



**CITY OF WASHOUGAL
CITY COUNCIL WORKSHOP MEETING
MINUTES
Monday, April 11, 2022
5:00 PM**

MEETING INFORMATION

Please click the link below to join the webinar:
<https://us02web.zoom.us/j/84646930001>

I. CALL TO ORDER

Mayor Pro Tem David Stuebe called the meeting to order at 5:00.

II. ROLL CALL

Present: Councilmembers Michelle Wagner, David Stuebe, Janice Killian, Molly Coston, Julie Russell, and Ernie Suggs **Absent:** Mayor Rochelle Ramos

Staff:

Jennifer Forsberg, City Clerk/Finance Director
Mitch Kneipp, Community Development Director
Wendi Steinbronn, Police Chief
Teresa Stedman, Human Resources & Risk Director
Rob Charles, City Engineer
Rose Jewell, Community Engagement Manager

III. PUBLIC COMMENTS

None

IV. NEW BUSINESS

A. Public Works: Contractor Agreement with Northbank Civil and Marine Inc for Steamboat Landing Repair

Rob Charles presented the following:

- History
- Needed repairs
- Next Steps - Award contract to Northbank Civil and Marine, Inc. through the consent agenda

B. Community Development: Critical Areas Ordinance (CAO) Update

Mitch Kneipp introduced the consultants Ethan Spoo and Dusty Day who presented the following:

- Five types of critical area
- State requirements
- History
- Existing Ordinance
- Process
- What is Best Available Science (BAS)
- Key proposed revisions
- Liquefaction susceptibility

- Ground shaking amplification site class
- Fish and wildlife habitat conservation area
- Riparian Buffers
- Wetlands
- Rating systems
- Mitigation issues
- Next steps
 - Public hearing on April 25th
 - Once adopted file with dept. of commerce

C. Finance: 2021 Annual Report

Jennifer Forsberg presented the following:

- Actual Expenditures
- Utility Billing
- Audit
- Bond Ratings
- Finance Accomplishments
- IT Accomplishments
- 2022 Goals

D. Finance: 2021 Year-end review

Jennifer Forsberg presented the following:

- Financial Summary
- General and Street Funds
 - Long Term Projections
 - Revenues
 - 2021 Revenues
 - 2021 Expenses
- Utility Funds
 - 2021 Revenues
 - 2021 Expenses
- All Funds
 - 2021 Revenues and Expenses
- LGIP-Investment Update
- Bond Investment Update

V. PUBLIC COMMENTS

None

VI. REPORTS AND COMMUNICATIONS

A. CITY MANAGER

Jennifer Forsberg, commented on her role as acting city manager.

B. MAYOR

Deferred to council meeting.

C. CITY COUNCIL

Deferred to council meeting.

VII. ADJOURNMENT

Meeting was adjourned at 6:16 pm

Mayor

City Clerk



City of Washougal
PUBLIC WORKS PURCHASING

Contract Information Form *(THIS FORM MUST ACCOMPANY EVERY CONTRACT)*

Contract Title: _____ Vault Filing Number: _____

Vendor Name: _____ Vendor Number: _____

Contract Overview: _____ Contract Total: _____

Project Manager: _____ Ext: _____ Department: Public Works

Project Number: _____

Budget Code(s): _____

Engineer's Project Estimate: \$ _____

Contract Price: \$ _____

Type of Procurement Method: _____

Project specifically identified in approved budget: N/A ☐ YES ☐ NO ☐ * if NO see below if project cost is greater than **\$50,000** for public works, professional services, and personal services.

Does project change exceed administrative discretion threshold? N/A ☐ YES ☐ NO ☐

If project exceeds administrative threshold, was it approved by Council? YES ☐ NO ☐ [Click here to enter a date.](#)

Bid Tab for:
CITY OF WASHOUGAL
2022 Steamboat Landing Dock Repair

Northbank Civil and Marine, Inc. 4180 NW Fruit Valley Road Vancouver, WA 98660-1222 Robert S. Barchus, President Phone: 360-835-8794 Email: SamB@northbankcm.com	
Unit Cost	Total Cost
\$22,000.00	\$22,000.00
\$21,000.00	\$42,000.00
\$58,000.00	\$58,000.00
\$5,000.00	\$5,000.00
\$10,668.00	\$10,668.00
Total: \$137,668.00	

Item No.	Est Quantity	Units	Description
1	1	LS	Mobilization and Demobiliazation
2	2	EA	Materials Pile Roller System installed
3	1	LS	Handrail Repairs
4		LS	Minor Change
5		LS	8.4% Washington State Sales Tax

BID PROPOSAL FORM

TO: City of Washougal
1701 "C" Street
Washougal, WA 98671

FROM: Bidder: Northbank Civil and Marine, Inc.
Address: 4180 NW Fruit Valley Road
Vancouver, WA 98660-1222
UBI #: 603-379-618
Contact Name: Robert S. Barchus, President
Telephone: 360.984.3336
Email: SamB@northbankcm.com

The undersigned, as bidder, declares that we have examined all of the contract documents and that we will contract with the City of Washougal to do everything necessary to complete the work as outlined on the plans and specification for the Steamboat Landing Dock Repair Project.

We acknowledge that addenda numbers NA to NA have been delivered to us and have been examined as part of the contract documents. We agree that the bid Bond and the Qualification of Bidder shall form a part of this proposal.

Attached is a bid bond duly completed by a guaranty company authorized to carry on business in the State of Washington, in the amount of no less than five percent (5%) of the total amount of our proposal, or alternatively, there is attached a certified or cashier's check payable to the City of Washougal in the amount of no less than five percent (5%) of the total amount of our proposal.

If our BID is accepted, we agree to sign the contract form and to furnish the contract bond and the required evidences of insurance within ten (10) calendar days after receiving written notice of the award of contract.

We further agree, if our BID is accepted and a contract for performance of work is entered into with the City of Washougal, to so plan the work and to prosecute it with such diligence that all the work shall be completed within the time period stated in the contract. We understand that the City of Washougal reserves the right to reject any or all bids and to determine which proposal is, in the judgment of the City of Washougal, the lowest responsible bid, and which proposal, if any, should be accepted in the best interests of the City of Washougal and that the city of Washougal also reserves the right to waive any informalities in any proposal or bid.

We further state that we have not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such contract.

Steamboat Landing Dock Repair

Bid Proposal Form

Page 1

We propose to perform the work at the prices listed in the following bid schedule:

Notes:

- (1) Bid items shall include all applicable taxes, fees, and permits.
- (2) Bid amounts shall be shown as figures.
- (3) For detailed description and/or explanation, see specifications.

STEAMBOAT LANDING FLOATING DOCK REPAIR

Item No.	Estimated Quantity	Units	Description	Unit Cost	Total Cost
1	1	LS	Mobilization and Demobilization	\$ 22,000 ⁰⁰	\$ 22,000 ⁰⁰
2	2	EA	Materials Pile Roller System installed	\$ 21,000 ⁰⁰	\$ 42,000 ⁰⁰
3	1	LS	Handrail Repairs	\$ 58,000 ⁰⁰	\$ 58,000 ⁰⁰
4		LS	Minor Change	\$5,000.00	\$5,000.00
5		LS	8.4% Washington State Sales Tax	\$ 10,668 ⁰⁰	\$ 10,668 ⁰⁰

TOTAL BID

(Sum of Items 1 through 5)

\$ 137,668⁰⁰

City of Washougal, Washington
Contractor Agreement
Project Name _____

THIS CONTRACT, effective this _____ day of _____, 2022, is entered into by and between Contractor _____ hereinafter referred to as the Contractor, and the City of Washougal, a municipal corporation of the State of Washington, hereinafter referred to as the Owner.

1. **Contractor's Obligation:** The Contractor, for and in consideration of the sum to be paid to it by the Owner in the manner and at the times provided, hereinafter and in the Specifications, and in consideration of the covenants and agreements herein contained, which documents are incorporated into and made a part of this contract, hereby agrees to furnish all materials, labor, tools, machinery and implements of every description necessary for construction and installation of the following improvements:

PROJECT NAME: _____

All work shall be done in accordance with the Contract on file with the City of Washougal, and in accordance with such alterations or modifications as may be made by the Owner. The Contractor agrees to do the work and furnish the materials in a most substantial and workmanlike manner and within the time limits stated in the Contract. The Contractor agrees that it will make all necessary arrangements for the obtaining of permits from the United States, State of Washington, and/or any of its agencies as may be necessary to do the work required and covered by this Contract.

2. **E-Verify Program:** The Contractor will certify their participation in the E-Verify Program by submitting a Declaration of Participation Form. If the Contractor described herein uses a subcontractor in connection with the performance of the Contract, the subcontractor shall, as a condition of the Contract, certify their participation in the E-Verify Program by submitting a Declaration of Participation Form. The Contractor and any subcontractors will not knowingly employ or contract with an unauthorized alien. The Contractor shall provide verification of their compliance immediately upon any City request. Failure by the Contractor to comply with such requests may be considered a breach of contract.
3. **Subcontractor Responsibility:** The Contractor shall include the language of this section in each of its tier subcontracts, and shall require all of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. The requirements of this section apply to all subcontractors regardless of tier.

At the time of subcontract execution, the Contractor shall verify that each tier subcontractor meets the following bidder responsibility criteria:

1. Have a current certificate of registration in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
2. Have a current Washington Unified Business Identifier (UBI) number;
3. Have a current City of Washougal General Business License;
4. If applicable, have
 - a. Have Industrial Insurance (workers' compensation) coverage for the subcontractor's employees working in Washington, as required in Title 51 RCW;
 - b. A Washington Employment Security Department reference number, as required in Title 50 RCW;
 - c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
 - d. An electrical contractor license, if required by Chapter 19.28 RCW;
 - e. An elevator contractor license, if required by Chapter 70.87 RCW.
5. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065 (3).
6. Have received training on the requirements related to public works and prevailing wage under RCW 39.04.350 and RCW 39.12. The bidder must designate a person or persons to be trained on these requirements. The training must be provided by the department of labor and industries or by a training provider whose curriculum is approved by the department. The department, in consultation with the prevailing wage advisory committee, must determine the length of the training. Bidders that have completed three or more public works projects and have had a valid business license in Washington for three or more years are exempt from this subsection. The department of labor and industries must keep records of entities that have satisfied the training requirement or are exempt and make the records available on its web site. Responsible parties may rely on the records made available by the department regarding satisfaction of the training requirement or exemption.

4. **Owner's Obligation:** In consideration of the promises and agreements of the Contractor as set forth herein, and in consideration of the faithful performance and furnishing of the work and materials required by this Contract to the satisfaction of the Washougal City Council, the Owner agrees to pay to the Contractor in the manner and at the times provided hereinafter and in the Contract Documents, and in accordance with the ordinances of the City of Washougal and the laws of the State of Washington, the following sum as indicated:

Including 8.4% Washington State Sales Tax (if applicable)

The total amount paid to the Contractor by the City may not exceed _____ and
 _____/100 Dollars (\$ _____
 _____).

The amount finally to be paid is, however, variable upon the work actually done and final payment will be made upon the basis of the amount of work done and the materials furnished and at the lump sum or unit prices fixed in the Contractor's Proposal or as modified by any or all approved Change Orders.

5. **Contractor's Insurance:** Contractor's liability insurance shall include completed operations and product liability coverage including:

1.	General Aggregate	\$2,000,000.00
2.	Completed Operations Aggregate	\$2,000,000.00
3.	For Each Occurrence (<i>Bodily Injury and Property Damage</i>)	\$1,000,000.00
4.	Property Damage Liability Insurance will include Explosion, Collapse and Underground coverage where applicable	\$2,000,000.00
5.	Automobile Liability for one (1) Bodily Injury:	
		\$1,000,000.00 per each person
		\$2,000,000.00 per each accident
6.	Property Damage	\$1,000,000.00 each accident

Subcontractors shall also be required to maintain insurance at the above stated limits.

The City of Washougal shall be named as an additional insured under all insurance required herein.

6. **Contractor's Bond:** The Contractor agrees that before it undertakes performance of this Contract, it will file with the City of Washougal a Contract Performance Bond and Payment Bond, in the forms prescribed by the City of Washougal, in the full amount of the Contract price executed by itself as principal and by a surety company authorized to do business in the State of Washington as surety. The bonds shall comply with the laws of the State of Washington, and especially with the provisions of Revised Code of Washington, Chapter 39.08.
7. **Employment of Labor:** The Contractor agrees that all persons employed in it and by any of its subcontractors in work done pursuant to this Contract shall be in accordance with all federal, state and local laws.
8. **Payment of Labor:** The Contractor agrees that all laborers, workers, or mechanics employed by it or by any subcontractor in the work of this Contract will be paid not less than the prevailing rate of wage for an hours work in accordance with the provisions of the Revised Code of Washington, Chapter 39.12, and all rules and regulations promulgated pursuant thereto. The State of Washington prevailing wage rates applicable for this public works project, which is located in Clark County, may be found at the following website address of the Department of Labor and Industries: <https://fortress.wa.gov/lni/wagelookup/prvWagelookup.aspx>. Based on the bid submittal deadline for this project, the applicable effective date for prevailing wages for this project is_____.

In case any dispute arises as to what the prevailing rates of wages for work of a similar nature are and such dispute cannot be adjusted by the parties involved, the matter shall be referred to the director of the Department of Labor and Industries of the State of Washington for arbitration, and the director's decision therein shall be final and conclusive and binding on all parties involved in the dispute.

9. **Payment to the Contractor:** Payment to the Contractor of the Contract price by the Owner shall be made in checks drawn on the fund provided therefore. Payment shall be in the manner provided below unless another manner has been specified in Special Provisions.

Progress payments to the Contractor shall be made within 30 days of receipt of the signed progress payment request, as approved by the Owner, for work completed during the previous month. There will be reserved and retained from monies earned by the Contractor on estimates during the progress of the improvements of work, a sum equal to 5 percent of all such estimates. Said retained amount shall be held in trust in accordance with the Specifications and Revised Code of Washington Ch. 60.28.

Payment of the retained percentage shall be withheld, by the owner, for a period of 45 days following the completion of all Contract work, as defined by WSDOT Section 1-01.3, and shall be paid the Contractor at the expiration of 60 days per RCW 39.12 and RCW 60.28, in the event no claims, as provided by law, have been filed against such funds; and provided further, that releases or certificates have been obtained from the State Department of Labor and Industries, from the State Department of Revenue, and the Employment Security Department and all other departments and agencies having jurisdiction over the activities of the Contractor. In the event such claims are filed, the Contractor shall be paid such retained percentages less an amount sufficient to pay any such claims, together with a sum sufficient to defray the cost of foreclosure action and to cover attorney fees as determined by the Owner.

Every person performing labor or furnishing supplies toward the completion of said improvement of work shall have a lien upon said monies so reserved; provided, that such notice of the lien of such claimant shall be given in the manner provided in Revised Code of Washington 39.08.030 and within the time provided in RCW 60.28 as now existing and in accordance with any amendments that may hereafter be made thereto.

No payment shall be made to the Contractor, however, until the Contractor and all subcontractors who have performed work shall have filed, with Procurement Services, the Labor and Industries executed Statement of Intent to Pay Prevailing Wage as required by Revised Code of Washington 39.12.040. Said Contractor and all subcontractors shall also keep accurate payroll records for three years from the date of acceptance as described in WAC 296-127-320 *Payroll*. A Contractor and all subcontractors shall, within ten days after it receives a written request, as defined by RCW 39.12.010(4) file a certified copy of the payroll records with the Owner. A contractor's noncompliance with this section shall constitute a violation of RCW 39.12.050.

10. **Indemnity:**

- A. **CONTRACTOR'S RESPONSIBILITY.** Contractor agrees to indemnify, defend, save and hold harmless the City, its officials, employees and agents from any and all liability, demands, claims, causes of action, suits or judgments, including costs, attorney fees and expenses incurred in connection therewith, or whatsoever kind or nature, arising out of, or in connection with, or incident to, the negligent performance of services by Contractor pursuant to this Agreement. This indemnification shall not include personal injury claims by outside third parties, except insofar as the claim relates to a latent condition not disclosed to the City.

1. In the event that any suit based on such a claim, demand, loss, damage, cost, or cause of action is brought against the Contractor, the City retains the right to participate in said suit.
 2. This indemnity and hold harmless shall include any claim made against the City by an employee of Contractor or subcontractor or agent of the Contractor, even if Contractor is thus otherwise immune from liability pursuant to the workers' compensation statute, Title 51 RCW. To the extent that such liability arises from the concurrent negligence of both the City and the Contractor, such cost, fees and expenses shall be shared between the City and the Contractor in proportion to their relative degrees of negligence. This indemnity and hold harmless shall NOT apply in the case where liability arises from the sole negligence of the City. Contractor specifically acknowledges that the provisions contained herein have been mutually negotiated by the parties and it is the intent of the parties that Contractor provide the broadest scope of indemnity permitted by RCW 4.24.115.
- 11. Ownership of Records and Documents – Public Disclosure:** All materials, writings and products produced by the Contractor in the course of performing this Contract shall immediately become the property of the City. In consideration of the compensation provided for by this Contract, the Contractor hereby further assigns all copyright interests in such materials, writings and products to the City. A copy may be retained by the Contractor. In the event the City receives a public record request for such materials, writings of products the City may, in its discretion, notify the Contractor of such request and withholds disclosure of such information for not less than five (5) business days to permit the Contractor to seek judicial protection of such information, provided that the Contractor shall be responsible for attorney fees and costs in such action and shall save and hold harmless the City from any costs, attorney fees, or penalty assessment under Ch.42.56 RCW.
- 12. Assignment:** This Contract is binding on each party, its successors, assigns, and legal representatives and may not, under any circumstances, be assigned or transferred by either party without express written authorization.
- 13. Termination for Convenience:** The City, at its sole discretion, may terminate this Contract for convenience at any time for any reason deemed appropriate. Termination is effective immediately upon notice of termination given by the City.
- 14. Bid Documents & Contract:** The complete Contract includes these parts: the Contract Form, Bidder's complete Proposal Form, Contract Plans, Contract Provisions, Standard Specifications, Standard Plans, Addenda, various certifications and affidavits, supplemental agreements, change orders, and subsurface boring logs (if any). These parts complement each other in describing a complete Work. Any requirement in one part binds as if stated in all parts.
- 15. Coordination of Contract Documents, Plans, Special Provisions, Specifications and Addenda:** As defined in section 1-04.2 in the 2012 Standard Specifications for Road, Bridge and Municipal

Construction as published by the Washington State Department of Transportation as modified by the Special Provisions, provided that this contract form shall supersede in the event of conflict.

16. Force Majeure: If either party fails to fulfill its obligations hereunder (other than an obligation for the payment of money), when such failure is due to an act of God, or other circumstances beyond its reasonable control, including but not limited to fire, flood, civil commotion, riot, war (declared and undeclared), revolution, or embargoes, then said failure shall excuse both party's performance for the duration of such event and for such a time thereafter as is reasonable to enable the parties to resume performance under this Agreement, provided however, that in no event shall such time extend for a period of more than one hundred eighty (180) days

17. **Notices:** Whenever in this written Contract written notices are to be given or made, they may be sent to the following people at the addresses as shown herein unless a different address is designated in writing or delivered to the respective party hereto:

[SPACE INTENTIONALLY LEFT BLANK]

**Owner: City of Washougal
1701 "C" Street
Washougal, WA 98671**

Contractor Name: _____
Street Address: _____
City, State, Zip: _____

Original signed at Washougal, Washington, on the dates listed below.

CITY OF WASHOUGAL, a municipal corporation

By:
City Manager, Date

Attest:

City Clerk

CONTRACTOR _____

By: (Proprietor, Partner, or corporate
President must sign)

(Title)

Date

Approved as to form:

City Attorney, Date

Steamboat Landing Dock Repair – Construction Award

April 11, 2022 | Presented by Rob Charles



City of Washougal

Steamboat Landing Dock Repair

- In December of 2020, a walkthrough of the dock by PW staff identified that the eastern dock section from the observation deck side had separated from the section parallel to the river. At the same time it was noted that some of the aluminum rail section bolts had become loose from the dock allowing adjacent sections of railing to slam into each other causing damage. The dock has been closed to the public since that time so the cause of the separation could be determined.
- Repairs will include installing bumpers or rollers on the two (2) triple pile sections, repairing damaged aluminum handrails, reinstalling bolts of the correct size to attach the handrails to the dock, and realignment of the eastern dock sections.



Steamboat Landing Dock Repair



Next Steps - Steamboat Landing Dock Repair

The city only received one bid on the repair of the dock from Northbank Civil and Marine, Inc. in the amount of \$137,668. The engineer's estimate on the project is \$110,000.

Timeline for the completion of the repairs is mid July.

Staff recommends that council authorize the City Manager to execute a construction contract with Northbank Civil and Marine, Inc. in the amount \$137,668 for SB Landing dock repairs.



Questions?





Critical Areas Ordinance Update

City Council Workshop

April 11, 2022

Ethan Spoo, WSP
Dusty Day, WSP



Purpose

- Critical areas and importance
- State requirements/history
- Update process/schedule
- Review proposed revisions to Critical Areas Ordinance (CAO)
- Questions
- Next steps





What are critical areas?

Five Main Types

Wetlands

Fish and wildlife habitat conservation areas

Critical aquifer recharge areas

Frequently flooded areas

Geologically hazardous areas



Why are they important?

- Benefits and costs to humans
 - *Prevents development in unsafe areas*
 - *May reduce development potential*
- Protects the environment

Where do critical area regulations apply?

- Critical areas and buffers outside shoreline jurisdiction





State Requirements

- Revised Code of Washington (RCW) 36.70A: Growth Management Act mandates updates every 8 years and compliance with best available science (BAS)
 - *RCWs 36.70A.130 and 172*
 - *WACs 365-190 and 365-195-915*
- Designated/defined per the Washington Administrative Code (WAC)
- The City of Washougal is at risk of losing significant grants if this update is not adopted prior to April 30, 2022



History

— Existing Ordinance

- *2006: adopted to comply with State's BAS requirement*
- *With the exception of an update in August 2012 to comply with FEMA regulations and other minor changes, this chapter has remained unchanged since original adoption*

— Draft Revised Ordinance

- *Planning Commission Meetings: November 16 and 30, 2021 and April 5, 2022*
- *Public Comment Period*
 - Notice of Application: February 8 to February 23, 2022
 - SEPA Determination: February 24 to March 11, 2022
- *Planning Commission recommend approval April 5, 2022*



Process

1. Document BAS
2. Develop new critical areas maps
3. Complete Commerce checklist to identify updates needed
4. Draft recommended updates to existing ordinance
5. Review draft ordinance (City staff, public/ stakeholders, Planning Commission, and City Council)
6. Discuss and adopt

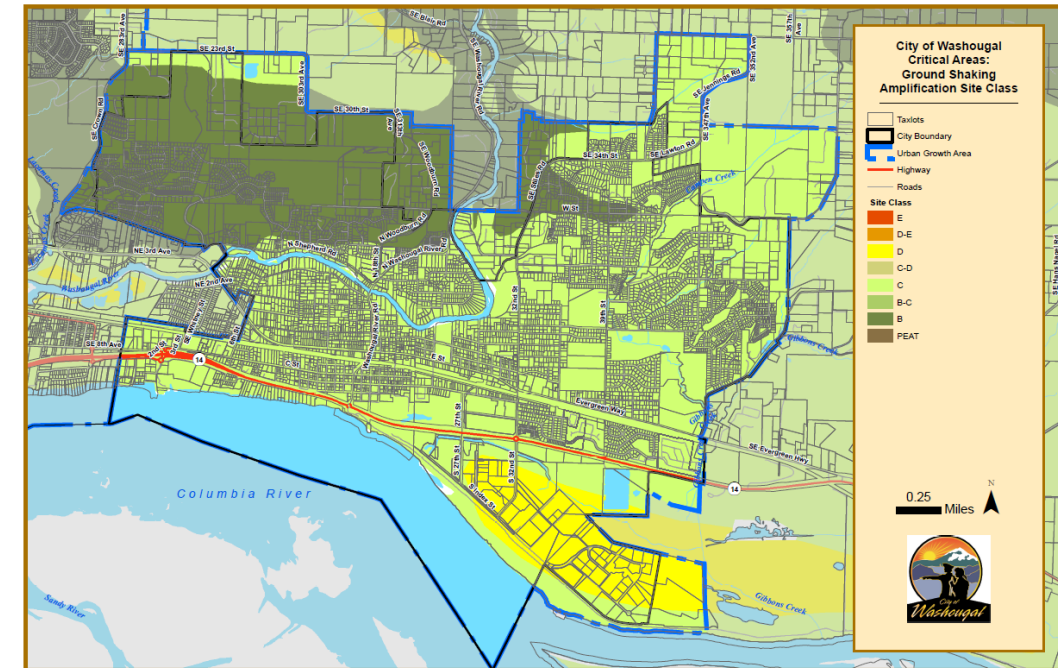




What is BAS?

WAC 365-195-905:

- Peer review: reviewed by qualified scientific experts
- Methods: clearly stated/able to be replicated
- Logical conclusions and inferences: based on reasonable assumptions, consistent with theory
- Quantitative analysis: uses appropriate quantitative methods
- Context: information placed in proper context
- References: relevant, credible literature





Key Proposed Revisions

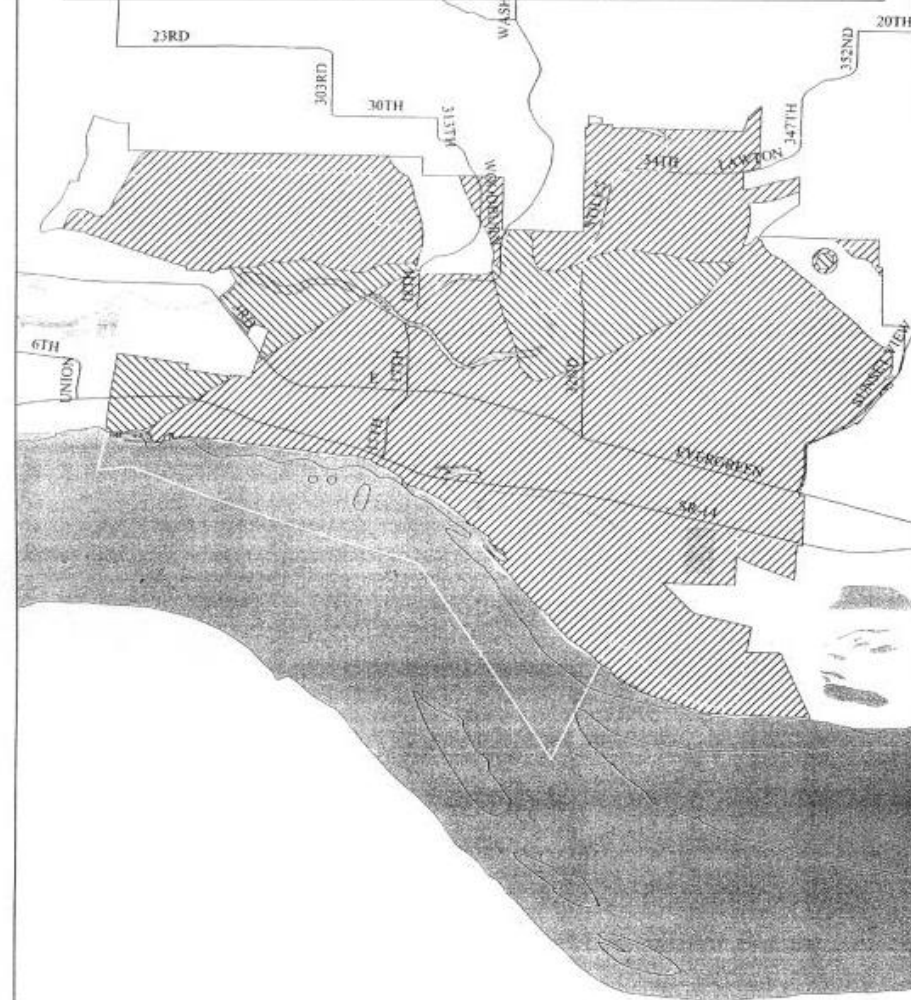
Critical Area	Proposed Updates
General	• Update definitions and terms to be consistent with RCW/WAC • Update references to current guidelines, manuals, and data sources • Update critical areas maps • Update exemptions
Wetlands	• Update approved delineation manual • Update exempt wetlands language • Update reference to current wetland rating system • Update regulated activities • Update mitigation ratios per Ecology guidance • Update a small percentage of the wetland buffers for Type III wetlands
Critical Aquifer Recharge Areas	• Consistent with guidance - no recommended revisions
Frequently Flooded Areas	• Minor text edits to be consistent with 44 CFR 60
Geologically Hazardous Areas	• Update applicability to reference state and federal maps
Fish and Wildlife Habitat Conservation Areas	• Add language to encourage use of updated WDFW guidance • Define according to seven standard state categories • Increased riparian buffer widths for Type Ns and Type Np streams • Add larger riparian buffer widths for Type F anadromous segments



Critical Areas Maps

- Updated Critical Areas Map
- Rationale: Existing maps are outdated (use old data)

Critical Aquifer Recharge Areas (CARA) City of Washougal



Critical Aquifer Recharge Areas

- Washougal Urban Growth Boundary
- Washougal
- CARA Category 1
- CARA Category 2

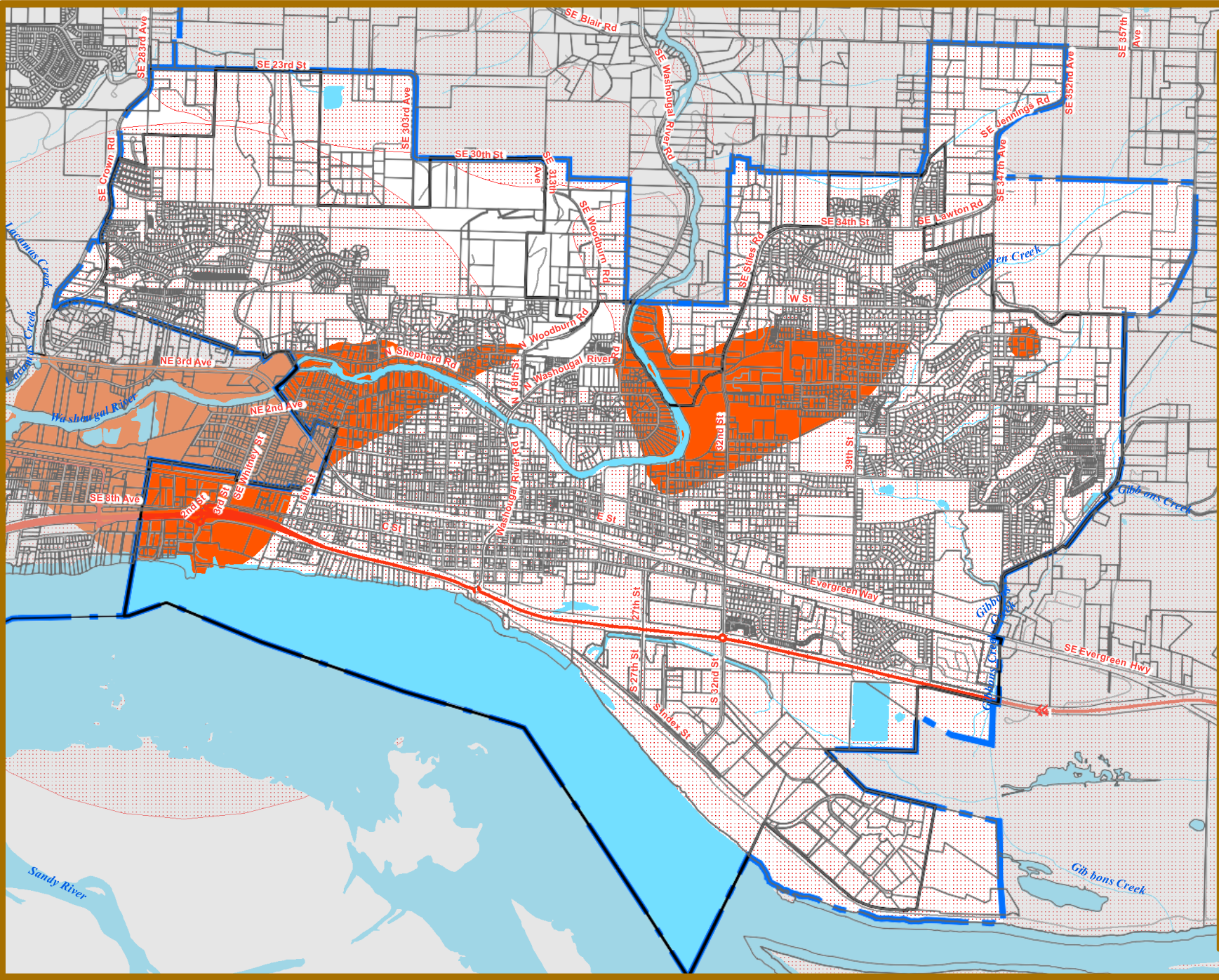


0 1,125 2,250 4,500
Feet

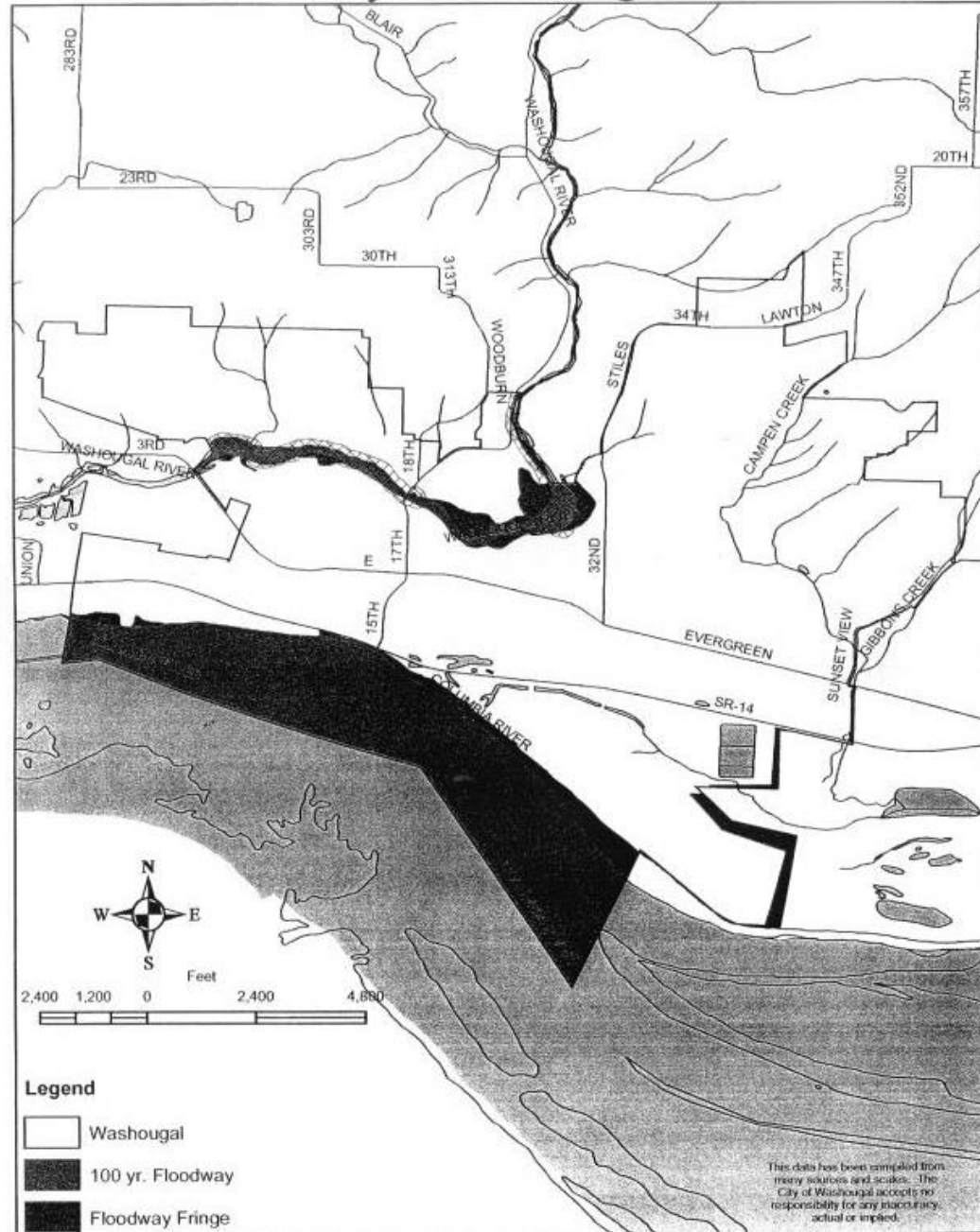
City of Washougal Critical Areas: Critical Aquifer Recharge Areas

