

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING
150 BEAVERCREEK ROAD OREGON CITY, OR 97045

MEMORANDUM

TO: Clackamas County Planning Commission

FROM: Joy Fields, Principal Planner

DATE: November 3, 2025

RE: Study Session: Code Audit Summary Review, Discussion and

Direction (File ZDO-290)

The purpose of this Planning Commission Study Session is to introduce the Planning Commission to the MIG Consultants who are assisting staff with the project to amend the Zoning and Development Ordinance (ZDO) so that we apply only clear and objective standards to the development of housing in urban and rural residential areas as required by state law. In addition, the Consultants will share with the Planning Commission a summary of what they found when they reviewed the ZDO's natural resource and hazard standards for compliance with the clear and objective requirement.

As discussed in September, through this project we are trying to avoid updating the natural resource and hazard inventories or changing the level of protection from development. You will see in the memo from MIG that a common way to keep the same level of protection for the natural resource and hazard inventories is to have applicants avoid disturbance to the resource entirely and provide a discretionary review path that can be used by applicants as an option if they are unable to meet the impact avoidance standards due to the unique situations for their specific project or site.

After the overview of the preliminary findings and approach to the amendments, time will be spent previewing discussion questions to be talked about at the following study session. The goal is to identify additional information the Planning Commission would like to have to facilitate a robust discussion in December.



TO: Clackamas County Planning Commission

FROM: Brandon Crawford, Kate Rogers, and Cathy Corliss, MIG

RE: Revised Draft Code Audit Summary for ZDO 290 (Task 2.2)

ZDO 290 – Clear and Objective Code Amendments

Creating clarity for housing development standards related to rivers, streams, habitat,

and other natural resources

DATE: October 31, 2025

A. Introduction

The purpose of the Clackamas County Clear and Objective Code Amendment project is to amend the Zoning and Development Ordinance (ZDO) to provide clear and objective standards for housing development, consistent with state statute. The project focuses on those standards that implement four Statewide Planning Goals related to natural resources and hazards, and associated Administrative Rules (OAR Chapter 660):

Goal 5 (Natural Resources, Scenic Areas, and Open Spaces)

Goal 6 (Water Quality)

Goal 7 (Natural Hazards)

Goal 15 (Willamette Greenway)

The first step of the project is a code audit to identify areas of potential concern. This draft Code Audit Report summarizes the results of the audit and identifies key areas of the ZDO where amendments may be needed to comply with the state requirements for clear and objective housing regulations. This report also provides some background information about state requirements, legislation, and the County's regulations that protect natural resources and hazards.

1. Clear and Objective Requirements

Oregon State statute (ORS 197A.400) requires that local governments adopt and apply only clear and objective standards, conditions, and procedures to the development of housing (with some exceptions for historic districts). Clear and objective standards use terms, definitions, and measurements that provide for **consistent interpretation of the regulation**. In other words, there is no need for the applicant or reviewer to use their discretion in interpreting the standard. State law also allows local governments to offer a second, **discretionary review path** that can be used by applicants as an optional alternative approach to the clear and objective standards.

ORS 197A.400 was revised in 2023 by House Bill 3197 to expand the requirement for clear and objective housing regulations. It now applies to:

- All land within an urban growth boundary (UGB) i.e., cities and urban zones within Clackamas County, including lands within natural resource areas; and
- Certain areas outside of UGBs:

- Unincorporated communities designated in a county's acknowledged comprehensive plan after December 5, 1994 (e.g., Boring and Beavercreek);
- o Non-resource lands (not applicable in Clackamas County); and
- o Area zoned for rural residential use (e.g., Rural Area Residential 2-Acre [RA-2] zone).

As a result, Clackamas County, like other counties that regulate development outside of cities and urban growth boundaries, needs to update its regulations to create a clear and objective review path for housing in areas subject to the requirements. This includes the County's regulations related to natural resources and hazards.

2. Natural Resource and Hazard Protections

The project will focus primarily on the following ZDO sections that implement Statewide Planning Goals (and Metro Urban Growth Management Functional Plan (UGMFP) requirements) for natural resource and hazard protection. These regulations are explained further in the **Detailed Audit Findings** section.

ZDO Section	Applicable Goal(s)	Applicable Resources	Where it Applies
704 River and Streams Conservation Area	Goals 5 and 6	Habitat and water quality in riparian areas (areas adjacent to rivers and streams).	Outside Metro UGB and Metropolitan Service District (MSD).
705 Willamette River Greenway	Goal 15 (and Goal 5 outside Metro UGB/MSD)	Natural, scenic, recreational, and other qualities of Willamette River.	Adjacent to Willamette River, both inside and outside the Metro UGB and MSD.
706 Habitat Conservation Area District	Goal 5 (and Metro UGMFP Title 13)	Riparian, wetland, and upland wildlife habitat.	Inside the Metro UGB and MSD.
709 Water Quality Resource Area District	Goal 6 (and Metro UGMFP Title 3)	Water quality in wetlands and riparian areas.	Inside the Metro UGB and MSD, but outside the boundaries of Clackamas County Service District #1.
1002 Protection of Natural Features	Goals 5, 6, and 7	 Hillsides Trees and Wooded Areas River and Stream Corridors Deer and Elk Winter Range Mt. Hood Resource Protection Open Space Significant Natural Areas Significant Landforms and Vegetation 	Generally applies throughout the County; however, location varies by code section and resource.

