

**RECOMMENDATIONS AND FINDINGS  
OF THE PLANNING COMMISSION  
FOR THE CITY OF TIGARD, OREGON**



**SECTION I. APPLICATION SUMMARY**

**CASE NAME:** FEMA ENDANGERED SPECIES ACT (ESA) COMPLIANCE CODE AMENDMENTS

**CASE NO.:** Development Code Amendment (DCA) DCA2025-00001

**PROPOSAL:** The City is proposing development code and municipal code amendments to the Special Flood Hazard Area regulations. The amendments to the development code are necessary to incorporate regulatory changes required by the Federal Emergency Management Agency (FEMA) as they relate to the Endangered Species Act (ESA). These regulatory changes are required in order for the City of Tigard to continue participation in the National Flood Insurance Program (NFIP). The proposed amendments include:

- Updates to Municipal Code Chapter 9.10 that add new definitions and “no net loss” standards;
- Updates to Chapter 18.510, Sensitive Lands, to require a “no net loss” analysis with a sensitive lands review for development within areas of special flood hazard; and
- General reorganization and clean-up of Chapter 18.510, Sensitive Lands.

**APPLICANT:** City of Tigard  
13125 SW Hall Blvd.  
Tigard, OR 97223

**ZONES:** Citywide

**LOCATION:** Citywide

**APPLICABLE  
REVIEW**

**CRITERIA:** Statewide Planning Goals 1 (Citizen Involvement), 2 (Land Use Planning), 7 (Areas subject to Natural Hazards); METRO’s Urban Growth Management Functional Plan Titles 3, and 8; Comprehensive Plan Goals 1.1.2, 2.1.1, 2.1.2, 2.1.3, 2.1.11, 2.1.20, 7.1.4, 7.1.5, 7.1.7, 7.1.8, 7.1.9, 7.1.11, 7.1.14, 10.1.2, 10.2.5, 10.2.7 and 11.1.1; and TCDC Chapters 18.790.

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### **SECTION II. PLANNING COMMISSION RECOMMENDATION**

The Planning Commission recommends that the City Council adopt the amendments to the Tigard Community Development Code with any alterations as determined appropriate by the City Council through the public hearing process.

### **SECTION III. BACKGROUND INFORMATION AND PROJECT SUMMARY**

#### **NFIP Background**

The purpose of the proposed amendments is to incorporate regulatory changes required by the Federal Emergency Management Agency (FEMA) as they relate to the Endangered Species Act (ESA). These regulatory changes are required in order for the City of Tigard to continue participation in the National Flood Insurance Program (NFIP). A brief summary of the National Flood Insurance Program and the proposed changes is provided below.

The NFIP is a federal program that was established in 1968 through the passage of the National Flood Insurance Act and administered by FEMA. The program allows owners of properties within the Special Flood Hazard Area to obtain federally-backed insurance for their properties in jurisdictions that have adopted land use regulations for development in the floodplain.

In addition to providing insurance, the NFIP provides maps for the nation's floodplains, known as Flood Insurance Rate Maps (FIRM) which results from a Flood Insurance Study. The FIRM is an official map that delineates both the ASFH and other flood zones within a community. The FIRM is used in determining which properties are subject to a jurisdiction's floodplain regulations and whether a property owner is required to obtain flood insurance as well as providing information on the insurance rate.

Floodplain boundaries can undergo changes over time due to the effects of erosion, development impacts, vegetation removal, and other factors. To account for floodplain boundary changes, FEMA periodically adjusts the ASFH maps used by local jurisdictions. The City of Tigard does not conduct floodplain inventories and relies on FEMA for the determination of the ASFH boundary. Prior to amending the FIRM or developing new or revised floodplain requirements as part of the NFIP updates, FEMA coordinates with local jurisdictions to determine changes in local flood conditions. Updates to the local FIRM and a corresponding Flood Insurance Study (FIS) Report for all of Washington County were most recently completed by FEMA in 2017. Additionally, FEMA periodically amends the regulatory requirements of the NFIP.

#### **FEMA and ESA Background**

In 2009, a lawsuit was brought against the Federal Emergency Management Agency (FEMA) by environmental advocacy agencies. The lawsuit stated that FEMA was in violation of Section 7 of the Endangered Species Act (ESA) by not consulting with the National Marine Fisheries Service (NMFS) on impacts of the National Flood Insurance Program (NFIP) in Oregon on 15 salmon and steelhead species listed as threatened or endangered under the ESA in Oregon.

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FEMA agreed to initiate formal consultation with NMFS on the implementation of the NFIP in Oregon based on litigation. In 2011, FEMA submitted a Programmatic Biological Assessment (PBA) to NMFS to assess the effects, if any, that the implementation of the NFIP in Oregon had on 16 species identified, as well as eulachon and Southern Residence killer whales and their habitats. FEMA's PBA determined that the implementation of the NFIP was "Not Likely to Adversely Affect" these ESA-listed species or their habitats.

After many years of discussion and agency coordination, in April 2016, the NMFS issued a Biological Opinion that determined the implementation of the NFIP in Oregon was likely to jeopardize the continued existence of endangered or threatened species and result in adverse impacts to the habitat of these species. Due to these finding, the NMFA must also provide a Reasonable and Prudent Alternatives (RPA) to the proposed action. RPA is a recommended set of program changes that will ensure the NFIP is implemented in a manner that will not jeopardize the continued existence of endangered or threatened species or result in the adverse modification of the critical habitats of such species.

In 2021, FEMA began preparing an Environmental Impact Statement (EIS) for the implementation of the plan for National Flood Insurance Program (NFIP) – Endangered Species Act (ESA) Integration in Oregon. In 2023, a subsequent lawsuit was brought against FEMA for the continued operation of the NFIP in Oregon that is in violation of the ESA and jeopardizing the continued existence of the 17 ESA-listed species. As a result of this lawsuit, FEMA established Pre-Implementation Compliance Measures (PICM) for NFIP-participating communities in Oregon. These measures will assist communities in preparing for the Final NFIP-ESA Implementation Plan by helping them develop short- and long-term solutions to ensure their ongoing participation in the NFIP.

On July 15, 2024, the City of Tigard received a letter from FEMA stating that all NFIP participating communities must select one of the PICM options and notify FEMA of that option by December 1, 2024. However, staff then learned from FEMA that communities must not only choose an option but also start implementing their chosen option by December 1, 2024. The three PICM options were:

1. Adopt a model ordinance that considers impacts to species and their habitat and requires mitigation to a "no net loss" standard;
2. Require a habitat assessment and mitigation plan for development on a permit-by-permit basis; or
3. Prohibit all development in the Special Flood Hazard Area (SFHA).

On Staff November 27, 2024, City of Tigard submitted a letter to FEMA stating that the City has selected the PICM pathway #1 and will promptly begin working toward adoption of the model ordinance into the City's Municipal Code and Community Development Code. Due to local process requirements for code amendments, the City was not able to commence permit-by-permit habitat assessment on December 1, 2024 because this option would also require a code amendment. The proposed amendments based on the model code are outlined below.

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### Proposed Amendments

Amend the Tigard Municipal Code Title 9 (Chapter 9.10 Area of Special Flood Hazard) and Tigard Community Development Code Sensitive Lands Chapter (TDC 18.510) as proposed:

- Text Amendments to Chapter 9.10 (Special Flood Hazard Area) to establish additional definitions;
- Text Amendments to Chapter 9.10 (Special Flood Hazard Area) to establish “no net loss” standards;
- Text Amendments to Chapter 9.10 (Special Flood Hazard Area) throughout that reference the “no net loss” standards;
- Text Amendments to Chapter 18.510 (Sensitive Lands) to reorganize the chapter for consistency and include the following:
  - Move the list of sensitive lands from Purpose to Applicability section
  - Combine General Provisions into a single section
  - Create a new Review Process section
  - Move review thresholds from Applicability to new Review Type Determination section
- Text Amendments to Chapter 18.510 (Sensitive Lands) to add arequirement for “no net loss” assessment for development within the special flood hazard area.

### **SECTION V. SUMMARY OF APPLICABLE REVIEW CRITERIA**

This section contains all of the applicable city, state, and Metro policies, provisions, and criteria that apply to the proposed amendments.

**City of Tigard Community Development Code:**  
**Chapter 18.790: Text and Map Amendments**

**City of Tigard Comprehensive Plan:**  
**Chapter 1: Citizen Involvement**  
**Chapter 2: Land Use Planning**  
**Chapter 7: Hazards**  
**Goal 10: Housing**  
**Chapter 11: Public Facilities**

**Metro Functional Plan:**  
**Title 3: Water Quality and Flood Management**  
**Title 8: Compliance Procedures**

**Statewide Planning Goals:**  
**Goal 1: Citizen Involvement**  
**Goal 2: Land Use Planning**  
**Goal 7: Areas subject to Natural Hazards**

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Goal 10: Housing

Goal 11: Public Facilities and Services

### **SECTION IV. APPLICABLE CRITERIA AND FINDINGS**

#### **18.790.020 Legislative Amendments**

**A. Legislative amendments shall be processed through a Legislative procedure, as provided in Section 18.710.120.**

FINDING: The proposed amendments are legislative in nature. Therefore, the amendments will be reviewed under the Legislative procedure. This procedure requires public hearings by both the Planning Commission and City Council. Public hearings are scheduled for May 5, 2025 and June 10, 2025. This standard is satisfied.

**B. Approval considerations. A recommendation or a decision for a legislative amendment application may be based on consideration of the applicable legal requirements. They may, but do not necessarily include: Oregon Revised Statutes, Oregon Administrative Rules, one or more Statewide Planning Goals, Metro's Urban Growth Management Functional Plan and any other regional plans.**

FINDING: Findings and conclusions are provided in this staff report for the applicable legal requirements on which the recommendation by the Commission and the decision by the Council must be based. This standard is satisfied.

CONCLUSION: Based on the findings above, staff concludes that the proposed code text amendments are consistent with the requirements for legislative amendments.

#### **TIGARD COMPREHENSIVE PLAN**

State planning regulations require cities to adopt and amend Comprehensive Plans and land use regulations in compliance with the state land use goals and consistent with State Goals and Policies. Because the development code amendments have a limited scope and the text amendments address only some of the topics in the Tigard Comprehensive Plan, only applicable comprehensive plan goals and associated policies are addressed below.

#### **Comprehensive Plan Goal 1: Citizen Involvement**

**Goal 1.1: Provide citizens, affected agencies, and other jurisdictions the opportunity to participate in all phases of the planning process.**

**Policy 1.1.2: The City shall define and publicize an appropriate role for citizens in each phase of the land use planning process.**

FINDING: This policy has been met by complying with the Tigard Community Development Code notice requirements set forth in Section 18.710.120. Measure 56 notices were sent by US Postal Service on March 27, 2025 to affected property owners, government agencies and the latest version

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of the City's interested parties list. Notice was also provided through the Department of Land Conservation and Development's Post-Acknowledgment Plan Amendment process. Project information and documents were published to the City website prior to the public hearing. A minimum of two public hearings will be held (one before the Planning Commission and the second before the City Council) at which an opportunity for public input is provided. This policy is satisfied.

### **Comprehensive Plan Goal 2: Land Use Planning**

**Goal 2.1: Maintain an up-to-date Comprehensive Plan, implementing regulations and action plans as the legislative foundation of Tigard's land use planning program.**

**Policy 2.1.1: The City's land use program shall establish clear policy direction, comply with state and regional requirements, and serve its citizens' own interests.**

FINDING: As demonstrated in this staff report, the proposed amendments to the Tigard Community Development Code continue to establish clear policy direction, comply with state and regional requirements, serve the City's citizens' own interests, and are consistent with the Tigard Comprehensive Plan. This policy is satisfied.

**Policy 2.1.2: The City's land use regulations, related plans, and implementing actions shall be consistent with and implement its Comprehensive Plan.**

FINDING: As demonstrated in this staff report, the proposed land use regulations (amendments to the Tigard Community Development Code), related plans, and implementing actions continue to be consistent with and implement the Tigard Comprehensive Plan. This policy is satisfied.

**Policy 2.1.3: The City shall coordinate the adoption, amendment, and implementation of its land use program with other potentially affected jurisdictions and agencies.**

FINDING: Copies of the proposed text amendments were sent to other affected jurisdictions and agencies, who were invited to comment on the proposal. Responses are discussed in Section V of this report. Comments submitted by affected agencies have been incorporated into this report and the proposed amendments. This policy is satisfied.

**Policy 2.1.11: The City shall adopt regulations and standards to protect public safety and welfare from hazardous conditions related to land use activities.**

FINDING: The proposed amendments include the adoption of regulatory changes required by FEMA, which will maintain the City's participation in the National Flood Insurance Program and protect public safety and welfare for properties located within the ASFH. This policy is satisfied.

**Policy 2.1.20: The City shall periodically review and, if necessary, update its Comprehensive Plan and regulatory maps and implementing measures to ensure they are current and responsive to community needs, provide reliable information, and conform to applicable state law, administrative rules, and regional requirements.**

FINDING: In July 2024, the City was notified by FEMA stating that all NFIP participating communities must select one of the PICM options and notify FEMA of that option by December 1,

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2024. The City has elected to adopt the model code, which is required to meet the minimum standards for participation in the NFIP. The proposed amendments include the adoption of regulatory changes required by FEMA, which will maintain the City's participation in the National Flood Insurance Program and protect the public welfare for properties located within the special flood hazard area. The proposed amendments ensure that the City's implementing measures are current and responsive to community needs, provide reliable information, and conform to applicable state law, administrative rules, and regional requirements. This policy is satisfied.

### **Comprehensive Plan Goal 7: Hazards**

**Goal 7.1: Protect people and property from flood, landslide, earthquake, wildfire, and severe weather hazards.**

**Policy 7.1.4: The City shall design and construct public facilities to withstand hazardous events with a priority on hazard protection of public services and facilities that are needed to provide emergency response services.**

FINDING: The proposed amendments include the adoption of updated regulations related to "no net loss" of the floodplain functions (storage, water quality, and vegetation). The existing regulations and proposed amendments to maintain no net loss of the floodplain functions ensures development can withstand hazardous events. These amendments include a new section in Title 9 that includes "no net loss" standards of the floodplain functions. Additionally, adoption of these amendments will ensure the City's continued participation in the NFIP. This policy is satisfied.

**Policy 7.1.5: The City shall apply and enforce the most current building code standards to protect the built environment from natural disasters and other hazards.**

FINDING: The City of Tigard administers and enforces the State of Oregon Specialty Codes, which contain certain provisions that apply to the design and construction of buildings and structures located in the special flood hazard area. The proposed amendments will be administered and enforced in conjunction with the Oregon Specialty Codes. The proposed amendments include the adoption of updated regulations for development within the special flood hazard area. These amendments, together with the Oregon Specialty Codes, will ensure that the City will apply and enforce the most current building code standards to protect the built environment from natural disasters and flood hazards. This policy is satisfied.

**Policy 7.1.7: The City shall comply with the Federal Emergency Management Agency (FEMA) flood regulations, which include standards for base flood levels, flood proofing, and minimum finished floor elevations.**

FINDING: The proposed amendments implement the latest FEMA-required regulatory updates related to "no net loss" standards of the floodplain functions. This policy is satisfied.

**Policy 7.1.8: The City shall prohibit any land form alterations or developments in the 100-year floodplain which would result in any rise in elevation of the 100-year floodplain.**

FINDING: The City's current development code prohibits landform alterations or developments in the 100-year floodplain that would result in any rise in elevation of the 100-year floodplain. Changes

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to this requirement are not proposed. Under the proposed amendments all new development will continue to meet this requirement. This policy is satisfied.

**Policy 7.1.9: The City shall not allow land form alterations of development within the 100-year floodplain outside the zero-foot rise floodway unless:**

- A. The streamflow capacity of the zero-foot rise and floodway is maintained; and**
- B. Engineered drawings and/or documentation shows there will be no detrimental upstream or downstream effects in the floodplain area.**

FINDING: The City's current development code prohibits landform alterations or developments in the 100-year floodplain that would result in any rise in elevation of the 100-year floodplain. Changes to this requirement are not proposed. Under the proposed amendments all new development will continue to meet this requirement and will need to provide the required documentation and engineered drawings. This policy is satisfied.