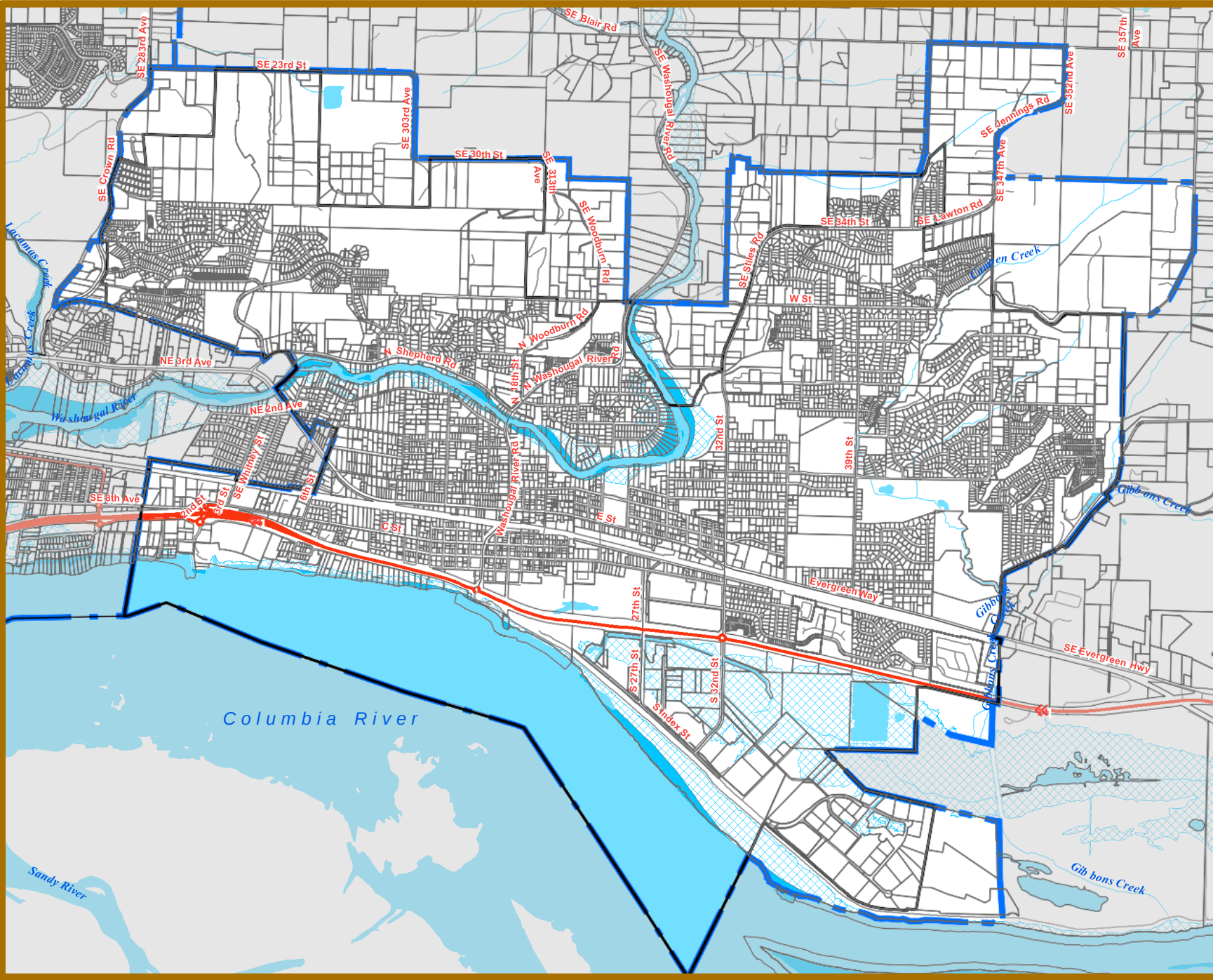
- Taxlots
- City Boundary
- Urban Growth Area
- Highway
- Roads
- Category
 - Category 1 Recharge Areas
 - Category 2 Recharge Areas

0.25
Miles



100 Year Floodplain and Shorelines City of Washougal





City of Washougal Critical Areas: Frequently Flooded Areas

 Taxlots

 City Boundary

 Urban Growth Area

 Highway

 Roads

Frequently Flooded Areas

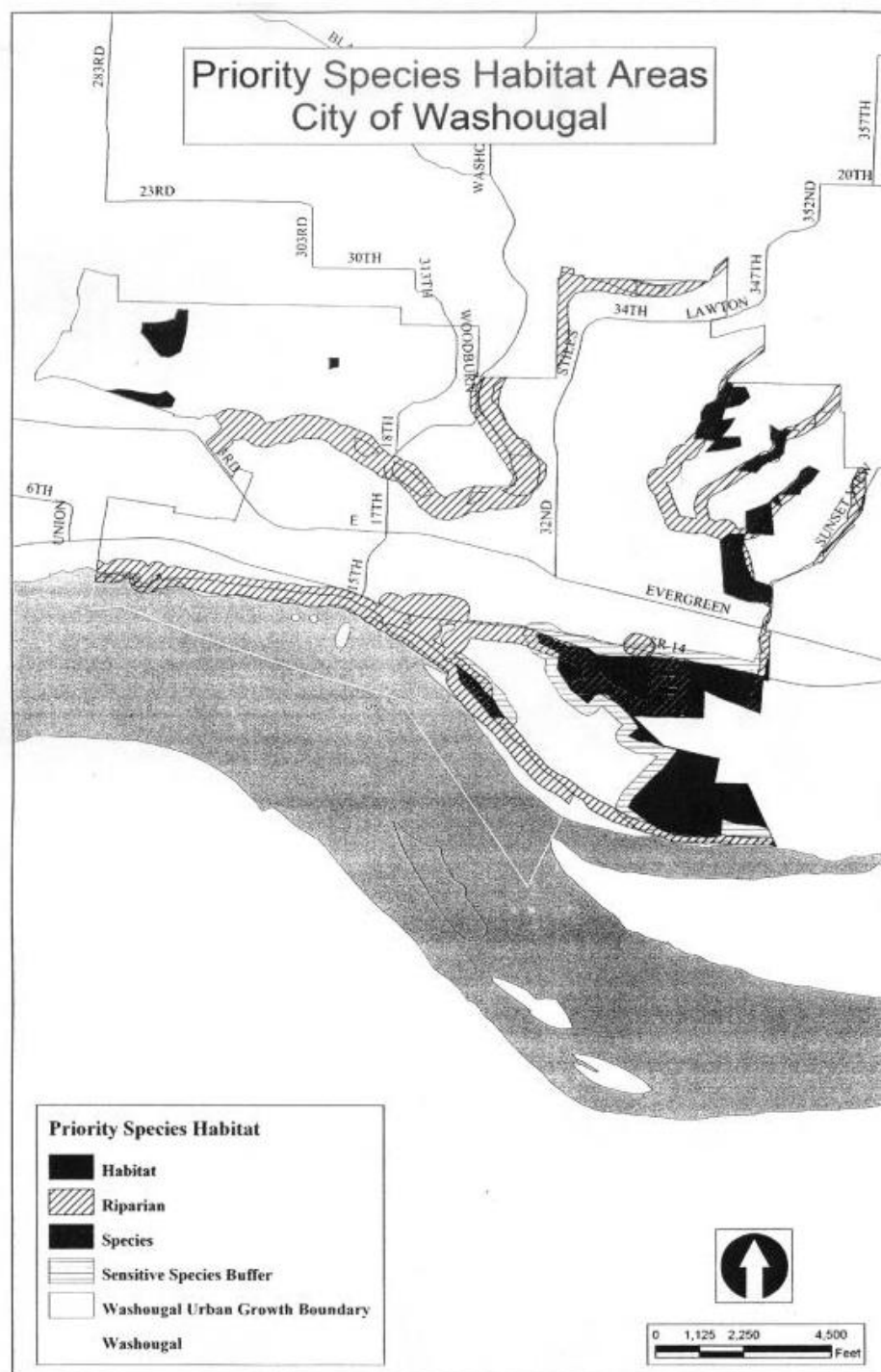
 Floodway

 Floodplain

 0.25 Miles



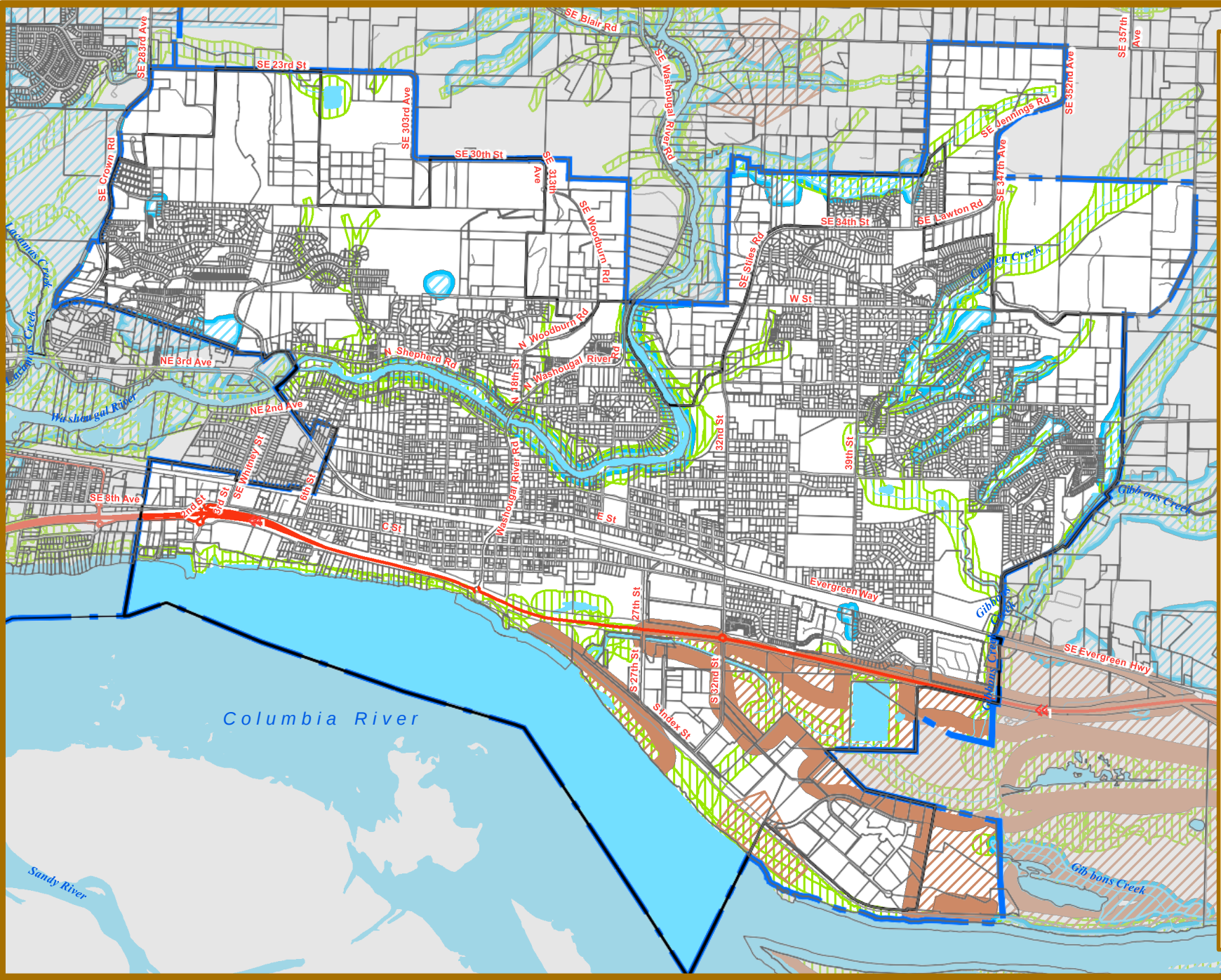
Priority Species Habitat Areas City of Washougal



City of Washougal Critical Areas: FWHCA

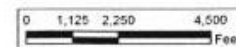
- Taxlots
- City Boundary
- Urban Growth Area
- Highway
- Roads
- Conservation Areas
 - Habitat Area
 - Adjacent to Habitat Area
 - Species Area
 - Adjacent to Species Area
 - Riparian Habitat Area

0.25
Miles

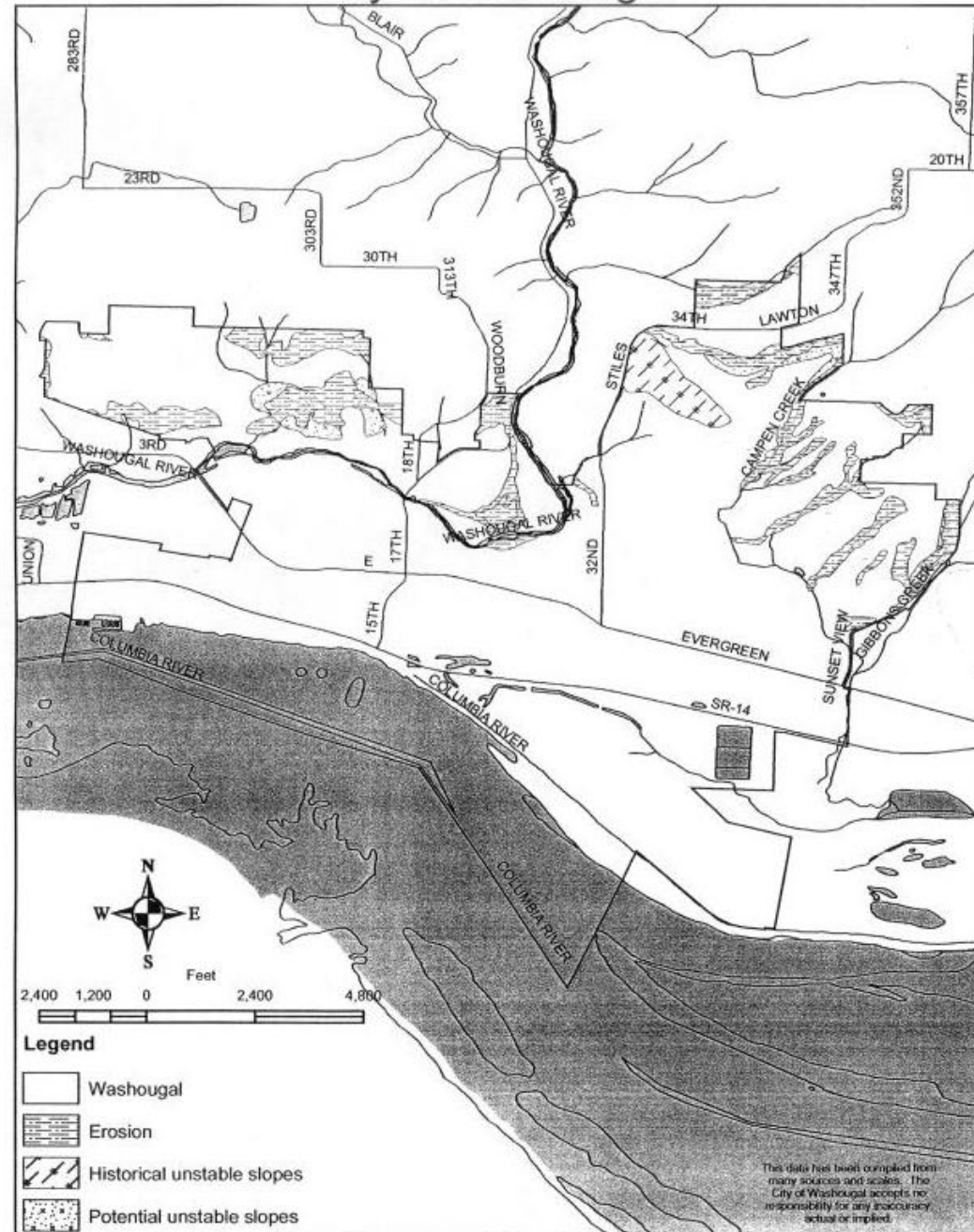


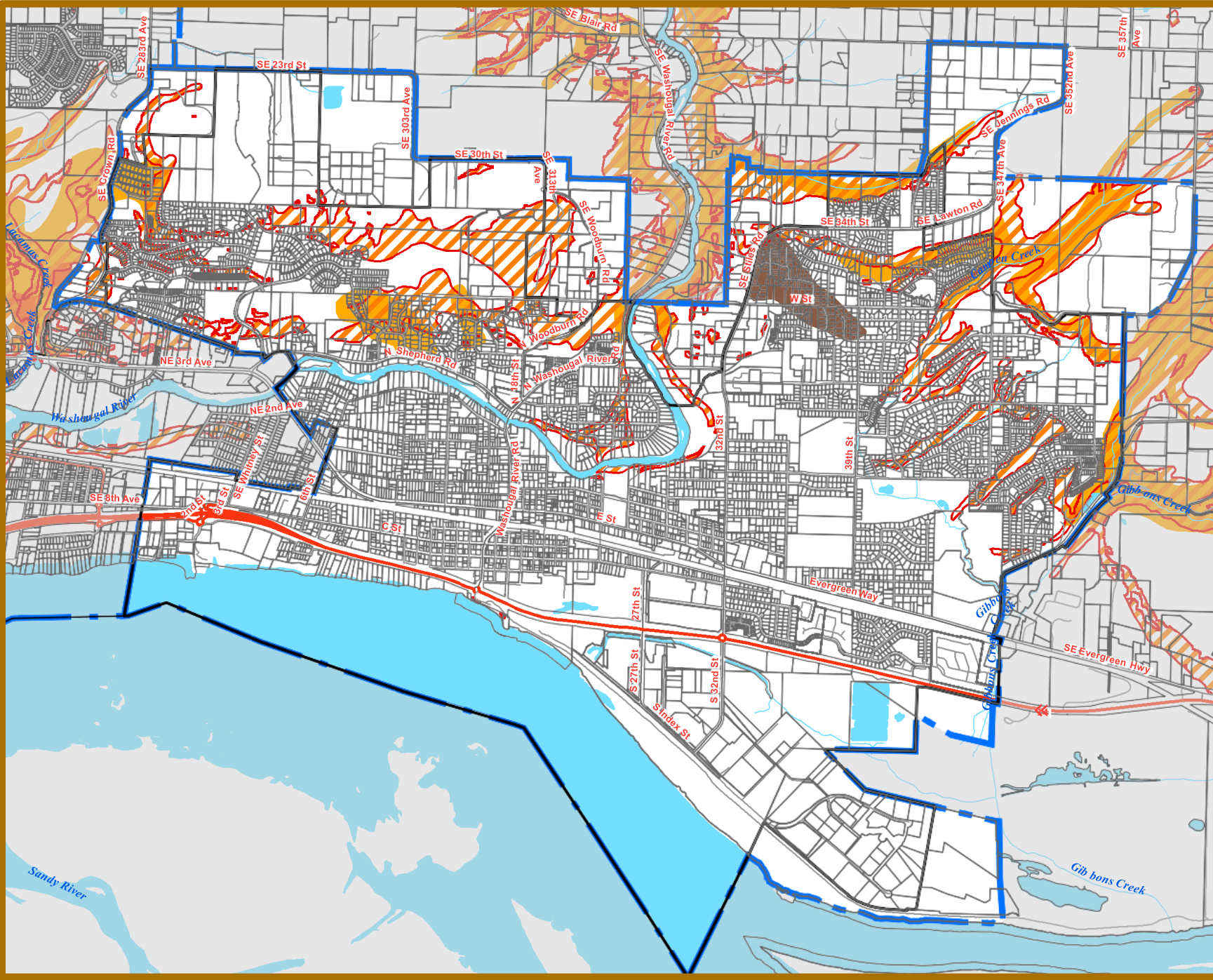
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 Severe Erosion
 Historical Unstable Slopes
 Potential Unstable Slopes
 Washougal Urban Growth Boundary
 Washougal



Unstable Slopes and Erosion Hazard City of Washougal



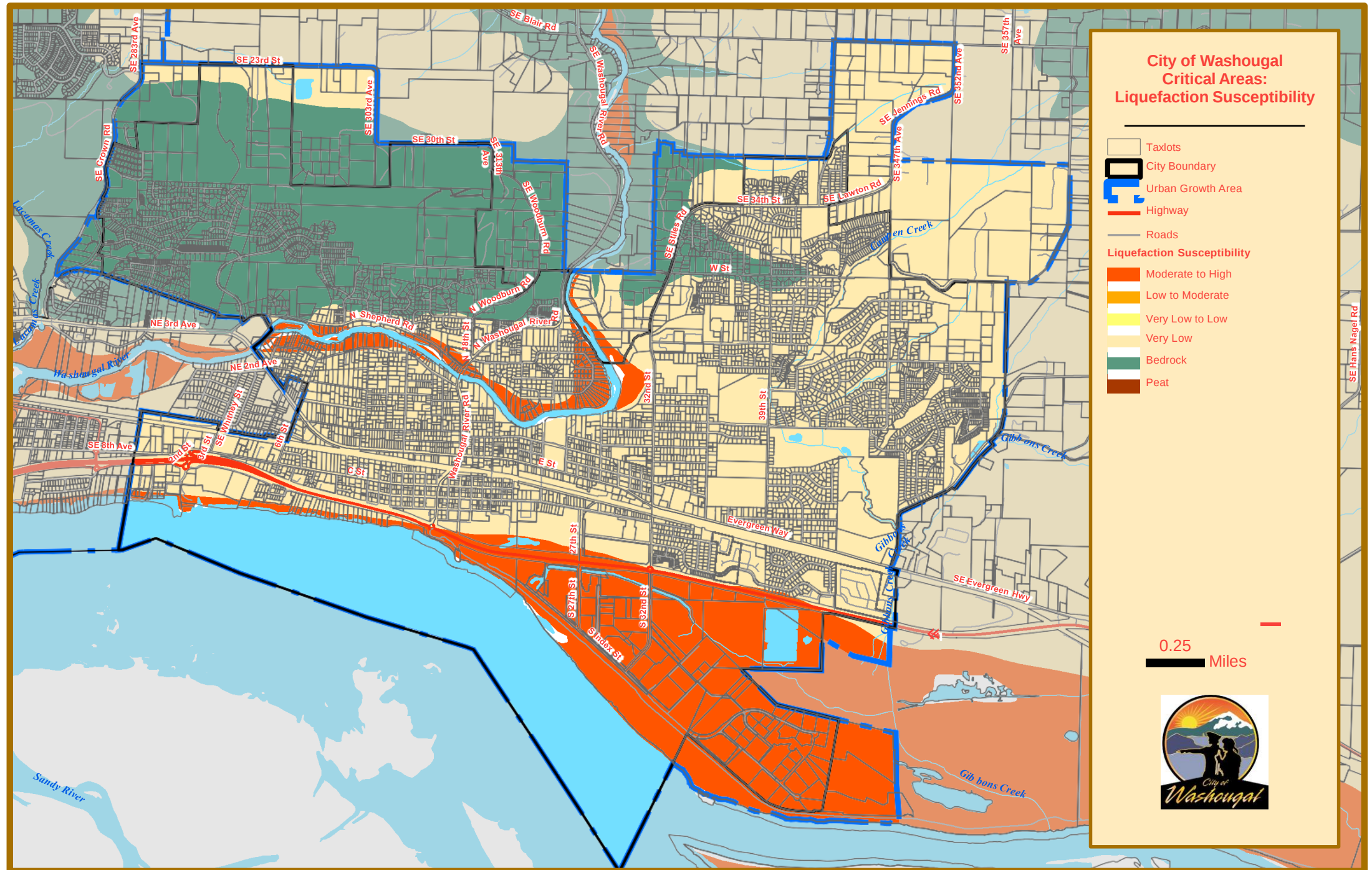


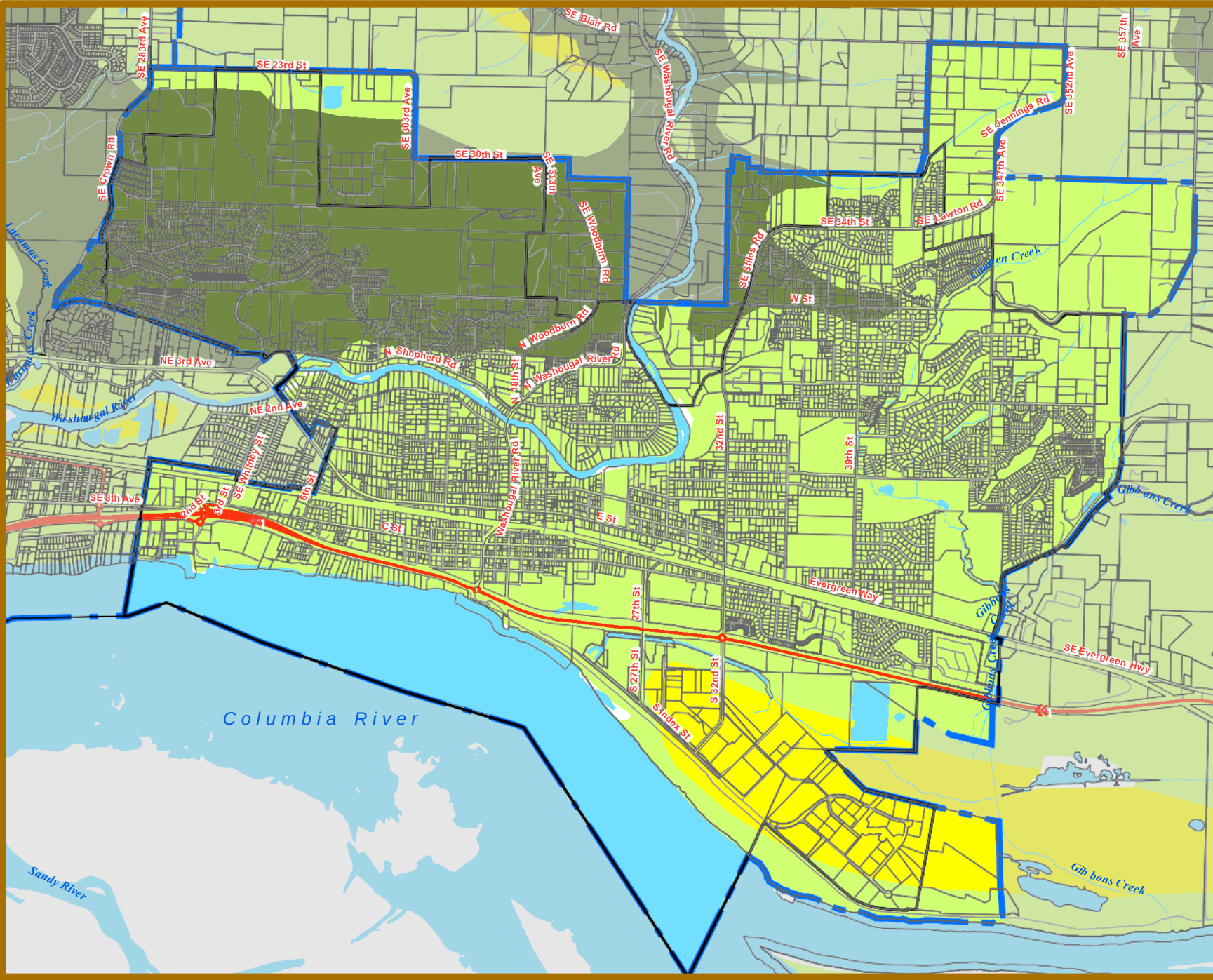
City of Washougal Critical Areas: Landslide Hazards

- Taxlots
- City Boundary
- Urban Growth Area
- Highway
- Roads
- Severe Erosion Hazard
- Landslide Hazards
 - Historical unstable slopes
 - Potential unstable slopes
 - Active unstable slopes

0.25
Miles







City of Washougal Critical Areas: Ground Shaking Amplification Site Class

- Taxlots
- City Boundary
- Urban Growth Area
- Highway
- Roads
- Site Class
 - E
 - D-E
 - D
 - C-D
 - C
 - B-C
 - B
 - PEAT

0.25
Miles



PABF
 PSS/EMR
 PUBKR
 Hydric Soils

PEM/SSC
 PSS/FOA
 PUSKR
 Washougal

PEM/SSR
 PSSA
 RIUBV
 Washougal Urban Growth Boundary

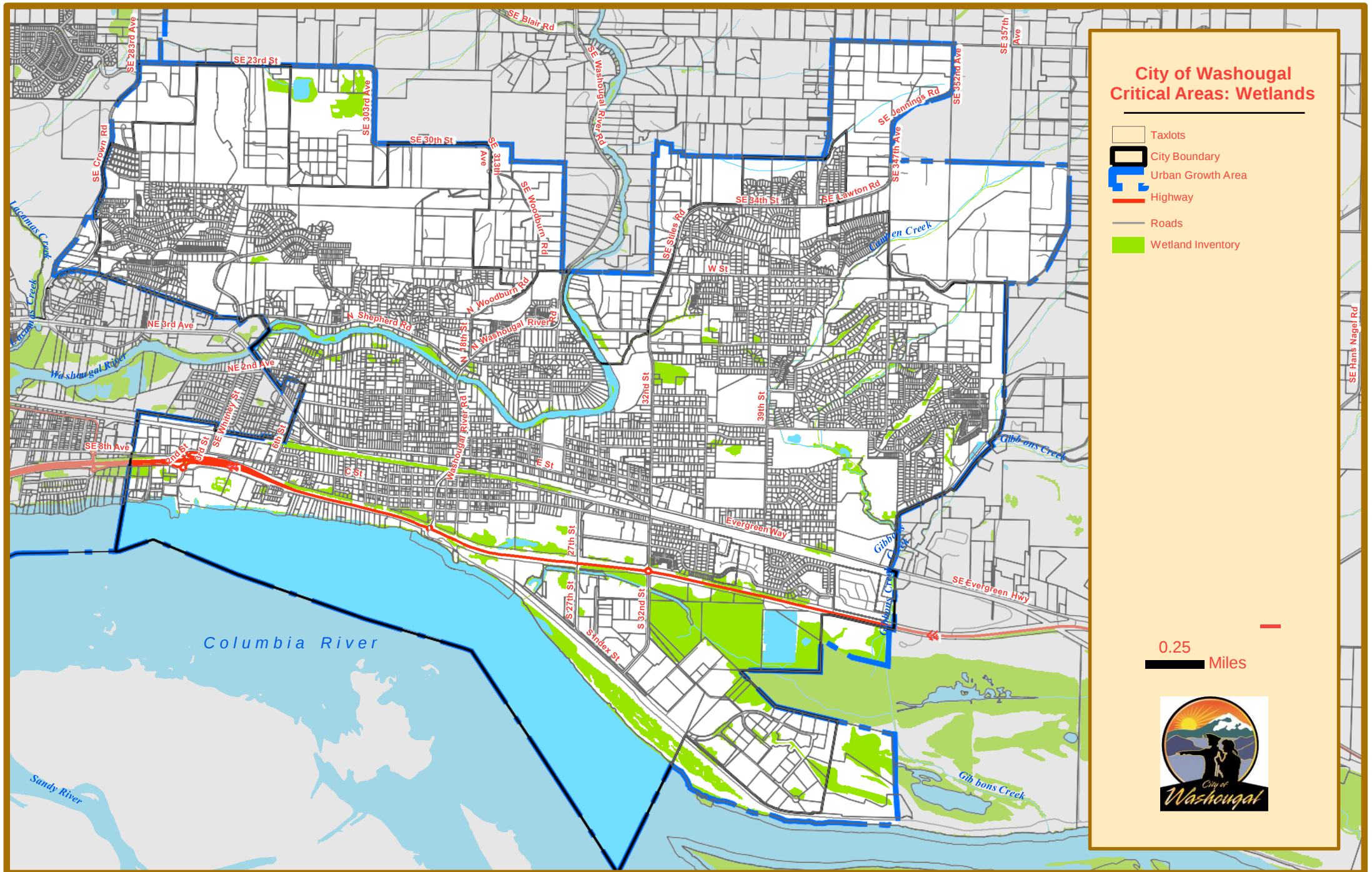
PEMA
 PSSC
 RIUSR

PEMC
 PSSR
 R2UBHX

PFOA
 PUBHH
 R3UBH

PFOS
 PUBHX
 R3USC

0 1,125 2,250 4,500 Feet





Fish and Wildlife Habitat Conservation Areas

Types of Fish and Wildlife Habitat Conservation Areas (FWHCs)

- WMC 16.04.055(1)
- Updated code to include seven FWHCs:
 - *Areas associated with state and federally designated endangered, threatened, and sensitive species*
 - *State priority habitats and species established by WDFW*
 - *Habitats and species of local importance*
 - *Naturally occurring ponds under 20 acres*
 - *Waters of the state*
 - *Lakes, ponds, streams, and rivers planted with game fish by governmental or tribal entities*
 - *State natural area preserves and natural resource conservation areas*
- Rationale: Consistency with the definition published in WAC 365-190-130

Fish and Wildlife Habitat Conservation Areas

Riparian Buffers

- Table 16.04.055(6)(a)
- Updated riparian buffer widths
 - *Provided larger riparian buffer widths for sections of Type F streams that support anadromous fish*
 - Sections of Type F streams that do not support anadromous fish do not change
- Rationale: meets RCW 36.70A.172(1)



Fish and Wildlife Habitat Conservation Areas

Riparian Buffers

- *Increased buffer widths of Type Ns and Type Np streams to meet BAS*
 - WDFW indicates that the minimum buffer width is 100 feet. This width has been shown to remove at least 90 percent of pollutants before reaching the stream.
 - Type Ns increased from 75 to 100 feet
 - Type Np increased from 100 to 125 feet
 - Rationale: meets minimum BAS published in WDFW guidance
- *New exemptions*
 - Expansions for existing structures/buildings
 - Replacement of existing single-family
 - Alterations of existing property improvements other than buildings
 - New structures under 200 square feet



Geologically Hazardous Areas

Applicability

- WMC 16.04.065(2)
- Updated applicability to specify each type of hazard area corresponding to maps
- Rationale: Better matches new state definitions for each hazard





Frequently Flooded Areas

Construction Materials and Methods

- WMC 16.04.060(19)(b)
- 44 CFR 60.3(a)(3) and (c)(5) requires that all new construction:
 - *Be designed or modified and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy*
 - *Be designed to equalize hydrostatic forces*
- Rationale: Changed to match wording of CFR

Manufactured Home Parks, Subdivisions, and Other New Development

- WMC 16.04.060(21)
- 44 CFR 60.3(a)(4) requires that all new subdivisions, *manufactured home parks, and other proposed new development*:
 - *Be consistent with need to minimize flood damage*
 - *Have public utilities and facilities located and constructed to minimize flood damage*
 - *Have adequate drainage provided to reduce exposure to flood damage*
- Rationale: Changed to match wording of the CFR

Wetlands

Exempted Wetlands

- WMC 16.04.070(3)
- Updated exempted wetlands section to be consistent with Ecology guidance
 - *Changed code to state that the exempted wetlands are exempt from avoidance and minimization measures but that wetland impacts must be mitigated*
- Rationale: this allows for small (i.e., less than 4,356 square feet) Category IV wetlands to be impacted, if the wetland meets certain criteria, consistent with Ecology guidance



Wetlands

Rating System

- WMC 16.04.070(6)
- Updated the code to include the use of the 2014 Washington State Wetland Rating System for Western Washington
- Rationale: meets WAC 365-190-090(3) requirements





Wetlands

Wetland Buffers

- WMC 16.04.070(8-9)
- Updated wetland buffer tables and added the land use intensity table
- Added buffer averaging to allow for more flexibility in on-site development
- Rationale: meets most recently published guidance on buffer widths and allowable buffer reductions

Wetland Buffer	Proposed Updates
Buffers to protect Hydrologic Functions (Categories I – IV)	• No change in buffer widths
Buffers to protect Category III wetlands based on habitat score	• Reduced buffers for habitat score 6 • Habitat score 7 = no change • Increased widths for habitat score of 8 and 9 (very rare)
Buffers to protect Categories I and II wetlands based on habitat score	• No change in buffer widths

Wetlands

Mitigation

- WMC 16.04.070(12)
- Updated mitigation requirements, including:
 - *Allowing for the use of wetland mitigation banks*
 - *Allowing for the use of in-lieu fee programs*
 - *Clarifying the allowable types of permittee responsible mitigation*
 - *Updating mitigation ratios*
- Rationale: updates bring the code into compliance with Ecology guidance on wetland mitigation





Next Steps

- April 25: City Council Public Hearing
- Filing the updated ordinance with the Department of Commerce (if approved)

Questions?

