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46411 Timine Way
Pendleton, Oregon 97801

Exhibit Schedule

File # ZC-25-002: Land Development Code Amendment

Applicant CTUIR Tribal Planning Office
46411 Timine Way
Pendleton, OR 97801

**Land Protection Planning
Commission Public Hearing Date** April 8, 2025

Exhibits

- 1 Twelve (12) page Staff Report
- 2 Three (3) page Zone Change Application
- 3 Eighteen (18) Amended Land Development Code – Definitions
- 4 Fifteen (15) Amended Land Code – Various Sections
- 5 Fifty-three (53) page NFIP Oregon Implementation Program Model Ordinance
- 6 Eleven (11) page Dissemination Record

STAFF REPORT
CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION (CTUIR)
PLANNING DEPARTMENT

File No: **ZC-25-002**
To: **Land Protection Planning Commission**
Public Hearing Date: **April 8, 2025**

SUBJECT

Land Development Code text amendment request for compliance with the National Marine Fisheries Service's 2020 Biological Opinion, which requires the Federal Emergency Management Agency (FEMA) National Flood Insurance Program to comply with the Endangered Species Act.

APPLICANT

CTUIR Tribal Planning Office – 46411 Timine Way, Pendleton, OR 97801

NATURE OF REQUEST

The applicant is proposing text edits to Chapters 2, 3, 8, and 19, which are required to maintain CTUIR's status as a community in the National Flood Insurance Program (NFIP). The NFIP allows property owners with pre-existing buildings such as homes and businesses within the Flood Hazard Overlay Zone to obtain flood insurance at a subsidized rate and allows CTUIR and property owners on the Umatilla Indian Reservation to obtain federal relief funds in the event of a flood.

Zone change amendments are subject to criteria and processes contained in the CTUIR Land Development Code Chapters 9 and 13. Zone change amendments are legislative decisions; the Land Protection Planning Commission (LPPC) will make a recommendation to the CTUIR Board of Trustees who will make the final decision to approve or deny this request.

PROPOSED REQUEST

Properties Affected: All properties wholly or partially or in part located within the Flood Hazard Overlay Zone (FHOZ) of the Umatilla River, including Iskuulpa Creek, and Meacham Creek, regardless of ownership status (CTUIR-owned fee, CTUIR Trust, Non-Tribal Fee or Individual Allotted Trust).

Requested Changes:

Summary of Amendments Regarding NFIP ESA Compliance by Section		
LDC Sect.	Summary of Amendment	Purpose of Amendment
2.020 46.c	Modify “Construction” definition	Adds ‘fill’ and other uses which are not typically considered construction, but which must be reviewed in the case of the new Flood Hazard Overlay Zone (FHOZ) rules.
2.020 71	New Definition: “Fish-Accessible Space”	Required for the application of the new No Net Loss of Undeveloped Space standard.
2.020 83	New Definition: “Green Infrastructure”	Required for the application of the new No Net Loss of Pervious Surface standard as an available mitigation measure when new pervious surface is proposed within the floodplain.
2.020 84	New Definition: “Habitat Restoration Activities”	An activity which is specifically exempted from compliance with the No Net Loss standards.
2.020 90	New Definition: “Hydraulically Equivalent Elevation”	Required for determinations of off-site mitigation efforts and their related distance multipliers.
2.020 92	New Definition: “Impervious Surface”	Required for the application of the new No Net Loss of Pervious Surface standard.
2.020 118	New Definition: “No Net Loss”	The new standards that the CTUIR must implement to retain compliance with the NFIP and ESA in the floodplain.
2.020 123	New Definition: “Offsite”	Distinguishes the location of the mitigation performed if mitigation measures are different for on-site or off-site mitigation.
2.020 124	New Definition: “Onsite”	Same as above.
2.020 125	New Definition:	This is used as a point of measurement for the degree of mitigation required. When an application is received, the permit reviewer