ZDO Section	Applicable Goal(s)	Applicable Resources	Where it Applies
1003 <u>Hazards to</u> <u>Safety</u>	Goal 7	 Mass Movement Hazard Areas Flood Hazard Areas Soil Hazard Areas Fire Hazard Areas 	Hazard areas throughout the County, some of which are mapped/inventoried.
1006 Utilities, Street Lights, Water Supply, Sewage Disposal, Surface Water Management, and Erosion Control	Goal 6	Water quality in rivers and streams via surface water / stormwater management and erosion control.	Throughout the County. However, Clackamas County has jurisdiction over surface water management and erosion control outside of cities or other service districts.
1011 Open Space And Parks and 1103 Open Space Review	Goals 5, 6, and 7	Various resources within areas designated as Open Space.	Inside the Metro UGB and within Mount Hood Villages (Mt. Hood Community Plan).

3. Approach to Amendments

While the sections listed above are the focus of this project, other code sections will also be updated as needed to ensure consistency throughout the ZDO. Further, Comprehensive Plan amendments may also be needed for consistency with ZDO updates.

The intent of these amendments is to keep the current level of protection for applicable resources and to use the inventories and the Economic, Social, Environmental, and Energy (ESEE) analyses conducted during the last periodic review. An ESEE analysis is a required step¹ in local protection of natural resources under Goal 5, and evaluates the potential economic, social, environmental, and energy impacts of regulating each identified resource in order to balance its protection with other public needs. This project aims to stay within the policy guidance provided by the County's adopted ESEE analyses.

4. Planning Commission Input

The project team will seek input from the Planning Commission on the key discussion items identified in Section B at work sessions in November and December 2025. Those meetings will focus on identifying where the problems are in the code and introducing high level concepts for addressing the issues. Following that, the team will develop initial draft code amendments to address the identified issues. The Planning Commission will have further opportunities to review the draft solutions and provide direction to the team at subsequent work sessions in Spring 2026.

¹ However, an ESEE is not required when a local government follows a "safe harbor" option for their local protection program, as provided for certain resources in OAR 660-023.

B. Code Audit Summary: Key Findings and Discussion Items

The project team conducted a detailed review of the ZDO to identify conflicts with clear and objective requirements. Below is a summary of high-level issues that affect multiple ZDO sections, key discussion items, and topics for which we are seeking policy direction from the Planning Commission. Following that (Section C) is a more detailed summary of audit findings for each ZDO section and initial suggestions for potential solutions.

1. Creating Clear and Objective ("C&O") Standards

Throughout the code sections listed above, there are provisions that introduce some level of discretion into the County's review of applications. Following is a sampling of the types of issues identified and potential solutions for establishing a C&O review path. In the examples, the problematic language is highlighted in yellow.

Issue	Example	Explanation and Potential Solution
Unclear or undefined terms	704.02(D) Mean High Water Line: The bank of any river or stream established by the annual fluctuations of water generally indicated by physical characteristics such as a line on the bank, changes in soil conditions, or vegetation line.	The definition of Mean High Water Line is essential to application of the RSCA (and other) regulations. However, the current definition is somewhat subjective.
		Potential Solution: Defer to the OAR or the FEMA model ordinance definition of ordinary high water line, and/or to establish a C&O method for determining the measurement based on field assessment by a qualified biologist, following more detailed OAR procedures.
Varying from a standard	706.02(B) An applicant may dispute the location of an HCA by submitting an application for HCA Map Verification.	The code can offer both a C&O and discretionary track to the applicant. If an applicant wishes to vary from the adopted HCA map that would be a discretionary request. That is allowed under ORS 197A.400, but it should be clarified in the code.
		Potential Solution: State that varying from the map is only available through discretionary review.
Subjective language	1002.03(A) Existing wooded areas, significant clumps or groves of trees and vegetation, consisting	"Significant clumps" is a term that should be defined or replaced with a more specific standard. "Whenever feasible" is also subjective.
	of conifers, oaks and large deciduous trees, shall be incorporated in the development plan wherever feasible.	Potential Solution: Replace this with a tree retention standard, which could specify the size of applicable trees, minimum canopy coverage, and/or number of trees per area

that must be preserved. Applicants could vary from the standard through the discretionary path.

