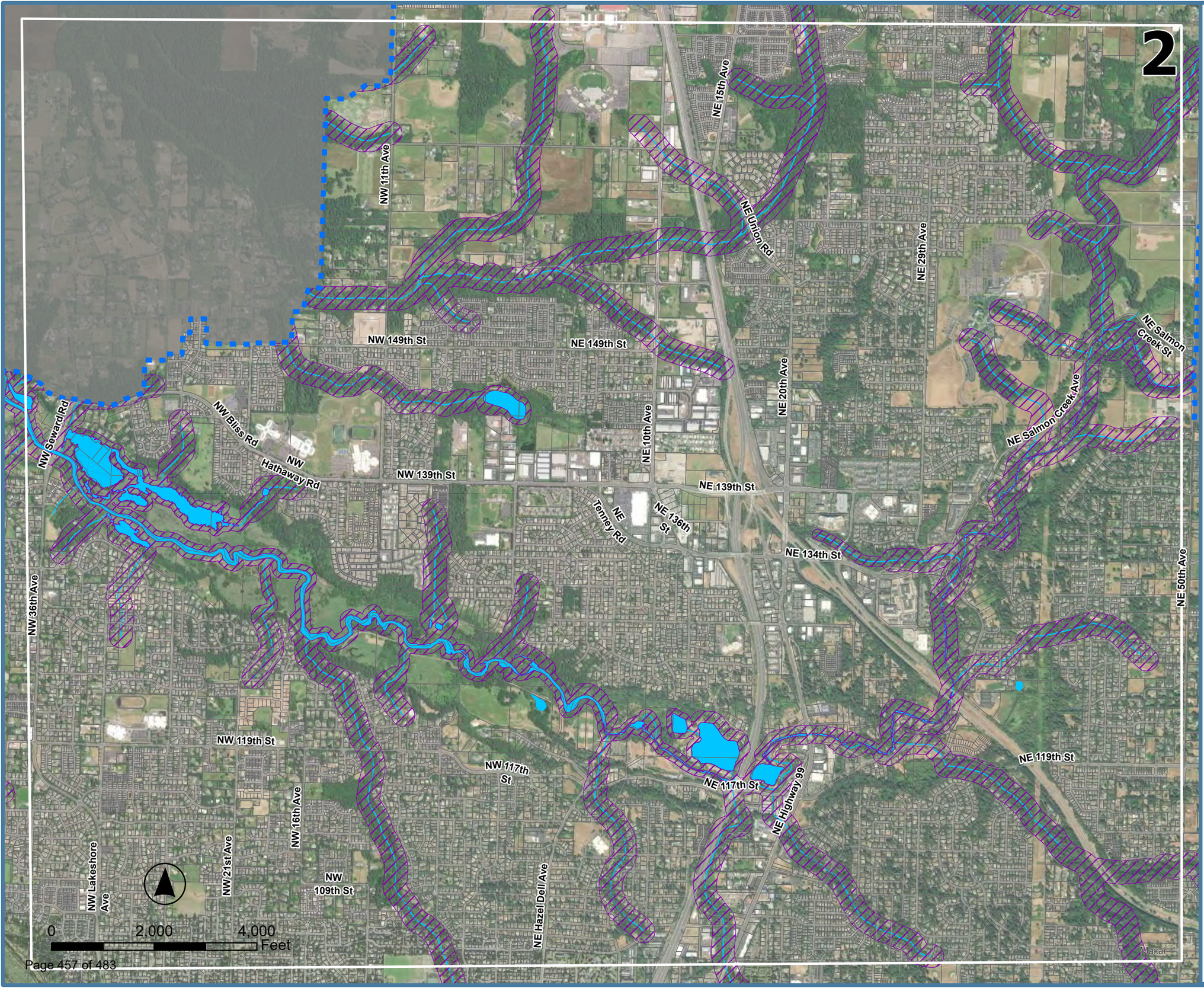
- Vancouver City Boundary
- Urban Growth Area
- Water
- Taxlots
- Roads
- Riparian Managment Zone

Riparian Management Zones are modeled representations calculated using statewide soil and tree species data. Tree and soil data are used to determine the potential height of a given tree if it lived for 200 years. The buffer width shown represents that modeled height as a horizontal distance from the centerline or stream edge of a water body.



CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR, WDFW



City of Vancouver Critical Areas: Fish and Wildlife Riparian Habitat

- Vancouver City Boundary
- Urban Growth Area
- Water
- Taxlots
- Roads
- Riparian Managment Zone

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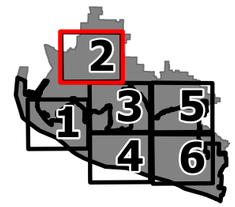

CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR, WDFW

City of Vancouver Critical Areas: Fish and Wildlife Riparian Habitat

3

- Vancouver City Boundary
- Urban Growth Area
- Water
- Taxlots
- Roads
- Riparian Managment Zone

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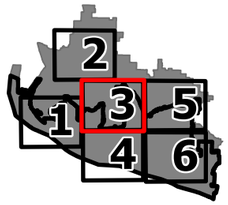

CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR, WDFW

City of Vancouver Critical Areas: Fish and Wildlife Riparian Habitat

4

- Vancouver City Boundary
- Urban Growth Area
- Water
- Taxlots
- Roads
- Riparian Managment Zone

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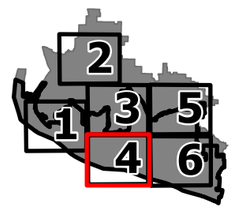

CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR, WDFW

City of Vancouver Critical Areas: Fish and Wildlife Riparian Habitat

5

- Vancouver City Boundary
- Urban Growth Area
- Water
- Taxlots
- Roads
- Riparian Managment Zone

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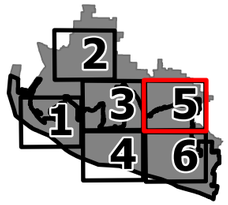
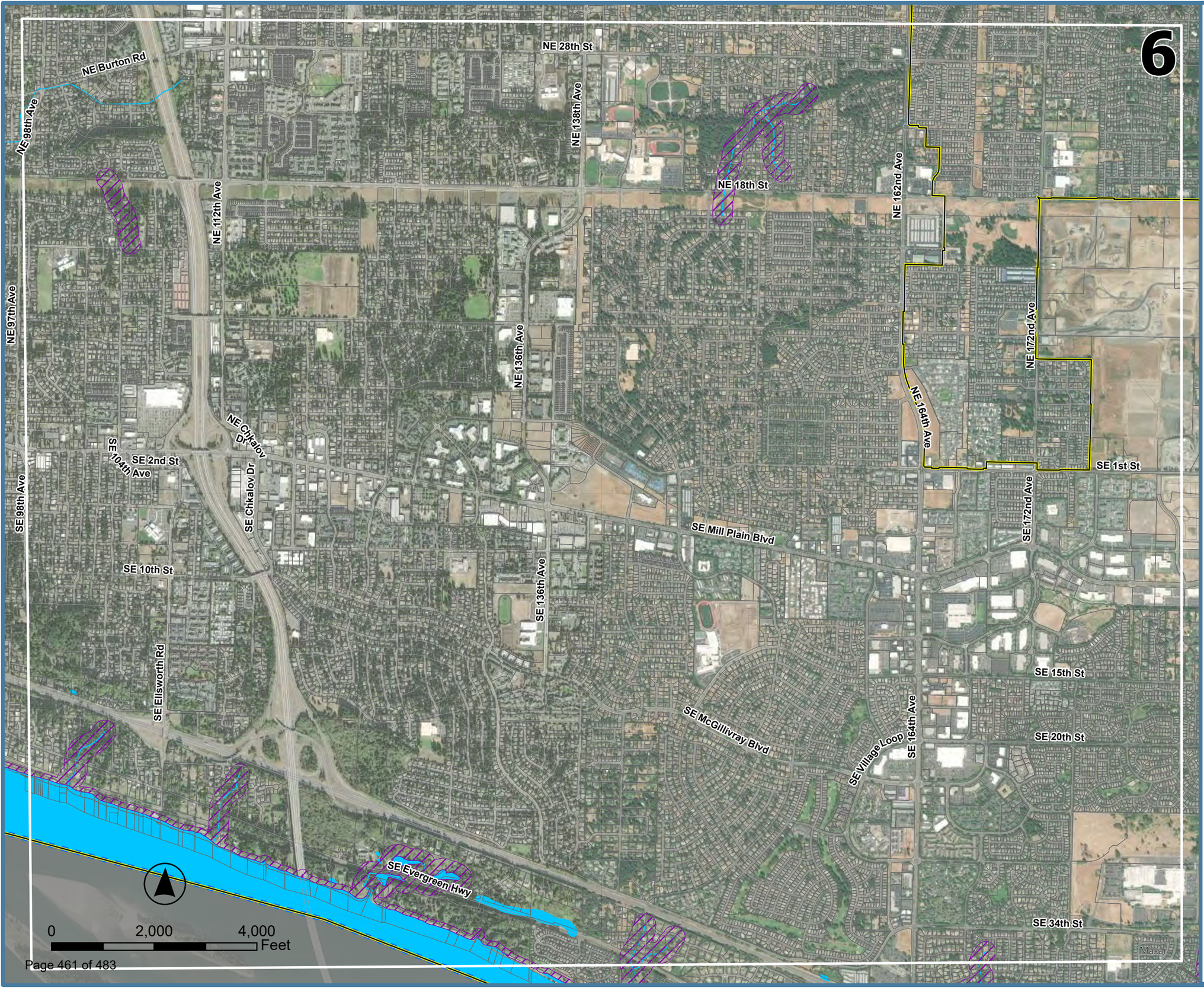


CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR, WDFW



City of Vancouver Critical Areas: Fish and Wildlife Riparian Habitat

- Vancouver City Boundary
- Urban Growth Area
- Water
- Taxlots
- Roads
- Riparian Managment Zone

