

5/23/25
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CITY OF ROSEBURG PLANNING COMMISSION

Monday, June 2, 2025 at 7:00 pm

City Hall Council Chambers

Public Access: Facebook Live at www.facebook.com/CityofRoseburg

City website at <https://www.cityofroseburg.org/your-government/commissions/planning-commission/videos>

AGENDA

1. CALL TO ORDER

2. ROLL CALL

Jaime Yraguen, Chair
Jarrett Nielsen

Matt Brady
Shelby Osborn

Matthew Keller

3. APPROVAL OF MINUTES

A. January 6, 2025 & April 7, 2025 – Planning Commission Meetings

4. AUDIENCE PARTICIPATION: See Information on the Reverse

5. PUBLIC HEARING

Legislative Amendment; Roseburg File No. LUDR-25-001

Amending the Roseburg Municipal Code to reflect changes to the City's floodplain development standards as required by the Federal Emergency Management Agency (FEMA's) Pre-Implementation Compliance Measures (PICM) for National Flood Insurance Program (NFIP) participating communities.

6. BUSINESS FROM STAFF

- A. Sunshine Park UGB Expansion Update
- B. UGB Swap Update

7. BUSINESS FROM THE COMMISSION

8. NEXT MEETING – July 7, 2025

9. ADJOURNMENT

The agenda packet is available on-line at:

<http://www.cityofroseburg.org/your-government/commissions/planning-commission/>

The Planning Commission meetings can also be viewed on the City website the next day at: <https://www.cityofroseburg.org/your-government/commissions/planning-commission/videos>.

AMERICANS WITH DISABILITIES ACT NOTICE

Please contact the City Administration Office at least 48 hours prior to the scheduled meeting date if you need accommodations in accordance with the Americans with Disabilities Act. TDD users, please call Oregon Telecommunications Relay Service at 800-735-2900.

AUDIENCE PARTICIPATION INFORMATION

The Roseburg Planning Commission welcomes and encourages participation by citizens at all meetings. To allow the Commission to deal with business already scheduled, it is asked that anyone wishing to address the Commission follow these simple guidelines.

Comments may be provided in one of three ways:

- **In person during the meeting in the Council Chambers, Roseburg City Hall, 900 SE Douglas Ave.**
- **Email by sending an email by 12:00 p.m. the day of the meeting to cdd@cityofroseburg.org**
- **Virtually during the meeting. Contact the Community Development Department by phone (541)492-6750 or email cdd@cityofroseburg.org by 12:00 p.m. the day of the meeting to get a link to the meeting.**

Provide your name, address, phone number and which item on the agenda you wish to speak.

When participating virtually, log or call in prior to the start of the meeting using the link or phone number provided.

- When accessing the meeting through the **ZOOM link**, click "Join Webinar" to join the meeting as an attendee.
- When accessing the meeting through the **phone**, call the number provided.
- All attendees will be held in a "waiting room" until called on to speak.

Persons addressing the Commission must state their name and address for the record, including whether or not they are a resident of the City of Roseburg. All remarks shall be directed to the entire Commission. The Commission reserves the right to delay any action requested until they are fully informed on the matter.

CITIZEN PARTICIPATION – PUBLIC HEARING AGENDA ITEMS

For public hearing items on the agenda you will be given an opportunity to address the Commission once the item is called. Public hearings typically begin with establishing those who have party status, (to be explained by the Chair), a report from staff, followed by Commission questions to staff, then the applicant along with anyone they wish to call as a witness on their behalf will be called to speak, followed by those with party status. After all initial testimony is completed there will be an opportunity for rebuttal. Everyone addressing the Commission is subject to questioning. After the hearing portion of the item is completed, the Commission will discuss the matter with a motion for consideration being presented and acted on.

Once final action is taken on Quasi-Judicial matters, the action of the Commission can be appealed to City Council within 14 calendar days of the decision by filing a Notice of Review with the Community Development Department. Action on Legislative matters is typically a recommendation to City Council and will be forwarded to them for final consideration.

CITIZEN PARTICIPATION – NON-AGENDA ITEMS

If you wish to address the Commission on a matter not on the agenda, at the appropriate time, speakers who attend in person will be called up to speak by the Chair in the order in which they signed up. Speakers on Zoom (video or phone only) will be called on to speak by the Chair in the order in which they signed up. Persons addressing the Commission must state their full name and address, including whether or not they are a resident of the City of Roseburg, for the record. All remarks are to be directed to the Commission. For items not on the agenda the presentation should be brief and be on a topic of interest to the Planning Commission, such as a general land use matter. These presentations are reserved for new material which has not been previously considered. The Commission will not be taking action on any item presented under Audience Participation and if needed will provide direction to staff for appropriate follow-up.

For further details or information please contact the Community Development Department Monday through Friday, 8:00 a.m. to 5:00 p.m., at Roseburg City Hall, 900 SE Douglas Avenue, Third Floor, Roseburg OR 97470, phone number 541-492-6750, or e-mail cmatthews@cityofroseburg.org.

**CITY OF ROSEBURG
PLANNING COMMISSION MINUTES
January 6, 2025**

CALL TO ORDER

Chair Yraguen called the meeting of the Roseburg Planning Commission to order at 7:00 p.m. on Monday, January 6, 2025, in the City Hall Council Chambers.

ROLL CALL

Present: Chair Jaime Yraguen, Commissioners Matt Brady, Emily Brandt, Matthew Keller, Jarrett Nielsen, and Shelby Osborn.

Staff Present: Senior Planner Mark Moffett, and Department Technician Chrissy Matthews.

APPROVAL OF MINUTES –

Commissioner Keller moved to approve the November 4, 2024 Planning Commission Work Study session minutes as submitted. The motion was seconded by Commissioner Osborn and approved with the following vote: Chair Yraguen, and Commissioners Brady, Brandt, Keller, Nielsen, and Osborn voted yes. No one voted no.

Commissioner Brady moved to approve the December 2, 2024 Joint City and County Planning Commission meeting minutes as submitted. The motion was seconded by Commissioner Brandt and approved with the following vote: Chair Yraguen, and Commissioners Brady, Brandt, Keller, Nielsen, and Osborn voted yes. No one voted no.

PUBLIC HEARING – None.

AUDIENCE PARTICIPATION – None.

ADOPTION OF FINDING –

Legislative Amendment; Roseburg File No. CPA-24-002 (Sunshine Park Urban Growth Boundary Expansion)

Chair Yraguen provided the following: Legislative Amendment; Roseburg File No. CPA-24-002 Sunshine Park Urban Growth Boundary Expansion was closed during the December 2, 2024, Planning Commission hearing. During the meeting the Commission made a motion to request staff to prepare the findings of fact on behalf of the Planning Commission and referred the request to City Council and recommended City Council approve the following land use actions, as referenced in File No. CPA-24-002.

1. Amend the UGB by expanding the boundary to include 49.92 acres of park property located on the east side of Sunshine Park.
2. Annex the property into the City limits;
3. Amend the City Comprehensive Plan Map by applying the city's Public/Semi-Public (PSP) plan designation to the 49.92 acres of park property;
4. Amend the City Zoning Map by applying the city's Public Reserve zoning designation to the 49.92 acres of park property; and,
5. Amend the Urban Growth Management Agreement (UGMA) maps to reflect the expanded boundary of the new UGB.

The Commission was qualified at the December 2, 2024 meeting, but asked again to disclose any conflict of interest. However, Ex-parte contacts are not required to be disclosed due to

legislative matters affecting broad areas involving policy.

No conflicts of interest were disclosed by the commissioners.

Chair Yraguen asked for the staff report.

Moffett stated that Director Cowie prepared the Findings of Fact as requested by the Commission and addressed the issues from the hearing.

The Commission had no questions or concerns.

Commissioner Nielsen moved to adopt the Findings of Fact and Order as presented referring the request to City Council and recommending Council approve the land use actions, as referenced in File No. CPA-24-002. The motion was seconded by Commissioner Brady and approved with the following vote: Chair Yraguen, and Commissioners Brady, Brandt, Keller, Nielsen, and Osborn voted yes. No one voted no.

BUSINESS FROM STAFF – ELECTION OF OFFICERS

Commissioner Brady moved to nominate Jaime Yraguen to continue to serve as chair. The motion was seconded by Commissioner Nielsen and approved with the following votes: Chair Yraguen, and Commissioners Brady, Brandt, Keller, Nielsen and Osborn voted yes. No one voted no.

Commissioner Brandt moved to nominate Shelby Osborn to continue to serve as vice chair. The motion was seconded by Commissioner Keller and approved with the following vote: Chair Yraguen and Commissioners Brady, Brandt, Keller, Nielsen and Osborn voted yes. No one voted no.

Chair Yraguen stated that officer elections are conducted annually, with no fixed terms for the chair and vice chair positions.

BUSINESS FROM COMMISSION –

Commissioner Nielsen inquired whether any items are scheduled to come before the Commission in the near future.

