



City of North Plains

Agenda

City Council - Regular Session Meeting
Monday, November 18, 2024 @ 6:00 PM
Jessie Mays Community Center
and also via ZOOM

Page

1. LOGIN INFORMATION TO ATTEND VIA ZOOM

Join Zoom Meeting

<https://us02web.zoom.us/j/84624241829?pwd=NnBBd09uOUVGSVhXUXQzMjlUMHpaUT09>
Meeting ID: 846 2424 1829
Passcode: 831831

Phone in (no internet)

253-215-8782
Meeting ID: 846 2424 1829
Passcode: 831831

2. WORK SESSION - 6:00 PM

A. **FEMA National Flood Insurance Program (NFIP) – Endangered Species Act (ESA) Integration Pre-Implementation Compliance Measures (PICM) Background and Decision Process**

4 - 119

- ☐ [Staff Report for NFIP-ESA Integration PICMs](#)
- ☐ [Exhibit A PICM Community Letter20123716 NorthPlains](#)
- ☐ [Exhibit B PICM OR Habitat assessment guide](#)
- ☐ [Exhibit C PICM Oregon NFIP-ESA Model Ordinance](#)
- ☐ [FEMA NFIP Joint Work Session](#)

3. CALL TO ORDER

4. PLEDGE OF ALLEGIANCE

5. ROLL CALL

6. CONSENT AGENDA:

(The items on the Consent Agenda are normally considered in a single motion. Any item may be removed for separate consideration upon request by any member of the Council.)

A. **Approval of November 18, 2024, City Council Regular Session Agenda**

B. **Approval of November 4, 2024, City Council Minutes.**

120 - 122

- ☐ [11 - City Council - Regular Session - 04 Nov 2024 - Minutes](#)

7. **PUBLIC COMMENT:**
We encourage those wishing to comment to do so in advance of the meeting by emailing comments to info@northplains.org. Comments will be read into the record. Persons wishing to speak on matters not on the agenda may be recognized at this time.
8. **BOARDS & COMMISSIONS QUARTERLY REPORTS**
- A. **Economic Development Commission Quarterly Report** 123
Chair Eric Lawson
□ [EDC City Council Update - Q3 2024R1](#)
9. **STAFF REPORTS**
- A. **Library Department Monthly Report** 124 - 125
□ [Staff Report - Library 2024-11](#)
- B. **Police Department Monthly Report** 126 - 127
□ [Staff Report - NP Police 10-2024](#)
- C. **Public Works Monthly Report** 128 - 129
□ [Staff Report - Public Works 2024-11-14](#)
- D. **Community Development Monthly Report & 3J Engineering Report** 130 - 133
□ [Staff Report - Planning Manager - Nov. 2024](#)
□ [Staff Report - 3J Update 2024-11-18-](#)
□ [Building Permits - Current](#)
- E. **Finance Department Monthly Report**
10. **UNFINISHED BUSINESS:**
- A. **Discussion - Draft City Council Rules** 134 - 147
□ [DRAFT City Council Rules 11.13.24 \(clean copy\) \(00919586xB8084\)](#)
11. **REPORTS**
- A. **City Manager Report** 148
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- B. **Council Reports**
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□ [2024 Calendar of all NP City Meetings & Ex Officio duties v6](#)
12. **EXECUTIVE SESSION**
- A. Legal Counsel - 192.660(2)(h) 151 - 153
□ [Executive Session Form and Script updated 01.2024](#)
13. **ADJOURNMENT:**

North Plains City Council meetings are accessible for disabled individuals. The City will also endeavor to provide services for persons with impaired hearing or vision and other services, if requested, at least 48 hours prior to the meeting. To obtain services, please call City Hall at [\(503\) 647-5555](tel:5036475555)

**The following City Council Meetings are scheduled to be held at:
Jessie Mays Community Center - 30975 NW Hillcrest Street North Plains, OR**

The meetings will be held on the following dates at 7:00 p.m.:
Monday, December 2, 2024 Monday, December 15, 2024 Monday, January 6, 2025



Date: November 18, 2024

To: Honorable Mayor and Councilors and Planning Commissioners

From: Rowan Maiorano, Assistant Planner

Subject: FEMA National Flood Insurance Program (NFIP) – Endangered Species Act (ESA)
Integration Pre-Implementation Compliance Measures (PICM) Background and Decision
Process

Request: Review the provided background and PICM options and form an opinion of the available options, advise staff of concerns or questions, and provide direction to staff on selecting a PICM.

Program Background: In July 2024, City staff received communication from FEMA Region X (FEMA) announcing the start of a new Pre-Implementation Compliance Measures (PICM) requirement for National Flood Insurance Program (NFIP) communities in Oregon (Exhibit A). Changes to NFIP requirements are the result of a lawsuit against FEMA claiming implementation of the NFIP jeopardized endangered species, violating the Endangered Species Act (ESA). To settle the suit, FEMA agreed to consultation with the National Marine Fisheries Service (NMFS) and the development of a Biological Opinion (BiOp). The resulting BiOp found that NFIP actions in most of Oregon are “likely to jeopardize the continued existence of 16 ESA-listed anadromous fish species and Southern Resident killer whales” and provided a Reasonable and Prudent Alternative (RPA) for NFIP-ESA implementation, including guidelines for interim measures such as PICM.

The BiOp was issued in 2016; however, implementation of the RPA has been significantly delayed and FEMA does not expect the NFIP-ESA Implementation Plan to be approved prior to 2026. To stay in good legal standing, FEMA has shifted compliance responsibility to the local jurisdictions in the affected area and retained a supervisory role. The PICMs will be implemented at a local level and data on floodplain development will be sent to FEMA for monitoring. PICM is proposed to be implemented from December 1, 2024, until the Implementation Plan goes into effect. The proposed PICM timeline is as follows:

- Selection of PICM and implementation no later than December 1, 2024;
- data collection using FEMA tool begins January 31, 2025;

- adoption of code updates for Model Ordinance PICM to be completed no later than July 31, 2025;
- and first data report sent to FEMA on January 31, 2026.

FEMA staff began hosting general information sessions in August, with option-specific sessions not occurring until mid-October and running through mid-November, and continue to promise, but not deliver, modified or updated PICM materials that provide essential details. Under these circumstances, City staff have elected to make a PICM decision without the updated PICM materials. The below section details each PICM option and the associated implementation process, relative fiscal impact, and long-term cost/benefit.

PICM Options: The below options are PICMs provided by FEMA.

Prohibition. The Prohibition PICM calls for halting all development within the Special Flood Hazard Area (SFHA). There are two pathways for a jurisdiction to prohibit development under Oregon state law: moratorium and rezoning. A moratorium is a time-limited solution and has a high bar for justification under State law, this option is not feasible for the full duration of PICM implementation. Rezoning to prohibit development is a more streamlined solution, but one not advised for implementation on urban lands. Rezoning would open the City to Measure 49 claims for just compensation. The Prohibition PICM has the greatest fiscal impact of all PICM options due to the staff time required to establish a moratorium or to adopt a new floodplain ordinance prohibiting development, and the lost economic opportunity from activities on floodplain impacted properties. Staff do not recommend the prohibition PICM option due to the above consequences.

Permit-by-Permit. The Permit-by-Permit PICM calls for floodplain development permit applications to be required to include a Habitat Assessment showing No Net Loss of the three proxies for floodplain function: undeveloped space, pervious surface, and vegetation. FEMA staff have provided a Habitat Assessment Guide (Guide) outlining the criteria that must be evaluated in the Assessment but have also stated in workshop sessions that the Guide, modeled after a similar program in Puget Sound, is overly detailed and that a new, simplified Guide would be published. No date has been provided for the new Guide. Implementation of the Permit-by-Permit PICM involves a minor text amendment to include a Habitat Assessment in the review criteria for a floodplain development permit. However, code language would need to be carefully crafted to remain clear and objective for purposes of needed housing development review and review of Assessments is expected to significantly increase staff time spent on floodplain development permits. Implementing the Permit-by-Permit PICM would not open the City to Measure 49 takings claims and would not have a significant economic impact. Due to the above reasons, staff do not recommend the Permit-by-Permit PICM option.

Model Ordinance. The Model Ordinance PICM provides code language which the City would adopt as part of the floodplain development standards. Once adopted, the No Net Loss standards would be required to be satisfied with every floodplain development permit application. FEMA has additionally supplied a version of the code language that is incorporated into the Oregon Floodplain Model Code. A complete code such as this code be adopted largely as-is and would bring the City floodplain codes up to

2020 standards in one action. Adoption of either the FEMA code language or the Oregon model code *and* FEMA code language is achieved through a text amendment and the incorporation of No Net Loss standards into the code is the most intuitive of the PICM options. Adoption of the Oregon model code and FEMA code language is favored by staff due to the efficiency of updating a currently outdated code while a mandatory amendment is ongoing. It is also possible that this model code will meet full implementation requirements and that no further updates to the floodplain development code will be needed in the near future. Staff recommend the Model Ordinance PICM and simultaneous implementation of the Oregon Floodplain Model Code.

Staff Recommendation: Choose Model Ordinance as North Plains PICM and direct staff to update the Floodplain Ordinances to meet 2020 Oregon Model Code Standards.

Attachments:

Exhibit A – Community Letter

Exhibit B – FEMA Habitat Assessment Guide

Exhibit C – FEMA Model Code



FEMA

July 15, 2024

Ms. Teri Lenahan
City Hall
31360 NW Commercial Street
North Plains, Oregon 97133

Dear Ms. Teri Lenahan:

The purpose of this letter is to announce the start of the United States Department of Homeland Security's Federal Emergency Management Agency's (FEMA) Pre-Implementation Compliance Measures (PICM) for National Flood Insurance Program (NFIP) participating communities in Oregon. The intent of PICM is to ensure the continued existence of threatened or endangered species in compliance with the Endangered Species Act (ESA). These measures include coordination with communities to provide appropriate technical assistance, help identify available resources, deliver trainings, and facilitate workshops to ensure on-going community participation in the NFIP. These pre-implementation compliance measures will assist communities in preparing for the Final NFIP-ESA Implementation Plan by helping them develop short and long-term solutions to ensure their on-going participation in the NFIP.

FEMA is currently conducting a National Environmental Policy Act (NEPA) evaluation of impacts associated with the Oregon NFIP-ESA Implementation Plan. FEMA developed this plan, in part, due to a Biological Opinion in 2016 from National Marine Fisheries Services. The Biological Opinion recommended specific measures for FEMA to take to avoid jeopardizing endangered species, including interim compliance measures. The release of the Final Implementation Plan (Plan) is anticipated by 2026, following the Record of Decision in the Environmental Impact Statement (EIS) process, then FEMA will fully implement the Plan in 2027.

FEMA has heard concerns from several communities regarding challenges they are facing to meet the expectations of this Plan. To provide communities with the support needed to incorporate ESA considerations to their permitting of development in the floodplain, FEMA will inform, educate, and support our Oregon NFIP participating communities through the PICM before the Final Implementation Plan is released.

NFIP participating communities in Oregon must select one of the PICM pathways which include the following: (1) adopt a model ordinance that considers impacts to species and their habitat and requires mitigation to a no net loss standard; (2) choose to require a habitat assessment and mitigation plan for development on a permit-by-permit basis; or (3) putting in place a prohibition on floodplain development in the Special Flood Hazard Area (SFHA). Communities must pick a PICM pathway by December 1, 2024. If a community fails to inform FEMA of its selection, they will default to the permit-by-permit PICM pathway. Communities will be required to report their floodplain development activities to FEMA beginning in January of 2025. Failure to report may result in a

compliance visit.

As a part of the PICM, FEMA will implement a delay in the processing of two types of Letters of Map Changes in the Oregon NFIP-ESA Implementation Plan area, specifically Letters of Map Changes associated with the placement of fill in the floodplain: Conditional Letter of Map Revision Based on Fill (CLOMR-F) and Letter of Map Revision Based on Fill (LOMR-F) requests. This action was specifically requested by NMFS in their 2016 Biological Opinion and serves to remove any perceived programmatic incentive of using fill in the floodplain. This delay in processing will begin on August 1, 2024, and will be in place until the Final Implementation Plan is released.

Your community's ongoing participation in the NFIP is critical, as it provides access to flood insurance for property owners, renters, and businesses. In City Of North Plains there are currently 11 of NFIP policies in force representing \$3609000 in coverage for your community.

FEMA will be conducting informational virtual webinars this summer to provide an overview and status update for the Oregon NFIP-ESA integration, introduce the Pre-Implementation Compliance Measures, and provide an opportunity for Oregon NFIP floodplain managers to ask questions of FEMA staff. In the fall, FEMA will hold workshops to provide in-depth opportunities for local technical staff to work with FEMA technical staff, to understand and discuss issues relating to the PICM.

The webinars will be held virtually over Zoom. The information at each webinar is the same so your jurisdiction only needs to attend one. You can register for a webinar using the links below.

- Wednesday, July 31 at 3-5pm PT: <https://kearnswest.zoom.us/meeting/register/tZEkc-murjstGdPJiFioethjRk-id8N-k0hj>
- Tuesday, August 13 at 9:30-11:30am PT: <https://kearnswest.zoom.us/meeting/register/tZAod-isrTsqGN0KqckRLPPeaZuu4rv96lcR>
- Thursday, August 15 at 2-4pm PT: https://kearnswest.zoom.us/meeting/register/tZlqcOGpqDojHtTXaa946aI9dMpCTcJIH_zt
- Wednesday, August 21 at 12:30-2:30pm PT: <https://kearnswest.zoom.us/meeting/register/tZYqcuGsrD8rH9DZO22vG0v9KrNzVeUZA9gy>

FEMA will also develop a questionnaire to allow communities to identify how they currently incorporate or plan to incorporate ESA considerations, both in the short-term and long-term. To assist communities in making this determination, FEMA will be offering guidance on the potential pathways that help ensure current compliance. Communities will also be asked to help identify what technical assistance and training would be most beneficial. Feedback from this questionnaire will drive FEMA's engagement and outreach.

Upon completion of the Environmental Impact Statement review and determination, the Final Implementation Plan will be distributed along with several guidance documents and a series of Frequently Asked Questions. FEMA will also be starting NFIP Compliance Audits, in which we will be reviewing permits issued by communities for development in the floodplain and will expect the community to be able to demonstrate what actions are being taken to address ESA considerations.

If you have any questions, please contact us through our project email address fema-r10-mit-

Lenahan
July 15 2024
Page 3

PICM@fema.dhs.gov. Thank you for your community's on-going efforts to reduce flood risk in your community and for your support as we worked toward these milestones.

Sincerely,



Willie G. Nunn
Regional Administrator
FEMA Region 10

cc: SteveMiller, City Of North Plains
John Graves, Floodplain Management and Insurance Branch Chief
Deanna Wright, Oregon State National Flood Insurance Program Coordinator

Enclosure: Pre-Implementation Compliance Measures Fact Sheet

Pre-Implementation Compliance Measures Overview

Beginning this summer, FEMA will assist communities with coming changes to the National Flood Insurance Program (NFIP) in Oregon.

Why are the changes needed?

As the result of a Biological Opinion issued by the National Marine Fisheries Service, communities are required to demonstrate how floodplain development is compliant with the Endangered Species Act in Special Flood Hazard Areas. Changes are needed to protect the habitat of several species of fish and the Southern Resident killer whales to comply with the Endangered Species Act (ESA). FEMA outlined these changes in the [draft Oregon NFIP-ESA Implementation Plan](#).

Current status

FEMA is evaluating proposed changes to the NFIP outlined in the Implementation Plan through an environmental impact statement (EIS), in compliance with the National Environmental Policy Act (NEPA).



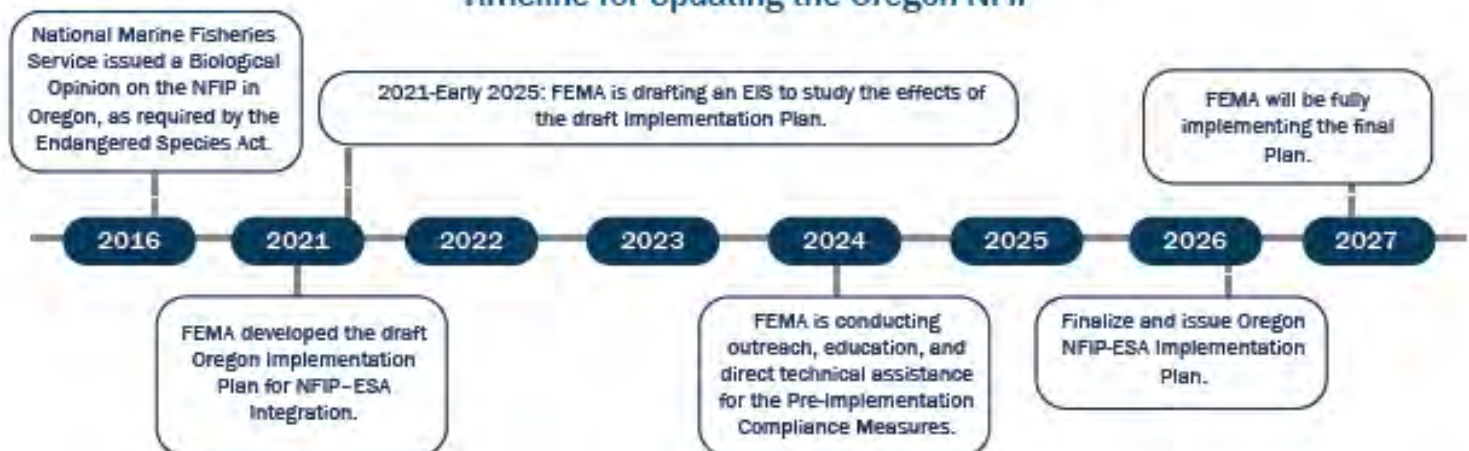
The National Flood Insurance Program serves to protect lives and property, while reducing costs to taxpayers due to flooding loss.

What is “no net loss”?

Any development action resulting in negative impacts to one or more key floodplain functions that are then mitigated or avoided to offset said impacts.

The Final Implementation Plan is anticipated by 2026 following the Record of Decision in the EIS process, then FEMA will fully implement the plan in 2027. Until then, communities need to begin taking action to protect habitat and achieve “no net loss.” FEMA is offering several resources for communities to learn more and implement interim measures, called Pre-Implementation Compliance Measures (PICMs).

Timeline for Updating the Oregon NFIP



What can communities do to comply with these changes?

Oregon communities participating in the NFIP can take short-term measures to comply with ESA requirements, known as PICMs. FEMA developed these measures in response to concerns from communities about the time and resources needed to meet requirements and ensure their future good standing in the NFIP. By implementing these measures now, communities will be better prepared for compliance audits, which will begin when the Final Implementation Plan is in place.

Communities can select one of the following three PICMs:

- Prohibit all new development in the floodplain.
- Incorporate the ESA into local floodplain ordinances.
- Require permit applicants to develop a Floodplain Habitat Assessment documenting that their proposed development in the Special Flood Hazard Area will achieve “no net loss.”

Communities must report to FEMA on their implementation of interim measures.

In addition to the above measures, as of August 1, 2024, FEMA is temporarily suspending processing applications for Letters of Map Revision based on Fill (LOMR-Fs) and Conditional Letters of Map Revision based on Fill (CLOMR-Fs) in NFIP communities to avoid potentially negative effects on ESA-listed species.

FEMA is here to support your community.

FEMA is offering several resources to assist communities in preparing for the Oregon NFIP-ESA Implementation Plan.

- **Informational Webinars (Summer 2024):** Learn about what FEMA is doing to revise the Implementation Plan and receive an introduction to the PICMs.
- **Questionnaire (Summer 2024):** Share what floodplain management measures your community is currently implementing to comply with the ESA, which PICMs you’re most interested in, and what support you need. Your feedback will help us plan the fall workshops and identify needs for technical assistance.
- **Workshops (Fall 2024):** Get an in-depth look at PICMs and talk through questions and concerns with FEMA staff.
- **Technical Assistance (Begins in Fall 2024):** Get support from FEMA to begin implementing PICMs.

Learn more and participate

Visit www.fema.gov/about/organization/region-10/oregon/nfip-esa-integration to read the latest information about NFIP-ESA Integration in Oregon.

You can also contact us at FEMA-R10-MIT-PICM@fema.dhs.gov



Floodplain Habitat Assessment and Mitigation

Regional Guidance for Oregon

August 2024



FEMA Region 10

Regional Guidance For Floodplain Habitat Assessments and Mitigation in Oregon

**Produced by FEMA - Region 10
August 2024**



FEMA
Region 10

For additional information or copies of this guidance:

Federal Emergency Management Agency

Attn: Mitigation Division

Federal Regional Center, Region 10

130 228th St. SW

Bothell, WA 98021-9796

(425) 487-4600

www.fema.gov/regionx/nfipesa.shtm

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Acknowledgements

This guidance document was developed by Region 10 of the Federal Emergency Management Agency, as part of its continuing effort to improve floodplain management practices and assist communities in meeting the requirements of the Endangered Species Act.

An earlier version of this document that was written solely for Puget Sound was drafted in 2010 by French & Associates, Ltd., Steilacoom, ESA Adolfson, Seattle, and PBS&J, Seattle, through an arrangement with the Insurance Services Office and the Community Rating System. Extensive edits were completed by FEMA Region 10 in 2013 in a document that was written solely for Puget Sound.

The 2018 Update was prepared by CDM Smith and FEMA Region 10.

The 2024 Update was prepared by FEMA Region 10 to address the interim measures for implementing the Oregon Biological Opinion.

Acronyms

BA	Biological Assessment
BE	Biological Evaluation
BiOp	Biological Opinion
CMZ	Channel Migration Zone
DLCD	Oregon Department of Land Conservation
EFH	Essential Fish Habitat
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FWHCA	Fish and Wildlife Habitat Conservation Areas
HA	Habitat Assessment
HPA	Hydraulic Project Approval
IPaC	Information for Planning and Consultation tool
JARPA	Joint Aquatic Resources Permit Application
JPA	Joint Permit Application
NFIP	National Flood Insurance Program
NMFS	National Marine Fisheries Service
ODEQ	Oregon Department of Environmental Quality
ODSL	Oregon Department of State Lands
RBZ	Riparian buffer zone
RPA	Reasonable and Prudent Alternative
SFHA	Special Flood Hazard Area
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

1.0 Introduction

1.1 Background

This Regional Guidance is written to assist communities in meeting the requirements and criteria of the Endangered Species Act (ESA) regarding the National Flood Insurance Program (NFIP). Those requirements are described in Biological Opinions (BiOp) issued by the National Marine Fisheries Service (NMFS) April 14, 2016, and the January 2017 errata document that supplements the BiOp for most of the State of Oregon.

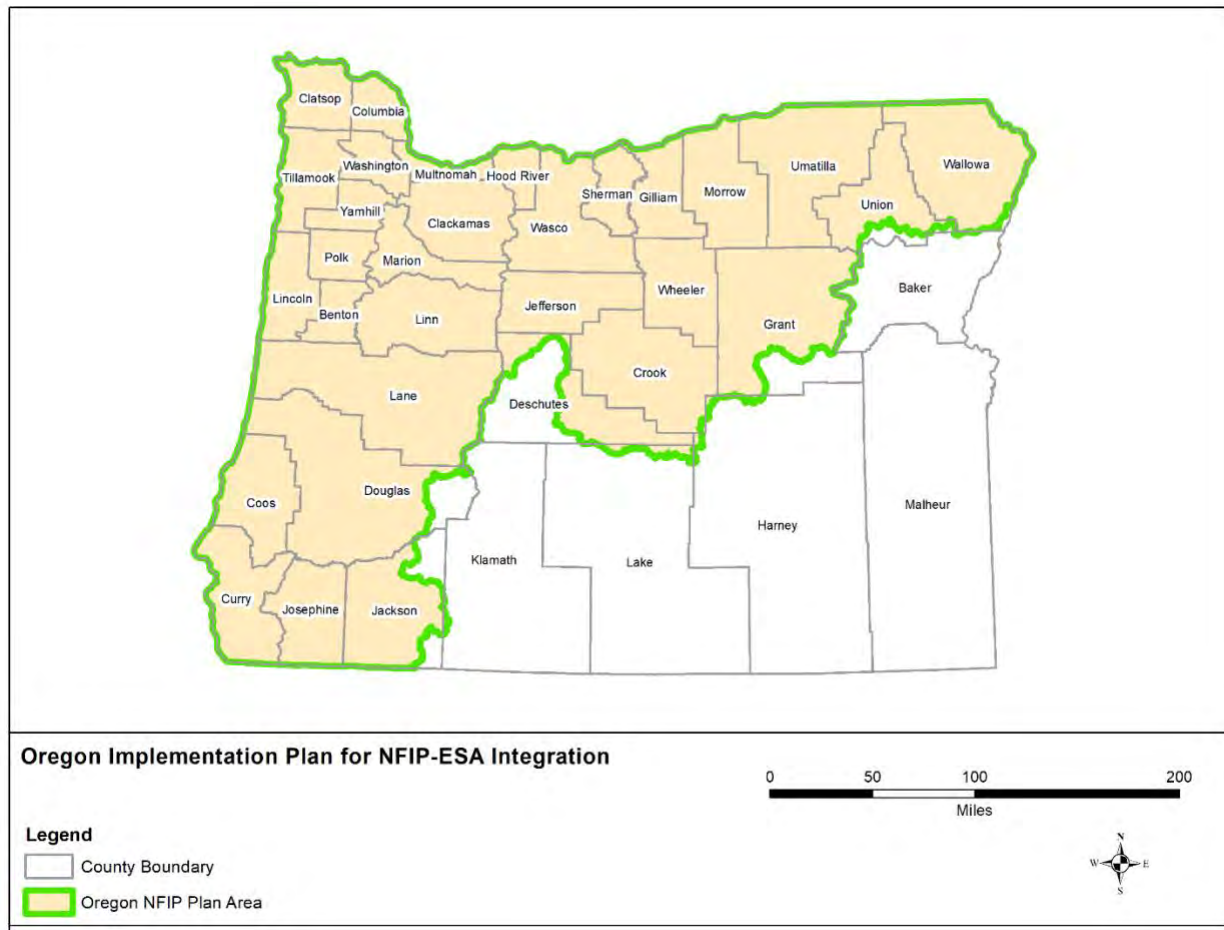


Figure 1 Oregon National Flood Insurance Program Plan Area for Endangered Species Act Integration

This guide is a companion to the BiOp for Oregon and the ESA Consultation Handbook (NMFS and USFWS 1998). It is intended to assist environmental planners, fisheries biologists, and other qualified floodplain and river management professionals who may potentially write or review habitat assessments (HAs). This document focuses on requirements specific to Oregon. It provides information on methods that communities may utilize to assess the impacts of land

management actions on ESA-listed species and their designated critical habitats within the Special Flood Hazard Area (SFHA).

This document is also designed to support the NFIP-ESA 2024 Draft Model Ordinance prepared by the Federal Emergency Management Agency (FEMA) Region 10. This guidance is offered to help communities comply with the interim measures in the Reasonable and Prudent Alternative (RPA) element 2 while FEMA works towards full implementation of the NMFS BiOp.

For further details on the BiOp's requirements, see the [BiOp and RPA for Oregon](#). The Model Ordinance and additional guidance documents are also available from FEMA Region 10.

Communities in Oregon have two options to implement the interim measures of the BiOp: adopting the Model Ordinance under a hybrid programmatic habitat assessment approach or using a permit-by-permit approach. Sections of the Model Ordinance are referenced in this guidance to help the reader match the requirements of the BiOp with NFIP regulations. Additional references included in this guidebook are listed at the end of the document.

The RPAs set forth for Oregon under the BiOp include an expanded timeframe for implementation to account for state-wide implementation and potential changes in FEMA policy and guidance. The RPAs also allow for compensatory mitigation of adverse effects within the SFHA.

This revised 2024 habitat assessment guidance will help jurisdictions assess and document ESA compliance reviews. It is intended to be useful to those jurisdictions who are complying with the requirements of the interim elements of the RPA in Oregon through adoption of the model ordinance.

Regardless of which compliance option is selected, the objective is to avoid adverse effects and ensure no net loss to ESA-listed species and their designated critical habitats by protecting those species and the natural functions of their designated critical habitats.

The preparation of this guidance was informed by technical input from local officials, engineers, natural resource scientists, and planners. It is designed to assist qualified habitat professionals, representing both permit applicants and permit officials, in ensuring that any adverse impacts from actions occurring anywhere within the Oregon Special Flood Hazard Area will be mitigated to a no net loss standard. This guidance is focused on ESA-listed species utilizing habitats in flood-prone areas, including those areas associated with streams, lakes, and marine waters.