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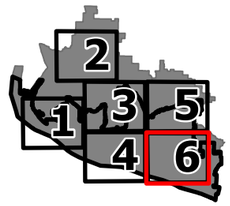

CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR, WDFW

City of Vancouver Critical Areas: Fish and Wildlife Riparian Habitat

- Vancouver City Boundary
- Urban Growth Area
- Riparian Managment Zone
- Water

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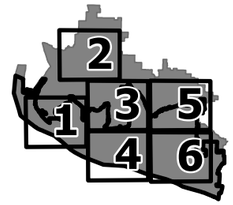


CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR WDFW

0 1 2 Miles

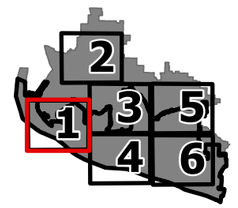
City of Vancouver Critical Areas: Geologic Hazards (Ground Shaking Amplification Site Class)

Vancouver City Boundary
Urban Growth Area
Taxlots
Roads

Ground Shaking Amplification Site Class

- B: rock (volcanic rock)
- B-C: rock (volcanic rock), very dense soil and soft rock (sandstone)
- C: very dense soil and soft rock (sandstone)
- C-D: very dense soil and soft rock (sandstone),stiff soil (mud)
- D: stiff soil (mud)
- D-E: stiff soil (mud), soft soil (artificial soil)
- E: soft soil (artificial soil).
- PEAT: requires specific evaluation
- Water

Ground shaking amplification site class is determined by the National Earthquake Reduction Program of the Federal Emergency Management Agency. Ground Shaking amplification and earthquake damage risk is lowest with Site Class A soils and highest with Class F soils.



CITY OF Vancouver WASHINGTON

Source: Clark County, NEHRP

City of Vancouver Critical Areas: Geologic Hazards (Ground Shaking Amplification Site Class)

2

Vancouver City Boundary
Urban Growth Area
Taxlots
Roads

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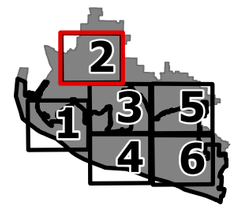

CITY OF Vancouver WASHINGTON

Source: Clark County, NEHRP

City of Vancouver Critical Areas: Geologic Hazards (Ground Shaking Amplification Site Class)

3

Vancouver City Boundary
Urban Growth Area
Taxlots
Roads

Ground Shaking Amplification Site Class

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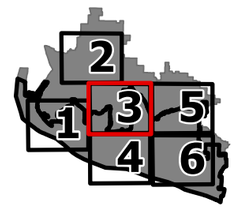

CITY OF Vancouver WASHINGTON

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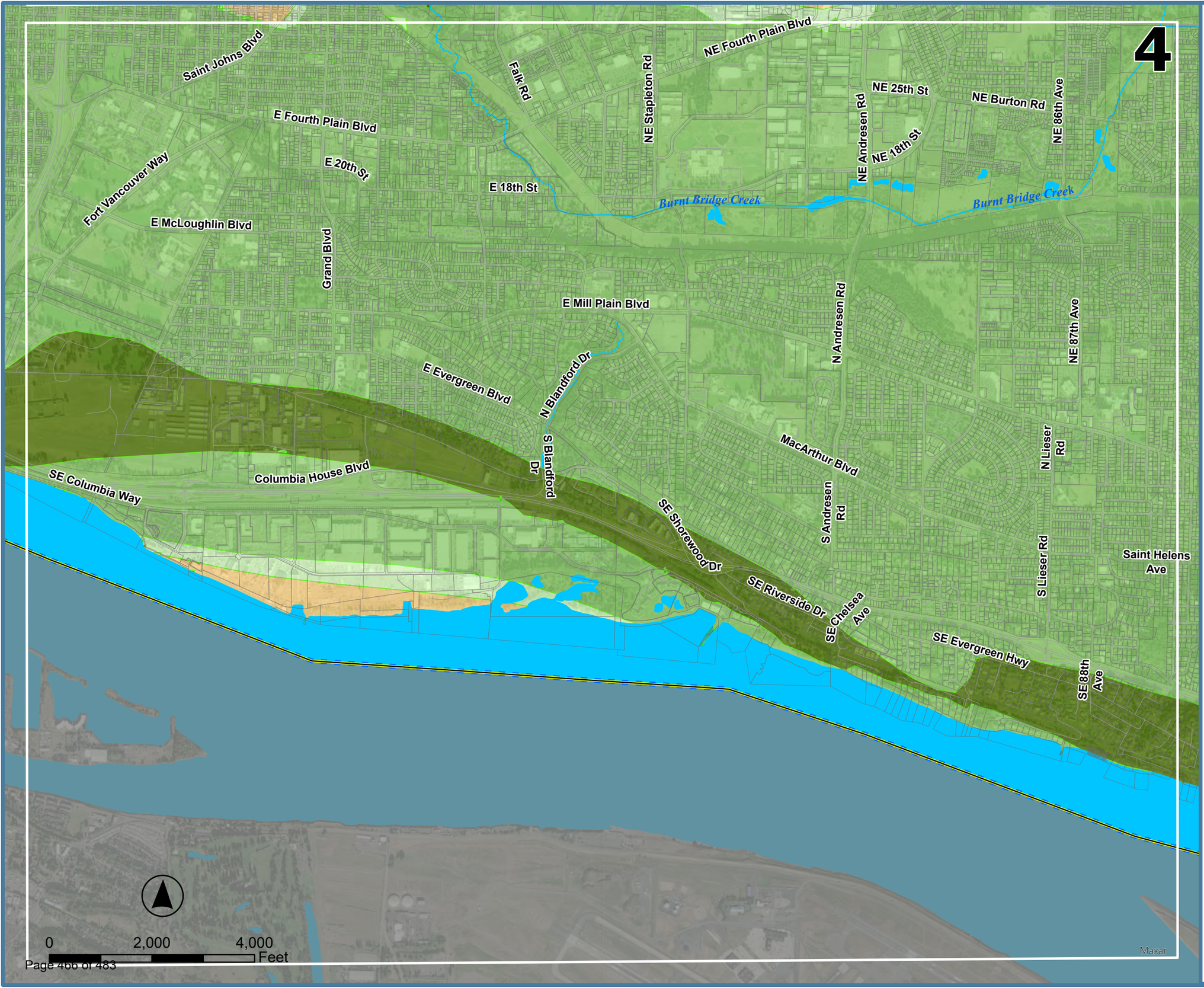