Moffett stated Director Cowie plans to meet with him, the City Manager, and the Public Works Director to reassess priorities for the year. Upcoming initiatives are housing code updates to occur, the transition to a new OpenGov software program, floodplain rule modification, and a potential work session with the commission to review and discuss all code changes. If the Charter Oaks Urban Growth Boundary gets remanded it will come before the Commission.

Chair Yraguen inquired if there were any updates regarding Oregon Department of Transportation's (ODOT) plans regarding development along Diamond Lake Blvd and the roundabout at the intersection of Garden Valley Road and Old Melrose Road.

Moffett stated that the roundabout falls under Douglas County's jurisdiction. However, he is assigned to the Oregon 138 E (Diamond Lake Blvd) Project which was on hold for approximately 7 months. The project has now been reactivated, with design concepts expected in February or March.

Discussion ensued regarding the details of the plan.

Commissioner Nielsen asked if the Commission will be involved in the code changes.

Moffett stated there are federal guidelines for what the model ordinance looks like to meet the Federal Emergency Management Agency (FEMA) minimum requirements.

A discussion ensued regarding code regulations.

ADJOURNMENT - The meeting adjourned at 7:25 p.m. The next meeting is scheduled for February 3, 2025 at 7:00 p.m.



Chrissy Matthews
Department Technician

**CITY OF ROSEBURG
PLANNING COMMISSION MINUTES
April 7, 2025**

CALL TO ORDER

Chair Yraguen called the meeting of the Roseburg Planning Commission to order at 7:01 p.m. on Monday, April 7, 2025 in the City Hall Council Chambers.

ROLL CALL

Present: Chair Jaime Yraguen, Commissioners Matt Brady, Emily Brandt, Matthew Keller, Jarrett Nielsen, and Shelby Osborn.

Staff Present: Community Development Director Stuart Cowie and Department Technician Chrissy Matthews.

AUDIENCE PARTICIPATION – None.

Chair Yraguen read the procedures of the meeting.

PUBLIC HEARING – None.

STATUS UPDATE –

Sunshine Park Urban Growth Boundary (UGB) Expansion Update.

Cowie presented a PowerPoint outlining key dates for the Sunshine Park UGB expansion.

DLCD acknowledged the application on 3/25/2025, with the appeal deadline set for Wednesday, 3/26/2025. The City Public Works Department anticipates opening the bid for the trail system in fall 2025, with construction anticipated in spring 2026. Once the expansion is approved the property will be within city limits, allowing the city to maintain control of the property for development.

The property is currently under Douglas Forest Protection Agency's jurisdiction, with Roseburg Fire Department providing responses when requested. Once incorporated into city limits, it will fall under Roseburg Fire's jurisdiction. The City Public Works Department has purchased equipment for property maintenance.

No further questions or discussion.

Charter Oaks UGB Swap Update.

Cowie provided a PowerPoint – HB 3921 – Why It's Essential.

He provided an overview of the UGB swap review process and timeline. The city has been working on the UGB swap for over six years. The Governor's Office, represented by Matthew Tschabold, Housing and Homelessness Initiative Director, encouraged collaboration with Oregon State Representative Virgle Osborne to draft a bill (HB 3921), which was introduced to the legislature on 3/13/2025 and referred to the Housing and Homelessness Committee to navigate state agency processes.

The committee held a meeting and testimony, and a work session moved HB 3921 forward to the House floor, with hopes that it will reach the governor's desk, where she is expected to support it.

The UGB Swap application has been appealed to the Department of Land Conservation and Development (DLCD), creating a two-track process.

Cowie stated that the application is approximately 250 pages. Analysis of the application provides numerous opportunities for appeal, as the information undergoes thorough scrutiny which can extend the appeals process for many years.

Discussion ensued regarding the challenges and the importance of the UGB expansion to the city of Roseburg.

The UGB swap is based on density and dwelling units rather than acreage. The city would remove 290 acres and take in 220 acres. The 2019 Housing Needs Analysis set a goal of 1,875 new units over 20 years, including single-family homes, duplexes, triplexes, and Accessory Dwelling Units (ADUs). With an average of 23 units built per year, per city site reviews, housing production is falling short. Even full development of Charter Oaks would only meet 30% of the identified need. Multi-family housing, apartments, Single Room Occupancy (SROs), and developments with four or more units are essential to addressing shortages across all income levels.

Staff testified that the city has been working on expanding into the Charter Oaks area for decades. All the subdivisions in the Charter Oaks area were platted between 1947 and 1966. In 1963, the Roseburg Public School District purchased 17.5 acres with the vision of building a school. Testimony highlighted the importance of approving the UGB swap to create housing opportunities in Roseburg.

The following supporters provided testimony in support of the UGB Swap: Oregon State Representative Virgle Osborne, City Manager Nikki Messenger, Mayor Larry Rich, Community Development Director Stuart Cowie, and Developer Ben Tatone.

Virtual supporters included Douglas County Commissioner Tom Kress, i.e. Engineering Alex Palm, CEO Mercy Hospital Russell Wooley, Developer Steve Loosley, Roseburg Urban Sanitary Authority (RUSA) Executive Director Jim Baird, and Umpqua Economic Development Executive Director Brian Prawitz.

Commissioner Brady inquired about long-term planning and how to build a foundation for future growth.

Cowie highlighted the UGB swap as a valuable tool. Future evaluations will consider other areas for expansion. Legislative efforts, including middle housing code reforms, aim to support increased density by enabling duplexes and triplexes in local zoning, creating more housing opportunities.

Commissioner Nielsen discussed the importance of exploring properties within the city limits to incentivize development.

Cowie stated the code currently permits single-family dwellings (SFD) in medium-density zones, which may not align with intended density goals. Considering limitations on building requirements could help encourage higher-density development, supporting the city's efforts to maximize growth and land use efficiency.

Commissioner Brandt inquired what code changes the city may explore to encourage property owners to develop vacant or underutilized land.

Cowie stated there has been discussion around incentives. The city currently offers system development charge (SDC) incentives through the Diamond Lake Urban Renewal District. Further study is needed to evaluate other incentives.

Chair Yraguen inquired about the floodplain mitigation status, as well as the status of the Diamond Lake Corridor Plan.

Cowie stated the Federal Emergency Management Agency's (FEMA) new program is significantly changing the floodplain criteria. There are two options: adopting FEMA's model ordinance or applying the criteria on a case-by-case basis. However, Oregon land use laws do not allow discretionary criteria, except in specific cases such as conditional use permits, variances and other land use actions which have an appeals process. As a result, the city cannot implement the model ordinance or case-by-case criteria because it would conflict with land use development laws that require specific criteria to be followed.

FEMA recognizes that the city has acknowledged FEMA's new program but will not be applying it until FEMA provides new standards by July 2025. These codes will fundamentally change the way development occurs.

The city is collaborating with ODOT on a Hwy 138 Corridor Plan which is in the final phase. The Plan will be presented to the planning commission for a recommendation to the city council in approximately 2-3 months.

Commissioner Nielsen asked about installing a stop light on NE Fulton Street.

Cowie stated that it is a long-term plan for ODOT, but he isn't aware of the timeline.

BUSINESS FROM STAFF – None.

BUSINESS FROM COMMISSION –

Commissioner Brady inquired about what is occurring in the old Sheri's building on NW Aviation Dr.

Cowie stated a site review application for tenant improvement was submitted for Elmer's Kitchen.

ADJOURNMENT - The meeting adjourned at 8:05 p.m. The next meeting is scheduled for May 5, 2025 at 7:00 p.m.



Chrissy Matthews
Department Technician

CITY OF ROSEBURG PLANNING COMMISSION STAFF REPORT



Land Use Regulation Text Amendments File No. LUDR-25-001

Meeting Date: June 2, 2025

Completeness Date: N/A

120-Day Limit: N/A

Staff Contact: Mark Moffett, Senior Planner

Applicant: City of Roseburg

Request: Amend the Roseburg Municipal Code to reflect changes to the City of Roseburg's floodplain development standards as required by the Federal Emergency Management Agency's (FEMA's) Pre-Implementation Compliance Measures (PICM) for National Flood Insurance Program (NFIP) participating communities.

ISSUE STATEMENT AND SUMMARY

Staff is proposing to add the required "no net loss" standards for all development into RMC 12.04.090, Floodplain Overlay Zone. New regulations are being required by FEMA, including mitigation for any new developed space, pervious surface, and tree removal. Additional stormwater management is also triggered in some situations, and mitigation plantings will be required in the floodplain when there are new impacts. FEMA has mandated that the regulations be adopted and in place by July 31, 2025.