Other types of solutions to C&O issues include:

- Providing C&O standards only for housing development, or only in areas subject to the C&O requirements (urban areas, rural residential areas, and unincorporated communities), while retaining existing regulations for all other development. The alternative would be to provide the same C&O standards for all uses and/or all areas outside the UGB (even where not required by statute).
- Deferring to service provider letters, such as from a surface water management authority, indicating that a development meets its standards. Whether a letter is submitted is a C&O "yes/no" answer.
- Deferring to C&O standards in other sections of the ZDO (e.g., "protection from flood hazard" criteria can instead defer to ZDO 703 Floodplain Management District).
- Deferring to state standards in rules and statutes, where available.

2. Consolidating ZDO Sections

The ZDO contains multiple layers of regulations, some of which overlap or conflict. There is interest in potentially consolidating some of the regulations so they are easier to understand and implement, which could help streamline review by staff and simplify the process for applicants. Some conceptual approaches include:

- a. Consolidating water resources regulations into one section. There are several ZDO chapters that regulate rivers, streams, adjacent riparian areas, wetlands and similar water resources:
 - Section 704 establishes setbacks (buffers) adjacent to rivers and streams located outside the Metro UGB and Metropolitan Service District. This section does not regulate wetlands unless they fall within the mean high water line of the river or stream. The standards are relatively streamlined, but are not entirely clear and objective.
 - Section 706 applies to riparian corridors (and upland habitat areas in publicly-owned parks and open spaces) that were inventoried and mapped by Metro inside the Metro UGB and MSD. It was adopted in compliance with Metro UGMFP Title 13 (Nature in Neighborhoods) and generally follows the Metro Title 13 Model Ordinance. The regulations in this section are complex, but generally clear and objective.
 - Section 709 establishes setbacks (buffers) adjacent to rivers, streams, wetlands, and natural lakes inside the Metro UGB and MSD, but outside the boundaries of Clackamas County Service District #1. It was adopted in compliance with Metro UGMFP Title 3. Metro's Title 3 requirements preceded the Title 13 requirements. When Title 13 was adopted, Metro removed many of the Title 3 requirements from the UGMFP in favor of Title 13. Some jurisdictions followed suit and replaced their Title 3 regulations with Title 13 regulations.

 Section 1002.04 establishes setbacks (buffers) to river and stream corridors outside the Metro UGB and MSD and not otherwise regulated by Section 704 or within the Willamette River Greenway.

Creating a single set of water resource regulations that applies throughout the County could improve consistency and efficiency of application review. However, the requirements necessarily differ significantly by location. Additionally, most property owners are only interested in the standards that apply to their property, so consolidation of disparate requirements could make the code more difficult for the individual property owner to understand.

Partial consolidation could provide some of the efficiency benefits, while still keeping individual sections manageable for individual property owners. For example, Sections 706 and 709, which both generally apply within the Metro UGB and MSD, could be combined. Similarly, Sections 704 and 1002.04 could be combined and updated to include clear and objective standards for development outside the Metro UGB and MSD.

- b. Consolidating sections of ZDO 1002 Natural Features with other sections of the code. The Natural Features section addresses a range of resources and responds to different Statewide Planning Goals. The following sections of ZDO 1002 could potentially be merged with other ZDO sections and deleted from ZDO 1002 to reduce redundancy:
 - 1002.01 Hillsides There is some overlap with the geologic hazard regulations in ZDO
 1003 (Hazards to Safety).
 - 1002.04 River and Stream Corridors This section pre-dated the establishment of Section 704 (RSCA), but addresses similar resources. See above for suggestions for combining this with Section 704.
 - 1002.06 Mt. Hood Resource Protection Open Space This section overlaps with ZDO
 1011 Open Space and Parks.
- c. Consolidating ZDO 1011 Open Space and Parks with other sections of the code. The resources listed in this section have significant overlap with other goal-protected areas regulated by other ZDO sections such as the Willamette River Greenway, hillsides, rivers and streams, and flood hazards. The County could consider removing most of ZDO 1011, leaving just those resources that are not regulated elsewhere such as wetlands in the Mt. Hood Community Plan area. (Note, Open Space protection under Goal 5 is not mandatory under the current administrative rules (Division 23).)

3. Comprehensive Plan Provisions

The County's policies for natural resources and hazards are found in Comprehensive Plan ("CP") Chapter 3: Natural Resources and Energy. These policies generally form the basis for the regulations in corresponding sections of the ZDO. However, there are some issues related to the coordination between the CP and the ZDO that should be considered:

a. Some of the CP policies are very detailed, and are worded more like ZDO regulations rather than policy statements. For example, the River and Stream Corridor policy 3.A.3 specifies the maximum width of vegetated buffers, and includes specific requirements for certain uses and improvements. These regulations are enacted in ZDO 704 and could be removed from the CP.

- b. Some CP policies do not have corresponding regulations in the ZDO. For example, River and Stream Corridor policy 3.A.6 requires nonstructural methods of bank stabilization in areas with unstable soil, however there are no ZDO provisions to implement this policy.
- c. County staff have identified other issues with CP Chapter 3 that would be beyond the scope of the Clear & Objective Code Amendments project to address, including updating or removing outdated or inconsistent provisions.