**Policy 7.1.11: The City shall comply with Metro Title 3 Functional Plan requirements for balanced fill and removal in the floodplain.**

FINDING: The proposed amendments will ensure that the City's regulations will continue to comply with Metro Title 3 Functional Plan requirements for balanced fill and removal in the floodplain. This is a basic requirement of the FEMA regulations, which is also a component of Metro Title 3 regulations. This policy is satisfied.

**Policy 7.1.12: 12. The City shall encourage pervious, and minimize impervious, surfaces to reduce storm water runoff.**

FINDING: The proposed amendments in Title 9 include "no net loss" standards of floodplain functions, specifically water quality. The proposed amendments include mitigation for new impervious surfaces, use of low impact development or green infrastructure, and other methods as documented and designed by a qualified professional. This policy is satisfied.

**Policy 7.1.14: The City shall work to reduce the risk of loss of life and damage to property from severe weather events.**

FINDING: The proposed amendments included in Title 9 and Chapter 18.510 reduce the risk of loss of life and damage to property from severe weather events, particularly flooding events by ensuring that the flood storage capacity of the city's waterways are maintained. These standards are applied in conjunction with the state building code to reduce the risk of damage to property by protecting flood storage capacity. This policy is satisfied.

### **Comprehensive Plan Goal 10: Housing**

**Goal 10.1: Provide opportunities for a variety of housing types at a range of price levels to meet the diverse housing needs of current and future City residents.**

**Policy 10.1.2: The City's land use program shall be consistent with applicable state and federal laws.**

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FINDING: The proposed amendments implement the latest FEMA required regulatory updates to maintain participation in the NFIP. The proposed amendments allow residential development when located outside of the area of special flood hazard. Any development, including residential, must comply with all applicable standards when developing within the special flood hazard area. These are consistent with applicable state and federal laws. This policy is satisfied.

### **Goal 10.2: Maintain a high level of residential livability**

**Policy 10.2.5: The City shall encourage housing that supports sustainable development patterns and climate change preparedness and mitigation by promoting the efficient use of land, conservation of natural resources, easy access to public transit and other efficient modes of transportation, easy access to services and parks, resource efficient design and construction, and the use of renewable energy resources.**

FINDING: The proposed amendments in Title 9 include “no net loss” standards to ensure floodplain functions, specifically floodplain storage, water quality, and vegetation. Mitigation is required for any impact to the floodplain functions to ensure the development results in no net loss of those functions. This standard encourages efficient use of land and conservation of natural resources through mitigation. This policy is satisfied.

**Policy 10.2.7: The City shall ensure that residential uses are appropriately related to locational characteristics and site conditions such as the presence of natural hazards and natural resources, availability of public facilities and services, and existing land use patterns.**

FINDING: The proposed amendments include “no net loss” standards of floodplain functions for development within the special flood hazard area. The required mitigations to maintain no net loss in floodplain functions will result in additional protection from natural hazards within the special flood hazard area. This policy is satisfied.

### **Comprehensive Plan Goal 11: Public Facilities and Services**

**Goal 11.1: Develop and maintain a stormwater system that protects development, water resources, and wildlife habitat.**

**Policy 11.1.1: The City shall require that all new development:**

- C. Meet or exceed regional, state, and federal standards for water quality and flood protection.**

FINDING: The proposed amendments adopt the FEMA-required regulatory updates for development within the special flood hazard area—meeting federal standards for water quality. The purpose of the proposed amendments is to incorporate regulatory changes required by the Federal Emergency Management Agency (FEMA) to comply with the latest standards and continue participation in the NFIP. This policy is satisfied.

CONCLUSION: Based on the findings above, staff concludes that the proposed code text amendments are consistent with applicable provisions of the Tigard Comprehensive Plan.

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### **METRO Urban Growth Management Functional Plan**

State planning regulations require cities to adopt and amend Comprehensive Plans and land use regulations in compliance with the state land use goals. Within the Portland metropolitan region, METRO also has responsibility for administering state planning regulations. This is accomplished through METRO's adopted Urban Growth Management Functional Plan (UGMFP). Because the proposed Code Amendments have a limited scope and the text amendments address only some of the topics in the UGMFP, only applicable UGMFP Titles are addressed below.

#### **Title 3: Water Quality and Flood Management:**

**The intent of this goal is to protect the beneficial water uses and functions and values of resources within the Water Quality and Flood Management Areas by limiting or mitigating the impact on these areas from development activities and protecting life and property from dangers associated with flooding.**

FINDING: The proposed amendments will ensure that the City's regulations will continue to comply with Metro Title 3 UGMFP requirements for limiting or mitigating the impact from development activities on Metro's designated Water Quality and Flood Management Areas as well as protecting life and property from the dangers associated with flooding. This is a basic requirement of the FEMA regulations, which is also a component of Metro Title 3 regulations. This policy is satisfied.

#### **Title 8: Compliance Procedures**

**The purposes of this chapter are to establish a process for ensuring city or county compliance with requirements of the Urban Growth Management Functional Plan and for evaluating and informing the region about the effectiveness of those requirements.**

FINDING: This title has been met by complying with the Tigard Community Development Code notice requirements set forth in Section 18.710.120. Measure 56 notices were sent by US Postal Service on March 27, 2025 to affected government agencies and the latest version of the City's interested parties list. Information and documents were published to the City website prior to the public hearing. A minimum of two public hearings will be held (one before the Planning Commission and the second before the City Council) at which an opportunity for public input is provided. These actions meet or exceed the specific requirements contained in Metro Title 8. This title is satisfied.

CONCLUSION: Based on the findings above, staff finds that the proposed code amendments are consistent with Metro's Urban Growth Management Functional Plan.

### **Statewide Planning Goals**

#### **Goal 1 – Citizen Involvement:**

**This goal outlines the citizen involvement requirement for the land use planning process, including the adoption of Comprehensive Plans and changes to the Comprehensive Plan and implementing documents.**

FINDING: This goal has been met by complying with the Tigard Community Development Code notice requirements set forth in Section 18.710.120. Measure 56 notices were sent by US Postal

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Service on March 27, 2025 to affected property owners, government agencies and the latest version of the City's interested parties list. Notice was also provided through the Department of Land Conservation and Development's Post-Acknowledgment Plan Amendment process. Project information and documents were published to the City website prior to the public hearing. A minimum of two public hearings will be held (one before the Planning Commission and the second before the City Council) at which an opportunity for public input is provided. This goal is satisfied.

### **Goal 2 – Land Use Planning:**

**This goal outlines the land use planning process and policy framework.**

FINDING: The Department of Land Conservation and Development (DLCD) has acknowledged the city's Comprehensive Plan as being consistent with the statewide planning goals. The Development Code implements the Comprehensive Plan. The Development Code establishes a process and standards to review changes to the Tigard Development Code in compliance with the Comprehensive Plan and other applicable state requirements. As discussed within this report, the applicable Development Code process and standards have been applied to the proposed amendment, and the intent of these amendments are to meet the requirement of state law, administrative rules, and the Statewide Planning Goals. This goal is satisfied.

### **Goal 7 – Areas Subject to Natural Hazards**

**This goal requires that local comprehensive plans to address Oregon's natural hazards. Protecting people and property from natural hazards requires knowledge, planning, coordination, and education.**

FINDING: The proposed amendments include the adoption of updated regulations related to "no net loss" of the floodplain functions (storage, water quality, and vegetation). The existing regulations and proposed amendments to maintain no net loss of the floodplain functions ensures development can withstand hazardous events. The proposed amendments included in Title 9 and Chapter 18.510 reduce the risk of loss of life and damage to property from severe weather events, particularly flooding events. These standards are applied in conjunction with the state building code to reduce the risk of damage to property. Additionally, adoption of these amendments will ensure the City's continued participation in the NFIP. This policy is satisfied.

### **Goal 10 – Housing**

**This goal requires cities and counties to provide adequate capacity for needed housing. OAR Chapter 660 Division 8, which implements Goal 10, states that "the purpose of the division is to ensure opportunity for the provision of adequate numbers of needed housing units, the efficient use of buildable land within urban growth boundaries, and to provide greater certainty in the development process so as to reduce housing costs."**

FINDING: The proposed amendments implement the latest FEMA required regulatory updates to maintain participation in the NFIP. The proposed amendments in Title 9 include "no net loss" standards to ensure floodplain functions, specifically floodplain storage, water quality, and vegetation. Mitigation is required for any impact to the floodplain functions to ensure the development results in no net loss of those functions. The proposed amendments allow residential development when located outside of the area of special flood hazard. Any development, including residential, must comply with all applicable standards when developing within the special flood hazard area. The proposed regulations may impact the amount of housing produced based on the

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amount of mitigation required to demonstrate no net loss of the floodplain functions. Under the previous code, housing development was already prohibited within the special flood hazard area, so the net impact on land available for housing is negligible. These are consistent with applicable state and federal laws. This policy is satisfied.

### **Goal 11 – Public Facilities and Services**

**This goal requires that cities and counties plan a develop a timely, orderly and efficient arrange of public facilities and services to serve as a framework for urban and rural development.**

**FINDING:** The proposed amendments adopt the FEMA required regulatory updates for development within the special flood hazard area—meeting federal standards for water quality. The purpose of the proposed amendments is to incorporate regulatory changes required by the Federal Emergency Management Agency (FEMA) to comply with the latest standards and continue participation in the NFIP. This policy is satisfied.

**CONCLUSION:** Based on the findings above, staff finds the proposed code amendments are consistent with applicable Statewide Planning Goals.

### **SUMMARY**

**CONCLUSION:** As shown in the findings provided in this report, staff concludes that the proposed amendments are consistent with the applicable Statewide Planning Goals; METRO’s UGMFP; applicable Comprehensive Plan goals and policies, and the applicable provisions of the City’s implementing ordinances.

## **SECTION V. AGENCY COMMENTS**

**City of Beaverton, City of Durham, City of King City, City of Lake Oswego, City of Tualatin, Washington County, Metro, ODOT, DLCD, DEQ, ODFW, OR Dept. of Geo. & Mineral Ind., US Army Corps of Engineers, and CWS** were notified of the proposed code text amendments but provided no comment.

**Department of State Lands** provided emailed comments primarily related to wetlands, these have been incorporated into the proposed amendments.

**City of Tigard Engineering Department** provided written comments and suggested edits on the proposed amendments. Staff incorporated many of these into the proposed amendments.

## **SECTION VI. PUBLIC COMMENTS**

The City has received the following public comments:

On March 30, 2025, staff received:

- An email from Art Bahrs requesting a copy of the proposed amendments.
- An email from Randy Killion requesting a copy of the proposed amendments.

On March 31, 2025, staff received:

- An email from Kevin Buckley requesting a copy of the proposed amendments.

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- An email and phone call from Jennifer Campbell asking what is being proposed and requesting a copy of the proposed amendments.
- An email from Randy Killion requesting a copy the map referenced in the proposed amendments.
- A phone call from Shirley Root asking what is being proposed.
- A phone call from Joan Sakagushi asking what is being proposed.
- A phone call from Ron Risberg asking what is being proposed.

On April 1, 2025, staff received:

- An email from Tom Manning asking how the amendments impact properties.
- An email from Mike Tietz requesting a copy of the proposed amendments.

On April 2, 2025, staff received a phone call from Julie Mann on what is being proposed.

On April 3, 2025, staff received:

- An email from Pasquale Pascuzzi requesting a copy of the proposed amendments.
- A phone call from Christine Broussard asking what is being proposed.
- A phone call from Sandy Pepnum asking what is being proposed.

On April 4, 2025, staff received

- An email from Steve Hilton asking what the proposed changes are and how it would impact his property.
- A phone call from Diane Swietnek expressing concerns about amendments and requesting more information about impacts to her property.
- A phone call from Sukanya Kannegundla asking what is being proposed.

On April 7, 2025, staff received:

- An email from Kimberly Shute expressing concerns about the amendments and impacts on her property.
- A phone call from Carol McAdam requesting a copy of the proposed amendments.
- A phone call from Pamela Cournoyer asking how the amendments will impact her property.
- A phone call from Michelle Burnett asking about impacts to her property and the Summerwood Village development.

On April 8, 2025, staff received:

- An email from Michelle Burnett requesting a map showing floodplain and the Summerwood Village development and asking what will occur at the public hearing.
- An email from Rob Rettig, an engineering from AKS Engineering and Forestry, LLC., asking what the proposed amendments were.
- A phone call from Zabi Ghaffari asking what is being proposed.

On April 11, 2025, an email from Zabi Ghaffari expressing support for the proposed amendments.

On April 14, 2025, an email from Amy and Matt Bloom asking for more information on the proposed amendments and their impacts on their property.

On April 15, 2025, staff received an email from Nancy Devine requesting a copy of the proposed amendments and their impacts on their property.

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On April 16, 2025, staff received an email and phone call from Michael Westfall asking what is being proposed and requesting a copy of the proposed amendments.

On April 22, 2025, staff received a phone call from Todd Ellsworth asking what is proposed and how it impacts his property. A copy of the proposed amendments was provided.

On April 26, 2025, staff received an email from Michael Westfall requesting the proposed amendments.

On April 28, 2025, staff received an email from Tiera Liby asking what is proposed and how it impacts their property, if and what the increase in insurance will be, and if the city will assist in these costs.

On May 5, 2024, staff received:

- An email from Pasquale Pascuzzi asking if the regulations impact wetlands and wetland buffers.
- Written comments from Robert Ruedy expressing concerns about property values, takings issues, and loss of tax revenue.
- An email from Patrick Winters requesting an image of where the floodplain is located on his property to place a shed.

On May 5, 2025, the Planning Commission held the public hearing on the proposed amendments, the following testimony was received:

- Randy Killion, 11825 SW Katherine Street, had questions about whether these regulations apply when flood insurance is not required and if existing structures can remain.
- Robert Ruedy, 14185 SW 100th Avenue, spoke about land takings, property value and loss of tax revenues, and compliance with the NFIP. Mr. Ruedy also submitted written comments.
- Paula Beck, 11765 SW Katherine Street, has questions about existing structures and how these regulations impact their property (specifically what is permissible and prohibited).
- Mark Gunderson, 10765 SW Ponderosa Place, expressed opposition and concerns about how these regulations would limit use of property and change our property value.
- Shelly McCargar, 11895 SW Katherine Street, expressed opposition and stated there is lots of erosion occurring along Summer Creek as well as lots of wildlife activity.
- Michael Westfall, 12180 SW Merestone Court, feels like he doesn't have enough information to know if he is against or for these regulations. He would like to know if these regulations will diminish property values or incur more costs associated with the code changes.
- Robert Clapham, 10900 SW 76<sup>th</sup> Place, received notice but his property is not within the floodplain and feels like he doesn't have enough information and what determines when a property is within the flood zone.
- Liz Jodeway, 11048 SW Greenburg Road, concerns about compensation and property values.
- Mike Stevenson, 9400 SW Burnham Street, stated he doesn't understand what is being proposed and how this affects our property values.
- Kenny Neal, 10705 SW Ponderosa Place, stated he would like to see some actionable items on what is proposed and how it will impact properties.

## EXHIBIT A

On May 7, 2025, staff received an email from Patrick Winters requesting documentation on the 1996 flood.

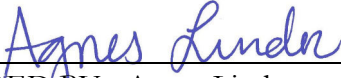
On May 8, 2025, staff received an email from Paula Beck requesting copied of all public hearing materials for both hearings, planning commission minutes, information on what is proposed within the amendments, and any proposed map changes.

On May 12, 2025, staff received an email from Forrest Reinhardt asking how the proposed amendments impact existing or future development.