BACKGROUND/ANALYSIS

In the summer of 2024, FEMA sent an announcement about how they must implement the Endangered Species Act within the National Flood Insurance Program (NFIP). FEMA has been working on an environmental impact statement (EIS) for the NFIP implementation plan being developed in response to a 2016 biological opinion (BiOp) from the National Marine Fisheries Service (NMFS). This 2016 BiOp from NMFS found that current floodplain regulations are impacting threatened species. As an interim measure, FEMA is requiring cities and counties in Western Oregon to begin applying one of three options for the new regulations in 2024 and 2025. Final and additional regulations are expected after the EIS has been completed and final rules adopted in 2026 and/or 2027.

The City Council was briefed on this issue on September 9, 2024. Planning Commission was also briefed on this issue on October 7, 2024. On November 18, 2024, City Council chose to pursue the Model Ordinance pathway for PICM. The two rejected pathways were (1) a prohibition on all new development in the floodplain and (2) a "permit-by-permit" approach with individual habitat assessments for each project. City staff provided a letter to all new owners of property in the regulated floodplain on November 1, 2024, informing them that new regulations were coming. A significant number of projects were submitted to city staff to

“grandfather” themselves under the pre-PICM regulations just before the preliminary measures went into effect on December 1, 2024. However, legal considerations have prevented staff from fully applying the discretionary “permit-by-permit” approach that was to go into effect on December 1, 2024.

Tracking of all permits in relation to the new standards began at the end of January 2025, and the new Model Ordinance is required by FEMA to be adopted by July 31, 2025.

This project is to comply with and adopt the Model Ordinance per the FEMA timeline for PICM outlined with City Council last year.

The new regulations apply a “no net loss” standard for all development in the floodplain, using three measurable “proxies” for floodplain functions that could have adverse impacts on threatened and endangered fish species and their critical habitat.

In practice, the changes will add language requiring the following changes in the regulated special flood hazard area (SFHA), including the 100-year or 1 percent chance floodplain and the Floodway:

- **No net loss of “undeveloped space”.** Open grassy areas, unpaved areas, and other undeveloped land must be maintained, or be replaced with “fish-accessible and egressable compensatory volume” in the same general area. Replacement on the same site can be achieved at a 1:1 ratio, but development of mitigation off-site or on a time delay significantly increases or doubles the area required for mitigation, and the assistance of a qualified professional would be necessary;
- **No net loss of “impervious area”.** Similar to the rules for undeveloped space, pervious areas must be maintained or replaced in the same general area. Low-impact development or green infrastructure, such as vegetated areas with native plants, may help to mitigate for new pervious area but these must be designed by a qualified professional. New stormwater management standards will apply to any project that does not successfully mitigate for loss of impervious area, including creating facilities with water quality treatment and retention; and
- **No net loss of trees 6-inches diameter breast height (dbh) or greater.** There is a tree replacement ratio for re-planting that must be followed, including generally planting many more new trees for larger trees being removed versus smaller trees. Replacement trees must be native species suitable to the region. In addition, 5% of the new disturbed area must be planted with native plants and be retained as open space.

Under the new regulations, additional time delay and expense will be incurred by applicants who may need to hire a qualified professional to develop the basic planning submittal documents as well as mitigation and compliance plans. Operation and maintenance plans will be required for any necessary stormwater management facilities, and city staff will incur significant additional time expense explaining the new regulations to our applicants and other community members. Finally, there is a list of projects that are exempt from the new “no net loss” provisions included in the code update, but it is limited to routine maintenance and habitat restoration activities.

The attached Findings of Fact and Order provides justification for the text amendments.

OPTIONS:

1. Adopt proposed Findings of Fact recommending the City Council approve the text amendments.
2. Adopt proposed Findings of Fact recommending the City Council deny the text amendments.
3. Adopt modified Findings of Fact.

RECOMMENDATION:

Based on prior City Council direction, and to maintain our good standing in the NFIP, staff recommend that the Planning Commission recommend City Council approve the Findings of Fact as presented.

SUGGESTED MOTION:

I MOVE TO ADOPT THE FINDINGS OF FACT AS PRESENTED, AND RECOMMEND CITY COUNCIL **APPROVE** THE PROPOSED TEXT AMENDMENTS INCLUDED UNDER FILE NO. LUDR-25-001.

EXHIBITS:

Exhibit A - Findings of Fact and Order
Exhibit B - Text Amendments

In the Matter of the Legislative Action
by the City of Roseburg

) Text Amendment
) File # LUDR-25-001

**BEFORE THE ROSEBURG PLANNING COMMISSION
FINDINGS OF FACT AND ORDER**

I. NATURE OF AMENDMENTS

The Community Development Department proposes changes to the Land Use and Development Regulations amending the Roseburg Municipal Code (RMC), which reflect changes to floodplain development standards as required by the Federal Emergency Management Agency's (FEMA's) Pre-Implementation Compliance Measures (PICM) for National Flood Insurance Program (NFIP) participating communities.

II. PUBLIC HEARING

A public hearing was held on the proposed amendments before the Roseburg Planning Commission on June 2, 2025. At the hearing, the Planning Commission reviewed Land Use File LUDR-25-001 for legislative text amendments and it was made part of the record.

III. FINDINGS OF FACT

A. EXISTING CONDITIONS

1. The Planning Commission takes official notice of the Roseburg Urban Area Comprehensive Plan adopted by City Council Ordinance #2980 on December 9, 1996 and of the Roseburg Land Use and Development Ordinance #2363, as originally adopted July 1, 1982, as both may have been amended from time-to-time.
2. Notice of the public hearing was given by publication in the News-Review, a newspaper of general circulation, at least 10 days prior to the hearing. Opportunities were provided for all interested parties to be involved in the planning process through the public hearing.
3. The proposal is to legislatively amend text within the Land Use and Development Regulations in chapter 12 of the Roseburg Municipal Code.

B. PROPOSAL BACKGROUND

The City was notified by the Federal Emergency Management Agency (FEMA) in July 2024 that all communities in Western Oregon which participate in the National Flood Insurance Program (NFIP) would be required to modify and update their floodplain regulations. In reaction to lawsuits and a 2016 biological opinion (BiOp) from the National Marine Fisheries Services (NMFS), the FEMA has been working on an environmental impact statement (EIS) to develop regulations responding to the BiOp. The 2016 BiOp found that the current NFIP is impacting threatened species, and therefore not in compliance with the Endangered Species Act (ESA). As an interim measure, FEMA is requiring cities and counties in Western Oregon to begin applying one of three options for the new regulations in 2024 and 2025. Final and additional regulations are expected after the EIS has been completed and final rules adopted in 2026 and/or 2027.

After Planning Commission and City Council direction in 2024, the current project seeks to comply with and adopt the PICM Model Ordinance per the FEMA timeline. The new

regulations apply a “no net loss” standard for all development in the floodplain, using three measurable “proxies” for floodplain functions that could have adverse impacts on threatened and endangered fish species and their critical habitat.

In practice, the changes will add language requiring the following changes in the regulated special flood hazard area (SFHA), including the 100-year or 1 percent chance floodplain and the floodway:

- **No net loss of “undeveloped space”.** Open grassy areas, unpaved areas, and other undeveloped land must be maintained, or be replaced with “fish-accessible and egress-able compensatory volume” in the same general area. Replacement on the same site can be achieved at a 1:1 ratio, but development of mitigation off-site or on a time delay significantly increases or doubles the area required for mitigation, and the assistance of a qualified professional would be necessary;
- **No net loss of “impervious area”.** Similar to the rules for undeveloped space, pervious areas must be maintained or replaced in the same general area. Low-impact development or green infrastructure, such as vegetated areas with native plants, may help to mitigate for new pervious area but these must be designed by a qualified professional. New stormwater management standards will apply to any project that does not successfully mitigate for loss of impervious area, including facilities with water quality treatment and retention; and
- **No net loss of trees 6-inches diameter breast height (dbh) or greater.** There is a tree replacement ratio for re-planting that must be followed, including generally planting many more new trees for larger trees being removed versus smaller trees. Replacement trees must be native species suitable to the region.

A significant number of new definitions are being added to the code relating to the new “no net loss” rules. The regulations will require significantly more information on most applications for floodplain site review, including existing trees and their size and species, details on the precise footprint of any new structures of impervious or paved areas, and the full extent and location of all fill materials.

C. AGENCY COMMENTS

Coordination occurred between the Community Development Department, Public Works Departments, the Douglas County Building Department, The Roseburg Fire Department and the Oregon Department of Land Conservation and Development while the proposed amendments were being drafted.

D. PUBLIC COMMENTS

No written comments have been received in response to the November 1, 2024 letter mailed to all property owners. At the time of writing for these findings, no public comments have been received. Any comments received prior to the public hearing will be presented to Planning Commission at their June 2, 2025 meeting.

E. PUBLIC OUTREACH

The City Council was briefed on this issue on September 9, 2024. Planning Commission was also briefed on this issue on October 7, 2024. Public Notices were made in the News-Review at least ten days prior to each of these hearings. A public notice was provided in the News-Review at least ten days prior to this Planning Commission meeting.