C. Detailed Audit Findings

Following is a more detailed summary of the audit findings for each ZDO section and initial recommendations for potential solutions. The column labeled "Existing Text (in italics) or Code Summary" provides examples of the types of discretionary language (highlighted in yellow). The column labeled "Key Issues and Potential Solutions" identifies the types of solutions that the County could consider to address the issue. In all sections there may be various other standards that will also need revisions to be C&O.

ZDO 704 River and Stream Conservation Area (RSCA)

This section applies to areas adjacent to rivers and streams (riparian areas) outside of the Metro UGB and the Metropolitan Service District. The regulations are intended to protect water quality and stream habitat, and implement Statewide Planning Goals 5 and 6, as well as the River Design Plans and Water Resource policies in Sections 3.A through 3.C of the Comprehensive Plan.

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
704 RSCA (various sections)	Examples of discretionary language: 704.04 River and Stream Setbacks	Section 704.04(A) relies on a discretionary determination for when setbacks should be increased beyond the baseline 100 feet.
	A. Structures shall be located a minimum of 100 feet from the mean high water line of a principal river. This minimum setback may be increased up to 150 feet from the mean high water line to lessen the impact of development. In	Potential Solution: This could be reversed – i.e., make the C&O standard 150 feet, with the option to reduce the setback through the discretionary track based on the discretionary criteria in 1-7.
	considered:1. The size and design of any proposed structures;2. The width of the river;	Section 704.6(C) needs to be further elaborated to be C&O, and "where possible" should be removed from the C&O path.
 The width of the river; The topography of the land between the site and the river; The type and stability of the soils; The type and density of existing vegetation between the site and the river; Established recreation areas or areas of public access; and Visual impact of any structures. 	Potential Solution: Specify a mathematical standard that ensures a certain amount of buildable area outside the RSCA setback. Allow deviation from the standard through the discretionary track.	
	704.06 Development Standards	
	C. Subdivisions and partitions shall be designed, where possible, to allow compliance with Section 704.	

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
704.03 RSCA Area of Application	Section 704 relies on the Water Protection Rule Classification (WPRC) Maps to identify streams subject to the RSCA regulations. The WPRC maps (Fish Bearing Stream Inventory) were created by the Oregon Departments of Forestry (DOF) and Fish & Wildlife (ODFW), and referenced by the County as part of the Comprehensive Plan.	The WPRC maps are only available as hard-copy maps, not in a digital format. County staff notes that DOF/ODFW created updated maps, but they have not been adopted by the County. Adopting the new maps may necessitate a new Goal 5 / ESEE process if there are substantial changes to the areas defined as significant resources.
704.05 Setback Exceptions	 A. The following uses are exempt from the minimum setback standards of Subsection 704.04: 1. Residential lots of record where lot depth precludes compliance with the setback standards of Subsection 704.04, provided that: 	The requirement to site a structure "the maximum distance" from the stream is discretionary, and the question of whether lot depth precludes compliance with the setbacks depends on the size and shape of the structure.
	 a. Structures shall be sited the maximum distance from the mean high water line which meets the setback and other standards of the underlying zoning district; and b. The footprint of structures shall not exceed 25 percent of the lot area; 	Potential Solution: Rephrase this section to make it clear that the C&O setbacks apply, but that the exception is available in cases where an applicant cannot meet the setback standards on an existing lot. Potentially, the code could provide additional standards to clarify when the exception applies – e.g., when the amount of buildable area outside of the setback is less than a specified size.

ZDO 705 Willamette River Greenway (WRG)

The WRG applies to areas adjacent to the Willamette River in unincorporated areas of the county. The WRG regulations implement Statewide Planning Goal 15, which requires protection of the natural, scenic, historical, agricultural, economic and recreational qualities of lands along the Willamette River. The WRG also implements Goal 5 protections outside of the Metro UGB/MSD. Further, the WRG regulations implement the County's Willamette River Design Plan and Policies in Section 3.C.6 of the Comprehensive Plan. The map for the WRG is Map 3-01e Willamette River Greenway Design Plan.