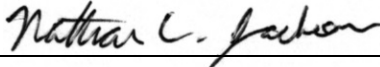
### ATTACHMENTS:

Attachments:

1. Draft Text Amendments
2. Draft Planning Commission Minutes

  
\_\_\_\_\_  
PREPARED BY: Agnes Lindor  
Senior Planner

\_\_\_\_\_  
May 13, 2025  
DATE

  
\_\_\_\_\_  
APPROVED BY: Nathan Jackson  
Planning Commission President

\_\_\_\_\_  
May 13, 2025  
DATE

**Chapter 9.10**  
**~~AREAS OF SPECIAL FLOOD HAZARD~~ AREA**

- 9.10.010. Purpose.**  
**9.10.020. Definitions.**  
**9.10.030. Applicability.**  
**9.10.040. General Provisions.**  
**9.10.050. National Flood Insurance Program General Standards.**  
**9.10.060. No Net Loss Standards.**  
**9.10.070. Violations.**

**§ 9.10.010. Purpose.**

The purpose of this chapter is to promote public health, safety, and general welfare, and to minimize public and private losses due to flooding in special flood hazard areas ~~through~~ by provisions designed to:

- A. Protect human life and health;
- B. Minimize expenditure of public money for costly flood control projects;
- C. Preserve natural and beneficial floodplain functions;**
- ~~D.~~ Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- ~~E.~~ Minimize prolonged business interruptions;
- ~~F.~~ Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in ~~areas of special flood hazard~~ areas;
- ~~G.~~ Help maintain a stable tax base by providing for the sound use and development of flood hazard areas so as to minimize blight areas caused by flooding;
- ~~H.~~ Notify potential buyers that the property is in an ~~area of special flood hazard~~ area;
- ~~I.~~ Notify those who occupy ~~areas of special flood hazard~~ area that they assume responsibility for their actions; and
- ~~J.~~ Participate in and maintain eligibility for flood insurance and disaster relief.

**9.10.020. Definitions.**

Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage. These definitions are only applicable to this chapter and Tigard Community Development Code (TCDC) Chapter 18.510, Sensitive Lands.

"Appeal" means a request for a review of the interpretation of any provision of this chapter or a request for a variance.

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

"Area of special flood hazard" means the land in the floodplain within the city subject to a one percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as Zone A, AO, AH, A1-30, AE, A99, AR. "Special flood hazard area" is synonymous in meaning and definition with the phrase "area of special flood hazard."

"Base flood" means a flood having a one percent chance of being equaled or exceeded in any given year.

"Base flood elevation (BFE)" means the elevation to which floodwater is anticipated to rise during the base flood.

"Basement" means any area of the building having its floor subgrade (below ground level) on all sides.

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

"Development" means any man-made 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.

**"Fill" means placement of any materials such as soil, gravel, crushed stone, or other materials that change the elevation of the floodplain. Placement of fill is considered "development" for the purposes of this chapter.**

**"Fish accessible space" means the volumetric space available to fish to access.**

**"Fish egress-able space" means the volumetric space available to fish to exit or leave from.**

"Flood" or "flooding" means:

1. A general and temporary condition of partial or complete inundation of normally dry land areas from:
  - a. The overflow of inland or tidal waters;
  - b. The unusual and rapid accumulation or runoff of surface waters from any source;
  - c. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in subsection 1.b of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

2. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in subsection 1.a of this definition.

Flood Elevation Study. See "Flood Insurance Study."

"Flood Insurance Rate Map (FIRM)" means the official map of the city, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the city. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

"Flood Insurance Study (FIS)" means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) or flood-related erosion hazards.

"Flood proofing" means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents.

**"Floodplain functions" mean flood storage, water quality, and riparian vegetation conditions.**

"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. Also referred to as "regulatory floodway."

"Functionally dependent use" means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long term storage or related manufacturing facilities.

**"Green infrastructure" means the use of natural or human-made hydrologic features to manage water and provide environmental and community benefits. Green infrastructure management approaches and technologies use, enhance, or mimic the natural hydrologic cycle processes of infiltration, evapotranspiration, and reuse. At a large scale, green infrastructure is an interconnected network of green spaces that conserve natural systems and provide assorted benefits to human populations. At a local scale, green infrastructure manages stormwater by infiltrating it into the ground where it is generated using vegetation or porous surfaces, or by capturing it for later reuse. Green infrastructure practices can be used to achieve no net loss of pervious surface by allowing or promoting infiltration of stormwater in an amount equal to or greater than the infiltration lost by the placement of new impervious surface.**

**"Habitat restoration activities" mean activities that have the sole purpose of restoring habitats, have only temporary impacts, and provide long-term benefits to habitat. Such projects must demonstrate that no rise in the base flood elevation would occur as a result of the project, and must obtain a CLOMR and LOMR and any other required permits (e.g., CWA Section 404 permit). Such projects cannot include ancillary structures such as a storage shed for maintenance equipment.**

**“Hazard tree” means a:**

1. **Standing dead, dying, or diseased tree;**
2. **Tree with a structural defect that makes it likely to fail in whole or in part and that present a potential hazard to a structure; or**
3. **A hazard tree as defined in Title 8, Urban Forestry.**

"Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

"Historic structure" means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
4. Individually listed on a City of Tigard Historic Resources list acknowledged by the Secretary of the Interior.

**“Hydraulically equivalent elevation” means a location (e.g., a site where “no net loss” standards are implemented) that is approximately equivalent to another (e.g., the impacted site) relative to the same 100-year water surface elevation contour or base flood elevation. This elevation may be estimated based on a point that is along the same approximate line perpendicular to the direction of flow.**

**“Hydrologically connected” means the interconnection of groundwater and surface water such that they constitute one water supply and use of either results in an impact to both.**

**“Impervious surface” means a surface that prevents or hinders the absorption of water and thereby prevents infiltration and increases the amount and rate of surface water runoff, leading to erosion of stream banks, degradation of habitat, and increased sediment loads in streams. Such surfaces can accumulate large amounts of pollutants that are then “flushed” into local water bodies during storms and can also interfere with recharge of groundwater and the base flows to water bodies.**

**“Low impact development (LID)” means an approach to land development (or redevelopment) that works with nature to manage stormwater as close to its source as possible. It employs principles such as preserving and recreating natural landscape features and minimizing effective imperviousness to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product. Low impact development refers to designing and implementing practices that can be employed at the site level to control stormwater and help replicate the predevelopment hydrology of the site. Low impact development helps achieve no net loss of pervious surface by infiltrating stormwater in an amount equal to or greater than the infiltration lost by the placement of new impervious surface. LID is a subset of green infrastructure.**

"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 non-elevation design requirements of this chapter.

"Manufactured dwelling" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured dwelling" does not include a "recreational vehicle" and is synonymous with "manufactured home."

"Manufactured dwelling park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured dwelling lots for rent or sale.

**"Mean higher-high water (MHHW)" means the average of the higher-high water height of each tidal day observed over the National Tidal Datum Epoch.**

"Mean sea level" means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on the city's Flood Insurance Rate Map are referenced.

"New construction" means, for floodplain management purposes, structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by City of Tigard and includes any subsequent improvements to such structures.

**"No net loss" means a standard where adverse impacts must be avoided or offset through adherence to certain requirements so that there is no net change in the function from the existing condition when a development application is submitted to the state, tribal, or local jurisdiction. The floodplain functions of floodplain storage, water quality, and vegetation must be maintained.**

**"Offsite" means mitigation occurring outside of the project area.**

**"Onsite" means mitigation occurring within the project area.**

**"Ordinary High Water Mark" means the line on a shore or bank that is established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas.**

**"Qualified Professional" means a person who has a minimum of a bachelor's degree in wildlife or fisheries habitat biology, or a related degree in a biological field from an accredited college or university with a minimum of four years' experience as a practicing fish or wildlife habitat biologist; or is listed on the Oregon Department of Transportation's official list of consultants qualified to provide Endangered Species Act Documentation.**

**"Reach" means a section of a stream or river along which similar hydrologic conditions exist, such as discharge, depth, area, and slope. It can also be the length of a stream or river (with varying conditions) between major tributaries or two stream gages, or a length of river for which the characteristics are well described by readings at a single stream gage.**

"Recreational vehicle" means a vehicle which is:

1. Built on a single chassis;
2. 400 square feet or less when measured at the largest horizontal projection;
3. Designed to be self-propelled or permanently towable by a light duty truck; and
4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

**“Riparian” means of, adjacent to, or living on, the bank of a river, lake, pond, or other water body.**

**“Riparian buffer zone (RBZ)” means the outer boundary of the riparian buffer zone as measured from the ordinary high water line of a fresh waterbody (lake; pond; ephemeral, intermittent, or perennial stream) or mean higher-high water line of a marine shoreline or tidally influenced river reach to 170 feet horizontally on each side of the stream or 170 feet inland from the MHHW. The riparian buffer zone includes the area between these outer boundaries on each side of the stream, including the stream channel. Where the RBZ is larger than the special flood hazard area, the “no net loss” standards shall only apply to the area within the special flood hazard area.**

**“Riparian buffer zone fringe” means the area outside of the RBZ and floodway but still within the SFHA.**

**“Silviculture” means the art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands.**

**“Special Flood Hazard Area (SFHA)”**. See "Area of special flood hazard" ~~for this definition~~.

"Start of construction" includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days from the date of the permit. 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 dwelling on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. 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.

"Structure" means, for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured dwelling.

"Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.

"Substantial improvement" means any reconstruction, rehabilitation, addition, or other improvement of a

structure, the cost of which equals or exceeds 50% of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
2. Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

**"Undeveloped Space" means the volume of flood capacity and fish-accessible/egress-able habitat from the existing ground to the Base Flood Elevation that is undeveloped. Any form of development including, but not limited to, the addition of fill, structures, concrete structures (vaults or tanks), pilings, levees and dikes, or any other development that reduces flood storage volume and fish accessible/egress-able habitat must achieve the "no net loss" standards.**

"Violation" means the failure of a structure or other development to be fully compliant with the city's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this chapter is presumed to be in violation until such time as that documentation is provided.

#### **9.10.030. Applicability.**

- A. All development within ~~areas of~~ special flood hazard areas is subject to the terms of this chapter and is required to comply with its provisions and all other applicable regulations including, but not limited to, TCDC Chapter 18.510, Sensitive Lands.
- B. The ~~areas of~~ special flood hazard areas identified by FEMA in a scientific and engineering report entitled "The Flood Insurance Study for Washington County, Oregon and Incorporated Areas effective October 19, 2018" with accompanying Flood Insurance Map (FIRM Panels: 41067C0529F, 41067C0533E, 41067C0534E, 41067C0541E through 41067C0544E, and 41067C0563E) is hereby adopted by reference and declared to be a part of this chapter.

#### **9.10.040. General Provisions.**

- A. Coordination with State of Oregon Specialty Codes. Pursuant to the requirement established in ORS 455 that the City of Tigard administers and enforces the State of Oregon Specialty Codes, the City of Tigard does hereby acknowledge that the Oregon Specialty Codes contain certain provisions that apply to the design and construction of buildings and structures located in ~~areas of~~ special flood hazard areas. Therefore, this chapter is intended to be administered and enforced in conjunction with the Oregon Specialty Codes.
- B. Warning. The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This chapter does not imply that land outside the ~~areas of~~ special flood hazards areas or uses permitted within such areas will be free from flooding or flood damages.

- C. Permit Review. The duties of the Floodplain Administrator, or their designee, ~~shall~~ include, but are not ~~be~~ limited to, review of all development permits to ~~determine that~~:
1. Determine that the The permit requirements of this ordinance have been satisfied;
  2. Determine that all All other required local, state, and federal permits have been obtained and approved;
  3. ~~Review all development permits to d~~ Determine if the proposed development is located in a floodway.
    - a. If located in the floodway, assure that the floodway provisions are met;
    - b. ~~4. Review all development permits to d~~ Determine if the proposed development is located in an area where base flood elevation data is available either through the Flood Insurance Study or from another authoritative source. If base flood elevation data is not available then ensure compliance with the provisions of Section 9.10.050.J; and
    - c. ~~5.~~ Provide to building officials the base flood elevation applicable to any building requiring a development permit;
  4. ~~6. Review all development permit applications to d~~ Determine if the proposed development qualifies as a substantial improvement as defined by Section 9.10.020;
  5. ~~7. Review all development permits to d~~ Determine if the proposed development activity is a watercourse alteration. If a watercourse alteration is proposed, ensure compliance with the provisions in Section 9.10.050.C; ~~and~~
  6. ~~8. Review all development permits to d~~ Determine if the proposed development activity includes the placement of fill or excavation; and;
  7. Determine whether the proposed development activity complies with the “no net loss” standards in Section 9.10.060.
- D. Information to be Obtained and Maintained. The following information shall be obtained and maintained and shall be made available for public inspection as needed:
1. Obtain, record, and maintain the actual elevation (in relation to mean sea level) of the lowest floor (including basements) and all attendant utilities of all new or substantially improved structures where base flood elevation data is provided through the Flood Insurance Study, Flood Insurance Rate Map, or obtained in accordance with Section 9.10.050.J.
  2. Obtain and record the elevation (in relation to mean sea level) of the natural grade of the building site for a structure prior to the start of construction and the placement of any fill and ensure that the requirements of Section 9.10.050.N are adhered to and all other required local, state, and federal permits have been obtained and approved.
  3. Upon placement of the lowest floor of a structure (including basement) but prior to further vertical construction, obtain documentation, prepared and sealed by a professional licensed

surveyor or engineer, certifying the elevation (in relation to mean sea level) of the lowest floor (including basement).

4. Where base flood elevation data are utilized, obtain record drawing certification of the elevation (in relation to mean sea level) of the lowest floor (including basement) prepared and sealed by a professional licensed surveyor or engineer, prior to the final inspection.
5. Maintain all elevation certificates submitted to the City of Tigard.
6. Obtain, record, and maintain the elevation (in relation to mean sea level) to which the structure and all attendant utilities were floodproofed for all new or substantially improved floodproofed structures where allowed under this chapter and where base flood elevation data is provided through the FIS, FIRM, or obtained in accordance with Section 9.10.050.J.
7. Maintain all floodproofing certificates required under this chapter.
8. Record and maintain all variance actions, including justification for their issuance.
9. Obtain and maintain all hydrologic and hydraulic analyses performed as required under Section 9.10.050.N.
10. Record and maintain all substantial improvement and substantial damage calculations and determinations as required under ~~sub~~Section 9.10.040.H.

**11. Maintain documentation of how the “no net loss” standards have been met (see Section 9.10.060).**

1244. Maintain for public inspection all records pertaining to the provisions of this chapter.

- E. City Boundary Alterations. The Floodplain Administrator shall notify the Federal Insurance Administrator in writing whenever the boundaries of the city have been modified by annexation or the city has otherwise assumed authority or no longer has authority to adopt and enforce floodplain management regulations for a particular area, to ensure that all Flood Hazard Boundary Maps and Flood Insurance Rate Maps accurately represent the city's boundaries. The notification will include a copy of a map of the city suitable for reproduction, clearly delineating the new corporate limits or new area for which the city has assumed or relinquished floodplain management regulatory authority.
- F. Watercourse Alterations. The Floodplain Administrator shall notify adjacent communities, the Department of Land Conservation and Development, and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration. This notification shall be provided by the applicant to the Federal Insurance Administration as a Letter of Map Revision along with either a proposed maintenance plan to assure the flood carrying capacity within the altered or relocated portion of the watercourse is maintained; or certification by a registered professional engineer that the project has been designed to retain its flood carrying capacity without periodic maintenance. The applicant shall be required to submit a Conditional Letter of Map Revision when required under ~~subsection~~Section 9.10.040.G to ensure compliance with all applicable requirements in ~~subsection~~Sections 9.10.040.G and ~~Section~~ 9.10.050.C.