City of Vancouver Critical Areas: Geologic Hazards (Ground Shaking Amplification Site Class)

- Vancouver City Boundary
- Urban Growth Area
- Taxlots
- Roads

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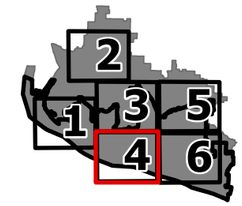

CITY OF Vancouver WASHINGTON

Source: Clark County, NEHRP

5

City of Vancouver Critical Areas: Geologic Hazards (Ground Shaking Amplification Site Class)

- Vancouver City Boundary
- Urban Growth Area
- Taxlots
- Roads

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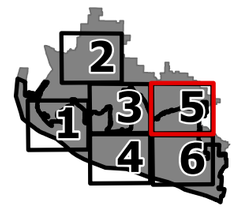

CITY OF Vancouver WASHINGTON

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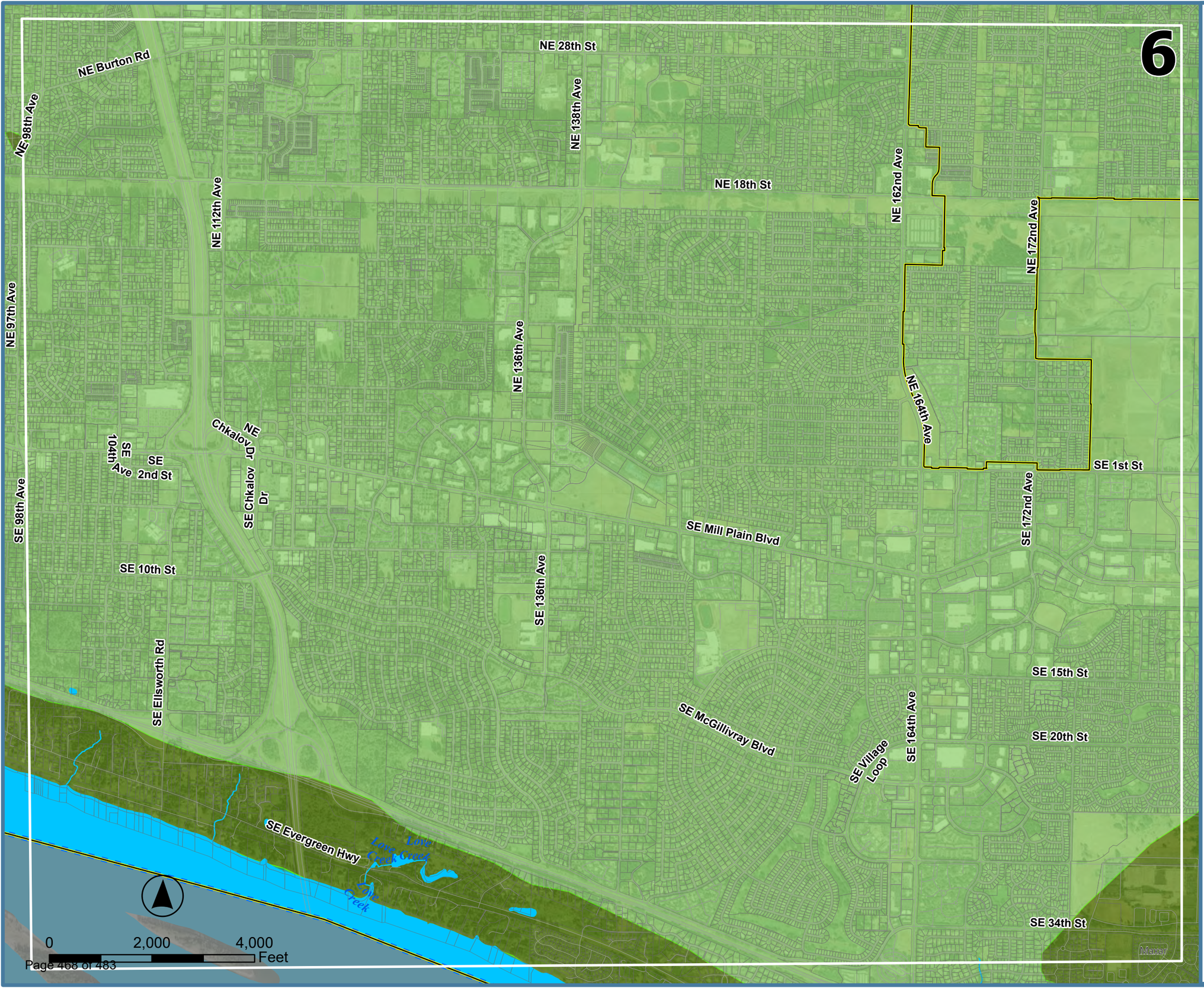