The 2016 BiOp and 2017 errata for the NFIP in Oregon apply to 16 ESA-listed fish species and the Southern Resident killer whale. However, the Model Ordinance and this guidance may also help guide assessment of potential impacts from project actions on bull trout (administered by the U.S. Fish and Wildlife Service [USFWS]), which are currently listed as threatened or endangered. In Oregon, bull trout are found in the Columbia River and many of its tributaries. The

assessment of impacts on other fish species that may become candidates for ESA listing may also be warranted, to ensure that project proposals adequately address their needs if they become formally listed while a project is still underway. This assessment guidance does not, however, provide details on possible methods of how to assess impacts to any ESA-listed wildlife, invertebrate, or plant species that may be present, nor impacts to their habitats.

1.2 Definitions

Three terms are used in this guidance and the Model Ordinance, that may not be the same terms used in a community's regulations: "Riparian Buffer Zone" and "development." These terms are defined in the Definitions section of the Model Ordinance Language (Section 2.0).

The **SFHA** is the land in the floodplain within a community subject to a 1% or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as Zone A, AO, AH, A1-30, AE, A99, AR (V, V1-30, VE).

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

Development is any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. The Oregon BiOp extends that definition to include subdivision of land, removal of vegetation, other alteration of natural site characteristics (including any remnant natural characteristics existing in a degraded site), substantial repairs and improvements, and the maintenance, repair, or remodel of existing buildings, facilities, and utilities when their existing footprint is expanded.

1.3 When to Conduct a Habitat Assessment

Whenever a development project is proposed in the SFHA, the property owner must obtain a floodplain development permit from the community. Certain types of projects can be permitted relatively quickly (see “Allowed Activities” below). Unless a community’s floodplain management ordinance lists a project action type as exempt from the requirement to complete an HA (see Section 1.3.1), the project applicant must complete an HA that describes the impact of the proposed development on existing floodplain and instream habitat functions and processes. The scope and detail of that assessment may vary as needed to portray possible impacts for each project. If the anticipated project effects are clearly limited in nature and extent, it may be possible to describe them in a relatively short assessment. The greater the complexity, scope, and/or risk of possible impacts to ESA-listed species or their habitats, the more likely it will be that the HA will need to be an in-depth analysis, to portray impacts and describe planned mitigation, if needed.

1.3.1 No Habitat Assessment Required

There are four general circumstances where an HA would not be required:

1. Projects that are listed as exempt from conducting a habitat assessment in the BiOp for the NFIP in Oregon. These exemptions should be listed in the community’s ordinance (exempt situations are listed below).
2. Project actions that are covered under separate consultations under Section 4(d), 7, or 10 of the ESA.
3. Projects under consideration that have already been covered by a full programmatic habitat assessment of all current and reasonably foreseeable future conditions throughout a jurisdiction. (When such an assessment already exists, and the project clearly fits within the nature and scope of those project types that were addressed by it, then the jurisdiction need only document and track how they evaluated its eligibility for coverage by that assessment).

1.3.1.1 No HA Required and No Floodplain Permit Required:

Communities may allow the following activities in the floodplain without requiring a floodplain development permit, provided all applicable federal, state, and local requirements are met. A floodplain permit is not required because these activities do not meet the NFIP definition of “development.” Note: local community regulations may be more restrictive than the minimum standards (44 CFR 59).

- Routine maintenance of existing landscaping that does not involve grading, excavation, or filling.
- Removal of noxious weeds, hazard trees, and replacement of non-native vegetation with native vegetation.
- Normal maintenance of above and below ground utilities and facilities, such as replacing power lines and utility poles.

- Normal road maintenance, such as filling potholes, repaving, installing signs and traffic signals, but not including any expansion.
- Normal maintenance of a levee or other flood control facility, as prescribed in the operations and maintenance plan for the facility. Normal maintenance does not include repair from flood damage, any expansion of the prism, face or toe expansion, or the addition of material for protection or armor.
- Plowing and other normal farm practices (other than new structures or filling) on legally existing agricultural areas. Clearing additional land for agriculture will likely require a floodplain development permit and an HA.

1.3.1.2 Floodplain Permit Required and No HA Required

Communities may allow the following activities in the floodplain without an HA, provided a floodplain development permit is obtained and all applicable federal, state, and local requirements are met.

- Normal maintenance, repairs, or remodeling of structures, such as re-roofing and replacing siding, provided such work does not constitute a substantial improvement or repair of substantial damage. To comply, the cost of such work must be less than 50 percent of the market value of the structure(s).
- Activities with the sole purpose of creating, restoring, or enhancing natural functions associated with floodplains, streams, lakes, estuaries, marine areas, habitat, and riparian areas, provided the activities meet federal and state standards and do not include structures, grading, fill, or impervious surfaces.
- Development of open space and recreational facilities, such as parks, trails, and hunting grounds, that do not include structures, fill, impervious surfaces, or removal of more than 5 percent of the native vegetation on the portion of the property located in the SFHA.
- Repair to onsite septic systems, provided ground disturbance is the minimal necessary and best management practices (BMP) are utilized to prevent stormwater runoff and soil erosion.
- Projects that have already received concurrence under another permit or other consultation with the Services, either through Section 7, Section 4d, or Section 10 of the ESA, that addresses the entirety of the project in the floodplain. Examples of other such permits include but are not limited to a U.S. Army Corps of Engineers (USACE) 404 permit.
- Repair of an existing, functional bulkhead in the same location and footprint with the same materials when the Ordinary High-Water Mark (OHWM) is still outside of the face of the bulkhead.

Projects that require a federal permit under Section 404 of the Clean Water Act would likely need to go through an ESA consultation process led by the USACE Regulatory Branch. The Section 404 permit process includes consultation with the U.S. Fish and Wildlife Service (USFWS),

and/or NMFS when a project may influence a federally listed species. Such consultation is required under Section 7 of the ESA. If a project has gone through this Section 7 process with USACE then a local HA would not be required.

A project is deemed to comply with the ESA if a permit applicant has prepared a Biological Evaluation (BE) or a Biological Assessment (BA) and has received concurrence from USFWS and/or NMFS as applicable for the species potentially present (via either a Letter of Concurrence or a BiOp) that covers the full scope of the proposed action. In such cases the additional HA requirements of this guidance are not required (see Section 7.7 of either of the Model Ordinances).

1.4 Habitat Assessment Overview

The habitat assessment needs to describe any impacts to habitat functions due to actions occurring within any part of the SFHA in the BiOps action area communities. The assessment must demonstrate that there will be no net loss to habitat functions in the SFHA.

The impact of a project on habitat functions and processes may be complicated to determine because there is often little or no information on the site's baseline (pre-project) natural features. A habitat assessment is needed to identify those natural functions and to complete an analysis that estimates what effects the proposed action will have on ESA-listed species and their critical habitats.

If the assessment finds that an adverse effect may occur due to impacts from the proposed action on ESA-listed fish species, Southern Resident killer whales, or their designated critical habitats, then the permit applicant must prepare a plan identifying the steps that the applicant will take to modify the proposed action to avoid adverse effects. Avoidance measures should be applied as the first priority. Then, measures to minimize or fully mitigate any unavoidable adverse impacts must be developed and applied to the project. Jurisdictions must be able to document the details of the mitigation plan and identify which mitigation measures are required rather than recommended. They must also be able to monitor and document the implementation and measure the effectiveness of the plan, track any enforcement actions taken, and provide that information to FEMA, if requested.

Any actions that would adversely affect ESA-listed species or their critical habitats within the BiOps action area SFHA must be fully mitigated. In the required descending order of preference, the mitigation sequence is avoidance, minimization, and mitigation. Applicants must explain and document why all preferable forms of mitigation were not practicable before proposing less preferable forms (e.g., mitigation over avoidance).

1.5 Preparing and Reviewing a Habitat Assessment

This guidance provides a step-by-step approach to complete a HA when an assessment is needed. The approach described in the following sections should provide sufficient information to assess

and document the likely effects of a proposed project, but it does not have to be followed exactly as described. However, if a different approach is followed, it must provide sufficient data and analysis to describe baseline conditions and likely effects on ESA-listed species and their designated critical habitat. It must conclude with an effects determination that is well supported by that analysis.

This guidebook is not intended to represent comprehensive instructions for how a jurisdiction should complete a comprehensive “programmatic” HA of existing conditions and impacts of community’s regulations across its entire jurisdiction (e.g., conditions within all watersheds in a jurisdiction). However, it helps describe the information that would be needed to complete such an extensive and inclusive programmatic assessment. Communities may conduct programmatic assessments with differing approaches based on their unique land uses, regulatory structure, available maps and data, and community goals. Communities may request technical assistance from FEMA when they draft programmatic habitat assessments or review assessments prepared by others for projects within their jurisdictions.

The guidance is also not intended to provide complete instructions for documentation and justification of how a jurisdiction’s existing regulations (and any planned changes to those regulations) comply with all the terms and conditions within the RPAs of the BiOp. It will be the responsibility of the jurisdiction to explain and document that information. This guidance is primarily intended to assist applicants in preparing an HA under the permit-by-permit approach listed in the Pre-Implementation Compliance Measures (PICM). Applicants may seek assistance from their local jurisdiction in preparation of the HA. If the project is complex, it is recommended that applicants begin with conceptual development plans and conduct a preliminary assessment before investing in detailed project plans and specifications. Continued communication with community staff will also help identify issues before significant time and/or money is spent on a project that may require additional mitigation measures or needs to be redesigned or abandoned. It may be appropriate for some communities with limited staff to request assistance from their neighboring jurisdictions, Tribes, or other partners to help assess the adequacy of draft HAs written on their behalf. This guidance document allows for flexibility in the format of many aspects of the HA. Reviewers of draft HAs should be familiar with the range of formats that adequately portray and interpret fisheries population and habitat survey data.

A permit applicant should weigh the cost of preparing an assessment and mitigation plan, should one be needed, against the cost of locating the project outside the SFHA. It may cost less in time and money to simply avoid the SFHA

2.0 Conducting the Assessment

The process to adequately identify and address the impacts a proposed project may have on habitat within the floodplain is described in the following sections. In circumstances where an approved habitat assessment (Steps 1 through 4) determines that if no impacts on habitat functions

associated with ESA-listed species will occur, development of a mitigation plan is not necessary. However, most activities within the SFHA that require a HA are highly likely to have impacts on habitats associated with ESA-listed species. The first few steps are to describe the project area, area of potential effects (which may be larger), and whether any listed species potentially occur in that area. If ESA-listed species potentially occur within the area where project effects may occur, then the potential impacts on those species must be determined. When habitat impacts are identified, a mitigation plan must be prepared for the project, in accordance with Steps 5 and 6.

2.1 Step 1. Describe the Project Area

The project area is generally the parcel or parcels being developed. In some cases, the project may extend to a larger area, such as when a road to the parcel is to be built or improved, or when the effects of several interrelated or interdependent proposed land development actions are considered together. Step 1 should produce two documents – the project area description and a project area map.

2.1.1 Project Area Description

If an Oregon State Joint Permit Application (JPA) form has been prepared for the project, it will include the general project area description information that would be included as part of the habitat assessment. An approval under Section 401 of the Clean Water Act is required from the Oregon Department of Environmental Quality (ODEQ) and/or a removal-fill permit is required from the Oregon Department of State Lands (DSL). However, the JPA may not adequately describe all the natural functions, and habitat support processes, species distribution characteristics, hydrologic variables, and/or water quality effects that need to be addressed in a habitat assessment. At a minimum, an Oregon State JPA form would include the following information:

- **Location information:**
 - Street address
 - City and County
 - Township, section, and range
 - Latitude and longitude
 - Tax parcel number(s) of the project location
 - Type of ownership of the project (Federal, State, or locally owned public lands; tribal lands; privately owned lands)
- **Water resource information:**
 - Watershed name
Watershed Assessment Unit or HUC12 codes. Information on Oregon's Watershed

Assessment Units can be found at the Oregon Department of Environmental Quality (DEQ) [Oregon 2024 Integrated Report Frequently Asked Questions](#) and the mapping webpage at:

[Oregon Explorer](#) HUC codes for the Pacific Northwest region can be found at the U.S. Geological Survey site: https://water.usgs.gov/GIS/wbd_huc8.pdf.

- Names and descriptions of the water bodies in which work will occur, including water type. For more information on water type and a map that designates the types for major water bodies, see the Oregon State Water Resources Department water typing page:
<http://www.oregon.gov/ODF/Documents/WorkingForests/WaterClassificationTechNotes1.pdf>
- Coastal Management Areas are associated with the coasts of Oregon, as managed by the Oregon Coastal Zone Management Program.
- Critical Areas associated with streams, designated by the local jurisdiction pursuant to the Transportation and Growth Act in Oregon. Critical areas management information should include the critical areas designation and a description of the extent of jurisdiction.
- **Fish and Wildlife Habitat Areas**
 - Designated Goal 5 resources include riparian areas, wetlands, wildlife habitat, and natural areas in or near the project area.

2.1.2 Project Area Map

The second item needed for Step 1 is a map, drawn to scale that shows the following:

- Parcel(s) boundaries
- Full analysis area
- Area of the finished project (including roads)
- Any additional area(s) that will be disrupted during construction (including access routes, staging areas, and areas to be re-graded or filled)
- All water bodies
- Site topography, soils, and geology
- Fish and Wildlife Habitat Conservation Areas/Goal 5 resources
- Existing native vegetation by vegetation community zones. For example, a map could distinguish areas with existing coniferous forest cover from areas with shrub cover and areas with grass cover.
- Boundaries of the following regulatory areas (see Section 3 of the Model Ordinance)
 - Special Flood Hazard Area

- Floodway (if available)
- Riparian buffer zone (RBZ)
- Channel Migration Zone (CMZ) (where available)
- Depths of the 10- and 100-year floods at representative locations. These only need to be provided when flood data is available from existing studies for the community.

2.2 Step 2. Describe the Project Area's Habitat

In Step 2 of the habitat assessment, the applicant describes the existing habitat conditions of the project area. Tasks 2.2.1 and 2.2.2 of Step 2 are largely based on existing scientific information regarding species use and current habitat functions in the project area.

2.2.1 Background Research

In order to adequately describe current population and habitat conditions, Step 2 starts with a review of existing sources of information relevant to threatened or endangered species and their habitats in or near the project area. There may be thorough inventories already available. The following sources should be checked, and appropriate sections referenced as needed:

- Critical areas inventory maps, best available science consistency studies, flood control and floodplain management plans, watershed analyses, and habitat studies that may be available from the community's planning or environmental protection department.
 - The following sources may be helpful: Conservation Strategy Areas; Coastal Zone Management Program
- Natural area studies that may be available from the community's parks and/or natural resources departments.
- NMFS distribution of threatened and endangered Species (www.nwr.noaa.gov)
- NMFS designated critical habitat maps (www.nmfs.noaa.gov/pr/species/criticalhabitat.htm)
- USFWS Information for Planning and Consultation tool (IPaC) at <https://ecos.fws.gov/ipac/location/index>
- USFWS critical habitat maps (<http://criticalhabitat.fws.gov/> and www.fws.gov/pacific/bulltrout/)
- USFWS National Wetland Inventory mapper (<https://www.fws.gov/wetlands/data/Mapper.html>)
- USFWS and NMFS habitat recovery plans, when published for ESA listed species in the project vicinity
 - USFWS: (www.fws.gov/pacific)

- NMFS: (www.nwr.noaa.gov)
- U.S. Department of Agriculture, Natural Resource Conservation Service soil survey maps (<http://websoilsurvey.nrcs.usda.gov/app/>)
- Oregon Department of Fish and Wildlife threatened and endangered species list (http://www.dfw.state.or.us/wildlife/diversity/species/threatened_endangered_candidate_list.asp)
- Oregon Department of Fish and Wildlife Crucial Habitat Database (<http://dfw.state.or.us/maps/compass/data.asp>)
- Oregon State Department of Environmental Quality Water Quality Assessment (<http://www.oregon.gov/deq/wq/Pages/WQ-Assessment.aspx>)
- Oregon Native Fish Conservation and Recovery Plans
- Stream surveys conducted by tribes or federal, state, or local agencies. Such surveys may contain detailed information on habitat conditions and fish species presence from redd surveys or from snorkeling or electroshocking surveys. Other recent projects near the project area may also have collected stream survey or other habitat data.

2.2.2 Protected Species Identification

The review of the existing research should identify all federally listed species, designated critical habitats, Essential Fish Habitat (EFH) as defined by the Magnuson-Stevens Fishery Conservation and Management Act, affected EFH species, and Fish and Wildlife Habitat Conservation Areas or Conservation Strategy Areas, that occur in or near the project area. Species or habitats that have the potential to be negatively impacted on a direct, indirect, or cumulative basis by proposed ground-disturbing actions need to be described. The appropriate spatial and temporal scales for each form of potential impact must also be identified and briefly explained. Further discussion of potentially measurable or observable impacts, and the appropriate spatial and temporal scales for an effects analysis is presented later in this guidebook.

The table below is an example of how species presence and ESA status of populations and Critical Habitat could be presented. Additional columns could also be inserted to list the status of EFH and other categories when present and convenient to describe in a tabular format.

Occurrence of Listed Species and Critical Habitat in or Near the Project Area. (Sample Display)				
Common Name	Scientific Name	ESA Status	Jurisdiction	Critical Habitat
Lower Columbia River Chinook salmon	<i>Oncorhynchus tshawytscha</i>	Threatened	NMFS	Yes
Lower Columbia River coho salmon	<i>O. kisutch</i>	Threatened	NMFS	Yes
Lower Columbia River steelhead	<i>O. Mykiss</i>	Threatened	NMFS	Yes
Southern Resident killer whale	<i>Orcinus orca</i>	Endangered	NMFS	Yes

Table 1. Sample Species Status Table for a Habitat Assessment

Check with the NMFS and USFWS data sources described in Section 2.1 of this document to obtain general maps of the distribution of ESA-listed or proposed species, listed critical habitats, and any areas designated Essential Fish Habitat. Please note that the maps of potential fish distribution at these websites are not necessarily the most detailed or accurate maps that exist. The regional or local offices of NMFS, USFWS, tribes, or local land management agencies may be able to provide more accurate maps based on recent fish and habitat surveys, including known migration barriers.

EFH species are managed by NMFS. On the west coast of the United States there are three EFH salmon species that potentially occur in freshwater systems, namely pink, coho, and Chinook salmon. If project actions may potentially negatively impact estuarine and marine systems, numerous species of ground fish and coastal pelagic fishes that are listed under EFH may also need to be considered.

This task should summarize the biological and ecological information that will be needed for the habitat assessment. Appropriate information on species life histories, habitat, and distributions, as well as other data necessary for species survival or possible recovery, must be included to provide sufficient background for the analyses in later sections. It is important to note that even though the 2016 BiOp for Oregon focuses on salmon and EFH species managed by NMFS, all threatened or endangered plant and animal species in or near the project area need to be addressed. If other ESA-listed species are present or are potentially present, it may be necessary to conduct additional surveys and assessments beyond those described in this guidance.

Several sources of existing information are listed above in Section 2.2.1. When a document contains relevant information, that information can simply be cited by page-specific reference. Other sources include the locally developed Best Available Science (BAS) documentation reports; the state's Growth Management Act that requires each community to prepare such

reports for their critical area standards. Additional references are provided below as examples of the general format and guidance on how some agencies conduct biological assessments.

- The U.S. Army Corps of Engineers' *ESA Consultation Initiation Template* (USACE 2007)
[http://www.spk.usace.army.mil/Portals/12/documents/regulatory/pdf/ESA_Template_Guidance.pdf]
- *Making Endangered Species Act Determinations of Effect for Individual or Grouped Actions at the Watershed Scale* (NMFS 1996).
[http://www.nwr.noaa.gov/Publications/Reference-Documents/upload/matrix_1996.pdf]
- Oregon Department of Transportation *Biological Assessment and Guidance Document* (ODOT 2005).
[<http://cms.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/docs/BAWritingDocument.pdf>]

Currently, the Northwest Region of NMFS does not formally recommend use of any specific template for Biological Assessments (other than the 'Analytical Process' for some specific land management actions like timber sales on Federal lands). The Region instead allows the potential use of a variety of formats.

HAs must describe existing habitat and species population conditions for each ESA-listed species that may occur in the area of potential effects. The HA should describe the habitat functions that potentially support ESA-listed species in or near the action area. It must then describe the potential impacts of the proposed actions on individuals of each species, populations of those species, and their habitats. The detail and extent of each assessment will vary by the nature and scope of the proposal and the potential for negative impacts.

This section's narrative should include, but not necessarily be limited to, descriptions and discussions of the following topics:

- i. Factors of decline
 - a. Historical pressures on the species
 - b. Current pressures on the species
 - c. Limiting factors for recovery of the species
- ii. Local empirical information (if available)
 - a. Current local population information
 - b. Ongoing monitoring programs (if any)
 - c. Population trend of the species

A summary of the habitat needs for each protected species should follow its description. This section of the narrative should identify and describe the key factors that are important to each

protected species. These factors include the Primary Constituent Elements (PCEs) for those species with designated critical habitat. PCEs are the key habitat components that an ESA-listed species needs to survive in an area (see example in the box). For each listed species, PCEs are described in the corresponding Federal Register publication for its designated critical habitat. The PCEs must be described when critical habitat may potentially be affected. In those cases where designated critical habitat is not present near the project action area, describing the available habitat in terms of the PCE components is still a recommended means to concisely describe existing habitat features. Not all PCEs for a species may apply to a project. In the example below, PCEs related to the ocean environment would not apply to the project if the project area is on a freshwater stream.

Example Primary Constituent Elements

(Chinook salmon and steelhead trout, 50 CFR Part 226, Federal Register / Vol. 70, No. 170 / Friday, September 2, 2005)

1. Freshwater spawning sites with water quantity and quality conditions and substrate supporting spawning, incubation and larval development.
2. Freshwater rearing sites with water quantity and floodplain connectivity
3. Freshwater migration corridors free of obstruction
4. Estuarine areas free of obstruction
5. Nearshore marine areas free of obstruction
6. Offshore marine areas with water quality conditions and forage, including aquatic invertebrates and fishes, supporting growth and maturation.

2.2.3 Site Investigation

Tasks 2.2.1 and 2.2.2 give the applicant guidance on where to look and what to look for regarding species potentially present at the site. Following completion of the first parts of Step 2, a site visit is usually needed to determine if there are habitat areas in the project area with which identified species have a “primary association.” “Habitats of primary association” include critical habitat components (which could be PCEs), which, if altered, may reduce the likelihood that the listed species will be able to continue to live and reproduce in the area over the long term. A site visit and determination of site-specific conditions is generally necessary to determine what actual impacts on ESA-listed species, EFH, and associated habitats may occur from a proposed project.

For example, identification of Chinook salmon habitat areas of primary association should look for those PCEs listed in the box. A description of the riparian and instream habitat conditions that exist both upstream and downstream of the project action area would also be needed.

This description of existing baseline habitat functions must, at a minimum, include those habitat functions that are listed in the BiOp on the NFIP in Oregon. These functions are described in the next section on the habitat narrative. In addition, it is especially important to note the locations

and distances from the proposed project area relative to any stream reaches that may potentially support ESA-listed species or contain designated critical habitat.

The description of habitat and general conditions in the project area should also identify existing modifications to the project site within the floodplain, including existing structures, roads, impervious areas, and graded or filled areas. Any existing modification that has impaired habitat functions and/or habitats of primary association should be described (as discussed in the next section). If the project includes activities to restore the habitat in these modified areas, it could help the assessment conclude that there will be no adverse effects on habitat due to the project (see also Task 2.3.3 of Step 3).

The Oregon Department of Fish and Wildlife, through its conservation strategy includes additional actions that have the potential to result in impaired habitats. The site investigation should look for and describe these modifications when they are present. In general, actions that have the potential to result in impaired habitats involve one or more of the following:

- coastal development and associated construction
- shoreline armoring
- alteration of hydraulic regimes
- dredging and dredged materials disposal
- aquaculture
- global climate change
- habitat isolation
- the removal of riparian vegetation (except for the removal of noxious plants)

Furthermore, RPA element 2 identified in the Oregon BiOp requires communities within the implementation plan area to identify a riparian buffer zone (RBZ) that is measured 170 feet horizontally from the ordinary high-water mark of perennial or intermittent streams, including the area between these outer boundaries on each side of the stream, including the stream channel or 170 feet inland from a MHHW. Development in the RBZ must adhere to additional performance standards to comply with NFIP-ESA integration efforts as outlined in section 2.5.3.

2.2.4 Habitat Narrative

The findings of the field investigation are used to prepare a description of the habitat areas of primary association that will need to be protected. The narrative for this part of the assessment report needs to describe the presence and existing quality of the natural features that relate to the PCEs for all the species and habitat areas that were identified in Tasks 2.2.2 and 2.2.3. The habitat narrative must include descriptions of the site's floodplain storage capabilities, water quality, and riparian vegetation. As described in the final paragraph of Task 2.2.2, PCEs are the key habitat components required for an ESA-listed species, as identified in the final rules that were published in the Federal Register when a species was listed. The narrative must identify what habitat

functions are still relatively intact and which are impaired by previous site and/or area (e.g., sub-watershed, watershed, or basin scale) modifications.

The BiOp for the NFIP in Oregon states that within the SFHA all development impacts on natural floodplain functions must be mitigated. The mitigation standards should identify the specific development activities that require mitigation including the following activities.

- 1) The addition of fill, structures, levees, or dikes, which reduces flood storage and fish refugia, impedes habitat forming processes, and increases flow volume and velocity. The latter erodes stream banks and beds and alters peak flow timing, which increases the risk of injury to redds, fry, and alevin.
- 2) The addition of impervious surfaces, which reduces hyporheic function and stream recharge, increases stormwater runoff, pollutant loading, water temperature, velocity, and scour, and modifies peak and base flows.
- 3) Vegetation removal, which reduces shade, detrital input, velocity refuge, and habitat complexity, and increases stormwater runoff and erosion.
- 4) Bank armoring, which reduces instream habitat values and impedes habitat forming processes.

The site investigation and resulting habitat narrative must also include a description of the proposed action and existing habitat conditions even when the action is outside of the High Hazard Area.

It is possible that there may be limited information available from the sources identified in Tasks 2.2.2 and 2.2.3. The habitat narrative must note the sources of data and information, and clarify which statements are based on scientific reports and data, and which statements are based on the professional opinion of the author. This is one of the most vital aspects of the assessment, and is required for reviewers to evaluate the basis and relative confidence of statements, related to current conditions and estimated environmental effects.

The variables listed below should be considered to ensure that the assessment covers all the required factors. In most cases, the analysis scale will be small and only address a small contiguous action area. However, some projects may include multiple sites in multiple watersheds. The extent and detail needed for the assessment will vary by the nature, scope, and scale of the proposed action. In many cases, the project will not have the potential to affect many (or any) of the habitat functions listed below. When that is the case, the assessment simply needs to clarify why the project does not have any significant potential to degrade some or all variables. The list below is intended to assist jurisdictions in considering all possible impacts on aquatic habitat and ESA-listed fish species, due to major land management actions. The list includes questions that should be answered in the HA with additional guidance on how to address them.

Primary Constituent Elements (PCEs)

These are identified in the final rules that designate critical habitat for listed threatened and endangered species (see the NMFS and USFWS critical habitat map links within the References and Resources section to access final rules for ESA listed species). For example, for an inland site with Chinook salmon habitat (see box on page 18), the first three sections of the habitat narrative would cover freshwater spawning sites, freshwater rearing sites, and freshwater migration corridors. In those cases where designated critical habitat is not present near the project action area, describing available habitat in terms of the PCE variables is still recommended to concisely depict key habitat features. Even if designated critical habitat is not present on a site, there still may be suitable habitat for the species and the species may be present. If suitable habitat is present, then the potential for impacts to the species from project activities needs to be evaluated. The distance and locations of the nearest designated critical habitat, relative to the project area also need to be listed, so that the potential for projects to impact these mapped areas can be evaluated (e.g. via sediment transport). Water quality, floodplain connectivity and storage, and riparian vegetative community are three PCEs of particular importance within the Oregon implementation plan area, as they have been identified as key floodplain functions by the 2016 BiOp.