- G. Requirement to Submit New Technical Data. The city's base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, the city must notify the Federal Insurance Administrator of the changes by submitting technical or scientific data in accordance with Title 44 of the Code of Federal Regulations (CFR), Section 65.3. The city may require the applicant to submit such data and review fees required for compliance with this section through the applicable FEMA Letter of Map Change process. The Floodplain Administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for proposed floodway encroachments that increase the base flood elevation and proposed development which increases the base flood elevation by more than one foot in areas where FEMA has provided base flood elevations but no floodway. An applicant shall notify FEMA within six months of project completion when an applicant has obtained a Conditional Letter of Map Revision from FEMA. This notification to FEMA shall be provided as a Letter of Map Revision.
- H. Substantial Improvement and Substantial Damage Assessments and Determinations. The Floodplain Administrator shall:
1. Conduct substantial improvement (as defined in Section 9.10.020) reviews for all structural development proposal applications and maintain a record of Substantial Improvement calculations within permit files in accordance with ~~subsection~~ **Section 9.10.040.D**.
  2. Conduct substantial damage assessments when structures are damaged due to a natural hazard event or other causes.
  2. Make substantial damage determinations whenever structures within the ~~area of~~ special flood hazard **area** (as established in Section 9.10.030.B) are damaged to the extent that the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.
- I. Floodplain Development Permit Required. A development permit shall be obtained before construction or development begins within any area horizontally within the ~~area of~~ special flood hazard **area** established in Section 9.10.030.B. The development permit shall be required for all structures, including manufactured dwellings, and for all other development, as defined in Section 9.10.020, including fill and other development activities.
- J. Application for Development Permit. Application for a development permit may be made on forms furnished by the Floodplain Administrator and may include, but not be limited to, plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required:
1. In riverine flood zones, the proposed elevation (in relation to mean sea level), of the lowest floor (including basement) and all attendant utilities of all new and substantially improved structures; in accordance with the requirements of ~~subsection~~ **Section 9.10.040.D**;
  2. Proposed elevation in relation to mean sea level to which any nonresidential structure will be floodproofed;
  3. Certification by a registered professional engineer or architect licensed in the State of Oregon that

the floodproofing methods proposed for any nonresidential structure meet the floodproofing criteria for nonresidential structures in Section 9.10.050.M.3;

4. Description of the extent to which any watercourse will be altered or relocated;
5. Base flood elevation data for subdivision proposals or other development when required by this chapter;
6. Substantial improvement calculation for any improvement, addition, reconstruction, renovation, or rehabilitation of an existing structure; and
7. The amount and location of any fill or excavation activities proposed.

**K. No Net Loss. In accordance with the terms of the NMFS 2016 Biological Opinion, mitigation is necessary to ensure no net loss in floodplain functions. FEMA's 2024 Draft Oregon Implementation Plan identifies proxies that provide measurable actions that can prevent the net loss of the parent floodplain functions. These proxies include undeveloped space, pervious surfaces, and trees to account for no net loss in respective floodplain functions of floodplain storage, water quality, and vegetation. Mitigation of these proxies must be completed to ensure compliance with "no net loss" standards. "No net loss" standards apply to the net change in floodplain functions as compared to existing conditions at the time of proposed development and mitigation must be addressed to the floodplain function that is receiving the detrimental impact. The standards described below apply to all special flood hazard areas as defined in Section 9.10.020.**

**LK.** Severability. This chapter and the various parts thereof are hereby declared to be severable. If any section clause, sentence, or phrase of this chapter is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this chapter.

**ML.** Abrogation. This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another provision, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

#### **9.10.050. National Flood Insurance Program General Standards.**

In all areas of special flood hazard areas, the **"no net loss" standards in Section 9.10.060 and the** following standards shall be adhered to:

- A. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- B. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
- C. Alteration of Watercourses. The Floodplain Administrator shall require that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained and that maintenance is provided within the altered or relocated portion of said watercourse to ensure that the

flood carrying capacity is not diminished. Compliance with Sections 9.10.040.F and G.

- D. Anchoring. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. All manufactured dwellings shall be anchored in accordance with subsection Section 9.10.050.M.4.
- E. Water Supply, Sanitary Sewer, and On-Site Waste Disposal Systems.
1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
  2. 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.
  3. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with Oregon Department of Environmental Quality regulations.
- F. Electrical, Mechanical, Plumbing, and Other Equipment. Electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall be elevated at or above the base flood level or shall be designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during conditions of flooding. In addition, electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall, if replaced as part of a substantial improvement, meet all the requirements of this section.
- G. Tanks. Underground tanks shall be anchored to prevent flotation, collapse and lateral movement under conditions of the base flood. Above-ground tanks shall be installed at or above the base flood level or shall be anchored to prevent flotation, collapse, and lateral movement under conditions of the base flood.
- H. Critical Facilities. Construction of new critical facilities must be, to the extent practicable, located outside ~~the areas of~~ special flood hazard area.
1. Construction of new critical facilities, other than critical bridges, are allowed within ~~the areas of~~ special flood hazard area if no feasible alternative site is available and the following applicable criteria are met:
    - a. Critical facilities constructed within ~~the areas of~~ special flood hazard area must have the lowest floor elevated three feet above base flood elevation or to the height of the 500-year flood, whichever is higher.
    - b. To the extent practicable, access to and from the critical facility should also be protected to three feet above base flood elevation or to the height of the 500-year flood, whichever is higher.
    - c. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.

2. All new and replacement critical bridges must have the lowest extension of the bridge superstructure elevated three feet above base flood elevation or to the height of the 500-year flood, whichever is higher.
3. Where standard ~~in sub~~Section 9.10.050.H.2 cannot be met, an analysis of alternative bridge designs is required by a registered professional civil engineer. The proposed encroachment will result in the least impact to base flood levels in the ~~area of~~ special flood hazard area of the practicable alternative bridge designs — as demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice.

I. Subdivision Proposals.

1. All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions) greater than 50 lots or five acres, whichever is the lesser, shall include within such proposals, base flood elevation data.
2. All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions) shall:
  - a. Be consistent with the need to minimize flood damage;
  - b. Have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage; ~~and~~
  - c. Have adequate drainage provided to reduce exposure to flood hazards.

- J. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with Section 9.10.030.B the local floodplain administrator shall obtain, review, and reasonably utilize any base flood elevation data available from a federal, state, or other source, in order to administer Section 9.10.050. All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions) must meet the requirements of ~~subsection~~Section 9.10.050.I. Base flood elevations shall be determined for development proposals that are five acres or more in size or are 50 lots or more, whichever is lesser in any A Zone that does not have an established base flood elevation. Development proposals located within a riverine unnumbered A Zone shall be reasonably safe from flooding; the test of reasonableness includes use of historical data, high water marks, FEMA provided base level engineering data, and photographs of past flooding, etc. When no base flood elevation data is available, the elevation requirement for development proposals within a riverine unnumbered A Zone is a minimum of two feet above the highest adjacent grade, to be reasonably safe from flooding. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

K. Structures Located in Multiple or Partial Flood Zones. In coordination with the State of Oregon Specialty Codes:

1. When a structure is located in multiple flood zones on the city's pertinent Flood Insurance Rate Maps (FIRMs) the provisions for the more restrictive flood zone shall apply.
2. When a structure is partially located in ~~the area of~~ special flood hazard area, the entire

structure shall meet the requirements for new construction and substantial improvements.

- L. Specific Standards for Riverine (Including All Non-Coastal) Flood Zones. These specific standards shall apply to all new construction and substantial improvements in addition to the general standards contained in ~~subsections~~ **Sections 9.10.050.A through K and the “no net loss” standards in Section 9.10.060.**
1. Flood Openings. All new construction and substantial improvements with fully enclosed areas below the lowest floor (excluding basements) are subject to the following requirements. Enclosed areas below the base flood elevation, including crawl spaces shall:
    - a. Be designed to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exist of floodwaters;
    - b. Be used solely for parking, storage, or building access; and
    - c. Be certified by a registered professional engineer or architect or meet or exceed all of the following minimum criteria:
      - i. A minimum of two openings,
      - ii. The total net area of non-engineered openings shall be not less than one square inch for each square foot of enclosed area, where the enclosed area is measured on the exterior of the enclosure walls,
      - iii. The bottom of all openings shall be no higher than one foot above grade,
      - iv. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they shall allow the automatic flow of floodwater into and out of the enclosed areas and shall be accounted for in the determination of the net open area, and
      - v. All additional higher standards for flood openings in the State of Oregon Residential Specialty Codes Section R322.2.2 shall be complied with when applicable.
  2. Garages. Attached garages may be constructed with the garage floor slab below the base flood elevation in riverine flood zones, if the following requirements are met:
    - a. If located within a floodway the proposed garage must comply with the requirements of ~~subsection~~ **Section 9.10.050.N;**
    - b. The floors are at or above grade on at least than one side;
    - c. The garage is used solely for parking, building access, and/or storage;
    - d. The garage is constructed with flood openings in compliance with ~~subsection~~ **Section 9.10.050.L.1** to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater;
    - e. The portions of the garage constructed below the base flood elevation are constructed with

- materials resistant to flood damage;
- f. The garage is constructed in compliance with the general standards ~~subsections~~Sections 9.10.050.A through K; and
  - g. The garage is constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.
3. Detached Garages. Detached garages must be constructed in compliance with the standards for appurtenant structures in ~~subsection~~Section 9.10.050.M.6 or nonresidential structures in ~~subsection~~Section 9.10.050.M.3 depending on the square footage of the garage.
- M. For Riverine (Non-Coastal) ~~Areas of Special Flood Hazard~~ Areas with Base Flood Elevations. In addition to the general standards in ~~subsections~~Sections 9.10.050.A through K, the following specific standards shall apply in riverine (non-coastal) ~~areas of special flood hazard~~ areas with base flood elevations: Zones A1-A30, AH, and AE:
1. Before Regulatory Floodway. In areas where a regulatory floodway has not been designated, no new construction, substantial improvement, or other development (including fill) shall be permitted within Zones A1-30 and AE on the city's Flood Insurance Rate Map (FIRM), unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood at any point within the city and will not result in the net loss of flood storage volume. When determined that structural elevation is not possible and where the placement of fill cannot meet the above standard, impacts to undeveloped space must adhere to the "no net loss" standards in Section 9.10.060.
  2. Residential Construction.
    - a. New construction, conversion to, and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated at one foot above the base flood elevation.
    - b. Enclosed areas below the lowest floor shall comply with the flood opening requirements in ~~subsection~~Section 9.10.050.L.1.
  3. Nonresidential Construction.
    - a. New construction, conversion to, and substantial improvement of, any commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated at one foot above the base flood elevation. Or, together with attendant utility and sanitary facilities:
      - i. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
      - ii. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

- iii. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this section based on their development or review of the structural design, specifications and plans. Such certifications shall be provided to the Floodplain Administrator as set forth Section 9.10.040.D.
  - b. Nonresidential structures that are elevated, not floodproofed, shall comply with the standards for enclosed areas below the lowest floor in ~~subsection~~ **Section 9.10.050.L.1**.
  - c. 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 the base flood level will be rated as one foot below).
4. Manufactured Dwellings.
  - a. Manufactured dwellings to be placed (new or replacement) or substantially improved that are supported on solid foundation walls shall be constructed with flood openings that comply with ~~subsection~~ **Section 9.10.050.L.1**;
  - b. The bottom of the longitudinal chassis frame beam shall be at or above base flood elevation;
  - c. Manufactured dwellings to be placed (new or replacement) or substantially improved shall be anchored to prevent flotation, collapse, and lateral movement during the base flood. 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); and
  - d. Electrical crossover connections shall be a minimum of 12 inches above base flood elevation (BFE).
5. Recreational Vehicles. Recreational vehicles placed on sites are required to:
  - a. Be on the site for fewer than 180 consecutive days; and
  - b. Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
  - c. Meet the requirements of ~~subsection~~ **Section 9.10.050.M.4**, including the anchoring and elevation requirements for manufactured dwellings.
6. Appurtenant (Accessory) Structures. Relief from elevation or floodproofing requirements for residential and nonresidential structures in Riverine (non-coastal) flood zones may be granted for appurtenant structures that meet the following requirements:
  - a. Appurtenant structures located partially or entirely within the floodway must comply with requirements for development within a floodway found in ~~subsection~~ **Section 9.10.050.N**;

- b. Appurtenant structures must only be used for parking, access, or storage and shall not be used for human habitation;
  - c. Appurtenant structures on properties are limited to one-story structures less than 600 square feet in A zones and must meet applicable setbacks from property lines;
  - d. The portions of the appurtenant structure located below the base flood elevation must be built using flood resistant materials;
  - e. The appurtenant structure must be adequately anchored to prevent flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood;
  - f. The appurtenant structure must be designed and constructed to equalize hydrostatic flood forces on exterior walls and comply with the requirements for flood openings in ~~subsection~~ **Section 9.10.050.L.1**;
  - g. Appurtenant structures shall be located and constructed to have low damage potential;
  - h. Appurtenant structures shall not be used to store toxic material, oil, or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality unless confined in a tank installed in compliance with ~~subsection~~ **Section 9.10.050.G**; and
  - i. Appurtenant structures shall be constructed with electrical, mechanical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.
- N. Floodways. Located within the ~~area of~~ special flood hazard **areas** established in Section 9.10.030.B are areas designated as floodways. Because the floodway is an extremely hazardous area due to the velocity of the floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:
- 1. Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless:
    - a. Certification by a registered professional civil 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 within the city during the occurrence of the base flood discharge; or
    - b. A city may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that a ~~C~~conditional Letter of Map Revision is applied for and approved **approval has been obtained from** by the Federal Insurance Administrator **through the Conditional Letter of Map Revision (CLOMR) application process**, and the requirements for such revision as all **requirements** established under Volume 44 of the Code of Federal Regulations, Section 65.12 are fulfilled, **and the encroachments comply with the “no net loss” standards in Section 9.10.060.**
  - 2. If the requirements of ~~subsection~~ **Section 9.10.050.N.1** are satisfied, all new construction,

substantial improvements, and other development shall comply with all other applicable flood hazard reduction provisions of Section 9.10.050.

- O. Standards for Shallow Flooding Areas. Shallow flooding areas appear on FIRMs as AO Zones with depth designations or as AH Zones with base flood elevations. For AO Zones the base flood depths range from one to three feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. For both AO and AH Zones, adequate drainage paths are required around structures on slopes to guide floodwaters around and away from proposed structures.
1. Standards for AH Zones. Development within AH Zones must comply with the standards in ~~subsection~~ **Section 9.10.050**.A through O.
  2. Standards for AO Zones. In AO zones, the following provisions apply in addition to the requirements in ~~subsection~~ **Section 9.10.050**.A through K and O.
    - a. New construction, conversion to, and substantial improvement of residential structures and manufactured dwellings within AO Zones shall have the lowest floor, including basement, elevated above the highest grade adjacent to the building, at minimum to or above the depth number specified on the Flood Insurance Rate Maps or at least two feet if no depth number is specified. For manufactured dwellings the lowest floor is considered to be the bottom of the longitudinal chassis frame beam.
    - b. New construction, conversion to, and substantial improvements of nonresidential structures within AO Zones shall either:
      - i. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, at minimum to or above the depth number specified on the Flood Insurance Rate Maps or at least two feet if no depth number is specified; or
      - ii. Together with attendant utility and sanitary facilities, be completely floodproofed to or above the depth number specified on the Flood Insurance Rate Map or a minimum of two feet above the highest adjacent grade if no depth number is specified, so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as stated in ~~subsection~~ **Section 9.10.050**.M.3.a.iii.
    - c. Recreational vehicles placed on sites within AO Zones on the city's Flood Insurance Rate Maps shall either:
      - i. Be on the site for fewer than 180 consecutive days; and
      - ii. Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
      - iii. Meet the elevation requirements of ~~subsection~~ **Section 9.10.050**.O.2.a, and the anchoring

and other requirements for manufactured dwellings of ~~subsection~~ Section 9.10.050.M.4.

- d. In AO Zones, new and substantially improved appurtenant structures must comply with the standards in ~~subsection~~ Section 9.10.050.M.6.
- e. In AO zones, enclosed areas beneath elevated structures shall comply with the requirements in ~~subsection~~ Section 9.10.050.L.1.