City of Vancouver Critical Areas: Geologic Hazards (Ground Shaking Amplification Site Class)

- Vancouver City Boundary
- Urban Growth Area
- Taxlots
- Roads

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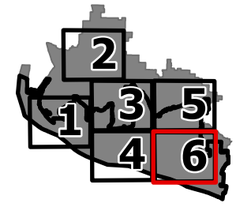

CITY OF Vancouver WASHINGTON

Source: Clark County, NEHRP

City of Vancouver Critical Areas: Geologic Hazards (Ground Shaking Amplification Site Class)

Vancouver City Boundary

Urban Growth Area

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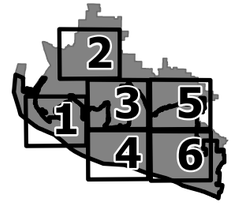


CITY OF Vancouver WASHINGTON

Source: Clark County

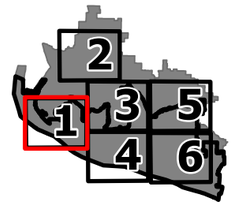
0 1 2 Miles

Maxar

City of Vancouver Critical Areas: Wetlands

- Vancouver City Boundary
- Urban Growth Area
- Taxlots
- Roads
- Water
- Wetlands

Wetlands are designated by the National Wetland Inventory (NWI) and include swamps, marshes, bogs, and similar areas, but do not include artificial wetlands that are intentionally created such as irrigation/drainage ditches, canals, and detention facilities.



CITY OF Vancouver WASHINGTON

Source: Clark County, NWI

City of Vancouver Critical Areas: Wetlands

- Vancouver City Boundary
- Urban Growth Area
- Taxlots
- Roads
- Water
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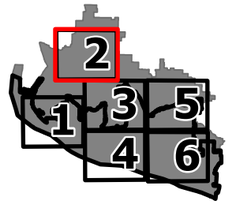
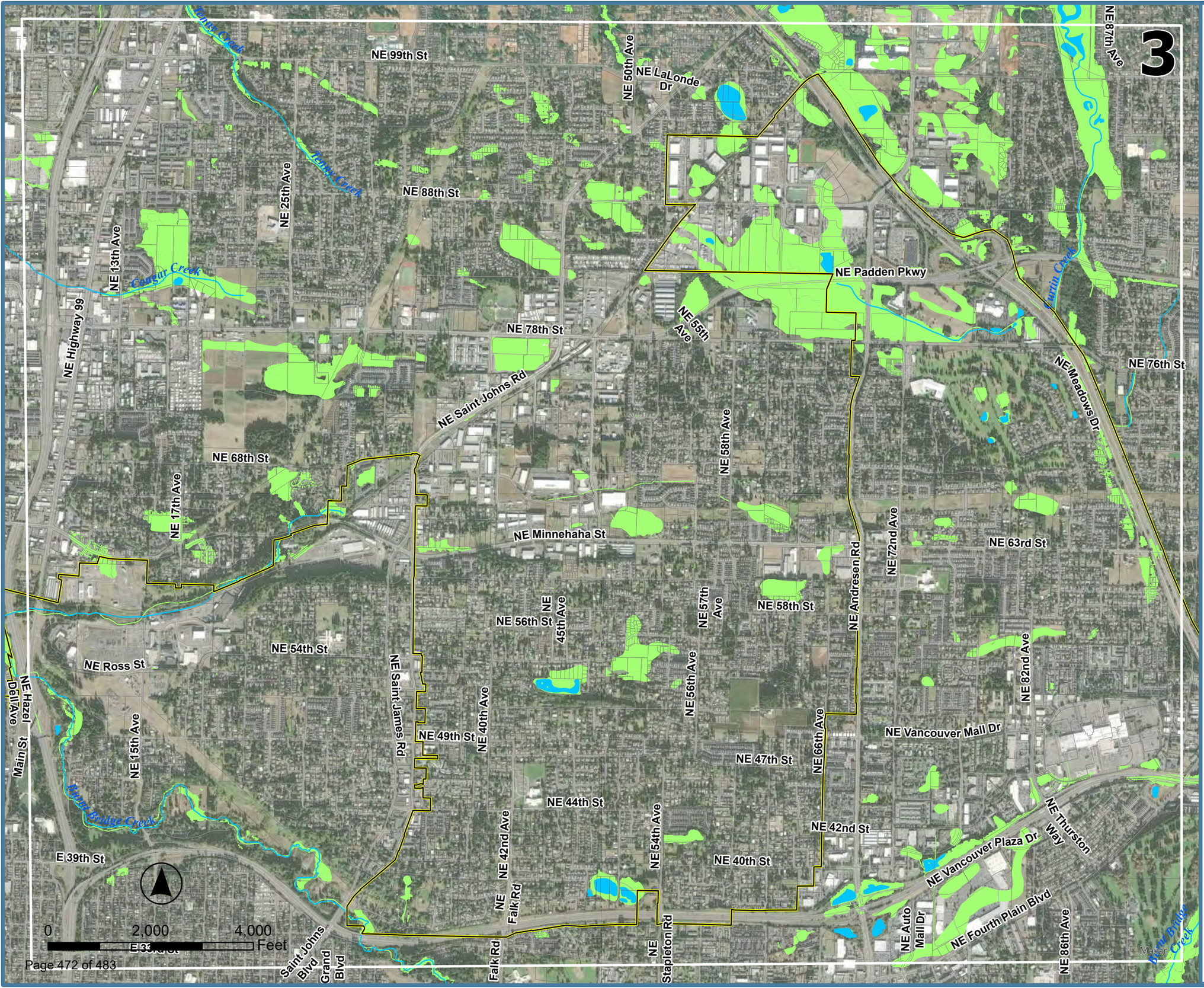