	“Ordinary High Water Mark”	will need to determine if the development is in the Riparian Buffer Zone (with higher mitigation requirements) or outside the RBZ (with lower mitigation requirements) as measured from this location.
2.020 133	New Definition: “Pervious Surface”	The opposite of Impervious Surface, for the purposes of implementing the No Net Loss of Pervious Surface.
2.020 145	New Definition: “Reach”	This is required for the determination of the off-site mitigation multiplier. The entire Umatilla Indian Reservation is within one reach, and this would only apply to potential mitigations in off-reservation trust properties.
2.020 151	Amended “Riparian Areas” definition	Expands the definition to include lakes and ponds. This does not change the location of the FHOZ.
2.020 152	New Definition: “Riparian Buffer Zone (RBZ)”	Establishes the zone with higher No Net Loss standards, measured as less than 170’ from the Ordinary High Water Mark as measured at a right angle to the river.
2.020 153	New Definition: “Riparian Buffer Zone Fringe”	Establishes the area with lower No Net Loss standards, which is greater than 170’ from the RBZ but still within the FHOZ.
2.020 187	New Definition: “Undeveloped Space”	This is a No Net Loss standard.
3.294	Adds a new clause to the General Information section of the Flood Hazard Overlay Zone	Addition of “harms habitat critical to protected species” as one of the reasons for restricting floodplain development.
3.295 10	Adds a new Purpose for the Flood Hazard Overlay Zone	“Preserve natural and beneficial floodplain functions”

3.305 1	Specify the FIRM maps that these regulations apply to	Adds all 18 FIRM map panels which are encompassed in the floodplain of the Umatilla River, as recommended by the Model Ordinance.
3.308	New Section: “Standards for Protection of FHOZ Floodplain Function”	Describes why these requirements are being added, in response to the NMFS 2016 Biological Opinion, which required ESA compliance.
3.309	New Section: “No Net Loss Standards”	This is the most critical section, which describes how the No Net Loss standards must be applied. This requires development in the FHOZ to ensure no net loss of: 1. Undeveloped Space (in cubic feet); 2. Pervious Surface (in square feet); and Trees over 6” at breast height (4’). Based on DNR Staff recommendation, subsection 7 was added to describe how a habitat restoration entity on the UIR may make an agreement with a property owner seeking to develop, to perform the any required habitat mitigation off-site.
3.310	New Section: “Stormwater Management”	Describes mitigation measures that could be used if new impervious surface is required, including retention of water run-off, or treatment of stormwater to limit pollution of the waterway.
3.311	New Section: “Activities Exempt from No Net Loss Standards”	Based on the NFIP Model Ordinance lists routine land management practices that may be exempted by these new standards to routine land management practices, provided they do not have substantial negative impacts on the water quality of the waterway or the space available to fish for refuge in case of a flood.
3.312	New Section: “Riparian Buffer Zone (RBZ)”	Describes how this zone is measured, and how the No Net Loss standard should be applied within it and outside of it.
3.320 4	Amends “Limitations on Fill” clause 4	Includes a new limitation of fill to comply with the No Net Loss standard in the FHOZ.
3.325 1	Amends the “Limitations on Structures” clause 1.	Cross references to the new No Net Loss requirements.
3.329	Amends the general information	Clerical error, did not previously specify these rules apply to RVs in the FHOZ.

	section on Recreational Vehicles	
3.335	Specifies who is responsible for administering the Flood Hazard Overlay Zone on the UIR	Comprehensive Planning Manager, or Senior Planner.
3.336 3.b	Corrects clerical error	The word “bye” was replaced with “by”, grammatical error.
8.016 8	New Variance requirement	Requires that Variance approvals comply with the No Net Loss standards.
19.600	New Section: “Special Plan Review and Inspections”	Specifies that special reviews which are contracted to outside firms because they fall outside the expertise of staff plan reviewers will be billed to the applicant.