**9.10.060. No Net Loss Standards.**

**A. General Provisions.**

1. All development in the special flood hazard area that would reduce undeveloped space, increase impervious surface, or result in a loss of trees that are 6-inches dbh or greater must achieve no net loss of the proxies for the floodplain functions. “No net loss” standards can be achieved by first avoiding negative effects to floodplain functions to the greatest degree practicable, then by minimizing remaining effects, then by replacing and/or otherwise compensating for, offsetting, or rectifying the residual adverse effects to the three floodplain functions.
2. Compliance with “no net loss” standards for undeveloped space or impervious surface must occur prior to the loss of habitat function or concurrent with the loss.
3. Mitigations that meet “no net loss” standards must be provided within, in order of preference: 1) the lot or parcel that floodplain functions were removed from, 2) the same reach of the waterbody where the development is proposed, or 3) the special flood hazard area within the same hydrologically connected area as the proposed development. Table 9.10 presents the no net loss mitigation ratios, which increase based on the preferences listed above.

**B. Undeveloped space. Development proposals must not reduce the fish-accessible and egress-able habitat and flood storage volume created by undeveloped space within the special flood hazard area. A development proposal with an activity that would impact undeveloped space must achieve no net loss of fish-accessible and egress-able space and flood storage volume. Lost undeveloped space must be replaced with fish-accessible and egress-able compensatory volume based on the ratios in Table 9.10; must be hydrologically connected to the waterbody that is the flooding source; and must be designed so that there is no increase in velocity.**

**C. Impervious surfaces. Impervious surface mitigation must be mitigated through any of the following options:**

1. Development proposals must not result in a net increase in impervious surface area within the special flood hazard area through the use of ratios prescribed in Table 9.10 or
2. Use low impact development or green infrastructure to infiltrate and treat stormwater produced by the new impervious surface, as documented by a registered professional engineer, or
3. If prior methods are not feasible and documented by registered professional engineer stormwater retention is required to ensure no increase in peak volume or flow and to maximize infiltration, and treatment is required to minimize pollutant loading. See Section 9.10.060.E.3 for stormwater retention specifications.

D. Trees. Development proposals must result in no net loss of trees 6-inches dbh or greater within the special flood hazard area.

1. Trees of or exceeding 6-inches dbh that are removed from the RBZ, Floodway, or RBZ-fringe must be replaced at the ratios in Table 9.10 and planted within the special flood hazard area.
2. Replacement trees must be a native species that would occur naturally in the Level III ecoregion of the impact area.

E. Stormwater Management. Any development proposal that cannot mitigate as specified in Sections 9.10.060.C.1 and 9.10.060.C.2 must include the following:

1. Water quality (pollution reduction) treatment for post-construction stormwater runoff from any net increase in impervious area. Water quality facilities must treat stormwater to remove sediment and pollutants from impervious surfaces such that at least 80 percent of the suspended solids are removed from the stormwater prior to discharging to the receiving water body; and
2. Water quantity treatment (retention or detention facilities). Retention and detention facilities must:
  - a. Limit discharge to match the pre-development peak discharge rate (i.e., the discharge rate of the site based on its natural groundcover and grade before any development occurred) for the 10-year peak flow using a continuous simulation for flows between 50 percent of the 2-year flow event and the 10-year flow event (annual series).
  - b. Be designed to not entrap fish.
  - c. Be certified by a registered professional engineer.
  - d. Drain to the source of flooding.
3. Stormwater treatment facilities serving multiple lots or parcels, including subdivisions, must have an enforceable operation and maintenance agreement to ensure the system functions as designed. This agreement must include:
  - a. Recorded access to stormwater treatment facilities at the site by the City of Tigard for the purpose of inspection and repair.
  - b. A legally binding document specifying the parties responsible for the proper maintenance of the stormwater treatment facilities. The agreement will be recorded and bind subsequent purchasers and sellers even if they were not party to the original agreement.
  - c. For stormwater controls that include vegetation and/or soil permeability, the operation and maintenance manual must include maintenance of these elements to maintain the functionality of the feature.
  - d. The responsible party for the operation and maintenance of the stormwater facility must have

the operation and maintenance manual on site and available at all times. Records of the maintenance and repairs shall be retained and made available for inspection by the City of Tigard for five years.

F. Exempt Activities. The following activities are not subject to the “no net loss” standards; however, they may be subject to other floodplain development permit requirements.

1. Normal maintenance of structures, such as re-roofing and replacing siding, provided there is no change in the footprint or expansion of the roof of the structure.
2. Normal street, sidewalk, and road maintenance, including but not limited to filling potholes, repaving, and installing signs and traffic signals, that does not alter contours, use or alter culverts, and is less than six inches above grade. Any expansion of paved areas is not an exempt activity.
3. Routine maintenance of landscaping that does not involve grading, excavation, or filling.
4. Routine agricultural practices such as tilling, plowing, harvesting, soil amendments, and ditch cleaning that does not alter the ditch configuration, provided the spoils are removed from special flood hazard area or tilled into fields as a soil amendment.
5. Routine silvicultural practices (harvesting of trees), including hazardous fuels reduction and hazard tree removal, as long as root balls are left in place.
6. Removal of noxious weeds and hazard trees, and replacement of non-native vegetation with native vegetation.
7. Normal maintenance of above ground utilities and facilities, such as replacing downed power lines and utility poles, provided there is no net change in footprint.
8. Normal maintenance of a levee or other flood control facility prescribed in the operations and maintenance plan for the levee or flood control facility. Normal maintenance does not include repair from flood damage, expansion of the prism, expansion of the face or toe, or addition of protection on the face or toe with rock armor.
9. Habitat restoration activities.
10. Pre-emptive removal of documented susceptible trees to manage the spread of invasive species.
11. Projects that are covered under separate consultations under Section 4(d), 7, or 10 of the Endangered Species Act (ESA).

G. Riparian Buffer Zone (RBZ).

1. The Riparian Buffer Zone is measured from the ordinary high-water line of a fresh waterbody (lake; pond; ephemeral, intermittent, or perennial stream) or mean higher-high water of a marine shoreline or tidally influenced river reach to 170 feet horizontally on each side of the stream or inland of the MHHW. The riparian buffer zone includes the area between these outer boundaries on each side of the stream, including the stream channel.

2. Functionally dependent uses are only subject to the “no net loss” standards in Sections 9.10.060.A through D for development in the RBZ. Ancillary features that are associated with but do not directly impact the functionally dependent use in the RBZ (including manufacturing support facilities and restrooms) are subject to the beneficial gain standard of Subsection 9.10.060.G.4, in addition to “no net loss” standards.
3. Any other use of the RBZ requires a greater offset to achieve no net loss of floodplain functions, on top of the “no net loss” standards described above, through the beneficial gain standard of Subsection 9.10.060.G.4.
4. Under FEMA’s beneficial gain standard, an area within the same reach of the project and equivalent to 5% of the total project area within the RBZ must be planted with native herbaceous, shrub, and tree vegetation.

**Table 9.10 “No Net Loss” Mitigation Standards**

<u>Basic Mitigate Ratios</u>	<u>Undeveloped Space (ft3)</u>	<u>Impervious Surface (ft2)</u>	<u>Trees (6”&lt;dbh&lt;20”)</u>	<u>Trees (20”&lt;dbh&lt;39”)</u>	<u>Trees (39”&lt;dbh)</u>
<u>RBZ and Floodway</u>	<u>2:1</u>	<u>1:1</u>	<u>3:1</u>	<u>5:1</u>	<u>6:1</u>
<u>RBZ-Fringe</u>	<u>1.5:1</u>	<u>1:1</u>	<u>2:1</u>	<u>4:1</u>	<u>5:1</u>
<b><u>Mitigation Multipliers:</u></b>					
<u>Mitigation onsite to Mitigation offsite, same reach</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
<u>Mitigation onsite to Mitigation offsite, different reach, same watershed (5th field)</u>	<u>200%</u>	<u>200%</u>	<u>200%</u>	<u>200%</u>	<u>200%</u>

**Notes:**

1. Mitigation multipliers of 100% result in the required mitigation occurring at the same value described by the ratios above, while multipliers of 200% result in the required mitigation being doubled. For example, if a development would create 1,000 square feet of new impervious surface, then 1,000 square feet of new pervious surface would need to be created. However, if only 500 square feet can be created within the same reach, the remaining 500 square feet created within a different reach would need to be double the required amount because of the 200 percent multiplier. In other words, another 1,000 square feet of pervious surface would need to be created at the location in the different reach, in addition to the 500 square feet created within the same reach.

**9.10.0760. Violations.**

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, including, but not limited to, TCDC Chapter 18.510, Sensitive Lands. Violations of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a Class 1 civil infraction, processed according to the procedures in the civil infractions ordinance, set out in TMC Chapter 1.16. Each violation of a separate provision of this chapter shall constitute a separate infraction, and each day that a violation of this chapter is committed or

permitted to continue shall constitute a separate infraction. A finding of a violation of this chapter shall not relieve the responsible party of the duty to abate the violation. The penalties imposed by this section are in addition and not in lieu of any remedies available to the city. If a provision of this chapter is violated by a firm or corporation, the officer or officers, or person or persons responsible for the violation shall be subject to the penalties imposed by this chapter. Nothing contained herein shall prevent the City of Tigard from taking such other lawful action as is necessary to prevent or remedy any violation.

## Chapter 18.510 Sensitive Lands

18.510.010	<b>Purpose.</b>
18.510.020	<b>Applicability.</b>
18.510.030	<b><del>Administrative</del> <u>General Provisions.</u></b>
18.510.040	<b><del>Reserved.</del> <u>Review Process.</u></b>
18.510.050	<b><del>General Provisions for Wetlands.</del> <u>Review Type Determination</u></b>
18.510.060	<b><del>Approval Period and Extensions.</del> <u>Reserved.</u></b>
18.510.070	<b><del>Sensitive Lands Applications.</del> <u>Approval Criteria</u></b>
18.510.080	<b>Special Provisions within Locally Significant Wetlands and Along the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek.</b>
18.510.090	<b>Density Transfer and Reductions.</b>
18.510.100	<b>Plan Amendment Option.</b>
18.510.110	<b>Significant Habitat Areas Map Verification Procedures.</b>

### 18.510.010. Purpose.

- A. Maintain integrity of rivers, streams, and creeks. Sensitive land regulations in this chapter are intended to maintain the integrity of the rivers, streams, and creeks in Tigard by minimizing erosion, promoting bank stability, maintaining and enhancing water quality and fish and wildlife habitats, and preserving scenic quality and recreation potential.
- B. Implement comprehensive plan and floodplain management program. The regulations of this chapter apply to all ~~areas~~ of special flood hazard areas within the City of Tigard. These regulations are intended to implement the comprehensive plan and the city's floodplain management program as required by the Federal Emergency Management Agency (FEMA) through the National Flood Insurance Program, to help to preserve sensitive land areas from encroaching use, and to maintain the October 19, 2018, zero-foot rise floodway elevation. All development within ~~the areas~~ of special flood hazard areas is subject to the terms of this ordinance and required to comply with its provisions and all other applicable regulations including Tigard Municipal (TMC) Chapter 9.10.
- C. Implement Clean Water Service (CWS) design and construction standards. The regulations of this chapter are intended to protect the beneficial uses of water within the Tualatin River Basin in compliance with the CWS "Design and Construction Standards."
- D. Implement the Metro Urban Growth Management Functional Plan. The regulations of this chapter are intended to protect the beneficial water uses and functions and values of resources within water quality and flood management areas and to implement the performance standards of the Metro Urban Growth Management Functional Plan.
- E. Implement Statewide Planning Goal 5 (Natural Resources). The regulations in this chapter are intended to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule pertaining to wetland and riparian corridors.
- F. Protect public health, safety, and welfare. Sensitive land areas are designated as such to protect the public health, safety, and welfare of the community through the regulation of these sensitive land

areas.

~~G. Location. Sensitive lands are lands potentially unsuitable for development because of their location within:~~

- ~~1. The areas of special flood hazard or 1996 flood inundation line, whichever is greater;~~
- ~~2. Natural drainageways;~~
- ~~3. Wetland areas that are regulated by the other agencies including the U.S. Army Corps of Engineers and the Division of State Lands, or are designated as significant wetland on the City of Tigard "Wetland and Stream Corridors Map";~~
- ~~4. Steep slopes of 25% or greater and unstable ground;~~
- ~~5. Significant fish and wildlife habitat areas designated on the City of Tigard "Significant Habitat Areas Map"; and~~
- ~~6. Significant tree groves as shown on the "City of Tigard Significant Tree Grove Map." (Ord. 17-22 §2; Ord. 18-21 §2; Ord. 20-01 §1; Ord. 23-09, 12/12/2023)~~

**18.510.020. Applicability.**

**A. The standards and procedures in this chapter apply to the following sensitive lands within the City of Tigard:**

- 1. The special flood hazard area or 1996 flood inundation line, whichever is greater.**
- 2. Drainageways.**
- 3. Wetlands that appear on the City of Tigard "Wetland and Stream Corridors Map" as either:**
  - a. Locally significant, or**
  - b. Non-significant and not subject to the regulatory authority of other agencies including the U.S. Army Corps of Engineers and the Department of State Lands.**
- 4. Steep slopes, which for the purposes of this chapter, are slopes of 25% or greater.**

**B. The following sensitive lands are defined as sensitive lands for the purposes of this title, including but not limited to Title 8 Urban Forestry, but are not regulated by this chapter:**

- 1. Significant fish and wildlife habitat areas designated on the City of Tigard "Significant Habitat Areas Map".**
- 2. Significant tree groves as shown on the "City of Tigard Significant Tree Grove Map."**
- 3. Wetlands that meet the jurisdictional requirements and subject to regulatory authority of the U.S. Army Corps of Engineers, Department of State Lands, CWS, or other federal, state, or regional agencies.**

18.510.030. General Provisions

- A. Interagency coordination. All necessary approvals must be obtained from all federal, state, or local governmental agencies, where applicable. All development applications must include a service provider letter from Clean Water Services.
- B. Other uses. Except as explicitly authorized by the provisions of this chapter, all uses are prohibited within sensitive lands.
- C. Nonconforming circumstances. Uses and developments established prior to the effective date of this title that would be either prohibited by this chapter or subject to limitations and controls imposed by this chapter are considered legal nonconforming circumstances and are subject to the provisions of Chapter 18.50, Nonconforming Circumstances.
- D. Wetlands.
1. Wetland regulations apply to those areas classified as significant on the City of Tigard "Wetland and Streams Corridors Map," and to a vegetated corridor ranging from 25 to 200 feet wide, measured horizontally, from the defined boundaries of the wetland, as provided in "Table 3.1, Vegetated Corridor Widths," and "Appendix C, Natural Resource Assessments," of the CWS "Design and Construction Standards." Wetland locations may include but are not limited to those areas identified as wetlands in "Wetland Inventory and Assessment for the City of Tigard, Oregon," prepared by Fishman Environmental Services, December 1994; "West Bull Mountain Area Local Wetland Inventory" prepared by Pacific Habitat Services, Inc., July 2012; and River Terrace and West Planning Areas of Tigard Local Wetland Inventory" prepared by Pacific Habitat Services, Inc., March 2023.
  2. Precise boundaries may vary from those shown on wetland maps; specific delineation of wetland boundaries may be necessary. Wetland delineations must be completed by qualified professionals at the applicant's expense. Delineations must be reviewed and approved by the Department of State Lands.

18.510.040. Review Process

A sensitive lands review is required for all development within sensitive lands unless the development is allowed without review, as provided in Subsection 18.510.050.A. Review type determinations are provided in Section 18.510.050. Sensitive lands reviews are processed as follows:

- A. Special flood hazard area. A sensitive land review for development within the special flood hazard area is processed through a Type I or II procedure as provided in 18.710.050 and 18.710.060, respectively.
- B. Drainageways. A sensitive land review for development within drainageways is processed through a Type I or II procedure as provided in 18.710.050 and 18.710.060, respectively.
- C. Steep slopes. A sensitive land review for development within steep slopes is processed through a Type I or II procedure as provided in 18.710.050 and 18.710.060, respectively.
- D. Wetlands. A sensitive land review for development within wetlands is processed through a Type II procedure as provided in 18.710.060.