CITY OF Vancouver WASHINGTON

Source: Clark County, NWI



City of Vancouver Critical Areas: Wetlands

- Vancouver City Boundary
- Urban Growth Area
- Taxlots
- Roads
- Water
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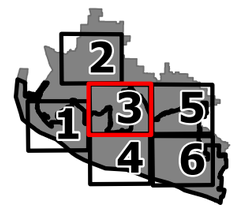
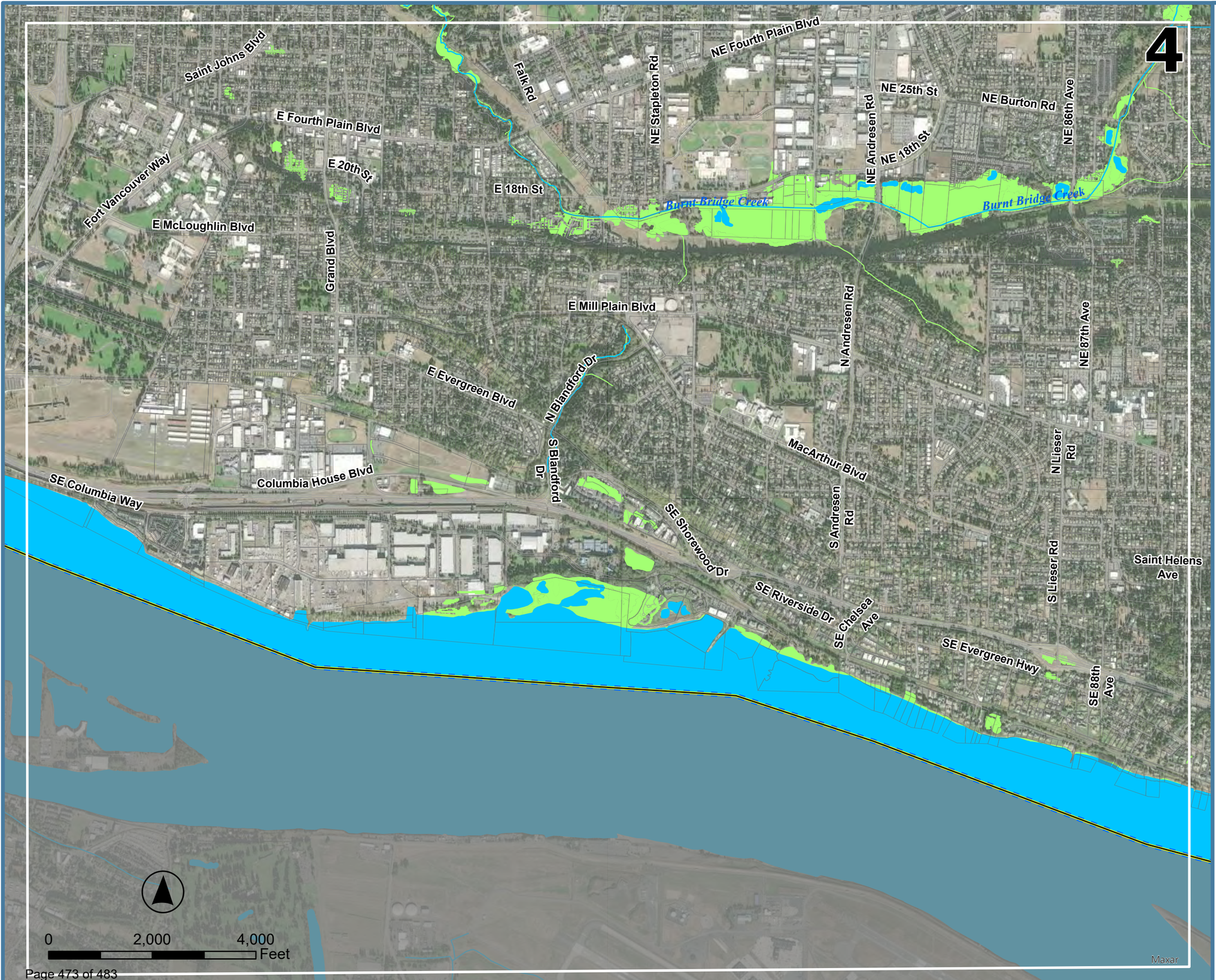