ZDO Section Existing Text (in italics) or Code Summary Key Issues and Potential Solutions 705 WRG (generally) Examples of discretionary language: The WRG regulations require all intensification, change of use, or development to obtain a WRG 705.04 Standards for Intensification, Change of Use, or permit. The permit requirements and standards Development closely parallel the wording in Goal 15, which is very B. Where necessary, public access has been provided by discretionary. appropriate legal means to and along the river. **Examples of Potential Solutions:** D. The request will result in the preservation of a buffer or Remove regulations that are redundant to other filter strip of natural vegetation along the river bank. ZDO sections (e.g., RSCA and HCA standards). The depth of this vegetative buffer or filter strip need not exceed 150 feet, and shall be determined by Establish a set of C&O standards only for housing consideration of the following: development, and retain the existing regulations for all other uses. C&O standards may be based [criteria are similar to the RSCA setback criteria] on the history of housing development outcomes E. Structures shall observe a minimum setback between in the WRG (i.e., codify the types of designs the 100 and 150 feet from the mean low water level. The County typically approves under the current setback shall be determined by evaluation of the discretionary standards). criteria stated in Subsection 705.04. Residential lots Codified Greenway Setback – Establish 150 feet of record and water-dependent uses unable to meet as the minimum setback, and allow reduction this requirement shall be exempt from this setback. down to 100 feet via discretionary review (similar to the RSCA solution noted above). Native Landscape Buffer – Require a minimum landscape buffer with native plants selected from a previously vetted and adopted approved plant list (e.g., the Portland Plant List). Pedestrian Access Requirements – Identify properties or specific areas that are subject to pedestrian access requirements, based on the WRG Design Plan. Allow deviation from the

requirements through an optional, discretionary

path.

ZDO 706 Habitat Conservation Area District (HCAD)

The HCAD includes mapped wetlands, riparian corridors, and wildlife habitat inside the Metro UGB or Metropolitan Service District Boundary. These regulations implement Statewide Planning Goal 5 and Metro Title 13: Nature in Neighborhoods (which implements Goal 5 within the Metro area). The regulations also implement the Habitat Conservation Areas policies in Section 3.D the Comprehensive Plan. The mapped HCA inventory can be found on Metro's web map.

With the exception of some missing definitions and non-C&O definitions, the HCAD standards are generally clear and objective. Most of the discretionary criteria in this chapter apply to alternative review and approval pathways for development (e.g., map verification). In some cases, it may be helpful to clarify which sections and criteria qualify as the discretionary review path and which sections/criteria qualify as the C&O path.

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
706.03 Definitions	Existing definitions and other terms used throughout the chapter that do not have a definition.	Unclear or undefined terms in this section include the following:
706.07 Submittal Requirements	Applications for development in an HCA are required to submit a Construction Management Plan, which includes an Erosion Prevention and Sediment Control (EPSC) plan.	There is no definition or standards for an EPSC plan. The requirements depend on who is the surface water management authority.

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
		Potential Solution: Cross-reference the erosion control requirements in ZDO 1006.06 and require an approved EPSC from the applicable approval authority.

ZDO 709 Water Quality Resource Area District (WQRAD)

The WQRAD regulations apply to mapped wetlands and riparian corridors inside the Metro UGB or Metropolitan Service District Boundary, but outside the boundaries of Clackamas County Service District No. 1. The regulations are intended to preserve water quality and implement the Statewide Planning Goal 6, Metro Goal 3, and Water Quality Resource Area policies in Section 3.E of the Comprehensive Plan. The mapped WQRA inventory can be found on Metro's web map.

As discussed in Section B, the County may consider removing this section and consolidating the urban area water quality regulations with the habitat regulations in Section 706 (HCAD). That would solve this section's issues with discretionary standards. Alternatively, the County could revise this section to make it C&O. Some potential solutions are discussed below.

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
709.02 Area of Application B. A wetland shall be a primary protected water resource if the wetland meets any one of the following criteria and is not a constructed wetland: [] C. Rivers, perennial streams, intermittent streams draining more than 100 acres, natural lakes, and	The County's WQRA mapping relies on the Metro Title 3 mapped inventory, the Oregon Statewide Wetland Inventory, as well as other urban wetlands mapped by the County. However, these existing inventories are not referenced in the code, which may create ambiguity. Also, the process for identifying a new feature during development review should be clarified.	
	springs that feed streams and wetlands and have year-round flow are primary protected water resources.	Potential Solution: Under Title 3, it is acceptable to regulate WQRAs by the Title 3 definitions (with maps as a reference), by field-verified Title 3 maps, or by a
	[]	substantially compliant local program. Following the
	F. The text of Section 709 shall determine the boundaries of the WQRA.	local program approach, a potential solution is to rely on the existing mapped inventories as the C&O track. If applicants wished to contest the map, they could