**18.510.020. Applicability.****18.510.050. Review Type Determination**

~~A. CWS stormwater connection permit. All proposed development must obtain a stormwater connection permit from CWS in compliance with its design and construction standards.~~

~~B.4. Allowed uses with no approval **No review** required. Except as provided below and by Subsections 18.510.020.D, F, and G of this section, the **The** following uses **and activities** are allowed uses **without review** within drainageways, **and steep** slopes that are 25 percent or greater, and unstable ground when the use does not involve paving. For the purposes of this chapter, the word "structure" excludes: children's play equipment, picnic tables, sand boxes, grills, basketball hoops, and similar recreational equipment.~~

1. Accessory uses such as lawns, gardens, or play areas; except in a water quality sensitive area or vegetated corridor, as defined in the CWS "Design and Construction Standards" or the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.510.080.
2. Farm uses conducted without locating a structure within the sensitive land area; except in a water quality sensitive area or vegetative corridor, as defined in CWS "Design and Construction Standards" or the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.510.080.
3. Community recreation uses, excluding structures; except in a water quality sensitive area or vegetated corridor, as defined in the CWS "Design and Construction Standards" or the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.510.080.
4. Public and private conservation areas for water, soil, open space, forest, and wildlife resources.
5. Removal of poison oak, tansy ragwort, blackberry, English ivy, or other noxious vegetation.
- ~~6. Maintenance of floodway excluding re-channeling; except in a water quality sensitive area or vegetated corridor, as defined in the CWS "Design and Construction Standards" or the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.510.080.~~
- ~~7.6. Fences; except in a water quality sensitive area or vegetated corridor, as defined in the CSW "Design and Construction Standards"; or the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.510.080.~~
- ~~8.7. Accessory structures that are less than ~~120~~**200** square feet in size; except in a water quality sensitive area or vegetated corridor, as defined in the CSW "Design and Construction Standards"; or the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.510.080.~~
- ~~9.8. Land form alterations involving up to 10 cubic yards of material; except in a water quality sensitive area or vegetated corridor, as defined in the CSW "Design and Construction Standards"; or the Statewide Goal 5 vegetated corridor established for the Tualatin River, as defined in Section 18.510.080.~~

~~C. Exemptions. When performed under the direction of the city, the following are exempt from the~~

provisions of this section:

**9. The following are exempt from the provisions of this section when performed under the direction of the city:**

- 1a.** Responses to public emergencies, including emergency repairs to public facilities.;
- 2b.** Stream and wetlands restoration and enhancement ~~activities~~ programs, except **that any portion of these activities that occur within the areas of special flood hazard area that** when meeting the definition of development in TMC Section 9.10.020 **are subject to a Type II review as provided in Subparagraph 18.510.050.C.2.**;
- 3c.** Non-native vegetation removal.;
- 4d.** Planting of native plant species.;
- 5e.** Routine maintenance or replacement of existing public facilities projects, except **that any portion of these activities that occur within the areas of special flood hazard area that** when meeting the definition of development in TMC Section 9.10.020 **are subject to a Type II review as provided in Subparagraph 18.510.050.C.2.**

~~D. Jurisdictional wetlands. Landform alterations or developments that are only within wetland areas that meet the jurisdictional requirements and permit criteria of the U.S. Army Corps of Engineers, Division of State Lands, CWS, or other federal, state, or regional agencies, and are not designated as significant wetlands on the City of Tigard "Wetland and Streams Corridors Map," do not require a sensitive lands review. The city will require that all necessary approvals from other agencies are obtained. All other applicable city requirements must be met, including sensitive land reviews for areas within the areas of special flood hazard, slopes of 25% or greater or unstable ground, drainageways, and wetlands that are not under state or federal jurisdiction.~~

~~E.B. Administrative~~ **Type I sensitive lands review.**

1. ~~Administrative~~ **A Type I sensitive lands reviews within the drainageways, and steep slopes that are 25% or greater, and unstable ground are processed through a Type I procedure, as provided in Section 18.710.050, is required** for the following actions:
  - a. The repair, reconstruction, or improvement of an existing structure or utility, the cost of which is less than 50% of the market value of the structure prior to the improvement or the damage requiring reconstruction.;
  - b. ~~Minimal~~ **Ground disturbance or landform alteration involving 10 to 50 cubic yards of material.;** and
  - c. Building permits for accessory structures that are ~~120~~ **200** to 528 square feet in size.
2. ~~Administrative~~ **A Type I sensitive lands reviews within the areas of is required for properties that contain any special flood hazard areas, where the applicant chooses to demonstrate** are processed through a Type I procedure, as provided in Section 18.710.050, for the following actions:
  - a. **that all proposed development and any land form alteration is located entirely outside the special flood hazard area.** ~~Within the areas of special flood hazard but outside the floodway~~

- (floodway fringe):
- i. ~~The construction of accessory structures up to 528 square feet in size; and~~
  - ii. ~~Any landform alteration involving up to 50 cubic yards of material.~~
- b. ~~Stream and wetland restoration and enhancement programs, including work in the floodway, when performed under the direction of the city.~~
3. The approval authority will approve, approve with conditions, or deny a sensitive land review application using the standards and approval criteria Sections ~~18.510.040, 18.510.050~~030, 18.510.070, and 18.510.080.

FC. Sensitive lands approvals issued by the director*Type II sensitive lands reviews.*

1. *A Type II S*sensitive land reviews within drainageways, *steep* slopes that are 25% or greater or ~~unstable ground~~, and wetlands areas that are not regulated by other local, state, or federal agencies are processed through a Type II procedure, as provided in Section 18.710.060, *is required* for the following actions:
- a. Ground disturbance or land form alterations involving more than 50 cubic yards of material;<sup>;</sup>
  - b. Repair, reconstruction, or improvement of an existing structure or utility, the cost of which equals or exceeds 50% of the market value of the structure prior to the improvement or the damage requiring reconstruction;<sup>;</sup>
  - c. Residential and nonresidential structures intended for human habitation;<sup>;</sup>and
  - d. Accessory structures that are greater than 528 square feet in size.
2. *A Type II sensitive lands review within the special flood hazard area is required for the following actions:*
- a. Ground disturbance or landform alterations in the special flood hazard area, including the floodway.*
  - b. Repair, reconstruction, or improvement of an existing structure or utility, the cost of which equals or exceeds 50% of the market value of the structure prior to the improvement or the damage requiring reconstruction, provided no development occurs in the floodway.*
  - c. Stream and wetland restoration and enhancement activities, including work in the floodway, when performed under the direction of the city.*
23. The approval authority will approve, approve with conditions, or deny a sensitive lands review application using the *standards and* approval criteria provided in Sections 18.510.030, 18.510.070, and 18.510.080.

G. Sensitive lands approvals issued by the hearings officer.

1. ~~Sensitive land reviews within areas of special flood hazard are processed through a Type III HO procedure, as provided in Section 18.710.080, for the following actions:~~

- a. ~~Ground disturbance or landform alterations in all floodway areas;~~
- b. ~~Ground disturbance or landform alterations in floodway fringe locations involving more than 50 cubic yards of material;~~
- c. ~~Repair, reconstruction, or improvement of an existing structure or utility, the cost of which equals or exceeds 50% of the market value of the structure prior to the improvement or the damage requiring reconstruction provided no development occurs in the floodway;~~
- d. ~~Structures intended for human habitation; and~~
- e. ~~Accessory structures that are greater than 528 square feet in size, outside of floodway areas.~~

2. ~~The approval authority will approve, approve with conditions, or deny a sensitive lands review application using the approval criteria provided in Section 18.510.070.~~

H. ~~Other uses. Except as explicitly authorized by other provisions of this chapter, all other uses are prohibited on sensitive land areas.~~

I. ~~Nonconforming uses. A use established prior to the effective date of this title, which would be prohibited by this chapter or that would be subject to the limitations and controls imposed by this chapter, shall be considered a nonconforming use. Nonconforming uses shall be subject to the provisions of Chapter 18.50, Nonconforming Circumstances. (Ord. 17-22 §2; Ord. 18-21 §2; Ord. 18-23 §2; Ord. 20-01 §1; Ord. 22-06 §2; Ord. 23-09, 12/12/2023)~~

#### **18.510.030. Administrative Provisions.**

A. ~~Interagency coordination. The approval authority will review all applications for a sensitive lands review to determine that all necessary approvals be obtained from those federal, state, or local governmental agencies, from which prior approval is also required.~~

~~As provided in CWS "Design and Construction Standards," the necessary permits for all "development" must comply include a CWS service provider letter, which specifies the conditions and requirements necessary, if any, for an applicant to comply with CWS water quality protection standards and for the agency to issue a stormwater connection permit.~~

B. ~~Applicable standards and criteria. The approval authority will apply the standards and criteria provided in this chapter when reviewing an application for a sensitive lands review. (Ord. 17-22 §2; Ord. 18-21 §2; Ord. 18-23 §2; Ord. 23-09, 12/12/2023)~~

#### **18.510.040. Reserved.**

#### **18.510.050. General Provisions for Wetlands.**

A. ~~Code compliance requirements. Wetland regulations apply to those areas classified as significant on the City of Tigard "Wetland and Streams Corridors Map," and to a vegetated corridor ranging from 25 to 200 feet wide, measured horizontally, from the defined boundaries of the wetland, as provided in "Table 3.1, Vegetated Corridor Widths," and "Appendix C, Natural Resource Assessments," of the CWS "Design and Construction Standards." Wetland locations may include but are not limited to those areas identified as wetlands in "Wetland Inventory and Assessment for the City of Tigard,~~

Oregon," Fishman Environmental Services, 1994.

~~B. Delineation of wetland boundaries. Precise boundaries may vary from those shown on wetland maps; specific delineation of wetland boundaries may be necessary. Wetland delineation will be done by qualified professionals at the applicant's expense. (Ord. 17-22 §2; Ord. 18-21 §2)~~

**18.510.060. Approval Period and Extensions.~~Reserved~~**

~~Expirations and extensions of approvals are provided in Subsection 18.20.050.G. (Ord. 17-22 §2; Ord. 18-21 §2; Ord. 18-23 §2; Ord. 18-28 §1; Ord. 22-06 §2)~~

**18.510.070. Sensitive Lands Applications.~~Approval Criteria.~~**

~~A. Approval required. An applicant, who wishes to develop within a sensitive area, as defined in this chapter, must obtain approval in certain situations. Depending on the nature and intensity of the proposed activity within a sensitive area, either a Type II or Type III review is required, as provided in Subsections 18.510.020.F and G. The approval criteria for different types of sensitive areas are provided in Subsections 18.510.070.B-E.~~

~~B. Within the areas of a special flood hazard area. The approval authority will approve or approve with conditions an application for sensitive lands review on properties that contain any within the areas of special flood hazard areas when all of the following either the clear and objective Type I criteria or the alternative Type II criteria are met:~~

~~1. Type I approval criteria. The proposed development or land form alteration is located entirely outside of the special flood hazard area.~~

~~2. Type II approval criteria. The proposed development or land form alteration is located within the special flood hazard area and complies with all of the following criteria:~~

~~1. Compliance with all of the applicable requirements of this title and TMC Chapter 9.10;~~

~~2a. Land form alterations must preserve or enhance the areas of special flood hazard area storage function and maintenance of the zero-foot rise floodway must not result in any encroachments, including fill, new construction, substantial improvements and other development unless certified by a registered professional engineer that the encroachment will not result in any increase in flood levels during the base flood discharge; ~~a.~~ If in the floodway and no-rise requirement is met, the development will comply with all applicable flood hazard reduction provisions.~~

~~3. Land form alterations or developments within the areas of special flood hazard are allowed only in areas designated as commercial, industrial, or parks and recreation on the comprehensive plan land use map, except that alterations or developments associated with community services uses, utilities, or public support facilities are allowed on residentially zoned properties subject to applicable zoning standards;~~

~~b. An assessment, prepared and certified by a qualified professional, must demonstrate that the proposed land form alteration or development results in no net loss of the following floodplain functions: floodplain storage, water quality, and vegetation. The assessment must include a mitigation plan, if applicable. The assessment must comply with all no net loss standards in TMC Section 9.10.060.~~

- 4c. Where a land form alteration or development is allowed to occur within the ~~areas of~~ special flood hazard area, it will not result in any increase in the water surface elevation of the 100-year flood.;
- 5d. The land form alteration or development plan includes a pedestrian or bicycle pathway in compliance with the adopted Transportation System Plan or Greenways Trail System Master Plan, unless the construction of said pathway is deemed as untimely.;
- 6e. Pedestrian or bicycle pathway projects within the ~~areas of~~ special flood hazard area must include a wildlife habitat assessment that shows the proposed alignment minimizes impacts to significant wildlife habitat while balancing the community's recreation and environmental educational goals.;
- 7f. The necessary U.S. Army Corps of Engineers ~~and State of Oregon Land Board, Division~~ Department of State Lands, and CWS permits and approvals must be obtained.;
- 8g. Where land form alterations or development are allowed within and adjacent to the ~~areas of~~ special flood hazard area, the city will require the consideration of dedication of sufficient open land area within and adjacent to the ~~areas of~~ special flood hazard area in compliance with the comprehensive plan. This area must include portions of a suitable elevation for the construction of a pedestrian or bicycle pathway within the ~~areas of~~ special flood hazard area in compliance with the adopted Transportation System Plan or Greenways Trail System Master Plan.
- ~~CB. With s~~ Steep slopes. The approval authority will approve or approve with conditions an application for a sensitive lands review ~~on~~ within steep slopes of 25% or greater or unstable ground when all of the following criteria are met:
1. ~~Compliance with all of the applicable requirements of this title;~~
  21. The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than that required for the use.;
  32. The proposed land form alteration or development will not result in erosion, stream sedimentation, ground instability, or other adverse on-site and off-site effects or hazards to life or property.;
  43. The structures are appropriately sited and designed to ensure structural stability and proper drainage of foundation and crawl space areas for development with any of the following soil conditions: wet or high water table; high shrink-swell capability; compressible or organic; and shallow depth-to-bedrock.;
  54. Where natural vegetation has been removed due to land form alteration or development, the areas not covered by structures or impervious surfaces will be replanted to prevent erosion in compliance with CWS "Design and Construction Standards".
- ~~DC. Within d~~ Drainageways. The approval authority will approve or approve with conditions an application for a sensitive lands review within drainageways when all of the following criteria are met:
1. ~~Compliance with all of the applicable requirements of this title;~~

- ~~21.~~ The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than that required for the use.;
- ~~32.~~ The proposed land form alteration or development will not result in erosion, stream sedimentation, ground instability, or other adverse on-site and off-site effects or hazards to life or property.;
- ~~43.~~ The water flow capacity of the drainageway is not decreased.;
- ~~54.~~ Where natural vegetation has been removed due to land form alteration or development, the areas not covered by structures or impervious surfaces will be replanted to prevent erosion in compliance with CWS "Design and Construction Standards".;
- ~~65.~~ The drainageway will be replaced by a public facility of adequate size to accommodate maximum flow in compliance with Clean Water Services requirements and the city's adopted stormwater master plan.;
- ~~76.~~ The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, ~~Division~~Department of State Lands, and CWS approvals must be obtained.;
- ~~87.~~ Where land form alterations or development are allowed within and adjacent to the ~~areas of~~ special flood hazard area, the city will require the consideration of dedication of sufficient open land area within and adjacent to the ~~areas of~~ special flood hazard area in compliance with the comprehensive plan. This area will include portions of a suitable elevation for the construction of a pedestrian or bicycle pathway within the ~~areas of~~ special flood hazard area in compliance with the adopted pedestrian bicycle pathway plan.