Aerial Photo of Affected Area



Riverside Neighborhood Area



Meacham and Iskuulpa Creek Areas



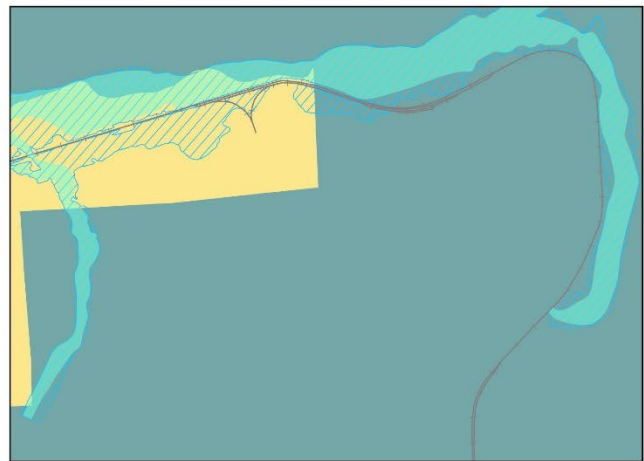
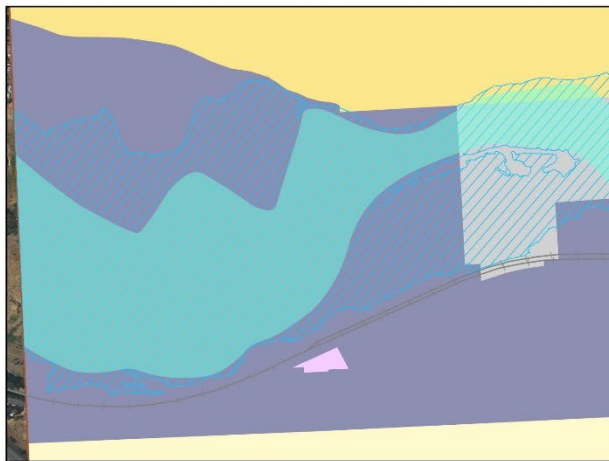
Zoning: From the western boundary of the Umatilla Indian Reservation (UIR) to Highway 331, much of the land in the Flood Hazard Overlay Zone (FHOZ) is zoned R-2 (General Rural). Additionally, there are a few Ag-2 (Farm Pasture) designated parcels on the north side of the river that are affected by these changes; however, the majority of those parcels are outside the FHOZ, and may be buildable outside the FHOZ. East of Highway 331, any affected parcels are within the Ag-3 (Small Farm) zone, through the end of the Community Water Sewer Service Area, on the east end of the Mission community. From there, all affected properties are zoned Ag-2 (Farm Pasture) to Homly Road. From there, the remaining properties interspersed to the east side of the UIR boundary are within the Ag-2 (Farm Pasture) or G-1 (Big Game Winter Grazing) zones.

Zoning of Affected Area



Riverside Neighborhood Area

Meacham and Iskuulpa Creek Areas



Intent of Request: The intent of this requested change is to comply with the Pre-Implementation Compliance Measures consistent with the National Flood Insurance Program (NFIP) requirements for Endangered Species Act (ESA) compliance. This is necessary to ensure that Umatilla Indian Reservation residents with NFIP-subsidized flood insurance may keep their insurance, and that other residents on the UIR remain eligible for NFIP-subsidized flood insurance if they choose to get it.

Participation in the NFIP is a requirement for local jurisdictions or individuals to receive federal funds in the event of a federally declared emergency, such as the 2020 Umatilla River flood. If another such flooding event occurs and the CTUIR's compliance with NFIP requirements has lapsed, neither the CTUIR nor individuals within the UIR floodplain will be eligible for most grant-based federal assistance. They may remain eligible for loan-based federal assistance programs.

RELEVANT REVIEW CRITERIA

1. Conformance with the Comprehensive Plan.
2. Conformance with all applicable statutes.
3. That there is a public need for a change of the kind in question.
4. ~~That need will be best served by changing the classification of the particular piece of property in question as compared with other available property.~~ N/A
5. That there is proof of a change of circumstance or a mistake in the original zoning.

STAFF FINDINGS

A. Tribal Staff Review Committee (TSRC): The TSRC met on March 20th to review this request. Participants provided verbal comments during the meeting, with follow-up comments received by follow-up phone calls. The Office of Legal Counsel and Cultural Resources Program provided emailed code review. Verbal comments are paraphrased.

CTUIR Fire Department: James Hall, CTUIR Fire Chief informed the attendees of the recent Wildland Urban Interface (WUI) standards in Oregon (ORS 476.392 and 455.612) and wondered if they applied to the Reservation. He also wondered if landowners removing trees to create “Defensible Space” around their homes would be impacted by the proposed amendments.

Removal of trees associated with a homesite within the FHOZ would be subject to the standards as amended.

CTUIR Water Resources Program: Jeremy Wolf and Marty King attended the meeting and provided comments pertaining to conflicts between the Water Code requirements and these new regulations. No specific conflicts or discrepancies between the Land Development Code and the Water Code were raised.

As a rule, when there are duplicate standards and a code conflict arises, the stricter code prevails.

CTUIR Cultural Resources Program: Carey Miller provided comments via email:

- i. “For the draft permit, there are many places where they refer to all other necessary or applicable local, state, or federal permits. Can we add tribal permits to these statements?”
- ii. Definitions: Undeveloped Space. You have added vaults and tanks behind structures. Not sure if it is relevant, but I have been reviewing several stream gauges but along with the gauge they have a cabinet and/or posts that hold solar panels to run the gage. These are next to streams but often just on posts. I realize they are fairly small but may want clarity as to whether these fall in the scope. Are these types of activities considered ‘not substantial improvements’?”