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
	[]	pursue a map verification through the discretionary track (similar to how the HCAD works).
	2. In addition, there may be WQRAs not shown on the WQRA Map. If credible evidence (e.g. aerial photographs, topographic maps, expert studies) indicates that the subject property may contain a WQRA that is not identified on the WQRA map, the provisions of Section 709 shall apply.	A potential challenge with this approach is that it could limit opportunities to add resources to the mapped inventory during development review process, particularly for projects that are subject to C&O review processes. This may be less of an issue for wetlands as they are subject to the requirements of the Department of State Lands (DSL), which regulates the identification and protection of wetlands during development. For non-wetland resources, the proposed approach would leave limited opportunity to add those resources to the WQRA inventory. However, some of those resources may be covered by the HCA regulations in ZDO 706.
709.10 Water Quality Resource Area Development Permits	A Water Quality Resource Area (WQRA) Development Permit shall be approved if the applicant provides evidence substantiating compliance with the following criteria. []	"No practicable alternative" is discretionary. The County needs a C&O review path for housing, which could allow limited housing development in the WQRA when the buildable, non-WQRA area is below a certain area
	A. No practicable alternative locations exist for the requested development that will not disturb the WQRA;	threshold. Potential Solution: For example, the City of Milwaukie has a Type I "nondiscretionary" review that allows a
	B. No reasonably practicable alternative design or method of development exists that would have a lesser impact on the WQRA than the one proposed. If no such reasonably practicable alternative design or method of development exists, the development shall be conditioned to: []	maximum disturbance up to 800 square feet in the WQRA if there is less than 1,500 square feet of non-WQRA area on a property.
Table 709-2: Water Quality		The requirements for native vegetation are discretionary.
esource Area Mitigation and mitigation in accordance with Table 709-2. For equirements example:	Potential Solution: Consider using the mitigation standards from the HCA (ZDO 706), which includes	

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
	 Restore and mitigate according to approved mitigation plan using native vegetation that would reasonably represent the vegetative composition that would naturally occur on the site. 	similar requirements for native vegetation and other mitigation, but provides mostly C&O standards.

ZDO 1002 Natural Features

These regulations apply to a range of natural resources and natural hazards both inside and outside the Metro UGB – including Hillsides, Trees and Wooded Areas, River and Stream Corridors, Deer and Elk Winter Range, Mt. Hood Resource Protection Open Space, Significant Natural Areas, and Significant Landforms and Vegetation. The regulations in this section implement Statewide Planning Goals 5, 6, and 7.

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
1002.01 Hillsides (generally)	This section regulates development on slopes of 20% or greater. Development on slopes of 20-35% requires a Type I permit and development on slopes over 35% (or housing on slopes over 25%) requires a Type II permit. The requirements address both geologic hazards and preservation of the natural and scenic qualities of hillside areas.	Several of the regulations in this section are discretionary – especially the Type II permit standards. However, some of these regulations would be difficult to translate into C&O standards – including phrases such as "unique characteristics of the subject property could be better utilized."
		Potential Solutions: There are a few potential approaches for this section. One would be to prohibit housing development on slopes over 25%, except to allow it through a discretionary path, which would allow the County to retain its existing standards. This approach may warrant discussion with Legal Counsel.
		Another potential approach is discussed in the next row.

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
1002.01(B)(2)	This section requires an engineering geologic study for slopes over 35% (or over 25% for housing).	Review of a geologic study involves discretion by the County.
	B. Development on slopes greater than 35 percent—and residential development on slopes greater than 25 percent in the RR, MRR, and HR Districts—shall require review of a Type II application pursuant to Section 1307 and shall be subject to the following standards: [] 2. An engineering geologic study approved by the County	Potential Solution: Require certification from a licensed engineering geologist or geotechnical engineer as the C&O standard. The certification itself would serve as the standard (i.e., did the applicant provide a certificate from the professional, yes or no?). This approach relies on the professional judgment of a licensed engineer, with the expectation that such a
	shall establish that the site is stable for the proposed development, and any conditions and recommendations based on the study shall be incorporated into the plans and construction of the development.	professional would not risk their licensure or professional reputation by certifying a development that does not meet safety standards.
1002.03 Trees and Wooded Areas	This section requires groves of trees to be incorporated into development "wherever feasible," and includes standards for avoiding "substantial disturbance" of tree groves, and other subjective requirements.	Potential Solution: See the Key Findings section above (Section B), which suggests a C&O tree retention standard. Also consider adopting an approved tree list.
		Alternatively, consider removing these standards if they are not being implemented or not delivering a public benefit.
1002.04 River and Stream Corridors	This section applies to land that is outside both the Metropolitan Service District Boundary and the Portland UGB. The standards require preservation of river and stream corridors "to the maximum extent feasible." It also requires minimum setbacks from streams, but the setback depends on evaluation of discretionary criteria.	As noted in the Key Findings section above (Section B), this section has substantial overlap with the RSCA. Currently, the County applies these regulations to rivers/streams that are not "Principal River Conservation Areas" and those identified in the Statewide Wetland Inventory but not in the adopted RSCA maps.
		Also, the regulations are discretionary. County staff indicated that, in practice, this section is