CITY OF Vancouver WASHINGTON

Source: Clark County, NWI



City of Vancouver Critical Areas: Wetlands

- Vancouver City Boundary
- Urban Growth Area
- Taxlots
- Roads
- Water
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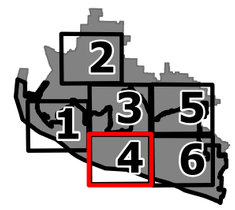

CITY OF Vancouver WASHINGTON

Source: Clark County, NWI

City of Vancouver Critical Areas: Wetlands

5

- Vancouver City Boundary
- Urban Growth Area
- Taxlots
- Roads
- Water
- Wetlands

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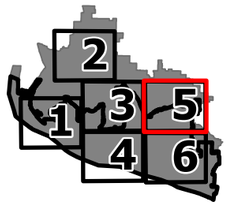

CITY OF Vancouver WASHINGTON

Source: Clark County, NWI

City of Vancouver Critical Areas: Wetlands

- Vancouver City Boundary
- Urban Growth Area
- Taxlots
- Roads
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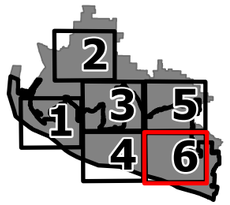

CITY OF Vancouver WASHINGTON

Source: Clark County, NWI

City of Vancouver Critical Areas: Wetlands

- Vancouver City Boundary
- Urban Growth Area
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CITY OF Vancouver WASHINGTON

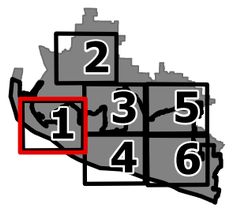
Source: Clark County, NWI

City of Vancouver Critical Areas: Fish and Wildlife Habitat Conservation Area

- Vancouver City Boundary
- Urban Growth Area
- Roads
- Taxlots
- Water
- Oak Woodland
- Priority Habitat Areas
- Priority Species Area
- Adopted Riparian Buffers

Priority Habitat and Species Areas are specific habitats identified by the Washington State Department of Fish and Wildlife with unique or significant value to a large number of species. These habitats may consist of unique plant species or specific habitat features like cliffs or oak habitat.

Riparian Buffers are regulated areas within a horizontal distance from the ordinary high water mark of water bodies which include lakes, streams, or rivers.



CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR

0 2,000 4,000 Feet

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

City of Vancouver Critical Areas: Fish and Wildlife Habitat Conservation Area

2

- Vancouver City Boundary
- Urban Growth Area
- Roads
- Taxlots
- Water
- Oak Woodland
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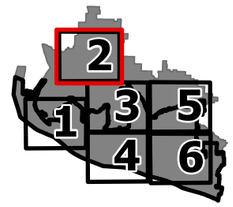

CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR

City of Vancouver Critical Areas: Fish and Wildlife Habitat Conservation Area

3

- Vancouver City Boundary
- Urban Growth Area
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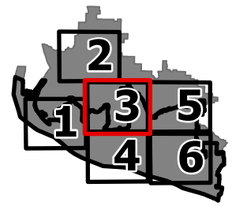

CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR

City of Vancouver Critical Areas: Fish and Wildlife Habitat Conservation Area

4

- Vancouver City Boundary
- Urban Growth Area
- Roads
- Taxlots
- Water
- Oak Woodland
- Priority Habitat Areas
- Priority Species Area
- Adopted Riparian Buffers