Critical Areas Ordinance Update

City Council Workshop

April 11, 2022

*Ethan Spoo, WSP
Dustin Day, WSP*

Memorandum

Date: April 11, 2022

Subject: Washougal Critical Areas Ordinance (CAO) Update

From: Ethan Spoo, Senior Planner, and Dusty Day, Senior Natural Resource Scientist

To: Washougal City Council

INTRODUCTION

The Washington State Growth Management Act (GMA) requires that all counties and cities across Washington plan for and regulate critical areas, including non-GMA counties that are not required to adopt comprehensive plans (see Revised Codes of Washington [RCW] 36.70A.060[2] and .170). The City of Washougal's CAO is contained in Washougal Municipal Code (WMC) Chapter 16.04. The City's CAO was first adopted in 2006 in response to the 1991 adoption of the GMA and was most recently updated in 2020 to meet National Flood Insurance Program requirements. Critical areas are wetlands, critical aquifer recharge areas, frequently flooded areas, geologically hazardous areas (landslides, erosion, and seismic hazards), and fish and wildlife habitat conservation areas (FWHCAs). These areas must be protected not only to conserve natural resources, but also to protect humans from dangerous situations.

Critical areas are required to be protected in accordance with "best available science" (BAS) (see RCW 36.70A.172; Washington Administrative Code [WAC] 365-195-900; and WAC 365-190-130(3)). Evolving BAS for critical areas means that the City's CAO may not reflect the latest scientific findings. As part of the effort to update the CAO in compliance with state requirements, WSP USA (WSP) conducted an audit of the City's CAO using the State's CAO update checklist, and completed a BAS report.

BACKGROUND

City staff and WSP facilitated three meetings with the Planning Commission (November 16 and November 30, 2021, and April 5, 2022) to discuss the City's CAO update. Following the November meetings, the City issued a notice of application on February 8, 2022, with the comment period ending on February 23, 2022. Subsequently, there was a second comment period for the State Environmental Policy Act determination of non-significance that opened February 24 and closed on March 11. The City did not receive any comments from the public or agencies during the comment periods.

This memorandum summarizes the findings and recommendations for the CAO update. The proposed CAO update is provided in Attachment A, and updated critical areas maps are provided in Attachment B of this memorandum.

FINDINGS AND RECOMMENDATIONS

WSP and City staff are recommending updates to the City's CAO to bring it into compliance with BAS and guidance documents. Updates are recommended to CAO sections pertaining to each type of critical area, as well as general updates. The following table highlights these updates, which are further discussed in the text following.

Critical Area	Proposed Updates
General	• Update definitions and terms to be consistent with RCW/WAC. • Update references to current guidelines, manuals, and data sources. • Update critical areas maps. • Update exemptions for existing improvements and expansions to existing structures, replacement of single-family homes, and accessory structures and uses.
Wetlands	• Update reference to approved federal wetland delineation manual and applicable regional supplements. • Update exempt wetlands language. • Update reference to current wetland rating system. • Update regulated activities. • Updates to wetland buffers for certain Type III wetlands. • Update mitigation ratios per Washington State Department of Ecology (Ecology) guidance.¹
Critical Aquifer Recharge Areas	• Consistent with guidance – no recommended revisions.
Frequently Flooded Areas	• Minor text edits to be consistent with 44 Code of Federal Regulations 60.
Geologically Hazardous Areas	• Update applicability to reference state and federal maps.
Fish and Wildlife Habitat Conservation Areas	• Add language to encourage use of updated Washington Department of Fish and Wildlife guidance. • Define according to seven standard state categories. • Increase riparian buffer widths for Type Ns and Type Np streams. • Increase riparian buffer widths for Type F river segments that support anadromous fish (applies to Gibbons and Campen Creeks).

¹ Washington State Department of Ecology. 2014. "Washington State Wetland Rating System." 2014 Update.

General

WSP and City staff recommend updates to the following general provisions in the CAO:

- **Definitions:** Proposed updates and new definitions to be consistent with the RCW and WAC throughout the CAO, including definitions for “critical aquifer recharge area,” “erosion hazard,” “Federal Emergency Management Agency,” “fish and wildlife habitat conservation area,” “flood or flooding,” “flood insurance,” “frequently flooded areas,” “landslide hazard,” “perennial stream,” “seismic hazard,” and “wetlands delineation manual.”
- **Current guidelines and manuals:** Proposed updated references to current guidelines and manuals. One example are proposed references to the federal wetland delineation manual and applicable regional supplement as the standard for conducting wetland delineations.
- **Critical areas maps:** Proposed updates to the City’s critical areas maps to contain the most current mapping information and to provide better information to applicants and the public. The draft updated maps are included in Attachment B.
- **Exemptions:** Proposed updates to the exemptions in the CAO to provide greater flexibility for property and homeowners. The proposed exemptions will allow for expansions of existing structures, replacement of existing single-family homes, alteration of property improvements other than buildings, and placement of new structures under 200 square feet.

Wetlands (WMC 16.04.070)

WSP and City staff are recommending updating the wetland section of the CAO as follows:

- **Exempted wetlands:** The City’s existing CAO does not apply to wetlands smaller than one-tenth of an acre. Consistent with Ecology guidance² that is considered BAS, the draft revised CAO proposes to exempt these smaller wetlands from the requirement to avoid impacts, but impacts are still required to be mitigated.
- **Wetland rating system:** Ecology developed a new wetland rating system in 2014 that is considered BAS.³ The draft revised CAO proposes to use the new rating system.
- **Regulated activities:** Regulated activities are those that trigger the application of the wetlands section of the CAO. The general applicability section of the current CAO applies the CAO to “any land use, building or site improvement or...authorization to alter the condition of land, water, or vegetation...,” which is ambiguous. The proposed regulated activities section will provide more clarity on what types of activities require compliance with the wetlands regulations.
- **Wetland buffers:** The draft revised CAO proposes updates to buffers to match Ecology’s 2014 guidance.⁴ The effect of the buffer updates is limited to buffers that protect Category III (lower quality) wetlands based on habitat score. These wetlands will have a reduced buffer width for habitat score 6, but increased widths for habitat scores of 8 and 9, which are very rare wetlands. In addition, new buffer averaging provisions are included to allow

² Washington State Department of Ecology. 2014. “Washington State Wetland Rating System.” 2014 Update.

³ Washington State Department of Ecology. 2014. “Washington State Wetland Rating System.” 2014 Update.

⁴ Washington State Department of Ecology. 2014. “Washington State Wetland Rating System.” 2014 Update.

“smoothing” of wetland buffer boundaries to provide more flexibility while also meeting BAS.

- **Mitigation:** The draft revised CAO proposes updates to the recommended mitigation ratios—also to be consistent with Ecology’s 2014 guidance and BAS.⁵ Proposed updates also include allowing the use of mitigation banks (off-site purchase of credits), allowing for use of in-lieu fee programs (Washougal does not have one at this time), and clarifying the allowable types of permittee mitigation (restoration, establishment, and enhancement). Finally, the section proposes updated mitigation ratios consistent with Ecology guidance.⁶

Critical Aquifer Recharge Areas

No updates are proposed for this section of the CAO. WSP determined that this section of the CAO is consistent with BAS after completion of the Washington State Department of Commerce’s critical areas checklist. No state agencies or other comments were received.

Frequently Flooded Areas

WSP and City staff are recommending updates to the “Frequently flooded areas” section of the revised CAO to better match Federal Emergency Management Agency requirements. For construction materials and methods, it is recommended that the draft revised CAO include language to require anchoring to prevent flotation, collapse, or lateral movement and construction to allow entry and exit of flood waters for fully enclosed areas below the lowest floor such as for parking garages, building access, or storage areas.

For manufactured home parks, subdivisions, and other new development, the draft revised CAO must be consistent with the need to minimize flood damage; public utilities and facilities be located and constructed to minimize flood damage; and that adequate drainage (stormwater quantity) be provided.

Geologically Hazardous Areas

Geologic hazards are landslide, seismic, and erosion hazards (volcanic, mine, and tsunami hazards are included in other Washington locales). This section of the CAO is updated to define where the geologically hazardous areas section of the CAO applies according to state and federal maps.

Fish and Wildlife Habitat Conservation Areas

WSP and City staff propose updates to this section of the CAO to:

- **Categories:** Proposed updates classify FWHCAs according to the seven state-defined categories.
- **Riparian buffers:** Proposed updates change riparian buffers to provide larger buffers for streams that support anadromous fish (Gibbons and Campen Creek segments) and non-fish-

⁵ Washington State Department of Ecology. 2014. “Washington State Wetland Rating System.” 2014 Update.

⁶ Washington State Department of Ecology. 2014. “Washington State Wetland Rating System.” 2014 Update.

bearing streams. The buffer for anadromous stream segments would increase from 200 feet to 250 feet; for non-fish-bearing streams, from 75 to 100 feet for seasonal types, and from 100 to 125 feet for perennial streams. The larger buffers better reflect the Washington Department of Fish and Wildlife's most current riparian guidance.⁷

CONCLUSION

WSP and City staff will be available to answer questions about the findings and recommendations at the City Council workshop on April 11, 2022.

ES:DG:ac

Attachments

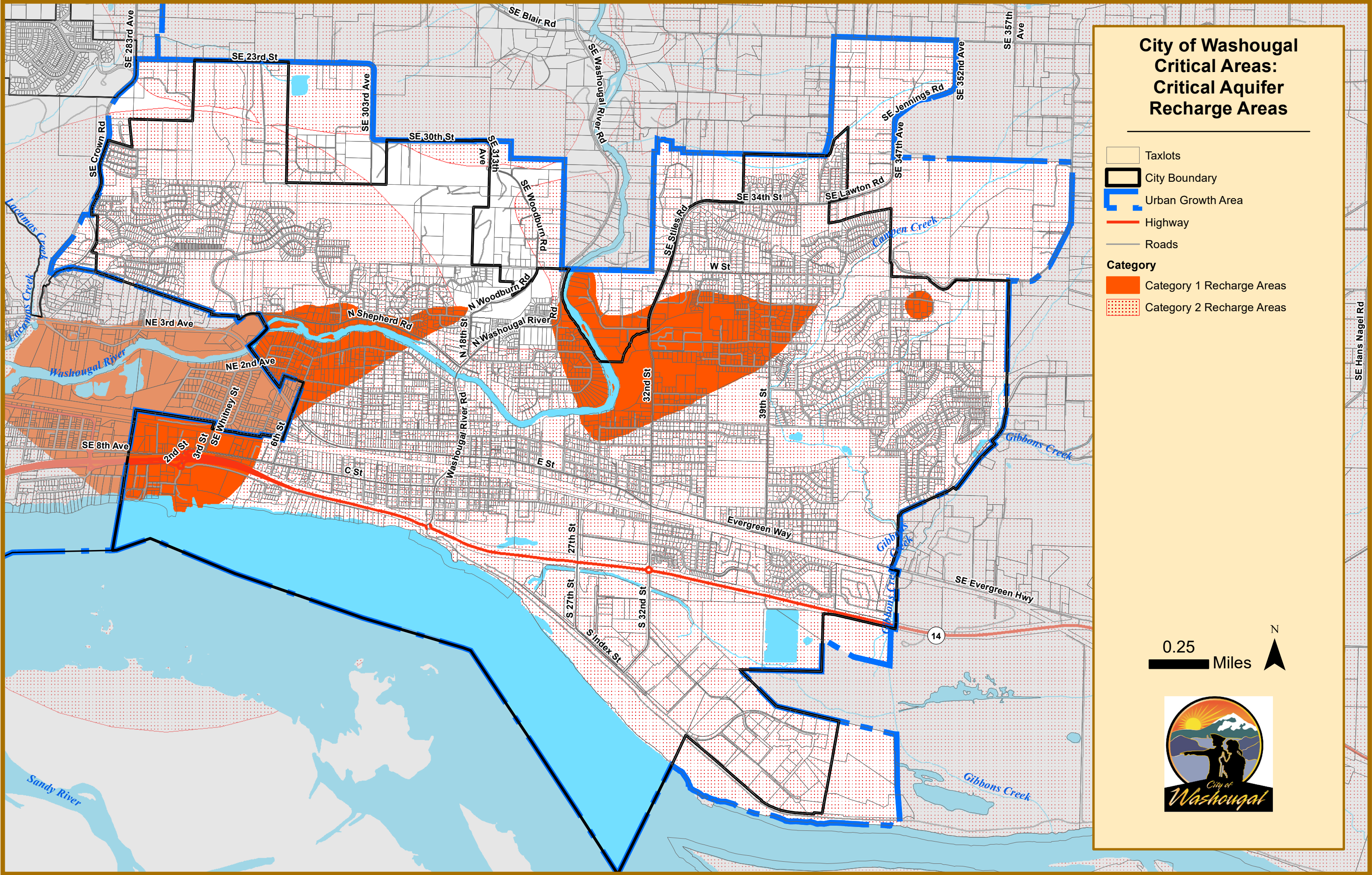
Attachment A – Draft Critical Areas Maps

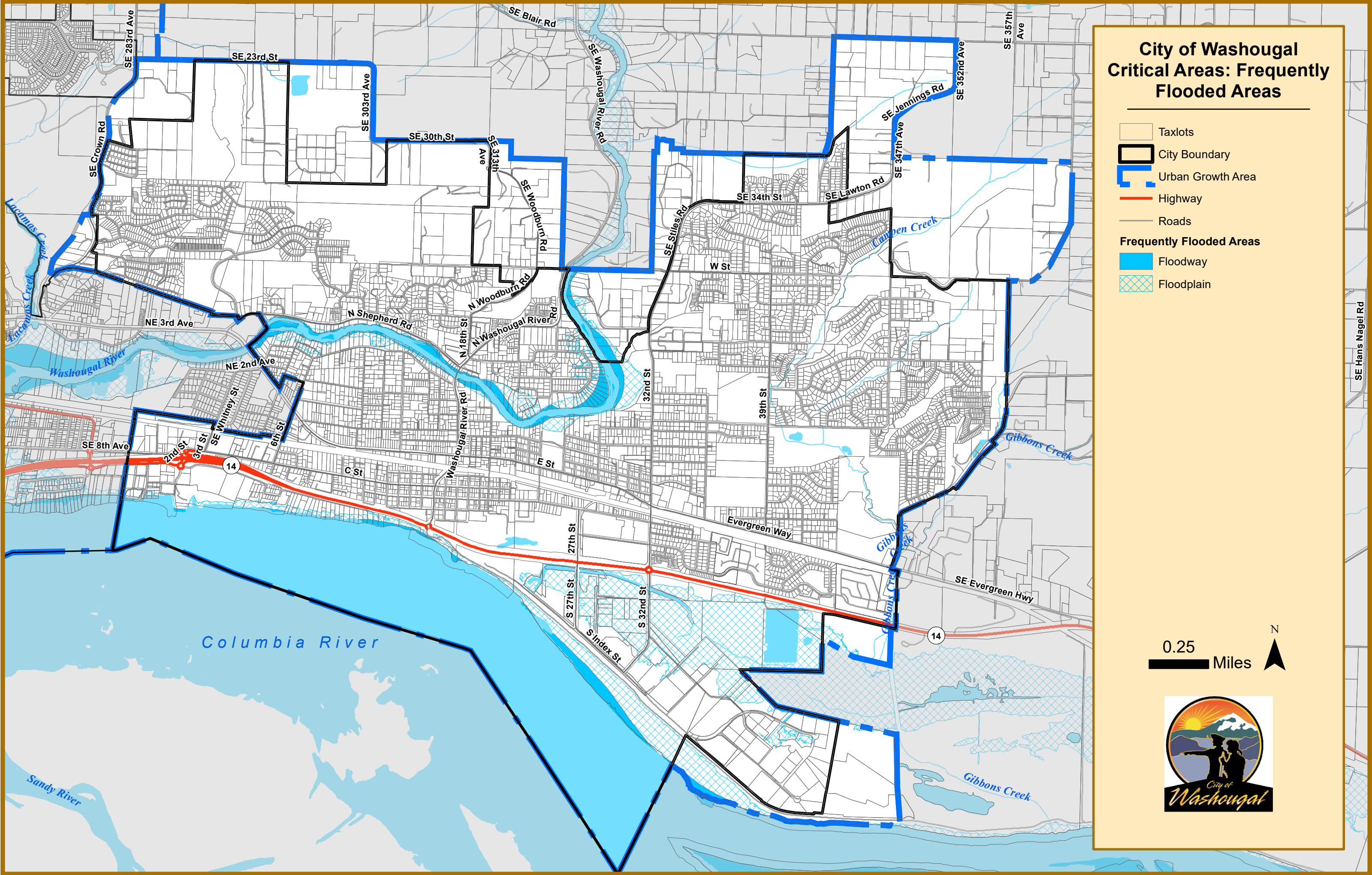
Attachment B – Draft Revised CAO

⁷ Washington Department of Fish and Wildlife. December 17, 2020. "Riparian Ecosystems, Volume 2: Management Recommendations.

City Council Memorandum
Washougal Critical Areas Ordinance Update
Washougal, Washington

Attachment A
Draft Critical Areas Maps





City of Washougal Critical Areas: Frequently Flooded Areas

- Taxlots
- City Boundary
- Urban Growth Area
- Highway
- Roads

Frequently Flooded Areas

- Floodway
- Floodplain

0.25 Miles

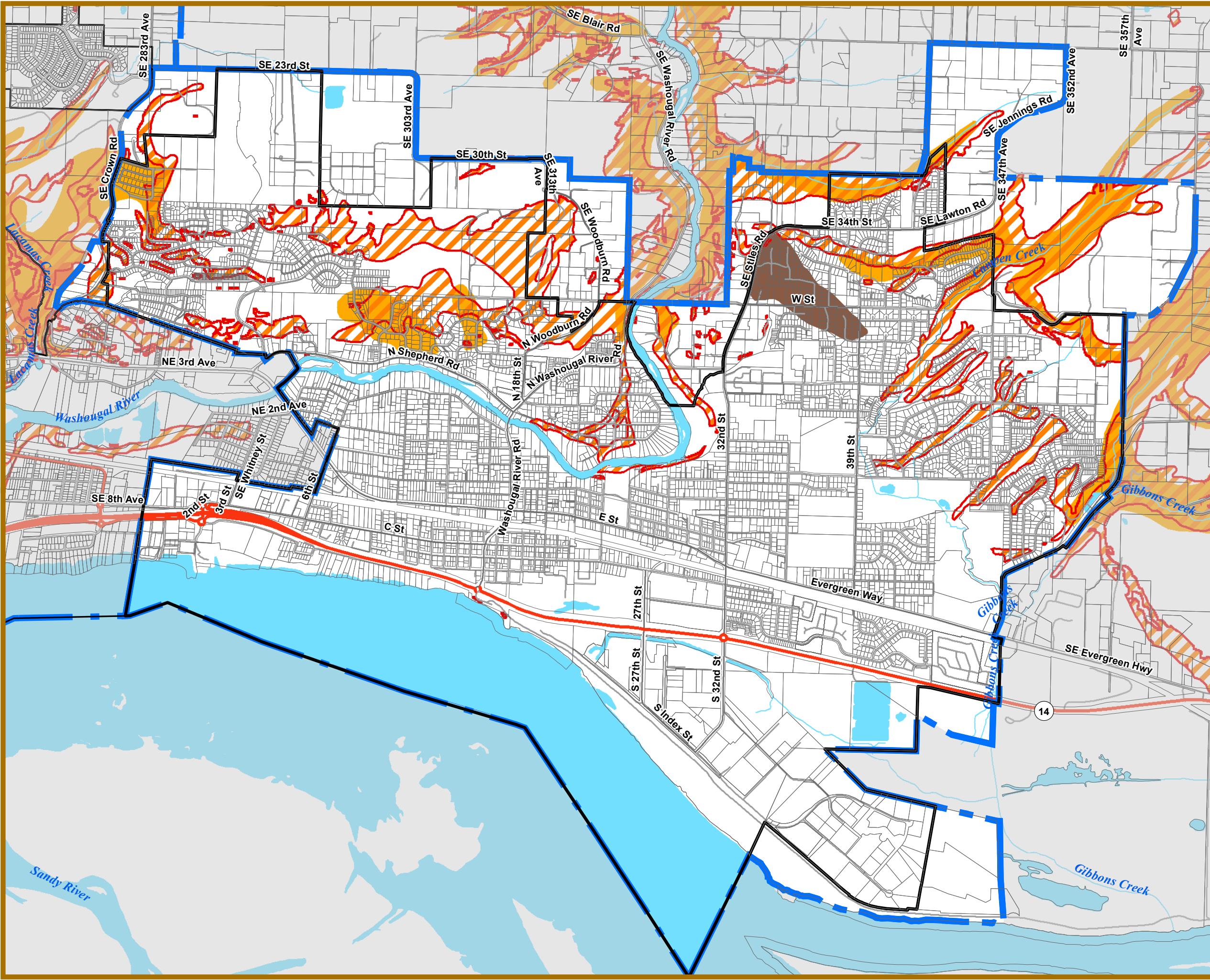
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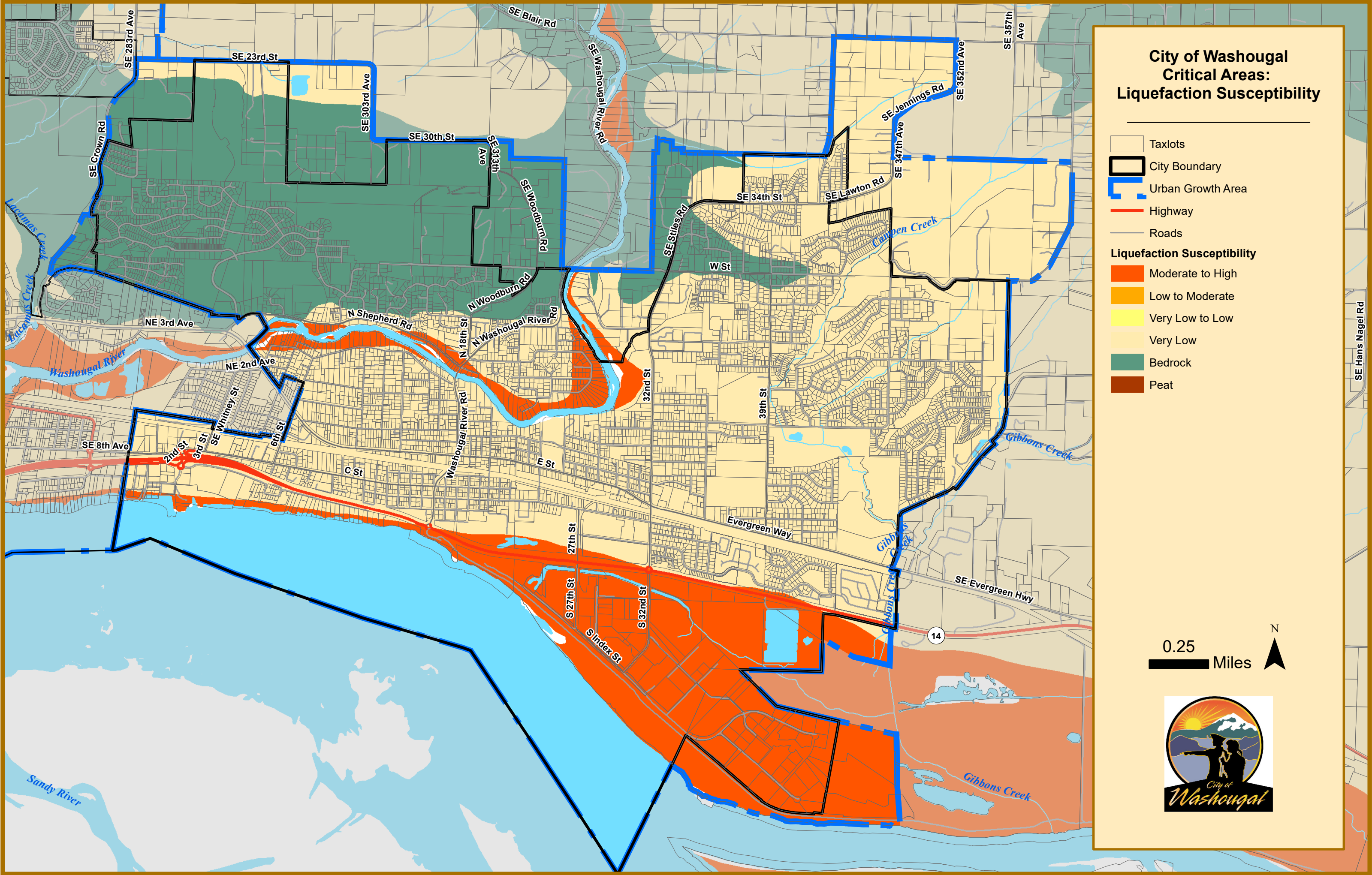


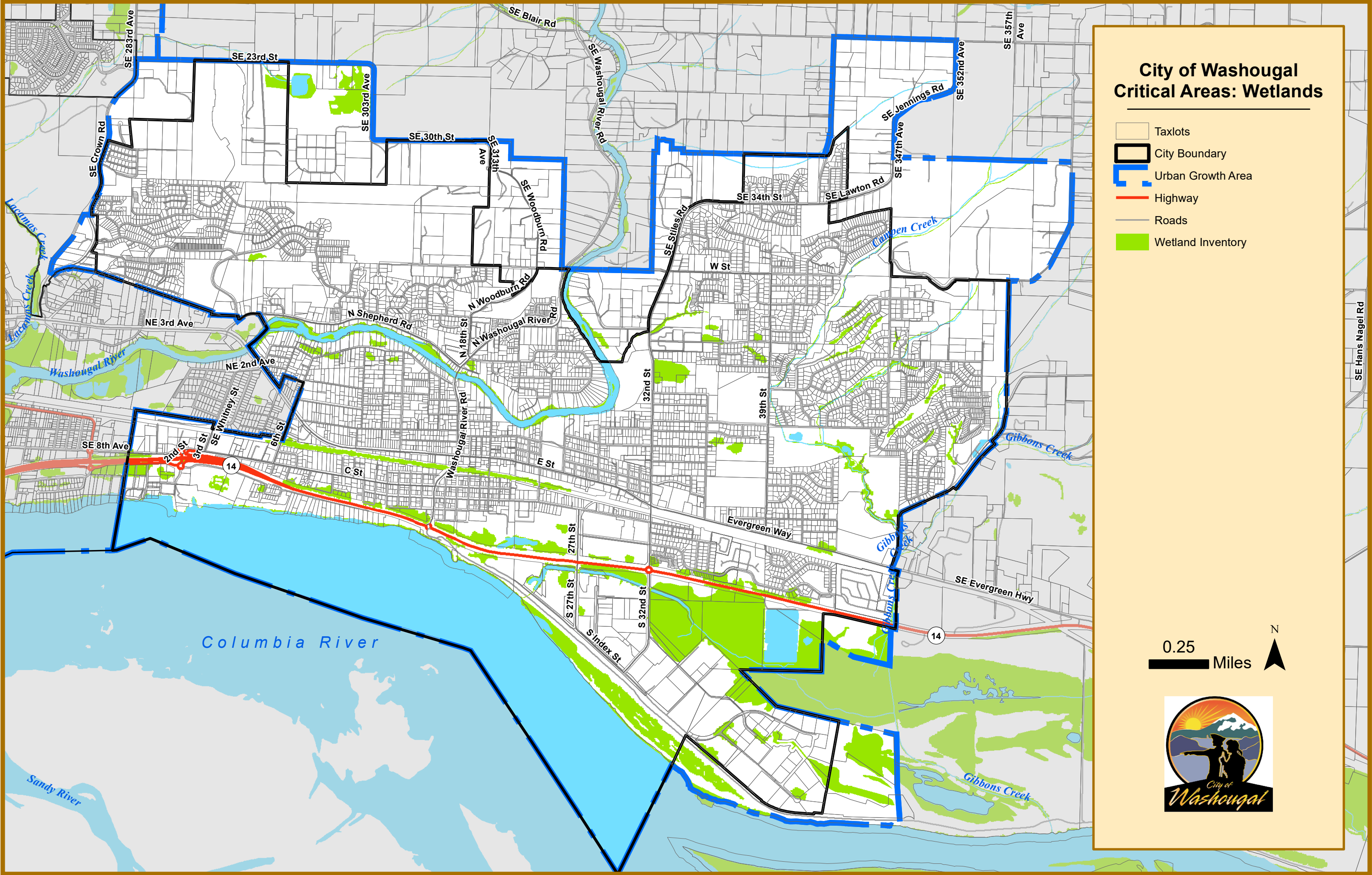
City of Washougal Critical Areas: Landslide Hazards

- Taxlots
 - City Boundary
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 - Severe Erosion Hazard
- Landslide Hazards**
- Historical unstable slopes
 - Potential unstable slopes
 - Active unstable slopes

0.25 Miles







City Council Memorandum
Washougal Critical Areas Ordinance Update
Washougal, Washington

Attachment B
Draft Revised Critical Areas Ordinance

Chapter 16.04

CRITICAL AREAS

Sections

16.04.005	Authority, chapter and procedures.
16.04.010	Purpose.
16.04.015	Definitions.
16.04.020	Applicability and critical areas map.
16.04.025	Allowed uses.
16.04.035	Variances.
16.04.040	Exemptions.
16.04.045	Reasonable use exception.
16.04.050	Critical area – Critical aquifer recharge areas.
16.04.055	Critical area – Fish and wildlife habitat conservation areas.
16.04.060	Critical area – Frequently flooded areas.
16.04.065	Critical area – Geologically hazardous areas.
16.04.070	Critical area – Wetlands.
16.04.075	Best available science.
16.04.080	Development standards.
16.04.085	Mitigation.
16.04.090	Residential density transfer.
16.04.095	Selective timber harvesting on critical lands.
16.04.100	Modification to overlay zone.
16.04.105	Application fees.
16.04.110	Bonds to ensure mitigation, maintenance and monitoring.
16.04.115	Critical area inspections.

Appendix A Critical Area Maps

Appendix B Table 8C-3, Types of Proposed Land Use that Can Result in High, Moderate, and Low Levels of Impacts to Adjacent Wetlands

16.04.005 Authority, chapter and procedures.

1. This chapter is established pursuant to RCW 36.70A.060 and Washougal Ordinance No. 1543. This chapter is known as the Washougal critical areas ordinance.
2. As provided herein, the director is given the authority to interpret and apply, and the responsibility to enforce this chapter to accomplish the stated purpose. The city may withhold, condition, or deny development permits or activity approvals to ensure that the proposed action is consistent with this chapter.
3. When any provision of this chapter or any existing regulation, easement, covenant, or deed restriction conflicts with this chapter, that which provides more protection to the critical areas shall apply.
4. The director, to the extent practical, shall review development for compliance with critical area regulations with the triggering development application. Where there are no triggering applications, determination of the type of application shall be based upon the criteria in Table 16.04.020(1).
5. Determinations of compliance with this chapter shall be appealed along with the decision on the underlying permit application to the hearing examiner. (Ord. 1543 § 1, 2006)

16.04.010 Purpose.

The purpose of the critical areas overlay district is to implement the policies of the Washougal Comprehensive Plan. This chapter creates an overlay district that requires the conservation and/or enhancement of identified critical areas while encouraging urban densities and affordable housing through density transfer to nonsensitive (buildable) lands. The Washougal Comprehensive Plan is designed to accommodate a 20-year supply of buildable residential, commercial and industrial lands. Where the effects of this chapter render private property unbuildable, the city will encourage the use of public and private strategies that balance protection or enhancement of critical areas against the city's adopted development-related comprehensive plan policies.

Critical areas are valuable and fragile natural resources with significant development constraints that, in their natural state, provide many valuable social and ecological functions. The attendant buffers of critical areas are essential to the maintenance and protection of the functions and value of important critical areas. The loss of social and ecological functions provided by critical areas, especially wetlands, riparian zones and fish and wildlife habitat, results in a detriment to public safety and welfare.

Critical areas help to relieve the burdens on the people of Washougal which urban development can create including congestion, noise and odors, air pollution, and water quality degradation. Critical areas can filter and clean surface waters, refresh the air we breathe, and provide open space areas that help add variety and texture to the urban landscape.

Critical areas serve several important urban design functions. They provide: (1) open space corridors separating and defining developed areas within the city; (2) views which enhance property values and quality of life in developed neighborhoods; (3) educational opportunities for the citizens of Washougal; and (4) accessible areas for residents to stroll, hike and enjoy Washougal's valuable natural features.

Conservation of critical areas has associated natural resource benefits, including improved air and water quality, maintenance of fish and wildlife habitat, decreased erosion and sedimentation of streams, absorption of pollutants and preservation of rare plant and animal species.

The intent of this overlay district is, at a minimum, to achieve no net loss of wetlands, floodplains, and fish and wildlife habitat areas and to avoid the degradation or loss of aquifer recharge/wellhead protection areas. Where avoidance is not practical, the intent is to minimize the environmental impacts of development within and adjacent to critical areas. An over-riding objective of this overlay district is to protect or enhance stream corridors and associated wetlands throughout the urban area. This overlay district is also designed to ensure conservation of wetland areas and their functions, where such areas are associated with steep slopes or stream corridors. The overlay district promotes a balance between private property rights, urban level development and public use of critical areas, consistent with the maintenance of their natural appearance and functional values.

Compliance with the Washougal critical areas ordinance may reduce the need to require additional studies to ensure compliance with the State Environmental Policy Act (SEPA), Chapter 43.21C RCW, process and other applicable state or federal environmental regulations. (Ord. 1543 § 1, 2006)

16.04.015 Definitions.

For the purposes of this chapter the definitions set forth in this chapter and Chapter 18.06 WMC shall apply. Unless specifically defined in this chapter or Chapter 18.06 WMC, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.

“Alter” means to adjust, modify or rework a structure or parcel of land.

“Altered,” when referring to wetlands, means a wetland of which at least 50 percent has been graded, drained, devegetated, or replanted with non-wetland plants.

“Anadromous” means fish that are born in freshwater; migrate to and live a portion of their lives in saltwater; then return to freshwater to reproduce.

“Area of special flood hazard” means the land in the flood plain within a community subject to the one percent or greater chance of flooding in any given year (also referred to as the “100-year flood”). Designations on flood insurance rate maps include the letter “A.”

“Basement” means any area of the building including any sunken room or sunken portion of a room, having its floor below ground level (subgrade) on all sides.

“Best available information” means data, other than official flood insurance rate map data, from federal, state, or other sources, provided this data has either been generated using technically defensible methods or is based on reasonable historical analysis and experience.

“Best available science” means a valid scientific process or method of inquiry that is consistent with the criteria for establishing best available science as found in WAC 365-195-900, as amended.

“Buffer” means an area that surrounds and protects critical area functions from adverse impacts.

“City” is the city of Washougal, a Class Four municipality governed by the mayor and Washougal city council.

“Conservation covenant” means a recorded instrument entered into as a condition of approving a triggering application.

“Council” means the council of the city of Washougal.

“Creation (establishment)” means the manipulation of the physical, chemical, or biological characteristics present to develop a critical area or wetland on an upland or deepwater site, where a wetland did not previously exist. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, create wetland soils and support the growth of hydrophytic plant species. Creation results in a net gain of wetland acres.

“Critical aquifer recharge area” means areas with a critical recharging effect on aquifers used for potable water, including areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water, or is susceptible to reduced recharge.

“Critical areas” means one of the following:

1. Wetlands;
2. Areas with a critical recharging effect on aquifers used for potable water, referred to in this chapter as critical aquifer recharge areas;
3. Fish and wildlife habitat conservation areas;
4. Frequently flooded areas; and
- ~~4.~~5. Geologically hazardous areas.

“Critical facility” means a facility for which even a slight chance of flooding would be too great. Critical facilities include but are not limited to schools, hospitals, police, fire and emergency response installations, nursing homes, installations which produce, use, or store hazardous materials or hazardous waste.

“Designated floodway” means the regulatory floodway that has been delineated on the flood insurance rate map (FIRM) or a community’s flood insurance study and is included in the community’s flood damage prevention ordinance.

“Development” means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials located within the area of special flood hazard.

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

“Endangered species” means fish and wildlife species native to Washington that are seriously threatened with extinction throughout all or a significant part of their ranges within the state. State-listed endangered species are legally designated in WAC 232-12-014.