A city website was set up to provide public information on the PICM project in September, 2024 and is still available online at <https://www.cityofroseburg.org/departments/community-development/news>. City staff provided a letter to all new owners of property in the regulated floodplain on November 1, 2024, informing them that new regulations were coming.

F. **REVIEW CRITERIA**

Text amendments to the Land Use and Development Regulations identified in RMC Title 12 require legislative action. Procedures in which a legislative action must occur are contained in RMC Section 12.10.020. Section 12.10.020(F)(2) requires that all legislative action proposals be analyzed for consistency with the policies of the Comprehensive Plan, Statewide Planning Goals, and other provisions of the Code.

The Roseburg Comprehensive Plan, as mandated by ORS Chapter 197, must conform to the Oregon Statewide Planning Goals and maintain an implementing ordinance, through which the Roseburg Municipal Code carries out the goals and policies of the Comprehensive Plan. The intent of these ordinance amendments are to maintain consistency with ORS as the State makes changes from time to time and to comply with the intent of the Comprehensive Plan.

It is important to note that as a change to floodplain development standards only, with no change to the underlying uses or other permitted activities in the various zones in which the new standards will apply, there are several criteria which do not apply. In addition, as a mandatory regulatory change being imposed by FEMA seeking compliance with the ESA and 2016 BiOp from NMFS, the proposed amendments circumvent the standard land use planning and statewide planning goal compliance process.

Comprehensive Plan

Pertinent policies that apply to the proposal have been evaluated. There are no changes with regards to the policies pertaining to growth, economic growth, transportation, energy conservation, parks and recreation, historic preservation, public facilities and services, housing, urban growth, commercial development, industrial development, transportation, schools and parks, and public and semi-public buildings and lands. Pertinent policies from the two planning areas where findings are necessary (natural resources, resource area and hazardous area development) are included below.

Natural Resources Policy No. 1

The City and County shall jointly develop and adopt ordinances and programs which carefully manage development on hillsides and in water bodies in order to protect scenic quality, water quality, vegetation and wildlife values of those areas.

Natural Resources Policy No. 2

The South and North Umpqua Rivers, Newton Creek and Deer Creek are major waterways that are scenic, recreational, and natural resources of the community. They are, however, to be protected, preserved, and maintained for their primary function as drainage courses first. Any measures taken to sustain their primary function shall minimize adverse impacts on scenic, recreational, and natural values.

Natural Resources Policy No. 3

Natural drainage courses, including major waterways, shall be regulated to control alteration, excavation, filling, realignment, cleaning, and all other actions that could affect their function or natural resource value.

Natural Resources Policy No. 4

Mature ground cover and trees, wildlife habitats, and the natural contours of identified significant stream banks shall be preserved. This shall be accomplished with a setback of structural and any other physical development such as parking lots, retaining walls, channel alterations, etc., from identified stream banks unless findings are made, after consultation with the Oregon Department of Fish and Wildlife, that any such activity:

- a. *Will not have a significant adverse effect on streambank erosion, water temperature and quality, or wildlife; or*
- b. *Is required for flood control and actions are taken to mitigate such impacts as much as is possible; or,*
- c. *Is not required for flood control and will include all actions as are necessary to prevent or sufficiently mitigate any significant immediate or potential streambank erosion, adverse effect on water temperature and quality, or wildlife.*

Natural Resources Policy No. 5

Fish habitats shall be protected against extraction of stream materials, fillings, erosion, siltation, impoundments, removal of shoreline vegetation, and deteriorating water quality.

Findings for Relevant Natural Resources Policies: This proposal does not modify regulations related to development on hillsides and steep slopes, which will remain unchanged and already comply with the relevant natural resources goals listed above, as well as others specific to the topic of hillside development. The current floodplain overlay regulations also comply with all relevant natural resources policies listed above.

The proposal adds additional provisions to protect the built environment from flood damage and to minimize potential impacts of construction on public health and safety, property, water quality, and aquatic and riparian habitats. The requirements pertain to new development in the special flood hazard area (SFHA), including the maintenance, repair, or remodel of existing structures and utilities when the footprint is expanded and/or the floodplain is further encroached upon. Adopting the proposed Model Ordinance provides compliance with federal and state statutes and with the Oregon (floodplain) Implementation Plan. The proposed changes to adopt the Model Ordinance also comply with the following:

- The requirements of the National Flood Insurance Program (NFIP), as specified in the Code of Federal Regulations (CFR) 44 CFR 59 and 60;
- Oregon State codes to protect structures from flood damage that are specified in the Oregon Structural Specialty Code (OSSC), Section 1612 and Oregon Residential Specialty Code (ORSC), Section R322;
- The Oregon Statewide Land Use Planning Goals; and
- Provisions needed to meet the requirements of the Oregon Implementation Plan for NFIP-ESA Integration.

Adherent to the NMFS 2016 Biological Opinion, mitigation is necessary to ensure a no net loss in floodplain functions. The proposed regulations provide measurable actions that can prevent no net loss of the parent floodplain functions. These proxies include undeveloped space, pervious surfaces, and trees to account for a no net loss in respective floodplain functions of floodplain storage, water quality, and vegetation. No net loss applies 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.

For the reasons noted above, the proposal is consistent with the goal of Policy Number 1 above to carefully manage development in water bodies in order to protect scenic quality, water quality, vegetation and wildlife values of those areas. Applied along the South Umpqua River, Newton Creek and Deer Creek, the proposal will expand the levels of protection, preservation and maintenance of these waterbodies as drainage courses, while minimizing adverse impacts on their scenic, recreational and natural values, consistent with Policy Number 2 above.

By adding new regulations requiring consideration of additional pervious surfaces and developed space, as well as tree removal and mitigation of impacts in these areas, there will be additional control of alterations and other actions that could impact function or natural resource value of waterways inside city limits. Additional requirements for disturbance of existing stream banks and mitigation requirements will ensure that these features will be preserved, while continuing to coordinate with the Oregon Department of Fish and Wildlife as necessary as happens today. The new regulations will have a significant potential impact on protecting fish habitats from extraction of stream materials, fillings, erosion, siltation, impoundments, removal of shoreline vegetation, and deteriorating water quality. For the reasons noted above in this paragraph, the Model Ordinance language being added to the Floodplain Overlay Zone is consistent with the goals of Natural Resource Policies 3 through 5.

Resource Area and Hazardous Area Development Policy No. 6

Development in the floodplain shall be regulated to preserve and maintain the capability of the floodplain to convey floodwater discharges and to minimize danger to life and property.

Resource Area and Hazardous Area Development Policy No. 7

New subdivisions and other development which occurs on property extending into the floodplain should be encouraged to utilize only that portion of the property lying outside the floodplain by employing Planned Unit Development or cluster-type development techniques.

Findings for Relevant Resource Area and Hazardous Area Development Policies: As noted above for findings on the relevant Natural Resource Policies, development in the floodplain is already regulated to maintain drainage capacity and minimize danger to life and property. The “no net loss” provisions in the PICM Model Ordinance will further ensure the preservation and maintenance of the floodplain for the conveyance of floodwater discharges and minimize danger to life and property. This will occur with additional restrictions on and mitigation for new impervious surface, developed area, and tree removal. Similarly, the PICM Model Ordinance provisions will further encourage development to be located outside of the SFHA on those sites where this is an option. Therefore, the proposed changes to the Floodplain Overlay Zone are consistent with the goals of Resource Area and Hazardous Area Development Policies 6 and 7.

Statewide Planning Goals

Pertinent Statewide Planning Goals that apply to the proposal have been evaluated as follows:

***Statewide Planning Goals 3, 4, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 will not be addressed within the findings below as they are not applicable to the proposed amendments.*

Statewide Planning Goal # 1 – CITIZEN INVOLVEMENT

To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

Finding: The City meets this requirement by administering the public outreach items listed and summarized within subsection E of these findings. In addition, the City is required to hold a public hearing with the Planning Commission, in which public notification was required under Section 12.10 of the Roseburg Municipal Code, to ensure that any members of the public who have comments or concerns related to the proposed amendments have an opportunity to be heard during the June 2nd, 2025 Planning Commission Hearing.

The City of Roseburg provided notice of this proposal as mandated through ORS and Municipal Code requirements, as well as publishing the notice in the News Review, a newspaper of general circulation. A public hearing(s) is held in order to provide an opportunity for interested citizens to be involved, provide comments and present issues, influence the Commission and eventually the Council.

This process has been established by the City and determined to be consistent with Goal 1 of the Oregon Statewide Planning Goals. The public hearing notice of the action and decision, and the hearings on this case before the Planning Commission and the City Council are all recognized as opportunities for citizen participation.

Roseburg's Planning Commission has the responsibility to act as the conduit to the City Council on land use matters. The Planning Commission is selected through an open, well-publicized public process and the Commission may include one member who resides outside the city limits. All meetings were advertised to local media. Therefore, the proposal is consistent with Statewide Planning Goal 1.