Water Quality

- Does the proposed action include any activities (e.g. grading, stormwater, or road construction) that may have any potential to cause measurable degradation to water quality variables within the action area, and how was this assessed?
- If so, which water quality variables would be affected? Water quality variables that should be considered include: turbidity, pH, total dissolved gas (percent of saturation), bacteria, toxics, and pollutants. In Oregon, the numeric standards for turbidity, pH, total dissolved gas, and bacteria vary by location depending on the state's designated uses for salmon and charr fish species listed for the river reach in question (i.e., spawning, rearing, and/or migration). These states have also adopted narrative criteria to supplement the numeric criteria for some variables. The narrative criteria are statements that describe the desired water quality goal, such as waters being "free from" pollutants including oil and scum, color and odor, and other substances that can harm people and fish.
- Is there any potential for the project to result in not meeting state water quality standards for any water quality variables (over any temporal scale) within the defined action area? If so, which variables? How was the action area selected, and how was the assessment conducted?

Reaches of streams that are known to be impaired and to not meet water quality criteria for one or more variables are required to be listed under section 303(d) of the Clean Water Act (CWA). If a river reach is not included on one of these lists, it does

not necessarily ensure that it meets all water quality standards for all variables. It may simply mean that no sampling (if any has occurred) has demonstrated that it does not meet standards. Data on water quality variables may be extremely limited or non-existent for many streams and river reaches. Water body segments only become listed via documented and repeated violations that are estimated to have likely been human-caused.

Jurisdictions in Oregon should advise the Oregon Department of Environmental Quality regarding any water quality data that they are aware of, in addition to what is cited in the current 303(d) list for a specific river reach. Information on the 303(d) list is found at: [Department of Environmental Quality : EPA Approved Integrated Report : Water Quality : State of Oregon](#).

Water body segments (i.e., stream reaches, lakes, marine waters) that appear on the 303(d) list require the preparation of a plan to restore water quality, which often takes the form of a Total Maximum Daily Load (TMDL) study. Habitat assessments should include consideration of the status of water quality in the project action area and evaluate whether the project proposal has any potential to further degrade any variables, including any that are already listed as not meeting State standards.

- If there is any potential for degradation of any water quality variables, what are the estimated effects on ESA-listed fish species and/or their designated critical habitats within the action area, and how was this assessed? In addition, what is the maximum estimated spatial scale, and maximum time period when any possible impacts on ESA-listed fish species and/or their designated critical habitats might occur?

Water Temperature and Dissolved Oxygen

- Does the proposed action include any actions or regulations that may cause measurable changes in water temperature or changes in levels of dissolved oxygen (DO) in any locations, and how was this assessed?
- If there is any potential for measurable impacts, is there any potential for water temperature or DO (over any temporal scale) to not meet State water quality standards within the action area(s)? [see Water Quality section above for hyperlinks to standards in Washington and Oregon].
- If there is any potential for measurable impacts, what is the estimated effect (at all temporal scales) on ESA-listed fish species, and how was this assessed?
- If there is the potential for measurable impacts, what is the maximum estimated spatial scale and locations (including any downstream effects) and maximum time period when impacts on ESA-listed fish species may occur?

Low Flow Hydrologic Regimes (including hyporheic flows)

- Does the proposed action include any actions that could potentially cause changes to the magnitude, duration, or recurrence intervals of low summer baseflows at any locations, over any temporal scale, and how was this assessed?
- If there is any potential for changes, what impact would those changes have on ESA-listed fish species or their designated critical habitats in the project action area, and what is the maximum estimated spatial and temporal scale of those effects?

High Flow (flood) Hydrologic Regimes

- Does the proposed action include any actions that could potentially cause changes to the magnitude, duration, or recurrence intervals of the 10-, 50-, or 100-year flood flows in any location, and how was this assessed?
- If there is any potential for changes in flood flows, what effect would those changes have on ESA-listed fish species and/or their designated critical habitats in the project action area, and what is the maximum estimated spatial and temporal scale of those effects?

Site flood dynamics and hydrology must be assessed to varying degrees, to ensure that the analysis is adequate and appropriate, for the nature of the proposed action and the habitat resources potentially at risk. Flood flow depths, volumes, velocities, and flow paths have an important effect on the way habitat is formed. The habitat assessment narrative should describe these factors with an emphasis placed on the effects of flood events on habitats. Tributary streams, seeps, stormwater outfalls, waterways that pass through the project site, and other water sources should be identified and described. This discussion may rely on and reference other flood and site hydrology studies prepared for the project and should be focused on how flood dynamics and hydrology impact local habitat areas.

A semi-quantitative or qualitative assessment of water quantity should usually be sufficient for projects limited in scope, scale, and overall potential to result in negative impacts on ESA-listed fish populations and their critical habitats. Projects with more potential for measurable or observable negative impacts will sometimes require more rigorous examination of hydrologic or sediment regimes, based on best available data, including correlations to existing gage stations. They may also require more intensive field surveys and possibly 1- or 2- dimensional flow modeling to describe water velocities, likely extents of inundation, and possible changes to instream and riparian habitat due to future flood events.

Flood Velocities

- Does the proposed action include any actions that could potentially cause increases in water velocities in streams or rivers during high flow events, and how was this assessed?

- If there are any potential for increases in high flow velocities, is there also any potential for measurable increases in streambed or stream bank shear or velocities in fish habitat units (e.g., pools, glides, side-channels) that provide refugia for ESA-listed species from high velocities within the channel over any temporal scale at any locations? How was this estimated?
- If there is any potential for changes in flood velocities, what impact would those changes have upon ESA-listed fish species and/or their designated critical habitats in the project action area, and what is the maximum estimated spatial and temporal scale of effects?

Sediment Delivery (erosion) and Sediment Regime (in-stream transport)

- Does the proposed action include any actions that could potentially increase rates of surface erosion, delivery of sediments to water bodies, or total loading (volumes) of sediment transported in rivers that provide habitat for ESA-listed species? How was this assessed?
- If there is any potential for sediment increases, what impact would those changes have on ESA-listed fish species and/or their designated critical habitats in the project action area, and what is the maximum estimated spatial and temporal scale of those effects?

Stream Substrate

The quality, quantity, and general distribution of substrate particle size needs to be described in those cases where there is the potential for spawning, rearing, feeding, or refugia substrate habitat to be degraded by project actions. In some cases, this may include impacts from transport of sediments downstream from the project site.

If the proposed action has the potential to deliver significant quantities of fine-sediments to stream reaches in designated critical habitat or in those areas that may otherwise provide potential habitat to ESA-listed species, the percent fines (e.g. per %) would need to be estimated and the analysis methods described. This information is required to describe current habitat conditions and estimate how (if) any additional inputs of fine sediments may degrade the current quality of stream substrate habitat.

In those cases where sediment impacts may be a significant concern, it may also be necessary to fully describe current substrate conditions in those stream reaches that could be impacted. If this is the case, the description should include the general range of substrate types that currently exist across each different channel type in potentially affected stream reaches.

The specific questions that need to be addressed are:

- Does the proposed action include any actions that could potentially cause increased rates of aggradation of fine or coarse sediments on potential substrates

for spawning, feeding, rearing, or migration? How was this assessed?

- If there is any potential for increased sedimentation, what impact would those changes have on ESA-listed fish species and/or their designated critical habitats in the project action area, and what is the maximum estimated spatial and temporal scale of effects?

Floodplain Connectivity and Storage

Disconnecting a river from its floodplain impacts several other functions that directly affect the quality and quantity of habitat that supports ESA-listed species. Disconnection affects the potential for natural lateral migration and hydrologic connectivity between the stream and its floodplain. It also affects groundwater systems and the production and utilization of organic matter by riparian and aquatic communities.

Hydrologic connections provide temporary storage of floodwaters, while also providing key off-channel habitats and a source of water during dry summer base-flow periods. Many urbanized watersheds have lost these functions to varying degrees. If the stream is largely disconnected from its floodplain, the stream ecosystem cannot maintain its biological diversity, nor can it recover from major episodic disturbances. Some of these diverse habitat types also provide refuge from high velocity flows during flood events (see discussion below).

The habitat assessment needs to describe the current condition of floodplain connections and processes. This can usually be accomplished in a brief narrative via a combination of a site visit and examination of aerial photography and FIRM maps (if they exist). Some of the conditions that should be noted include, but are not necessarily limited to, the extent of the channel migration zone, general channel geometry in potentially affected stream reaches, including the distribution and size of riffles and pools, and identification of any side-channels and tributaries. Specific questions that need to be addressed include:

- Does the proposed action include any actions that could potentially affect the extent and level of the connection of stream channels to their floodplain? How was this assessed?
- If there is any potential for changing the extent or level of floodplain connectivity, what impact would those changes have upon ESA-listed fish species and/or their designated critical habitats in the project action area, and what is the maximum estimated spatial and temporal scale of effects?

Refugia for ESA-listed Fish Species from High Velocity Flows

- Does the proposed action include any actions that could potentially affect the location, extent, or quality of refugia from high velocity flows available for ESA-listed fish

species in side channels and other areas across the floodplain when over-bank flows occur? How was this assessed?

- If there is any potential for changes in the extent or quality of refugia, what impact would those changes have upon ESA-listed fish species and/or their designated critical habitats in the project action area, and what is the maximum estimated spatial and temporal scale of those effects?

Riparian Vegetative Community

The riparian vegetation along a stream provides many functions including bank stability, food input to streams, nutrient cycling, potential for recruitment of large woody debris to streams, shade, buffering of sediment and pollutants. The habitat assessment should include, but not necessarily be limited to, a description of existing conditions throughout any mapped channel migration area. Freshwater riparian conditions should be characterized by describing conditions as they relate to the riparian habitat functions. The habitat functions affected by riparian communities include water temperature control, recruitment of large woody debris, filtering of sediment and pollutants, erosion control, bank stability, and influence on microclimatology.

Characterization of marine shoreline conditions should be consistent with guidance from state agencies, such as the Oregon's Department of Land Conservation and Development (DLCD) Coastal Management Program. Questions that should be addressed include:

- Does the proposed action include any actions that could potentially degrade the quantity or quality of the riparian vegetative community? How was this assessed?
- If the project has any potential to affect riparian vegetation, describe the general species, sizes, areas, and percent cover of the existing levels of riparian vegetation as well as the percent cover resulting from the proposed action.
- If there is any potential for degradation of the riparian vegetative community, how would:
 - The extent, rate, and quality of nutrient cycling, buffering, food input from terrestrial sources to streams (i.e. allochthonous food), and recruitment of large woody debris be impacted?
 - The extent and quality of bank stability and stream shading to be impacted?
- If there is any potential for degradation of some of the functions that the riparian community provides, what impact would those changes have on ESA-listed fish species and/or their designated critical habitat in the project action area, and what

is the maximum estimated spatial and temporal scale of those effects?

2.2.5. Habitat Area Map

Once all habitat areas of primary association are identified and described, they should be delineated on a map. The map should be at the same scale as the project area map (Task 2.1.2) to facilitate comparison of the habitat to be protected with the extent of the Special Flood Hazard Area, Floodway, the riparian buffer zone, and other relevant features such as watercourses and wetlands.

2.3 Step 3. Describe the Project

There are two key parts of the project that need to be described at this stage of the assessment report: 1) the final project, i.e., what the area will look like and how it will be used when the project is completed; and 2) the construction process that will be followed to get there. The description of the final project should be covered first. Measures taken by the proponent to avoid, minimize, replace, or compensate (the descending order of preference of the mitigation sequence) for degradation to the habitat functions must be described in enough detail to allow assessment of all the effects of the proposed action. It needs to be clear whether each measure is required, or if it is only recommended. It can't be assumed that recommended actions will occur, so their potential positive impacts should not be part of the assured result.

As described for Task 2.1.1, if an Oregon State JPA form has been prepared for the project, it will include general project description information, but usually additional information will be needed for the habitat assessment. More information regarding the Oregon application process and JPA form template can be found at the Oregon Department of State Lands website at: <http://www.oregon.gov/DSL/WW/Pages/Permits.aspx>.

If the information that is already being provided in the JPA includes the level of detail described in this guidance, then the community may accept the application form as sufficient for the project description. If a JPA has not been prepared for the project, the project area description should, at a minimum, include the information included in Tasks 2.3.1 and 2.3.2 of this section.

2.3.1 Final Project

All features of the proposed completed project must be described. This includes, but is not necessarily limited to:

- A summary of the project, including all features that will be present when construction is finished
- Project category (industrial, commercial, residential, institutional, transportation, recreational, maintenance, agriculture, or environmental restoration)
- A description of the general design, location relative to nearest water bodies, and general dimensions of the footprints of any structures and facilities including, but not

- necessarily limited to: buildings, boat launches, docks, pilings, fences, roads, bridges, culverts, trails, roads, or paved areas
- Detailed descriptions of all structures or facilities that would potentially impact water bodies or wetlands including, but not necessarily limited to: aquaculture, buoys, mining, bank stabilization, channel modifications, culverts, dams, levees, ditches, fishways, moorage, or outfall structures
- Above and underground utilities
- Water supply
- Wastewater disposal
- Stormwater management facilities
- Non-native landscaping

The level of detail needed for these descriptions will vary according to the nature, scope, and scale of the project, and its location relative to ESA-listed species and their potential habitats. Assessments should include as much information as is needed to adequately describe and estimate potential environmental effects. In some cases, there may be little or no potential for adverse effects; therefore, in those cases, it may require relatively less information and discussion to document potential effects.

Project details, nearby stream courses, and any key floodplain features need to be mapped, and those features should be shown on the project area map(s) (Task 2.1.2). Maps should show how project details relate to stream conditions appearing on the habitat area map(s) (Task 2.2.5).

There should also be a description of:

- Any ongoing activities that will be conducted at the site after construction is complete.
- Any ongoing activities that will affect adjacent areas, including, but not necessarily limited to, increases in traffic, stormwater runoff from the site, and noise, and changes air quality.

2.3.2 Construction Process

At a minimum, the description of the construction methods should cover the following points:

- Land clearance (areas to be cleared and native vegetation that will be removed)
- Any work in-water, including a description of the methods and materials used
- Grading and filling
- Stormwater management measures to be taken during construction
- Utility installation (including any on-site wastewater treatment)
- Methods and techniques for construction of structures, including buildings, roads,

bridges, paved areas, retaining walls, shoreline modifications, and types of equipment to be used

- Construction phasing and anticipated construction timing
- Mobilization and staging plans
- Temporary construction access and staging areas

Maps and a timeline should be included to show where and when each activity will occur.

2.3.3 Protection Measures

There are several federal, state, and local regulatory requirements that require development projects to include measures that avoid, minimize, replace, or compensate for negative effects on populations or habitat functions due to project impacts. The applicant may propose additional measures. The habitat assessment must list the protective measures that will be implemented and clarify which are required and which are recommended. All required and recommended measures should be described. They could include, but are not necessarily limited to, the examples below:

- Preserving a setback area from any disturbances, or any other measures that avoid negative impacts on ESA-listed species or their habitats.
- Drainage/erosion control plans to be implemented during construction.
- Post-construction stormwater and erosion control plans.
- Use of low impact development techniques (which may eliminate or reduce runoff from areas to be developed).
- Any other measures that minimize negative impacts on ESA-listed species or their habitats.
- Actions to implement wetland mitigation plans.
- Any other measures proposed to reduce potential negative impacts during or after construction is complete, such as sedimentation basins, should be included and described as part of the project design and included in the project timeline.
- Compensatory storage provisions to replace lost floodplain storage¹ that demonstrate that they will not potentially strand fish.
- Any other forms of on-site or off-site compensation for degradation of habitat functions that support ESA-listed species.
- A description of any adaptive management program that will be utilized. This should

¹ Compensatory floodplain storage requirements are included in Section 7.6 of the Model Ordinance. This section requires that compensatory storage areas must be graded and vegetated to allow fish passage during flood events without creating fish stranding sites. Areas of compensatory flood storage should be designed to create floodplain habitat whenever feasible. Compensatory storage should not be used in areas prone to avulsions because lowering floodplain elevations or digging pits in these areas may increase the probability of an avulsion.

include, but not necessarily be limited to, a description of what monitoring would be conducted to track both implementation and effectiveness of mitigation measures, what would trigger adaptive measures, what those measures would be, and what method will be used to determine if they are sufficient and successful.

Adaptive management refers to a structured, iterative process intended to enable decision-making under conditions that include some uncertainty. The goal is to reduce that uncertainty over time by monitoring project site conditions before, during, and after construction, as well as the effectiveness of project design elements and mitigation measures. Possible components of an adaptive management plan include, but are not necessarily limited to, the following topics.

- How monitoring and resultant possible changes in project management (e.g., variations in mitigation measures) are based on spatial and temporal scales of analysis that are appropriate for the project in question, and how the basis for those scales is explained. This includes the location(s), duration, and frequency of monitoring.
- Why the variables selected for monitoring are appropriate and practical to track project impacts and the effectiveness of best management practices and mitigation measures.
- How monitoring results can and will be used in a direct way to decide what, if any, changes need to be made to achieve the desired future condition for the project. For many projects the desired future condition is obvious and can be easily stated. For more complex projects, the minimum parameters needed to adequately define the desired future condition will need to be determined and clearly described.
- How adaptive changes to the project would be based on existing best management practices and best available science to the greatest extent possible.

2.4 Step 4. Assess the Environmental Effects

The habitat assessment must analyze the direct and indirect effects of the proposed action on ESA-listed species and their aquatic, riparian, and floodplain habitat areas identified in Step 2, as well as the cumulative effects of future actions that are reasonably certain to occur. Primary factors to be considered in the assessment include, but are not necessarily limited to, the following considerations:

- The proximity of the action to individuals of the species present, habitat management units, or designated critical habitat units. This includes assessing the likelihood of measurable or observable impacts on fish or their designated critical habitats based on the relative location(s) of the action and nearby populations and habitats. For example, habitats located well downstream of an action that is expected to deliver significant volumes of sediment to a stream near the project site may still be measurably impacted

if those sediments may be routed (transported) downstream to areas of concern. The appropriate temporal and spatial scales of analysis will vary by the variables of concern and nature of the project and must be described in the assessment.

- The spatial distribution of an action over one or more action areas or sub-watersheds. The analysis should consider the accumulated effects of impacts in multiple locations and/or cumulative effects due to the combination of project effects added to the effects of other nearby, reasonably foreseeable future, non-federal actions.
- The timing of the proposed action relative to sensitive periods of the lifecycles of any potentially impacted ESA-listed species, and how that timing may result in negative impacts.
- The nature, scale, scope, and duration of the effects of the proposed action on the sub-population size, growth and survival, life cycle, diversity, isolation, and genetic integrity of ESA-listed species that could potentially be affected. Assessments should include as much information as is needed to adequately describe these population variables. In some cases, there may be little or no potential for adverse effects with respect to these variables, so relatively little discussion will be needed.
- The nature, scale, scope, and duration of the effects of the proposed action on the PCEs of any designated critical habitat, including any direct, indirect, interdependent, interrelated, or cumulative effects. In freshwater systems, PCEs generally include adequate water quality, water quantity, and substrate (free of fine sediments) for spawning, incubation, and larval development, floodplain connectivity for rearing, and stream channels free of man-made obstructions (obstructions may include physical, water temperature, or chemical barriers). The habitat assessments should include as much information as is needed to adequately estimate potential effects on these habitat variables. In some cases, there may be little or no potential for adverse effects on these variables, so relatively little discussion will be needed.
- There are three potential categories of effect on designated critical habitat that relate to the duration of the effect: 1) a short-term events where effects reduce to negligible levels soon after construction activities cease; 2) actions that may result in sustained long-term negative effects that are measurable or observable after the proposed action is completed; and 3) actions that cause permanent changes, resulting in a new threshold (condition) for some population or habitat functions of an a ESA-listed species and/or its critical habitat. Note that ‘Short-term’ effects will never persist more than one year beyond the duration of construction duration (e.g., removal of native vegetation due to construction that is replaced within one year), and in the case of significant inputs of sediment or pollutants, may not persist for more than a few hours to a few days at most.
- The frequency of any negative impacts due to the proposed action, described as the mean number of events per an appropriate time basis for the proposed action. This rate must then be compared against best available data on the estimated recovery rates of

any potentially affected species to assess how those species would likely be impacted by multiple disturbances (if such occurs). The duration of each event may vary. A recurring event of short duration will in some cases result in a smaller net impact than a single event of a much longer duration, but the opposite may also be true depending on the nature of the disturbance.

- The severity of any negative effects on ESA-listed fish or their designated critical habitats that may potentially occur due to the actions of the proposed project. In this context severity is not analogous to intensity or scale, but it is closely related. With a “severe disturbance,” affected fish would take a longer time to recover, due to both the intensity of effects as well as the cumulative effects of the other variables described above.

2.4.1 Types of Environmental Effects

The References and Resources section at the end of this document lists resources that have additional guidance for the assessment of environmental effects. The habitat assessment should assess direct, indirect, and cumulative effects.

Direct effects: According to ESA rules and regulations, direct effects occur at or very close to the time of the action itself. Examples include, but are not limited to: construction noise disturbance, loss of habitat, or sedimentation that results from the construction activity. Direct effects include the effects of interrelated actions. Such actions are part of the proposed action and depend on the proposed action for their justification. Direct effects also include interdependent actions, which are activities that have no independent utility apart from the action under consideration. Neither interdependent nor interrelated actions would occur ‘but for’ the implementation of the proposed action.

The discussion of direct effects must include information on the temporal and spatial limits of the effects, species tolerances, severity of effect, mortality, and other forms of take (including harm) and expected habitat loss as a result of the proposed action. Identification of the appropriate estimated temporal and spatial scales of potential impacts are key to assessing environmental consequences. It is recommended that a table or list of appropriate scales for each pertinent issue (e.g., possible erosion and delivery of sediments to stream channels, water pollutants, changes in instream or riparian habitat, changes in hydraulics, etc.) be created to document appropriate scales of analysis for the nature and location of the proposed action. Habitat assessments only need to address those habitat functions and processes that the project has the potential to affect, while also explaining (as briefly as is practicable) why those are the only functions that may be impacted.

The direct impacts a project might have on a habitat area include, but are not limited to:

- Permanent clearing and grading of any habitat area
- Temporary clearing and grading of any habitat area during construction
- Permanent structures, pavements, etc., constructed within or placed within a habitat

area

- Modification of a stream channel or side channel, including bank stabilization measures and removal or changes to large woody debris (other than stream restoration efforts)
- Diversion of water that will change the hydrologic or sediment regime in the project action area

Indirect effects: Indirect effects are also caused by or result from the proposed action; however, they are likely to occur later in time. They may occur outside of the area directly affected by the action. Indirect impacts include, but are not limited to:

- Disrupting high or low stream flows, including impacts from stormwater runoff
- Contributing to sedimentation that fills in substrate
- Blocking a corridor that connects habitat areas
- Increases in water temperature or degradation of chemical or biologic water quality parameters through removal of riparian vegetation or other actions
- Disturbance of riparian vegetation (for example, clearing vegetation to the edge of a forested riparian area)
- Moving or removing large woody debris
- Destabilizing banks or altering natural lateral or vertical channel migration or channel forming processes
- Degrading wetland areas through disturbance of adjacent vegetation or modification of hydrology

Cumulative effects: Under the National Environmental Policy Act (NEPA) cumulative effects include the lingering effects of past and current actions (as depicted in the environmental baseline) that overlap in time and space with the proposed action, as well as estimates of the effects of future state, federal, tribal, local, or private actions that are reasonably certain to occur in the action area. However, under the ESA's distinct definition, cumulative effects include the effects of foreseeable future state, tribal, local, or private actions that are reasonably certain to occur in the project action area, but federal actions (i.e. actions permitted or partially funded by one or more federal agencies) are not part of the assessment nor are any past projects.

Project assessment cannot be segmented under either NEPA or ESA. It is not permitted to break the project down into small segments that may have low levels of impacts when considered separately. The entire scope of the direct, indirect, interdependent, and interrelated actions must be considered, including any possible lingering effects that may overlap with other reasonably foreseeable projects that could result in cumulative effects in the area(s) defined for analysis.

Permit officials are required to review the cumulative effects of all projects when the proposed action has the potential to produce any measurable or observable negative effects. The cumulative effects section should not simply be a list of other projects. It must in some manner describe the estimated accumulated impacts of future projects that are reasonably certain to occur, superimposed upon the baseline of current conditions and the expected impacts of the proposed action.

2.4.2 Report Format

There is no single required format for a NFIP habitat assessment, but such assessments must contain sufficient information and analysis to fully describe the impacts of the proposed action on ESA-listed species and their habitats. Similarly, neither NMFS nor USFWS (often jointly referred to as the ‘Services’) requires a specific format that biological assessments must follow. The main reference that the Services refer to and recommend applicants fully comply with is the Consultation Handbook (NMFS, USFWS 1998). [Endangered Species Consultation Handbook \(noaa.gov\)](https://www.noaa.gov/endangered-species-consultation-handbook)

The Handbook is a large document that includes chapters and appendices that stress the contents (versus format) needed in a biological assessment, along with examples of such assessments. However, there are also several examples of formats sometimes employed by various agencies that may be helpful for jurisdictions to reference as they can supplement the recommendations in this guidance. One format often used in the Pacific Northwest is the [Matrix of Pathways and Indicators \(NMFS 1996 and USFWS 1998\)](#). This approach assesses both the current condition and the estimated effect of the proposed action on 18 ‘indicators’ of population and habitat conditions that fall under six broader ‘pathway’ categories. This approach is useful because it breaks down the assessment into a repeatable, manageable number of specific topics.

The only significant difference between the NMFS and USFWS versions is that the suggested thresholds for when the current condition of an indicator is ‘properly functioning’, ‘at risk’, or ‘not properly functioning’ varies between the Services. The narrative for the matrices emphasizes that these specific threshold metrics do not need to be used and can be replaced by other metrics that are more appropriate for the watershed in question, if the deviation can be explained.

The outline below is a variation on the U.S. Army Corps of Engineers (USACE) Biological Assessment Template guidance regarding how to describe the effects of a proposed action in a biological assessment. It is included in the Endangered Species Section of USACE Permit Guidebook online resource at:

<http://www.nws.usace.army.mil/Missions/CivilWorks/Regulatory/PermitGuidebook.aspx>. All the components of this USACE outline must be covered in some manner, but the format may vary.

A. Direct effects

1. First PCE (e.g., freshwater spawning sites)
2. Second PCE (e.g., freshwater rearing sites)

3. Third PCE (e.g., freshwater migration corridors)
 4. Additional PCEs as appropriate
 5. Essential Fish Habitat designated by the National Marine Fisheries Service
 6. Fish and Wildlife Habitat Conservation Areas
 7. Vegetation communities and habitat structures
 8. Water quality
 9. Water quantity, including flood and low flow depths, volumes, and velocities
 10. The channel's planform pattern and migration processes
 11. Spawning substrate, if applicable
 12. Floodplain refugia, if applicable
- B. Indirect effects - see the list on the previous pages of this document and include consideration of indirect effects with respect to items A.1 through A.12, above, that are applicable to the proposed project
- C. Effects from interdependent and interrelated actions
- D. Cumulative Effects
- E. Effects determinations – see following section
- F. Summary

2.4.3 No Net Loss Determination

Actions in the SFHA of the implementation plan area will have a May Affect -- Not Likely to Adversely Affect (NLAA) determination. However, the RPAs set forth in the 2016 BiOp and 2017 errata allow for compensatory mitigation of adverse effects within the SFHA through abundance with no net loss standards. No net loss is a standard where adverse impacts must be avoided or offset through mitigation so that there is no net change in function from the condition when development begins. The no net loss standards ensure that the implementation of the NFIP avoids jeopardy of listed species and adverse modification of habitat, including essential fish habitat (EFH) under the jurisdiction of NMFS within the plan area. They apply to three floodplain functions (i.e., floodplain storage, water quality, and riparian vegetation) essential to the survival of the 16 ESA-listed fish species and Southern Resident killer whale in the plan area.

2.4.4 Preparing the Mitigation Plan

The following sections (Steps 5 and 6) provide guidance on preparing a mitigation plan, including reference to any other pertinent habitat-specific restoration and mitigation guidance materials developed for the area under consideration. The final objective of floodplain habitat mitigation is to ensure that there is no adverse effect on quality or quantity of natural habitat functions and processes within the Special Flood Hazard Area through no net loss standards. Step 6, Task 2.6.1

of this guidance provides guidance on mitigation objectives to achieve no net loss, including specific requirements for mitigation within riparian buffer zones and through the remainder of the SFHA.