“Enhancement” means the manipulation of the physical, chemical or biological characteristics of a wetland site to heighten, intensify or improve specific function(s) or to change the growth stage or composition of the existing vegetation. Enhancement is undertaken for the specified purposes such as water quality improvement, flood water retention or wildlife habitat. Enhancement results in a change in some wetland functions and can lead to a decline in other wetland functions, but does not result in a net gain of acres.

“Erosion hazard” means those areas containing soils which, according to the U.S. Department of Agriculture Natural Resources Conservation Service (USDA NRCS) Soil Survey Program, may experience significant erosion. Erosion hazard areas also include coastal erosion-prone areas and channel migration zones.

“Exotic” means any species of plants or animals that are not native to the watershed.

“Federal Emergency Management Agency (FEMA)” means the Federal agency under which the National Flood Insurance Program is administered.

“Fish and wildlife habitat conservation areas” means areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements, including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness and locally important habitats and species. Fish and wildlife habitat conservation areas do not include such artificial features or constructs 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 and wildlife habitat conservation areas include the following:

1. Areas with which state or federally designated endangered, threatened, and sensitive species have a primary association;
2. Habitats of local importance, including, but not limited to, areas designated as priority habitat by the Washington Department of Fish and Wildlife;
3. Naturally occurring ponds under 20 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;
4. Waters of the state, including lakes, rivers, ponds, streams, inland waters, underground waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington;
5. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;
6. State natural area preserves and natural resource conservation areas; and
7. Land essential for preserving connections between habitat blocks and open spaces.

“Flood” or “flooding” means a general and temporary condition of partial or complete inundation of normally dry land areas from: (1) the overflow of inland or tidal waters; ~~and/or~~ (2) the unusual and rapid accumulation of runoff of surface waters from any source; ~~(3) mudflow; or (4) collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels that result in a flood as defined in conditions 1- to 3 above.~~

“Flood insurance rate map (FIRM)” means the official map of a community on which ~~the Federal Insurance-Administration~~FEMA has delineated the Special Flood Hazard Areas (SFHAs), the Base Flood Elevations (BFEs), both the areas of special flood hazards and the risk premium zones applicable to the community.

“Flood insurance study” means the official report provided by the Federal Insurance Administration that includes flood profiles and the water surface elevation of the base flood.

“Flood protection elevation” means one foot above the base flood elevation.

“Floodway” means 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 one foot. For areas of special flood hazard studied in detail, the floodway boundary is delineated upon the flood insurance rate maps. In all other areas of special flood hazard, the floodway boundary shall be determined by the use of other base flood data.

“Floodway fringe” shall mean the land between the boundary of the floodway and the limits of the 100-year floodplain.

“Forested wetland” means a wetland with at least 30 percent of the surface area covered by a canopy of woody obligate, facultative wet, or facultative plants greater than 20 feet in height.

~~“Frequently flooded” means a flooding class in which flooding is likely to occur often under normal weather-conditions (more than 50 percent chance of flooding in any year or more than 50 times in 100 years).~~

“Frequently flooded areas” means lands in the flood plain subject to at least a 1 percent or greater chance of flooding in any given year, or within areas subject to flooding due to high groundwater. These areas include, but are not limited to, streams, rivers, lakes, coastal areas, wetlands, and areas where high groundwater forms ponds on the ground surface.

“Functions” means the beneficial roles served by wetlands including the control of flood waters, maintenance of summer stream flows, filtration of pollutants, recharge of ground water, and provision of significant habitat areas for fish and wildlife.

“Geologically hazardous areas” means areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns.

“Habitat” means the environment occupied by individuals of a particular species, population or community.

“Headwaters” means springs, lakes, ponds, or wetlands providing significant sources of water to a stream.

“High intensity land use” means roadways, commercial, industrial, and multifamily (more than four units per parcel) land uses.

“Hydric soil” means a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part. Hydric soils that occur in areas having positive indicators of hydrophytic vegetation and wetland hydrology are wetland soils.

“Hydrophytic vegetation” means 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.

“Intermittent stream” means a surface stream with no measurable flow during 30 consecutive days in a normal water year.

“JARPA” means joint aquatics resource permit application.

“Landslide hazard” means areas at risk of mass movement 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, and include, at a minimum, the following:

1. Areas of historic failures, such as:
 - a. Those areas delineated by the USDA NRCS as having a significant limitation for building site development;
 - b. Those coastal areas mapped as Class U (unstable), UOS (unstable old slides), and URS (unstable recent slides) in the Washington State Department of Ecology (Ecology) Washington coastal atlas; or
 - c. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey or Washington State Department of Natural Resources.
2. Areas with all three of the following characteristics:
 - a. Slopes steeper than 15 percent;
 - b. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
 - c. Springs or groundwater seepage.
3. Areas that have shown movement during the holocene epoch (from ten thousand years ago to the present) or which are underlain or covered by mass wastage debris of this epoch;
4. Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;
5. Slopes having gradients steeper than 80 percent subject to rockfall during seismic shaking;
6. Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action, including stream channel migration zones;
7. Areas that show evidence of, or are at risk from, snow avalanches;
8. Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and
- 4-9. 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.

“Local habitat area” means an area that contains sufficient food, water, or cover for native terrestrial or aquatic species that the city of Washougal has identified in this chapter as being of significant local concern.

“Lowest floor” means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, 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 this chapter.

“Manufactured home” 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 connected to the required utilities. For floodplain management purposes the term “manufactured home” also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes the term “manufactured home” does not include park trailers, travel trailers, and other similar vehicles.

“Minimizing impacts to wetlands or buffers” means:

1. Using appropriate and best available technology or best available science;
2. Taking affirmative steps to avoid or reduce impacts;
3. Sensitive site design and siting of facilities and construction staging areas away from regulated wetlands and their buffers; and

4. Providing and maintaining protective measures such as siltation curtains, hay bales and other siltation prevention measures, scheduling the regulated activity to avoid interference with wildlife and fisheries rearing, resting, nesting or spawning activities;
5. Not jeopardizing the continued existence of endangered, threatened, rare, sensitive, or monitor species as listed by the federal government or the state of Washington.

“Mitigation” means actions that the approving agency shall require so as to avoid or compensate for impacts to critical areas resulting from the proposed project activity. The type(s) of mitigation required shall be considered and implemented, where feasible, in the following sequential order of preference:

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;
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 or providing substitute resources or environments; or
6. Monitoring the impact and taking appropriate corrective measures to achieve the identified goal.

“Native,” when referring to plants or plant communities, means those species or communities that are indigenous to the watershed, including extirpated species.

“New construction” means structures for which the “start of construction” commenced on or after the effective date of this chapter.

“Normal water year” means a 12-month period (October 1st through September 30th) with average precipitation based upon data from the past 50 years.

“Obligate,” “facultative wet,” and “facultative” refer to 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 wet plants usually (67 to 99 percent probability) occur in wetlands. Facultative plants are equally likely (34 to 66 percent probability) to occur in wetlands or non-wetlands. Such groupings are more fully defined in the wetlands delineation manual.

“Open water,” when not specifically defined by the rating criteria, means a proportion of open water to vegetative cover equal to 25 percent to 75 percent of the total wetland area during a majority of a normal water year.

“Ordinary high water mark” on all lakes, streams, and tidal water is that mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in ordinary years, as to mark upon the soil a character distinct from that of the abutting upland in respect to vegetation as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or department; provided, that in any area where the ordinary high water line cannot be found, the ordinary high water line adjoining saltwater shall be the line of mean higher high tide and the ordinary high water mark adjoining fresh water shall be line of high water. (RCW 90.58.030(2)(b).)

“Perennial stream” means a stream with flowing water year-round during a normal water year.

“Person” means an individual, partnership, corporation, association, organization, cooperative, public or municipal corporation, or any agency of the state or local governmental unit however designated.

“Preservation (protection/maintenance)” means removing a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This includes the purchase of land or easements, repairing water control structures or fences, or structural protection such as repairing a barrier island. Preservation does not result in a gain of wetland acres, may result in a gain in functions, and will be used only in exceptional circumstances.

“Priority habitat and species areas,” as defined by the Washington State Department of Fish and Wildlife, are areas requiring protective measures for the perpetuation of fish and wildlife species due to their population status, their sensitivity to habitat alteration and/or their recreational, commercial, or tribal importance.

“Qualified wetland professional” generally means a person with at least two years of full-time professional experience and comprehensive training in wetlands issues, including experience performing wetland delineations using state and federal manuals, assessing wetland functions and values, analyzing wetland impacts, preparing wetland reports, developing and implementing mitigation plans, and recommending and designing wetland mitigation projects.

“Recreational vehicle” means a vehicle that is: (1) built on a separate chassis, (2) 400 square feet or less when measured at the largest horizontal projection; (3) is designed to be self-propelled or permanently towable by a light duty truck; and (4) is designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

“Regulated activities” include land clearing, grading, placement of fill or waste material, removal of protected native vegetation, construction and other habitat-altering activities.

“Restoration” means the manipulation of physical, chemical or biological characteristics of a site with the goal of returning natural or historic functions to a former or degraded wetland. Restoration is divided into the following two classes:

1. Re-establishment, which is the manipulation of physical, chemical or biological characteristics with the goal of returning natural or historic functions to a former wetland. This results in a net gain of wetland acres.
2. Rehabilitation, which is the manipulation of physical, chemical or biological characteristics of a site with the goal of repairing natural or historic functions of a degraded wetland. This results in the gain in wetland function but does not result in a gain in wetland acres.

“Review authority” means the decision maker that issues the final land use order, not the appeal authority.

“Riparian habitat area” is defined as areas adjacent to aquatic systems with flowing water (e.g., rivers, perennial or intermittent streams, seeps, springs) that contain elements of both aquatic and terrestrial ecosystems which mutually influence each other.

“Scrub-shrub wetland” means 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.

“Seismic hazard areas” means areas subject to severe risk of damage as a result of earthquake–induced ground shaking, slope failure, settlement, soil liquefaction, debris flows, lahars, or tsunamis.

“Sensitive species” are species native to Washington that are vulnerable or declining, and are likely to become endangered or threatened in a significant portion of their ranges within the state, without cooperative management or the removal of the threats. These species are designated in WAC 232-12-011.

“SEPA” means State Environmental Policy Act, Chapter 42.21C RCW and Chapter 197-11 WAC.

“Start of construction” includes substantial improvements and means the date the building permit was issued, provided the actual start of construction, placement of a manufactured home on a foundation or other permanent construction beyond the stage of excavation was within 180 days of the permit date.

1. The “actual start” means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation.
2. Permanent construction does not include:
 - a. Land preparation, such as clearing, grading and filling;
 - b. Installation of streets and/or walkways;
 - c. Excavation for a basement, footings, piers, or foundation or the erection of temporary forms;
 - d. Construction of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.
 - e. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

“Storm water management facilities” include biofiltration swales, filter strips, bubbler diffusers, detention ponds, retention ponds, wet ponds, and similar facilities designed and intended to control and treat stormwater, but not including ditches designed and intended primarily for conveyance.

“Streams (water types),” for the purposes of this chapter, are defined by the water type system used by the Washington State Department of Natural Resources based on WAC 222-16-030 or 222-16-031 (as adopted) and as shown in Table 16.04.055(6)(a). Streams do not include manmade ditches that are not a diversion of a natural stream channel.

“Structure” means a walled and roofed building, including a gas or liquid storage tank that is principally above ground.

“Substantial damage” means damage of any origin sustained by a structure whereby the costs of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

“Substantial improvement” means 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. For the purpose of this definition “substantial improvement” is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term can exclude:

1. Any project for improvement of a structure to correct pre-cited existing violations of state or local health, sanitary, or safety code specifications which have been previously identified by city officials 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.

“Threatened” species are native to the state of Washington and likely to become endangered in the foreseeable future throughout a significant portion of their ranges within the state without cooperative management or the removal of threats. Threatened species are legally designated in WAC 232-12-011.

“Triggering application” means an application for one of the permits or approvals listed in this chapter.

“Water-dependent” means a use or a portion of a use that requires direct contact with the water and cannot exist at a non-water location due to the intrinsic nature of its operations.

“Watershed” means an area draining to a single surface water system as shown on the Clark County wetland watershed map.

“Wetland(s)” means areas that are inundated or saturated by surface water 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. 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 July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas created to mitigate conversion of wetlands.

“Wetland classes and subclasses” means descriptive classes of the wetlands taxonomic classification system of the United States Fish and Wildlife Service (Cowardin, et al. 1978).

“Wetlands delineation manual” means the [approved federal wetland delineation manual and applicable regional supplements](#) ~~Washington State Wetlands Identification and Delineation Manual (Publication No. 96-94, March-1997)~~. (Ord. 1725 § 3 (Exh. A), 2012; Ord. 1543 § 1, 2006)

16.04.020 Applicability and critical areas map.

1. Applicability. The provisions of this chapter apply only to lands designated as critical areas within the Washougal corporate limits and urban growth area.
 - a. Properties containing critical areas are subject to this chapter.
 - b. When the requirements of this chapter are more stringent than those of other Washougal codes and regulations, the requirements of this chapter shall apply.
 - c. Where a site contains two or more critical areas, the site shall meet the minimum standards and requirements for each identified critical area as set forth in this chapter.
 - d. The city shall not approve any land use, building or site improvement permit or otherwise issue any authorization to alter the condition of any land, water, or vegetation, or to construct or alter any structure or improvement in, over, or on a critical area or associated buffer, if the proposed activity does not comply with the requirements of this chapter.
 - e. Unless otherwise expressly provided for within this chapter, lots created after the effective date of this chapter shall not include critical areas or their buffers within the lot area.
2. Critical Areas. Critical areas include:
 - a. Critical aquifer recharge areas;
 - b. Wetlands;
 - c. Fish and wildlife habitat conservation areas;
 - d. Frequently flooded areas;
 - e. Geologically hazardous areas.

3. Buffers. Critical areas include the protective buffer areas to lands identified in WMC 16.04.070(7), Wetland buffers, and Tables 16.04.055(6)(a), ~~16.04.055(6)(b)~~ - Riparian Areas, and ~~16.04.055(6)(c)~~ - Priority Habitat and Species Buffers.
4. Map Location. The general location of critical areas is depicted on the adopted Washougal critical areas map. The critical areas map is an indicator of probable regulated areas. The precise limits of critical areas and their attendant buffers on a particular parcel of land shall be determined by the applicant and subject to confirmation or concurrence by the community development director prior to final approval of regulated activities on the subject property. Development shall avoid critical areas, consistent with the provisions of this chapter. The city community development director shall keep on permanent file and maintain the critical areas map.
5. Use of Existing Procedures and Laws. The following laws and procedures shall be used to implement this chapter:
 - a. Washougal Municipal Code. Development activity regulated by WMC Title 17, Land Divisions, and Title 18, Zoning, that will occur within a protected critical area or critical area buffer shall comply with the provisions of this chapter.
 - b. The State Environmental Policy Act (SEPA), Chapter 43.21C RCW. Development activity that is likely to have a significant adverse impact upon identified critical areas regulated by this chapter shall not be categorically exempt from SEPA review and shall demonstrate compliance with this chapter.
 - c. The Shorelines Management Act (SMA), Chapter 90.58 RCW.
6. State and Federal Agency Review. Regulated activities subject to this chapter shall be routed to appropriate state and federal agencies for review and comment as required through the SEPA and/or JARPA review process.
7. Applicability by Activity. Table 16.04.020(1) establishes the level of review required for uses or activities under this chapter.
 - a. Exempt (E). Activities or uses that are exempt require no review and do not need to meet the standards of this chapter.
 - b. Review Required (RR). Activities and uses that are categorized as “review required” must comply with the standards of the chapter but no special report is needed. Determination of compliance with this chapter shall be determined through the review process required for the underlying development permit application.
 - c. Critical Area Report (CAR). For activities where a critical area report is required, the applicant must submit a report consistent with this chapter and with the underlying development application and will submit additional application fees consistent with the adopted fee schedule.
 - d. The community development director shall have the discretion to determine whether the proposed activity may adversely impact protected critical areas and/or their buffers and shall assign the appropriate level of review, exempt, review required, or critical areas report. The decision of the community development director may be appealed to the hearing examiner.

Table 16.04.020(1)

Use/Activity	Development located in any of the following critical areas may be exempt (E), require review (RR), or are subject to a critical area report (CAR):				
	Wetland	Fish and Wildlife Habitat	Critical Aquifer Recharge	Geologically Hazardous Area	Frequently Flooded Area
RESIDENTIAL ACTIVITIES					
One single-family dwelling on a pre-existing legal lot located in a critical area or buffer	E	E	E	E	E
Single-family permit located outside critical area or buffer	E	E	E	E	E
Approved multifamily site plan prior to 2004	RR	RR	RR	RR	RR
Multifamily site plan within critical area or buffer	CAR	CAR	CAR	CAR	CAR
Multifamily site plan outside critical area or buffer	E	E	E	E	E
Interior or exterior alteration or repair that does not change the footprint of the building or does not increase the footprint within a critical area or buffer	E	E	E	E	E
COMMERCIAL AND INDUSTRIAL ACTIVITIES					
New construction on vacant land in critical area or buffer	CAR	CAR	CAR	CAR	CAR
New construction previously approved prior to adoption of the ordinance codified in this chapter	E	E	E	E	E
New construction on vacant land outside critical areas or buffer	E	E	E	E	E
Expansion, alteration or addition to existing construction within a critical area or buffer	RR	RR	RR	RR	RR
Expansion, alteration or addition to existing construction outside of critical area or buffer	E	E	E	E	E
Public facilities and services identified on the CFP such as road, sewer and water infrastructure, power line, gas lines, and so forth	RR	RR	RR	RR	RR
Public facilities on a site already developed where there is no proposed impact to a resource or buffer	E	E	E	E	E
OTHER ACTIVITIES					
Clearing, filling, grading, and native vegetation removal activities within a critical area or buffer	CAR	CAR	CAR	CAR	CAR
Forest practices except conversions	RR	RR	RR	RR	RR
Emergencies ¹	RRE	RRE	RRE	RRE	RRE
Repair of existing structures, infrastructure improvements, utilities, public or private roads or drainage systems in critical areas or buffers	RR	RR	RR	RR	RR
Public facilities on a site already developed where there is no proposed impact to a resource or buffer	E	E	E	E	E
Activities within an existing improved right-of-way or roadway easement	E	E	E	E	E

Use/Activity	Development located in any of the following critical areas may be exempt (E), require review (RR), or are subject to a critical area report (CAR):				
	Wetland	Fish and Wildlife Habitat	Critical Aquifer Recharge	Geologically Hazardous Area	Frequently Flooded Area
Chemical applications subject to applicable local, state or federal handling and application requirements	E	E	E	E	E
Minor site investigative work, up to 10 cubic yards of fill or removal or removal of trees of six inches dbh or less	E	E	E	E	E
Hand removal of invasive weeds and blackberries	E	E	E	E	E
Public and private pedestrian trails	RR	RR	RR	RR	RR
Select removal of hazard trees and vegetation when necessary to comply with fire codes	RR	RR	RR	RR	RR
Construction of fences in a critical area or buffer	RR	RR	RR	RR	RR
Vegetation removal and maintenance activities inside existing landscaped areas on lots that predate adoption of this chapter (other than removal of trees greater than six inches dbh)	E	E	E	E	E

¹ Emergencies: See WMC 16.04.040(1)(a). Within one week of substantially completing the emergency work, the party responsible for the emergency activity shall file a report with the community development director demonstrating compliance with this chapter.

(Ord. 1613 § 1 (Exh. A), 2008; Ord. 1543 § 1, 2006)

16.04.025 Allowed uses.

1. Approval Required. Unless the requirements of this chapter are met, Washougal shall not grant any approval or permission to alter the condition of any land, water, or vegetation, or to construct or alter any structure or improvement regulated through the following: building permit, commercial or residential; binding site plan; franchise right-of-way construction permit; site development permit; right-of-way permit; shoreline permits; short subdivision; use permits; subdivision; utility permits; or any subsequently adopted permit or required approval not expressly exempted by this chapter.
2. Compliance with Federal or State Requirements. Compliance with these regulations does not remove an applicant's obligation to comply with applicable provisions of any other federal, state, or local law or regulation.
3. Review Process. The uses listed in this section may be approved, subject to a Type II process, if the proposed development activity meets the standards in WMC 16.04.080, Development standards, and WMC 16.04.085, Mitigation.
4. Allowed Uses. The city may allow the following uses on critical areas and within buffer areas subject to the review and mitigation requirements of this chapter:
 - a. Pervious trails for nonmotorized uses;
 - b. Below, or above ground public utilities, facilities and improvements, initiated by the city, where necessary to serve development consistent with the Washougal Comprehensive Plan, including: streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, domestic water systems, storm and sanitary sewer systems, open space, and parks and recreational facilities, anticipated in the capital facilities plan, where there is no other reasonable alternative, based on topographic and environmental conditions, as determined by the community development director;
 - c. Water-dependent uses;
 - d. Removal of diseased or dangerous trees, as determined by the city public works director, or the removal of invasive or nuisance plants;
 - e. Construction, replacement, or alteration of a single-family dwelling unit in a residential zoning district on a legal lot of record, created prior to the effective date of this chapter so long as the replacement or expansion conforms to the height regulations, lot coverage and dimension standards and other design provisions for the zone in which the residence is located. The dwelling unit shall be used solely for single-family purposes. Approval is subject to Type II review. The city may modify underlying zoning district dimensional standards applicable by up to a 50 percent adjustment, if necessary to protect critical areas;
 - f. Existing agricultural practices on lands used continuously for agricultural purposes since December 31, 1994. Allowed agricultural practices include: pasture, vineyards, Christmas tree farms, gardens, etc., but do not include machine intensive row crop production;
 - g. Specific uses allowed in wetlands.
 - 1) Uses allowed in wetlands or wetland buffers areas are generally described in subsection (4) of this section.

- 2) Additional uses allowed in wetlands and wetland buffers include enhanced replacement and wetland banking.
 - 3) Enhanced Replacement. Replacing or enhancing a wetland such that the enhanced wetland is of higher quality and meets the criteria for a higher category.
 - 4) Wetland Banking. Construction, enhancement or restoration of wetlands to use as mitigation for future wetland development impacts in the same watershed is permitted subject to the following:
 - (a) A critical area permit shall be obtained prior to any mitigation banking.
 - (b) Federal and state wetland regulations, if applicable, shall supersede city requirements.
 - 5) All impacts to wetlands and wetland buffers shall be mitigated and monitored consistent with WMC 16.04.085.
 - 6) New lots shall not be platted within a wetland/or wetland buffer.
5. Limited Uses. Limited uses shall avoid critical areas, and where allowed within buffer areas shall be subject to the mitigation measures and implementation of a monitoring plan as described in WMC 16.04.085. All limited uses shall be consistent with the provisions of this chapter and SEPA. limited uses include:
- a. Subdivision or Short Plat. The subdivision or short plat process may be used when there are provisions (e.g., dedication of land/or conservation easements) that prohibit building construction on critical areas.
 - b. Development Subject to Site Plan Review. Any new building or structure affecting critical areas shall be subject to site plan review, unless otherwise exempted in this chapter. (Ord. 1613 § 1 (Exh. A), 2008; Ord. 1543 § 1, 2006)

16.04.035 Variances.

- (1) An applicant who seeks to vary from the requirements of this chapter may seek a variance pursuant to the procedures established in Chapter 18.80 WMC.
- (2) The city shall review a request to vary from the requirements of this chapter through a Type III review process.
- (3) In addition to the approval criteria found in WMC 18.80.040, an application to vary from the requirements of this chapter shall demonstrate compliance with all of the following criteria:
 - (a) There are special circumstances applicable to the subject property or to the intended use such as shape, topography, location, or surroundings that do not apply generally to other properties;
 - (b) The variance is necessary for the preservation and enjoyment of a substantial property right or use possessed by other similarly situated property, but which because of special circumstances is denied to the property in question;
 - (c) Granting the variance will not be materially detrimental to the public welfare or injurious to the property or improvement; and
 - (d) Granting the variance will not violate, abrogate, or ignore the goals, objectives, or policies of the Washougal Comprehensive Plan.
 - (e) In addition to the approval criteria above, an application to vary from the buffer requirements of a fish habitat conservation area or riparian area shall demonstrate that the requested buffer width modification preserves adequate vegetation to:

- (i) Maintain proper water temperature;
- (ii) Minimize sedimentation; and
- (iii) Provide food and cover for critical fish and wildlife species.

(f) When granting a variance, the city may attach specific conditions to the variance that will serve to meet the goals, objectives, and policies of this chapter, including the preparation and implementation of a mitigation and monitoring plan consistent with WMC 16.04.085. (Ord. 1543 § 1, 2006)

16.04.040 Exemptions.

(1) Exempt Activities in All Critical Areas. The following developments, activities, and associated uses shall be exempt from the provisions of this chapter; provided, that they are otherwise consistent with the provisions of other local, state, and federal laws and requirements, and a written request for exemption has been filed with and approved by the community development director.

The community development director shall have the authority to negotiate memoranda of agreements with utility service providers or public agencies, and said agreements shall specify best management practices to be used in situations of emergency and usual and customary repair which, if rigorously adhered to, may exempt said emergency or repair activity, including routine operation and maintenance, from further review under this chapter. Memorandum of agreements shall be authorized by the Washougal city council only after notice and completion of a public hearing on the full terms and merits of the agreement.

(a) Emergencies. Emergency activities are those activities necessary to prevent an immediate threat to public health, safety, or welfare, or that pose an immediate risk of damage to private property and that require remedial or preventative action in a timeframe too short to allow for compliance with the requirements of this chapter. Emergency actions that create an impact to a critical area or its buffer shall use reasonable methods to address the emergency; in addition, they must have the least possible impact to the critical area or its buffer. The person or agency undertaking such action shall notify the city within one working day following commencement of the emergency activity. Following the emergency appropriate mitigation shall be implemented and permanent activities, installations or impacts are subject to review and compliance with the applicable standards.

(i) Authorization. Notwithstanding the provisions of this chapter, the community development director may issue a temporary emergency permit prospectively or, in the case of imminent threats to public health, safety or welfare, retroactively, where the anticipated threat or loss may occur before a permit can be issued or modified under the procedures otherwise required by the Act and other applicable laws.

(ii) Prior to issuing an emergency permit, the community development director shall issue a finding that extraordinary circumstances exist and that the potential threat to public health, safety or welfare from the emergency situation is clearly significant and substantial.

(iii) Conditions. Any emergency permit granted shall incorporate, to the greatest extent practicable and feasible but not inconsistent with the emergency situation, the standards and criteria required for nonemergency activities under the Act and shall:

(A) Be limited in duration to the time required to complete the authorized emergency activity, not to exceed 90 days; and

(B) Require, within this 90-day period, the restoration of any wetland altered as a result of the emergency activity, except that if more than the 90 days from the issuance of the emergency permit is required to complete restoration, the emergency permit may be extended to complete this restoration.

(iv) Notice. Notice of issuance of an emergency permit shall be published in a newspaper having general circulation in the city of Washougal not later than 10 days after issuance of such permit.

(v) Termination. The emergency permit may be terminated at any time without process upon a determination by the city that the action is no longer necessary to protect human health or the environment.

(b) Repair. Repair, alteration, or replacement of existing structures, infrastructure improvements, utilities, public or private roads, dikes, levees or drainage systems, including operation and maintenance of existing facilities, that do not require construction permits, if the activity does not further alter or increase the impact to, or encroach further within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed maintenance or repair.

(c) Existing structures and related improvements. Structures and related improvements may continue to exist in their present form, and may be expanded, if such alteration complies with the following:

(i) Existing buildings may be expanded only one time within the lifetime of the structure, and:

(A) The expansion of the structure's footprint is outside a landslide hazard area or landslide hazard area buffer unless required for safety or seismic upgrades;

(B) Any expansion of the structure's footprint is located only within a critical area buffer. No expansion of the footprint is allowed within a wetland or on lands covered by water;

(C) Cantilevers over critical areas are not allowed;

(D) The expansion of the structure's footprint at ground level does not exceed five hundred square feet;

(E) Any expansion of the structure's footprint is no closer to the critical area than its existing footprint; and

(d) An existing single-family dwelling may be replaced with a new dwelling, if the new dwelling complies with all provisions of subsections (1)(c)(i)(A), (B), (C) and (E) of this section. The dwelling's footprint at ground level may expand up to 500 square feet. An existing building damaged or destroyed by fire, flood, or other similar disaster may be replaced. Construction must commence within two years of the date the original building was damaged or destroyed.

(e) Existing property improvements other than buildings, including driveways, parking areas, yards and landscaped areas, play areas, storage areas, decks less than five feet in height, patios, and similar improvements, may be altered if:

(i) Any alteration is in substantially the same location as the original property improvement;

(ii) Any expansion of the improvement's footprint is located only within the required buffer. No expansion of the footprint is allowed within the critical area itself and cantilevers over wetlands and land covered by water are not allowed;

(iii) Any expansion of the improvement's footprint is no closer to the critical area than its existing footprint; and

(iv) Native vegetation is not removed.

(f) Structures under two hundred square feet in area, which are exempt from building permit requirements, that are residential accessory structures and are not plumbed, provided the structure is placed in an area of the buffer where no woody vegetation exists and will not impact the functions and values of the critical area or its buffer substantially. No more than one such structure is allowed for each existing lot.

(de) Forest Practices. Forest practices regulated and conducted in accordance with the provisions of Chapter 76.09 RCW and forest practices regulations, WAC Title 222, and those that are exempt from Washougal's jurisdiction; provided, that forest practice conversions are not exempt.

(ed) Activities within the Improved Public Right-of-Way or Recorded Easement. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, not including substations, when such facilities are located within the improved portion of the public right-of-way or recorded easement, or a city-authorized private roadway except those private activities that alter a wetland or watercourse, such as culverts or bridges, or results in the transport of sediment or increased storm water.

(ef) Chemical Applications. The application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances, if necessary; provided, that their use shall be restricted in accordance with Department of Fish and Wildlife Management Recommendations, the city of Portland's pest management program and the regulations of the Department of Agriculture and the U.S. Environmental Protection Agency.

(gf) Minor Site Investigative Work. Work necessary for land use submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads or significant amounts of excavation. In every case, impacts to the critical area shall be minimized and disturbed areas shall be immediately restored.

(g) Boundary Markers. Construction or modification of boundary markers or fences.

(h) Construction and modifications to existing structures that does not increase the footprint of the structure.

(i) The removal of the following vegetation with hand labor and light equipment, and vegetation removal that is a hazard to electrical power lines with handheld and walk-beside equipment such as mowers and weed eaters in compliance with the provisions contained in the ANSI A300 (Part 1) guidelines, unless other equipment is approved by the community development director based on BAS as evidenced by a biologist, including, but not limited to:

(i) Invasive non-native weeds;

(ii) English Ivy (*Hedera helix*);

(iii) Himalayan blackberry (*Rubus discolorarmeriacus*; ~~*R. procerus*~~); and

(iv) Evergreen blackberry (*Rubus laciniatus*).

(j) Emergency or hazard tree removal conducted so that habitat impacts are minimized.

(k) Public improvement projects located within existing impervious surface areas.

(l) Public agency and utility exemption.

(2) Exemption Request and Review Process. The proponent of the activity shall submit a completed exemption request form to the director that describes the activity and states the exemption listed in this section that applies. The director shall review the exemption request to verify that it complies with this chapter and approve or deny the exemption. If the exemption is approved, it shall be placed on file with the department and the requesting party notified. If the exemption is denied, the proponent may continue in the review process and shall be subject to the requirements of this chapter. Determinations shall be considered a Type I process pursuant to WMC 18.94.035(3)(a) and subject to appeal pursuant to WMC 18.94.140.

(3) Exempt Activities Shall Minimize Impacts to Critical Areas. All exempted activities shall use reasonable methods to avoid potential adverse impacts to critical areas. To be exempt from this chapter does not give permission to degrade a critical area or ignore risk from natural hazards. Any incidental damage to, or alteration of, a critical area that is not a necessary outcome of the exempted activity shall be restored, rehabilitated, or replaced at the responsible party's expense. (Ord. 1758 § 1 (Exh. A), 2014; Ord. 1613 § 1 (Exh. A), 2008; Ord. 1543 § 1, 2006)

16.04.045 Reasonable use exception.

(1) General Requirements.

(a) If the application of this chapter would deny all reasonable use of a legal lot, development may be allowed that is consistent with the general purposes of this chapter and the public interest. Nothing in this chapter is intended to preclude all reasonable use of property.

(b) Except when application of this chapter would deny all reasonable use of a legal lot, an applicant who seeks a modification from the regulations of this chapter may pursue a variance as provided in WMC 16.04.035, Variances, and consistent with the requirements of this section.

(c) The community development director shall prepare and maintain application forms necessary to implement this section.

(2) Application Requirements.

(a) Preliminary Review. The provisions for conducting a preliminary review of a proposed reasonable use exception are set forth in subsection (3) of this section.

(b) Regulations – General Provisions – Application Filing.

(i) Reasonable use exception applications shall be reviewed for completeness in accordance with city submittal standards checklists and pursuant to WMC 18.94.050.

(ii) An applicant for a development proposal may file a request for a reasonable use exception which shall include the following information:

(A) A description of the areas of the site which are critical areas or within setbacks required under this chapter;

(B) A description of the amount of the site which is within setbacks required by other standards of Chapter 18.80 WMC;

(C) A description of the proposed development, including a site plan;

(D) An analysis of the impact that the amount of development described in subsection (2)(b)(ii)(c) of this section would have on the critical area(s);

(E) An analysis of whether any other reasonable use is possible that would result in less impact on the critical area(s) and associated buffer(s);

(F) A design of the proposal so that the amount of development proposed as reasonable use will have the least impact practicable on the critical area(s);

(G) An analysis of the modifications needed to the standards of this chapter to accommodate the proposed development;

(H) A description of any modifications needed to the required front, side, and rear setbacks; building height; and buffer widths to provide for a reasonable use of the site while providing greater protection to the critical area(s); and

(I) Such other information as the city determines is reasonably necessary to evaluate the issue of reasonable use as it relates to the proposed development.

(3) Public Review.

(a) The city shall process a request for a reasonable use exception as a Type III procedure pursuant to WMC 18.94.035(3)(c).

(b) The city shall forward a copy of a request for reasonable use exception to the state and federal agencies with jurisdiction over the resource at issues and to all property owners within 300 feet of the subject property.

(c) The city shall provide public notice of the request for reasonable use exception pursuant to WMC 18.94.080.

(d) An aggrieved party shall appeal a final decision of a request for reasonable use exception pursuant to WMC 18.94.140.

(4) Reasonable Use Exception Decision Criteria. The review authority shall approve a reasonable use exception if the authority determines the following criteria are met:

(a) There is no other reasonable use or feasible alternative to the proposed development with less impact on the critical area(s);

(b) The proposed development does not pose a threat to the public health, safety, or welfare on or off the site;

(c) Any alteration of the critical area(s) shall be the minimum necessary to allow for reasonable use of the property;

(d) The proposed development will not result in a “take” of a threatened or endangered species;

(e) The inability of the applicant to derive reasonable economic use of the property is not the result of actions taken by the applicant or immediate predecessor in interest, after the effective date of this chapter, in subdividing the property or adjusting a boundary line, or otherwise creating the undevelopable condition; and

(f) The proposal mitigates the impacts on the critical area(s) to the maximum extent possible, while still allowing reasonable use of the site. The applicant shall prepare and implement a mitigation and monitoring plan consistent with WMC 16.04.085. (Ord. 1613 § 1 (Exh. A), 2008; Ord. 1543 § 1, 2006)

16.04.050 Critical area – Critical aquifer recharge areas.

1. Purpose. Due to the exceptional susceptibility and/or vulnerability of ground waters underlying aquifer recharge areas to contamination and the importance of such ground waters as sources of public water supply, it is the intent of this section to safeguard ground water resources by mitigating or precluding future discharges of contaminants from new land use activities. The provisions of this section shall apply to regulated activities specified herein within those portions of the Washougal UGA classified as aquifer recharge areas.
2. Recharging Effect. Critical aquifer recharge areas (CARAs) are those areas with a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(23). CARAs have prevailing geologic conditions associated with infiltration rates that create a high potential for contamination of ground water resources or contribute significantly to the replenishment of ground water. These areas include the following:
 - a. Wellhead Protection Areas (WHPA). Wellhead protection areas may be defined by the boundaries of the 10-year time of ground water travel, or boundaries established using alternate criteria approved by the Clark County department of health in those settings where ground water time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-135.
 - b. Sole Source Aquifers. Sole source aquifers are areas that have been designated by the U.S. Environmental Protection Agency pursuant to the Federal Safe Drinking Water Act.
 - c. Susceptible Ground Water Management Areas. Susceptible ground water management areas are areas that have been designated as moderately or highly vulnerable or susceptible in an adopted ground water management program developed pursuant to Chapter 173-100 WAC.