Statewide Planning Goal #2 – LAND USE PLANNING

To establish a land use planning process and policy framework as a basis for all decisions and actions related to the use of land and to assure an adequate factual base for such decisions and actions.

Finding: This Goal requires that land use decisions 1) have an adequate factual base, 2) that alternatives have been considered, and 3) that implementation measures are consistent with and adequate to carry out comprehensive plan policies and designations.

The proposed land use action has an adequate factual base and is being required by FEMA for all communities in Western Oregon participating in the NFIP. The project background and the federal regulatory mandate it is responding to has been thoroughly described in this application. Implementation measures proposed are consistent with the relevant Model Ordinance published by FEMA and will be adequate to carry out comprehensive plan policies and designations as noted in these findings.

As noted above the City of Roseburg has adopted a Comprehensive Plan, which is "acknowledged" by the State of Oregon. Implementation of the Comprehensive Plan is accomplished through the adopted Code. The Land Use and Development Regulations Chapter of Roseburg Municipal Code has been acknowledged by the

State of Oregon and has been amended from time-to-time in order to comply with ORS.

Therefore, the proposal is consistent with Statewide Planning Goal 2.

Statewide Planning Goal #5, 6, 7 – NATURAL RESOURCES, SCENIC AND HISTORIC AREAS, AND OPEN SPACES/AIR, WATER AND LAND RESOURCES QUALITY/AREAS SUBJECT TO NATURAL HAZARDS

Finding: Goals 5, 6 and 7 are represented in relevant part through the Natural Resources and Resource Area and Hazardous Development Area sections of Roseburg's Comprehensive Plan. The policies related to these items are reflected within the current implementing regulations of the Roseburg Municipal Code, including the Floodplain Overlay. Floodplain regulations are being strengthened with this project and will continue to be administered at the same level currently applied to all development within the City. In keeping with regulatory changes contained within this package and others adopted over time in the past, the Roseburg Municipal Code will continue to be in compliance with Statewide Planning Goals 5, 6 & 7 with regards to development in the floodplain. Therefore, the proposal is consistent with Statewide Planning Goals 5, 6 & 7.

IV. CONCLUSION

Based on the above findings, the Planning Commission concludes that the application meets the criteria for approval in RMC 12.10.020(F)(2).

V. ORDER

Based on the Findings and Conclusions above, the Planning Commission recommends the City Council approved the proposed text amendments included under file number LUDR-25-001.

Planning Commission Chair

Date _____

Stuart Cowie, Community Development Director

Date _____

Planning Commission Members:

Jaime Yraguen, Chair
Shelby Osborn, Vice Chair
Jarrett Nielsen
Matthew Brady
Matthew Keller
Vacant
Vacant

§ 12.04.090. Floodplain overlay.

- A. Statutory Authorization. The Legislature of the State of Oregon has in Article IV, Section 2, and Article XI, Section 2, of the Constitution of the State of Oregon, delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. The City Council has adopted this Section in accordance with such authority.
- B. Impact on Public Health and Safety.
1. Flood hazard areas within City of Roseburg are subject to periodic inundation which results in loss of life and property; health and safety hazards; disruption of commerce and governmental services; extraordinary public expenditures for flood protection; and relief and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
 2. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities and when inadequately anchored, damage uses in other areas. Uses that are inadequately flood-proofed, elevated, or otherwise protected from flood damages also contribute to the flood loss.
 3. This Section seeks to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid the direct or indirect support of floodplain development whenever there is a practicable alternative. The preferred method for satisfying this requirement is to avoid sites in the base floodplain. If a structure must be located in the base floodplain, this Section requires that potential harm to people and property and to natural and beneficial floodplain values is minimized.
- C. Purpose. It is the purpose of this Section to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:
1. Protect human life and health;
 2. Minimize expenditure of public money and costly flood control projects;
 3. Preserve natural and beneficial floodplain functions;
 4. Minimize the need for rescue and relief efforts associated with flooding generally undertaken at the expense of the general public;
 5. Minimize prolonged business interruptions;
 6. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, and sewer lines, streets, and bridges located in areas of special flood hazard;
 7. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
 8. Participate in and maintain eligibility for flood insurance and disaster relief;
 9. Ensure that potential buyers are notified that property is in an area of special flood hazard; and
 10. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.
- D. Methods of Reducing Flood Losses. In order to accomplish its purposes, this Section includes methods and provisions for:
1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or

velocities;

2. Requiring that uses vulnerable to floods, including facilities which serve uses, be protected against flood damage at the time of initial construction;
 3. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
 4. Controlling filling, grading, dredging and other development which may increase flood damage;
and
 5. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas;
 6. Employing a standard of "no net loss" of natural and beneficial floodplain functions; and
 7. Coordinating and supplementing the provisions of the state building code with local land use and development ordinances.
- E. Definitions. Unless specifically defined below, words or phrases used in this Section shall be interpreted so as to give them the meaning they have in common usage and to give this Section the most reasonable application. For purposes of this Section, the following are defined as follows:
- "0.2-percent-annual-chance flood" means a flood which has a 0.2-percent chance of being equaled or exceeded in any given year (also known as the "500-year" flood).
- "0.2-percent-annual-chance flood elevation" means a computed elevation to which floodwater is anticipated to rise during the 0.2-percent-annual-chance flood (also known as the "500-year" flood elevation).
- "0.2-percent-annual-chance floodplain" means an area subject to flooding by the 0.2-percent-annual-chance flood (also known as the "500-year" floodplain).
- "1-percent-annual-chance flood" means a flood having a one chance in 100 of being equaled or exceeded in any one-year period (also known as the "100-year" flood or "base flood").
- "1-percent-annual-chance flood elevation" means a computed elevation to which floodwater is anticipated to rise during the 1-percent-annual-chance flood (also known as the "100-year" flood elevation or the "base" flood elevation).
- "1-percent-annual-chance floodplain" means an area subject to flooding by the 1-percent-annual-chance flood (also known as the "100-year" floodplain or "base" floodplain).
- "500-year elevation approach" means an area subject to a 0.2-percent-annual-chance flood.
- "Ancillary features" means features of a development that are not directly related to the primary purpose of the development.
- "Appeal" means a request for a review of the Community Development Director's interpretation of any provision of this Code or a request for a variance.
- "Area of shallow flooding" means a designated AO or AH Zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.
- "Area of special flood hazard" means land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.
- "Base flood" means a flood having a one percent chance of being equaled or exceeded in any given year.

"Base flood elevation" means a computed 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.

"Below-grade crawlspace" means an enclosed area below the base flood elevation in which the interior grade is not more than two feet below the lowest adjacent grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed four feet at any point.

BFE. See "Base flood elevation."

"Compensatory storage" means the volume of the loss of floodwater storage due to filling in the special flood hazard area shall be offset by providing a volume of flood storage by excavation or other compensatory measures at or adjacent to the development site.

"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, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

DBH or dbh. See "Diameter breast height".

"Diameter breast height" means the diameter of a tree as measured at 4.5 feet above ground level.

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

"Elevated building" means for insurance purposes, a non-basement building which has had its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.

"Existing manufactured home park or subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

"Fill" means placement of any materials such as soil, gravel, crushed stone, or other materials that change the elevation of the floodplain. The placement of fill is considered "development".

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

"Fish egressible space" means the volumetric space available to fish to exit or leave from.

"Flood insurance rate map (FIRM)" means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

"Flood insurance study" means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary Floodway Map, and the water surface elevation of the base flood.

"Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from overflow of inland or tidal waters and/or unusual and rapid accumulation of surface runoff waters from any source.

"Floodplain storage capacity" means the volume of floodwater that an area of floodplain can hold during the 1-percent annual chance flood.

"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.

“Footprint” means the existing measurements of the structure related to the three floodplain functions and their proxies. The footprint related to floodplain storage refers to the volumetric amount of developed space measured from the existing ground level to the BFE, and the footprint related to water quality refers to the area of impervious surface that the structure creates.

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

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

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

“Hazard trees” means standing dead, dying or diseased trees or ones 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 as defined by the community.

“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 may be estimated based on a point that is along the same approximate line perpendicular to the direction of flow.

“Hydraulically equivalent site” means a compensation area designed to drain freely and openly to a channel and located opposite or adjacent to a fill area. A site shall be designed by a registered civil engineer using a nationally accepted hydrologic model.

“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 cannot be penetrated by 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” 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 replication the predevelopment hydrology of the site. Low impact development helps achieve no net loss of impervious surface by infiltrating stormwater in an amount equal to or greater than the infiltration lost by the placement of new

impervious surface. Low impact development 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 vehicles, building access or storage, in an area other than a basement area, is 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 Subsection 12.04.090(DD) of this Code.

"Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.

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

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

"NAVD 88" means North American Vertical Datum of 1988.

"New construction" means structures for which the "start of construction" commenced on or after the effective date of this Section.

"New manufactured home subdivision" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either the final site grading or the pouring of concrete pads) is completed on or after the effective date of adopted floodplain management regulations.