For many development proposals, the permit conditions and mitigation actions required to meet other local and state permit requirements may also provide sufficient mitigation for the impacts identified through Step 4 of this guidance. In such instances, permit conditions and required mitigation actions may overlap to serve as mitigation for impacts on floodplain habitats, as required by the local floodplain management ordinance. However, the conditions and mitigation proposed, must be sufficient to mitigate for all floodplain habitat impacts, in order to meet the objective of no adverse effect on habitat for ESA-listed species.

2.5 Step 5. Review Mitigation Alternatives (Mitigation Sequencing)

There are three major types of mitigation approaches to rectify an adverse effect. In descending order of preference and effectiveness they are: avoidance, minimization, and mitigation. This mitigation sequence hierarchy requires minimization of those impacts that can't be avoided and directs that any impacts remaining after taking steps to minimize shall be fully mitigated. On-site, in-kind compensation is preferred over off-site and/or out-of-kind compensation. The necessity for use of the latter must be explained and justified. Successful mitigation is dependent upon adequate monitoring of both the actual (versus planned) implementation of mitigation measures as well as the effectiveness of those measures to accomplish the stated objectives in the Mitigation Plan (see Step 6 below). The results of that monitoring may trigger adaptive management to accomplish those goals.

2.5.1 Avoidance

Avoidance of adverse effects is the preferred approach. FEMA recommends that new land development actions remain outside of the SFHA. Avoidance prevents additional adverse effects on aquatic and riparian habitats, while also precluding any risks to public safety and property from increased frequency, duration, or magnitude of flooding that would possibly result from further development in the floodplain. Avoidance also largely eliminates the expense of adhering to no net loss within the SFHA. The permit applicant should strongly consider relocating or redesigning proposed projects to minimize the impacts on floodplain habitat functions and the corresponding need for a mitigation plan.

Communities should consider disincentivizing development within the floodplain. Many communities currently use a variety of strategies to encourage conservation of sensitive areas by allowing for development at a more intense level in other areas. These measures are usually implemented through provisions of a zoning ordinance or separate development regulations. Here are three incentives for floodplain conservation that some jurisdictions use:

1. Providing density incentives to individual property owners: A density incentive or

density credit system would allow specified land uses to occur at a more intense level within the portion of a parcel outside of the floodplain as compensation for conservation of flood-prone areas within the parcel. For example, if a 20-acre parcel is zoned for one acre lots and half of the parcel is in the floodplain, the community might consider allowing the ten “dry” acres to be developed with half acre lots, allowing the developer to still construct 20 homes. This would allow for a higher density of development in a portion of the property and would require the remaining, high-habitat-value floodplain to be conserved as a dedicated tract. This strategy is similar to the approach of clustering development, which is provided as a case study in Figure 6-3 of the FEMA 480 manual “Floodplain Management Requirements” and is often used in planned unit developments. Under either the density incentive or density credit approach, the overall project does not exceed the development density allowed by the zoning district.

2. **Transfer of development rights:** Transfer of development rights (TDR) programs allow for the transfer of development density from one parcel of land (with some conservation value, such as a floodplain or wetland) to another parcel or area that is planned for higher density development. Implementation and administration of TDR systems has proven challenging in many circumstances due to the required coordination in establishing density receiving and density giving areas and the required negotiation to set density credit values. However, a community, regional, or watershed-based TDR system may be a successful strategy for floodplain avoidance.
3. **Tax relief for conservation lands:** Tax relief is a financial incentive proven to help discourage development of sensitive lands. Such systems could provide an additional venue to encourage conservation of floodplain lands. However, tax relief systems generally do not provide permanent protection for natural resources as they often are terminated when the property ownership transfers.

2.5.2 Minimization

If the entire project cannot avoid some development within the SFHA, it may be able to minimize the physical area and magnitude of impacts on the three floodplain functions. Some ideas for minimizing impacts include:

- Elevating structures in the SFHA on posts and piers to reduce the amount of fill/structure volume below the BFE.
- Reducing the amount of new impervious surface and using pervious surfaces where possible.
- Reducing the number of trees with a dbh of 6 inches or larger to be removed.

Many adverse effects result from degradation of natural processes or functions caused by actions during the construction period. Some best management practices to avoid these types of problems include, but are not necessarily limited to:

- Perform all work in dry weather and/or during the dry season.
- Incorporate erosion and sedimentation control measures.
- Use vegetable oil-based hydraulic fluids in all equipment working in water.
- Prepare and train crews on a spill prevention and pollution control plan and require that all equipment needed to contain a possible spill is available on-site before construction activities begin.
- Store, stage, and refuel equipment outside the riparian buffer zone.
- Inspect equipment daily for leaks.
- Time specific phases of work to occur during “species work windows,” when the species are not present or will not be affected.

2.5.3 Mitigation

Mitigation must be conducted for any loss to floodplain storage, water quality, and riparian vegetation in the SFHA. This is commonly measured through an increase in fill or structures below the BFE, an increase in impervious surfaces, and the removal of trees 6 inches dbh or higher. Mitigation may include both natural methods (e.g., replanting of trees) or engineered methods (e.g., green infrastructure) depending on the floodplain function impacted.

Mitigation is recommended to occur on the same site and reach as which the impact occurs. Mitigation that does not occur within the same reach as where impacts occurred is subject to higher ratios that increase mitigation required to achieve no net loss. Mitigation must occur within the same watershed (i.e., within the same 10-digit hydrologic unit code area) and the same jurisdictional boundaries as the impact. For communities within the plan area of Oregon’s BiOp, FEMA requires that all development in the SFHA to be mitigated to achieve no net loss of the natural floodplain functions of floodplain storage, water quality, and vegetation through the ratios below.

Basic Mitigate Ratios	Undeveloped Space (ft³)	Pervious Surface (ft²)	Trees (6" < dbh ≤ 20")	Trees (20" < dbh ≤ 39")	Trees (39" < dbh)
Floodway and/or RBZ	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)	200%	200%	200%	200%	200%

Table 2: Mitigation Ratios Required to Achieve No Net Loss

Mitigation multipliers of 100% result in the required mitigation occurring at the same value described by the ratios above, while multipliers of 200% result in the required mitigation being doubled.

- For example, if 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 as a result of the 200% multiplier.

In instances where pervious surface replacement is not possible, mitigation can be achieved through infiltration of stormwater using low impact development (LID) or green infrastructure practices (e.g., rain gardens, bioswales). Or, where pervious surface replacement is not possible, due to impermeable soils or high-water tables, then through stormwater detention, to ensure no increase in peak volume of flow, followed by treatment to minimize pollutant loading.

In addition to higher mitigation ratios established by the no net loss standards, development in the RBZ is subject to the following conditions and performance standards:

- Habitat restoration activities in the RBZ are considered self-mitigating and are not subject to the no net loss standards described above.
- Functional-dependent uses are subject to the no net loss standards for development in the RBZ. Ancillary features in the RBZ (including manufacturing support facilities) are subject to the beneficial gain standard in addition to no net loss standards.
- Any other use of the RBZ requires a greater offset to achieve no net loss of floodplain functions, on top of the no net loss standards described above, through the beneficial

gain standard.

- Under FEMA's beneficial gain standard, an area within the same reach of the project and equivalent to 5% of the total project area within the RBZ, shall be planted with native herbaceous and shrub vegetation and designated as open space.

2.5.4 Select the Best Approach

Selecting the best mitigation approach for the proposed project is an iterative process. Avoidance should be considered first as the preferred choice. If work must be done in a sensitive area, the project proponent should consider the costs of restoration and compensation. If those costs are too high, then avoidance should be reconsidered.

Selecting the best mitigation approach should be done in conjunction with the local, state, and federal regulatory offices for technical assistance regarding the discussion of preliminary project designs and assessment of environmental effects. Assistance from these sources, as well as possible review and assistance from neighboring tribal representatives, can greatly aid in designing an appropriate sequence of mitigation of actions. Early and periodic meetings with appropriate regulatory agencies will increase the likelihood that a mitigation plan will meet all regulatory requirements and can reduce total project costs and the probability of schedule delays during the approval process.

2.6 Step 6. Prepare the Mitigation Plan

2.6.1 Objective

As noted in Step 5, the objective of the mitigation plan is to assure that actions are taken to sufficiently and appropriately mitigate for negative impacts on ESA-listed populations and the natural functions and processes that support their habitats. The mitigation plan needs to provide sufficient detail to demonstrate how this will be done, using avoidance, minimization, replacement (rectify), and/or compensatory measures.

For all mitigation, the final plan (construction level detail) should not be drafted until the local permitting office(s), in coordination with state and federal agencies, as necessary, has agreed that the conceptual mitigation plan would meet the objectives. Coordination with local permitting officers will ensure that the scope of the planned mitigation will be commensurate with the scale of the impacts and will meet the objectives identified above.

2.6.2 Format

Many communities have established formats that they have used to document mitigation plans within environmental or biological assessments. These formats are likely adequate for purposes of the NFIP. In Oregon, refer to Chapter 3 of [*Wetland Mitigation Banking Guidebook for Oregon: Approval Process and Documentation*](#). For detailed guidelines regarding what to include in a mitigation plan.

Here is an example mitigation plan outline:

1. Introduction, background, objectives
2. The project area, with map (taken from Step 1 of the assessment)
3. The project area's habitat, with map (taken from Step 2 of the assessment)
4. Project description (taken from Step 3 of the assessment)
5. Impact on habitat (taken from Step 4 of the assessment)
6. Alternatives considered (taken from Step 5, this should note why some alternatives, especially avoidance, were not selected)
7. Mitigation concept (an overall explanation of the measures)
8. Construction measures
 - a. Grading plan, with existing and post-construction topographical maps
 - b. Construction methods (e.g. equipment to be used)
 - c. Construction schedule
9. Permanent measures
 - a. Surface water management
 - b. Vegetation plan
 - c. Permanent buffer areas
 - d. Etc.
10. Post-construction monitoring and maintenance plan
11. Bond arrangements

2.6.3 Minimum Standards

At a minimum, the mitigation plan's components 7, 8, 9, 10, and 11 of the outline above, should be consistent with the mitigation guidance requirements of the Army Corps of Engineers, and Chapter 3 of [*Wetland Mitigation Banking Guidebook for Oregon: Approval Process and Documentation*](#). In Oregon, mitigation plans must also be consistent with the community's critical areas regulations or Goal 5 implementation plans. If there are inconsistencies between these requirements, the standards that provide the highest level of environmental protection and the greatest likelihood of mitigation success take precedence.

3.0 Reviewing Habitat Assessments and Mitigation Plans

This section provides guidance for the local permit official. The following strategies may be used to ensure that habitat assessments and mitigation plans are prepared by a qualified individual or company and meet the intent of the Model Ordinance and this guidance.

Establishing a List of Qualified Professionals: The community could provide a list of qualified professionals who have experience in the area to developers and landowners. Another strategy for ensuring that qualified professionals are used could include developing qualification criteria for authors of habitat assessments and mitigation plans; see the box below for an example of qualifying criteria.

Public Comment Period: After habitat assessments and mitigation plans are submitted, the permitting official may require a public comment period before assessment conclusions and/or mitigation plans are approved. This approach could include a requirement that a public notice be posted in a publication of record. The intent of the public comment period would be to ensure that interested third parties would have ample opportunity to review and comment on proposed projects. This could alert the local permit official to issues or impacts not adequately addressed by an assessment or mitigation plan.

Third Party Review: The community may establish a system of third-party review(s) by qualified consultants or agencies. Third party review is frequently implemented by local jurisdictions for other environmental permits and approvals. The cost of third-party review could be passed on to the applicant. This may require establishment of a third-party review system in the local ordinance. Establishing a system of third party review could augment internal review within the local jurisdiction. Another option that may work for certain jurisdictions could be formalizing a system of internal review where qualified staff would determine the adequacy of submitted materials.

Example Qualification Criteria

The following criteria could be used by a community as part (likely not all) of the minimal criteria needed to conduct habitat assessment to ensure assessments and mitigation plans are prepared by a qualified consultant:

Reports and plans shall be prepared by persons who have a minimum of a bachelor's degree in wildlife or fisheries habitat biology, or a related degree in a biological field from an accredited college or university with a minimum of four years' experience as a practicing fish or wildlife habitat biologist.

Qualifying criteria should include further specifications for all wildlife, fisheries, habitat, and environmental professionals that could be relied upon to address the broad array of habitats and conditions that occur in flood-prone areas.

3.1 Review Checklists

Permit staff could develop a review checklist for assessment and mitigation plan submittals. A checklist would likely need to be tailored to specific types of development activity due to the site

and habitat-specific nature of habitat assessments and mitigation plans. See the worksheet attached to this guidance document for an example of a review checklist.

4.0 References and Resources

4.1 Federal and State Regulations and Guidance

National Flood Insurance Program- Endangered Species Act Integration in Oregon, FEMA Region 10. <https://www.fema.gov/about/organization/region-10/oregon/nfip-esa-integration>

CRS Credit for Habitat Protection, FEMA, 2010. <http://training.fema.gov/EMIWeb/CRS/>

Endangered Species Consultation Handbook, National Marine Fisheries Service, 1998. https://media.fisheries.noaa.gov/dam-migration/esa_section7_handbook_1998_opr5.pdf

Endangered Species Act (ESA) Section 7(a)(2) Jeopardy and Adverse Modification of Critical Habitat Biological Opinion, ESA Section 7(a)(2) "Not Likely to Adversely Affect" Determination, and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Implementation of the National Flood Insurance Program in the State of Oregon. April 14, 2016. <https://media.fisheries.noaa.gov/2022-01/2016-04-14-fema-nfip-nwr-2011-3197.pdf>

Mitigation guidance and JPA permit information, Oregon State Department of Lands. <http://www.oregon.gov/DSL/WW/Pages/Permits.aspx>

National Flood Insurance Program Floodplain Management Requirements A Study Guide & Desk Reference for Local Officials, FEMA 480, 2005. <https://library.floods.org/cgi-bin/koha/opac-detail.pl?biblionumber=5219>

4.2 Maps and Databases

Critical habitat maps:

National Marine Fisheries Service: <http://www.nmfs.noaa.gov/pr/species/criticalhabitat.htm>

U.S. Fish and Wildlife Service: <http://criticalhabitat.fws.gov/>

Forest Water Typing System, Oregon State Water Resources Department. <http://www.oregon.gov/ODF/Documents/WorkingForests/WaterClassificationTechNote1.pdf>

Threatened and Endangered Species List, Oregon Department of fish and Wildlife. http://www.dfw.state.or.us/wildlife/diversity/species/threatened_endangered_candidate_list.asp

[Oregon Natural Heritage Program, Oregon State University Institute for Natural Resources.](http://inr.oregonstate.edu/orbic)
<http://inr.oregonstate.edu/orbic>

Washington and Oregon State Soil Survey data, see the USDA Natural Resource Conservation Service maps or online *Web Soil Survey*. <http://websoilsurvey.nrcs.usda.gov/app/>

Regional Guidance for Hydrologic and Hydraulic Studies in Support of the Model Ordinance for Floodplain Management under the National Flood Insurance Program and the Endangered Species Act, FEMA Region 10, 2010.

https://www.fema.gov/pdf/about/regions/regionx/draft_handh_guide.pdf

4.3 Water Quality and Quantity

Section 401 Water Quality Certification: Post-Construction Stormwater Management Plan Submission Guidelines, State of Oregon Department of Environmental Quality, 2016,
<https://www.oregon.gov/deq/wq/wqpermits/Pages/Section-401.aspx>

Standards for surface water quality in Oregon State, Department of Environmental Quality. <http://www.oregon.gov/deq/wq/Pages/WQ-Standards.aspx>

Routine Road Maintenance | Water Quality and Habitat Guide, Best Management Practices, State of Oregon Department of Transportation, 2020.
<http://www.oregon.gov/ODOT/GeoEnvironmental/Pages/Stormwater.aspx>

Oregon State Water Quality Assessment, Department of Environmental Quality.
<http://www.oregon.gov/deq/wq/Pages/WQ-Standards.aspx>

Water level data:

- U.S. Geological Survey: <http://wa.water.usgs.gov/data/>

4.4 Mitigation

Engineering with Nature – Alternative Techniques to Riprap Bank Stabilization, FEMA Region 10, 2009.
https://www.fema.gov/pdf/about/regions/regionx/Engineering_With_Nature_Web.pdf

Habitat Conservation Planning Handbook, US Fish & Wildlife Service and National Marine Fisheries Service, 1996. <https://www.fws.gov/library/collections/habitat-conservation-planning-handbook>

Purpose of Mitigation and Mitigation Steps in Oregon State, Oregon State Department of State Lands. <http://www.oregon.gov/dsl/WW/Pages/Mitigation.aspx>

Wetland Mitigation Banking Guidebook for Oregon: Approval Process and Documentation, Oregon Division of State Lands, 2000, http://oregonexplorer.info/data_files/OE_topic/wetlands/documents/mitbank_guidebk.pdf

A Guide to the Removal-Fill Permit Process: Compensatory Mitigation Planning, Oregon Division of State Lands, 2016, https://www.oregon.gov/dsl/wetlands-waters/Documents/Removal_Fill_Guide.pdf

Oregon Aquatic Habitat: Restoration and Enhancement Guide, Oregon Plan for Salmon and Watersheds, 1999, <https://digital.osl.state.or.us/islandora/object/osl:16552>

4.5 Additional References

Invasive species information: Oregon Department of Agriculture.
<http://www.oregon.gov/ODA/programs/Weeds/Pages/AboutWeeds.aspx>

Low Impact Development, Oregon Environmental Council.
<http://www.oeconline.org/tag/low-impact-development/>



NFIP Oregon Implementation Program Guidance

Model Floodplain Management Ordinance

For Participating Communities in the
Implementation Plan Area



FEMA

Federal Emergency Management Agency
Region 10
Department of Homeland Security
130 – 228th Street SW
Bothell, WA 98021

Note to Communities: This document presents the draft model ordinance that for the Pre-Implementation Compliance Measures and is intended to closely represent most of the language that will be presented as Pathway A of the Draft Implementation Plan. It is built off the 2020 State of Oregon Model Flood Hazard Management Ordinance and the 2018 iteration of the Oregon Model ordinance for ESA Integration. It reflects the NMFS 2016 Biological Opinion (BiOp) (except where noted) and is informed by the 2023 NEPA Scoping effort.

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Acronyms and Abbreviations

BiOp	Biological Opinion
CFR	Code of Federal Regulations
CLOMR	Conditional Letter of Map Revision
CRS	Community Rating System
dbh	diameter breast height
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
LID	Low-Impact Development
LOMR	Letter of Map Revision
MHHW	Marine Higher-High Water line
NFIP	National Flood Insurance Program
NMFS	National Marine Fisheries Service
OHWM	Ordinary High Water Mark
ORS	Oregon Revised Statutes
ORSC	Oregon Residential Specialty Code
OSSC	Oregon Structural Specialty Code
RBZ	Riparian buffer zone
SFHA	Special Flood Hazard Area
TB	Technical Bulletin

SECTION 1. Introduction

FEMA has developed this model flood hazard management ordinance (“2024 model ordinance”) to address the requirements outlined in the Draft Implementation Plan for National Flood Insurance Program (NFIP)-Endangered Species Act (ESA) Integration in Oregon (“Oregon Implementation Plan”). The Federal Emergency Management Agency (FEMA) consulted with the National Marine Fisheries Service (NMFS) on potential effects of the implementation of the NFIP in Oregon on listed species under NMFS authority. In 2016, NMFS issued a Biological Opinion (BiOp), which recommended changes to the implementation of the NFIP in Oregon within the plan area (see the 2024 Draft Oregon Implementation Plan for NFIP-ESA Integration [2024 Draft Implementation Plan] for a description of the plan area).

As a result of the BiOp issued by NMFS, communities are required to demonstrate how floodplain development is compliant with the Endangered Species Act in the SFHA while the 2024 Draft Implementation Plan undergoes an Environmental Impact Statement (EIS). The 2024 model ordinance provides the tools a community would need to implement “Path A” of the 2024 Draft Implementation Plan and serves as one of three actions a community can take under Pre-Implementation Compliance Measures (PICM).

The regulatory language contained within the 2024 model ordinance can be adopted verbatim and incorporated into local floodplain and land use regulations, or a community may select those sections that are missing from its current floodplain ordinance and adopt those sections. The State of Oregon’s Model Flood Hazard Management Ordinance (2020) was used as a starting point, with additions to provide compliance with the Oregon Implementation Plan. The additional sections are clearly noted with yellow highlighting to simplify implementation for Oregon communities in the plan area that have already adopted the Oregon Model Flood Hazard Management Ordinance (2020).

This 2024 model ordinance provides a set of provisions to protect the built environment from flood damage and to minimize potential impacts of construction and reconstruction on public health and safety, property, water quality, and aquatic and riparian habitats. The requirements pertain to new development in Special Flood Hazard Area (see definitions), which includes the maintenance, repair, or remodel of existing structures and utilities when the existing footprint is expanded and/or the floodplain is further encroached upon.

The Oregon Implementation Plan and this model ordinance do not change the definition of development in 44 Code of Federal Regulations [CFR] 59.1.

“Development” is defined as “any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials.” (44 C.F.R. 59.1)

The 2024 model ordinance provides compliance with federal and state statutes and with the Oregon Implementation Plan. The 2024 model ordinance conforms to the following:

1. The requirements of the NFIP, as specified in 44 CFR 59 and 60.
2. Oregon State codes to protect structures from flood damage that are specified in Oregon Structural Specialty Code (OSSC), Section 1612 and Oregon Residential Specialty Code (ORSC), Section R322.
3. Oregon Statewide Land Use Planning Goals
4. Provisions needed to meet the requirements of the Oregon Implementation Plan for NFIP-ESA Integration. These sections are highlighted in yellow in the model ordinance.

This 2024 model ordinance provides communities with ordinance language that complies with the NFIP-ESA Integration Implementation Plan. Adoption of the ordinance language will ensure compliance with the minimum standards for participation in the NFIP in the plan area in Oregon. Prior to adoption of the ordinance language, communities must have their locally proposed draft language reviewed by FEMA and/or the Oregon Department of Land Conservation and Development.

The model flood hazard ordinance includes standards and provisions that encourage sound floodplain management. The language is based on the minimum requirements of the NFIP found in 44 CFR 59 and 60, Oregon's statewide land use planning Goal 7, and Oregon specialty codes. The new language added to the state model floodplain ordinance, highlighted in yellow, provides compliance with the ESA for floodplain development in the plan area.

Adherent to the NMFS 2016 Biological Opinion, mitigation is necessary to ensure a no net loss in floodplain functions. FEMA's 2024 Draft Oregon Implementation Plan identifies proxies that provide measurable actions that can prevent the 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. 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 the detrimental impact.

1.1. How to Use this Document

This 2024 model ordinance includes a Table of Contents and a Regulatory Crosswalk that identifies the federal and state standards that align to and are reflected in each section. Communities will need to review their ordinances and ensure that all the required components are included.

Please refer to [FEMA's website](#) for information on how to determine whether or not your community is within the plan area.

1.1.1. ORDINANCE LANGUAGE LEGEND:

The colors are used in the text in the model ordinance to denote specific actions or sections with specific applicability.

- Black: Represents the existing NFIP and current state minimum requirements that are found in the 2020 Oregon Model Flood Hazard Management Ordinance.
- Red: Represents language that must be replaced with community specific information. Only include the appropriate language for your community.
- Purple: Represents language required for communities with Coastal High Hazard Areas mapped by FEMA (V Zones or Coastal A Zones). (DELETE ALL PURPLE LANGUAGE IF NOT A COASTAL COMMUNITY).
- Blue: Represents hyperlinks to other sections of the document or external websites.
- Yellow highlighting: Represents new ordinance language not in the 2020 Oregon Model Flood Hazard Management Ordinance. Communities that have previously adopted the state model ordinance may focus on the yellow highlighted sections.

1.2. Changes from the 2020 Oregon Model Flood Hazard Management Ordinance

This 2024 version of the Oregon Model Flood Hazard Ordinance (to be referred to herein as the “2024 Model Ordinance”), varies from the 2020 Oregon Model Flood Hazard Management Ordinance. with the addition of new content to be included for ESA compliance for NFIP-participating communities in the plan area. If no part of the Special Flood Hazard Area (SFHA) in your NFIP-participating community is in the Oregon NFIP-ESA Integration plan area, your community may continue to use the 2020 Oregon Model Flood Hazard Management Ordinance.

In general, the ordinance was revised to ensure that the implementation of the NFIP-ESA integration no net loss standards avoids or offsets adverse impacts on threatened and endangered species and their critical habitat. A summary of the primary changes found in the 2024 model ordinance is provided below:

1. New language has been added to incorporate the following no net loss standards:
 - a. No net loss of undeveloped space (see Section 6.1.1).
 - b. No net loss of pervious surface. (see Section 6.1.2).
 - c. No net loss of trees equal to or greater than 6 inches dbh (i.e., tree diameter measured at 4.5 feet from the ground surface). (see Section 6.1.3).

2. Some definitions (see 2.0) have been added to provide context for the new no net loss standards from the Oregon Implementation Plan.
3. Language has been added:
 - a. (see 6.3) to address activities that may require a floodplain development permit but are exempt from the no net loss requirement per the BiOp.
 - b. (see 6.4) to address the specific requirements of the Riparian Buffer Zone (RBZ).
4. In general, the language in the 2024 model ordinance mirrors the language from the 2020 Oregon Model Flood Hazard Management Ordinance. Minor edits to the 2020 language have been made for clarity, punctuation, and grammar.

1.3. Community Rating System

Implementation of the new no net loss standards related to NFIP-ESA integration may be eligible for credit under the Community Rating System (CRS). The CRS is explained further in CRS Credit for Habitat Protection, available online at: <https://crsresources.org/files/guides/crs-credit-for-habitat-protection.pdf>, and the 2017 CRS Coordinators' Manual, available online at: https://www.fema.gov/sites/default/files/documents/fema_community-rating-system_coordinators-manual_2017.pdf, and the 2021 Addendum to the 2017 CRS Coordinator's Manual, available online at: https://www.fema.gov/sites/default/files/documents/fema_community-rating-system_coordinator-manual_addendum-2021.pdf. The Association of State Floodplain Managers' Green Guide, also provides useful information on development techniques that avoid impacts on natural functions and values of floodplains. This document is available at: www.floodsciencecenter.org/products/crs-community-resilience/green-guide/. Communities interested in CRS credits should contact their CRS specialist for additional information and review.

Implementation of the no net loss standards would most likely contribute to credits under the following CRS activities:

- Activity 430 Higher Regulatory Standards
 - Development Limitations
 - Prohibition of all fill (DL1a): This credit is for prohibiting all filling in the regulatory floodplain. To meet this standard, communities may NOT approve Conditional Letters or Letters of Map Revision based on Fill (CLOMR-F or LOMR-F). If a CLOMR-F or LOMR-F is issued for a property in a community, then DL1 credit will be denied. This applies to CLOMRs and LOMRs that include filling as part of the reason for requesting a map change. Minor filling may be allowed where needed to protect or restore natural floodplain functions, such as part of a channel restoration project.

- The CRS manual describes a number of regulatory approaches that do not warrant credit under DL1; however, because the Oregon NFIP-ESA integration no net loss standards exceed the approaches described in the manual, a community meeting the Oregon no net loss standards should qualify for credit under DL1.

- Compensatory storage (DL1b): This credit is for regulations that require new development to provide compensatory storage at hydraulically equivalent sites up to a ratio of 1.5:1. Credit is not provided for:

- Compensatory storage requirements in floodways only or in V Zones only, or

- Stormwater management regulations that require a developer to compensate for any increase in runoff created by the development. This is credited under Activity 450.

- Activity 450 Stormwater Management

- Stormwater management regulations (SMR – 452a): This credit is the sum of four sub-elements: Size of development (Section 452.a(1), SZ); design storm used (Section 452.a(2), DS); low-impact development (LID) regulations (Section 452.a(3), LID); and public agency authority to inspect and maintain, at the owner's expense, private facilities constructed to comply with the ordinance (Section 452.a.(4), PUB).

- LID credits the community's regulatory language that requires the implementation of LID techniques to the maximum extent feasible to control peak runoff when new development occurs. LID techniques can significantly reduce or eliminate the increase in stormwater runoff created by traditional development, encourage aquifer recharge, and promote better water quality.

SECTION 2. Regulatory Crosswalk

The following table presents a crosswalk of the model ordinance sections against the relevant federal and state laws, regulations, and policies. The new sections related to the Oregon NFIP-ESA integration implementation (yellow highlighted sections of the model ordinance) are not listed in this table and are related to compliance with the ESA.