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
		only applied to discretionary applications such as Conditional Use.
		Potential Solution: Clarify the distinction in geographic applicability between this section and the RSCA. Consider limiting the applicability to ensure housing subject to C&O standards is excluded. Alternatively, establish C&O standards for housing if necessary for compliance with applicable Total Maximum Daily Load (TMDL) requirements.
1002.05 Deer and Elk Winter Range	The full text of this section is provided below. Development in deer and elk winter range below 3,000 feet	The review criterion for development within the deer and elk winter range is highly discretionary.
in e Sco	in elevation, as identified on Comprehensive Plan Map III-2, Scenic and Distinctive Resource Areas, shall be designed to minimize adverse wildlife impacts.	Potential Solution: Consider establishing C&O standards for residential development in the deer and elk winter range – such as restrictive siting standards – with options to vary from these standards through the discretionary path.
1002.06 Mount Hood Resource Protection Open Space	This section addresses water quality in areas designated as "Resource Protection Open Space" in the Comprehensive Plan for various Mount Hood villages.	As noted in the Key Findings section above (Section B), this section overlaps with ZDO 1011 Open Space and Parks.
		Potential Solution: There may be opportunities to consolidate these sections and establish a single set of C&O criteria for water quality and wetland protection.
1002.08 Significant	The full text of this section is provided below.	There is no definition for "significant landforms
Landforms and Vegetation	Institutional, commercial, and industrial development; multifamily dwellings; and developments of more than one duplex, triplex, or quadplex shall cluster and modulate building masses to minimize disturbance of existing	and vegetation," so it is unclear what types of resources would be subject to these standards. Note, these regulations are not connected to statewide planning goal protections. Because they are so discretionary, they are difficult to

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
	significant landforms and vegetation. Pursuant to the review procedure required by Section 1102, Design Review, minimum front setbacks may be reduced or waived to minimize disturbance of natural landforms or vegetation. If a setback reduction is granted, a program for protection of those landforms and vegetation during construction, and for long-term maintenance, shall be provided.	enforce; therefore, they are not delivering a significant public benefit. Potential Solutions: Consider removing these regulations from the code.

ZDO 1003 Hazards to Safety

These regulations apply both inside and outside the Metro UGB and implement Statewide Planning Goal 7. The regulations address flood hazards, soil and landslide hazards, and fire hazard areas.

ZDO Section	Existing Text <i>(in italics)</i> or Code Summary	Key Issues and Potential Solutions
1003.02 Standards and Criteria for Mass Movement Hazard Area Development	This section applies to areas of land movement, slump or earth flow, and mud or debris flow.	This section requires an engineering geologic study, similar to ZDO 1002.01 Hillsides. The County could consider similar approaches for defining a C&O review path for housing as suggested in the findings for Section 1002.01, above.
1003.03 Standards for Flood Hazard Areas	This section applies regulations to development in flood hazard areas, in addition to ZDO 703 Floodplain	Because floodplains are regulated through ZDO 703, the County should consider removing this section or simply cross-referencing Sections 703 and 1011 and removing the other provisions.
	Management District (FMD). It also refers to ZDO 1011 Open Space and Parks.	Note, updates to floodplain regulations in ZDO 703 may be addressed as a separate process in the future depending on federal and state guidance. There may be minor updates to that section to ensure internal consistency with other chapters, however the mapped inventory and regulations will remain unchanged.
1003.04 Standards for Soil Hazard Areas	B. The principal source of information for determining soil hazards is the State DOGAMI Bulletin 99 and accompanying maps. Approved site specific soil studies	This section should be updated to specify the exact hazard areas where these standards apply.

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
	shall be used to identify the extent and severity of the hazardous conditions on the site, and to update the soil hazards data base accordingly.	Potential Solution: Reference the updated DOGAMI mapping, which includes a landslide inventory and landslide susceptibility maps.
1003.05 Standards for Fire Hazard Areas	This section provides standards for "development in areas with the potential for forest or brush fires."	This section could potentially be revised to provide C&O methods for determining wildfire hazard areas. The County should consider methods and information provided in the <u>Clackamas County Wildfire Protection Plan</u> .
		Note, Senate Bill 83 (2025) directs the State Fire Marshal to create model code for defensible space standards that local governments can use in wildfire hazard areas. The County may wish to defer updates on this section until the model code is available.

ZDO 1006 Utilities, Street Lights, Water Supply, Sewage Disposal, Surface Water Management, and Erosion Control

This section addresses a range of public utilities. However, the primary intersection with Statewide Planning Goals (and this project's scope) is with Goal 6 (Water Quality). The surface water and erosion control regulations are part of the County's protection of water quality in rivers and streams. The County regulates surface water and erosion outside of UGBs or other service districts.

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
1006.06 Surface Water Management and Erosion Control	This section requires development to meet the standards of the "surface water management regulatory authority." Clackamas County includes these surface water districts: Water Environment Services (WES), Clean Water Services (CWS), and the Oak Lodge Sanitary District (OLSD). Outside of those areas and outside city jurisdictions, the County is the surface water management authority.	The regulations in Section 1006.06 require approval from the surface water management authority, but this section also includes its own approval standards for surface water management. Many of those standards are discretionary.