"No net loss" means a standard where adverse impacts must be avoided to 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 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 the shore 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.

"Pervious surface" means surfaces that allow rain and snowmelt to seep into the soil and gravel below. Pervious surface may also be referred to as permeable surface.

"Qualified professional" means an appropriate subject matter expert that is defined by the community.

"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.

"Regulatory flood." See "1-percent-annual-chance floodplain."

"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 is measures from the ordinary high water line of a fresh waterbody (lake; pond; ephemeral, intermittent, or perennial stream" or mean higher-high water line (MHHW) 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 special flood hazard area.

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

"Special flood hazard area." See "1-percent-annual-chance floodplain," also abbreviated as "SFHA."

"Start of construction" means the first placement of permanent construction including substantial improvement of a structure (other than a mobile home) on a site such as the pouring of slabs or footings or any work beyond the stage of excavation. 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 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 as part of the main structure. For a structure (other than a mobile home) without a basement or poured footings, the "start of construction" includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. For mobile homes not within a mobile home park or mobile home subdivision, "start of construction" means the affixing of the mobile home to its permanent site. For mobile homes within mobile home parks or mobile home subdivisions, "start of construction" is the date on which the construction of facilities for servicing the site on which the mobile home is to be affixed (including, at a minimum, the construction of streets, either final site grading or the pouring of concrete pads, and installation of utilities) is completed.

"State Building Code" means the combined specialty codes.

"Structure" means a walled and roofed building including a gas or liquid storage that is principally above ground.

"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 30 percent of the market value of the structure before the damage occurred.

"Substantial improvement" means any combination of repairs, reconstruction, rehabilitation, addition, or other improvement of a structure taking place during a 15-year period, the cost of which equals or exceeds 30 percent of the market value of the structure before the work is started. Before the damage occurred, this term includes structures that have incurred substantial damage, regardless of the actual repair work performed. For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either:

1. Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or
2. Any alteration of a structure listed on the National Register of Historic Places or the City Inventory of Historic Places.

"Technical evaluation" means the application of special knowledge of the mathematical, physical, and engineering sciences regarding investigation, evaluation, planning, and design for the purpose of assuring compliance with applicable standards (i.e., photo interpretation, surveys, land forms, data sources, hydrological analysis, etc.).

"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 no net loss.

"Variance" means a grant of relief from the requirements of this Section which permits construction in a manner that would otherwise be prohibited by this Section.

- F. Lands to Which this Code Applies. This Code shall apply to all areas of special flood hazards within the jurisdiction of the City of Roseburg.
- G. Basis for Establishing Areas of Special Flood Hazard. Areas of flood hazard for the Roseburg urban area are areas designated as special flood hazard areas (A zones) or areas within a floodway.

Special flood hazard areas and floodways are identified by the Federal Insurance Administration in scientific and engineering reports entitled "The Flood Insurance Study for Douglas County, Oregon and Incorporated Areas," effective date February 17, 2010, with accompanying Digital Flood Insurance Rate Maps (DFIRM) and Flood Hazard Boundary Maps and future revisions as adopted.

All of the above referenced publications, maps and orthophotos are hereby adopted by reference and declared to be part of this Code as are future revisions as adopted. These publications, maps, and orthophotos shall be kept on file with the Community Development Department.

These publications shall be used as the basis for determining which flood district applies to property. The best available information for flood hazard identification as outlined in Subsection N shall be the basis for regulation until a new FIRM is issued which incorporates the data utilized under Subsection N of this Section. Where these publications fail to provide data sufficient to determine the applicable flood district, the applicable flood district and base flood elevation shall be determined on the basis of the best available information.

Areas of flood hazard shall also include any land area susceptible to inundation water from any source where the above referenced maps have not identified any special flood areas.

- H. Penalties for Noncompliance. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this Code and other applicable regulations. Violation of the provisions of this Code by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this Code or fails to comply with any of its requirements shall upon conviction thereof be fined not more than \$5,000 or imprisoned for not more than 30 days, or both, for each violation and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the City of Roseburg from taking such other lawful action as is necessary to prevent or remedy any violation.
- I. Abrogation and Greater Restrictions. This Code is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Section and another

ordinance, state building code, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restriction shall prevail.

J. Interpretation. In the interpretation and application of this Code, all provisions shall be:

1. Considered as minimum requirements;
2. Liberally constructed in favor of the City Council; and,
3. Deemed neither to limit nor repeal any other powers granted under State statutes and rules including the State building codes.

K. Warning and Disclaimer of Liability. The degree of flood protection required by this Code is considered reasonable for regulatory purposes and is based on technical evaluations as defined in Subsection E of this Section. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This Code does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This Code shall not create liability on the part of the City, any Department or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this Code or any administrative decision lawfully made thereunder. Building in areas where flooding can occur is at the owner's sole risk.

L. Site Plan Review. A site plan review shall be obtained before construction or development begins within any area of special flood hazard established in Subsection FF of this Section. The Community Development Director is appointed to administer and implement this Code by granting or denying site plan review applications in accordance with its provisions. The review shall be for all structures including mobile homes, as set forth in Subsection E, Definitions, and for other development including fill and other activities, also as set forth in the Subsection E, Definitions. Application for a site plan review shall be made on forms furnished by the Community Development Director and may include but 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. Elevation in relation to mean sea level NAVD 88, of the bottom of the lowest floor (including basement) of all structures;
2. Elevation in relation to mean sea level NAVD 88 to which any structure has been flood-proofed;
3. Certification by a registered professional engineer or architect that the flood-proofing methods for any nonresidential structure meet the flood-proofing criteria specified in Subsection ~~BB~~ AA of this Section; and
4. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

Where elevation data is not available through the Flood Insurance Study or from another authoritative source (Subsection N of this Section), applications for site plan review shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

M. Duties and Responsibilities of the Director. Duties of the Community Development Director shall include, but not be limited to:

1. Review all development applications to determine that the requirements and conditions of this Code have been satisfied. This shall include, but not be limited to, determinations as to whether the project includes a substantial improvement, watercourse alteration, and the placement of fill

or excavation.

2. Review all development permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
 3. Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Subsection EE of this Section are met.
 4. Determine whether the proposed development activity complies with the no net loss standards in 12.04.060(HH).
- N. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with Subsection 12.04.090(G) of this Code: Basis for Establishing the Areas of Special Flood Hazard, the Community Development Director shall obtain, review, and reasonably utilize any base flood elevation data available from a Federal, State, or other source, in order to administer Subsection Z of this Section: Residential Construction, and Subsection AA of this Section: Non-Residential Construction.
- O. Information to Be Obtained and Maintained.
1. Where base flood elevations data is provided through the Flood Insurance Study or required as Subsection 12.04.090(N) of this Code obtain and record the actual elevation (in relation to NAVD 88) of the bottom of the lowest floor (including basements and below-grade crawlspace) of all new or substantially improved structures, and whether or not the structure contains a basement.
 2. For all new or substantially improved flood-proofed structures:
 - a. Verify and record the actual elevation (in relation to NAVD 88), and,
 - b. Maintain the flood-proofing certifications required in Subsection 0(L)(3) of this Section.
 3. Documentation of how no net loss standards have been met.
 4. Maintain for public inspection all records pertaining to the provisions of this Code.
- P. Alteration of Watercourses.
1. Notify adjacent communities and the State coordinating agency prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
 2. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity of the watercourse is not diminished.
- Q. Interpretation of Firm Boundaries. Make interpretation where needed as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Subsection R of this Section.
- R. Variance Procedure.
1. The Planning Commission shall hear and decide variances from the requirements of this Section as provided for in Subsection 12.10.010(T) of this Code.
 2. The Planning Commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Community Development Director in

the enforcement or administration of this Section as provided for in Subsection 12.10.010(Q) of this Code.

3. Those aggrieved by the decision of the Planning Commission, or any taxpayer, may appeal such decision to the City Council, as provided in Subsection 12.10.010(Y) of this Code.
4. In passing upon such applications, the Planning Commission shall consider all technical valuations, all relevant factors, standards specified in other Sections of this Code, and:
 - a. Danger that materials may be swept onto other lands to the injury of others;
 - b. Danger to life and property due to flooding or erosion damage;
 - c. Susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - d. Importance of the services provided by the proposed facility to the community;
 - e. Necessity to the facility of a waterfront location, where applicable;
 - f. Availability of alternative locations, for the proposed use which are not subject to flooding or erosion damage;
 - g. Compatibility of the proposed use with existing anticipated development;
 - h. Relationship of the proposed use to the Comprehensive Plan and Floodplain Management Program for that area;
 - i. Safety of access to the property in times of flood for ordinary and emergency vehicles;
 - j. Expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
 - k. Costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and street and bridges,
 - l. Effects of flood damage on individual property owners.
5. Generally, the only condition under which a variance may be issued is for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing Subsection (R)(4) of this Section have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
6. The Planning Commission may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Code.
7. The Community Development Director shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

S. Conditions for Variances.

1. Variances shall not be issued unless it is demonstrated that the development will not result in net loss of the following proxies for the three floodplain functions in the special flood hazard area: undeveloped space, pervious surface, or trees 6 inches diameter breast height (dbh) or greater.
2. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed

on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this Section.

3. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
4. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
5. Variances shall only be issued upon:
 - a. Showing of good and sufficient cause;
 - b. Determination that the granting of a variance will not result in increased flood heights or additional threats to public safety, extraordinary public expense, create nuisances, cause fraud, or victimization of the public as identified in Subsections L through R of this Section, or conflict with existing local laws or ordinances.
6. Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. As such, variances from the flood elevations should be quite rare.
7. Variances may be issued for nonresidential buildings and structures in very limited circumstances to allow a lesser degree of flood-proofing than watertight or dry-flood-proofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except Subsection (R)(5) and otherwise complies with Subsections (U)(1) and (U)(2)(a)-(b) of this Section.
8. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

T. General Standards. In areas of flood hazards, ~~the any relevant~~ provisions of Subsections 12.04.090(U) through 12.04.090(BBHH) of this Code shall apply. In all special flood hazard areas, the no net loss standards of 12.04.090(HH) will apply.

U. Anchoring.

1. New construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
2. Manufactured homes shall be anchored to resist flotation, collapse, or lateral movement by providing over-the-top and frame ties to ground anchors. Specific requirements shall be that:
 - a. All manufactured homes must likewise be anchored to resist flotation, collapse, and lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to the use of over-the-top or frame ties to ground anchors (Reference FEMA's guidebook FEMA-85 "Manufactured Home Installation in Flood Hazard Areas" for additional techniques).
 - b. Additions to the mobile home shall be similarly anchored.
3. Alternative methods of anchoring may involve a system designed to withstand a wind force of 90 miles per hour or greater. Certification must be provided to the Community Development Director that this standard has been met.

V. Construction Materials and Methods.

1. New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
2. New construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
3. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be elevated to a minimum of one foot above base flood elevation or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

W. Utilities.

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; and,
3. On site waste disposal systems shall be located to avoid impairment to them to contamination from them during flooding consistent with Oregon Department of Environmental Quality Regulations.
 - a. Roseburg Urban Sanitary Authority shall be notified when development requiring an onsite waste disposal system is proposed in an area of flood hazard.
 - b. Roseburg Urban Sanitary Authority shall be responsible for carrying out the purposes of enforcing this provision.

X. Subdivision and Partitioning Proposals.

1. Subdivision and partitioning proposals shall be consistent with the need to minimize flood damage. In addition, the no net loss provisions of 12.04.090(HH) shall apply;
2. Subdivision and partitioning proposals shall have public utilities and facilities such as sanitary and storm sewer, gas, electrical, and water systems located and constructed and maintained to minimize flood damage;
3. Subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage, including returning water;
4. Partitions and subdivisions for nonresidential uses shall have the explanation "Not for residential use" printed on the face of the final survey map or plat. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision and partition proposals and other proposed development which contain at least 50 lots or five acres (whichever is less);
5. No portion of any street or road surface in any subdivision shall be at an elevation less than one foot below the regional flood height. The road surface is that portion of a street or way available for vehicular traffic or where curbs are laid; the portion between curbs;
6. 100-year flood elevation data shall be provided and shown on final partition and subdivision plats. Applicant must show the boundaries of the 100-year flood and floodway on the final subdivision plat;

7. A permanent monument shall be established and maintained on land partitioned or subdivided, showing the elevation in feet above mean sea level, NAVD 88. The location of such monument shall be shown on the final partition map or subdivision plat.
- Y. Specific Standards. In all areas of special flood hazards where base flood elevation data has been provided as set forth in Subsection G: Basis for Establishing Areas of Special Flood Hazard, or Subsection N: Use of Other Base Flood Data, the following provisions for residential and nonresidential construction, Subsections Z and AA of this Section and manufactured home placement, Subsection BB of this Section, are required.
- Z. Residential Construction.
1. New construction and substantial improvement of any residential structure shall have the bottom of the lowest floor, including basement, elevated to a minimum of one foot above base flood elevation.
 2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
 - b. The bottom of all openings shall be no higher than one foot above grade.
 - c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- AA. Non-Residential Construction. New Construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to a minimum of one foot above base flood elevation; or, together with attendant utility and sanitary facilities, shall:
1. Be flood-proofed so that below one foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
 3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this Section based on their development and/or review of the structural design, specifications and plans. Such certification shall be provided to the official as set forth in Subsection (O)(2) of this Section;
 4. Non-residential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in Subsection (Z)(2);
 5. Applicants flood-proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood-proof level (e.g., a building constructed to the base flood level will be rated as one foot below that level).
- BB. Manufactured Homes. All manufactured homes to be placed or substantially improved within Zone AE shall be elevated on a permanent foundation conforming to Subsection F such that the lowest longitudinal chassis beam of the manufactured home is a minimum of 18 inches above the base flood elevation and be securely anchored with a foundation system in accordance with the provisions of

Subsection (U)(2). Electrical and HVAC cross-over ducts shall be elevated to a minimum of one foot above base flood elevation.

CC. Recreational Vehicles. Recreational vehicles placed on sites are required to either:

1. Be on the site for fewer than 180 consecutive days,
2. 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
3. Meet the requirements of Subsection 2.04.090(BB) above and the elevation and anchoring requirements for manufactured homes.

DD. Below-Grade Crawlspaces. Below-grade crawlspaces are allowed subject to the following standards as found in FEMA Technical Bulletin 11-01, Crawlspace Construction for Buildings Located in Special Flood Hazard Areas, and depicted in Figure 2-6, Figure 2-7 and Figure 2-8, below.

1. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed by the required openings stated in Subsection (DD)(2) below. Because of hydrodynamic loads crawlspace construction is not allowed in areas with flood velocities greater than five feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.
2. The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one foot above the lowest adjacent exterior grade.
3. Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction is to elevate the bottom of joists and all insulation one foot above BFE.
4. Any building utility systems within the crawlspace must be elevated a minimum of one foot above BFE or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed a minimum of one foot above the BFE or sealed from floodwaters.
5. The interior grade of a crawlspace below the BFE must not be more than two feet below the lowest adjacent exterior grade.
6. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.
7. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity or mechanical means.

8. The velocity of floodwaters at the site should not exceed five feet per second for any crawlspace. For velocities in excess of five feet per second, other foundation types should be used.
9. There is a charge added to the basic policy premium for a below-grade crawlspace.

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FIGURE 2-6: PREFERRED CRAWLSPACE CONSTRUCTION

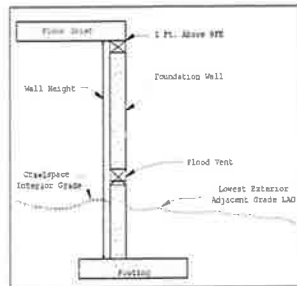


FIGURE 2-7: BELOW-GRADE CRAWLSPACE CONSTRUCTION

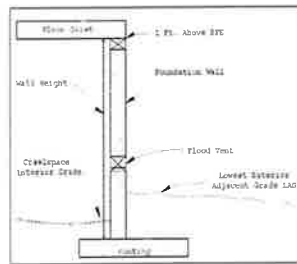
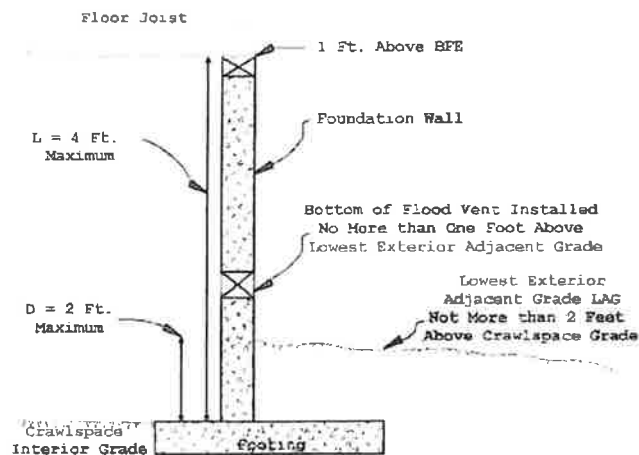