Ordinance Section	44 CFR and Technical Bulletin (TB) Citation(s)	State of Oregon Citation(s) (Goal 7, Specialty Codes*, Oregon Revised Statutes [ORS])
1.1 Statutory Authorization	59.22(a)(2)	Goal 7; ORS 203.035 (Counties), ORS 197.175 (Cities)
1.2 Findings of Fact	59.22(a)(1)	Goal 7
1.3 Statement of Purpose	59.2; 59.22(a)(1) and (8); 60.22	Goal 7
1.4 Methods of Reducing Flood Losses	60.22	Goal 7
2.0 Definitions	59.1; 33 CFR 328.3(c)(7)	Goal 7
3.1 Lands to Which this Ordinance Applies	59.22(a)	Goal 7
3.2 Basis for Establishing the Special Flood Hazard Areas	59.22(a)(6); 60.2(h)	Goal 7
3.3 Coordination with Specialty Codes Adopted by the State of Oregon Building Codes Division		ORS 455
3.4.1 Compliance	60.1(b) – (d)	Goal 7
3.4.2 Penalties for Noncompliance	60.1(b) – (d)	Goal 7
3.5.1 Abrogation	60.1(b) – (d)	Goal 7
3.5.2 Severability		
3.6 Interpretation	60.1(b) – (d)	Goal 7
3.7.1 Warning		
3.7.2 Disclaimer of Liability		
4.1 Designation of the Floodplain Administrator	59.22(b)(1)	Goal 7
4.2.1 Permit Review	60.3(a)(1) – (3); 60.3(c)(10)	Goal 7
4.2.2 Information to be Obtained and Maintained	59.22(a)(9)(iii); 60.3(b)(5)(i) and (iii); 60.3(c)(4); 60.3(b)(3); 60.6(a)(6)	Goal 7; 105.9; 110.33; R106.1.4; R109.1.3; R109.1.6.1; R322.1.10; R322.3.6

Ordinance Section	44 CFR and Technical Bulletin (TB) Citation(s)	State of Oregon Citation(s) (Goal 7, Specialty Codes*, Oregon Revised Statutes [ORS])
4.2.3.1 Community Boundary Alterations	59.22(a)(9)(v)	Goal 7
4.2.3.2 Watercourse Alterations	60.3(b)(6) – (7), 65.6(12-13)	Goal 7
4.2.3.3 Requirement to Submit New Technical Data	65.3, 65.6, 65.7, 65.12	Goal 7
4.2.4 Substantial Improvement and Substantial Damage Assessments and Determinations	59.1; 60.3(a)(3); 60.3(b)(2); 60.3(b)(5)(i); 60.3(c)(1), (2), (3), (5) – (8), (10), (12); 60.3(d)(3); 60.3(e)(4), (5), (8)	Goal 7
4.3.1 Floodplain Development Permit Required	60.3(a)(1)	Goal 7
4.3.2 Application for Development Permit	60.3(a)(1); 60.3(b)(3); 60.3(c)(4)	Goal 7; Oregon Residential Specialty Code (R) 106.1.4; R322.3.6
4.4 Variance Procedure	60.6(a)	Goal 7
4.4.1 Conditions for Variances	60.6(a)	Goal 7
4.4.2 Variance Notification	60.6(a)(5)	Goal 7
5.1.1 Alteration of Watercourses	60.3(b)(6) and (7)	Goal 7
5.1.2 Anchoring	60.3(a)(3); 60.3(b)(1), (2), and (8)	Goal 7; R322.1.2
5.1.3 Construction Materials and Methods	60.3(a)(3), TB 2; TB 11	Goal 7; R322.1.3; R322.1.3
5.1.4.1 Water Supply, Sanitary Sewer, and On-Site Waste Disposal Systems	60.3(a)(5) and (6)	Goal 7; R322.1.7
5.1.4.2 Electrical, Mechanical, Plumbing, and Other Equipment	60.3(a)(3)	Goal 7; R322.1.6;
5.1.5 Tanks		R322.2.4; R322.3.7
5.1.6 Subdivision Proposals	60.3(a)(4)(i) – (iii); 60.3(b)(3)	Goal 7
5.1.7 Use of Other Base Flood Data	60.3(a)(3); 60.3(b)(4); 60.3(b)(3); TB 10-01	Goal 7; R322.3.2
5.1.8 Structures Located in Multiple or Partial Flood Zones		R322.1
5.2.1 Flood Openings	60.3(c)(5); TB 1; TB 11	Goal 7; R322.2.2;

Ordinance Section	44 CFR and Technical Bulletin (TB) Citation(s)	State of Oregon Citation(s) (Goal 7, Specialty Codes*, Oregon Revised Statutes [ORS])
		R322.2.2.1
5.2.2 Garages	TB 7-93	R309
5.2.3.1 Before Regulatory Floodway	60.3(c)(10)	Goal 7
5.2.3.2 Residential Construction	60.3(c)(2)	Goal 7
5.2.3.3 Non-residential Construction	60.3(c)(3) – (5); TB 3	Goal 7; R322.2.2; R322.2.2.1
5.2.3.4 Manufactured Dwellings	60.3(b)(8); 60.3(c)(6)(iv); 60.3(c)(12)(ii)	Goal 7; State of OR Manufactured Dwelling Installation Specialty Code (MDISC) and associated statewide Code Interpretation dated 1/1/2011
5.2.3.5 Recreational Vehicles	60.3(c)(14)(i) – (iii)	Goal 7
5.2.3.6 Appurtenant (Accessory) Structures	60.3(c)(5); TB 1; TB 7-93	Oregon Structural Specialty Code (S) 105.2; R105.2
5.2.4 Floodways	60.3(d); FEMA Region X Fish Enhancement Memo (Mark Riebau)	Goal 7
5.2.5 Standards for Shallow Flooding Areas	60.3(c)(7), (8), (11), and (14)	Goal 7
5.3 Specific Standards for Coastal High Hazard Flood Zones, and 5.3.1 Development Standards	60.3(e); TB 5; TB 8; TB 9	Goal 7; R322.3.1; R322.3.2; R322.3.3; R322.3.4; R322.3.5
5.3.1.1 Manufactured Dwelling Standards for Coastal High Hazard Zones	60.3(e)(8)(i) – (iii)	Goal 7; RR322.3.2; State of OR Manufactured Dwelling Installation Specialty Code (MDISC) and associated statewide Code Interpretation dated 1/1/2011

Ordinance Section	44 CFR and Technical Bulletin (TB) Citation(s)	State of Oregon Citation(s) (Goal 7, Specialty Codes*, Oregon Revised Statutes [ORS])
5.3.1.2 Recreational Vehicle Standards for Coastal High Hazard Zones	60.3(e)(9)(i)- (iii)	Goal 7
5.3.1.3 Tank Standards for Coastal High Hazard Zones		R322.2.4; R322.3.7

*[Link to Oregon Specialty Codes \(https://www.oregon.gov/bcd/codes-stand/Pages/adopted-codes.aspx\)](https://www.oregon.gov/bcd/codes-stand/Pages/adopted-codes.aspx)

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SECTION 3. Model Ordinance Language

1.0 STATUTORY AUTHORITY, FINDINGS OF FACT, PURPOSE, AND METHODS

1.1 STATUTORY AUTHORIZATION

The State of Oregon has in **ORS 203.035 (COUNTIES) OR ORS 197.175 (CITIES)** delegated the responsibility to local governmental units to adopt floodplain management regulations designed to promote the public health, safety, and general welfare of its citizenry.

Therefore, the **COMMUNITY NAME** does ordain as follows:

1.2 FINDINGS OF FACT

- A. The flood hazard areas of **COMMUNITY NAME** **preserve the natural and beneficial values served by floodplains but** are subject to periodic inundation which may result 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.
- B. These flood losses may be caused by the cumulative effect of obstructions in special flood hazard areas which increase flood heights and velocities, and when inadequately anchored, cause damage in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protected from flood damage also contribute to flood loss.

1.3 STATEMENT OF PURPOSE

It is the purpose of this ordinance to promote public health, safety, and general welfare, and to minimize public and private losses due to flooding in special flood hazard areas by provisions designed to:

- A. Protect human life and health;
- B. Minimize expenditure of public money for costly flood control projects;
- C. Preserve natural and beneficial floodplain functions;**
- D. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- E. Minimize prolonged business interruptions;

- F. Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in special flood hazard areas;
- G. Help maintain a stable tax base by providing for the sound use and development of flood hazard areas so as to minimize blight areas caused by flooding;
- H. Notify potential buyers that the property is in a special flood hazard area;
- I. Notify those who occupy special flood hazard areas that they assume responsibility for their actions;
- J. Participate in and maintain eligibility for flood insurance and disaster relief.

1.4 METHODS OF REDUCING FLOOD LOSSES

In order to accomplish its purposes, this ordinance includes methods and provisions for:

- A. Restricting or prohibiting development which is 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;
- B. Requiring that development vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
- D. Controlling filling, grading, dredging, and other development which may increase flood damage;
- E. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas.
- F. Employing a standard of “no net loss” of natural and beneficial floodplain functions.

2.0 DEFINITIONS

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage.

Appeal: A request for a review of the interpretation of any provision of this ordinance or a request for a variance.

Area of shallow flooding: A designated Zone AO, AH, AR/AO or AR/AH on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel

does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard: The land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as Zone A, AO, AH, A1-30, AE, A99, AR (V, V1-30, VE). “Special flood hazard area” is synonymous in meaning and definition with the phrase “area of special flood hazard.”

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

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

Basement: Any area of the building having its floor subgrade (below ground level) on all sides.

Breakaway wall: A wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

Coastal high hazard area: An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources.

Development: Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

Fill: 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: The volumetric space available to fish to access.

Fish Egress-able Space: The volumetric space available to fish to exit or leave from.

Flood or Flooding:

(a) A general and temporary condition of partial or complete inundation of normally dry land areas from:

(1) The overflow of inland or tidal waters.

(2) The unusual and rapid accumulation or runoff of surface waters from any source.

(3) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

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

Flood elevation study: an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

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

Flood Insurance Study (FIS): See "Flood elevation study."

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

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

Green Infrastructure: Use of natural or 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 reuse. 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 new impervious surface.

Habitat Restoration Activities: 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: 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.

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

Historic structure: Any structure that is:

- (a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
- (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (1) By an approved state program as determined by the Secretary of the Interior or
 - (2) Directly by the Secretary of the Interior in states without approved programs.

Hydraulically Equivalent Elevation: 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.

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

Lowest floor: The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

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

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

Mean Higher-High Water: The average of the higher-high water height of each tidal day observed over the National Tidal Datum Epoch.

Mean sea level: For purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which Base Flood Elevations shown on a community's Flood Insurance Rate Map are referenced.

New construction: For floodplain management purposes, “new construction” means structures for which the “start of construction” commenced on or after the effective date of a floodplain management regulation adopted by **COMMUNITY NAME** and includes any subsequent improvements to such structures.

No Net Loss: A standard where adverse impacts must be avoided or offset through adherence to certain requirements so that there is no net change in the function

from the existing condition when a development application is submitted to the state, tribal, or local jurisdiction. The floodplain functions of floodplain storage, water quality, and vegetation must be maintained.

Offsite: Mitigation occurring outside of the project area.

Onsite: Mitigation occurring within the project area.

Ordinary High Water Mark: 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.

Qualified Professional: Appropriate subject matter expert that is defined by the community.

Reach: 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: A vehicle which is:

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

Riparian: Of, adjacent to, or living on, the bank of a river, lake, pond, or other water body.

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

Riparian Buffer Zone Fringe: The area outside of the RBZ and floodway but still within the SFHA.

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

Special flood hazard area: See "Area of special flood hazard" for this definition.

Start of construction: Includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days from the date of the permit. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured dwelling on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

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

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

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

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

Undeveloped Space: 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: A grant of relief by **COMMUNITY NAME** from the terms of a floodplain management regulation.

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

3.0 GENERAL PROVISIONS

3.1 LANDS TO WHICH THIS ORDINANCE APPLIES

This ordinance shall apply to all special flood hazard areas within the jurisdiction of **COMMUNITY NAME**.

3.2 BASIS FOR ESTABLISHING THE SPECIAL FLOOD HAZARD AREAS

The special flood hazard areas identified by the Federal Insurance Administrator in a scientific and engineering report entitled "The Flood Insurance Study (FIS) for **EXACT TITLE OF FLOOD INSURANCE STUDY FOR COMMUNITY**", dated **DATE (MONTH DAY, FOUR DIGIT YEAR)**, with accompanying Flood Insurance Rate Maps (FIRMs) **LIST ALL EFFECTIVE FIRM PANELS HERE (UNLESS ALL PANELS ARE BEING REPLACED THROUGH A NEW COUNTY_WIDE MAP THAT INCORPORATES ALL PREVIOUS PANELS/VERSIONS, IN THAT SITUATION PANELS DO NOT NEED TO BE INDIVIDUALLY LISTED)** are hereby adopted by reference and declared to be a part of this ordinance. The FIS and FIRM panels are on file at **INSERT THE LOCATION (I.E. COMMUNITY PLANNING DEPARTMENT LOCATED IN THE COMMUNITY ADMINISTRATIVE BUILDING)**.

3.3 COORDINATION WITH STATE OF OREGON SPECIALTY CODES

Pursuant to the requirement established in ORS 455 that the **COMMUNITY NAME** administers and enforces the State of Oregon Specialty Codes, the **COMMUNITY NAME** does hereby acknowledge that the Oregon Specialty Codes contain certain provisions that apply to the design and construction of buildings and structures located in special flood hazard areas. Therefore, this ordinance is intended to be administered and enforced in conjunction with the Oregon Specialty Codes.

3.4 COMPLIANCE AND PENALTIES FOR NONCOMPLIANCE

3.4.1 COMPLIANCE

All development within special flood hazard areas is subject to the terms of this ordinance and required to comply with its provisions and all other applicable regulations.

3.4.2 PENALTIES FOR NONCOMPLIANCE

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violations of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a (INFRACTION TYPE (I.E. MISDEMEANOR) AND PENALTIES PER STATE/LOCAL LAW ASSOCIATED WITH SPECIFIED INFRACTION TYPE (I.E. ANY PERSON WHO VIOLATES THE REQUIREMENTS OF THIS ORDINANCE SHALL UPON CONVICTION THEREOF BE FINED NOT MORE THAN A SPECIFIED AMOUNT OF MONEY...))

Nothing contained herein shall prevent the COMMUNITY NAME from taking such other lawful action as is necessary to prevent or remedy any violation.

3.5 ABROGATION AND SEVERABILITY

3.5.1 ABROGATION

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

3.5.2 SEVERABILITY

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

3.6 INTERPRETATION

In the interpretation and application of this ordinance, all provisions shall be:

- A. Considered as minimum requirements;
- B. Liberally construed in favor of the governing body; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes.

3.7 WARNING AND DISCLAIMER OF LIABILITY

3.7.1 WARNING

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance 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.

3.7.2 DISCLAIMER OF LIABILITY

This ordinance shall not create liability on the part of the **COMMUNITY NAME**, any officer or employee thereof, or the Federal Insurance Administrator for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

4.0 ADMINISTRATION

4.1 DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR

The **INDIVIDUAL JOB TITLE** is hereby appointed to administer, implement, and enforce this ordinance by granting or denying development permits in accordance with its provisions. The Floodplain Administrator may delegate authority to implement these provisions.

[Additional Recommended Language Provided in Appendix B](#)

4.2 DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

Duties of the floodplain administrator, or their designee, shall include, but not be limited to:

4.2.1 PERMIT REVIEW

Review all development permits to:

- A. Determine that the permit requirements of this ordinance have been satisfied;
- B. Determine that all other required local, state, and federal permits have been obtained and approved;
- C. Determine if the proposed development is located in a floodway.
 - i. If located in the floodway assure that the floodway provisions of this ordinance in section **5.2.4** are met; and
 - ii. Determine if the proposed development is located in an area where Base Flood Elevation (BFE) data is available either through the Flood Insurance Study (FIS) or from another authoritative source. If BFE data is not available then ensure compliance with the provisions of sections **5.1.7**; and

- iii. Provide to building officials the Base Flood Elevation (BFE) (ADD FREEBOARD IF COMMUNITY HAS HIGHER ELEVATION STANDARDS) applicable to any building requiring a development permit.

- D. Determine if the proposed development qualifies as a substantial improvement as defined in section 2.0.
- E. Determine if the proposed development activity is a watercourse alteration. If a watercourse alteration is proposed, ensure compliance with the provisions in section 5.1.1.
- F. Determine if the proposed development activity includes the placement of fill or excavation.

- G. Determine whether the proposed development activity complies with the no net loss standards in Section 6.0.

4.2.2 INFORMATION TO BE OBTAINED AND MAINTAINED

The following information shall be obtained and maintained and shall be made available for public inspection as needed:

- A. The actual elevation (in relation to mean sea level) of the lowest floor (including basements) and all attendant utilities of all new or substantially improved structures where Base Flood Elevation (BFE) data is provided through the Flood Insurance Study (FIS), Flood Insurance Rate Map (FIRM), or obtained in accordance with section 5.1.7.
- B. The elevation (in relation to mean sea level) of the natural grade of the building site for a structure prior to the start of construction and the placement of any fill and ensure that the requirements of sections 4.2.1(B), 5.2.4, and 5.3.1(F), are adhered to.
- C. Upon placement of the lowest floor of a structure (including basement) but prior to further vertical construction, documentation, prepared and sealed by a professional licensed surveyor or engineer, certifying the elevation (in relation to mean sea level) of the lowest floor (including basement).
- D. Where base flood elevation data are utilized, As-built certification of the elevation (in relation to mean sea level) of the lowest floor (including basement) prepared and sealed by a professional licensed surveyor or engineer, prior to the final inspection.
- E. Maintain all Elevation Certificates (EC) submitted to the community.
- F. The elevation (in relation to mean sea level) to which the structure and all attendant utilities were floodproofed for all new or substantially improved floodproofed structures where allowed under this ordinance and where

Base Flood Elevation (BFE) data is provided through the FIS, FIRM, or obtained in accordance with section 5.1.7.

G. All floodproofing certificates required under this ordinance.

H. All variance actions, including justification for their issuance.

I. All hydrologic and hydraulic analyses performed as required under section 5.2.4.

J. All Substantial Improvement and Substantial Damage calculations and determinations as required under section 4.2.4.

K. Documentation of how no net loss standards have been met (see Section 6.0)

L. All records pertaining to the provisions of this ordinance.

4.2.3 REQUIREMENT TO NOTIFY OTHER ENTITIES AND SUBMIT NEW TECHNICAL DATA

4.2.3.1 COMMUNITY BOUNDARY ALTERATIONS

The Floodplain Administrator shall notify the Federal Insurance Administrator in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed authority or no longer has authority to adopt and enforce floodplain management regulations for a particular area, to ensure that all Flood Hazard Boundary Maps (FHBM) and Flood Insurance Rate Maps (FIRM) accurately represent the community's boundaries. Include within such notification a copy of a map of the community suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority.

4.2.3.2 WATERCOURSE ALTERATIONS

A. Notify adjacent communities, the Department of Land Conservation and Development, and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration. This notification shall be provided by the applicant to the Federal Insurance Administration as a Letter of Map Revision (LOMR) along with either:

- i. A proposed maintenance plan to assure the flood carrying capacity within the altered or relocated portion of the watercourse is maintained; or

- ii. Certification by a registered professional engineer that the project has been designed to retain its flood carrying capacity without periodic maintenance.

- B. The applicant shall be required to submit a Conditional Letter of Map Revision (CLOMR) when required under section 4.2.3.3. Ensure compliance with all applicable requirements in sections 4.2.3.3 and 5.1.1.

4.2.3.3 REQUIREMENT TO SUBMIT NEW TECHNICAL DATA

- A. A community's base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the Federal Insurance Administrator of the changes by submitting technical or scientific data in accordance with Title 44 of the Code of Federal Regulations (CFR), Section 65.3. The community may require the applicant to submit such data and review fees required for compliance with this section through the applicable FEMA Letter of Map Change (LOMC) process.
- B. The Floodplain Administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for:
 - i. Proposed floodway encroachments that increase the base flood elevation; and
 - ii. Proposed development which increases the base flood elevation by more than one foot in areas where FEMA has provided base flood elevations but no floodway.
- C. An applicant shall notify FEMA within six (6) months of project completion when an applicant has obtained a Conditional Letter of Map Revision (CLOMR) from FEMA. This notification to FEMA shall be provided as a Letter of Map Revision (LOMR).

[Additional Recommended Language Provided in Appendix B](#)

4.2.4 SUBSTANTIAL IMPROVEMENT AND SUBSTANTIAL DAMAGE ASSESSMENTS AND DETERMINATIONS

Conduct Substantial Improvement (SI) (as defined in section 2.0) reviews for all structural development proposal applications and maintain a record of SI calculations within permit files in accordance with section 4.2.2. Conduct Substantial Damage (SD) (as defined in section 2.0) assessments when structures are damaged due to a natural hazard event or other causes. Make SD determinations whenever structures within the special flood hazard area (as established in section 3.2) are damaged to the extent that the cost of restoring

the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

4.3 ESTABLISHMENT OF DEVELOPMENT PERMIT

4.3.1 FLOODPLAIN DEVELOPMENT PERMIT REQUIRED

A development permit shall be obtained before construction or development begins within any area horizontally within the special flood hazard area established in section 3.2. The development permit shall be required for all structures, including manufactured dwellings, and for all other development, as defined in section 2.0, including fill and other development activities.

4.3.2 APPLICATION FOR DEVELOPMENT PERMIT

Application for a development permit may be made on forms furnished by the Floodplain Administrator and may include, but not be limited to, plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

- A. In riverine flood zones, the proposed elevation (in relation to mean sea level), of the lowest floor (including basement) and all attendant utilities of all new and substantially improved structures; in accordance with the requirements of section 4.2.2.
- B. In coastal flood zones (V zones and coastal A zones), the proposed elevation in relation to mean sea level of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all structures, and whether such structures contain a basement.
- C. Proposed elevation in relation to mean sea level to which any non-residential structure will be floodproofed.
- D. Certification by a registered professional engineer or architect licensed in the State of Oregon that the floodproofing methods proposed for any non-residential structure meet the floodproofing criteria for non-residential structures in section 5.2.3.3.
- E. Description of the extent to which any watercourse will be altered or relocated.
- F. Base Flood Elevation data for subdivision proposals or other development when required per sections 4.2.1 and 5.1.6.
- G. Substantial improvement calculation for any improvement, addition, reconstruction, renovation, or rehabilitation of an existing structure.

H. The amount and location of any fill or excavation activities proposed.

4.4 VARIANCE PROCEDURE

The issuance of a variance is for floodplain management purposes only. Flood insurance premium rates are determined by federal statute according to actuarial risk and will not be modified by the granting of a variance.

4.4.1 CONDITIONS FOR VARIANCES

- A. Generally, variances may be issued 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, in conformance with the provisions of sections **4.4.1 (C) and (E), and 4.4.2**. As the lot size increases beyond one-half acre, the technical justification required for issuing a variance increases.
- B. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- C. Variances shall not be issued within any floodway if any increase in flood levels during the base flood discharge would result.
- D. Variances shall only be issued upon:
 - i. A showing of good and sufficient cause;
 - ii. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and,
 - iii. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
- E. Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the criteria of section **4.4.1 (B) – (D)** are met, and the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.
- F. 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 SFHA: undeveloped space; pervious surface; or trees 6 inches dbh or greater (see Section 6.0 and associated options in Table 1).

[Additional Optional Language Provided in Appendix B.](#)

4.4.2 VARIANCE NOTIFICATION

Any applicant to whom a variance is granted shall be given written notice that the issuance of a variance to construct a structure below the Base Flood Elevation will result in increased premium rates for flood insurance and that such construction below the base flood elevation increases risks to life and property. Such notification and a record of all variance actions, including justification for their issuance shall be maintained in accordance with section 4.2.2.

5.0 PROVISIONS FOR FLOOD HAZARD REDUCTION

5.1 GENERAL STANDARDS

In all special flood hazard areas, the no net loss standards (see Section 6.0) and the following standards shall be adhered to:

5.1.1 ALTERATION OF WATERCOURSES

Require that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained. Require that maintenance is provided within the altered or relocated portion of said watercourse to ensure that the flood carrying capacity is not diminished. Require compliance with sections 4.2.3.2 and 4.2.3.3.

5.1.2 ANCHORING

- A. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- B. All manufactured dwellings shall be anchored per section 5.2.3.4.

5.1.3 CONSTRUCTION MATERIALS AND METHODS

- A. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- B. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

5.1.4 UTILITIES AND EQUIPMENT

5.1.4.1 WATER SUPPLY, SANITARY SEWER, AND ON-SITE WASTE DISPOSAL SYSTEMS

- A. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

B. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

C. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with the Oregon Department of Environmental Quality.

5.1.4.2 ELECTRICAL, MECHANICAL, PLUMBING, AND OTHER EQUIPMENT

Electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall be elevated at or above the base flood level (ANY COMMUNITY FREEBOARD REQUIREMENT) or shall be designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during conditions of flooding. In addition, electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall:

A. If replaced as part of a substantial improvement shall meet all the requirements of this section.

B. Not be mounted on or penetrate through breakaway walls.

5.1.5 TANKS

A. Underground tanks shall be anchored to prevent flotation, collapse and lateral movement under conditions of the base flood.

B. Above-ground tanks shall be installed at or above the base flood level (COMMUNITY FREEBOARD REQUIREMENT) or shall be anchored to prevent flotation, collapse, and lateral movement under conditions of the base flood.

C. In coastal flood zones (V Zones or coastal A Zones) when elevated on platforms, the platforms shall be cantilevered from or knee braced to the building or shall be supported on foundations that conform to the requirements of the State of Oregon Specialty Code.

5.1.6 SUBDIVISION PROPOSALS AND OTHER PROPOSED DEVELOPMENTS

A. All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, shall include within such proposals Base Flood Elevation data.

B. All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions) shall:

- i. Be consistent with the need to minimize flood damage.
- ii. Have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage.
- iii. Have adequate drainage provided to reduce exposure to flood hazards.

iv. Comply with no net loss standards in section 6.0.

5.1.7 USE OF OTHER BASE FLOOD ELEVATION DATA

A. When Base Flood Elevation data has not been provided in accordance with section 3.2 the local floodplain administrator shall obtain, review, and reasonably utilize any Base Flood Elevation data available from a federal, state, or other source, in order to administer section 5.0. All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions) must meet the requirements of section 5.1.6.

B. Base Flood Elevations shall be determined for development proposals that are 5 acres or more in size or are 50 lots or more, whichever is lesser in any A zone that does not have an established base flood elevation. Development proposals located within a riverine unnumbered A Zone shall be reasonably safe from flooding; the test of reasonableness includes use of historical data, high water marks, FEMA provided Base Level Engineering data, and photographs of past flooding, etc... where available. (REFERENCE TO ANY OF THIS TYPE OF INFORMATION TO BE USED FOR REGULATORY PURPOSES BY YOUR COMMUNITY, I.E. BASE LEVEL ENGINEERING DATA, HIGH WATER MARKS, HISTORICAL OR OTHER DATA THAT WILL BE REGULATED TO. THIS MAY BE NECESSARY TO ENSURE THAT THE STANDARDS APPLIED TO RESIDENTIAL STRUCTURES ARE CLEAR AND OBJECTIVE. IF UNCERTAIN SEEK LEGAL ADVICE, AT A MINIMUM REQUIRE THE ELEVATION OF RESIDENTIAL STRUCTURES AND NON-RESIDENTIAL STRUCTURES THAT ARE NOT DRY FLOODPROOFED TO BE 2 FEET ABOVE HIGHEST ADJACENT GRADE). Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

5.1.8 STRUCTURES LOCATED IN MULTIPLE OR PARTIAL FLOOD ZONES

In coordination with the State of Oregon Specialty Codes:

A. When a structure is located in multiple flood zones on the community's Flood Insurance Rate Maps (FIRM) the provisions for the more restrictive flood zone shall apply.

B. When a structure is partially located in a special flood hazard area, the entire structure shall meet the requirements for new construction and substantial improvements.