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
	Per the <u>Clackamas County Roadway Standards</u> , the County has adopted WES stormwater standards, with some exceptions. Section 1006.06(C) requires applicants to provide "a preliminary statement of feasibility from the surface water management regulatory authority," which is needed to verify that adequate management, treatment, and conveyance can be made available to serve the development.	Potential Solution: The approval standards in this section may be redundant to the County Roadway Standards and the other surface water districts' standards. If that is the case, much of this section could potentially be removed in favor of requiring a "statement of feasibility" (i.e., service provider letter), verifying the adequacy of the design.

ZDO 1011 Open Space and Parks

This section applies to urban areas of the County (i.e., inside the Metro UGB) and to the various Mount Hood Villages. Specifically, the section applies to areas identified as Open Space on the Comprehensive Plan Map and on the Mt. Hood Community Plan Map.

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
1011.01 Area of Application	 A. Section 1011 applies to areas generally indicated as Open Space on Comprehensive Plan Map IV-6, North Urban Area Land Use Plan Map, or on the Mt. Hood Community Plan Map when one or more of the following open space resources is present: 1. Willamette River Greenway; 2. Distinctive urban forests; 3. Hillsides of more than 20 percent slope; 	The resources listed in this section have significant overlap with other goal-protected areas regulated by other ZDO sections – such as the Willamette River Greenway, hillsides, rivers and streams, and flood hazards. Note, Open Space protection under Goal 5 is not mandatory under the current administrative rules (Division 23).
4. Areas of confirmed land movement hazard;	Potential Solution: Remove or consolidate	
	5. Areas of severe erosion or unstable soil; sections of the ZDO	code sections that overlap with other sections of the ZDO. This would leave just
	6. Areas of high visual sensitivity;	those resources that are not regulated

ZDO Section Existing Text (in italics) or Code Summary Key Issues and Potential Solutions elsewhere - such as wetlands in the Mt. 7. Significant natural areas; and Hood Community Plan area. 8. Other distinctive or unique natural areas, or areas of serious natural Also, the applicability of this section needs hazard. to be C&O. Per subsection (A), "Section B. Section 1011 also applies to areas generally indicated as Open Space on 1011 applies to areas generally indicated as the Mt. Hood Community Plan Map when one or more of the following open Open Space on Comprehensive Plan space resources is present: Map..." The code needs to clarify whether it applies to all mapped Open Space areas in 1. Bodies of water, such as rivers, lakes, or lagoons; these maps or not. 2. Special flood hazard areas, as defined in Section 703, Floodplain Management District; 3. Land within 100 feet of mean low water of all major rivers and 50 feet of other perennial streams; and 4. Wetlands, including recharge areas. 1011.01(C) The resources listed above are divided into high-priority and second-priority This section applies a highly discretionary and 1011.02 open space. High-priority open space must be "preserved outright," whereas review process to second-priority open second-priority open space is regulated on a case-by-case basis using spaces. It cross-references the review Development criteria in ZDO 1103 Open Space Review. Standards and discretionary criteria. Limitations which are also highly discretionary. Open space regulated pursuant to Subsection 1011.01(A) or (B) 1011.01(C). shall be categorized as follows: Potential Solution: If applied to mapped Open Space areas, the code could prohibit 1. High-priority open space is: development in both Priority 1 and 2 areas, a. Land or water necessary to assure a continuous network of open but allow development through the space (e.g., stream corridor, forested hillside); discretionary track in Priority 2 areas. b. Land over 35 percent slope; c. Confirmed land movement hazard areas; d. Areas judged to have severe erosion potential due to soil type, geologic structure, and vegetation; e. Bodies of water such as rivers, lakes, or lagoons;

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Key Issues and Potential Solutions

- f. Wetlands; and
- g. Significant natural areas.
- 2. Second-priority open space is:
 - a. Land greater than 20 percent slope and less than 35 percent slope;
 - b. Distinctive urban forests;
 - c. Land within a special flood hazard area, as defined in Section 703, or within 25-year flood limits where special flood hazard areas have not been designated;
 - d. Land used as a recharge area for wetlands; and
 - e. Areas of high visual sensitivity.
- 1011.02(C). Second-priority open space shall be preserved to the maximum extent possible making full use, as necessary, of techniques which reduce the need for land coverage, and disturbance of open space features. Various site plan and development options shall be identified and applied on a case-by-case basis pursuant to Section 1103, Open Space Review. Site plan and development techniques may include but are not limited to:
 - 1. Multistory construction;
 - 2. Elevated pole structures;
 - 3. Understructure parking;
 - 4. Reduction of parking requirements as provided under Subsection 1015.02(D)(2)(a) and (b);
 - 5. Clustering of buildings;
 - 6. Minimized driveway areas, use of shared driveways and loading areas;
 - 7. Reduction of road widths or use of one-way roads to accommodate terrain or other features; and

ZDO Section	Existing Text (in italics) or Code Summary	Key Issues and Potential Solutions
8. Siting of buildings to maximize transit and pedestrian orientation.		