FIGURE 2-8: REQUIREMENTS OF BELOW-GRADE CRAWLSPACE CONSTRUCTION



- EE. Floodways. Located within areas of special flood hazard established in Subsection 12.04.090(G) are areas designed as floodways. Since the floodway is an extremely hazardous area due to the velocity of 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 unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed using current nationally accepted hydrologic models meeting the minimum requirement of National Flood Insurance Program that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
 2. If Subsection (EE)(1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Subsections T through EE.
 3. Compensatory Storage Required. Each cubic foot of fill placed within special flood hazard area (SFHA) requires developer to remove one and one-half cubic feet of fill from a hydraulically equivalent site.
- FF. Before Regulatory Floodway Designation. In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-A30 and AE on the community's 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 more than one foot at any point within the community. Compensatory Storage Required. Each cubic foot of fill placed within SFHA requires developer to remove 1½ cubic feet of fill from a hydraulically equivalent site.
- GG. Critical Facility. Construction of new critical facilities shall be located outside the limits of the Special Flood Hazard Area (SFHA), Zone AE (100-year floodplain) and Zone X (500-year floodplain). Construction of new critical facilities shall be permissible within these zones only through the variance process. Access to and from the critical facility shall be protected to the height of the base flood. Flood-proofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the base flood elevation shall be provided to all critical facilities to the extent possible.
- HH. (No Net Loss) Standards for Protection of Special Flood Hazard Area Floodplain Functions. Adherent to the National Marine Fisheries Service 2016 Biological Opinion, mitigation is necessary to ensure no net loss in floodplain functions. The Federal Emergency Management Agency's 2024 Draft Oregon Implementation Plan identifies proxies that provide measurable actions that can prevent the no net loss of parent floodplain functions. These proxies include undeveloped space, pervious surfaces, and trees to account for a 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 applies 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 detrimental impact. The standards below apply to all special flood hazard areas.
1. No Net Loss Standards
 - a. No net loss of floodplain functions is allowed for development in the special flood hazard area, as measured by the reduction of undeveloped space, increased impervious surface area, or the loss of trees that are 6-inches diameter breast height (dbh) or greater. No net loss can be achieved by first avoiding negative effects to

floodplain functions to the degree possible, then minimizing remaining effects, then replacing and/or otherwise compensating for, offsetting, or rectifying the residual adverse effects to undeveloped space, impervious surfaces, or trees over 6-inches dbh. Prior to the issuance of any development authorization, the applicant shall:

- i. Demonstrate a legal right by the project proponent to implement the proposed activities to achieve no net loss (e.g. property owner authorization); and
 - ii. Communicate with the property owner their responsibility for the long-term maintenance and monitoring of all mitigation and other features as approved by these regulations to achieve no net loss.
- b. No net loss 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 2-14-A presents the no net loss ratios, which increase based on the preferences listed above.

2. Undeveloped Space.

- a. Development proposals shall not reduce the fish-accessible and egress-able undeveloped space within the special flood hazard area.
- b. A development proposal with an activity that would impact undeveloped space shall achieve no net loss of fish-accessible and egress-able space.
- c. Lost undeveloped space must be replaced with fish-accessible and egress-able compensatory volume based on the ratio in Table 2-14-A and at the same flood level at which the development causes an impact (i.e., plus or minus 1 foot of the hydraulically equivalent elevation).
 - i. Hydraulically equivalent sites must be found at or within 5' of elevation difference above or below the project area, and between the Ordinary High Water Mark and outer boundary of the 100-year floodplain;
 - ii. Hydrologically connected to the waterbody that is the flooding source;
 - iii. Designed so that there is no increase in velocity; and
 - iv. Designed to fill and drain in a manner that minimizes anadromous fish stranding to the greatest extent possible.

3. Impervious Surfaces. Impervious surface mitigation shall be achieved through any of the following options:

- a. Development proposals shall not result in a net increase in impervious surface area within the special flood hazard area; or
- b. Use low impact development or green infrastructure to infiltrate and treat stormwater produced by the new impervious surface, as documented by a qualified professional; or

- c. If prior methods are not feasible and documented by a qualified professional, 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 12.04.090.HH.5 for stormwater retention specifications.
- 4. Trees.
 - a. Development proposals shall result in no net loss of trees 6-inches diameter breast height (dbh) or greater within the special flood hazard area. This requirement does not apply to silviculture where there is no development.
 - i. Trees of or exceeding 6-inches dbh that are removed from the riparian buffer zone (RBZ), floodway, or RBZ fringe must be replaced at the ratios in Table 2-14-A.
 - ii. Replacement trees must be native species that would occur naturally in the the impact area.
- 5. Stormwater Management. Any development proposal that cannot mitigate for impervious surfaces as identified above in 12.04.090.HH.3 must include the following:
 - a. Water quality (pollution reduction) treatment for post-construction stormwater runoff from any net increase in impervious area; and
 - b. Water quality treatment (retention facilities).
 - c. Retention facilities must:
 - i. 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 event and the 10-year flow event (annual series).
 - ii. Treat stormwater to remove sediment and pollutants form impervious surfaces such that at least 80 percent of the suspended solids are removed from the stormwater prior to discharging to the receiving body.
 - iii. Be certified by a qualified professional.
 - d. Stormwater treatment practices for multi-parcel facilities, including subdivisions, shall have an enforceable operation and maintenance agreement to ensure the system functions as designed. This agreement will include:
 - i. Access to stormwater treatment facilities at the site by City of Roseburg Public Works staff for the purpose of inspection and repair.
 - ii. A legally binding document specifying the parties responsible for the proper maintenance of the stormwater treatment facilities (typically the property owner). The agreement will be recorded and bind subsequent purchasers and sellers even if they were not party to the original agreement.
 - iii. 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.

- iv. The party responsible for the operation and maintenance of the stormwater facility shall 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 Roseburg for five years.

6. **Activities Exempt from No Net Loss Standards.** The following activities are not subject to the no net loss standards of 12.04.090.HH; however, they may not be exempt from City of Roseburg Site Review or other floodplain standards.

- a. Normal maintenance of structures, such as re-roofing and replacing siding, provided there is no change in footprint or expansion of the roof of the structure;
- b. Normal street, sidewalk, and road maintenance, including filling potholes, repaving, and installing signs and traffic signals, that does not alter contours, use, or later culverts and is less than six inches above grade. Activities exempt do not include expansion of paved areas;
- c. Routine maintenance of landscaping that does not involve grading, excavation or filling;
- d. 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 the special flood hazard area or tilled into fields as a soil amendment;
- e. Routine silviculture practices that do not meet the definition of development, including harvesting of trees as long as root balls are left in place and forest road construction or maintenance that does not alter contours, use, or alter culverts and is less than six inches above grade;
- f. Removal of noxious weeds and hazard trees, and replacement of non-native vegetation with native vegetation;
- g. 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;
- h. 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; and
- i. Habitat restoration activities.

7. **Riparian Buffer Zone (RBZ) and Beneficial Gain Standard**

- a. The Riparian Buffer Zone (RBZ) is measured from the ordinary high-water line and extending out 170 feet horizontally on each side of the waterbody in the special flood hazard area. The RBZ includes the area between these outer boundaries on each side of the waterbody, including the stream channel.

- b. Habitat restoration activities in the RBZ are considered self-mitigating and are not subject to the no net loss standards described above. Invasive plants such as Himalayan Blackberry may be removed with hand-held equipment and such removal is also not subject to the no net loss standards described above.
- c. Functionally dependent uses (docks, etc.) are only subject to the no net loss standards for development in the RBZ. Ancillary features that are associated with but do not directly impact the functionally dependent use in the RBZ (including storage or support buildings, restrooms, etc.) are subject to the beneficial gain standard in addition to no net loss standards.
- d. Beneficial Gain Standard: An area within the same reach of the project and equivalent to 5% of the net total of new undeveloped area or impervious surface within the RBZ shall be planted with native herbaceous and shrub vegetation and remain designated as open space.

Table 2-14-A: NO NET LOSS STANDARDS

<u>BASIC MITIGATE RATIOS</u>	Undeveloped Space (ft³)	Impervious Surface (ft²)	Trees (6"<db h≤20")	Trees (20"<db h≤39")	Trees (39"< dbh)
RBZ and Floodway	2:1*	1:1	3:1*	5:1	6:1
RBZ Fringe	1.5:1*	1:1	2:1*	4:1	5:1
<u>MITIGATION MULTIPLIERS</u>					
Mitigation onsite to Mitigation offsite, same reach	100%	100%	100%	100%	100%
Mitigation onsite to mitigation offsite, different reach, same watershed (5th field)	200%	200%	200%	200%	200%

Notes:

1. * Ratios with asterisks are indicated in the NMFS Biological Opinion.
2. Mitigation multipliers of 100% result in the required mitigation occurring at the same value described in the ratios above, while multipliers of 200% result in the required mitigation being doubled.
 - a. For example, if only 500 ft² of the total 1000 ft² of required pervious surface mitigation can be conducted onsite and in the same reach, the remaining 500 ft² of required pervious surface mitigation occurring offsite at a different reach would double because of the 200% multiplier.
3. RBZ impacts must be offset in the RBZ, onsite or offsite.
4. Additional standards may apply in the RBZ (see 12.04.090(HH)(7)).

(Ord. 3514, § 5, 11-26-2018)

(Insert new Ordinance and Adoption Date Here)