- d. Special Protection Areas. Special protection areas are those areas defined by WAC 173-200-090.
 - e. Moderately or Highly Vulnerable Aquifer Recharge Areas. Aquifer recharge areas that are moderately or highly vulnerable to degradation or depletion because of hydrogeologic characteristics are those areas delineated by a hydrogeologic study prepared in accordance with the State Department of Ecology guidelines.
 - f. Moderately or Highly Susceptible Aquifer Recharge Areas. Aquifer recharge areas moderately or highly susceptible to degradation or depletion because of hydrogeologic conditions.
3. CARA Map. CARAs can be referenced in the “Critical Aquifer Recharge Area Map” (Appendix A) of this chapter. Wells shall be added to the above-mentioned map, and shall include the one-, five-, and 10-year capture zones, as brought on-line.
4. Classifications.
- a. Category I is the highest priority CARA. Category I is the one-year time of travel for water wells.
 - b. Category II is the primary CARA. Category II is the five- to 10-year time of travel for water wells.
 - c. Parcels that are partly within Category I and Category II shall be subject to the Category I provisions in this section.
 - d. Parcels that are partly inside Category II, but outside Category I shall be subject to the Category II provisions in this section.
5. Vulnerability Rating.
- a. For each well a vulnerability rating must be established. Vulnerability ratings shall determine a CARA’s susceptibility to degradation or depletion.
 - b. New wells shall be added to the above-mentioned table, and shall include an aquifer vulnerability rating.
6. Report Requirements – Critical Aquifer Recharge Area. Where a critical area report is required for a development the report shall contain the following information:
- a. Areas determined to be moderately or highly vulnerable or susceptible to degradation or depletion because of hydrogeologic characteristics should be identified.
 - b. The report must be completed by a qualified professional. A CARA report shall be prepared by a qualified professional who is a hydrogeologist, geologist, or engineer, who is licensed in the state of Washington and has experience in preparing hydrogeologic assessments.
 - c. A hydrogeologic assessment required for all proposed activities to be located in a CARA, including:
 - 1) Activities that result in five percent or more impervious site area;
 - 2) Activities that divert, alter, or reduce the flow of surface or ground waters, or otherwise reduce the recharging of the aquifer;

- 3) The use of injection wells, including on-site septic systems, except those domestic septic systems releasing less than 14,500 gallons of effluent per day and that are limited to a maximum density of one system per one acre; or
 - 4) Any other activity determined by the director likely to have an adverse impact on ground water quality or quantity, or on the recharge of the aquifer.
7. Best Management Practices. The following are required for all developments within a designated CARA:
 - a. The following best management practices shall be used to help prevent pollution to ground water and surface water in Washougal:
 - 1) Bonding. Two-year construction bond. Applicants for storm water permits must maintain facilities for two years and must post a maintenance bond. Private storm water facilities shall be maintained for the life of the project by the owner;
 - 2) Contingency Planning. Develop a contingency plan.
 - b. Design Standards.
 - 1) Storm water shall be treated prior to infiltration for the 100-year storm, as required for all storm water discharges from development sites where local soil types and ground water conditions are suitable.
 - 2) Individuals shall implement the Washington State Department of Ecology's Stormwater, Water Quality, Hazardous Waste, Wetland, and Solid Waste Programs BMPs; and BMPs from the Department of Health, Agriculture, Transportation and State Conservation District Office.
 - 3) Design of storm water control facilities shall be designed in accordance with the current Storm Water Manual for Western Washington.
 - c. Storm Water Infiltration Siting.
 - 1) Treatment, runoff control, and recharge facilities shall be located prior to the point of discharge into a stream, lake, or fish-bearing water or prior to discharge into ground water. These treatment, runoff control, and recharge facilities shall be located outside of the CARA or require BMPs to ensure ground water protection.
 - 2) Control pollution sources within WHPA to prevent spills through proper containment and handling and education with property owners within the WHPA.
8. Exempt, Prohibited, Permitted, Provisional Activities. Exempt activities in Categories I and II. The following activities are exempt from the standards of this section:
 - a. All residential uses and activities;
 - b. Other uses not listed in subsections (9) and (10) of this section;
 - c. Activities already permitted and regulated by the state and Clark County Health District to incorporate best management practices.

9. Prohibited Activities in Category I. The following activities are considered high-impact uses due to the probability and/or potential magnitude of their adverse effects on ground water and shall be prohibited within Category I:
 - a. Landfills; areas used for the collection and storage of waste products and waste materials as opposed to areas of fill resulting from approved grading permits;
 - b. Class V injection wells;
 - c. Agricultural drainage wells;
 - d. Untreated sewage waste disposal wells;
 - e. Cesspools;
 - f. Industrial process water and disposal wells;
 - g. Radioactive waste disposal;
 - h. Radioactive disposal sites; and
 - i. Surface mining operations.
10. Permitted Activities by Permit in Categories I and II in Critical Aquifer Recharge Areas.
 - a. The following activities are allowed in both Categories I and II subject to review and approval:
 - 1) Above- and below-ground storage tanks;
 - 2) Facilities that conduct biological research;
 - 3) Boat repair shops;
 - 4) Chemical research facilities;
 - 5) Dry cleaners;
 - 6) Gasoline service stations;
 - 7) Pipelines;
 - 8) Printing and publishing shops (that use printing liquids);
 - 9) Below-ground transformers and capacitors;
 - 10) Sawmills (producing over 10,000 board feet per day);
 - 11) Solid waste handling and processing;
 - 12) Vehicle repair, recycling, and auto wrecking;
 - 13) Funeral services;
 - 14) Furniture stripping;
 - 15) Motor vehicle service garages (both private and government);
 - 16) Photographic processing;
 - 17) Chemical manufactures and reprocessing;
 - 18) Creosote and asphalt manufacture and treatment;
 - 19) Electroplating activities;
 - 20) Petroleum and petroleum products refining, including reprocessing;
 - 21) Wood products preserving;
 - 22) Golf course;
 - 23) Regulated waste treatment, storage, disposal facilities that handle hazardous material;
 - 24) Medium quantity generators (dangerous, acutely hazardous, and toxic extremely hazardous waste); and
 - 25) Large quantity generators (dangerous, acutely hazardous, and toxic extremely hazardous waste).

- b. To receive a permit for development in a CARA area, the applicant must demonstrate, through a Level 1 site evaluation report, how they will integrate necessary and appropriate best management practices to prevent degradation to ground water. The applicant must also meet existing local, state, and federal laws and regulations. A Level 1 site evaluation report shall be completed and submitted to the director for review and approval.
- c. If an applicant wants to avoid implementation of applicable best management practices, they must submit a Level 2 site evaluation report and develop and implement a monitoring program that consists of the following:
 - 1) Demonstrate, through a Level 2 site evaluation report, how they will prevent degradation to ground water. The applicant must also meet existing local, state and federal laws and regulations. A Level 2 site assessment report shall be completed and submitted to the director for review and approval; and
 - 2) Develop and implement a monitoring program with quarterly reporting to the department. The director will evaluate the monitoring program and may require periodic changes based on the monitoring results, new technology, and/or BMPs.

11. Level 1 Report Contents and Approval Criteria.

- a. Level 1 Site Evaluation Report/Approval Criteria. The site evaluation report shall be done by, or under the direction of, and signed by a qualified ground water professional. The report will identify appropriate BMPs and show how they will prevent degradation of ground water.
- b. The report will also identify how the applicant will follow the requirements of the Dangerous Waste Regulations, Chapter 173-303 WAC, in the event hazardous material is released onto the ground or into ground water.
- c. The report will include site-specific hydrogeologic information to support a conclusion of no degradation to ground water. Hydrogeologic information is available from existing U.S. Geological Survey Reports (A Description of Hydrogeologic Units in the Portland Basin, Oregon and Washington, Water-Resources Investigation Report 90-4196); U.S. Department of Agriculture, Natural Resources Conservation Service (Soil Survey of Clark County, Washington, 1972); the local health district; and from local purveyors.
- d. The report will be reviewed by the director in the same process as the primary development permit. If approved, the applicant will receive a permit allowing the activity on the subject property.
- e. The director may waive the requirement for a qualified ground water professional. This would be done when the site conditions or project mitigations have been, or can be, adequately addressed in the site evaluation report.

12. Level 2 Report Contents and Report Criteria.

- a. Level 2 Site Evaluation Report/Approval Criteria. A qualified ground water professional will determine whether the proposed activity will have any adverse impacts on ground water in CARAs based upon the requirements of the Safe Drinking Water Act and the Wellhead Protection Area Program, pursuant to public water supplies, Chapter 246-290 WAC; Water Quality Standards for Ground Waters of the State of Washington, Chapter 173-200 WAC; and Dangerous Waste Regulations, Chapter 173-303 WAC.

- b. The Level 2 site evaluation report will include the following:
- 1) Identification of the proposed development plan, along with potential adverse impacts to water quality (e.g., on-site septic systems and other on-site activities) that may adversely impact ground water quality underlying or down gradient of the project or project area;
 - 2) Depict an appropriate scale (1:2,400 or one inch to 200 feet) showing the location of abandoned and active wells, springs, and surface water bodies within 1,000 feet of the project or project area; and
 - 3) Description of the geologic and hydrologic characteristics of the subject property including the following:
 - (a) Lithologic characteristics and stratigraphic relationships,
 - (b) Aquifer characteristics including recharge and discharge areas, depth to and static water-flow patterns, and an estimate of ground water-flow velocity,
 - (c) Contaminant disposition and transport including probable migration pathways and travel time of a potential contaminant release from the site through the unsaturated zone to the aquifer(s) and through the aquifer(s), and how the contaminant(s) may be attenuated within the unsaturated zone and the aquifer(s),
 - (d) Appropriate hydrogeologic cross-sections which depict lithology, stratigraphy, aquifer, units, potential or probable contaminant pathways from a chemical release, and rate of ground water flow, and
 - (e) Existing ground water quality, a proposal for monitoring ground water to detect changes and the corrective actions that will be taken if monitoring results indicate contaminants from the site have entered the underlying aquifer(s).
 - 4) The report will be reviewed by the director, who may consult with other agencies or hire consultants in conjunction with the same process as the primary development permit. If approved, the applicant will receive a permit allowing the activity on the subject property. (Ord. 1586 § 1 (Exh. A), 2007; Ord. 1543 § 1, 2006)

16.04.055 Critical area – Fish and wildlife habitat conservation areas.

1. Fish and Wildlife Conservation Areas. The purpose of this section is to protect environmentally distinct, fragile and valuable fish and wildlife habitat conservation areas. Protection measures spelled out in this section are intended to conserve and enhance the functional integrity of those habitats needed to perpetually support fish and wildlife populations. Identified sensitive fish and wildlife habitat conservation areas shall be preserved or adverse impacts mitigated. Fish and wildlife habitat conservation areas are divided into four basic categories as outlined below:

- a. Areas with Which State or Federally Designated Endangered, Threatened, and Sensitive Species Have a Primary AssociationRiparian.
 - 1) Federally designated endangered and threatened species are those fish and wildlife species identified by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that are in danger of extinction or threatened to become endangered. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted for current listing status.Overwhelming evidence exists to support the use of riparian buffers of adequate size to maintain healthy,

- ~~productive fish and wildlife habitat. Although riparian areas comprise only a small portion of the surface landscape, approximately 90 percent of Washington's land-based vertebrate species prefer, or are dependent upon, riparian habitats for essential life.~~
- 2) State designated endangered, threatened, and sensitive species are those fish and wildlife species native to the state of Washington identified by the Washington Department of Fish and Wildlife that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. State designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (state endangered species) and WAC 232-12-011 (state threatened and sensitive species). The Washington Department of Fish and Wildlife maintains the most current listing and should be consulted for current listing status. ~~Riparian habitat areas may include frequently flooded areas, critical recharge areas, geologically hazardous areas, and wetlands. Riparian habitat areas are those areas immediately adjacent to waterways that contain elements of both aquatic and terrestrial ecosystems that mutually influence each other. WAC 222-16-031, relating to stream classification, shall be the city's classification system for streams.~~
- b. Endangered or Threatened State Priority Habitats and Areas Associated with State Priority Species.
- 1) Priority habitats and species are considered to be priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by the Washington Department of Fish and Wildlife and included on its Priority Habitats and Species List. ~~Areas that have a primary association with federal-listed endangered, threatened, or sensitive species of fish or wildlife and which if altered may reduce the likelihood that the species will maintain and reproduce over the long term. Federal or state listed species that are endangered, threatened, candidate or of concern found in the Washougal corporate limits and urban growth area as of December 31, 2004, are listed in Appendix A. Habitat types and species are listed in Appendix A showing the location of priority species habitats and are kept on file at the city.~~
- 2) ~~Point source areas are lands where species designated as endangered or threatened have a primary association with that land. Development of such lands shall be controlled in accordance with a site specific fish and wildlife management plan formulated from WDFW's priority habitats and species management recommendations and prepared by a qualified consultant. The Washington State Department of Fish and Wildlife should be consulted to provide a technical review and an advisory role in the decision making process. Point locations are the specific sites (nests, dens, etc.) where critical wildlife species are found. Many of these sites have been identified and mapped by the Washington State Department of Fish and Wildlife.~~

- c. ~~Local Habitat Area~~Habitats and Species of Local Importance. Habitats and species of local importance are those identified by the city, including, but not limited to, those habitats and species that, due to their population status or sensitivity to habitat manipulation, warrant protection. Habitats may include a seasonal range or habitat element with which a species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term.~~Species of local importance are those species that are of local concern due to their population status or their sensitivity to habitat manipulation or that are game species.~~
- 1) Habitats of local importance include a seasonal range or habitat element with which a given species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term. These might include areas of high relative density or species richness, breeding habitat, winter range, and movement corridors. These might also include habitats that are of limited availability or high vulnerability to alteration, such as cliffs, talus, and wetlands.
 - 2) Local habitat areas include those areas specifically identified as local habitat areas on the city's adopted critical areas map and background maps used to prepare the critical areas map.
 - (a) The city or private citizens may nominate areas for consideration as local habitat areas and for inclusion on the critical areas map.
 - (b) The applicant shall be responsible for preparing the nomination using city-prescribed forms. The applicant shall pay a processing fee of one percent of the assessed value of the proposed area as zoned at the time of application.
 - (c) The hearing examiner, through a Type III process, and in reliance upon all best available science in the hearing record, shall make a determination of whether the nominated area qualifies as a local habitat area.
- d. ~~Naturally Occurring Ponds under 20 Acres. Those ponds under 20 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.~~Priority Habitat Species (PHS) Areas. The Washington State Department of Fish and Wildlife has identified priority habitats and/or species considered to be priorities for conservation and management. Priority habitat types have unique or significant value to many species. Priority species are those species that require protective measures and/or management guidelines to ensure their perpetuation. The Washington State Department of Fish and Wildlife has identified PHS areas within the Washougal UGA that if altered may reduce the likelihood that the species will maintain and reproduce over the long term. Fish and wildlife habitat conservation areas include commercial and recreational shellfish; smelt spawning areas; naturally occurring ponds under 20 acres and submerged aquatic beds that provide fish or wildlife habitat; waters of the state; lakes, ponds, streams and rivers planted with game fish by a governmental or tribal entity; and state natural area preserves and natural resource conservation areas. Habitat types and species are listed in Appendix A showing the location of priority species habitats and are kept on file at the city.

- e. Waters of the State. Waters of the state include lakes, rivers, ponds, streams, inland waters, underground waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington, as classified in WAC 222-16-030.
 - f. Lakes, Ponds, Streams, and Rivers Planted with Game Fish by a Governmental or Tribal Entity.
 - ~~d.g.~~ State Natural Area Preserves and Natural Resource Conservation Areas. Natural area preserves and natural resource conservation areas are defined, established, and managed by the Washington State Department of Natural Resources.
- 2. Sources. The city consulted the following sources to identify critical fish and wildlife habitat areas:
 - a. Water type reference maps, Washington State Department of Natural Resources;
 - b. Natural heritage data-base, Washington State Department of Natural Resources;
 - c. Priority habitats and species program and priority habitat species maps, Washington State Department of Fish and Wildlife;
 - d. Non-game data base, Washington State Department of Fish and Wildlife;
 - e. SalmonScape mapping of anadromous and resident salmonid distribution, Washington Department of Fish and Wildlife;
 - ~~e.f.~~ Washington rivers information system, Washington State Department of Fish and Wildlife;
 - ~~f.g.~~ Water resource index areas (WRIA), Washington State Department of Fish and Wildlife; ~~and~~
 - h. Field studies performed by qualified natural resource specialists; and
 - i. City official habitat maps.
These maps are to be used as a guide for the City, project applicants, and/or property owners and should be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical areas designation.
- 3. Education and Information. A voluntary education program to explain the need for and methods of habitat management may provide for long-term protection and enhancement of critical fish and wildlife habitat areas. By informing citizens about the declining populations of several fish and wildlife species in Washougal, the diminishing animal habitat available, and the management techniques that individuals can use to preserve and restore fish and wildlife habitat areas, the city can foster good stewardship of the land by property owners.
 - a. The city will provide educational materials and lists of additional sources of information to applicants proposing regulated activities in the vicinity of critical fish and wildlife habitat areas. Materials will be selected from a variety of state and local resources.
 - b. The city may accumulate information on the number of proposed activities associated with fish and wildlife habitat areas as identified by this chapter and

indicated by state and local governmental maps to be in the vicinity of identified critical fish and wildlife habitats. Information shall include the number of single-family residences and other development occurring in the vicinity of critical fish and wildlife areas. Based on this information, additional regulations could be developed.

- c. The education and information program is an important adjunct to the implementation of the regulatory provisions of this chapter.
4. Species and Habitat Assessment Report. A critical area report is required where specifically indicated and when an activity is proposed within a critical area or buffer that is not specifically exempt, or permitted with review. Where a critical area report is required it shall be consistent with the following standards:
- a. The report must be completed by a qualified professional.
 - b. The critical area report shall use scientifically valid and professionally recognized and accepted methods and studies or best available science in the analysis of critical area data and field reconnaissance and reference the source of science used. The critical area report shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this chapter.
 - c. Minimum Report Contents. At a minimum, the report shall contain the following:
 - 1) The name and contact information of the applicant, and the name and address of the qualified professional who prepared the report, a description of the proposal, and identification of the permit requested;
 - 2) A copy of the site plan for the development proposal showing:
 - (a) Identified critical areas, buffers, and the development proposal with dimensions;
 - (b) Limits of any areas to be cleared;
 - (c) A description of the proposed storm water management plan for the development and consideration of impacts to drainage alterations; and
 - (d) General location and types of vegetation;
 - 3) The dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site;
 - 4) Identification and characterization of all critical areas, wetlands, water bodies, and buffers adjacent to the proposed project area;
 - 5) A statement specifying the accuracy of the report, and all assumptions made and relied upon;
 - 6) A description of reasonable efforts made to apply mitigation sequencing pursuant to mitigation sequencing, WMC 16.04.085, to avoid, minimize, and mitigate impacts to critical areas;
 - 7) Plans for adequate mitigation, as needed, to offset any impacts, in accordance with mitigation plan requirements, WMC 16.04.085, including, but not limited to:
 - (a) The impacts of any proposed development within or adjacent to a critical area or buffer on the critical area; and
 - (b) The impacts of any proposed alteration of a critical area or buffer on the development proposal, other properties and the environment;

- 8) A discussion of the performance standards applicable to the critical area and proposed activity;
 - 9) A discussion on monitoring and adaptive management;
 - ~~9)10)~~ Financial guarantees to ensure compliance; and
 - ~~10)11)~~ Any additional information required for the critical area as specified in the corresponding chapter.
- d. Unless otherwise provided, a critical area report may be supplemented by or composed of, in whole or in part, any reports or studies required by other laws and regulations or previously prepared, by a qualified professional, for and applicable to the development proposal site, as approved by the director.
 - e. The director may waive specific requirements of the critical area reports where less information is required to adequately address the impacts to the critical area or where existing information is on file with the city that addresses the impacts.
 - f. The director may require additional information that is necessary to determine compliance with the standards of this chapter.
 - g. A qualified professional shall be a person who has the education, training, experience, and/or certification that meets the specific requirements to evaluate fish and wildlife habitat.
5. Best Available Science. Habitat reports and decisions to alter habitat areas shall rely on the best available science to protect the functions and values of critical habitat areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish and their habitat. Best available science is that scientific information applicable to the critical area prepared by local, state or federal natural resource agencies, a qualified scientific professional or team of qualified scientific professionals, that is consistent with criteria established in WAC 365-195-900 through 365-195-925.
 6. Habitat Buffers. Fish and wildlife habitat conservation areas and buffers are assigned to the lands regulated by this section according to Table 16.04.055(6)(a). Development activities are restricted within buffer areas as indicated in Table 16.04.055(6)(b).

Table 16.04.055(6)(a)
Riparian Areas

Fish and Wildlife Habitat Areas RIPARIAN AREAS	Characteristic	Riparian Ecosystem Area (in feet)
Type S (fish bearing)	Columbia and Washougal Rivers	250
<u>Type F (supports anadromous)</u>	<u>Gibbons and Campen Creeks (anadromous segments)</u>	<u>250</u>
Type F (perennial or fish bearing)	Gibbons and Campen Creeks and stream < 5 feet wide, if other Non-anadromous fish bearing streams segments	200
Type Np streams, low mass-wasting potential	Perennial, non-fish bearing streams, Less than 3 feet in width on average	100 125
Type Ns stream, high mass-wasting potential	Seasonal, non-fish bearing streams with a defined channel	75 100

Water-Type Conversion Table

Old System	New Water Typing System	Riparian Zone Width
Type I	Type S	250 feet
Type II and III	Type F	200 feet
Type IV	Type Np	100 feet
Type V	Type Ns	75 feet

- a. Water types are defined and mapped based on WAC 222-16-030 or 222-16-031, whichever is in effect on the date of application. While the WAC definitions control, generally, Type S streams include shorelines of the state and have flows averaging 20 or more cubic feet per second; Type F streams are those that are non-Type S but still provide fish habitat; and Type N streams do not have fish habitat and are either perennial (Np) or seasonal (Ns). Erosion gullies or rills, and streams which are manmade, less than six inches wide or not having a defined bed and/or bank are not included.

**Table 16.04.055(6)(b)
Priority Habitat and Species Buffers**

Resource Type	Critical Zone	Protected Buffer
Wildlife Habitat	<u>Delineated</u>	<u>Use BAS for habitat</u>
Local Habitat	Delineated	Use BAS for species
Non-Riparian Priority Habitat and Species	Delineated	300 feet or threshold based upon consultation with WDFW
Subject to the ESA	Delineated	Use BAS for species up to 1,300 review threshold distance

7. Buffer Standards.

- a. Building Setback and Construction near Buffer. A minimum setback of 15 feet from the buffer shall be required for construction of any impervious surface(s) greater than 120 square feet of base coverage from the head or toe of a slope where the overall slope is greater than 35 percent. Clearing, grading, and filling within 15 feet of the buffer setback shall be allowed only when the applicant can demonstrate that native vegetation within the buffer will not be damaged. The additional impervious surface setback from the toe and head of a slope may be waived if the applicant demonstrates, by credible evidence, that the proposed impervious surface will not significantly affect the stability of the slope.
- b. Marking of the Buffer Area. The edge of the buffer area shall be clearly staked, flagged, and fenced prior to and through completion of construction. The buffer boundary markers shall be clearly visible, durable, and permanently affixed to the ground.
- c. Fencing from Farm Animals. Permanent fencing shall be required from the buffer when farm animals are introduced on a site.

8. Riparian Area Ecosystem Buffers. Regulated activities proposed along rivers and streams shall provide for habitat protection.

- a. The riparian ecosystem buffer is generally an area of no building, consisting of undisturbed natural vegetation. The buffer shall be required along all streams as classified by the DNR water typing classification system (WAC 222-16-030). The buffer shall extend landward from the ordinary high water mark of the water body.
- b. The buffer of a river or stream shall not extend landward beyond an existing substantial improvement such as an improved road, dike, levee, or a permanent structure which reduces the impact proposed activities would have on the river or stream.
- ~~c. The city identifies the following river and stream segments as being critical to anadromous fish and, therefore, requiring a larger buffer protection:~~
 - ~~1) Columbia and Washougal Rivers within the UGA;~~
 - ~~2) Gibbons Creek within the UGA; and~~
 - ~~3) Campen Creek from north of J Street within Orchard Hills Golf Course to its confluence with Gibbons.~~

9. Mitigation.

- a. Approval. City approval of a mitigation plan is a prerequisite for approval of any development activities within a designated habitat area or habitat buffer.
- b. Application. The applicant shall submit a written request describing the extent and nature of the proposed development activity on critical areas and buffers. The request shall include boundary locations of all critical areas and associated buffers.
 - 1) The application for development shall include a mitigation plan prepared in compliance with this section.
 - 2) The city may require the applicant to prepare special reports evaluating potential adverse impacts upon critical areas and potential mitigation measures as part of the land use application process. These reports may include, but are not limited to, the following: storm water management plan; hydrology, geology, and soils report; grading and erosion control plan; native vegetation report; fish and wildlife assessment and impact report; water quality report; wetlands delineation; and other reports determined necessary by the city.
- c. The city shall consult with state and federal resource management agencies and, in order to protect wildlife habitat or natural resource values, shall attach such conditions as may be necessary to effectively mitigate identified adverse impacts of the proposed development activity.
- d. The city may request third party “peer review” of an application by qualified professionals and may incorporate recommendations from such third party reports in findings approving or denying the application.
- e. All reports recommending mitigation shall include provisions for monitoring of programs and replacement of improvements, on an annual basis, consistent with report recommendations and at one-, three-, five- and seven-year intervals.
- f. The city may require replacement mitigation to be established and functional concurrent with project construction.

10. No Net Loss.

- a. Mitigation efforts, when allowed, shall ensure that development activity does not yield a net loss of the area or function, including fish and wildlife habitat values, of the critical area. No net loss shall be measured by:
 - 1) Avoidance or mitigation of adverse impacts to fish or wildlife; or
 - 2) Avoidance or mitigation of net loss of habitat functions necessary to sustain fish life; or
 - 3) Avoidance or mitigation of loss of area by habitat type.
 - b. Mitigation to achieve no net loss should benefit those organisms being impacted.
 - c. Where development results in a loss of habitat area, the mitigation plan shall demonstrate that habitat area is replaced at an equal or greater functional value(s).
 - 1) Wherever possible, replacement or enhancement shall occur on-site.
 - 2) However, where the applicant can demonstrate that off-site mitigation will provide greater functional values, the city may approve such off-site mitigation.
11. Mitigation Plan. A mitigation plan shall provide for the design, implementation, maintenance, and monitoring of mitigation measures. A mitigation plan shall include but is not limited to the following:
 - a. Description of how the project avoided or minimized unavoidable impacts.
 - ~~a.b.~~ Methods and techniques to be used to mitigate impacts to the critical area, including ways to improve riparian ecosystem functions by enhancing riparian corridor connectivity or by improving the quality of the riparian area (i.e., replacing invasive vegetation with appropriate native vegetation);
 - ~~b.c.~~ Explanation of methods and techniques, such as construction practices to be used to implement to the identified mitigation methods; and
 - ~~c.d.~~ Methods and techniques for monitoring and adaptive management the proposed mitigation and a timeframe for such monitoring.
12. Vegetative Buffer Enhancement. Where the city permits the use of buffer reduction opportunity described in this section, the following enhancement standards shall apply:
 - a. The applicant shall submit to the city a written request describing the extent and nature of the proposed development activity and shall submit a written enhancement plan.
 - b. Buffer shall not be reduced to less than one-half the base buffer width listed in Tables 16.04.055(6)(a) and (6)(b).
 - c. The enhancement plan shall include calculations and maps that illustrate:
 - 1) Required boundary locations of all critical areas and associated buffers;
 - 2) Proposed buffer areas after reduction;
 - 3) Proposed areas to receive enhancement measures;
 - 4) A timeline for completion of the enhancement plan;
 - 5) Methods and techniques used to mitigate impacts to critical areas shall comply with best available science;

- 6) An explanation of methods and techniques, such as construction practices to be used to implement the identified mitigation methods; and
 - d. Methods and techniques for monitoring said mitigation and a proposed timeframe for monitoring.
 - e. The enhanced area shall be of equal or greater habitat value(s) based on best available science.
 - f. Enhancement shall occur on-site, unless the applicant can demonstrate that off-site mitigation will provide greater functional value(s).
13. Standard Requirements. All applications requiring review under this section shall have the following minimum conditions applied:
 - a. Marking Buffer During Construction. The location of the outer extent of the habitat buffer, or if no buffer is required, the habitat area, shall be marked in the field and such markings shall be maintained throughout the duration of the permit.
 - b. Permanent Marking of Buffer Area. A permanent and perpetual physical demarcation along the upland boundary of the habitat buffer area shall be installed and thereafter maintained. Such demarcation may consist of logs, a tree or hedgerow, wood or wood-like fencing, or other prominent physical marking approved by the director. In addition, signs (measuring minimum size one-foot by one-foot and posted three and one-half feet above grade) shall be posted at an interval of one per lot or every 100 feet, whichever is less, and perpetually maintained at locations along the outer perimeter of the habitat buffer approved by the director, worded substantially as follows: HABITAT BUFFER – PLEASE RETAIN IN A NATURAL STATE.
 - c. A conservation covenant shall be recorded in a form approved by the city attorney as adequate to incorporate the other restrictions of this section and to give notice of the requirement to obtain a permit prior to engaging in regulated activities within a habitat area or its buffer. (Ord. 1613 § 1 (Exh. A), 2008; Ord. 1543 § 1, 2006)

16.04.060 Critical area – Frequently flooded areas.

1. Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled “~~The Flood Insurance Study, for Clark County, Washington, and Incorporated Areas,~~” ~~dated-revised January 19September-5, 2012~~²⁸, with accompanying flood insurance maps (FIRM), and any revisions thereto, are hereby adopted by reference and declared to be a part of this chapter. The flood insurance study is on file at the office of the director, 1701 C. St., Washougal, WA. ~~The best available information for flood-hazard area identification as outlined in subsection (15) of this section shall be the basis-for regulation until a new FIRM is issued which incorporates the data used under-subsection (15) of this section.~~
2. Compliance. 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.

3. Abrogation and Greater Restrictions. Where this chapter and another code, ordinance, easement, covenant or deed restriction conflict or overlap, that which imposes the more stringent restriction shall prevail.
4. Interpretation.
 - a. In the interpretation and application of this section, all provisions shall be:
 - 1) Considered as minimum requirements;
 - 2) Liberally construed in favor of the governing body; and
 - 3) Deemed neither to limit nor repeal any other powers granted under state statutes.
 - b. Interpretation of FIRM Boundaries. The local administrator, the governing body or its agent or employee may interpret and apply when necessary the exact location of the boundaries of the areas of special flood hazards where there appears to be a conflict between a mapped boundary and actual field conditions. Any aggrieved person may contest the location of the boundary and shall be given a reasonable opportunity to appeal the interpretation to the local administrator and then the governing body. Such appeal shall be granted consistent with the standards of Section 60.6 of the Rules and Regulations of the National Flood Insurance Program (44 CFR 59-76).
5. Warning and Disclaimer of Liability. The degree of flood protection required by this chapter is considered reasonable for regulatory purposes, and is based upon scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city of Washougal, any officer or employee thereof, or the Federal Emergency Management Agency or Federal Insurance Administration for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.
6. Floodplain (FP) Combining District. A floodplain (FP) combining district is established and shall be applied to all 100-year floodplains identified on the flood insurance rate maps, which have been adopted by reference. The land use and siting provisions of these areas shall be in addition to other zoning provisions applied. Two distinct areas are recognized within the FP combining district: the “floodway” area and the “floodway fringe” area.
7. Regulatory Area. The areas for floodplain management regulations shall be those areas subject to a base (100-year) flood. Base floodplains are designated as special flood hazard areas on the most recent maps provided by the Federal Emergency Management Agency for the National Flood Insurance Program.
8. Relationship to Other Requirements. Land uses in the floodplain combining district shall be subject to all relevant local, state, or federal regulations including those of the underlying zoning district. Where applicable, permit requirements under the Shoreline Management Act (Chapter 90.58 RCW), or the State Flood Control Zone Act (Chapter 86.16 RCW) may be substituted for permits required under this chapter; provided, that the standards of this chapter are applied.
9. Criteria for Land Management and Use. The standards and definitions contained in 44 CFR Parts 59 and 60 for the National Flood Insurance Program are adopted by reference as the minimum standards.

10. Uses Prohibited in the Floodway. Structures for human habitation and other residential structures or works posing a high flood damage potential are prohibited in the floodway, unless authorized by WAC 173-158-070. Any use in a floodway shall be subject to the terms of a floodplain permit.
11. Uses Allowed under a Floodplain Permit. All other uses permitted in the zoning district with which the FP combining district has been combined are allowed in the floodway and floodway fringe areas subject to the terms of a floodplain permit.
12. Permit Requirements. A floodplain permit shall be obtained before construction or development begins within any area of special flood hazard. The permit shall be for all structures including manufactured homes and other development, including fill and other activities, also set forth in the definitions. Permit application forms shall be furnished by the city clerk/treasurer. The application shall include, but is not limited to, plans in duplicate drawn to scale showing the nature, location, dimensions and elevations of the area in question, and existing or proposed structures, fill, storage of materials, and drainage facilities. Specifically, the following information is required:
 - a. Elevation in relation to mean sea level of the lowest floor (including basement) of all nonresidential structures;
 - b. Elevation in relation to mean sea level to which any structure has been floodproofed;
 - c. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing requirements; and
 - d. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.
13. Designation of the Local Administrator. The mayor or his or her designee is appointed to administer and implement this chapter by granting or denying floodplain permit applications in accordance with its provisions.
14. Duties and Responsibilities of the Local Administrator. Duties of the local administrator, if applicable, shall include, but not be limited to:
 - a. Development Review.
 - 1) Review all proposed developments to determine whether or not a floodplain permit is required.
 - 2) Review all proposed developments with respect to the flood insurance study maps and zoning district boundaries. Make interpretations where needed, as to the exact location of special flood hazard area boundaries.
 - b. Permit Review.
 - 1) Review all proposed development permits to determine that the permit requirements of this chapter have been satisfied.
 - 2) Review all proposed development permits to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.
 - 3) Review all proposed development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions are met.

15. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with subsection (1) of this section, Basis for Establishing the Areas of Special Flood Hazard, the mayor or his or her designee shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from an agency of federal or state government, or other sources, in order to administer this section, including specific standards for residential construction, nonresidential construction and floodways and floodway requirements.
16. Information to Be Obtained and Maintained.
 - a. Where base flood elevation data is provided through the flood insurance study or required as in subsection (15) of this section, obtain and record the actual as-built elevation in relation to mean sea level of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.
 - b. For all new or substantially improved floodproofed nonresidential structures, where base flood elevation data is provided through the FIS, FIRM, or as required in subsection (15) of this section:
 - 1) Verify and record the actual elevation (in relation to mean sea level) to which the structure has been floodproofed;
 - 2) Maintain the floodproofing certifications;
 - c. Maintain for public inspection all records pertaining to the provisions of this chapter.
17. Variance Procedure – Additional State Requirements. The variance procedure contained in 44 CFR Part 60.6 and this chapter shall apply to the additional state requirements contained in WAC 173-158-064 and 173-158-070, unless an activity or use is expressly prohibited therein.
18. Appeal and Review of City Action.
 - a. Any aggrieved person may appeal the approval or denial of a floodplain permit to the hearing examiner.
 - b. In acting on appeals or permit approval requests, the city shall consider all technical evaluations, all relevant factors, and standards specified in other sections of this chapter, and:
 - 1) The danger that materials may be swept onto other lands to the injury of others;
 - 2) The danger of life and property due to flooding or erosion damage;
 - 3) The susceptibility of the proposed facility and its contents to flood damage, and the effect of such damage on the individual owner;
 - 4) The importance of the services provided by the proposed facility to the community;
 - 5) The necessity to the facility of a waterfront location where applicable;
 - 6) The availability of alternative locations for the proposed use that are not subject to flooding or erosion damage;
 - 7) The compatibility of the proposed use with existing and anticipated development;
 - 8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

- 9) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - 10) 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
 - 11) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, water systems, streets and bridges.
- c. Upon consideration of the above factors, and the purposes of this chapter, the appeal hearing body may attach such conditions to actions on appeals and approvals as it deems necessary to further the purpose of this chapter.
 - d. The director shall maintain the records of all appeal and approval actions of the city of Washougal.
 - e. Conditions for Variances. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level. As the lot size increases, the technical justification required for issuing the variance increases.
 - f. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places.
 - g. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
 - h. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - i. Variances shall only be issued upon:
 - 1) Showing a good and sufficient cause;
 - 2) A determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - 3) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
 - j. Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations shall be quite rare.
 - k. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except subsection

(18)(e) of this section, and otherwise complies with anchoring and construction materials and methods general standards below.