[Additional Recommended Language Provided in Appendix B.](#)

5.2 SPECIFIC STANDARDS FOR RIVERINE (INCLUDING ALL NON-COASTAL) FLOOD ZONES

These specific standards shall apply to all new construction and substantial improvements in addition to the General Standards contained in section 5.1 of this ordinance **and the no net loss standards (see Section 6.0).**

5.2.1 FLOOD OPENINGS

All new construction and substantial improvements with fully enclosed areas below the lowest floor (excluding basements) are subject to the following requirements. Enclosed areas below the Base Flood Elevation, including crawl spaces shall:

- A. Be designed to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters;
- B. Be used solely for parking, storage, or building access;
- C. Be certified by a registered professional engineer or architect or meet or exceed all of the following minimum criteria:
 - i. A minimum of two openings;
 - ii. The total net area of non-engineered openings shall be not less than one square inch for each square foot of enclosed area, where the enclosed area is measured on the exterior of the enclosure walls;
 - iii. The bottom of all openings shall be no higher than one foot above grade;
 - iv. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they shall allow the automatic flow of floodwater into and out of the enclosed areas and shall be accounted for in the determination of the net open area; and,
 - v. All additional higher standards for flood openings in the State of Oregon Residential Specialty Codes Section R322.2.2 shall be complied with when applicable.

5.2.2 GARAGES

- A. Attached garages may be constructed with the garage floor slab below the Base Flood Elevation (BFE) in riverine flood zones, if the following requirements are met:
- i. If located within a floodway the proposed garage must comply with the requirements of section **5.2.4**;
 - ii. The floors are at or above grade on not less than one side;
 - iii. The garage is used solely for parking, building access, and/or storage;
 - iv. The garage is constructed with flood openings in compliance with section **5.2.1** to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater;
 - v. The portions of the garage constructed below the BFE are constructed with materials resistant to flood damage;
 - vi. The garage is constructed in compliance with the standards in section **5.1**; and,
 - vii. The garage is constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.
- B. Detached garages must be constructed in compliance with the standards for appurtenant structures in section **5.2.3.6** or non-residential structures in section **5.2.3.3** depending on the square footage of the garage.

5.2.3 FOR RIVERINE (NON-COASTAL) SPECIAL FLOOD HAZARD AREAS WITH BASE FLOOD ELEVATIONS

In addition to the general standards listed in section **5.1** the following specific standards shall apply in Riverine (non-coastal) special flood hazard areas with Base Flood Elevations (BFE): Zones A1-A30, AH, and AE.

5.2.3.1 BEFORE REGULATORY FLOODWAY

In areas where a regulatory floodway has not been designated, no new construction, substantial improvement, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's Flood Insurance Rate Map (FIRM), unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community and will not

result in the net loss of flood storage volume. When determined that structural elevation is not possible and where the placement of fill cannot meet the above standard, impacts to undeveloped space must adhere to the no net loss standards in section 6.1.C.

5.2.3.2 RESIDENTIAL CONSTRUCTION

- A. New construction, conversion to, and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated at or above the Base Flood Elevation (BFE) (ADDITIONAL FREEBOARD FOR YOUR COMMUNITY – RECOMMEND MINIMUM OF 1FT ABOVE BFE).
- B. Enclosed areas below the lowest floor shall comply with the flood opening requirements in section 5.2.1.

5.2.3.3 NON-RESIDENTIAL CONSTRUCTION

- A. New construction, conversion to, and substantial improvement of any commercial, industrial, or other non-residential structure shall:
 - i. Have the lowest floor, including basement elevated at or above the Base Flood Elevation (BFE) (ANY ADDITIONAL FREEBOARD REQUIREMENTS FOR YOUR COMMUNITY); or
 - ii. Together with attendant utility and sanitary facilities:
 - a. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
 - b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and,
 - c. 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 certifications shall be provided to the Floodplain Administrator as set forth section 4.2.2.
- B. Non-residential structures that are elevated, not floodproofed, shall comply with the standards for enclosed areas below the lowest floor in section 5.2.1.

- C. Applicants floodproofing non-residential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the floodproofed level (e.g. a building floodproofed to the base flood level will be rated as one (1) foot below.

5.2.3.4 MANUFACTURED DWELLINGS

- A. Manufactured dwellings to be placed (new or replacement) or substantially improved that are supported on solid foundation walls shall be constructed with flood openings that comply with section 5.2.1;
- B. The bottom of the longitudinal chassis frame beam shall be at or above Base Flood Elevation;
- C. Manufactured dwellings to be placed (new or replacement) or substantially improved shall be anchored to prevent flotation, collapse, and lateral movement during the base flood. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques), and;
- D. Electrical crossover connections shall be a minimum of twelve (12) inches above Base Flood Elevation (BFE).

5.2.3.5 RECREATIONAL VEHICLES

Recreational vehicles placed on sites are required to:

- A. Be on the site for fewer than 180 consecutive days, and
- B. Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
- C. Meet the requirements of section 5.2.3.4, including the anchoring and elevation requirements for manufactured dwellings.

5.2.3.6 APPURTENANT (ACCESSORY) STRUCTURES

Relief from elevation or floodproofing requirements for residential and non-residential structures in Riverine (Non-Coastal) flood zones may be granted for appurtenant structures that meet the following requirements:

- A. Appurtenant structures located partially or entirely within the floodway must comply with requirements for development within a floodway found in section 5.2.4;
- B. Appurtenant structures must only be used for parking, access, and/or storage and shall not be used for human habitation;

- C. In compliance with State of Oregon Specialty Codes, appurtenant structures on properties that are zoned residential are limited to one-story structures less than 200 square feet, or 400 square feet if the property is greater than two (2) acres in area and the proposed appurtenant structure will be located a minimum of 20 feet from all property lines. Appurtenant structures on properties that are zoned as non-residential are limited in size to 120 square feet;
- D. The portions of the appurtenant structure located below the Base Flood Elevation must be built using flood resistant materials;
- E. The appurtenant structure must be adequately anchored to prevent flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood;
- F. The appurtenant structure must be designed and constructed to equalize hydrostatic flood forces on exterior walls and comply with the requirements for flood openings in section 5.2.1;
- G. Appurtenant structures shall be located and constructed to have low damage potential;
- H. Appurtenant structures shall not be used to store toxic material, oil, or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality unless confined in a tank installed in compliance with section 5.1.5; and,
- I. Appurtenant structures shall be constructed with electrical, mechanical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

5.2.4 FLOODWAYS

Located within the special flood hazard areas established in section 3.2 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of the floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

- A. Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless:
 - i. Certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment shall not result in any increase in flood levels within the community during the occurrence of the base flood discharge; or

ii. A community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that conditional approval has been obtained by the Federal Insurance Administrator through the Conditional Letter of Map Revision (CLOMR) application process, all requirements established under 44 CFR 65.12 are fulfilled, and the encroachment(s) comply with the no net loss standards in section 6.0.

B. If the requirements of section 5.2.4 (A) are satisfied, all new construction, substantial improvements, and other development shall comply with all other applicable flood hazard reduction provisions of section 5.0 and 6.0.

5.2.5 STANDARDS FOR SHALLOW FLOODING AREAS

Shallow flooding areas appear on FIRMs as AO zones with depth designations or as AH zones with Base Flood Elevations. For AO zones the base flood depths range from one (1) to three (3) feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. For both AO and AH zones, adequate drainage paths are required around structures on slopes to guide floodwaters around and away from proposed structures.

5.2.5.1 STANDARDS FOR AH ZONES

Development within AH Zones must comply with the standards in sections 5.1, 5.2, and 5.2.5.

5.2.5.2 STANDARDS FOR AO ZONES

In AO zones, the following provisions apply in addition to the requirements in sections 5.1 and 5.2.5:

A. New construction, conversion to, and substantial improvement of residential structures and manufactured dwellings within AO zones shall have the lowest floor, including basement, elevated above the highest grade adjacent to the building, at minimum to or above the depth number specified on the Flood Insurance Rate Maps (FIRM) (COMMUNITY FREEBOARD REQUIREMENT) (at least two (2) feet if no depth number is specified). For manufactured dwellings the lowest floor is considered to be the bottom of the longitudinal chassis frame beam.

B. New construction, conversion to, and substantial improvements of non-residential structures within AO zones shall either:

i. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, at minimum to or above the depth number specified on the Flood Insurance Rate

- 895 Maps (FIRMS) (**COMMUNITY FREE BOARD REQUIREMENT**) (at
896 least two (2) feet if no depth number is specified); or
- 897 ii. Together with attendant utility and sanitary facilities, be
898 completely floodproofed to or above the depth number specified
899 on the FIRM (**COMMUNITY FREEBOARD REQUIREMENT**) or a
900 minimum of two (2) feet above the highest adjacent grade if no
901 depth number is specified, so that any space below that level is
902 watertight with walls substantially impermeable to the passage
903 of water and with structural components having the capability of
904 resisting hydrostatic and hydrodynamic loads and the effects of
905 buoyancy. If this method is used, compliance shall be certified
906 by a registered professional engineer or architect as stated in
907 section **5.2.3.3(A)(4)**.
- 908 C. Recreational vehicles placed on sites within AO Zones on the
909 community's Flood Insurance Rate Maps (FIRM) shall either:
- 910 i. Be on the site for fewer than 180 consecutive days, and
- 911 ii. Be fully licensed and ready for highway use, on its wheels or
912 jacking system, is attached to the site only by quick disconnect
913 type utilities and security devices, and has no permanently
914 attached additions; or
- 915 iii. Meet the elevation requirements of section **5.2.5.2(A)**, and the
916 anchoring and other requirements for manufactured dwellings of
917 section **5.2.3.4**.
- 918 D. In AO zones, new and substantially improved appurtenant structures
919 must comply with the standards in section **5.2.3.6**.
- 920 E. In AO zones, enclosed areas beneath elevated structures shall comply
921 with the requirements in section **5.2.1**.

922 **5.3 SPECIFIC STANDARDS FOR COASTAL HIGH HAZARD FLOOD ZONES**

923 Located within special flood hazard areas established in section **3.2** are Coastal High
924 Hazard Areas, designated as Zones V1-V30, VE, V, or coastal A zones as identified on the
925 FIRMs as the area between the Limit of Moderate Wave Action (LiMWA) and the Zone V
926 boundary. These areas have special flood hazards associated with high velocity waters
927 from surges and, therefore, in addition to meeting all provisions of this ordinance and the
928 State of Oregon Specialty Codes, the following provisions shall apply in addition to the
929 general standards provisions in section **5.1**.

5.3.1 DEVELOPMENT STANDARDS

A. All new construction and substantial improvements in Zones V1-V30 and VE, V, and coastal A zones (where base flood elevation data is available) shall be elevated on pilings and columns such that:

i. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated a minimum of one foot above the base flood level; and

ii. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading values used shall be those associated with the base flood. Wind loading values used shall be those specified by the State of Oregon Specialty Codes;

B. A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of this section.

C. Obtain the elevation (in relation to mean sea level) of the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures and whether or not such structures contain a basement. The floodplain administrator shall maintain a record of all such information in accordance with section 4.2.2.

D. Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system.

For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or state codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

i. Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and

ii. Such enclosed space created by breakaway walls shall be useable solely for parking of vehicles, building access, or storage. Such space shall not be used for human habitation.

iii. Walls intended to break away under flood loads shall have flood openings that meet or exceed the criteria for flood openings in section 5.2.1.

E. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Maximum water loading values to be used in this determination shall be those associated with the base flood. Maximum wind loading values used shall be those specified by the State of Oregon Specialty Codes.

F. Prohibit the use of fill for structural support of buildings.

G. All new construction shall be located landward of the reach of mean high tide.

H. Prohibit man-made alteration of sand dunes which would increase potential flood damage.

I. All structures, including but not limited to residential structures, non-residential structures, appurtenant structures, and attached garages shall comply with all the requirements of section 5.3.1 Floodproofing of non-residential structures is prohibited.

5.3.1.1 MANUFACTURED DWELLING STANDARDS FOR COASTAL HIGH HAZARD ZONES

All manufactured dwellings to be placed (new or replacement) or substantially improved within Coastal High Hazard Areas (Zones V, V1-30, VE, or Coastal A) shall meet the following requirements:

A. Comply with all of the standards within section 5.3

B. The bottom of the longitudinal chassis frame beam shall be elevated to a minimum of one foot above the Base Flood Elevation (BFE); and

C. Electrical crossover connections shall be a minimum of 12 inches above the BFE.

5.3.1.2 RECREATIONAL VEHICLE STANDARDS FOR COASTAL HIGH HAZARD ZONES

Recreational Vehicles within Coastal High Hazard Areas (Zones V, V1-30, VE, or Coastal A) shall either:

- A. Be on the site for fewer than 180 consecutive days, and
- B. Be fully licensed and ready for highway use, on wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

5.3.1.3 TANK STANDARDS FOR COASTAL HIGH HAZARD ZONES

Tanks shall meet the requirements of section 5.1.5 and 6.0.

6.0 STANDARDS FOR PROTECTION OF SFHA FLOODPLAIN FUNCTIONS

The standards described below apply to all special flood hazard areas as defined in Section 2.0.

6.1 NO NET LOSS STANDARDS

- A. No net loss of the three proxies for the floodplain functions mentioned in Section 1 is required for development in the special flood hazard area that would reduce undeveloped space, increase impervious surface, or result in a loss of trees that are 6-inches dbh or greater. 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 the three floodplain functions. 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 agreement);
 - ii. Demonstrate that financial assurances are in place for the long-term maintenance and monitoring of all projects to achieve no net loss;
 - iii. Include a management plan that identifies the responsible site manager, stipulates what activities are allowed on site, and requires the posting of signage identifying the site as a mitigation area.
- B. Compliance with no net loss for undeveloped space or impervious surface is preferred to occur prior to the loss of habitat function but, at a minimum, shall occur concurrent with the loss. To offset the impacts of delay in implementing no net loss, a 25 percent increase in the required minimum area is added for each year no net loss implementation is delayed.
- C. 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 1 presents the no net loss ratios, which increase based on the preferences listed above.

6.1.1 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 1 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 within either the equivalent 1-foot elevations or the same flood elevation bands of the development proposal. The flood elevation bands are identified as follows:

(1) Ordinary High Water Mark to 10-year,

(2) 10-year to 25-year,

(3) 25-year to 50-year,

(4) And 50-year to 100-year

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.

6.1.2 IMPERVIOUS SURFACES

Impervious surface mitigation shall be mitigated through any of the following options:

A. Development proposals shall not result in a net increase in impervious surface area within the SFHA, 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

1072 minimize pollutant loading. See section 6.2.C for stormwater retention
1073 specifications.

1074 **6.1.3 TREES**

1075 A. Development proposals shall result in no net loss of trees 6-inches dbh or
1076 greater within the special flood hazard area. This requirement does not
1077 apply to silviculture where there is no development.

1078 i. Trees of or exceeding 6-inches dbh that are removed from the RBZ,
1079 Floodway, or RBZ-fringe must be replaced at the ratios in Table 1.

1080 ii. Replacement trees must be native species that would occur naturally
1081 in the Level III ecoregion of the impact area.

1082 **6.2 STORMWATER MANAGEMENT**

1083 Any development proposal that cannot mitigate as specified in 6.1.2(A)-(B) must include
1084 the following:

1085 A. Water quality (pollution reduction) treatment for post-construction
1086 stormwater runoff from any net increase in impervious area; and

1087 B. Water quantity treatment (retention facilities) unless the outfall discharges
1088 into the ocean.

1089 C. Retention facilities must:

1090 i. Limit discharge to match the pre-development peak discharge rate
1091 (i.e., the discharge rate of the site based on its natural groundcover
1092 and grade before any development occurred) for the 10-year peak
1093 flow using a continuous simulation for flows between 50 percent of
1094 the 2-year event and the 10-year flow event (annual series).

1095 ii. Treat stormwater to remove sediment and pollutants from impervious
1096 surfaces such that at least 80 percent of the suspended solids are
1097 removed from the stormwater prior to discharging to the receiving
1098 water body.

1099 iii. Be designed to not entrap fish and drain to the source of flooding.

1100 iv. Be certified by a qualified professional.

1101 D. Stormwater treatment practices for multi-parcel facilities, including
1102 subdivisions, shall have an enforceable operation and maintenance
1103 agreement to ensure the system functions as designed. This agreement will
1104 include:

i. Access to stormwater treatment facilities at the site by the
COMMUNITY TYPE (e.g., city, county) 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. 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 responsible party 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 **COMMUNITY TYPE (e.g., city, county)** for five years

6.3 ACTIVITIES EXEMPT FROM NO NET LOSS STANDARDS

The following activities are not subject to the no net loss standards in Section 6.1;
however, they may not be exempt from floodplain development permit requirements.

A. Normal maintenance of structures, such as re-roofing and replacing siding,
provided there is no change in the footprint or expansion of the roof of the
structure;

B. Normal street, sidewalk, and road maintenance, including filling potholes,
repaving, and installing signs and traffic signals, that does not alter
contours, use, or alter culverts. 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 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;

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.

I. Habitat restoration activities.

6.4 RIPARIAN BUFFER ZONE (RBZ)

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

B. Habitat restoration activities in the RBZ are considered self-mitigating and are not subject to the no net loss standards described above.

C. Functionally dependent uses 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 manufacturing support facilities and restrooms) are subject to the beneficial gain standard in addition to no net loss standards.

D. Any other use of the RBZ requires a greater offset to achieve no net loss of floodplain functions, on top of the no net loss standards described above, through the beneficial gain standard.

E. Under FEMA's beneficial gain standard, an area within the same reach of the project and equivalent to 5% of the total project area within the RBZ shall be planted with native herbaceous and shrub vegetation and designated as open space.

Table 1 No Net Loss Standards

Basic Mitigate Ratios	Undeveloped Space (ft ³)	Impervious Surface (ft ²)	Trees (6" < dbh ≤ 20")	Trees (20" < dbh ≤ 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 BiOp
2. Mitigation multipliers of 100% result in the required mitigation occurring at the same value described by the ratios above, while multipliers of 200% result in the required mitigation being doubled.
 - 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, on-site or off-site.
4. Additional standards may apply in the RBZ (See 6.4 Riparian Buffer Zone)

FEMA NFIP PRE-IMPLEMENTATION COMPLIANCE MEASURES

Joint Work Session
November 18th, 2024



STAFF REQUEST

Consider the program history, context, and PICM options and provide direction regarding which PICM you would like to see implemented

COMPREHENSIVE HISTORY

2010 – FEMA is sued for implementing NFIP in a manner that jeopardized the existence of endangered species and settles with an agreement to undergo consultation with NMFS

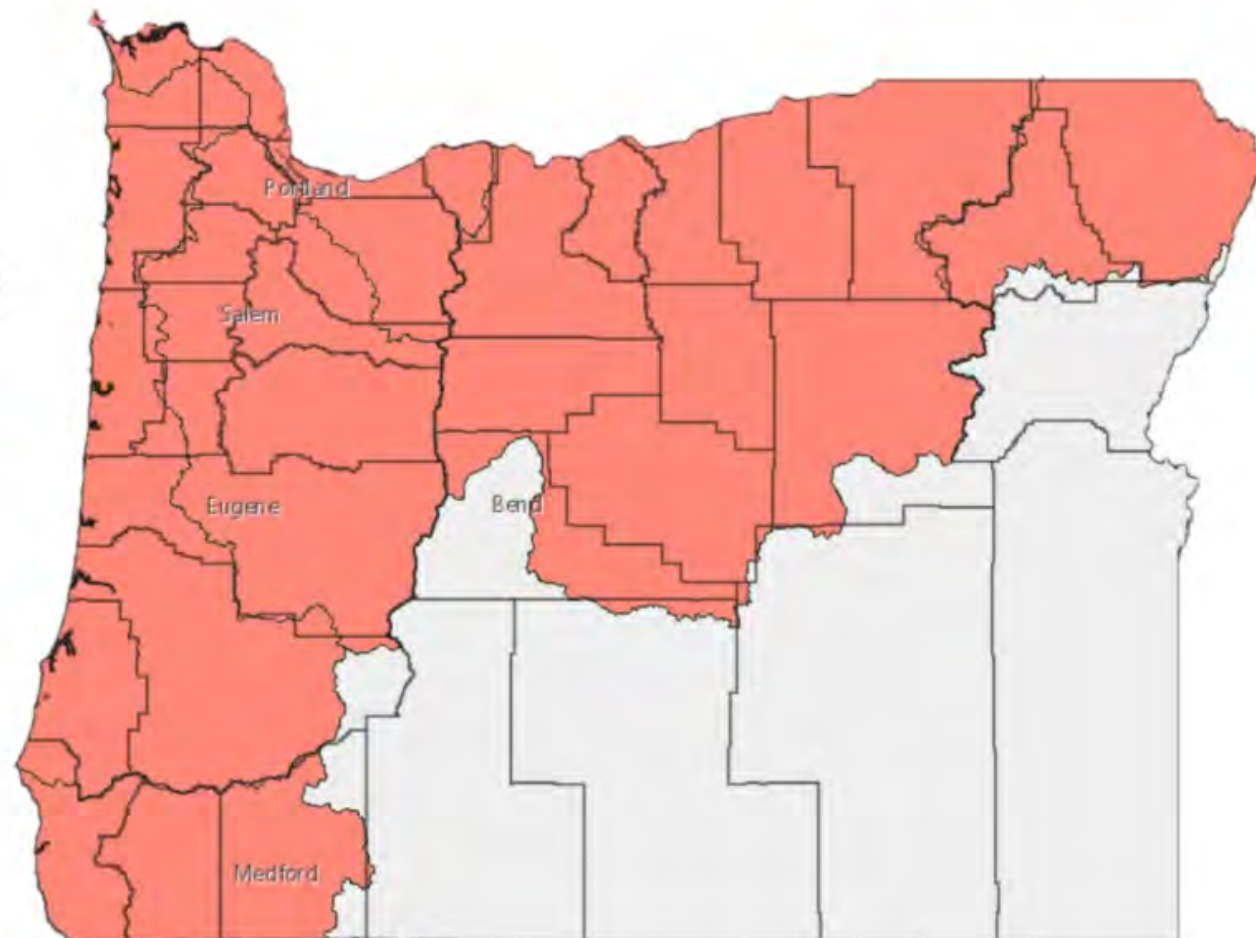
2016 – NMFS issues a BiOp finding that FEMA did jeopardize the existence of 16 ESA listed anadromous fish and Southern Resident killer whales and provides an RPA for the implementation of NFIP in Oregon

2023 – FEMA has been significantly delayed in implementing the RPA of the 2016 BiOp and environmental groups seek additional legal action to force implementation

2024 – FEMA establishes the PICM program as an interim measure

AFFECTED AREA

31 counties:
86% of OR



FEMA

AFFECTED AREA



PRE-IMPLEMENTATION COMPLIANCE MEASURES

- Interim measures to implement No Net Loss standards developed by FEMA to ensure ESA compliance
- All PICMs require a text amendment
- The goal of PICM is to stop further degradation of floodplain habitat function and to track what modifications to floodplain structure are occurring

CURRENT PROGRAM STATUS

- PICM is set to begin December 1, 2024
- Data collection will begin January 31, 2025
- All code amendments to be completed by July 31, 2025
- First report sent to FEMA January 31, 2026

PROHIBITION

Action

City adopts a moratorium on all development within the Special Flood Hazard Area

Consequences

A moratorium or rezoning would significantly reduce prospects for property in the SFHA and could prohibit infill development within current city limits. A moratorium or rezoning would prohibit re/development on parts of or the entirety of many lots.



PROHIBITION

Implementation

- Prohibition by Moratorium can be implemented for a limited time with justification and would not serve as a permanent solution
- Prohibition by Rezoning is a permanent solution requiring a legislative code amendment

Staff Opinion

- Staff do not recommend Prohibition due to the restriction of infill development and the possibility for Measure 49 claims

PERMIT BY PERMIT

Action

- Require a Habitat Assessment as a review criteria for floodplain development permits

Consequences

- All applicants must submit a Habitat Assessment, written by a Qualified Professional, demonstrating project compliance with No Net Loss standards when applying for a floodplain development permit
- Habitat Assessment is not currently included as an option in the Implementation Plan and an additional code amendment will likely be necessary in 2026/27



Floodplain Habitat Assessment and Mitigation

Regional Guidance for Oregon

August 2024



FEMA Region 10

PERMIT BY PERMIT

Implementation

- Amend the Floodplain Development Permits code (155.339) to require a Habitat Assessment to be submitted with the application
- Staff will review the submitted Habitat Assessments when reviewing the application

Staff Opinion

- Staff do not recommend Permit by Permit due to the uncertainty of expectations, burden on staff time, and potential confusion around clear and objective standards

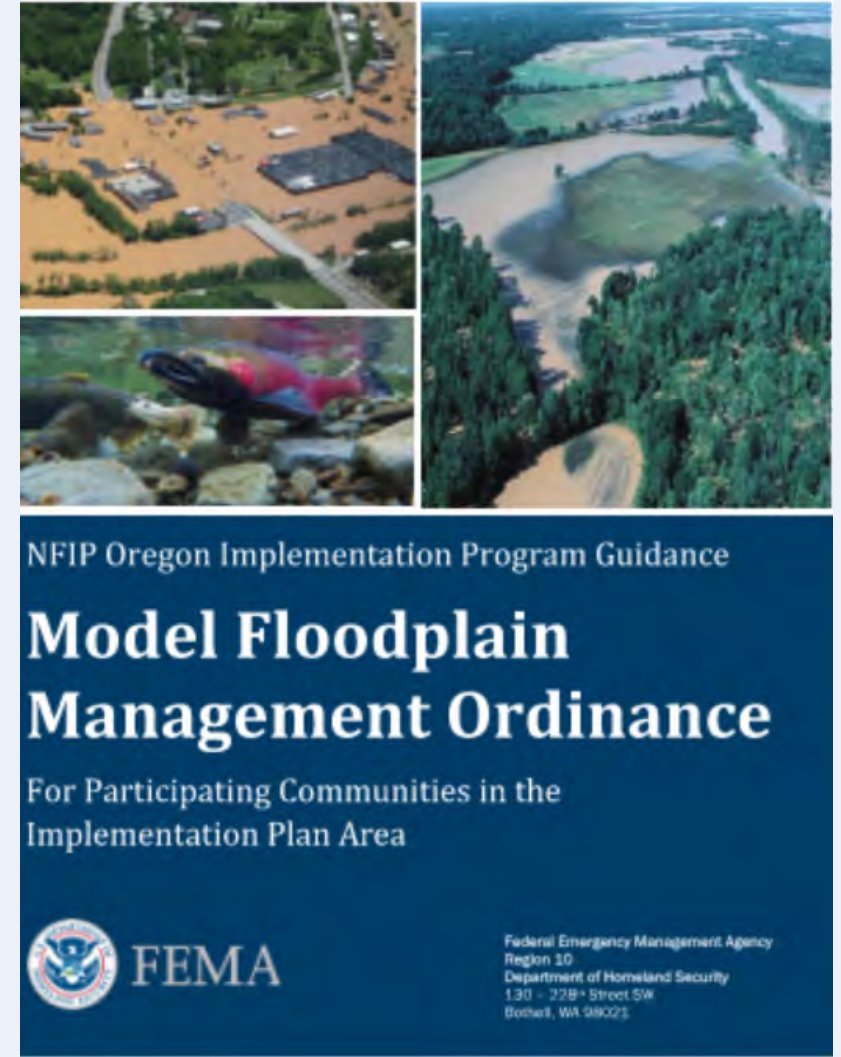
MODEL ORDINANCE

Action

- Adopt new code language proposed by FEMA into Floodplain Code

Consequences

- All Floodplain Development Standards will be reviewed pursuant to the new code



MODEL ORDINANCE

Implementation

- Option 1: Amend the Floodplain Code to include the FEMA model code language and references where appropriate
- Option 2: Amend the Floodplain code using the Oregon Floodplain Model Code and FEMA model code language to completely modernize code

Staff Opinion

- Staff recommends adopting a new Floodplain Code based on the Oregon Floodplain Model Code and FEMA Model Code to optimize staff time and city resources and minimize changes when full implementation goes into effect

STAFF RECOMMENDATION

Staff recommend selection of the Model Ordinance PICM and the adoption of the 2020 Oregon Floodplain Model Code in North Plains Zoning and Development Code



MINUTES

City Council - Regular Session Meeting
Monday, November 4, 2024 6:00 PM
Jessie Mays Community Center
and also via Zoom

**COUNCIL
MEMBERS:**

Mayor Teri Lenahan; Council President Russ Sheldon; Councilors:
James Fage, Robert "Butch" Kindel, Jr., Cameron Martinez, Trista
Papen, Rickey Smith,

STAFF PRESENT:

City Manager Director Bill Reid, City Recorder Lori Lesmeister,
Planning Manager Steve Miller, Asst. Planner Rowan Maiorano

OTHER:

1 LOGIN INFORMATION TO ATTEND VIA ZOOM

Join Zoom Meeting

<https://us02web.zoom.us/j/84624241829?pwd=NnBBd09uOUVGSVhXUXQzMjlUMHpaUT09>
Meeting ID: 846 2424 1829
Passcode: 831831

Phone in (no internet)

253-215-8782
Meeting ID: 846 2424 1829
Passcode: 831831

2 WORK SESSION - 6:00 PM **Public Works Building Plan**

3 CALL TO ORDER at 7:00 pm

4 PLEDGE OF ALLEGIANCE

5 ROLL CALL

- a) All councilors in attendance - Councilor Papen attended via Zoom.