~~E.D. Within Wetlands.~~ The approval authority will approve or approve with conditions an application for a sensitive lands review within wetlands when all of the following criteria are met:

- ~~1. Compliance with all of the applicable requirements of this title;~~
- ~~21.~~ The proposed land form alteration or development is **not located within a locally significant wetland or its associated vegetative corridor** neither on wetland in an area designated as significant wetland on the comprehensive plan areas of special flood hazard and wetland map nor is within the vegetative corridor as provided in "Table 3.1 Vegetative Corridor Widths" and "Appendix C: Natural Resources Assessments" of the CWS "Design and Construction Standards," for such a wetland.;
- ~~32.~~ The extent and nature of the proposed land form alteration or development will not create site disturbances to an extent greater than the minimum required for the use.;
- ~~43.~~ Any encroachment or change in on-site or off-site drainage that would adversely impact wetland characteristics have been mitigated.;
- ~~54.~~ Where natural vegetation has been removed due to land form alteration or development, erosion control provisions of the Surface Water Management program of Washington County must be met and areas not covered by structures or impervious surfaces will be replanted in like or similar species in compliance with CWS "Design and Construction Standards".;

65. All other sensitive lands requirements of this chapter have been met.;
76. The necessary U.S. Army Corps of Engineers and State of Oregon Land Board, ~~Division~~ Department of State Lands, and CWS approvals must be obtained.;
87. Physical limitations and natural hazards, ~~areas of~~ special flood hazard areas and wetlands, natural areas, and parks, recreation and open space policies of the comprehensive plan have been met.

**18.510.080. Special Provisions within Locally Significant Wetlands and Along the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek.**

- A. In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule (OAR 666-023-0030) pertaining to wetlands, all wetlands classified as significant on the City of Tigard "Wetlands and Streams Corridors Map" are protected. No land form alterations or developments are allowed within or partially within a significant wetland, except as allowed or approved in compliance with Section 18.510.100.
- B. In order to address the requirements of Statewide Planning Goal 5 (Natural Resources) and the safe harbor provisions of the Goal 5 administrative rule (OAR 660-023-0030) pertaining to riparian corridors, a standard setback distance or vegetated corridor area, measured horizontally from and parallel to the top of the bank, is established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek.
1. The standard width for "good condition" vegetated corridors along the Tualatin River is 75 feet, unless wider in compliance with CWS "Design and Construction Standards," or modified in compliance with Section 18.510.100. If all or part of a locally significant wetland (a wetland identified as significant on the City of Tigard "Wetlands and Streams Corridors Map") is located within the 75-foot setback area, the vegetated corridor is measured from the upland edge of the associated wetland.
  2. The standard width for "good condition" vegetated corridors along Fanno Creek, Ball Creek, and the South Fork of Ash Creek is 50 feet, unless wider in compliance with CWS "Design and Construction Standards," or modified in compliance with Section 18.510.100. If all or part of a locally significant wetland (a wetland identified as significant on the City of Tigard "Wetlands and Streams Corridors Map") is located within the 50-foot setback area, the vegetated corridor is measured from the upland edge of the associated wetland.
  3. The minimum width for "marginal or degraded condition" vegetated corridors along the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek is 50 percent of the standard width, unless wider in compliance with CWS "Design and Construction Standards," or modified in compliance with Section 18.510.100.
  4. The determination of corridor condition is based on the natural resource assessment guidelines as provided in the CWS "Design and Construction Standards."
  5. The standard setback distance or vegetated corridor area applies to all development proposed on property located within or partially within the vegetated corridors, except as allowed below:
    - a. Roads, pedestrian or bike paths crossing the vegetated corridor from one side to the other in order to provide access to the sensitive area or across the sensitive area, as approved by the city in compliance with Section 18.510.070 and by CWS "Design and Construction

Standards";

- b. Utility or service provider infrastructure construction (i.e. storm, sanitary sewer, water, phone, gas, cable, etc.), if approved by the city and CWS;
  - c. A pedestrian or bike path, not exceeding 10 feet in width and in compliance with the CWS "Design and Construction Standards";
  - d. Grading for the purpose of enhancing the vegetated corridor, as approved by the city and CWS;
  - e. Measures to remove or abate hazards, nuisances, or fire and life safety violations, as approved by the regulating jurisdiction;
  - f. Enhancement of the vegetated corridor for water quality or quantity benefits, fish, or wildlife habitat, as approved by the city and CWS;
  - g. Measures to repair, maintain, alter, remove, add to, or replace existing structures, roadways, driveways, utilities, accessory uses, or other developments provided they are in compliance with city and CWS regulations, and do not encroach further into the vegetated corridor or sensitive area than allowed by the CWS "Design and Construction Standards."
- C. Land form alterations or developments located within or partially within the Goal 5 safeharbor setback or vegetated corridor areas established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek that meet the jurisdictional requirements and permit criteria of the CWS, U.S. Army Corps of Engineers, Department of State Lands, or other federal, state, or regional agencies, are not subject to this subsection B, except where the:
- a. Land form alterations or developments are located within or partially within a good condition vegetated corridor, as provided in Paragraphs 18.510.080.B.1 and 2;
  - b. Land form alterations or developments are located within or partially within the minimum width area established for marginal or a degraded condition vegetated corridor, as provided in Paragraph 18.510.080.B.3.

These exceptions reflect instances of the greater protection of riparian corridors provided by the safe harbor provisions of the Goal 5 administrative rule.

#### **18.510.090. Density Transfer and Reductions.**

- A. Density transfer. Required residential density for apartments, rowhouses, and small form residential development may be transferred from sensitive lands using the following methods:
- 1. The units per acre calculated by subtracting land areas listed in Subparagraphs 18.40.020.A.1–3 from the gross acres may be transferred to the remaining buildable land areas subject to the following limitations:
    - a. The number of units that can be transferred is limited to the number of units that would have been allowed on 25% of the unbuildable area if not for these regulations; and
    - b. The total number of units per site does not exceed 125% of the maximum number of units per

gross acre allowed.

2. Units per acre calculated by subtracting land areas listed in Paragraph 18.40.020.A.4 from the gross acres may be transferred to the remaining buildable land areas on land zoned RES-D and RES-E subject to the following limitations:
  - a. The number of units that can be transferred is limited to the number of units that would have been allowed on the wetland area, if not for these regulations;
  - b. The total number of units per site does not exceed the maximum number of units per gross acre allowed.
- B. Density reduction. The minimum number of residential units required in a development may be reduced if necessary to ensure that impacts on habitat areas are minimized. The amount of reduction in the minimum density is calculated by subtracting the square footage of inventoried significant habitat that is permanently protected from the total square footage used to calculate the minimum density requirement. The approval authority may impose any reasonable condition necessary to mitigate identified impacts resulting from development on otherwise unbuildable land.

The approval authority will approve, approve with conditions, or deny the density reduction provided that the proposal will directly result in the protection of significant habitat areas through placement in a non-buildable tract or protected with a restrictive easement.

#### **18.510.100. Plan Amendment Option.**

- A. Comprehensive plan amendment. Any owner of property affected by the Goal 5 safeharbor (1) protection of significant wetlands or (2) vegetated areas established for the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek may apply for a comprehensive plan amendment as provided in Chapter 18.790, Text and Map Amendments. This amendment must be based on a specific development proposal. The effect of the amendment would be to remove Goal 5 protection from the property, but not to remove the requirements related to the CWS Stormwater Connection Permit, which must be addressed separately through an alternatives analysis, as described in Section 3.02.5 of the CWS "Design and Construction Standards." The applicant must demonstrate that such an amendment is justified by either of the following:
  1. The analysis must consider the ESEE consequences of allowing the proposed conflicting use, considering both the impacts on the specific resource site and the comparison with other comparable sites within the Tigard Planning Area;
  2. The ESEE analysis must demonstrate to the satisfaction of the city council that the adverse economic consequences of not allowing the conflicting use are sufficient to justify the loss, or partial loss, of the resource;
  3. In particular, ESEE analysis must demonstrate why the use cannot be located on buildable land, consistent with the provisions of this chapter, and that there are no other sites within the Tigard Planning Area that can meet the specific needs of the proposed use;
- B. ESEE analysis. The applicant may prepare an environmental, social, economic and energy (ESEE) consequences analysis prepared in compliance with OAR 660-23-040.
  1. The analysis must consider the ESEE consequences of allowing the proposed conflicting use, considering both the impacts on the specific resource site and the comparison with other comparable sites within the Tigard Planning Area;
  2. The ESEE analysis must demonstrate to the satisfaction of the city council that the adverse economic consequences of not allowing the conflicting use are sufficient to justify the loss, or partial loss, of the resource;
  3. In particular, ESEE analysis must demonstrate why the use cannot be located on buildable land, consistent with the provisions of this chapter, and that there are no other sites within the Tigard Planning Area that can meet the specific needs of the proposed use;

4. The ESEE analysis must be prepared by a team consisting of a wildlife biologist or wetlands ecologist and a land use planner or land use attorney, all of whom are qualified in their respective fields and experienced in the preparation of Goal 5 ESEE analysis;
  5. If the application is approved, then the ESEE analysis must be incorporated by reference into the Tigard Comprehensive Plan, and the "Tigard Wetland and Stream Corridor Map" be amended to remove the site from the inventory.
- C. Demonstration of change. In this case, the applicant must demonstrate that the sensitive area site no longer meets the applicable significance threshold defined by the Goal 5 administrative rule, relative to other comparable resources within the Tigard Planning Area.
1. Significance thresholds are described and applied in the addendum to the City of Tigard Local Wetlands Inventory adopted by reference as part of this chapter.
  2. To approve this claim, the city council must find that the decline in identified resource values did not result from a violation of this title.

#### **18.510.110. Significant Habitat Areas Map Verification Procedures.**

- A. Applicants who concur that the significant habitat areas map is accurate must submit the following information to serve as the basis for verifying the boundaries of inventoried habitat areas:
1. Submission requirements.
    - a. A detailed property description;
    - b. A scale map of the property showing the locations of significant habitat areas, any existing built area, wetlands or water bodies, Clean Water Services' vegetated corridor, the ~~areas of~~ special flood hazard area, the 1996 flood inundation line, and contour lines (two-foot intervals for slope less than 15% and 10-foot intervals for slopes 15% or greater); and
    - c. A current aerial photograph of the property.
  2. The approval authority's decision will be based on consideration of submitted information, site visit information, and other factual information. Should the applicant disagree with the determination on the location of significant habitat areas on the property, the precise boundaries must be verified by the applicant in compliance with the detailed delineation methodology outlined in Subsection 18.510.110.B.
- B. Applicants who believe that the map is inaccurate must submit a detailed delineation conducted by a qualified professional in compliance with the following methodology to verify the precise boundaries of the inventoried habitat areas by means of a Type II procedure.
1. Verifying boundaries of inventoried riparian habitat. Locating habitat and determining its riparian habitat class is a 4-step process:
    - a. Locate the water feature that is the basis for identifying riparian habitat.
      - i. Locate the top of bank of all streams, rivers, and open water within 200 feet of the property.

- ii. Locate the ~~areas of~~ special flood hazard area or 1996 flood inundation line, whichever is greater, within 100 feet of the property.
  - iii. Locate all wetlands within 150 feet of the property. Identified wetlands on the property must be further delineated consistent with methods currently accepted by the Oregon ~~Division~~Department of State Lands and the U.S. Army Corps of Engineers.
- b. Identify the vegetative cover status of all areas on the property that are within 200 feet of the top of bank of streams, rivers, and open water, are wetlands or are within 150 feet of wetlands, and are flood areas and within 100 feet of flood areas.
- i. Vegetative cover status must be as identified on the metro vegetative cover map.
  - ii. The vegetative cover status of a property may be adjusted only if (a) the property was developed prior to the time the regional program was approved; or (b) an error was made at the time the vegetative cover status was determined. To assert the latter type of error, applicants must submit an analysis of the vegetative cover on their property using summer 2002 aerial photographs and the following definition of vegetative cover types in Table 18.510.1.

Table 18.510.1 Definitions of Vegetative Cover Types	
Type	Definition
Low structure vegetation or open soils	Areas that are part of a contiguous area 1 acre or larger of grass, meadow, croplands, or areas of open soils located within 300 feet of a surface stream (low structure vegetation areas may include areas of shrub vegetation less than 1 acre in size if they are contiguous with areas of grass, meadow, croplands, orchards, Christmas tree farms, holly farms, or areas of open soils located within 300 feet of a surface stream and together form an area of 1 acre in size or larger).
Woody vegetation	Areas that are part of a contiguous area 1 acre or larger of shrub or open or scattered forest canopy (less than 60 percent crown closure) located within 300 feet of a surface stream.
Forest canopy	Areas that are part of a contiguous grove of trees 1 acre or larger in area with approximately 60 percent or greater crown closure, irrespective of whether the entire grove is within 200 feet of the relevant water feature.

- c. Determine whether the degree that the land slope upward from all streams, rivers, and open water within 200 feet of the property is greater than or less than 25 percent (using the vegetated corridor measurement methodology as provided in Clean Water Services Design and Construction Standards; and
- d. Identify the riparian habitat classes applicable to all areas on the property using Table 18.510.2 and Table 18.510.3.

Table 18.510.2 Method for Locating Boundaries of Class I and II Riparian Areas				
Distance in feet from water feature	Development/Vegetation Status[1]			
	<i>Developed areas not providing vegetative cover</i>	<i>Low structure vegetation or open soils</i>	<i>Woody vegetation (shrub and scattered forest canopy)</i>	<i>Forest canopy (closed to open forest canopy)</i>
Surface streams				
0-50	Class II	Class I	Class I	Class I
50-100		Class II [2]	Class I	Class I
100-150		Class II [2] if slope > 25 percent	Class II [2] if slope > 25 percent	Class II [2]
150-200		Class II [2] if slope > 25 percent	Class II [2] if slope > 25 percent	Class II [2] if slope > 25 percent
Wetlands (Wetland feature itself is a Class I Riparian Area)				
0-100		Class II [2]	Class I	Class I
100-150				Class II [2]
Flood Areas (Undeveloped portion of flood area is a Class I Riparian Area)				
0-100			Class II [2]	Class II [2]

**Notes:**

[1] The vegetative cover type assigned to any particular area was based on 2 factors: the type of vegetation observed in aerial photographs and the size of the overall contiguous area of vegetative cover to which a particular piece of vegetation belonged. As an example of how the categories were assigned, in order to qualify as a "forest canopy" the forested area had to be part of a larger patch of forest land at least 1 acre in size.

[2] Areas that have been identified as habitats of concern, as designated on the Metro Habitats of Concern Map, will be treated as Class I riparian habitat areas in all cases, subject to the provision of additional information that establishes that they do not meet the criteria used to identify habitats of concern as described in Metro's Technical Report for Fish and Wildlife. Examples of habitats of concern include: Oregon white oak woodlands, bottomland hardwood forests, wetlands, native grasslands, riverine islands or deltas, and important wildlife migration corridors.

Table 18.510.3 Tualatin Basin "Limit" Decision [1]				
Resource Category	Conflicting Use Category			
	<i>High Intensity Urban</i>	<i>Other Urban</i>	<i>Future Urban (2002 and 2004 additions)</i>	<i>Non-Urban (outside UGB)</i>
Class I & II Riparian inside vegetated corridor	Moderately Limit	Strictly Limit	Strictly Limit	N/A
Class I & II Riparian outside vegetated corridor	Moderately Limit	Moderately Limit	Moderately Limit	Moderately Limit
All other Resource Areas	Lightly Limit	Lightly Limit	Lightly Limit	Lightly Limit
Inner Impact Area	Lightly Limit	Lightly Limit	Lightly Limit	Lightly Limit
Outer Impact Area	Lightly Limit	Lightly Limit	Lightly Limit	Lightly Limit

**Notes:**

[1] Vegetated corridor standards are applied consistently throughout the District; in HIU areas they supersede the "limit" decision.

2. Verifying boundaries of inventoried upland habitat was identified based on the existence of contiguous patches of forest canopy, with limited canopy openings. The "forest canopy" designation is made based on analysis of aerial photographs as part of determining the vegetative cover status of land within the region. Upland habitat is as identified on the Significant Habitat Areas Map unless corrected as provided in this subsection.
  - a. The only allowed corrections to the vegetative cover status of a property area as follows:
    - i. To correct errors made when the vegetative status of an area was determined based on analysis of the aerial photographs used to inventory the habitat. The perimeter of an area delineated as "forest canopy" on the Metro Vegetative Cover Map may be adjusted to more precisely indicate the dripline of the trees within the canopied area provided that no areas providing greater than 60 percent canopy crown closure are de-classified from the "forest canopy" designation. To assert such errors, applicants must submit an analysis of the vegetative habitat cover on their property using the aerial photographs that were used to inventory the habitat and the definitions of the different vegetative cover types provided in Table 18.510.1; and
    - ii. To remove tree orchards and Christmas tree farms from inventoried habitat; provided,

however, that Christmas tree farms where the trees were planted prior to 1975 and have not been harvested for sale as Christmas trees may not be removed from the habitat inventory.