- l. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below 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.

m. Penalties and Enforcement.

- 1) The attorney general or the attorney for the local government shall bring such injunctive, declaratory, or other actions as are necessary to ensure compliance with this chapter.
- 2) Any person who fails to comply with this chapter shall also be subject to a civil penalty not to exceed \$1,000 for each violation. Each violation or each day of noncompliance shall constitute a separate violation.
- 3) The penalty provided for in this section shall be imposed by a notice in writing either by certified mail with return receipt requested or by personal service to the person incurring the same from the department or local government, describing the violation with reasonable particularity and ordering the act or acts constituting the violation or violations to cease and desist or, in appropriate cases, requiring necessary corrective action to be taken within a specific and reasonable time.
- 4) Any penalty imposed pursuant to this section by the department shall be subject to review by the pollution control hearings board. Any penalty imposed pursuant to this section by the city shall be subject to review by the city council. Any penalty jointly imposed by the department and city shall be appealed to the pollution control hearings board.

19. General Standards. In all areas of special flood hazards the following standards are required:

a. Anchoring.

- 1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
- 2) All manufactured homes must likewise be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques). This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.

b. Construction Materials and Methods.

- 1) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- 2) All new construction and substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

- ~~2)3)~~ All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
- ~~4)~~ Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- ~~5)~~ All new construction and substantial improvements have fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be 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 either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:
- (a) A minimum of two openings having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding shall be provided.
 - (b) The bottom of all openings shall be no higher than 1 foot above grade.
 - (c) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

20. Utilities.

- a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters;
- c. On-site waste disposal systems are prohibited in the floodplain; and
- d. Water wells shall be located on high ground that is not in the floodway.

21. Subdivision Proposals-, Manufactured Home Parks and Subdivisions, and Other Proposed New Development.

- a. All subdivision proposals, manufactured home parks and subdivisions, and other proposed new development shall be consistent with the need to minimize flood damage;
- b. All subdivision proposals, manufactured home parks and subdivisions, and other proposed new development shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
- c. All subdivision proposals, manufactured home parks and subdivisions, and other proposed new development shall have adequate drainage provided to reduce exposure to flood damage; and
- d. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

22. Review of Building Permits. Where elevation data is not available either through the flood insurance study, FIRM or from another authoritative source, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.
23. Additional Standards.
 - a. Critical Facilities.
 - 1) Critical facilities should be afforded additional flood protection due to their nature. The city shall use the 500-year frequency flood as a minimum standard instead of the 100-year frequency flood as used for other types of development. When FEMA amends the Washougal floodway and floodplain maps the city shall reevaluate this section within one year of the FEMA map amendments.
 - 2) Construction of new critical facilities shall be, to the extent possible, located outside the limits of the 500-year floodplain as identified on the city's FIRM. Construction of new critical facilities shall be permissible within the 500-year frequency floodplain if no feasible alternative site is available. Critical facilities constructed within the 500-year frequency floodplain shall have the lowest floor elevated to or above the level of the 500-year frequency flood or the flood protection elevation, whichever is greater. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into flood waters.
 - 3) Access routes elevated to or above the level of the 500-year frequency flood shall be provided to all critical facilities to the extent possible.
 - b. Flood Protection Elevation. In order to account for the impacts of future development on flood depths, and in order to ensure less expensive insurance rates for floodplain occupants, all development within special flood hazard areas which requires elevation or floodproofing shall be elevated or floodproofed to the flood protection elevation (base flood elevation plus 1 foot).
24. Specific Standards. In all areas of special flood hazards where base flood elevation data has been provided as set forth in subsection (1) of this section, Basis for Establishing the Areas of Special Flood Hazard, or subsection (15) of this section, Use of Other Base Flood Data, the following provisions are required:
 - a. Residential Construction.
 - 1) New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot or more above the base flood elevation.
 - 2) Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

- (a) A minimum of two openings having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding shall be provided.
- (b) The bottom of all openings shall be no higher than 1 foot above grade.
- (c) Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of flood waters.

Note: Foundation vent standards required by the IBC/IRC outside the floodplain do not meet this standard and are often inadvertently permitted. Insurance rates reflect an “all or nothing” standard, meaning partially ventilated crawl spaces may be subject to an additional loading fee of 20 to 25 percent attached to the annual insurance premium.

- b. Nonresidential Construction. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated one foot or more above the base flood elevation, or, together with attendant utility and sanitary facilities, shall:

- 1) Be floodproofed so that below one foot or more above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- 2) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
- 3) 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 official;
- 4) Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in this subsection; and
- 5) Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g., a building floodproofed to one foot above the base flood level will be rated at the base flood elevation).

- 25. Manufactured Homes. All manufactured homes to be placed or substantially improved within Zone AE shall be: (1) elevated on a permanent foundation such that the lowest floor of the manufactured home is 1 foot or more above the base flood elevation and (2) the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.

- 26. Recreational Vehicles. Recreational vehicles placed on sites are required either to:
 - a. Be on site for fewer than 180 consecutive days;
 - b. Be fully licensed and ready for highway use, on its wheels or jacking system, be attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
 - c. Meet the requirements for a manufactured home and the elevation and anchoring requirements for manufactured homes. Recreational vehicles may be allowed in

the floodway and floodway fringe areas on a temporary basis as long as subsections (26)(a) and (b) of this section apply.

27. Floodways and Floodway Requirements. Located within areas of special flood hazard established in subsection (1) of this section are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:
- a. Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge;
 - b. Construction or reconstruction of residential structures, including the placement of any manufactured homes, is prohibited within the designated floodways, except for:
 - 1) Repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and
 - 2) Repairs, reconstruction, or improvements to a structure, the cost of which does not exceed 50 percent of the market value of the structure either:
 - (a) Before the repair or reconstruction is started, or
 - (b) If the structure has been damaged, and is being restored, before the damage occurred.
 - 3) 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 to structures identified as historic places, may be excluded in the 50 percent determination.
 - c. If subsection (27)(a) of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this code.
28. Special Flood Hazard Areas with Base Flood Elevations but without Designated Floodways. When a regulatory floodway for a stream has not been designated, the city will require that applicants for new construction, substantial improvements, or other development (including fill) reasonably utilize the best available information from federal, state, or other sources to demonstrate the cumulative effect of existing, proposed, and anticipated future development and determine that the increase in the water surface elevations of the base flood will not be more than one foot at any point in the community. Building and development within a SFHA without a designated floodway shall comply with the requirement of 44 CFR 60.3(b) and 60.3(c) of the NFIP regulations, adopted by reference.
29. Alteration of Watercourses.
- a. Notify adjacent communities and the Washington State Department of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of

such notification to the Federal Insurance Administration and the Federal Emergency Management Agency;

- b. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

30. Severability. If any section, subsection, sentence, clause or phrase of this chapter is for any reason held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this chapter. (Ord. 1728 § 2 (Exh. A), 2012; Ord. 1725 § 4 (Exh. B), 2012; Ord. 1543 § 1, 2006)

16.04.065 Critical area – Geologically hazardous areas.

1. Purpose and Intent.

- a. The purpose of this chapter is to regulate development to protect fragile steep slopes from unsuitable development and to protect life and property from hazards due to inappropriate development on steep slopes, erodible soils and geologically hazardous areas, in a manner consistent with the Washougal Comprehensive Plan and Clark County countywide planning policies.
- b. It shall also be the intent of these regulations to: use the fullest current understanding of good civic design, landscape architecture, architecture, planning and civil engineering to preserve, enhance and promote the existing and future appearance and resources of hillside areas; preserve and enhance the beauty of the landscape by encouraging the maximum retention of natural topographic features, such as forested hillsides, drainage swales, streams, slopes, ridge lines, vistas and natural plant formations; promote a safe means of ingress and egress for vehicular and pedestrian traffic to and within hillside areas while at the same time minimizing the scarring effects of hillside street construction; and encourage imaginative and innovative building techniques to create buildings suited to natural hillside surroundings.
- c. Unauthorized motor vehicle use in geologically hazardous areas may be construed as a violation of this chapter and the community development director may refer observed unauthorized motorized vehicle use to the Washougal code enforcement officer or person designated to fulfill code enforcement activity within the city.

2. Applicability. This chapter shall apply to any development proposal for properties when any topographical slope exceeds 15 percent or where landslide, erosion, or seismic hazards adverse conditions associated with slope stability, erosion, sedimentation, or geological hazard are present as determined by Clark County or city records or identified by a geotechnical engineer.

a. Landslide hazard areas. These areas are mapped as landslides, scarps, and flanks on the Washington Department of Natural Resources (WDNR) map “2018 Landslide Inventory and Susceptibility of the Columbia Gorge in Clark, Skamania, and Klickitat Counties, Washington.”

b. Erosion hazard areas. These areas are identified by USDA NRCS as having “severe” or “very severe” erosion hazard.

c. Seismic hazard areas. These areas are indicated by:

- 1) A Zone D1 or higher rating as defined by the seismic design category maps for residential construction in Washington by the WDNR (2007) or as updated and the International Residential Code; and areas with

Site Classes C to D, D, D to E, E, and F as defined by the “Site Class Map of Clark County” by the WDNR and the International Building Code.

4)2) Areas of “low to moderate” or greater liquefaction susceptibility. These areas are as mapped by the WDNR on its “Liquefaction Susceptibility Map of Clark County, Washington (September 2004 or as updated).”

2.3. Approval Criteria for Hillside Development. All development proposals shall comply with the following:

- a. Orient development on the site so that grading and site preparation is kept to a minimum;
- b. Grade the site to blend with natural landforms to minimize the necessity of padding and/or terracing of building sites;
- c. Phase the project into workable units to schedule construction to minimize soil disturbance and to control erosion in accordance with the approved erosion control and grading plan;
- d. Allocation for open spaces and recreational uses of areas not well suited for development because of soil, geology, vegetation or hydrology limitations;
- e. Existing native vegetation shall not be removed in areas of 15 percent or greater slopes. Non-native, invasive nuisance vegetation may be removed by hand (not by chemical methods or machinery such as backhoe, track vehicle, or similar equipment). The exception is in the case where approval has been granted by the hearing examiner or community development director for utilities, storm water facilities, buildings, roads, and filled areas;
- f. Inclusion of innovative concepts for slope and soil stabilization, grading and landscaping is encouraged.

3.4. Engineering Reports and Plans Required. At the time of preliminary plat review for development, or at the time of site plan review, of properties with slopes of 15 percent or more, the following reports and plans shall be submitted for review:

- a. Engineering Soils Report. This report shall include conclusions and recommendations regarding soil conditions for proposed developments. It shall include site-specific soil tests, particularly to identify the boundaries of slope-constrained areas and whether soils are permeable for storm water infiltration and construction of streets, utilities and buildings. This report shall be completed by a registered professional engineer experienced in soil mechanics. The report may use the U.S. Soil Conservation Service’s local soil survey as its basis, although site-specific soil tests are strongly recommended;
- b. Engineering Geology Report. This report shall include a complete description of the geology of the site, conclusions and recommendations regarding the effect of geologic conditions on the proposed development and opinions and recommendations covering the capability of the site to be developed for its intended use or uses. This report shall be completed by a professional geologist or a professional engineer experienced and knowledgeable in the practice of engineering geology;
- c. Hydrology Report. This report shall include a complete description of the hydrology of the site, conclusions and recommendations regarding the effect of hydrologic conditions on the proposed development and the capability of the site

to be developed. Preliminary hydrology reports shall be completed by a professional engineer experienced and knowledgeable in the practice of hydrology and in the techniques of hydrologic investigation;

- d. Grading and Drainage Plan. A plan shall be submitted which contains the following information: existing topographic contour intervals of not less than two feet, proposed building sites; approximate dimensions, elevations and contours of proposed grading, including all cut and fill slopes; and proposed drainage facilities including all surface and subsurface drainage devices, retaining walls, sediment basins and other drainage features;
- e. Revegetation Plan. A revegetation plan showing types of vegetative materials to be planted in disturbed and graded areas or in areas where nuisance vegetation is proposed to be removed;
- f. The city will review the reports and plans within the context of the approval criteria for development specified in subsection (3) of this section and may place conditions on the proposed development that will result in compliance with said general guidelines.

4.5. Hillside Development Grading Regulations. All development subject to regulation under this chapter shall conform to the following:

- a. In addition to the erosion control requirements of the city of Washougal engineering standards, no earthwork activity shall occur on slopes in excess of 25 percent between the dates of October 1st and May 1st; provided, that the city of Washougal may extend or shorten this time period on a case-by-case basis depending on actual weather conditions.
- b. Buffer area of at least 50 feet shall be established from the edge of areas characterized by steep slopes (25 percent or greater), potentially unstable soils, and erosion potential, or seismic activity. The buffer may be extended at the determination of the community development director or hearing examiner if a larger buffer is necessary to mitigate adverse impacts and to protect life and property. Existing native vegetation within the buffer area shall be maintained. The buffer may be reduced if the applicant demonstrates to the satisfaction of the community development director that such reduction will adequately protect the public health, safety and welfare.
- c. No grading, filling, clearing or excavation of any kind in excess of 50 cubic yards shall be initiated until a grading plan is formally reviewed and approved by the city engineer. Additional geotechnical analysis may be required, as determined by the city engineer.
- d. Borrowing for fill shall be prohibited unless the material is obtained from a cut permitted under an approved grading plan or imported from outside the hillside areas of Washougal. No cuts shall be permitted solely for the purpose of obtaining fill unless specifically approved in the grading plan, and any approved cut or fill slopes shall be no steeper than two horizontal to one vertical (2:1) unless it can be shown by the project engineer that steeper slopes are feasible.
- e. All retaining walls with a total vertical projection of more than four feet shall be engineered as structural members keyed into stable foundations and capable of sustaining the design loads, and approved by the building official through the building permit process.

- f. All slopes which are stabilized by mechanical or alternate means shall be adapted to conform to the surrounding terrain.
- g. Construction shall be scheduled to minimize soil disturbance. All disturbed soil surfaces shall be stabilized. Temporary treatment adequate to prevent erosion shall be installed on these surfaces.

5.6. Hillside Development Road and Circulation Requirements.

- a. Roads shall be designed to create the minimum feasible amounts of land coverage and the minimum feasible disturbance of the soil. Existing vegetation of the deep-rooted perennial variety shall be preserved to the greatest extent possible in the location of roads. Road alignments should follow the natural terrain unless the project engineer can justify additional cuts or fills.
- b. Combinations of collective private driveways, cluster parking areas and on-street parallel parking bays shall be used where possible to attempt to optimize the objectives of minimum soil disturbance, minimum impervious cover, excellence of design and aesthetic sensitivity. (Ord. 1613 § 1 (Exh. A), 2008; Ord. 1543 § 1, 2006)

16.04.070 Critical area – Wetlands.

- 1. Purpose. Wetlands constitute important natural resources which provide significant environmental functions including: the control of flood waters, maintenance of summer stream flows, filtration of pollutants, recharge of ground water, and provisions of significant habitat areas for fish and wildlife. Uncontrolled urban-density development in and adjacent to wetlands can eliminate or significantly reduce the ability of wetlands to provide these important functions, thereby detrimentally affecting the public health, safety, and general welfare.
- 2. Applicability. The provisions of this chapter apply to any soil disturbance occurring or land use proposal affecting Category 1, 2, 3, or 4I, II, III, or IV wetlands or associated buffers unless otherwise expressly exempted by this chapter.
- 3. Exempted Wetlands. This chapter shall not apply to the following wetlands: The following wetlands may be exempt from the requirements to avoid impacts and may be filled if the impacts are fully mitigated. If available, impacts should be mitigated through the purchase of credits from an in-lieu fee program or a mitigation bank, consistent with the terms and conditions of the program or bank. In order to verify the following conditions, a critical areas report for wetlands meeting the requirements in the chapter must be submitted. Isolated wetlands are still regulated by Ecology. This provision does not exempt the applicant from securing authorization from Ecology to impact the types of wetlands listed below.
 - a. Isolated Category IV wetlands less than one-tenth of an acre in size that:
 - 1) Are not associated with riparian areas or their buffers;
 - 2) Are not associated with shorelines of the state or their associated buffers;
 - 3) Are not part of a wetland mosaic;
 - 4) Do not score 6 or more points for habitat function under the Department of Ecology Rating System, as amended Washington State Wetland Rating System for Western Washington – 2014 Update (Revised, Ecology publication #14-06-029, October 2014), as amended; and

- ~~4)5)~~ Do not contain a priority habitat or priority area for a priority species identified by the Washington Department of Fish and Wildlife, or do not contain federally listed species or their critical.
- b. Riparian. Wetlands less than five feet wide above the ordinary high water mark along streams and lakes which are regulated under the State Shorelines Management Act (Chapter 90.58 RCW). Wetlands less than 1,000 square feet that meet the above criteria and do not contain federally listed species or their critical habitat are exempt from the buffer provisions contained in this chapter.
4. Interpretation. Except where a contrary intent clearly appears, the provisions of this chapter shall be construed to the maximum feasible extent consistent with the Federal Clean Water Act, 33 USC Section 1251 et seq., and the rules and guidelines promulgated pursuant thereto. Nothing in this chapter shall be construed to preclude application of the State Environmental Policy Act in approving applications not listed in WMC 16.04.025.
5. Wetland Delineation and Marking.
- a. An application shall not be deemed technically complete until completion (if required) of a wetland delineation.
- b. The community development director shall determine whether a wetland delineation is required based upon several factors including but not limited to a site visit, review of existing critical areas maps, review of National Wetland Inventory maps, the presence of hydric soils, historical evidence, or consultation with a qualified expert.
- c. Wetland Delineation.
- 1) Methodology. The location of a wetland and its boundary shall be determined through the performance of a field investigation, to be performed by a qualified wetland professional using the methodology contained in the approved federal wetland delineation manual and applicable regional supplements. Washington State Wetland Identification and Delineation Manual (Publication #96-94) and 1987 U.S. Corps of Engineers Wetlands Delineation Manual or the most current editions adopted by these agencies. The applicant shall be responsible for the cost of the professional services. If a wetland is located on an adjacent parcel, such that the wetland buffer may extend onto the proposed development site, the applicant shall use all reasonable resources to determine the wetland boundary and category and buffer type.
- 2) Information Requirements. Wetland boundaries shall be staked and flagged in the field and a delineation report shall be submitted to the city. The report shall include the following information:
- (a) U.S.G.S.-USGS topographic map with site clearly defined;
- (b) National wetland inventory map showing site;
- (c) Soil Conservation Service soils map of the site;
- (d) Site map, at a scale no smaller than one inch equals 400 feet, if practical, showing the following information:
- Wetland boundaries;
 - Sample sites and sample transects;
 - Boundaries of forested areas;
 - Boundaries of wetland classes if multiple classes exist;

- (e) An aerial photograph of the project area (scale no smaller than one inch equals 400 feet);
 - (f) Discussion of methods and results with special emphasis on technique used from the wetlands delineation manual;
 - (g) Acreage of each wetland identified on the site based on a survey;
 - (h) All completed field data sheets (U.S. Army Corps of Engineers' format for three parameter application) numbered to correspond to each sample site; and
 - (i) Name and contact information of the applicant and primary author(s) of the wetland critical area report.
 - 3) Responsibility. The wetland delineation is the responsibility of the applicant. The city shall verify the accuracy of the boundary delineation within 20 days of receiving the delineation report. This review period may be extended when excessively dry conditions prohibit the confirmation of the wetland delineation. If the delineation is found to not accurately reflect the boundary of the wetland, the city will issue a report, within 30 days of receiving the applicant's delineation report, citing evidence (for example, soil samples) that demonstrates where the delineation is in error. The applicant may then either revise the delineation or submit another report or appeal.
 - 4) Buffers. All buffers shall be measured perpendicularly outward from the delineated wetland boundary or, in the case of a stream with no adjacent wetlands, the ordinary high water mark as surveyed in the field.
 - 5) Marking Buffer During Construction. The location of the outer extent of the wetland buffer shall be marked in the field and such markings shall be maintained throughout the duration of the permit.
 - 6) Permanent Marking of Buffer Area. A permanent physical demarcation along the upland boundary of the wetland buffer area shall be installed and thereafter maintained. Such demarcation may consist of logs, a tree or hedge row, fencing, or other prominent physical marking approved by the hearing examiner. In addition, signs (minimum size one-foot by one-foot and posted three and one-half feet above grade) shall be posted at an interval of one per lot or every 100 feet, whichever is less, and perpetually maintained at locations along the outer perimeter of the wetland buffer worded substantially as follows: WETLAND AND BUFFER – PLEASE RETAIN IN A NATURAL STATE.
 - 7) A conservation covenant shall be recorded in a form approved by the city attorney as adequate to incorporate the other restrictions of this section and to give notice of the requirement to obtain a wetland permit prior to engaging in regulated activities within a wetland or its buffer.
 - 8) In the cases of plats, short plats, and recorded site plans, include on the face of such instrument the boundary of the wetland and its buffer and a reference to the separately recorded conservation covenant provided for in subsection (5)(c) of this subsection.
6. Wetland Rating. Wetlands shall be rated according to the Washington State Department of Ecology's Wetland Rating System for Western Washington (Ecology Publication #[14-06-02904-06-025](#)) or as revised by Ecology. The rating system is designed to differentiate between wetlands based on their sensitivity to disturbance, their significance, rarity, the ability for replacement, and wetland functions. This rating system shall be used to determine base buffer widths and to determine mitigation and enhancement requirements. The rating system document contains the definitions and

methods for determining the criteria for each wetland category. Wetland rating forms shall be included in the wetland delineation report.

- a. The determination of the specific category of wetland and buffer type for each wetland shall be the responsibility of the city.
- b. A single wetland shall be classified into more than one category if distinct areas exist in the wetland that clearly meet the description of separate categories. Buffers shall also be classified into more than one type when distinct areas exist in the buffer that clearly meet the description for separate types.
- c. Wetlands that are enhanced and thereafter meet the criteria for a higher category are classified according to the characteristics of the pre-enhanced wetland.
- d. Wetland Rating System. The rating system contains a general description of each wetland category followed by specific criteria. If the specific criteria conflicts with the general description, the city shall determine the most appropriate classification as applied to a particular site.

e. Wetland Rating Categories.

1) Category I. Category I wetlands are:

- (a) relatively undisturbed estuarine wetlands larger than 1 acre;
- (b) wetlands of high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR;
- (c) bogs;
- (d) mature and old-growth forested wetlands larger than 1 acre;
- (e) wetlands in coastal lagoons;
- (f) interdunal wetlands that score 8 or 9 habitat points and are larger than 1 acre; and
- (g) wetlands that perform many functions well (scoring 23 points or more).

~~—These wetlands: Category I wetlands represent unique or rare wetland types, are more sensitive to disturbance than most wetlands, are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime, or provide a high level of functions.~~

2) Category II. Category II wetlands are:

- (a) estuarine wetlands smaller than 1 acre, or disturbed estuarine wetlands larger than 1 acre;
- (b) interdunal wetlands larger than 1 acre or those found in a mosaic of wetlands; or
- (c) wetlands with a moderately high level of functions (scoring between 20 and 22 points).

3) Category III. Wetlands scoring between 16 and 19 points, generally have been disturbed in some ways, and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands. Category III wetlands are:

- (a) wetlands with a moderate level of functions (scoring between 16 and 19 points);

- (b) can often be adequately replaced with a well-planned mitigation project; and
 - (c) interdunal wetlands between 0.1 and 1 acre.
 - 4) **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 we should be able to replace, or in some cases to improve. 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.
- 7. ~~(i) Category I. Category I wetlands represent a unique or rare wetland type; are more sensitive to disturbance than most wetlands; are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or provide a high level of water quality, hydrologic and habitat functions. These wetlands meet one or more of the following criteria:~~
 - 8. ~~(A) Wetlands that are identified by scientists of the Washington State Department of Natural Resources Washington Natural Heritage Program as high quality wetlands, relatively undisturbed wetlands or wetlands that support state listed threatened or endangered plants;~~
 - 9. ~~(B) Bogs due to their sensitivity to disturbance and that they are irreplaceable through compensatory mitigation;~~
 - 10. ~~(C) Mature (softwoods 80 years old or older and hardwoods 50 years old or older) and old growth forested wetlands larger than one acre;~~
 - 11. ~~(D) Wetlands that perform many functions well, as indicated by scoring 70 points (out of 100) in the rating system.~~
 - 12. ~~(ii) Category II. Category II wetlands are difficult but not impossible to replace, and perform most functions relatively well or perform one group of functions (water quality, hydrologic or habitat) very well and the other two groups moderately well. These wetlands have moderately high level of functions, as indicated by scoring 51 to 69 points in the Ecology rating system.~~
 - 13. ~~(iii) Category III. Category III wetlands perform a moderate level of functions; typically have been disturbed in some manner; and are often less diverse and more isolated from other natural resources in the landscape than Category II wetlands. These wetlands score between 30 and 50 points in the Ecology rating system.~~
 - 14. ~~(iv) Category IV. Category IV wetlands have the lowest levels of functions and are often heavily disturbed. These wetlands score less than 30 points in the Ecology rating system.~~
- 7. Regulated Activities
 - a. For any regulated activity, a critical area report may be required to support the requested activity.
 - 1) The following activities are regulated if they occur in a regulated wetland or its buffer:
 - (a) The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind.
 - (b) The dumping of, discharging of, or filling with any material.

- (c) The draining, flooding, or disturbing of the water level or water table.
- (d) Pile driving.
- (e) The construction, reconstruction, demolition, or expansion of any structure.
- (f) The destruction or alteration of wetland vegetation through clearing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a regulated wetland.
- (g) “Class IV – General Forest Practices” under the authority of the “1992 Washington State Forest Practices Act Rules and Regulations,” WAC 222-12-030, or as thereafter amended.
- (h) Activities that result in:
 - A significant change of water temperature.
 - A significant change of physical or chemical characteristics of the sources of water to the wetland.
 - A significant change in the quantity, timing, or duration of the water entering the wetland.
 - The introduction of pollutants.

15.8. Base Buffer Width.

- a. Buffer width, measured in feet, shall be based upon “Alternative 3 in Appendix 8C of Freshwater Wetlands in Washington State, Vol. 2” as modified in 2014. Intensity of use shall be based upon Table “8C-3, Types of proposed land use that can result in high, moderate, and low levels of impacts to adjacent wetlands” described in “Appendix 8C of Freshwater Wetlands in Washington State, Vol. 2” as modified in 2014, and attached to the ordinance codified in this chapter. The standard required buffer widths of wetlands buffers are shown in Tables 16.04.070(8)(a) through 16.04.070(8)(c) and land use intensities are listed in Table 16.04.070(8)(d).

Table 16.04.070(7)(a)

Buffers Required to Protect Hydrologic Functions

Wetland Rating	Low-Intensity Use	Moderate-Intensity Use	High-Intensity Use
Category-I	50	75	100
Category-II	50	75	100
Category-III	40	60	80
Category-IV	25	40	50

Table 16.04.070(7)(b)

Buffers Required to Protect Habitat Functions in Category-III Wetlands

Habitat Score in the Rating Form	Low-Intensity Use	Moderate-Intensity Use	High-Intensity Use
19 points or less	See Table 16.04.070(7)(a)	See Table 16.04.070(7)(a)	See Table 16.04.070(7)(a)
20 points or greater	75	110	150

Table 16.04.070(7)(c)

Buffers Required to Protect Habitat Functions in Category-I and II Wetlands

Habitat Score in the Rating Form	Low-Intensity Use	Moderate-Intensity Use	High-Intensity Use
19 points or less	See Table 16.04.070(7)(a)	See Table 16.04.070(7)(a)	See Table 16.04.070(7)(a)
20—23 points	60	90	120
24—27 points	90	130	180
28—30 points	130	195	260
31 points or greater	150	225	300

Table 16.04.070(8)(a). Buffers Required to Protect Water Quality Functions

<u>Wetland Rating</u>	<u>Low Intensity Use</u>	<u>Moderate Intensity Use</u>	<u>High Intensity Use</u>
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<u>Table 16.04.070(8)(a). Buffers Required to Protect Water Quality Functions</u>			
<u>Category I</u>	<u>50 ft.</u>	<u>75 ft.</u>	<u>100 ft.</u>
<u>Category II</u>	<u>50 ft.</u>	<u>75 ft.</u>	<u>100 ft.</u>
<u>Category III</u>	<u>40 ft.</u>	<u>60 ft.</u>	<u>80 ft.</u>
<u>Category IV</u>	<u>25 ft.</u>	<u>40 ft.</u>	<u>50 ft.</u>
<u>Table 16.04.070(8)(b). Buffers Required to Protect Habitat Functions in Category III Wetlands</u>			
<u>Habitat Score in the Rating Form</u>	<u>Low Intensity Use</u>	<u>Moderate Intensity Use</u>	<u>High Intensity Use</u>
<u>45 points or less</u>	<u>See Table 16.04.070(7)(a)</u>	<u>See Table 16.04.070(7)(a)</u>	<u>See Table 16.04.070(7)(a)</u>
<u>56 points</u>	<u>60</u>	<u>90</u>	<u>120</u>
6 points	65	100	135
<u>7 Points</u>	<u>75</u>	<u>110</u>	<u>150</u>
<u>8 Points</u>	<u>130</u>	<u>195</u>	<u>260</u>
<u>9 Points</u>	<u>150</u>	<u>225</u>	<u>300</u>

<u>Table 16.04.070(8)(c)Table a-3. Buffers Required to Protect Habitat Functions in Category I and II Wetlands</u>			
<u>Habitat Score in the Rating Form</u>	<u>Low Intensity Use</u>	<u>Moderate Intensity Use</u>	<u>High Intensity Use</u>
<u>45 points or less</u>	<u>Table 16.04.070(8)(a)</u>	<u>Table 16.04.070(8)(a)</u>	<u>Table 16.04.070(8)(a)</u>
5 points	70 ft.	105 ft.	140 ft.
<u>6 points</u>	90 60 ft.	135 90 ft.	180 120 ft.
<u>7 points</u>	110 90 ft.	165 130 ft.	220 180 ft.
<u>8 points</u>	<u>130 ft.</u>	<u>195 ft.</u>	<u>260 ft.</u>
<u>9 Points</u>	<u>150 ft.</u>	<u>225 ft.</u>	<u>300 ft.</u>

Table 16.04.070(8)(d)						
Intensity	Parks and Recreation	Streets and Roads	Stormwater Facilities	Utilities	Commercial/Industrial	Residential ²
Low	Natural fields and grass areas, viewing areas, split rail fencing	NA	Outfalls, spreaders, constructed wetlands, bioswales, vegetated detention basins, overflows	Underground and overhead utility lines, manholes, power poles (without footings)	NA	NA
Moderate	Impervious trails, engineered fields, fairways	Residential driveways and access roads	Wet ponds	Maintenance access roads	NA	Single-family with density less than 1 unit per acre
High	Greens, tees, structures, parking, lighting, concrete or gravel pads, security fencing	Public and private streets, security fencing, retaining walls	Maintenance access roads, retaining walls, vaults, infiltration basins, sedimentation forebays and structures, security fencing	Paved or concrete surfaces, structures, facilities, pump stations, towers, vaults, security fencing, etc.	All site development	Single- and multifamily with density higher than 1 unit per acre

- b. New urban residential lots shall not be platted within wetland buffers.
- c. ~~Storm~~ Stormwater facilities and public utilities may be located within the buffers of those wetlands with low habitat function or in degraded buffer areas.
- e-d. The standard buffer widths presume the existence of a relatively intact native vegetation community and continuity in the buffer zone adequate to protect the critical area functions and values at the time of the proposed activity. When the conditions and setting show the buffer is unvegetated or sparsely vegetated, wider buffers or a revegetation plan may be needed.

16.9. Wetland Buffer Reductions.

- a. Functionally Isolated Buffer Areas. Areas which are functionally separated from a wetland and do not protect the wetland from adverse impacts due to pre-existing roads, structures, or vertical separation shall be excluded from buffers otherwise required by this chapter.
- b. The full buffer width of higher quality wetlands (habitat scores of ~~20~~ 5 or greater) shall not be extended over lesser quality wetlands that have reduced habitat function as designated in Tables 16.04.070(7)(b) and (c), if all of the following criteria are met:
 - 1) The area of reduced habitat function is at least one acre in size;
 - 2) The area supports less than five native plant species and contains no special habitat features listed in H1.5 of the rating form;
 - 3) The area does not meet any WDFW priority habitat or species criteria;
 - 4) The required buffer width to protect habitat function is provided for all portions of the wetland that do not have reduced habitat function.
- c. Buffer Averaging. Buffer averaging is authorized for wetland buffers only when the buffer area and width after averaging will not impact the wetland and/or

buffer functions and values adversely and such averaging does not exceed 25 percent of the buffer width. At a minimum, any proposed buffer averaging shall meet all of the following criteria:

- 1) The total area contained in the buffer after averaging shall be at least functionally equivalent and equal in size to the area contained within the buffer prior to averaging.
- 2) The buffer width shall not be reduced by more than 25 percent.
- 3) There are no feasible alternatives to the site design that could be accomplished without buffer averaging.
- ~~5)4) The additional buffer area is contiguous with the standard buffer. The average buffer width may not be reduced by more than 25 percent of the buffer width.~~

~~e. The total area contained in the buffer after averaging shall be at least functionally equivalent and equal in size to the area contained within the buffer prior to averaging.~~

d. General Site Design Measures. High intensity buffers may be reduced to moderate intensity buffers if all of the following mitigation measures are applied to the greatest extent practicable:

- 1) Buffer Enhancement. The intent and effect of an approved buffer enhancement program shall be to measurably improve low functioning buffers by increasing the identified functions of the buffer. This may include the removal and management of noxious weeds and/or invasive vegetation or specific measures to improve hydrologic or habitat function.
- 2) Shielding of High Intensity Uses.
 - (a) Lights. Direct all lights away from wetlands;
 - (b) Noise. Locate activity that generates noise away from wetlands;
 - (c) Pets and Human Disturbance. Use privacy fencing; plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion; place wetland and its buffer in a separate tract.
- 3) Surface Water Management.
 - (a) Existing Runoff. Retrofit storm water detention and treatment for roads and existing development and disperse direct discharge of channelized flows from lawns and landscaping;
 - (b) Change in Water Regime. Infiltrate and/or disperse storm water runoff from impervious surfaces and drainage from lawns and landscaping into the buffer at multiple locations, except where the infiltration or dispersal would either be in opposition to the recommendations contained in the geotechnical report for the project or where the infiltration or dispersal would occur in a geologically hazardous area.

e. Low Impact Development. If the development of the site has a low impact upon the critical area, the applicant may reduce the buffer width. However, the following reductions cannot be used in combination:

- 1) Limiting Effective Impervious Surface as Defined in the Washougal Engineering Standards. Use of low impact development techniques and/or limiting the extent of impervious site area. Areas set aside as non-impervious surface must be protected by some type of permanent legal protection such as a covenant or easement.
 - (a) Less than 35 percent effective impervious surface results in a low-intensity impact.
 - (b) Less than 50 percent effective impervious surface results in a moderate-intensity impact.
- 2) Habitat Corridors. Establishment of a minimum 100-foot-wide functioning or enhanced vegetated corridor between the wetland and any other priority habitat areas as defined by the Washington State Department of Fish and Wildlife:
 - (a) Applies only to wetlands with habitat function scores higher than 205 on the rating system form;
 - (b) The habitat corridor must be protected for the entire distance between the wetland and the priority habitat area by some type of permanent legal protection such as a covenant or easement.

17.10. Wetland Permit Standards – General.

- a. Any development proposal that impacts a wetland or wetland buffer shall not be allowed without an approved mitigation or enhancement plan consistent with subsection H-13 of this section and WMC 16.04.085 and the mitigation sequencing preference. (See “mitigation” in the definition section of this chapter.)
- b. The city shall not approve a development proposal that impacts wetlands or wetland buffers without a finding that:
 - 1) The proposed activity shall not cause significant degradation of ground water or surface water quality or fish and wildlife habitat;
 - 2) The proposed activity shall comply with all state, local and federal laws, including those related to sediment control, pollution control, floodplain restrictions, storm water management, and on-site wastewater disposal.