6 CONSENT AGENDA:

(The items on the Consent Agenda are normally considered in a single motion. Any item may be removed for separate consideration upon request by any member of the Council.)

- a) **Approval of November 4, 2024, City Council Regular Session Agenda**
- b) **Approval of October 21, 2024, City Council Minutes.**
- c) **Approval of October 29, 2024, City Council Emergency Meeting Minutes**
- d) **Resolution No. 2281 - Reappointing Lonnie Knodel to the Planning Commission through Dec. 31, 2028**
- e) **Res. No. 2282 - Removing Rob Drake and naming William Reid as City Manager on the Heritage Bank Signer List**

Motion to approve the Consent Agenda.

Moved by Councilor Kindel. Second by Councilor Martinez.

Motion was approved unanimously.

7 PUBLIC COMMENT:

- a) **Public Comment Guidelines**
No Public Comment

8 PUBLIC HEARING / ORDINANCES:

- a) **Ordinance No. 496 - Sign Code Text Amendment as an Emergency**

Open Public Hearing at 7:05 pm.

Assistant Planner Rowan Maiorano gave the staff report, noting that this is put before City Council to be adopted as an emergency because it is required for the sign that is to be put at the new public works building.

No proponents.

No opponents.

No neutral.

Close Public Hearing at 7:18 pm.

Consensus of the Council to consider this ordinance as an emergency.

Move to do first reading of Ordinance No. 496 - Sign Code Text Amendment by title only, and as an emergency.

Moved by Councilor Sheldon. Second by Councilor Martinez.

Motion was approved unanimously.

Move to do first second of Ordinance No. 496 - Sign Code Text Amendment by title only, and as an emergency.

Moved by Councilor Sheldon. Second by Councilor Martinez.
Motion was approved unanimously.

Move to adopt Ordinance No. 496 - Sign Code Text Amendment as an emergency.

Moved by Councilor Martinez. Second by Councilor Fage.
Motion was approved unanimously.

9 UNFINISHED BUSINESS: None

10 NEW BUSINESS: None

11 REPORTS

a) **City Manager Report**

City Manager Bill Reid reported that Therese Lang is the new Communications Consultant.

At the EDC meeting this Wednesday there will be a public meeting providing information on the Brownfield grant that will be submitted next week to help with the costs of soil removal at the Glencoe Opportunity Area (GOA).

City Manager Reid reminded everyone that tomorrow is the election, and ballots must be turned in by 8:00 pm. Newly elected officials, along with current officials will be encouraged to take Elected Essentials training through the League of Oregon Cities. It is being offered in Hillsboro on Monday, October 18, 2024, and Mr. Reid will be sending out an email to the newly elected, plus the three councilors whose terms are not up until 2026 to urge them to attend.

b) **Council Reports**

Councilor Russ Sheldon said that he attended Washington County Board of Commissioners Chair Kathryn Harrington's session on taxes and will forward the slide deck that was presented there to the members of the council.

c) **Review November 2024 Council Calendar**

12 ADJOURNMENT: 7:30 pm

Teri Lenahan, Mayor

Lori Lesmeister, City Recorder

Date Approved _____



CITY OF NORTH PLAINS

31360 NW Commercial Street, North Plains, Oregon 97133

Date: September, 2024
To: North Plains City Council
From: North Plains Economic Development Commission
Subject: EDC Quarterly Update - Q3 of 2024

City Council Members:

The Economic Development Commission (EDC) is pleased to share our progress and key accomplishments over the past three quarters. Our efforts continue to focus on enhancing the economic landscape of North Plains and fostering stronger connections with the business community.

Key Accomplishments & Updates:

1. Onboarding of New Members and Formal Commission Status

In Q1 and Q2, we onboarded two new members, bringing fresh perspectives to our commission. Additionally, we completed the process to formally codify the EDC as a recognized commission, strengthening our governance and strategic impact.

2. Volunteer Day at Kent's Corner

In Q2, the EDC successfully organized a Volunteer Day at Kent's Corner, demonstrating our commitment to community engagement and beautification efforts.

3. Business Survey Initiative

During Q2 and Q3, we initiated the development of a new survey targeting current North Plains businesses. This initiative aims to gather valuable insights to guide our economic strategies. Concurrently, we reviewed historical data from previous surveys to identify trends and areas of improvement.

4. Collaboration with the Chamber of Commerce

In September, we met with the North Plains Chamber of Commerce to discuss opportunities for collaboration and strengthen our relationship. This meeting sets the stage for joint efforts to support local businesses.

5. Formation of Sub-Committees and Establishment of SMART Goals

To better address specific areas within North Plains' economic landscape, we formed sub-committees in Q2 and Q3 that focused on the following key areas:

- Glencoe Opportunity Area: Targeting development opportunities and economic growth potential.
- Downtown Corridor: Enhancing the appeal and economic activity of the city's core.
- UGB Re-Look Advisory Committee Representative: Providing guidance on UGB-related matters.

6. URA Food Service Tenant Improvement Grant Program Application

In Q2, we reviewed and approved an Urban Renewal TI Grant application for Black Water Coffee, supporting local entrepreneurship and the revitalization of key business areas.

Looking Ahead:

As we move forward, the EDC remains committed to fostering economic growth, supporting local businesses, and driving initiatives that enhance the economic vitality of North Plains. This includes supporting the UGB ReLook Committee, for which the EDC has selected Chair Lawson to represent. We appreciate the ongoing support of the City Council and look forward to our continued partnership.



Date: November 18, 2024
To: Mayor Lenahan and City Councilors
From: Robin Doughty, Library Director
Subject: Monthly Staff Report

ANNOUNCEMENTS:

Upcoming Holiday Closures: The library will close early at 5 p.m. on November 27, 2024. The library will be closed on Thursday, November 28th and Friday, November 29th for Thanksgiving holiday observance.

The library recognizes **Sheila Nelson**, PT Library Assistant II for 12 years working for the library and many years of volunteering before that! She is our expert on library card accounts and is a warm & friendly presence for visitors. **Stephen Dehner**, PT Library Assistant, is celebrating 5 years working for the library this month. In addition to library operations, Steve organizes our rotating art display. Thank you for all you contribute to the North Plains community!

The Friends of the North Plains Library will run our **Annual Craft Faire Fundraiser** this year on a slightly different timeframe. They will happily accept hand crafted items, unused boxes of crayons and coloring books (children and adult), bracelet making supplies, jewelry, games, puzzles. Please bring your donations to the library between **November 20 and December 2**. The sale runs December 2nd-14th this year.

The **Library Board** will not meet for a regular business meeting in December and is planning a group community service project instead.

FEATURED PROGRAMS:

Our state-recognized ABC's 123's Letters and Sounds Class is back! This 11-week series provides so many fun early literacy opportunities for young ones with an emphasis on learning to read! Starting in January, Early Literacy Specialist Emily West will lead this in-person course on Tuesday afternoons. We are adding a second time slot to deliver an online option as the in-person class is almost full.

Book Bites at the library begins this month on the Second Saturday 10:30 – 11:30 a.m. for book sampling and socializing over coffee and tea (non-caffeinated and caffeinated options). This pilot program series will run through winter.

NORTH PLAINS PUBLIC LIBRARY

MONTH-AT-A-GLANCE

2024
OCTOBER

COLLECTION

BORROWED FROM OUR LOCATION:	7,301	SAME MONTH, LAST YEAR:	7,128
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Items Added to Our Local Collection	Holds Sent	Holds Received
349	6,409	4,643

USAGE AND PATRONAGE

OPEN HOURS:	235	VISITORS:	3,296
SAME MONTH, LAST YEAR:			2,741

NEW PATRONS

84

ITEMS BORROWED FROM THE NPPL COLLECTION:	8,892	HOURS OF FREE COMPUTER AND INTERNET ACCESS:	993
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PARTICIPATION

	PROGRAMS	BOOK BABIES	PRESCHOOL STORYTIME	EARLY LITERACY CLASSES
# OF SESSIONS	7	4	5	3
ATTENDEES	154	121	132	84
	VOLUNTEER HOURS		STAFF HOURS	
THIS MONTH	169		1,052	
SAME MONTH, LAST YEAR	291		961	



Washington County
Cooperative Library Services





Date: November 13th, 2024

To: Honorable Mayor and City Council

From: Nick Jones – Chief of Police

Subject: Police Chief Staff Report

Calls for service (October 2024): NPPD Officers responded/self-initiated to 268 calls for service. These calls include but are not limited to dispatched calls for service, investigative stops, community contacts, assist person calls and city ordinance violations.

October 2024:

NP Police responded to a variety of calls with no reoccurring trends.

NPPD enjoyed attending the trunk-or-treat event at Atfalati Ridge in October. It was great opportunity to engage with the community and fun was had by all. A special thanks to Lori Lesmeister for all her help before and during the event.

This month NPPD wrapped up in-service training which included defensive tactics, firearms, and emergency driving.

(R-Reports/Y2-Warnings/Y3-Citations/TS-Traffic Stop/PD-Public demand/SI-Self initiated)

Contract Deputies Activities (Only NP deputy activities in All of the county)

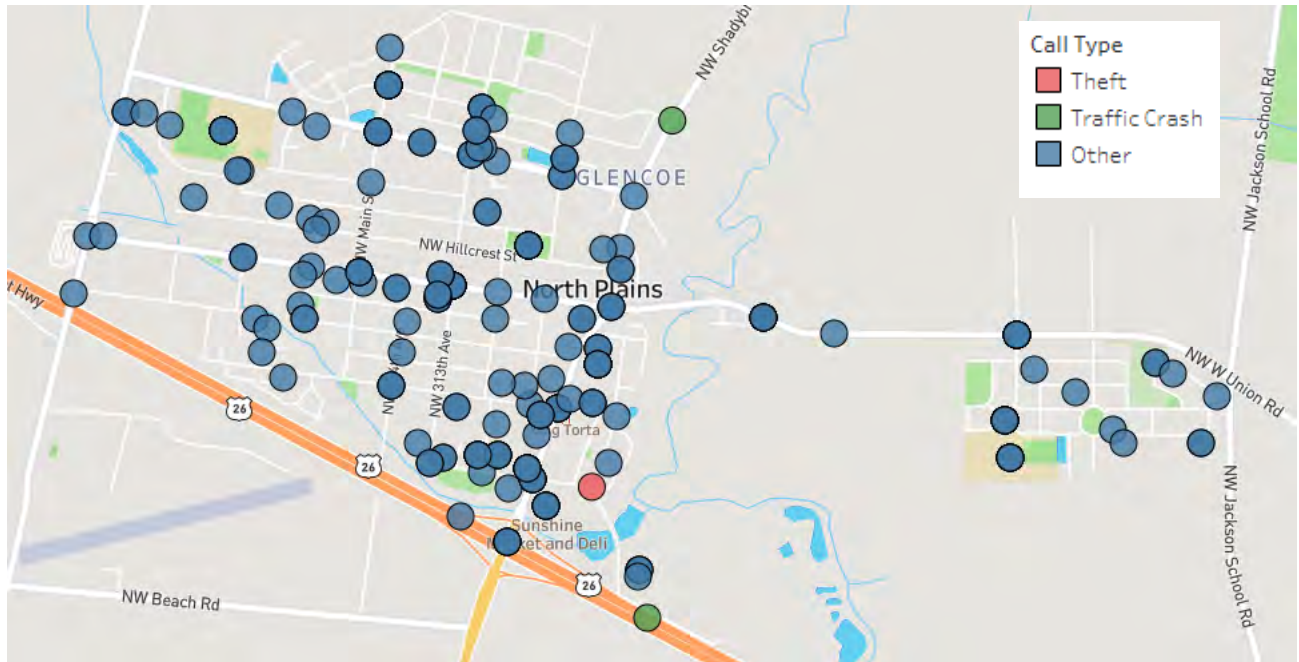
Year	Month	R	Y2	Y3	TS	PD	SI	Total
2024	October	19	32	2	24	50	218	268
2023	October	16	32	1	34	63	176	239
2022	October	18	55	4	59	67	235	302
2021	October	27	24	0	24	63	79	142
2020	October	23	60	3	57	64	142	206
2019	October	21	50	8	54	69	127	196

North Plains Calls in the City (All police activities within NP)

Year	Month	R	Y2	Y3	TS	PD	SI	Total
2024	October	22	29	2	21	62	216	278
2023	October	14	38	5	44	64	192	256
2022	October	26	48	6	55	72	258	330
2021	October	27	24	4	29	76	96	172
2020	October	24	41	3	41	69	130	199
2019	October	22	36	10	41	68	110	178



North Plains **CFS Map**





Date: November 14, 2024
To: Honorable Mayor and City Council
From: Dustin Lueckenotte – Public Works Director
Subject: Public Works Staff Report

North Plains Public Works – Operations Update

Capital Improvements and Development:

3J Consulting will provide a detailed report on our capital improvement and development projects, covering progress and addressing technical questions.

Public Works Facility Transition:

With the Temporary Certificate of Occupancy expected this week, we'll begin moving equipment into the new facility. This phased transition also includes clearing and organizing the yard at Pump Station 1, as well as the old shop, yard, and brown building, to assess future space needs. The team has the flexibility to complete this transition thoroughly.

Water System Operations:

- **Outstanding Performer Status:** Our water distribution system's "Outstanding Performer" designation is now official. Although the next audit is in five years, new requirements tied to our growing population mean additional testing and compliance measures.
- **Personnel Challenges & Maintenance Needs:**
 - **Shared Crew Responsibilities:** Javier, our Water Distribution Lead, and Cody, our Lead Operations Technician, share two crew members to cover water system operations, streets, stormwater, parks, facilities maintenance, and various city event support. With a high workload across all these areas, balancing resources has become a challenge. Adding an additional dedicated Water Operations Technician would help support these critical programs.
 - **Key Maintenance Programs:** Javier oversees essential maintenance tasks, including valve exercising for over 700 valves, cross-connection management, reservoir upkeep, SCADA monitoring, and pump station equipment maintenance. He is also gradually taking on more water distribution system responsibilities on his way to becoming the Direct Responsible Charge (DRC) for the system, a role currently held by TVWD.
 - **Seasonal Operations Technician:** We are preparing to announce a Seasonal Operations Technician role to provide immediate assistance, especially during Leaf Pickup Season. This role will also support various tasks around town, including assisting Javier with valve exercising while Cody is attending CDL training. This position may transition to full-time as demands grow.



- **Meter Replacement & AMI Evaluation:** With over 400 meters now over 20 years old, we need a focused replacement program and dedicated personnel. Rising service costs for Meter Readers, driven by the industry's shift to Advanced Metering Infrastructure (AMI), make the transition to AMI worth exploring. While AMI would require initial staff training, it could ultimately reduce field demand by allowing remote issue management.
- **Process Development:** Formalizing and updating existing procedures and standards will help us continue successful audits, ensuring readiness and consistency across all operations.

Winter Preparation:

Following a winter briefing with Washington County's Department of Land Use & Transportation, and some winter equipment maintenance, our team is well-prepared for coordinated emergency response this winter.

Technology & Communication:

We're working with Communications Manager Therese Lang to improve public updates on the Public Works page. Diamond Maps is being used to track work orders and service requests, though connectivity issues in areas like Brynhill present challenges. Our goal is to enhance data collection to better target future projects and even bring a visual aspect to future council reports.

Budget Planning:

We are in the early stages of budgeting for the next biennium, aligning resources to support operational priorities and long-term goals.



Date: November 14, 2024
To: City Council
From: Steve Miller, Planning Manager
Subject: November Staff Report

PLANNING

1. GreenLight Development – Brynhill 2-Acre Site

- The Planning Commission held a public hearing on the GreenLight Development Type III Design Review application on Wednesday, November 13th for the development of the 2-acre parcel in Brynhill. Due to a few unresolved issues, the PC continued the hearing to their December 11th meeting. Staff anticipates the PC making a decision at the continued hearing on GreenLight's application.

2. FEMA

- Staff continues to work with FEMA on the Pre-Implementation Compliance Measure (PICM). To that end, Rowan attended FEMA's fall Pre-Implementation Compliance Measures (PICM) Workshop on October 16, 2024, which provided in-depth information about a specific PICM. Each workshop will focus on one PICM - either the Model Ordinance or Permit-by-Permit approach. The next workshop will be November 19, 2024.

3. Brynhill

- Lennar has started to submit building permit applications for their homes in Phase 5, which is the last phase of the development. Staff is working with Lennar and PCD on the Ph. 5 park design as well.

4. Miscellaneous/Code Enforcement

- Staff received a code complaint from Mark Hagedorn about his neighbor erecting a greenhouse without permits and possibly growing marijuana in the greenhouse. Staff contacted the neighbor, who Mr. Hagedorn has turned into the city previously for code violations and scheduled a time for a site visit. During the site visit on 11/8, Staff observed a small greenhouse (6'.5" long X 4' wide X 10' tallest portion of greenhouse) with a variety of herbs, a couple small house plants, and a small lemon tree growing in the greenhouse. There was also a small red heat lamp in the greenhouse that was powered by an extension cord coming from the main house. Lastly, there was no sign of marijuana being grown in the greenhouse during Staff's site visit. Based upon Staff's site visit on 11/8, there are no zoning code or building code violations occurring on Mr. Hagedorn's neighbor's property. As such, the case was closed, and no further investigation will occur.

CITY OF NORTH PLAINS CITY COUNCIL UPDATE

Date: November 18, 2024

The following is a short summary of the current tasks undertaken by the 3J staff for Engineering since the last update.

ENGINEERING

1. **Public Works Building:**

- Project is substantially complete. Contract working in punchlist items for both the building and the site. 3J working on completing the close out documents required for Washington County and Clean Water Services.

2. **ADA Analysis:**

- 3J working on data collection and inventory of all ADA ramps within the City right-of-way. Existing data collection to be completed by end of year. 3J is working on a draft report to summarize each ramp and if corrections are required.

3. **Commercial Street Sidewalk Improvements:**

- Construction is substantially complete. The contractor is working in final punchlist corrections.

4. **Glencoe Sidewalk Improvements:**

- Construction is substantially complete. The contractor is working in final punchlist corrections.

5. **313th Ave Improvements:**

- Construction is substantially complete. The contractor is working in final punchlist corrections.

6. **Main Street Improvements:**

- Permit Documents in for review with Clean Water Services.

7. **Jessie Mays Park/309th/311th Improvements:**

- Permit Documents in for review with the Railroad. Working on final permit drawing updates for permit resubmittal to Clean Water Services.

8. **Pacific Street Improvements:** (CIP#ST0.11, ST0.25):

- Working on drawing updates/revisions to minimize impact to individual lot.

9. **Small City Allotment Grant:**

- The city submitted for a SMA project for pavement upgrades along Hillcrest. Applications are being reviewed and decisions will be made by ODOT by end of 2024.

10. **City Standards**

- Continuing working on draft updates to both the City Engineering Design Manual and Standard Details.

11. **Sign/Street Light Inventory:**

- City would like an inventory of all assets owned for street signs and streetlights within the public right-of-way. Currently looking at options to efficiently document all city sign/street light assets.



DEVELOPMENT REVIEW:

- **Brynhill Phase 1:**
 - Project is at the end of the maintenance period. Lennar is working on correcting deficient items for final City acceptance.
- **Brynhill Phase 2:**
 - Project is currently in the 1-year maintenance period till March 2025 and when all deficient items noted at that time are corrected.
- **Brynhill Phase 3:**
 - Project is currently in the 1-year maintenance period till March 2025 and when all deficient items noted at that time are corrected.
- **Brynhill Phase 4**
 - Project is currently in the 1-year maintenance period till March 2025 and when all deficient items noted at that time are corrected.
- **Brynhill Phase 5:**
 - Project is substantially complete. 3J has performed a punchlist walk and is pulling together the close out memo required to finalize the project and put it into maintenance.
- **Brynhill Traffic Calming:**
 - Project is currently in the 1-year maintenance period till October 2025 and when all deficient items noted at that time are corrected.
- **Brynhill North Ave East Improvements:**
 - Project is in construction. Currently being delayed due to franchise utility relocations. Lennar working with Luman to provide a schedule for completion.
- **Brynhill North Ave West Improvements:**
 - Completed 2nd round engineering review. Pending resubmittal from Developer and their team.
- **Holmstead Subdivision:**
 - Project is substantially complete. Developer and their team working on remaining punchlist items prior to final city acceptance and maintenance period.
- **Commercial Street Homes:**
 - Completed 1st round engineering review in Oct 2023. Pending resubmittal. complete.
- **Spec Warehouse (Far West Recycling):**
 - Project in Construction
- **NW West Union (Frank's Excavation):**
 - Land use approved in April 2024. Pending permit formal permit submittal.
- **Kaybern 2-lot Development:**
 - Plan are approved, pending performance bond prior to work being permitted.
- **St. Edwards Church:**
 - Public Works Permit submittal received in August 2024. Review is pending fee payment to City prior to start of review.
- **Brynhill Apartment:**
 - Currently in land use review. 3J provided draft condition of approval to City staff.
- **Commercial Street Partition:**
 - Currently in land use review. 3J provided draft condition of approval to City staff.

- - - E N D O F D O C U M E N T - - -



Building Permits
Oct. 15 thru Nov. 7

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PERMIT TYPE	PERMIT #	DATE RECEIVED	Subproject: BP TYPE: NEW HOME/FP/DEMO/ELECTRICAL/etc	APPLICANT	DESCRIPTION/TYPE	ADDRESS
BP	24-150	10/16/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 360	31676 NW Timeric Dr.
BP	24-151	10/16/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 414	31724 NW Turel Dr.
BP	24-152	10/16/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 415	31738 NW Turel Dr.
BP	24-153	10/17/2024	Electrical Permit	Meng-Hannan Const.	Type 1 - Electrical Permit	9880 NW Glencoe Dr.
BP	24-154	10/22/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 380	31697 NW Turel Dr.
BP	24-155	10/22/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 364	31690 NW Timeric Dr.
BP	24-156	10/22/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 379	31701 NW Turel Dr.
BP	24-157	10/22/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 381	31693 NW Turel Dr.
BP	24-158	10/22/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 365	31694 NW Timeric Dr.
BP	24-159	10/25/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 416	31752 NW Turel Dr.
BP	24-160	10/30/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 418	31780 NW Turel Dr.
BP	24-161	10/30/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 419	31794 NW Turel Dr.
BP	24-162	10/31/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 394	11339 NW Main St.
BP	24-163	10/31/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 395	11337 NW Main St.
BP	24-164	10/31/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 396	11335 NW Main St.
BP	24-165	10/31/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 397	11333 NW Main St.
BP	24-166	11/1/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 398	11331 NW Main St.
BP	24-167	11/1/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 399	11329 NW Main St.
BP	24-168	11/1/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 400	11327 NW Main St.
BP	24-169	11/1/2024	New Home	Lennar Northwest	Type 1 - New Structure Lot 401	11325 NW Main St.

CITY OF NORTH PLAINS CITY COUNCIL RULES

A. AUTHORITY

North Plains City Charter Section 11 requires the City Council to adopt rules governing the conduct of its meeting. The Council wishes to implement City Charter section 11 and adopt rules by resolution to govern the conduct of its meetings. The Council will review these rules at least every three years and amend the rules as necessary at the direction of the City Manager and with the advice of the City Attorney.

B. DEFINITIONS

As used in these rules, the following mean:

- City Commission: All City commissions, boards, committees, task forces and advisory bodies.
- City Council: The Mayor and the six Councilors.
- Mayor: The Mayor, or in the absence of the Mayor, the Council President or other Presiding Officer.
- Member of the City Council: Either the Mayor or an individual City Councilor.

C. COUNCIL MEETINGS

1. Regular Meetings to conduct City Council business will be held the first and third Monday of each month and additionally as needed. Meetings will be held at the Community Center unless another location is approved by the City Council. Meetings will be recorded.
2. Work sessions to develop city policy will be held each month, or more frequently as the need arises. A work session may be held in conjunction with a regular City Council meeting. Work session agendas will be developed by the City Manager in consultation with the City Council.
3. Special meetings may be called by the Mayor, Council President in the absence of the Mayor, or by a majority of the City Council.
4. Executive sessions will be held in compliance with the Oregon Public Meetings Law. Members of the media, if attending, are required to attend in-person. The City Council will generally follow the Oregon Attorney General's Public Records Manual to determine when a person is a member of the media. Members of the City Council are expected to attend in-person whenever possible. If attending virtually with video capabilities, members of the City Council are expected to have

their video turned on.

5. Minutes will be taken as directed by the Oregon Public Records Law.
6. Telephonic/electronic meetings may be held in compliance with the Oregon Public Meetings Law. Members of the City Council may participate and vote in City Council meetings via telephone, electronically or by other means consistent with the Oregon Public Meetings Law. Members of the City Council are expected to attend in-person whenever possible. If attending virtually with video capabilities, members of the City Council are expected to have their video turned on.
7. Attendance at meetings is expected of all members of the City Council who should use their best efforts to attend all Council meetings. Absence from the City for 30 days without City Council consent, or from all City Council meetings within a 60-day period may result in a declaration by the City Council stating that the position is vacant.

Excused absences from Council meetings include:

- Death in the family
- Illness
- Family emergency
- Scheduled vacation; however, members of the City Council are encouraged to participate electronically if possible during vacation
- Essential business duties
- On City business
- Other absences as excused by the Mayor.

D. AGENDA

1. The agenda headings for City Council business meetings are generally as follows:
 - PLEDGE OF ALLEGIANCE
 - CALL TO ORDER - ROLL CALL
 - PRESENTATIONS
 - PUBLIC COMMENT
 - CONSENT AGENDA
 - PUBLIC HEARINGS
 - UNFINISHED BUSINESS
 - ORDINANCES (with subheadings “FIRST READING” and “SECOND READING”)
 - NEW BUSINESS
 - CITY MANAGER REPORT
 - ADVICE/INFORMATION
 - ADJOURNMENT

2. The City Manager will prepare and schedule agenda items. The City Manager may omit from the agenda one or more agenda headings if there are no items for City Council consideration under that heading. Members of the City Council may request that items be placed on an agenda at any Council meeting or by communication with the City Manager. The City Council will make its best efforts to reach consensus on agenda items and should obtain staff input before requesting an agenda item. Agendas will generally be set to allow meetings to end no later than 10:00 p.m. If the City Council is still in session at 9:30 p.m., then the Council will decide whether to continue with the agenda or move items to a future agenda.
3. The consent agenda is intended for items that are deemed to be non-controversial, not related to a fiscal matter, and not likely to require separate discussion. The consent agenda is generally approved with one motion. Any member of the City Council may ask that any item be removed from the consent agenda. Upon such request, the item in question will be moved to the new business section of the agenda.
4. The Mayor or other Presiding Officer may alter the sequence of agenda items at the beginning of a work session or regular meeting, and may add or remove an agenda items with the City Council's consent.

E. COUNCIL DISCUSSIONS AND DECORUM

1. Members of the City Council will conduct themselves so as to bring credit upon the city government by ensuring equitable delivery of public services, keeping informed about matters coming before the City Council and abiding by City Council decisions, whether or not the member voted on the prevailing side.
2. Members of the City Council shall seek to preserve order and decorum during City Council meetings and may not, by conversation or other action, delay or interrupt the proceedings or refuse to obey rulings of the Mayor regarding rules of procedure or these Council rules. When addressing staff or members of the public, members of the City Council will confine themselves to questions or issues under discussion and not engage in personal attacks or impugn the motives of any speaker.
3. The following ground rules will be observed to maintain order and decorum during City Council discussions. Members of the City Council:
 - a. will gather necessary information and ask questions of City staff before meetings.
 - b. will have an opportunity to speak once on any pending motion or agenda item, and will speak for themselves and not for other members.
 - c. will not speak on behalf of the Council, unless they have been authorized by

the Council to do so.