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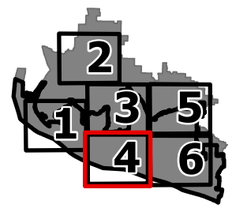
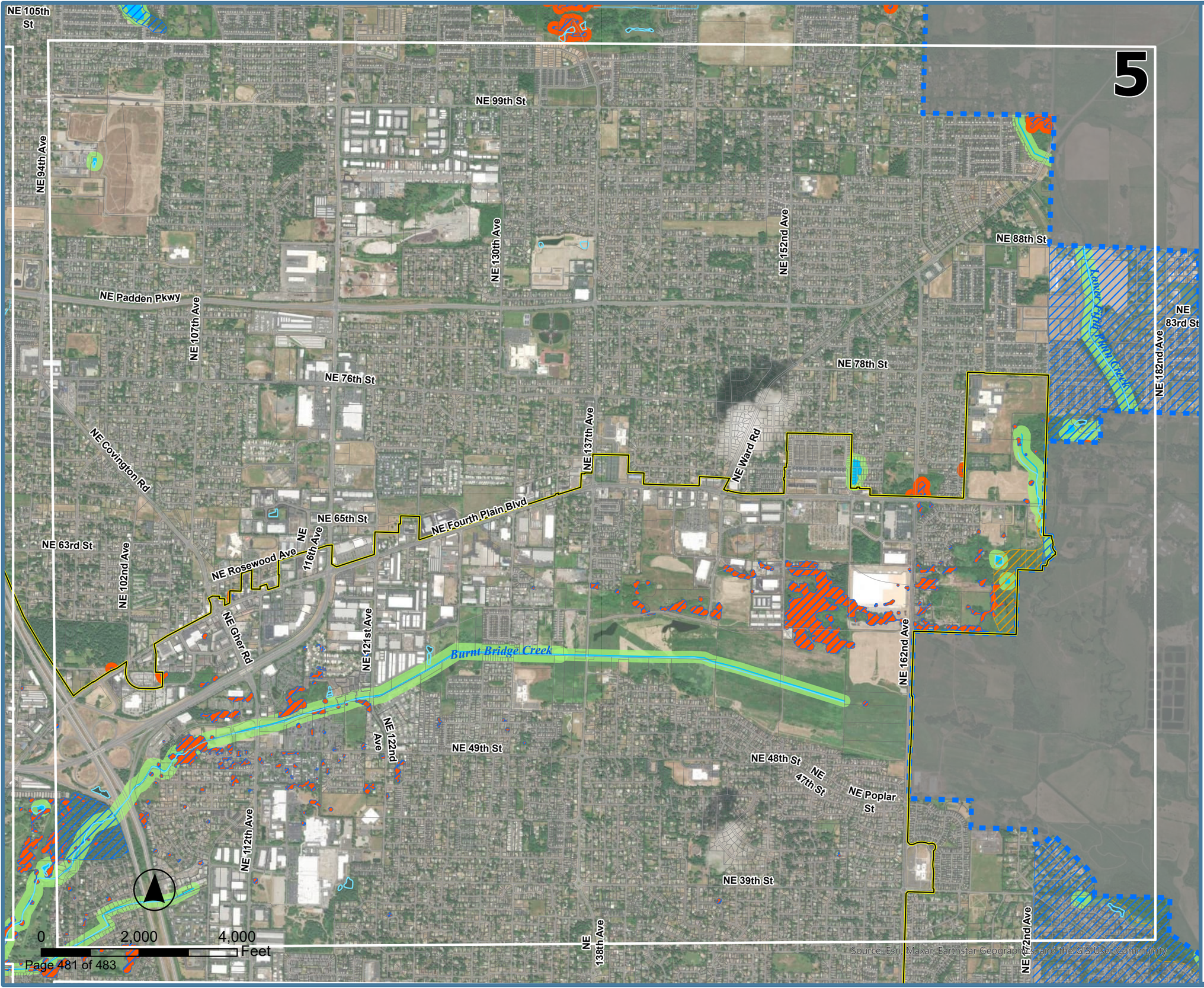


CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR

0 2,000 4,000 Feet

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

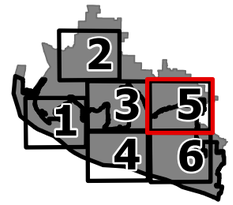


City of Vancouver Critical Areas: Fish and Wildlife Habitat Conservation Area

- Vancouver City Boundary
- Urban Growth Area
- Roads
- Taxlots
- Water
- Oak Woodland
- Priority Habitat Areas
- Priority Species Area
- Adopted Riparian Buffers

Priority Habitat and Species Areas are specific habitats identified by the Washington State Department of Fish and Wildlife with unique or significant value to a large number of species. These habitats may consist of unique plant species or specific habitat features like cliffs or oak habitat.

Riparian Buffers are regulated areas within a horizontal distance from the ordinary high water mark of water bodies which include lakes, streams, or rivers.



CITY OF Vancouver WASHINGTON

Source: Clark County, WDNR

City of Vancouver Critical Areas: Fish and Wildlife Habitat Conservation Area

6

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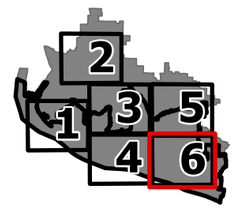

CITY OF Vancouver WASHINGTON

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0 1 2 Miles