18.11. Wetland Activities. Activities that trigger a wetland permit shall meet the following standards:

- a. Wetland impacts to Category I wetlands that are bogs or wetlands of high conservation value~~Natural Heritage sites~~ shall be avoided.
- b. All other wetland impacts shall meet the compensation ratios stated in Table 16.04.070(~~11~~12)(a), Wetland Mitigation Ratios for Projects in the Washougal Urban Growth Area.
- c. Mitigation requirements may also be determined using the credit/debit tool described in “Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Final Report” Ecology publication #10-06-011, March 2011).

12. Compensatory Mitigation. Activities affecting wetland functions shall achieve functional equivalency or the improvement of functions. The goal shall be for the compensatory mitigation to provide wetland functions similar to those lost. Mitigation actions that require compensation shall occur in the following order of preference:

a. Wetland mitigation banks. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the mitigation bank instrument. Use of credits from a wetland mitigation bank certified under WAC 173-700 is allowed if:

- 1) The City determines that the use of credits would provide appropriate compensation for the proposed impacts;
- 2) The impact site is located in the service area of the bank;
- 3) The proposed use of credits is consistent with the terms and conditions of the certified mitigation bank instrument; and
- 4) Replacement ratios for projects using bank credits is consistent with replacement ratios specified in the certified mitigation bank instrument.

b. In-lieu fee mitigation: To help implement off-site mitigation, the County may develop an in-lieu fee program. It shall be developed and approved through a public process and be consistent with federal rules, state policy regarding in-lieu fee mitigation, and state water quality regulations. An approved in-lieu-fee program sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the in-lieu program sponsor, a governmental or non-profit natural resource management entity.

Credits from an approved in-lieu-fee program may be used when ALL of the following apply:

- 1) The County determines that these credits would provide environmentally appropriate compensation for the proposed impacts;
- 2) The proposed use of credits is consistent with the terms and conditions of the approved in-lieu-fee program instrument;
- 3) Projects using in-lieu-fee credits shall have debits associated with the proposed impacts calculated by the applicant's qualified wetland professional using the credit assessment method specified in the approved instrument for the in-lieu-fee program; and
- 4) The impacts are located within the service area specified in the approved in-lieu-fee instrument.

c. Permittee-responsible mitigation. In this situation, the permittee or responsible party performs the mitigation after the permit has been issued and is ultimately responsible for implementation and success of the mitigation. Permittee-responsible mitigation may occur at the site of the permitted impacts or at an off-site location within the same watershed. Permittee-responsible mitigation shall be used only if the applicant's qualified wetland professional demonstrates to the approval authority's satisfaction that the proposed approach is ecologically preferable to the use of a bank or in-lieu fee program, consistent with the criteria in this section.

- 1) Restoration: For the purpose of tracking net gains in wetland acres, restoration is divided into:
 - Reestablishment: The goal of reestablishment is to return the natural or historic functions to a former wetland, and
 - Rehabilitation: The goal of rehabilitation is to repair the natural or historic functions of an existing degraded wetland.

- 2) Establishment (Creation): The goal of establishment is to develop a wetland from an upland or deepwater site where a wetland did not previously exist.
- 3) Enhancement. The goal of enhancement is to heighten, intensify, or improve specific functions, or to change the growth stage or composition of existing vegetation with a wetland.

Table 16.04.070(121)(a)
Wetland Mitigation Ratios for Projects in the Washougal Urban Growth Area

Impacted Wetland Category and Type	Re-establishment or Creation	Rehabilitation	1:1 Re-establishment or Creation (R/C) plus Enhancement (E)	Enhancement Only
Category I bog	Not considered possible	6:1 rehabilitation of a bog	Case-by-case	Case-by-case
Category I Natural Heritage wetlands of high conservation value	Not considered possible	6:1 rehabilitation of a Natural Heritage wetland of high conservation value	Case-by-case	Case-by-case
Category I forested	6:1	12:1	1:1 R-C and 24 10:1 E	24 18:1
Category I based on score for functions	4:1	8:1	1:1 R-C and 126 1 E	162 1
Category II	3:1	6:1	1:1 R-C and 84 1 E	128 1
Category III	2:1	4:1	1:1 R-C and 42 1 E	86 1
Category IV	1.5:1	3:1	1:1 R-C and 2:1 E	64 1

~~19.13.~~ ¹Wetland/Buffer Enhancement – Preliminary Plan. The preliminary enhancement/mitigation plan consists of two parts: baseline information for the site and a conceptual plan.

- a. Baseline information shall include:
 - 1) Wetland delineation report;
 - 2) Description and maps of vegetative conditions at the site;
 - 3) Description and maps of hydrological conditions at the site;
 - 4) Description of soil conditions at the site based on a preliminary on-site analysis;
 - 5) A topographic map of the site; and
 - 6) Assessment of the functional uses of the existing wetland and buffer.
- b. The contents of the conceptual plan shall include:
 - 1) Goals and objectives of the proposed project;
 - 2) Description of wetland type to be created, rehabilitated, restored, or enhanced;
 - 3) Map showing proposed wetland and buffer. This map should include the base buffer and the proposed buffer;
 - 4) Site plan;
 - 5) Discussion and map of plant material to be planted and planting densities;
 - 6) Preliminary drainage plan identifying location of proposed drainage facilities including detention structures and water quality features (e.g., swales);
 - 7) Discussion of water sources for the wetland;
 - 8) Project schedule;
 - 9) Discussion of how the completed project will be managed and monitored; and
 - 10) Discussion of contingency plans in case the project does not meet the goals initially set for the project.

~~20.14.~~ Wetland/Buffer Enhancement – Final Plan. The contents of the final enhancement/mitigation plan shall include:

- a. Preliminary enhancement/mitigation plan and all conditions imposed on that plan.
- b. Performance Standards. Specific criteria shall be provided for evaluating whether or not the goals and objectives of the enhancement/mitigation project are being met. Such criteria may include water quality standards, survival rates of planted vegetation, species abundance and diversity targets, habitat diversity indices, or other ecological, geological or hydrological criteria.
- c. Detailed Construction Plans. Written specifications for the enhancement/mitigation project shall be provided. The specifications shall include: the proposed construction sequence, grading and excavation details, water and nutrient requirements for planting, specification of substrate stockpiling techniques, and planting instructions, as appropriate. These written specifications shall be accompanied by detailed site diagrams, sealed 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.

- d. Monitoring Program. Description of a detailed program for monitoring the success of the enhancement/mitigation project. In addition to the standards described in WMC 16.04.085, a monitoring program shall include, but is not limited to:
 - 1) Establishing vegetation plots to track changes in plant species composition and density over time;
 - 2) Using photo stations to evaluate vegetation community response;
 - 3) Sampling surface and subsurface waters to determine pollutant loading, and changes from the natural variability of background conditions (pH, nutrients, and heavy metals);
 - 4) Measuring base flow rates and storm water runoff to model and evaluate water quality predictions, if appropriate;
 - 5) Measuring sedimentation rates, if applicable; and
 - 6) Sampling fish and wildlife populations to determine habitat utilization, species abundance and diversity. A protocol shall be included outlining how the monitoring data will be evaluated by agencies that are tracking the progress of the project. A monitoring report shall be submitted annually, at a minimum, documenting milestones, successes, problems, and contingency actions of the compensation project. The compensation 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.
- e. Associated Plans and Other Permits.
 - 1) Final landscaping plan;
 - 2) An as-built plan for projects that require wetland creation or wetland construction;
 - 3) Final drainage plan; and
 - 4) Final erosion and sediment control plan.
- f. Evidence of Financial and Scientific Proficiency. A description of how the enhancement/mitigation project will be managed during construction and the scientific capability of the designer to successfully implement the proposed project. In addition, a demonstration of the financial capability of the applicant to successfully complete the project and ensure it functions properly over a 10-year period. Evidence that required bonding can be obtained.
- g. Contingency Plan. Identification of potential courses of action, and any corrective measures to be taken when monitoring or evaluation indicates project performance standards are not being met.

21.15. Wetland Permit – Application.

- a. Applications for wetland permits shall be made to the city on forms furnished by the city. The city shall process a wetland permit application as a request for land use approval pursuant to WMC 18.94.035, Type II applications.
- b. Wetlands permit applications shall include:
 - 1) Wetland delineations and required buffer width;
 - 2) A site plan for the proposed activity overlaid on an aerial photograph at a scale no smaller than one inch equals 400 feet showing the location, width, depth and length of all existing and proposed structures, roads, storm water management facilities, sewage treatment, and installations within the wetland and its buffer;

- 3) The exact sites and specifications for all regulated activities including the amounts and methods; and
- 4) A proposed preliminary enhancement/mitigation plan meeting the requirements of this chapter.

22.16. Wetland Permit – Approval.

- a. The city shall issue final approval of the wetland permit authorizing commencement of the activity permitted thereby upon:
 - 1) Submittal and approval of a final enhancement/mitigation plan;
 - (a) Installation and approval of the required field markings;
 - (b) The recording of a conservation covenant.
 - 2) Conditions. An approval of a wetland permit shall incorporate the following conditions:
 - (a) Posting of a cash performance bond or other security acceptable to the city in an amount and with surety and conditions sufficient to fulfill the initial (first year) requirements of the required final plan, mitigation plan and enhancement plan and to secure compliance with other conditions and limitations set forth in the permit.
 - (b) The city shall release the performance bond upon determining that:
 - All initial (first year) activities, including any required compensatory mitigation, have been completed in accordance with the terms and conditions of the permit and the requirements of this chapter; and
 - Upon forfeiture of a performance bond, the proceeds thereof shall be utilized either to correct deficiencies which resulted in forfeiture or, if such correction is deemed by the county to be impractical or ineffective, to enhance other wetlands in the same watershed.
 - (c) Posting of a cash maintenance bond or other security acceptable to the city in an amount and with surety and conditions sufficient to fulfill the requirements of the required final plan, mitigation plan and enhancement plan and to secure compliance with other conditions and limitations set forth in the permit for the duration (beyond year one) of the required monitoring and maintenance time period.
 - (d) The eCity shall release the maintenance bond at the end of the approved monitoring and maintenance time period upon determining that:
 - All activities, including any required compensatory mitigation, have been completed in accordance with the terms and conditions of the permit and the requirements of this chapter; and
 - Upon forfeiture of a performance or maintenance bond, the proceeds thereof shall be utilized either to correct deficiencies which resulted in forfeiture or, if such correction is deemed by the county to be impractical or ineffective, to enhance other wetlands in the same watershed.

- 3) Duration. Wetland permit final approval shall be valid for a period of two years from the date of issuance unless:
 - (a) A longer period, not to exceed five years, is specified in the permit; or
 - (b) The city grants an extension upon the written request of the original permit holder or successor in demonstrating to the satisfaction of the city:
 - That the original intent of the permit would not be altered or enlarged by the extension; and
 - That relevant circumstances and standards have not changed substantially since the permit application; and
 - That the applicant has complied with the terms of the permit.
 - (c) Revocation. In addition to other remedies provided for elsewhere, the city may suspend or revoke a permit if the applicant or permittee has not complied with any of the conditions or limitations set forth in the permit, has exceeded the scope of work set forth in the permit, or has failed to undertake the project in the manner set forth in the permit. (Ord. 1660 § 1 (Exh. A), 2010; Ord. 1613 § 1 (Exh. A), 2008; Ord. 1543 § 1, 2006)

16.04.075 Best available science.

Critical area reports and decisions to alter critical areas shall rely on the best available science to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish and their habitat. Best available science is that scientific information applicable to the critical area prepared by local, state or federal natural resource agencies, a qualified scientific professional or team of qualified scientific professionals, that is consistent with criteria established in WAC 365-195-900 through 365-195-925. (Ord. 1543 § 1, 2006)

16.04.080 Development standards.

Within critical areas, the city shall prohibit soil excavation, grading, removal of native vegetation species, draining, intentional burning, planting of invasive or nuisance vegetation, placement of structures and new construction on critical areas unless otherwise authorized in this chapter.

1. Applicability. These development standards apply to uses on critical areas and within buffers unless otherwise exempted in this chapter.
2. Performance Standards. In order to approve application for development on lands subject to this chapter, the community development director shall find that the following standards have been met:
 - a. All reasonable alternatives for locating the development activity in such a way so as to avoid critical areas have been considered and the development activity will be located in the least environmentally sensitive area as practicable and the purpose of this chapter is fulfilled.
 - b. The city has approved the vegetation removal methods and the removal of native plants has been avoided, to the extent practicable.
 - c. All adverse impacts to all affected critical areas and buffers are either avoided or fully mitigated.
 - d. The plan minimizes cuts and fills.

- e. Soils are not exposed during the rainy season (November 1st through April 30th) and construction activity is limited to the dry season (May 1st through October 31st).
 - f. The director has reviewed and approved an erosion control plan, grading plan, and vegetation removal and replanting plan prior to construction activity.
 - g. All activities have received applicable state and federal permits, and comply with SEPA requirements if the “lead agency” makes a threshold determination of significance (DS), or a mitigated determination of nonsignificance (MDNS).
 - h. Hydraulic permits are required for any activity occurring within the ordinary high water mark of any state-regulated ~~Class I or Class II~~ stream.
 - i. Compliance with this chapter does not constitute compliance with state and federal environmental standards. The applicant shall be responsible for demonstrating such compliance.
3. Review Process.
- a. The review process shall be the type specified in WMC Title 18 for each particular land use action unless otherwise specified in this chapter.
 - b. Applications to develop on critical areas or their buffers shall be subject to Type I review if, within a one-year period, the cumulative impact on critical areas is:
 - 1) Disturbance of less than 10 cubic feet of soil;
 - 2) An activity, the fair market cost of which is less than \$500.00; or
 - 3) The activity involves less than 1,000 square feet of critical areas.
4. SEPA Review. On a case-by-case basis, the responsible official may issue a determination of nonsignificance (DNS) if:
- a. The application for development review contains all requested information, including reports, maps and other documents relevant to the proposed activity; and
 - b. The proposed activity complies with all applicable development review and performance standards; and
 - c. Compliance with all applicable development standards and performance standards is made a binding condition of land use approval. (Ord. 1613 § 1 (Exh. A), 2008; Ord. 1543 § 1, 2006)

16.04.085 Mitigation.

- 1. Approval. City approval of a mitigation plan is a prerequisite for approval of any development activities in critical areas.
 - a. The applicant shall submit a written request describing the extent and nature of the proposed development activity on critical areas and buffers. The request shall include boundary locations of all critical areas and attendant buffers.
 - b. The application for development shall include a mitigation plan prepared in compliance with this section.
 - c. The city may require the applicant to prepare special reports evaluating potential adverse impacts upon critical areas and potential mitigation measures as part of

the land use application process. These reports may include, but are not limited to, the following: storm water management plan; hydrology, geology, and soils report; grading and erosion control plan; native vegetation report; fish and wildlife assessment and impact report; water quality report; wetlands delineation; and other reports determined necessary by the city.

- d. The city shall consult with state and federal resource management agencies and, in order to protect wildlife habitat or natural resource values, shall attach such conditions as may be necessary to effectively mitigate identified adverse impacts of the proposed development activity.
- e. The city may request third party “peer review” of an application by qualified professionals and may incorporate recommendations from such third party reports in findings approving or denying the application.
- f. All reports recommending mitigation shall include provisions for monitoring of programs and replacement of improvements, on an annual basis, consistent with report recommendations and at one-, three-, five- and seven-year intervals.
- g. The city may require replacement mitigation to be established and functional prior to project construction.

2. No Net Loss.

- a. Mitigation efforts, when allowed, shall ensure that development activity does not yield a net loss of the area or function of the critical areas. No net loss shall be measured by:
 - 1) Avoidance or mitigation of adverse impacts to fish life; or
 - 2) Avoidance or mitigation of net loss of habitat functions necessary to sustain fish life; or
 - 3) Avoidance or mitigation of loss of area by habitat type.
- b. Mitigation to achieve no net loss should benefit those organisms being impacted.
- c. Where development results in a loss of wetland area, the mitigation plan shall demonstrate that wetland area is replaced consistent with the ratios described in the tables in WMC 16.04.070. The created or enhanced wetland shall be, acre for acre, of equal or greater biological values, including habitat value, and with equivalent hydrological values including storage capacity.
 - 1) Wherever possible, replacement or enhancement shall occur on-site.
 - 2) However, where the applicant can demonstrate that an off-site location is in the same drainage sub-basin, and that greater biological and hydrological values will be achieved, the city may approve such off-site mitigation.
 - 3) Wetponds established and maintained for control of surface water shall not constitute mitigation for wetland alterations.
 - 4) Where there is a wetland within 25 feet of the toe of a slope equal to or greater than 25 percent, the buffer shall be a minimum of 25 feet beyond the toe of the slope.

3. Mitigation Plan. A mitigation plan shall provide for the design, implementation, maintenance, and monitoring of mitigation measures. A mitigation plan shall include but is not limited to the following:

- a. Methods and techniques to be used to mitigate impacts to critical areas;

- b. Explanation of methods and techniques, such as construction practices to be used to implement the identified mitigation methods;
 - c. Methods and techniques for monitoring said mitigation and a proposed timeframe for such monitoring.
- 4. Storm Water Management. Any development on critical areas shall be consistent with the storm water and erosion control regulations of the Washougal Municipal Code or the most recent version of the ~~City's Stormwater Management Program. Manual for the- Puget Sound Basin, Washington State Department of Ecology~~, whichever is more restrictive.
- 5. Buffer Enhancement. Where a development avails itself of the buffer reduction opportunity described in this chapter, the following enhancement standards shall apply:
 - a. The applicant shall submit to the city a written request describing the extent and nature of the proposed development activity and shall submit a written enhancement plan.
 - b. The enhancement plan shall include calculations and maps that illustrate:
 - 1) Required boundary locations of all critical areas and attendant buffers;
 - 2) Proposed buffer areas after reduction;
 - 3) Proposed areas to receive enhancement measures;
 - 4) A timeline for completion of the enhancement plan;
 - 5) Methods and techniques to be used to mitigate impacts to critical areas;
 - 6) An explanation of methods and techniques, such as construction practices to be used to implement the identified mitigation methods; and
 - 7) Methods and techniques for monitoring said mitigation and a proposed timeframe for monitoring.
 - c. The enhanced area shall be, acre for acre, of greater biological values, including habitat value, and with greater hydrological values including storage capacity.
 - d. Enhancement shall occur on-site.
 - e. Wetponds established and maintained for control of surface water shall not constitute mitigation for wetland alterations.
 - f. Surface water management or flood control shall not be considered enhancement. (Ord. 1543 § 1, 2006)

16.04.090 Residential density transfer.

The city may permit density transfer from critical areas (sending lands) to designated noncritical areas (receiving areas).

- 1. Residential Density Transfer. A property owner may transfer residential density to a receiving area designated on the Washougal Comprehensive Plan map.
 - a. Density may be transferred from one residential zone to a receiving zone that allows equal or greater density than the transferring zone.
 - b. The value of the transfer shall be calculated on a net dwelling (DU) unit per acre basis using an average lot size of 7,500 square feet. For example, if a property owner has one acre of unbuildable critical lands, the owner may transfer up to 3.6 units of density to a receiving area. The calculation is based on the following

formula: one gross acre (43,560 square feet) minus the infrastructure allowance (15,680 square feet for roads, sewers, parks, schools) equals one net acre (26,880 square feet). A net acre could contain 3.6 single-family units, each built on a 7,500-square-foot lot.

2. Transfer Criteria. The director may approve requests to transfer density subject to the following criteria:
 - a. Any adverse impacts to natural resources on the receiving lands shall be mitigated consistent with WMC 16.04.085.
 - b. The building height and perimeter setback standards of the receiving district shall be met.
 - c. Maximum density on the receiving land shall not exceed 150 percent of the base density otherwise allowed by the receiving district.
 - d. The transfer of density to a receiving area shall not result in the construction of a housing type not otherwise allowed in the receiving district.
 - e. On density sending lands the remaining critical areas and buffers shall be:
 - 1) Dedicated to the city for public use, or
 - 2) Protected as an unbuildable area by means of deed restriction, conservation easement, or other mechanism approved by the city council.
3. Recordation Required. Density may be transferred from a protected critical areas area only once. The director (after consultation with the city attorney) shall be responsible for approving the mechanism used for protecting each critical area. The director shall maintain a list of sites from which density has been transferred, and a corresponding list of sites that have received density from protected critical areas. (Ord. 1543 § 1, 2006)

16.04.095 Selective timber harvesting on critical lands.

1. Applicability. Consistent with RCW 76.09.240, the city extends its planning and zoning jurisdiction over forest practices in critical areas to the extent that:
 - a. Commercial forestry activity occurs on lands identified as critical areas on the city's adopted critical areas map;
 - b. An application submitted under RCW 76.09.060 indicates that the lands will be converted to a use other than commercial timber productions; and
 - c. The subject lands were platted after January 1, 1960;
 - d. The city of Washougal presumes that any application for commercial timber harvest within the Washougal urban growth boundary that is subject to Chapter 76.09 RCW et seq. is for the purpose of converting forested lands into urban lands.
2. Standards. Selective commercial timber harvesting may be permitted on critical areas subject to the following standards:
 - a. Written Plan Required. Trees to be removed shall be identified through the development approval process and shall be clearly marked prior to their removal. An applicant shall present a written plan, explaining in detail the

- location of trees to be removed, and the method of removal, to the city arborist, or designee, for review and approval.
- b. In conjunction with a development application. Selective tree cutting may occur to the minimum extent necessary in conjunction with an approved development.
 - c. Commercial timber harvesting shall not be allowed on any critical areas for a period of six years prior to submittal of a development application.
 - d. Prior to approval of a harvesting permit, the applicant shall sign and record an agreement with the city stating that no development application may be filed on the subject property, other than a single-family residence, for six years following completion of timber harvesting operations.
 - e. Selective tree removal on critical lands shall not result in loss of more than 50 percent of existing tree canopy covering critical areas.
 - f. Roads may be cut in forested areas to facilitate tree removal only if the road is within a planned future capital facilities right-of-way or public easement, and an appropriate dedication is made to the city in accordance with the CFP.
 - g. The applicant shall demonstrate that the methods used for tree harvesting and removal are the least disruptive practicable.
 - h. Operations shall be limited to the dry season, that is, from May 1st through October 30th.
 - i. Applicants for selective timber harvesting shall prepare an erosion control plan for review and approval by the community development director and, if the plan is approved, shall comply with the plan during harvesting activity and shall maintain required erosion control mechanisms for a period of 180 days after completion of the timber removal project.
3. Conditions. The director may recommend conditions of approval necessary to minimize adverse impacts on natural resource values, including water quality and wildlife habitat to the extent that such conditions are consistent with the Washougal Comprehensive Plan. (Ord. 1613 § 1 (Exh. A), 2008; Ord. 1543 § 1, 2006)

16.04.100 Modification to overlay zone.

The city may modify the boundaries of the critical areas overlay district based upon expert studies. Such amendments shall occur under Type II or III proceedings.

1. Land to be conserved as public or private open space, through dedication, conservation easements or other appropriate means, shall retain a critical areas overlay designation.
2. Land approved for private building construction shall be removed from this overlay district.
3. The city shall maintain a record of all administrative amendments to the critical areas overlay district, including findings in support of the decision to modify the boundaries of the overlay district. (Ord. 1543 § 1, 2006)

16.04.105 Application fees.

At the time of application for land use review or critical areas review, the applicant shall pay a critical areas review fee, adopted by the city council, from time to time, by resolution. (Ord. 1543 § 1, 2006)

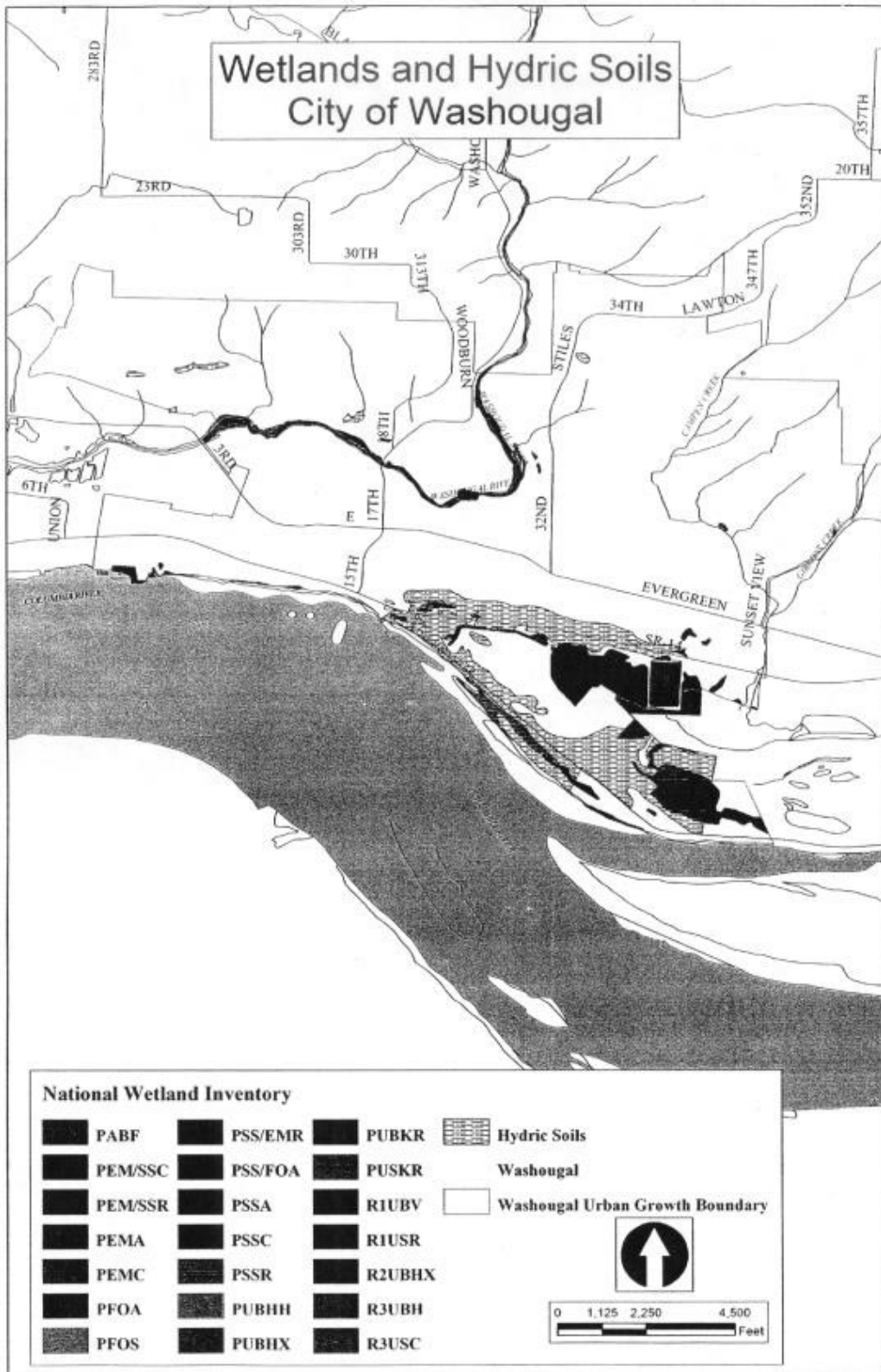
16.04.110 Bonds to ensure mitigation, maintenance and monitoring.

1. When mitigation required pursuant to a development proposal is not completed prior to the city final permit approval, such as final plat approval or final building inspection, the city shall require the applicant to post a performance bond or other security in a form and amount deemed acceptable by the city. If the development proposal is subject to mitigation, the applicant shall post a mitigation bond or other security in a form and amount deemed acceptable by the city to ensure mitigation is fully functional.
2. The bond shall be in the amount of 125 percent of the estimated cost of the uncompleted actions or the estimated cost of restoring the functions and values of the critical area that are at risk, whichever is greater, and the cost of maintenance and monitoring for a 10-year period.
3. The bond shall be in the form of an assignment of savings account, or an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the city attorney or other method acceptable to the community development director.
4. Bonds or other security authorized by this section shall remain in effect until the city determines, in writing, that the standards bonded for have been met. Bonds or other security shall be held by the city for a minimum of 10 years to ensure that the required mitigation has been fully implemented and demonstrated to function, and may be held for longer periods when necessary.
5. 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.
6. 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.
7. Any failure to satisfy 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.
8. Any funds recovered pursuant to this section shall be used to complete the required mitigation, maintenance or monitoring. (Ord. 1613 § 1 (Exh. A), 2008; Ord. 1543 § 1, 2006)

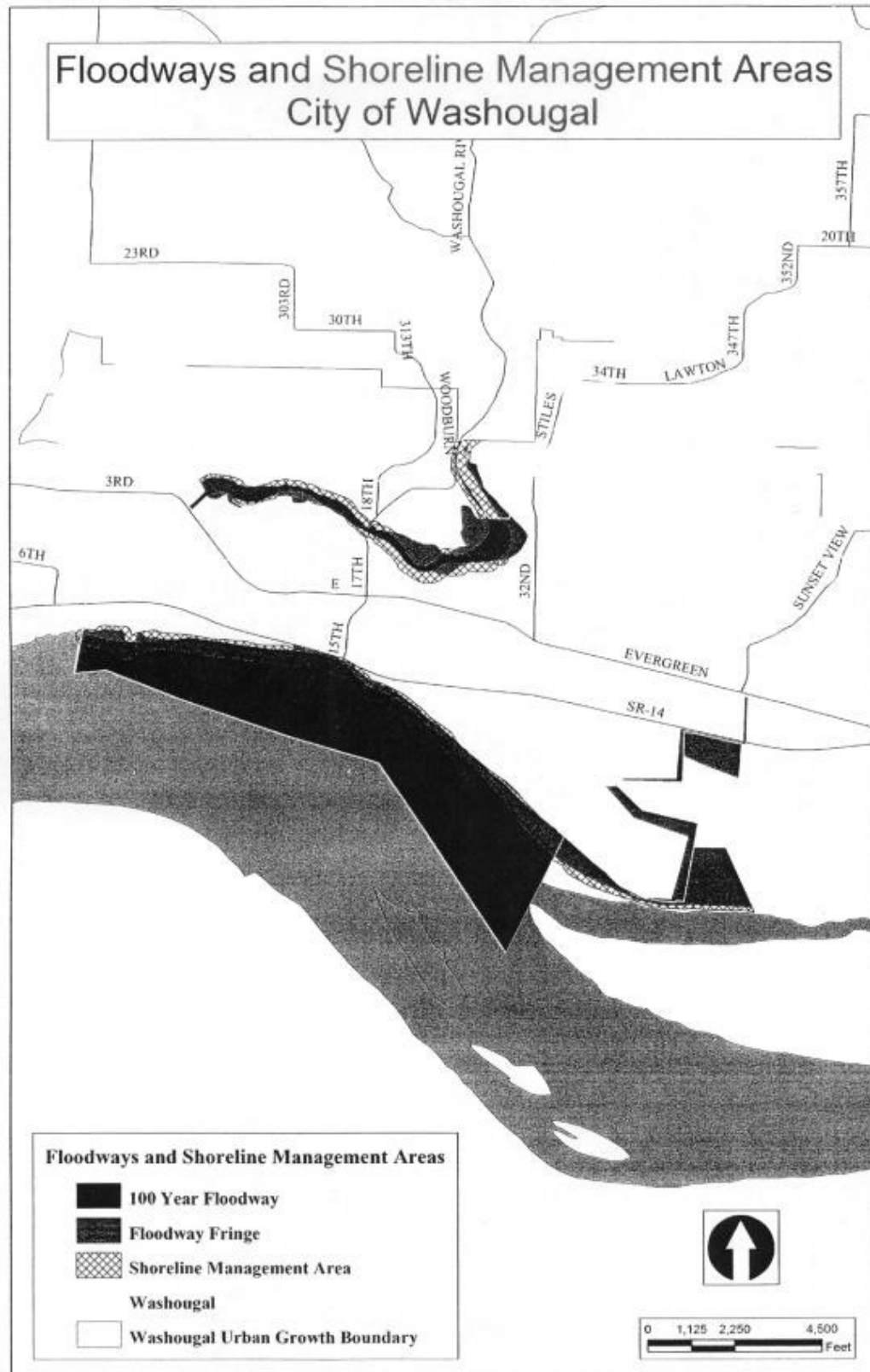
16.04.115 Critical area inspections.