- d. during public meetings, will not attempt to edit or revise prepared ordinances. Amendments to proposed ordinances may be appropriate after input is sought from the City Manager or the City Attorney.
- e. will be open, direct and candid in the City Council forum and should be brief and succinct in stating their views and focus on only one issue or topic at a time.
- f. will focus on city issues and avoid becoming involved in “extra-territorial” issues.
- g. will not speak until having been recognized by the Mayor in the order of their requests. The Mayor will provide each member of the City Council with an opportunity to speak before recognizing another member of the Council. Members of the City Council will not interrupt another member who has the floor.
- h. will not disguise statements as questions or use repetition to convince others.
- i. will keep discussions moving and call for a “process check” if the Council becomes bogged down in discussions.
- j. will set and adhere to time limits on discussions.
- k. will focus on policy issues and will not criticize or attack each other, City staff or other persons.
- l. will not seek to discuss a major policy issue during discussion of a different agenda item, but rather seek to have the discussion scheduled on a future agenda.

4. Public Comment.

- a. The purpose of the public comment period on the agenda is to hear from the public about matters directly related to the City business that are not otherwise on the agenda. The public comment period is a limited public forum and comments are therefore appropriately limited to matters of City concern, official action, or other matters that may come before the City Council. The City Council is not creating an opportunity for and will not accept public comment on matters that fall outside the scope of the Council’s jurisdiction, such as employment issues related to employees and officers who are not appointed or supervised by Council. All public comments must be addressed to the City Council as a body.

- b. For all other agenda items, public comment must relate to the specific matter under discussion.
- c. Public comment must not unduly interfere with the City Council's ability to conduct business or otherwise disrupt City Council meetings. Comments that substantially interrupt, delay, or disturb the peace and good order of the proceedings of the City Council are not permitted. Examples of such types of comments include shouting, use of profanity or vulgarity, or speaking outside of allotted time. In addition, public comment may not be used for belligerent or abusive behavior including true threats, fighting words, or incitements to imminent lawless action. Abusive and harassing comments that could lead to the creation of a hostile work environment for City employees required to attend City Council meetings likewise unduly interferes with the Council's ability to conduct its business and are therefore prohibited. The City Council will seek to ensure that all public comment is provided in a manner that is respectful to those in attendance at the meeting.
- d. Public comment may be provided to the Council either orally or in writing. Individual and community group testimony forms will be available at each regular business meeting and must be filled out prior to providing public comment. Individual and community groups desiring to provide public comment virtually, must register with the City Recorder by 3:00 pm the day of the meeting and provide their name, address, email, phone, and a general topic. Written comments may be provided to the City Recorder either in advance of or during the Council meeting, although it is possible that the City Council may not be able to read written comments provided during a meeting until after the meeting has concluded. At the time on the agenda designated for public comment and during any public hearing, any member of the public desiring to address the City Council must first wait to be recognized by the Mayor and then state their name for the record. The City Council may set time limits for comments. The Council may request that groups with similar comments choose a spokesperson to present joint remarks.
- e. In general, members of the City Council will not respond to comments made during the public comment agenda time, except to ask clarifying questions. Any public requests for City Council action will be referred to staff for review before being placed on a future agenda.

F. MOTIONS

- 1. General.
 - a. Motions will be clearly and concisely stated. The member who made the motion will state their name following the phrase, so moved. The member

who seconds the motion will state their name following the phrase, second.

- b. The motion maker, Mayor or City Recorder should repeat the motion prior to voting.
 - c. Most motions die if they do not receive a second. Motions for nominations, withdrawal of a motion, agenda order, roll call votes and a point of order do not require a second
 - d. Discussion of a motion is open to all members of the City Council who wish to address the motion. A member of the City Council must be recognized by the Mayor before speaking.
 - e. The Mayor will ask for a voice vote for all final decisions. All members of the City Council are expected to vote on each motion unless they are disqualified for some reason. A member of the City Council who does not vote must state the basis for any conflict of interest or other disqualification. The City Recorder will maintain a record of the votes. Any member of the City Council may request a roll call vote on any motion. Under City Charter Section 33, the Mayor does not vote on filling a council vacancy unless there is a tie vote, in which case the Mayor shall cast the deciding vote.
 - f. At the conclusion of any vote, the Mayor will announce the results. Members of the City Council who wish to explain the reasons for their votes should do so briefly and succinctly.
- 2. Withdrawal. A motion may be withdrawn by the motion maker at any time without the consent of the City Council.
 - 3. Table. A motion to table is not debatable and precludes all amendments or further debate. If the motion prevails, the item may be taken from the table only by adding it to a future agenda for continued discussion.
 - 4. Postpone. A motion to postpone to a certain date is debatable and amendable. A motion to postpone indefinitely is a motion to reject without a direct vote and is debatable and not amendable.
 - 5. Call for Question. A motion to call for the question ends debate on the item and is not debatable. Before a member of the City Council calls for the question, each member wishing to speak on the item should have one opportunity to speak. A second is required for this motion. When the question is called, the Mayor will inquire whether any member of the City Council objects. If there is an objection, the matter will be put to a vote, and it fails without a two-thirds vote. Debate may continue if the motion fails.

6. Amendment. A motion to amend may be made to a previous motion that has been seconded but not voted on. Amendments will be voted on first, then the main motion as amended (or not amended). Motions to adjourn, amend the agenda order, table, point of order, take from table and reconsider may not be amended.
7. Reconsideration. When a motion has been decided, any member of the City Council who voted with the majority may move for reconsideration. A motion for reconsideration may only be made at the meeting at which the motion on the ordinance, resolution, order or other decision was approved.

G. COUNCIL MEMBER CONDUCT

1. Representing City. If a member of the City Council appears before another governmental agency or organization to give a statement on an issue, the member must state:
 - a. Whether the statement reflects personal opinion or is the official position of the City; and
 - b. Whether the statement is supported by a majority of the City Council.

If the member is representing the City, the member must support and advocate for the official City position on the issue rather than a personal viewpoint.

2. Censure.
 - a. The City Council may make and enforce its own rules and ensure compliance with city and state laws applicable to governing bodies. If a member of the City Council substantially violates these rules or state law, the City Council may take action to protect Council integrity and discipline the member with a public reprimand or censure.
 - b. Before taking any action to publicly reprimand or censure a member of the City Council, the Council must plainly state its concerns in writing or in an open public meeting, and the Council member must have a reasonable opportunity to respond.
 - c. The City Council may thereafter investigate the actions of any member and meet in executive session to discuss any finding that reasonable grounds exist that a substantial violation has occurred. Under ORS 192.660(1)(b), the member under investigation may request an open hearing.

H. CONFIDENTIALITY

1. Members of the City Council will keep all written materials provided to them on matters of confidentiality under law in complete confidence to ensure the City's

position is not compromised. No mention of the information read or heard should be made to anyone other than other members of the City Council, the City Manager or City Attorney.

2. If the Council meets in executive session, members should attempt to provide direction or consensus to staff on proposed terms and conditions for negotiations. All contact with other parties must be left to the designated staff or representative(s) handling the negotiations or litigation. Members of the City Council may not have any contact or discussion with any other party or its representative nor communicate any executive session discussion.
3. All public statements, information or press releases relating to a confidential matter will be handled by designated staff or a designated member of the City Council.
4. Unless required by law, a member of the City Council may not make public the discussions or information obtained in executive session. The City Council may censure a member who discloses a confidential matter or otherwise violates these rules. A City Council member who makes an unauthorized disclosure of confidential information may be personally liable for any damages resulting from the disclosure.

I. COMMUNICATION WITH STAFF

1. The City Council will respect the separation between policy making (Council function) and administration (City Manager function) by:
 - a. Working with the staff as a team with a spirit of mutual respect and support.
 - b. Except in a Council meeting, not attempting to influence a City employee or the City Manager concerning personnel matters, purchasing issues, the award of contracts or the selection of consultants, the processing of development applications or granting of City licenses and permits. However, the sharing of ideas with the City Manager on these matters is appropriate.
 - c. Limiting individual contacts with City staff to the City Manager, Executive Management, or other designated staff so as not to influence staff decisions or recommendations, interfere with their work performance, undermine the City Manager authority or prevent the full Council from having the benefit of any information received. To this end, members of the City Council shall not request City staff to perform significant work without the prior approval of the City Manager, so that workloads and work plans are not adversely impacted.
 - d. Respecting roles and responsibilities of staff when and if expressing criticism in a public meeting or through public electronic mail messages.

2. All written informational material requested by members of the City Council will be submitted by staff to the entire City Council with a notation stating who requested the information. In situations where staff provides a copy of an existing document previously provided to the City Council, staff will advise the entire Council rather than providing the material to each member.
3. The City Council will refer any comments or questions regarding City personnel or administration to the City Manager. Members of the City Council may redirect other questions to other members or the City Manager, as appropriate. Members of the City Council may also address questions directly to the City Manager, who may either answer the inquiry or ask a staff member to do so.

J. MINUTES

1. Minutes will be prepared with sufficient detail to meet their intended use. Verbatim minutes are not required. The minutes of meetings of the Council will comply with provisions of ORS 192.650 by containing the following information at a minimum:
 - The name of each member of the City Council and staff present;
 - All motions, proposals, resolutions, orders, ordinances and measures proposed and their disposition;
 - The result of all votes, including ayes and nays and the names of the members of the City Council who voted;
 - The substance of the discussion on any matter; and
 - Reference to any document discussed at the meeting.
2. The City Council may amend the minutes to more accurately reflect what transpired at the meeting. Upon receipt of the minutes in the Council agenda packet, members of the City Council should read and submit any changes, additions or corrections to the City Recorder so that a corrected copy may be issued prior to the meeting for approval. Under no circumstances may the minutes be changed following approval by the City Council, unless the Council authorizes such change.
3. The City Recorder or designee will make an audio recording of all meetings. The City Recorder will maintain custody of all recordings, but a member of the City Council may obtain a copy of any recording. A member of the City Council may obtain a meeting transcript or partial transcript if it can be produced with nominal staff time. If a transcript requires a significant amount of staff time, the City Recorder may only produce the transcript with City Council approval. The City Recorder is authorized to produce transcripts as required by law.

K. ADJOURNMENT

1. Upon motion and majority vote of the members of the City Council present, any meeting of the Council may be continued or adjourned from day to day or for more than one day. No adjournment may be for a period longer than until the next regular meeting.

2. Upon the request of a member of the City Council, a short recess may be taken during a Council meeting.
3. A motion to adjourn will be in order at any time except as follows:
 - When made as an interruption of a member while speaking; or
 - While a vote is being taken.
4. After all business on the agenda has been concluded, the Mayor may adjourn a Council meeting by unanimous consent.

L. BIAS AND DISQUALIFICATION

1. A City Council member should not participate in a quasi-judicial decision in which the member has an actual bias. A City Council member may choose not to participate in a decision in which the member reasonably concludes doing so would create a perception of bias.
2. In quasi-judicial matters, each member of the City Council must disclose participation in a prior decision or action on the matter that is before the Council. Common examples include when a Planning Commission member is elected or appointed to the City Council or when a member of the City Council testifies at a Planning Commission meeting. The member of the City Council must state whether the member can participate in the hearing with no regard for the prior decision made. If the member is unable to be impartial, the member has a duty not to participate in proceedings and to leave the Council table.
3. If the City Council believes the member is actually biased, it may disqualify the member by majority vote from participating in a decision on the matter. A member who has been disqualified from participating in a decision may participate in the proceeding as a private citizen.
4. Generally, conflicts of interest arise when a City Council member has an actual or potential financial interest in the matter before the Council. Under state law, an actual conflict of interest is defined as one that would result in a private financial benefit or detriment to the member, a relative or a business with which the member or a relative is associated. A potential conflict of interest is one that could be to the private financial benefit or detriment of the member, a relative or a business with which the member or a relative is associated. A relative means the City Council member's spouse, children, siblings, parents, including step-children, step siblings and step-parents, of the member, and any other person for whom the City Council member has a financial support obligation. A member of the City Council must publicly announce a potential or actual conflict of interest and, in the case of an actual conflict of interest, may not participate in the debate or vote on the issue. A City Council member who has a potential conflict of interest may participate in the decision after disclosing the potential conflict.

M. EX PARTE CONTACTS AND DISQUALIFICATION

1. For quasi-judicial hearings, members of the City Council should refrain from having *ex parte* contacts relating to any issue of the hearing. *Ex parte* contacts are those contacts by a party on a fact in issue under circumstances that do not involve all parties to the proceeding. *Ex parte* contacts may be either oral statements when other interested parties are not present, or written information that other interested parties do not receive.
2. If a member of the City Council has *ex parte* contact prior to a hearing, the member must reveal the contact at the meeting and before the hearing. The member must describe the substance of the contact. The member also will state whether such contact affects their impartiality or ability to vote in the matter. The member must state whether he or she will participate or abstain.
3. For quasi-judicial hearings, a member of the City Council who was absent during the presentation of evidence may not participate in any deliberations or decision regarding the matter, unless the member reviews all the evidence and testimony received.

N. OREGON GOVERNMENT ETHICS COMMISSION REQUIREMENTS AND REPORTING

1. Members of the City Council must review and observe the requirements of the State Ethics Law (ORS 244.010 to ORS 244.390) dealing with use of public office for private financial gain.
2. Members of the City Council must give public notice of any conflict of interest or potential conflict of interest and the notice will be reported in the meeting minutes. In addition to matters of financial interest, members will maintain the highest standards of ethical conduct and assure fair and equal treatment of all persons, claims and transactions coming before the City Council.
3. In accordance with state law, it is each member's responsibility to file all required statements of economic interest with the Oregon Government Ethics Commission.

O. LEGAL ADVICE

Requests to the City Attorney for advice that requires legal research may not be made by a member of the City Council without the concurrence of the Council. Before requesting research or other action by the City Attorney, members are encouraged to consider consulting with the City Manager to determine if the request or action can be accomplished more cost-effectively. Outside a City Council meeting, a member should make requests of the City Attorney through the City Manager. Exceptions to this are issues related to the performance of the City Manager, clarification questions or communications that are City business-related and require a reasonable amount of attorney time, and unique or sensitive

personal, yet City business-related, requests.

P. ROBERT'S RULES

Robert's Rules of Order Revised will be used as the guideline for conduct of City Council meetings, except where these Rules specifically apply.

Q. COMMISSIONS, BOARDS, COMMITTEES, ORGANIZATIONS & MEDIA

1. Citizen Appointment and Removal.

- a. The City Council will appoint the members of City commissions, boards and committees, including ad hoc committees, as provided in the municipal code.
- b. The City Council may encourage broad participation on City commissions, boards and committees by generally seeking to limit the number of terms a community member may serve.
- c. In order to encourage the broadest possible citizen involvement, it is the policy of the City Council to avoid appointing a citizen to more than two City commissions, boards or committees simultaneously whenever possible. Any citizen serving on two City commissions, boards or committees may not be chair of both simultaneously. This limitation does not apply to service on the City Budget Committee.
- d. With the consent of the Council, the Mayor may remove a person from a City commission, board or committee prior to the expiration of the person's term of office.

2. Council Member Participation.

- a. Members of the City Council will encourage citizen participation in City commissions, boards and committees.
- b. Members of the City Council may and are encouraged to attend meetings but shall (1) be mindful of their role as individual members of the City Council and not represent the full Council unless specifically authorized to do so, and (2) facilitate full discussion and participation by the regular members of the body. Members of the City Council should limit their attendance at and participation in meetings at which quasi-judicial public hearings are conducted on matters that are appealable to the City Council, so as to avoid challenges for bias as set forth in Section L of these rules.

3. Organizations and Media.

- a. If a member of the City Council represents the City before another governmental agency, a community organization or the media, the member should first state the Council majority position. Personal opinions and comments should be expressed only if the member makes clear that he or she does not express the City Council position.
- b. Members of the City Council should obtain the appropriate permission before representing another member's view or position with the media.

R. CITY MANAGER EVALUATION

- 1. Criteria. The standards, criteria and policy directives used in the evaluation of the City Manager will be adopted at a regular City Council meeting in accordance with state law.
- 2. Process.
 - a. Evaluation sessions will be scheduled in accordance with the City Manager's decision on whether to hold the evaluation in open or executive session.
 - b. By November 1, the City Manager will prepare a written assessment identifying major accomplishments. This assessment will be distributed along with an employee evaluation form to the City Council.
 - c. By November 15, members of the City Council will review the elements in the evaluation forms in response to the City Manager assessment.
 - d. At the second meeting in November the City Council will meet in executive session, unless the Manager has requested that such discussion occur in an open meeting, to discuss their assessment of the City Manager's performance and to decide what message will be delivered to the City Manager. This is also the time to draft the criteria and goals for the upcoming year to discuss with the City Manager.
 - e. At this or a subsequent meeting, the City Council will then meet with the City Manager in an evaluation session. City Council summary comments and individual member comments will be made. The City Manager will have an opportunity to respond to all comments. The effect of the evaluation on the City Manager's employment contract will be discussed. Sufficient time will be allotted for the evaluation discussion with the City Manager.
 - f. Compensation may not be discussed in executive session. The Council may convene with the City Manager in open session to review any final performance evaluation and discuss compensation. Any final summary of the evaluation process shall be prepared by the City Attorney and a member

of the City Council delegated such authority by the Council, if any.


3. Contract. The City Attorney, in consultation with the City Council and consistent with results of the City Manager's latest evaluation process, will prepare any proposed employment contract amendments to the City Manager's contract. The City Attorney and a member of the City Council delegated such authority by the Council, if any, will present such amendments to the City Manager for discussion and negotiation. Once the City Manager agrees to the proposed amendment language, the amended contract will be presented to the City Council for approval. Contracts normally will be approved as a consent agenda item at the next regular City Council meeting. The evaluation process should be concluded by the end of December each calendar year, although the formal consideration of any contract amendment may occur in the following year.

S. COUNCIL EXPENSES

1. Reimbursement. The Council will follow the same rules and procedures for reimbursement as City employees, as established by City policy. Councilor expenditures for other than routine expenses (e.g., conference registration, travel, etc.) require advance City Manager approval to ensure compliance with the City's purchasing rules which apply city-wide and budget appropriations. Unless requested otherwise, the City Recorder will coordinate travel accommodations for Councilors.
2. Budget. The City Council will review and discuss its proposed biennial budget for Council expenses as coordinated by the Mayor and Council President and as presented by City staff during a public meeting.
3. Mayoral compensation. The City Council establishes the parameters of City policy governing Mayoral compensation. The Mayor may be compensated for their efforts on behalf of the City in addition to the expense reimbursement described above. Actual compensation amounts shall be reviewed, consistent with Council policy and state ethics laws, through the City's biennial budget process.

T. COUNCIL PRESIDENT

At the first City Council Meeting of each year, the City Council will ask the current Council President if they have a desire to continue serving as Council President. If the Council President does not wish to continue, the City Council will elect a new Council President as provided in Chapter III, Section 10 of the City of North Plains Charter.

2024 City Council Meeting Calendar Schedule								
	<u>Items/Presentations</u>	<u>Resolutions</u>	<u>Ordinances & Public Hearing</u>	<u>1st Reading</u>	<u>2nd Reading</u>	<u>Work Session</u>	<u>Notes</u>	<u>URA</u>
4/1	Family Peace Center Proclamations					Council Rules		
4/15	Family Peace Center							
5/6	TVF&R Annual Update	TVWD IGA; Interim city mgr agreement	Sign Code Text Amendment	X		Franchise Ordinance presentation		
5/20		City Council Mission+Goals Statement; City Manager recruitment	Sign Code Text Amendment		X			
6/3	Ride Connection	Levy Property Taxes FY25 Eligibility to rcvc State Revenues Election to rcv State Revenues		X		SB8- Affordable Housing (Joint session w PC)		
6/17		Fee Schedule, Bank Signers, P&R Appt. WCSO Contract, new Library Position	Right of Way Use Ordinance not done	x				
7/1	NO CITY COUNCIL MEETING							
7/15	Parks Maint Fee. UGB action plan with 3J	Creating Asst. Planner position 2 PW Lead positions, Surplus property process						
8/5	Calloway presentation	Bancroft Financing - TDT				Public Works Update	Exec Session Franchise & Marijuana Appeal	
8/19	NO CITY COUNCIL MEETING		-	-	-	-		
8/26?	Emergency Meeting	Marijuana Appeal						
9/3		WACO IGA - Shuttle Stop update				Council Rules?		
9/12	Emergency Meeting - Executive Session						Prothman - CM Candidate Apps review	
9/16	Comm. Willey							
10/2	Emergency Meeting - Executive Session						CM discussion w/Prothman	
10/7		Right-of-Way license fee			2nd reading & adoption Right-of-Way use			
10/21						ARS		
11/4		City Manager Contract Agreement, JWC Contract				Council Rules		
11/18	Executive Session - Legal					FEMA with Planning Comm.		
12/2		Job description & wage, Adopt new CC Rules	Repeal Ord CC Rules					
12/16								
City Council Issues/Action Tracker				Assigned	Status	Notes		
Date	Item Requested							

December 2024

<u>MEETING</u>	<u>PRIMARY</u>	<u>ALTERNATE</u>	<u>NOTE</u>	<u>DATE</u>
City Council *Work Session with Planning Commission			1st Monday of the month at 7:00 pm 6pm Work Session	12/2
Economic Development Commission	Lenahan		1st Wednesday of the month at 6:00 pm	12/4
Parks & Rec Board	Kindel		2nd Monday at 6:00 pm	12/9
Washington County Coordinating Committee (WCCC)	Lenahan	<i>Open</i>	2nd Monday at 12:00 noon	12/9
Planning Commission	Fage		2nd Wednesday at 6:00 pm	12/11
Washington County Office of Community Development Policy	Papen	<i>Kindel</i>	2nd Thursday 7:00pm	12/12
City Council			3rd Monday of the month at 7:00pm	12/16
Library Board	Papen		3rd Wednesday at 6:00pm	CANCELLED
Metro Policy Advisory Committee (MPAC)	Reid		4th Wednesday at 5:00pm	No meeting/holiday
Col-Pac EDD				
Metropolitan Area Communications Commission (MACC)	Sheldon	<i>Smith</i>		

2024 City Council Meeting Calendar Schedule

2024 City Council Meeting Dates-7:00 p.m.

1/2 **	4/1 **	7/1**	10/7 **
1/16	4/15	7/15	10/21
2/5 **	5/6 **	8/5 **	11/4 **
2/20	5/20	8/19-cancelled	11/18
3/4 **	6/3 **	9/3 **	12/2 **
3/18	6/17	9/19	12/16
Meetings in yellow are Tuesday meetings due to Monday holidays		Meetings with ** behind them have a 6:00 pm Work Session	

2024 Schedule for Board and Commission Meetings

1st Wednesday 6:00 pm	Economic Development	2nd Monday 6:00 pm	Parks & Recreation Board	2nd Wednesday 7:00 pm	Planning Commission	3rd Wednesday 7:00 pm	Library Board
1/3	PAPEN	1/8	FAGE	1/10	MARTINEZ	1/17	LENAHAN
2/7	SHELDON	2/12	SHELDON	2/14	SHELDON	2/21	SHELDON
3/6	LENAHAN	3/11	PAPEN	3/13	SMITH	3/20	MARTINEZ
4/3	SMITH	4/8	LENAHAN	4/10	LENAHAN	4/17	FAGE
5/1	SHELDON	5/13	FAGE	5/8	LENAHAN	5/15	KINDEL
6/5	KINDEL	6/10	KINDEL	6/12	FAGE	6/20	SMITH
7/3	PAPEN	7/8	SMITH	7/10	KINDEL	7/17	MARTINEZ
8/7	MARTINEZ	8/12	MARTINEZ	8/14	PAPEN	8/21	SHELDON
9/4	FAGE	9/9	SHELDON	9/11	KINDEL	9/18	LENAHAN
10/2	MARTINEZ	10/14	PAPEN	10/9	LENAHAN	10/16	SMITH
11/6	SHELDON	11/12	SMITH	11/13	KINDEL	11/20	PAPEN
12/4	LENAHAN	12/9	KINDEL	12/11	FAGE		



NORTH PLAINS CITY COUNCIL EXECUTIVE SESSION

MEETING DATE AND TIME : Monday, November 18, 2024

Jessie Mays Community Center

LOCATION

THIS MEETING IS CALLED TO ORDER UNDER AUTHORITY OF:		
	192.660(2)(a)	Employment of public officer, staff member or individual (attorney)
	192.660(2)(b)	Discipline of Public Officers and Employees
	192.660(2)(d)	Labor Negotiations*
	192.660(2)(e)	Real Property Transaction Negotiations
	192.660(2)(f)	Exempt Public Records
	192.660(2)(g)	Trade Negotiations
XX	192.660(2)(h)	Legal Counsel
	192.690(2)(i)	Employee Performance Evaluations / Contract
	192.660(2)(j)	Public Investments
	192.660(2)(k)	School Safety
	192.660(2)(n)(C)	Natural Resource, Utility, or Hazardous Substance Security
	192.660(2)(o)	City Safety
	192.660(2)(p)	Cyber Security
PURSUANT TO OREGON REVISED STATUTES, NO INFORMATION FROM THIS SESSION SHALL BE DISCLOSED BY THE NEWS MEDIA.		

Elected Officials:

_____ Fage _____ Kindel _____ Lenahan _____ Martinez
_____ Papen _____ Sheldon _____ Smiths

Staff: City Manager Bil Reid, City Attorney Chris Crean, City Recorder Lori Lesmeister

*Media cannot attend executive sessions on labor negotiations per ORS 192.660(4)

City Attorney:

Consultants:

Media*:

PowerPoint/additional handouts? _____

Adjourned at _____ p.m.

EXECUTIVE SESSION PROVISIONS:

- The City Council will now meet in executive session under **ORS 192.660(2)(a) to consider the employment of a public officer, employee, staff member or individual agent.**
- The City Council will now meet in executive session under **ORS 192.660(2)(b) to consider the dismissal or disciplining of, or to hear complaints or charges brought against, a public officer, employee, staff member or individual agent who does not request an open hearing.**
- The City Council will now meet in executive session under **ORS 192.660(2)(d) to conduct deliberations with persons designated by the governing body to carry on labor negotiations.***
- The City Council will now meet in executive session under **ORS 192.660(2)(e) to conduct deliberations with persons designated by the governing body to negotiate real property transactions.**
- The City Council will now meet in executive session under **ORS 192.660(2)(f) to consider information or records that are exempt by law from public inspection.**
- The City Council will now meet in executive session under **ORS 192.660(2)(h) to consult with counsel concerning the legal rights and duties of a public body regarding current litigation or litigation likely to be filed.**
- The City Council will now meet in executive session under **ORS 192.660(2)(i) to review and evaluate the employment-related performance of the chief executive officer who does not request an open hearing.**

*Media cannot attend executive sessions on labor negotiations per ORS 192.660(4)

- The City Council will now meet in executive session under **ORS 192.660(2)(k)** to **consider matters relating to school safety or a plan that responds to safety threats made toward a school.**
- The City Council will now meet in executive session under **192.660(2)(n)(C)** to **discuss information about review or approval of programs relating to the security of generation, storage or conveyance of: (1) electricity; (2) gas in liquefied or gaseous form; (3) hazardous substances as defined in ORS 453.005(7)(a), (b), and (d); (4) petroleum products; (5) sewage; or (6) water.**
- The City Council will now meet in executive session under **192.660(2)(n)(D)** to **discuss information about review or approval of programs relating to the security of generation, storage, or conveyance of telecommunication systems, including cellular, wireless or radio systems.**
- The City Council will now meet in executive session under **192.660(2)(n)(E)** to **discuss information about review or approval of programs relating to the security of generation, storage, or conveyance of data transmissions by whatever means provided.**
- The City Council will now meet in executive session under **192.660(2)(o)** to **consider matters relating to the safety of the City and of City staff and volunteers and the security of City facilities and meeting spaces.**
- The City Council will now meet in executive session under **192.660(2)(p)** to **consider matters relating to cyber security infrastructure and responses to cyber security threats.**

City Recorder Script:

“Only news media representatives and staff designated by the City Council are permitted to attend the executive session. News media representatives, staff and Council members are respectfully directed not to report on any of the discussions that occur during the session, except to state the general subject as previously announced. The Council will return to regular session if there is a need for action on the executive session item—no final action or decision may be taken in executive session. Any materials distributed will be collected by the City Recorder at the end”.*

Note: If there is a need to reconvene in regular session, open the doors and invite the public back in.

*Media cannot attend executive sessions on labor negotiations per ORS 192.660(4)