- b. If the vegetative cover status of any area identified as upland habitat is corrected in compliance with Subparagraph 18.510.110.B.2.a to change the status of an area originally identified as "forest canopy," then such area will not be considered upland habitat unless it remains part of a forest canopy opening less than 1 acre in area completely surrounded by an area of contiguous forest canopy.



**City of Tigard**  
**Planning Commission**

## MINUTES – May 5, 2025

**Location:** Town Hall, 13125 SW Hall Blvd. - Hybrid Meeting

### CALL TO ORDER

President Jackson called the meeting to order at 7:00 PM.

### ROLL CALL

**Present:** President Jackson, Commissioner Bowerman, Commissioner Sabbe, Commissioner Schuck, Commissioner Tiruvallur, and Commissioner Murphy, Alternate Commissioner Sprague, Commissioner Brandt (*remote*), Commissioner Choudhury (*remote*). Council President Wolf (*remote*), Councilor Schlack.

**Excused:** Vice-President Miranda

**Staff Present:** Assistant Director of Community Development Schuyler Warren, Senior Planner Agnes Lindor, Planning Commission Secretary Joanne Bengtson.

### COMMUNICATIONS

President Jackson asked if there were any external communications to share. Seeing none, he mentioned that City Council would be considering food carts on May 6, a subject that came to the Planning Commission in previous meetings. On March 4, Council discussed closing the loophole on SDCs in cases of temporary Certificates of Occupancy.

### APPROVE DRAFT MINUTES

President Jackson asked for changes or corrections to the draft minutes of February 3, 2025. Seeing none, Commissioner Schuck motioned to approve the minutes as written. Commissioner Bowerman seconded the motion.

### LEGISLATIVE PUBLIC HEARING: FEMA ENDANGERED SPECIES ACT (ESA)

**COMPLIANCE CODE AMENDMENTS: DCA2025-00001** Senior Planner Agnes Lindor

President Jackson read a brief description of the hearing process, order of presentations and comments. He then opened the public hearing and introduced Senior Planner Agnes Lindor to present the staff report.

### STAFF REPORT/APPLICANT PRESENTATION

Community Development's Senior Planner Agnes Lindor provided a brief review of the FEMA flood Insurance Program, national flood maps and how they're used to determine local regulations and determine flood insurance need and rates. Because the proposed amendments in this case are Legislative in nature, they are reviewed under the Legislative procedure. This process requires public hearings by the Planning Commission (tonight's hearing) and City Council (scheduled for June 10, 2025).

In July 2024, Oregon jurisdictions received a letter from FEMA stating that all NFIP participating communities must select one of three pre-implementation compliance measures and notify FEMA of the choice by December 1, 2024, and start implementing it. Tigard chose number one:

1. Adopt a model ordinance that considers impacts to species and their habitat and requires mitigation to a "no net loss" standard;
2. Require a habitat assessment and mitigation plan for development on a permit-by-permit basis; or

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3. Prohibit all development in the Special Flood Hazard Area (SFHA).

We notified FEMA we'd begin working toward adoption of the model ordinance to the city's Municipal Code and Community Development Code.

Sr. Planner Lindor stated DCA2025-00001 contains **no** changes to FEMA's flood maps, only proposed updates to the development and municipal codes necessary to incorporate regulatory changes required for Tigard's continued participation in the National Flood Insurance Program (NFIP).

The proposed amendments include updates to Municipal Code Chapter 9.10 that add new definitions and "no net loss" standards; Chapter 18.510, Sensitive Lands, to require a "no net loss" analysis with a sensitive lands review for development within areas of special flood hazard; and general reorganization and clean-up of Chapter 18.510, Sensitive Lands.

Sr. Planner Lindor stated she received three additional public comments following publication of the staff report, which she shared with the commission:

- 5/5/25, a phone call from Mr. Mike Westfall, curious to learn more about the regulations were about the hearing process, the meaning of "no net loss", and when these changes would be effective.
- 5/5/25, an e-mail from Mr. Pascal Pascuzzi asking about these regulations and how they would impact wetlands and any associated buffers. Sr. Planner Lindor stated for the Commission – there's no impact to wetlands with these regulations.
- 5/5/25, a written comment from Mr. Robert Ruedy forwarded to Planning Commission late this afternoon requesting a continuance and stating economic concerns for taxpayers.

Commissioner Jackson submitted comments to Sr. Planner Lindor with scrivener errors, which will be incorporated into the Planning Commission's recommendation.

### STAFF RECOMMENDATION

Sr. Planner Lindor recommends that the Planning Commission find in favor of the proposed development code and municipal code text amendments and make a final recommendation to Tigard City Council for its approval.

### QUESTIONS

**President Jackson** asked if there was a map. Ms. Lindor said no because there are no changes to the map. While waiting for one to be pulled up to display, she estimated 400 parcels citywide could be affected, with perhaps 120 of those being owned by the city. The Special Flood Hazard area runs along Fanno Creek, Summer Creek, Ash Creek around Oak St., most of Cook Park and along the Tualatin River.

**Commissioner Schuck** asked if the three options were the only ones available to us and why did we choose the first one? Sr. Planner Lindor said yes, those were the choices, and the city had to choose an option or we could be dropped from the Flood Insurance Program.

Option #2 didn't consider Oregon's requirement for notices and the legislative process that must be followed. FEMA didn't expect Option #2 to require any kind of code amendment to process a permit-by-permit basis. FEMA also stated that Option #2 would not be an option for long-term implementation measures. Option #3 would prohibit all development and could result in litigation and loss for the city.

This is why staff went with Option #1.



**President Jackson** asked if staff knew of any existing non-conforming developments that could be affected. Planner Lindor said she didn't, but parcels that are non-conforming today will remain that way. It's likely that dwellings on such a parcel were built above flood level, while a yard, garden bed or shed might be in the special flood area. However, if the resident is in the floodplain and they remove more than 50% of the structure, they would need to comply with all NFIP national requirements to rebuild.

President Jackson moved to the public testimony portion and provided instructions for in-person and remote testimony in support, neutral and against, in that order. However, many attendees didn't indicate or weren't sure of their position, so the President called in order of sign-up.

### **PUBLIC TESTIMONY**

- Randy Killion, 11825 SW Katherine Street, had questions about whether these regulations apply when flood insurance is not required and if existing structures can remain.
- Robert Ruedy, 14185 SW 100th Avenue, spoke about land takings, property value and loss of tax revenues, and compliance with the NFIP. Mr. Ruedy also submitted written comments for the Commissioners to consider. He outlined his concerns about diminished property values, increasing taxpayer burdens and density even though his property isn't in a floodplain.
- Paula Beck, 11765 SW Katherine Street, has questions about existing structures and how these regulations impact her property (specifically what is permissible and prohibited).
- Mark Gunderson, 10765 SW Ponderosa Place, expressed opposition and concerns about how these regulations would limit use of property and change his property value.
- Shelly McCargar, 11895 SW Katherine Street, expressed opposition and stated her concerns about significant erosion occurring along Summer Creek as well as a lot of wildlife activity.
- Michael Westfall, 12180 SW Merestone Court, feels like he doesn't have enough information to know if he is against or for these regulations. He would like to know if these regulations will diminish property values or incur more costs for property owners with the code changes.
- Robert Clapham, 10900 SW 76<sup>th</sup> Place, received notice, but his property is not within the floodplain and feels like he doesn't have enough information and asked what determines when a property is within the flood zone.
- Liz Jodeway, 11048 SW Greenburg Road, has concerns about compensation and property values.
- Mike Stevenson, 9400 SW Burnham Street, stated he doesn't understand what is being proposed and how this affects his property values.
- Kenny Neal, 10705 SW Ponderosa Place, stated he would like to see some actionable items on what is proposed and how it will impact properties. He wants clarity on whether these changes will require him to get flood insurance.

### **STAFF RESPONSE & QUESTIONS**

Asst. Director Warren projected an area map and looked at some of the properties that were the subject of the evening's testimony. Sr. Planner Lindor clarified that new regulations aren't going to affect existing structures, it's only if there is new ground disturbance proposed on a parcel within the area of special flood

hazard. Mr. Killian's property has some floodplain, but his dwelling is completely outside the floodplain, so he probably wasn't required to have flood insurance.

There were questions about the requirement to obtain insurance. Planner Lindor stated that obtaining flood insurance isn't a city requirement, it's required by mortgage lenders. There's no requirement on the city's part



to participate in the National Flood Insurance Program.

Asst. Director Warren reiterated that these proposed amendments are not changing the FEMA flood insurance maps. Property owners who question whether their property is truly in a floodplain can contact FEMA and go through their review process to remove the floodplain designation from their dwelling or their entire property.

Assistant Director Warren said some residents were confused about why they got notice of this action. Staff sent a notice to every landowner with even a tiny sliver of floodplain on their property, as well as anyone who signed up to the 'Interested Parties' list which would deliver notice to property owners outside the floodplain.

Regarding the question of taking, the city is already required by FEMA to have certain regulations that apply to the floodplain. This package of proposed amendments changes the way those regulations are implemented – with a tightening of some regulations and loosening other regulations. The current development code prohibits all development in the floodplain in residential zones. The proposed amendments would create a process for development opportunities in residential zones that is more streamlined and less expensive. Applications would be reviewed and decided by professional staff instead of the Hearings Officer, reducing time and expense.

Sr. Planner Lindor said all materials have her contact information, and she urged people to contact by phone, email or in person with the Planner On Duty at Tigard Permit Center. Staff will help property owners find out if/how their properties are affected and answer questions.

**President Jackson** asked staff to define “No Net Loss”, a recurring question in much of the evening’s testimony. Sr. Planner Lindor said it focuses on three functions of the floodplain: Floodplain Storage, Water Quality and Vegetation – primarily trees. If you remove trees from the floodplain, you must mitigate at a higher rate to replace those trees. If you add impervious surface, you’re required to either take impervious surface away or treat it per approved stormwater standards. The same applies to adding fill into the floodplain. If you fill the floodplain, you would be required to remove fill somewhere else within the special Flood Hazard area on your property. This is the balance of three floodplain functions.

**Commissioner K7** asked staff to address the impact of regulations on property value. Sr. Planner Lindor stated there are too many factors to apply one answer that fits all properties. Asst. Director Warren stated properties that might be most impacted are owned by the city or an HOA (open space) and considered non-developable. Staff has looked at this closely and even with properties entirely within the floodplain, it does not completely remove all economic value from the property.

Asst. Director Warren stated that the federal government functions as an insurer of last resort and the National Flood Insurance program has helped replace homes in communities impacted by flood, hurricanes, and serious weather events. Protecting the economic value of a property is supported by Tigard’s participation in the National Flood Insurance Program - an important economic factor for the livability of our city and the sustainability of residences within flood hazard areas.

**Commissioner Bowerman** asked about garden beds, fire pits, things that are not structural and how these amendments would affect those property amenities. Sr. Planner Lindor said removable features like fire pits are not within the purview of this regulation.

**Commissioner Schuck** pointed out the city doesn't draw the floodplain map, and it's not changing with this amendment so the speaker who might remodel his house, if he came to the city today with plans to extend into the floodplain, would be rejected? Sr. Planner Lindor said yes, if he's located in a residential zone. He asked if the amendment is approved, would the resident have a chance to remodel if it went into the floodplain? Sr. Planner Lindor confirmed that if the no net loss standards are met, yes.



The last question was about public concerns about water flow and impact of wildlife. Sr. Planner Lindor stated that these amendments have no connection to that issue. If the public is concerned about maintenance, or erosion issues please contact Planning or Public Works.

The language used in the public notice is required by the State Statute, but staff is happy to answer questions. Please contact Sr. Planner Lindor or the Planner on Duty at the front counter in the Permit Center. President Jackson then closed the public portion of the hearing and thanked staff.

Before moving to deliberation, he mentioned Mr. Ruedy's request for a continuance. In cases of quasi-judicial hearings, the Planning Commission would be obliged to honor his request for either continuance or seven days public comment but since this is legislative hearing, we'll proceed without granting the continuance. The public will have more opportunities to comment when it goes to City Council for a final decision in June.

### **DELIBERATION**

**Commissioner Bowerman** said none of the three choices are optimal and she understands why staff recommend #1. She said her main concern is knowing that people who may need this coverage won't have access to government funded flood insurance if a decision isn't made. Therefore, Commissioner Bowerman supports staff's recommendation as written.

**Commissioner Murphy** said he's 100% in support.

**President Jackson and Alt. Commissioner Sprague** said they'd like to see more outreach to educate the community about this subject. With so many members of the public asking questions tonight, staff should take more opportunities to share information to reduce confusion.

**Commissioner K7** thanked residents for giving feedback.

### **MOTION | DCA2025-00001 FEMA Endangered Species Act (ESA) Compliance Amendments**

Commissioner Murphy motioned, "for the Planning Commission to forward a recommendation of approval for DCA 2025-00001 to the City Council and that we adopt the findings and recommendations of the staff." Commissioner Bowerman seconded the motion. President Jackson asked if there were any motions to amend and none were raised so he moved to the vote.

### **VOTE**

President Jackson asked those in favor of the motion to say 'Aye' and Commissioners Bowerman, Sabbe, Schuck, Tiruvallur, Murphy, Brandt, Choudhury and Alternate Commissioner Sprague, and President Jackson responded that way. Although everyone voted with an 'aye', he asked if there were any "Nays", and hearing none stated the motion's unanimous passage. The hearing date for City Council is June 10, 2025, and urged everyone to stay involved.

### **Other Business:**

- Asst. Director Warren recapped the city's food cart open house on April 24 in Town Hall. We talked with prospective and current food cart owners to answer questions about regulations and gather feedback about their concerns. Staff briefed City Council with results on April 25.
- Schuyler announced the addition of Senior Planner Brittany Gada to the CD team. She comes to us from Beaverton and will be Tigard's project manager for River Terrace 2.0. She worked on the Cooper Mountain plan and her experience with land use, development, code writing, and more makes her a great addition to our team. She'll give the Commission a progress report on the RT2.0 Housing plan on June 2, 2025. Because the Housing piece is funded by a grant from the Department of Land Conservation and Development we must complete work by June 30.

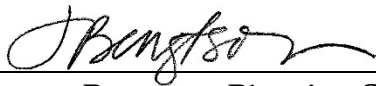
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- On June 16, we'll be back with RT2.0 consultants to present the Transportation plan, including a preliminary report on Tile Flat Road options.
- On June 2, our Associate Planner Trin Miller will share a briefing on Tigard HOME. She's completed the scoping work and will give you a briefing on work to be accomplished.
- Commissioner K7 asked if anything is happening with the Washington Square Mall. Schuyler said there's not much to share, just that we've had conversations with the mall owners, and they don't have an application submitted for consideration. The redevelopment application approved by the Planning Commission a few years ago is the most recent action.
- Asst. Director Warren gave a brief update on SB1537, the Governor's marquee housing bill. The last legislative session approved changes to mixed-use requirements (residential over retail development and mid-rise, 4-6 story buildings). One of the mandatory adjustments: if we have a zone that has a mixed-use ground floor commercial requirement, we're now required to allow someone to develop without that ground floor commercial. It's somewhat disappointing, but mixed-use as a rule will continue and developers will likely see the benefit in it.

**MOTION FOR ADJOURNMENT**

Commissioner Tiruvallur made a motion for adjournment; seconded simultaneously by Commissioner Schuck and Commissioner Sabbe and unanimously approved, concluding the meeting at 8:39 PM.



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Joanne Bengtson, Planning Commission Secretary

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**ATTEST: President Nathan C. Jackson**