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, restoration, emergency action, or monitoring period. (Ord. 1543 § 1, 2006)

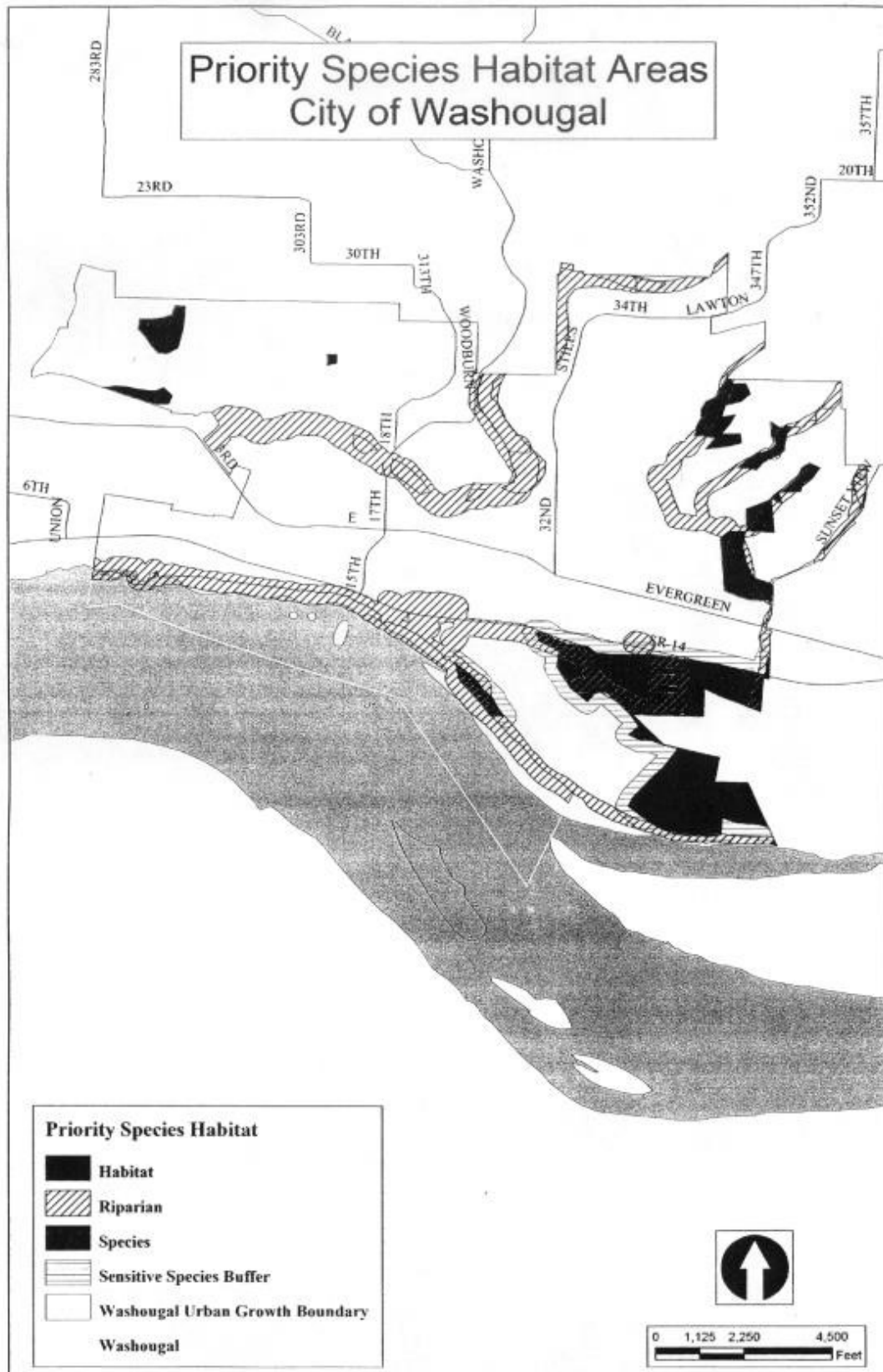
Appendix A Critical Area Maps



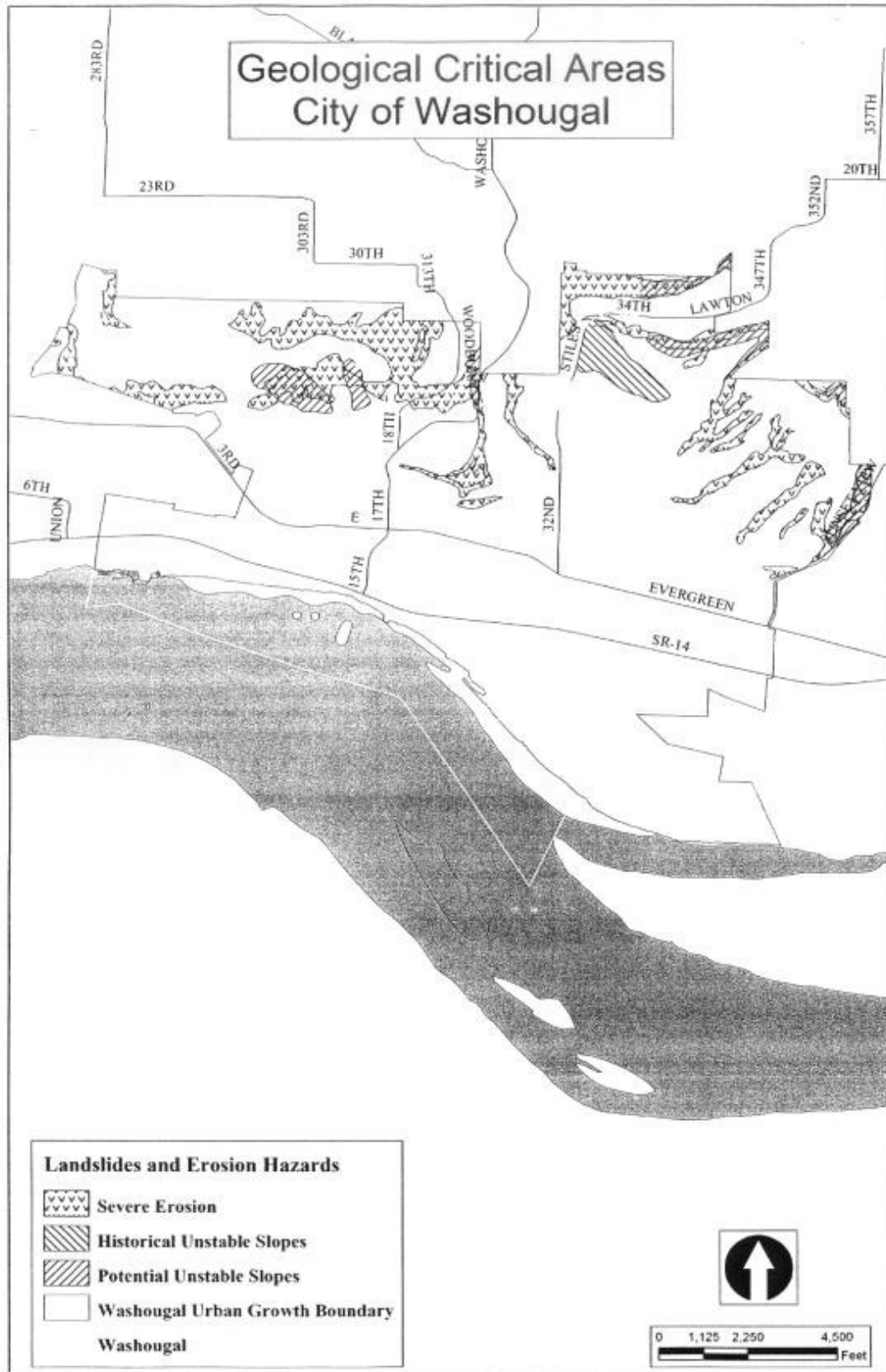
(Ord. 1543 § 1, 2006)



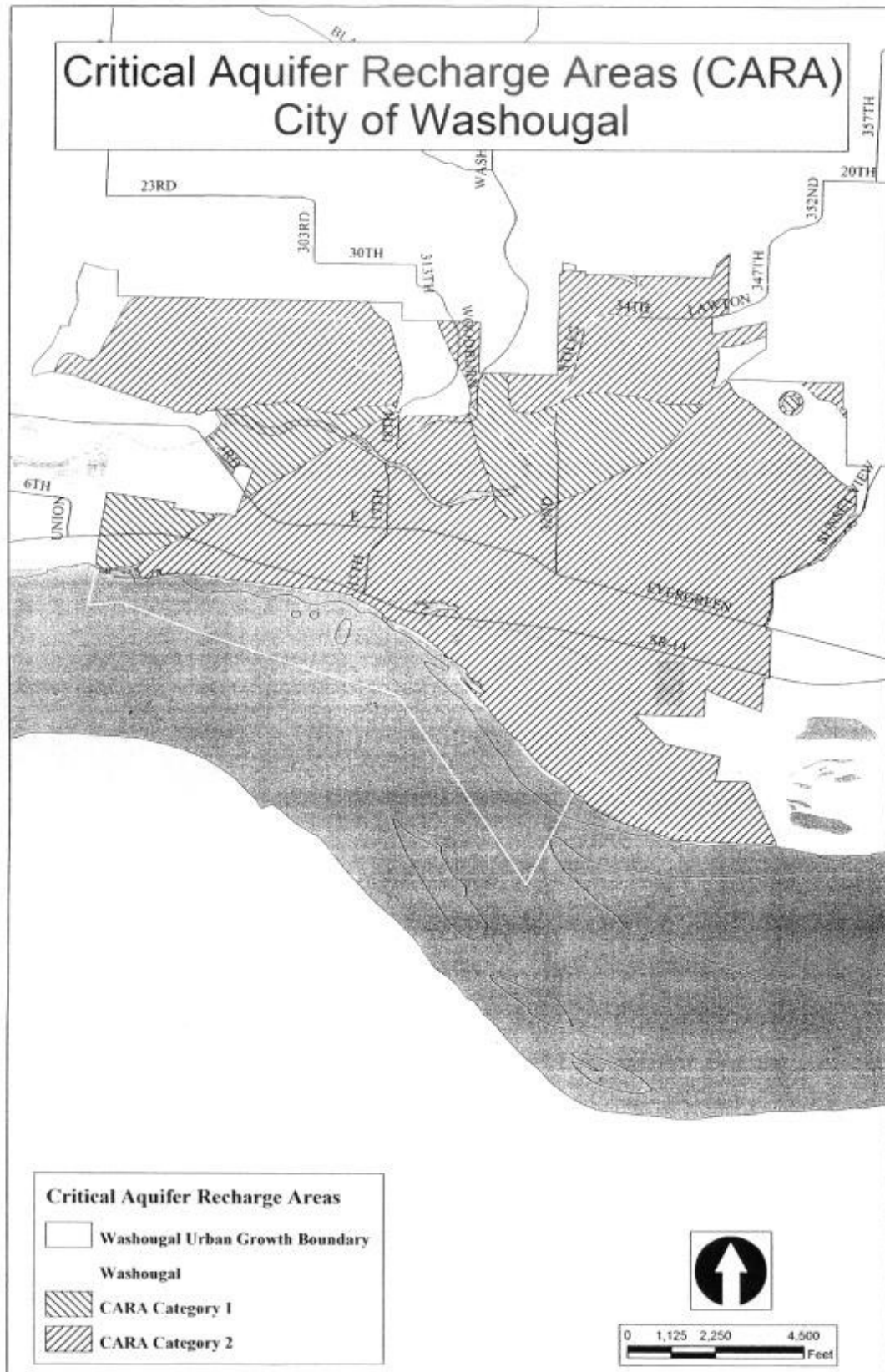
(Ord. 1543 § 1, 2006)



(Ord. 1543 § 1, 2006)



(Ord. 1543 § 1, 2006)



(Ord. 1543 § 1, 2006)

This map illustrates the City of Washougal, Oregon, highlighting areas of erosion and unstable slopes. The Columbia River is shown at the bottom, with the Washougal River flowing into it. The city's boundaries are marked by a thick black line. Key streets include 3RD, 15TH, 17TH, 18TH, 30TH, 32ND, 34TH, 36TH, 37TH, 38TH, 39TH, 40TH, 41ST, 42ND, 43RD, 44TH, 45TH, 46TH, 47TH, 48TH, 49TH, 50TH, 51ST, 52ND, 53RD, 54TH, 55TH, 56TH, 57TH, 58TH, 59TH, 60TH, 61ST, 62ND, 63RD, 64TH, 65TH, 66TH, 67TH, 68TH, 69TH, 70TH, 71ST, 72ND, 73RD, 74TH, 75TH, 76TH, 77TH, 78TH, 79TH, 80TH, 81ST, 82ND, 83RD, 84TH, 85TH, 86TH, 87TH, 88TH, 89TH, 90TH, 91ST, 92ND, 93RD, 94TH, 95TH, 96TH, 97TH, 98TH, 99TH, 100TH. The map also shows the locations of the Washougal River, Camp Creek, and the Columbia River. A legend in the bottom left corner identifies the symbols used: a solid line for the city boundary, a hatched pattern for erosion, diagonal lines for historical unstable slopes, and a dotted pattern for potential unstable slopes. A scale bar and a north arrow are also included.

Legend

- Washougal
- Erosion
- Historical unstable slopes
- Potential unstable slopes

This data has been compiled from many sources and scales. The City of Washougal accepts no responsibility for any inaccuracy, actual or implied.

The Washougal Municipal Code is current through Ordinance 1764, passed August 11, 2014.

Legend

- Washougal
- 100 yr. Floodway
- Floodway Fringe

This data has been compiled from many sources and scales. The City of Washougal accepts no responsibility for any inaccuracy, actual or implied.

The Washougal Municipal Code is current through Ordinance 1764, passed August 11, 2014.

Appendix B Table 8C-3

**Table 8C-3.
Types of Proposed Land Use that Can Result in High, Moderate, and Low Levels
of Impacts to Adjacent Wetlands**

Level of Impact from Proposed Change in Land Use	Types of Land Use Based on Common Zoning Designations*
High	Commercial Urban Industrial Institutional Retail sales Residential (more than 1 unit/acre) Conversion to high-intensity agriculture (dairies, nurseries, greenhouses, growing and harvesting crops requiring annual tilling and raising and maintaining animals, etc.) High-intensity recreation (golf courses, ball fields, etc.) Hobby farms
Moderate	Residential (1 unit/acre or less) Moderate-intensity open space (parks with biking, jogging, etc.) Conversion to moderate-intensity agriculture (orchards, hay fields, etc.) Paved trails Building of logging roads Utility corridor or right-of-way shared by several utilities and including access/maintenance road

Level of Impact from Proposed Change in Land Use	Types of Land Use Based on Common Zoning Designations*
Low	Forestry (cutting of trees only) Low-intensity open space (hiking, bird-watching, preservation of natural resources, etc.) Unpaved trails Utility corridor without a maintenance road and little or no vegetation management
*Local governments are encouraged to create land-use designations for zoning that are consistent with these examples.	

(Ord. 1543 § 1, 2006)

Finance & IT - Annual Report

04/11/2022 | Presented by Jen Forsberg



City of Washougal

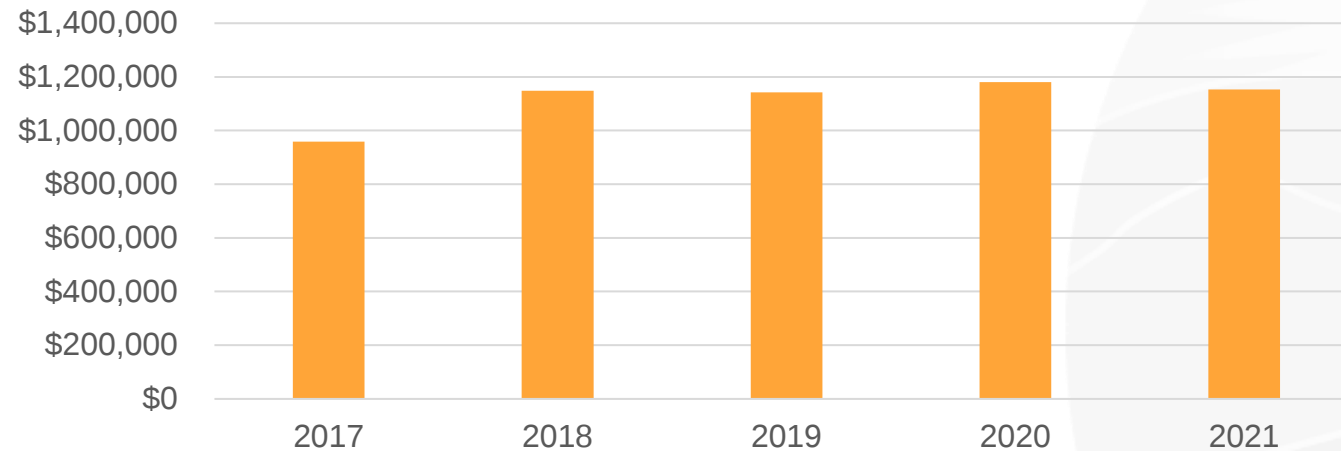
2021 Annual Report: What We Will Cover

- Measures
- 2021 Accomplishments
- 2022 Goals



2021 Annual Report: Actual Expenditures

Finance Total Expenses



	2017	2018	2019	2020	2021
Finance Total Expenses	\$903,340	\$958,402	\$1,148,894	\$1,142,592	\$1,180,511

¹General Fund calculation includes street funds as an expense category



2021 Annual Report: Utility Billing

	Goal	2018	2019	2020	2021	Change from 2020 to 2021
Total Payments Processed	No Goal	33,085	31,707	30,520	31,315	2.6%
% of Utility Payments Made Online	Increase	19%	21%	30%	52.4%	24%
% of Utility Payments Made On Time	Increase	83%	80%	*0%	*0%	*0%

	2016	2017	2018	2019	2020	2021
Meter Re-Reads	655	753	607	791	1,140	1,156
Emergency Assistances Processed	74	51	27	14	6 / 27 COVID	13

* = 2020 & 2021 is not accurate with the utility emergency orders regarding shut offs



2021 Annual Report: Finance

Audit Type	Goal	2016	2017	2018	2019	2020
Accountability	Clean	Clean	Clean	Clean	Clean	Clean
Financial	Clean	Clean	Clean	Clean	Clean	Clean

General Obligation Bond Rating			
	2012	2014	2016
General Obligation	AA-	AA	AA

Water & Sewer Bond Rating					
	2013	2014	2015	2016	2017
Water & Sewer Bond	A+	AA	A+	A+	A+



2021 Annual Report: Accomplishments

Finance Accomplishments

- Received clean Accountability and Financial Audits
- Awarded Government Finance Officers Association Distinguished Budget Award
- Hired Accounting Specialist
- Reopened to the public



2021 Annual Report: IT

	2017	2018	2019	2020	2021	%Change
Helpdesk Requests	525	460	468	483	438	-9%
Resolved within 9 business hours	71%	82%	85%	87%	93%	+6%

	Total	Legitimate	Bulk	Viruses	Spam	Blocked/ Other
Inbound E-Mail	516,748	265,518	146,584	65	35,463	69,118
		51%	28%	1%	7%	13%

Phishing Tests				
	2019	2020	2021	Industry
Average Phish-prone %	9.1%	9.5%	5%	3.9%

This represents successful phish attempts meaning the user fell victim to monthly test e-mails.



2021 Annual Report: Accomplishments

IT Accomplishments

- Managed upgrade of A/V in PD interview rooms to provide better recordings.
- Implemented new hardware and upgraded better connection security to Clark County for PD applications.
- Re-classify IT Specialist to IT Administrator to better capture the skill set and job duties being utilized in this position.
- Replaced primary servers and upgraded software that hosts City's virtual server environment.
- Completed several projects related to IT's Cloud First initiative to increase business continuity, collaboration and security.
 - Migrated all eligible City data files to OneDrive/SharePoint (Microsoft 365).
 - Data is now easier to collaborate and share with others both internally and externally.
 - Migrated and deployed cloud-based email filter.
 - This reduces any potential downtime from keeping this service on premises.
 - Began implementation of Two Factor Authentication (2FA) for Microsoft 365 on mobile devices.
 - Decreases chances of accounts being compromised.



2021 Annual Report: 2022 Goals

- Receive Government Finance Officers Association Budget Award
- Clean 2021 Financial and Accountability Audit
- Refine Finance Performance Indicators
- Continue Cloud First Initiative
 - Further minimize on premise infrastructure dependices
 - Implement cloud-based phone system
 - Prioritize laptops/mobile solutions with yearly ERR replacements of desktop computers whenever possible.
 - Identify projects to increase mobility, collaboration and technical training of City Staff.
- Security improvements – expand 2FA rollout, implement additional scanning, monitoring and testing tools .
- Council Chambers A/V system upgrade – Supply chain issue has caused delays, expected completion 2022.
- Evaluate options to expand City fiber network and/or increase data speed to WWTP and Permit Center.



Questions & Discussion

For More Information

Jennifer Forsberg, Finance Director/City Clerk

Jennifer.Forsberg@cityofwashougal.us



City of Washougal

2021 Year End Review

4/11/2022 | Presented by Jen Forsberg



City of Washougal

Agenda

- 2021 Financial Summary



2021 Summary – General and Street Funds

- Final 2021 budget included (adding in the amendments):
 - Use of Reserves/GF Capacity - \$1.13K
 - Various projects/one-time expenses/purchase of fire station
- 2021 Actual:
 - Purchased the fire station on 39th (rolled into 2021)
 - Completed the evidence room remodel
 - Transferred funds to the ERR program
 - Completed cemetery and park repair projects
 - Completed the class/comp study



2021 Summary – General and Street Fund

- Final 2021 Actual (including ARPA funding and impact fees):

- Revenue: \$18,883,056

- Expenses: (\$15,159,106)

- Surplus: \$3,723,950

- Final 2021 Actual (without ARPA funding and impact fees):

- Revenue: \$18,883,056

- Less ARPA: (\$2,250,314)

- Less Impact Fees: (\$748,200)

- Expenses: (\$15,159,106)

- Surplus: \$725,436



2021 Recap – Long Term Projections

General & Street Funds

	<u>2018 Year End</u>	<u>2019 Est Actual</u>	<u>2020 Est</u>	<u>2021 Est</u>	<u>2022 Est</u>	<u>2023 Est</u>	<u>2024 Est</u>	<u>2024 Est</u>	<u>2024 Est</u>	<u>2025 Est</u>
Revenue	\$ 12,962,204	\$ 13,268,699	\$ 15,056,910	\$18,883,056	\$16,250,443	\$16,737,956	\$17,240,095	\$17,757,298	\$18,290,017	\$18,838,717
Expenditure	\$ 13,193,461	\$ 13,182,904	\$ 14,171,660	\$15,159,106	\$16,895,662	\$16,773,428	\$17,293,404	\$17,829,499	\$18,382,214	\$18,952,062
Surplus/(Deficit)	\$ (231,258)	\$ 85,795	\$ 885,250	\$ 3,723,950	\$ (645,219)	\$ (35,471)	\$ (53,309)	\$ (72,201)	\$ (92,197)	\$ (113,345)
Ending Cash Reserve	\$ 3,424,963	\$ 3,510,758	\$ 4,396,008	\$ 8,119,958	\$ 7,474,739	\$ 7,439,267	\$ 7,385,958	\$ 7,313,757	\$ 7,221,560	\$ 7,108,215
Reserves as % Expense	26.0%	26.6%	31.0%	53.6%	44.2%	44.4%	42.7%	41.0%	39.3%	37.5%
Reserves as % Revenue	26.4%	26.5%	29.2%	43.0%	46.0%	44.4%	42.8%	41.2%	39.5%	37.7%
Net Revenue as % Expense	-1.8%	0.7%	6.2%	24.6%	-3.8%	-0.2%	-0.3%	-0.4%	-0.5%	-0.6%
Minimum Reserve at 16%	\$ 1,583,628	\$ 1,573,157	\$ 1,704,605	\$ 1,835,349	\$ 2,078,826	\$ 2,043,748	\$ 2,126,945	\$ 2,212,720	\$ 2,301,154	\$ 2,392,330
Additional Reserves	\$ 1,841,335	\$ 1,937,601	\$ 2,691,402	\$ 6,284,609	\$ 5,395,913	\$ 5,395,519	\$ 5,259,014	\$ 5,101,037	\$ 4,920,406	\$ 4,715,885



2021 Revenues – General & Street Funds

2021 revenues ended the year at 110.7% of the budget when including the ARPA funding and school impact fee revenue that had not been remitted to the County – when extrapolated out the year ended at 93.1% of the budget.

- Overall revenue is up 8.6% from 2020 without the above and 29.1% including the ARPA and impact fees
- ARPA funding was \$2.25M and unremitted school impact fees were \$748K



2021 Revenues - General & Street Funds

Revenue Source	2021 Actual	2021 Budget	% of Budget	2020 Actual	2021 v 2020
Regular Property Taxes	\$ 5,855,578	\$ 5,833,158	100.4%	\$ 5,744,792	1.9%
Retail Sales Taxes/Criminal Justice	\$ 2,984,958	\$ 2,414,000	123.7%	\$ 2,369,200	26.0%
Utility Taxes	\$ 2,836,361	\$ 2,918,715	97.2%	\$ 2,721,259	4.2%
Leasehold/Gambling Taxes & TBD	\$ 435,835	\$ 421,800	103.3%	\$ 411,800	5.8%
Licenses and Permits	\$ 526,086	\$ 397,200	132.4%	\$ 312,250	68.5%
State and Federal Grants	\$ 2,318,121	\$ 2,285,868	101.4%	\$ 457,717	406.5%
State Shared Revenues/Entitlements	\$ 913,055	\$ 889,710	102.6%	\$ 814,310	12.1%
Animal Control Fees	\$ 113,999	\$ 133,075	85.7%	\$ 131,500	-13.3%
General Government Charges	\$ 253,920	\$ 302,734	83.9%	\$ 267,974	-5.2%
Sub Division/Zoning/Planning Fees	\$ 1,618,883	\$ 189,560	854.0%	\$ 189,320	755.1%
Indirect Cost Recovery	\$ 940,955	\$ 1,121,780	83.9%	\$ 1,121,780	0.0%
Interest and Rents	\$ 85,306	\$ 84,750	100.7%	\$ 80,636	5.8%
Other Revenue Sources (Transfers)	\$ -	\$ 60,786	0.0%	\$ -	0.0%
Total	\$ 18,883,056	\$ 17,053,136	110.7%	\$ 14,622,538	29.1%



2021 Expenses – General & Street Funds

2021 total expenditures ended the year at 94.7% of the budget

- This is down 0.9% from 2020



2021 Expenses – General & Street Funds

Department	2021 Actual	2021 Budget	% of Budget	2020 Actual	2021 v 2020
Council	\$ 89,525	\$ 106,306	84.2%	\$ 92,556	-3.3%
Judicial	\$ 489,042	\$ 510,500	95.8%	\$ 505,500	-3.3%
City Manager's Officer	\$ 486,348	\$ 531,580	91.5%	\$ 530,819	-8.4%
Human Resources	\$ 186,413	\$ 200,032	93.2%	\$ 200,233	-6.9%
Finance	\$ 1,152,499	\$ 1,134,280	101.6%	\$ 1,257,152	-8.3%
Economic Development	\$ 5,000	\$ 55,000	9.1%	\$ 55,000	-90.9%
Legal	\$ 14,090	\$ 20,000	70.4%	\$ 20,000	-29.6%
General Government Services	\$ 1,913,924	\$ 1,895,050	101.0%	\$ 1,428,855	33.9%
Police	\$ 3,684,670	\$ 3,788,934	97.2%	\$ 3,691,255	-0.2%
Fire	\$ 3,365,994	\$ 3,716,426	90.6%	\$ 3,544,206	-5.0%
Intergovernment Services	\$ 12,229	\$ 17,000	71.9%	\$ 17,000	-28.1%
Community Development/Planning	\$ 1,487,418	\$ 1,500,445	99.1%	\$ 1,377,312	8.0%
Engineering	\$ 158,458	\$ 163,704	96.8%	\$ 132,004	20.0%
Animal Control	\$ 198,463	\$ 265,705	74.7%	\$ 249,851	-20.6%
Parks	\$ 458,548	\$ 552,833	82.9%	\$ 595,330	-23.0%
City Building Maintenance	\$ 469,301	\$ 473,950	99.0%	\$ 491,140	-4.4%
Street Maintenance	\$ 987,184	\$ 1,073,783	91.9%	\$ 1,110,041	-11.1%
Total	\$ 15,159,106	\$ 16,005,528	94.7%	\$ 15,298,254	-0.9%



2021 Revenue – Utility Funds

2021 total revenues:

- Water/sewer revenues are at 112.3% of the budget and down 0.95% from 2020
- Stormwater revenues are at 115.6% of the budget and up 4.1% from 2020



2021 Expenses – Utility Funds

2021 total expenses:

- Water/sewer expenses are at 77.9% of the budgeted amounts
- Stormwater expenses are at 84.3% of the budgeted amounts



2021 Revenues and Expenses – Utility Funds

<u>Water/Sewer Utility</u>	<u>2021</u>	<u>2021 Budget</u>	<u>% of Budget</u>	<u>2020 Actual</u>
Revenues				
Water Sales	\$ 4,203,795	\$ 4,038,252	104.1%	\$ 3,799,300
Sewer Sales	\$ 5,617,149	\$ 4,758,864	118.0%	\$ 5,019,964
Other Revenues	\$ 152,415	\$ 80,800	188.6%	\$ 144,243
Total Revenue	\$ 9,973,359	\$ 8,877,916	112.3%	\$ 8,963,507
Total Expenses	\$ 10,743,963	\$ 13,792,348	77.9%	\$ 7,797,570
Total Net Revenue	\$ (770,604)	\$ (4,914,432)		\$ 1,165,937
 <u>Storm Water Utility</u>	 <u>2021</u>	 <u>2021 Budget</u>	 <u>% of Budget</u>	 <u>2020 Actual</u>
Revenues				
Storm Water Sales	\$ 1,672,438	\$ 1,437,350	116.4%	\$ 1,559,299
Storm Water Connection Fee	\$ 54,014	\$ 45,000	120.0%	\$ 34,177
Other Revenues	\$ 109,479	\$ 106,000	103.3%	\$ 169,364
Total Revenue	\$ 1,835,931	\$ 1,588,350	115.6%	\$ 1,762,840
Total Expenses	\$ 1,387,883	\$ 1,645,751	84.3%	\$ 1,283,058
Total Net Revenue	\$ 448,048	\$ (57,401)		\$ 479,782



2021 Revenue & Expenses – All Funds



2021 Revenues & Expenses – All Funds

Fund	Fund Description	2021			2021 Budget			2020		
		Rev	Exp	Surplus/ (Def.)	Rev	Exp	Surplus/ (Def.)	Rev	Exp	Surplus/ (Def.)
001/101	General & Street	\$ 18,883,056	\$ 15,159,106	\$ 3,723,950	\$ 17,053,136	\$ 16,005,528	\$ 1,047,608	\$ 15,056,910	\$ 14,171,660	\$ 885,250
003	Abatement Fund	\$ 24,293	\$ 2,228	\$ 22,064	\$ 1,200	\$ 19,500	\$ (18,300)	\$ 401	\$ 16,206	\$ (15,805)
103	Cemetery Fund	\$ 231,064	\$ 241,014	\$ (9,950)	\$ 223,150	\$ 243,150	\$ (20,000)	\$ 201,886	\$ 209,997	\$ (8,111)
104	REET-1st 1/4%	\$ 686,761	\$ 812,932	\$ (126,171)	\$ 360,000	\$ 1,094,600	\$ (734,600)	\$ 469,282	\$ 357,850	\$ 111,432
105	Park Development Fund	\$ 183,940	\$ 869,000	\$ (685,060)	\$ 156,000	\$ 869,000	\$ (713,000)	\$ 93,354	\$ 3,100	\$ 90,254
106	REET-2nd 1/4%	\$ 1,119,959	\$ 794,141	\$ 325,818	\$ 781,800	\$ 907,000	\$ (125,200)	\$ 1,014,803	\$ 426,260	\$ 588,543
108	Hotel Motel Tax	\$ 105,615	\$ 35,530	\$ 70,085	\$ 61,400	\$ 60,000	\$ 1,400	\$ 69,174	\$ 45,469	\$ 23,705
110	Transportation Development	\$ 426,686	\$ 413,218	\$ 13,468	\$ 262,000	\$ 1,550,000	\$ (1,288,000)	\$ 263,940	\$ 112,759	\$ 151,181
118	PEG Fees	\$ 124	\$ -	\$ 124	\$ 1,600	\$ 101,600	\$ (100,000)	\$ 733	\$ 10,967	\$ (10,234)
125	EMS Restrictd	\$ 64	\$ -	\$ 64	\$ -	\$ 60,786	\$ (60,786)	\$ 381	\$ -	\$ 381
126	Fire Impact Fee Fund	\$ 49,616	\$ 14,000	\$ 35,617	\$ 30,500	\$ 14,000	\$ 16,500	\$ 29,248	\$ 53,300	\$ (24,052)
127	Affordable Housing Sales Tax Credit	\$ 20,665	\$ -	\$ 20,665	\$ 15,000	\$ 14,500	\$ 500	\$ 0.47	\$ -	\$ 0.47
141	Drug Seizure Fund	\$ 3,768	\$ 5,706	\$ (1,938)	\$ 28,300	\$ 37,200	\$ (8,900)	\$ 2,655	\$ 12,272	\$ (9,617)



2021 Revenues & Expenses – All Funds

Fund	Fund Description	2021			2021 Budget			2020		
		Rev	Exp	Surplus/ (Def.)	Rev	Exp	Surplus/ (Def.)	Rev	Exp	Surplus/ (Def.)
212	UTGO Bond Redemption Fund	\$ 100,674	\$ 106,150	\$ (5,476)	\$ 100,200	\$ 106,150	\$ (5,950)	\$ 105,473	\$ 114,300	\$ (8,827)
215/315	Downtown Bond Debt Fund	\$ 354,600	\$ 354,600	\$ 0	\$ 354,600	\$ 354,600	\$ -	\$ 357,852	\$ 357,850	\$ 2
350	Capital Projects Fund	\$ 2,505,084	\$ 2,502,929	\$ 2,155	\$ 3,121,000	\$ 3,157,000	\$ (36,000)	\$ 1,053,954	\$ 388,083	\$ 665,871
351	Facilities Capital Project	\$ 647,512	\$ 534,645	\$ 112,867	\$ 1,570,195	\$ 1,570,195	\$ -	\$ 525,332	\$ 613,846	\$ (88,514)
353	Transportation Capital Fund	\$ 1,650,878	\$ 1,331,517	\$ 319,362	\$ 3,789,520	\$ 3,955,335	\$ (165,815)	\$ 799,395	\$ 1,114,500	\$ (315,105)
355	Art Project Fund	\$ 5,000	\$ -	\$ 5,000	\$ 5,000	\$ 9,000	\$ (4,000)	\$ 5,000	\$ 718	\$ 4,282



2021 Revenues & Expenses – All Funds

Fund	Fund Description	2021			2021 Budget			2020		
		Rev	Exp	Surplus/ (Def.)	Rev	Exp	Surplus/ (Def.)	Rev	Exp	Surplus/ (Def.)
401	Water/Sewer Fund	\$ 9,973,359	\$10,743,963	\$ (770,604)	\$ 8,877,916	\$13,792,348	\$ (4,914,432)	\$ 8,963,506	\$ 7,797,570	\$ 1,165,936
403	Stormwater Utility Fund	\$ 1,835,931	\$ 1,387,883	\$ 448,048	\$ 1,588,350	\$ 1,645,751	\$ (57,401)	\$ 1,762,840	\$ 1,283,058	\$ 479,782
406	Water/Sewer Construction Res.	\$ 2,598,084	\$ 249,874	\$ 2,348,210	\$ 3,674,029	\$ 3,666,737	\$ 7,292	\$ 1,246,954	\$ 3,985,036	\$ (2,738,082)
408	Water/Sewer Bond Redemption	\$ -	\$ -	\$ -	\$ 3,443	\$ 3,443	\$ -	\$ -	\$ -	\$ -
410	PWTF Loan Redemption	\$ 301,662	\$ 301,662	\$ (0)	\$ 301,663	\$ 301,662	\$ 1	\$ 303,472	\$ 303,472	\$ -
412	Water/Sewer Bond Redemption	\$ 2	\$ -	\$ 2	\$ -	\$ -	\$ -	\$ 10	\$ -	\$ 10
413	Water/Sewer/Storm Bond	\$ 3,771,506	\$ 3,989,541	\$ (218,035)	\$ 7,279,738	\$ 9,906,982	\$ (2,627,244)	\$ 6,717,321	\$ 3,057,400	\$ 3,659,921
414	Water/Sewer/Storm Bond Res.	\$ 104	\$ -	\$ 104	\$ 1,800	\$ -	\$ 1,800	\$ 618	\$ -	\$ 618



2021 Revenues & Expenses – All Funds

Fund	Fund Description	2021			2021 Budget			2020		
		Rev	Exp	Surplus/ (Def.)	Rev	Exp	Surplus/ (Def.)	Rev	Exp	Surplus/ (Def.)
510	Employment Security Reserve	\$ 117	\$ 18,184	\$ (18,067)	\$ 3,000	\$ 30,450	\$ (27,450)	\$ 887	\$ 10,470	\$ (9,583)
520	ER&R - Rolling Stock	\$ 447,780	\$ 76,219	\$ 371,561	\$ 437,400	\$ 430,000	\$ 7,400	\$ 82,590	\$ 108,870	\$ (26,280)
521	ER&R - IT FUND	\$ 50,000	\$ 35,229	\$ 14,771	\$ 50,100	\$ 50,000	\$ 100	\$ 736	\$ 7,198	\$ (6,462)
604	Cemetery Perpetual Care Fund	\$ 14,557	\$ -	\$ 14,557	\$ 9,802	\$ -	\$ 9,802	\$ 10,276	\$ -	\$ 10,276
610	Downtown Bond Guarantee Fund	\$ 3,283	\$ -	\$ 3,283	\$ 6,000	\$ -	\$ 6,000	\$ 7,026	\$ -	\$ 7,026
631	Agency Fund - Low Income	\$ 3	\$ -	\$ 3	\$ 10,300	\$ 14,000	\$ (3,700)	\$ 19,519	\$ 19,310	\$ 209
Total All Funds		\$45,995,750	\$39,979,271	\$ 6,016,479	\$50,158,142	\$59,970,517	\$ (9,812,375)	\$39,165,528	\$34,581,521	\$ 4,584,007



LGIP - Investment Update

January	February	March
2,727.86	2,380.64	1,793.75
0.1395%	0.1347%	0.1133%
April	May	June
1,260.39	975.89	930.82
0.1020%	0.0764%	0.0753%
July	August	September
2,277.48	1,007.56	1,075.92
0.1783%	0.0789%	0.0870%
October	November	December
1,197.81	1,064.47	1,159.54
0.0938%	0.0861%	0.0907%
Total LGIP Interest YTD 17,852.13		

Note: LGIP investments are liquid



Bond - Investment Update

Purchasing Fund	Rate	Maturity Date	Amount Paid	Maturity Value	Over the Life of the Bond Expected Interest
Water/Sewer	0.550%	9/30/2025	1,677,769.92	1,698,000.00	39,332.58
Water/Sewer/Storm/Downtown Bond Fund	0.660%	3/17/2025	2,003,148.00	2,000,000.00	56,000.00
Water/Sewer/Storm	0.430%	6/10/2024	1,997,436.00	2,000,000.00	18,000.00
Water/Sewer 401 and 406	0.310%	7/2/2024	2,094,082.00	2,000,000.00	105,000.00
Water/Sewer/TIF/REET	0.230%	2/5/2024	2,130,142.00	2,000,000.00	150,000.00
General Fund/Downtown Bond Fund	0.850%	1/28/2026	1,978,500.00	2,000,000.00	62,500.00
General Fund	0.460%	2/24/2026	1,001,940.00	1,000,000.00	25,000.00
Water/Sewer	0.260%	2/10/2025	1,002,374.00	1,000,000.00	12,800.00
General Fund	0.260%	2/10/2025	501,187.00	500,000.00	6,400.00
Water/Sewer/General Fund	0.460%	2/24/2026	500,970.00	500,000.00	12,500.00
			14,887,548.92	14,698,000.00	487,532.58

Earnings Received to Date:

General Fund	\$ 9,917.65
Other Funds	\$ 7,510.00
W/S and SW Bond Funds	\$ 87,756.64
Total Earnings	\$ 105,184.29



Questions

Thank You!