- iii. Include 'First Foods' as a protected habitat

Is fish accessible space measured at certain times, or does it need to take into account during flood times? Realize this is really for Fisheries, but it is a little unclear to me."

CTUIR Range, Agriculture and Forestry Program: Gordy Schumacher attended the TSRC meeting, and had some concerns about how the proposed amendments this would apply to Forest Practice Permits, and other forestry activities conducted by the Department of Natural Resources.

CTUIR Office of Legal Counsel. The CTUIR Office of Legal Counsel reviewed the proposed LDC amendments prior to the TSRC meeting. They provided text edits pertaining to the definitions included in the Model Ordinance that were not included in the draft, as well as copy editing of the document.

- B. Zone Change Approval Criteria:** Chapter 9 - Section 9.000 Amendments to the Land Development Code states – "This Code may be amended by changing the boundary of zones or by changing any other provisions thereof, whenever the public necessity and convenience and the general welfare requires such an amendment." Section 9.015 lists the standards for a Zone Change:

SECTION 9.015 STANDARDS FOR ZONE CHANGE

The burden of proof is upon the one seeking change. The degree of that burden increases proportionately with the degree of impact of the change which is sought. The applicant shall in all cases establish:

1. Conformance with the Comprehensive Plan.
2. Conformance with all applicable statutes.
3. That there is a public need for a change of the kind in questions.
4. That need will be best served by changing the classification of the particular piece of property in question as compared with other available property.
5. That there is proof of a change of circumstance or a mistake in the original zoning.

The Applicant's responses to each criterion and staff analysis will follow.

1. Conformance with the Comprehensive Plan.

Staff Review: These changes are consistent with Comprehensive Plan objectives which pertain to emergency preparedness and natural resources protection. Those objectives are:

5.6 Natural Resources

Objective 3: To Protect, enhance and restore functional floodplain, channel, and watershed processes to provide sustainable and healthy habitat for aquatic species of the First Food order;

Objective 7: To provide sustainable harvest opportunities to aquatic species of the First Food order by protecting, conserving and restoring aquatic species populations and their habitats, including floodplain, channel and watershed processes.

Objective 8: To develop and implement a First Foods policy to inform natural resource management decisions impacting the conservation, enhancement and harvest of First Foods and their habitats;

5.14: Public Safety

Objective 4: To develop and implement a First Foods policy to inform natural resource management decisions impacting the conservation, enhancement and harvest of First Foods and their habitats;

2. Conformance with all applicable statutes.

Staff Review: This Code Amendment is required to comply with FEMA’s Preliminary Implementation Plan to bring NFIP regulations in compliance with the Endangered Species Act. The code update will ensure CTUIR and UIR residents within the Flood Hazard Overlay Zone may continue to be eligible to obtain NFIP flood insurance and federal disaster relief funds associated with that program.

3. That there is a public need for a change of the kind in question.

Staff Review: There are currently eight NFIP flood insurance policies within the FHOZ of the UIR. A total of 116 residential units are eligible for NFIP flood insurance. This includes 42 residential units in the designated “Floodway”, which has a very high risk of flooding. Additionally, 74 residential units are within the 100-year Floodplain, which has a 1% chance of flooding each year. NFIP flood insurance is typically required for individuals to get a conventional mortgage and makes residents eligible for FEMA emergency funding in the case of a federally declared disaster-level flooding event.

4. That need will be best served by changing the classification of the particular piece of property in question as compared with other available property.

Staff Review: N/A – the zoning and overlay designations will not be changed on any specific property. The regulatory framework will be applied to all properties in the FHOZ based on Endangered Species Act compliance.

5. That there is proof of a change of circumstance or a mistake in the original zoning.

Staff Review: The National Marine Fisheries Service’s 2020 Biological Opinion requires that FEMA’s NFIP program amend its regulations to comply with the Endangered Species Act within the Action Area of the 2016 Biological Opinion. This area encompasses all communities within the State of Oregon, including two Tribal Nations that participate in the NFIP.

The NFIP invited CTUIR to official Tribal Consultation in December 2023, which was completed on July 26, 2024. The NFIP issued a Draft Implementation Plan on June 1, 2024. NFIP member communities were offered three alternative paths to accomplish Pre-Implementation Compliance Measures: (1) a construction moratorium within the FHOZ; (2) adopting the model ordinance to implement the compliance measures; or (3) a permit-by-permit

assessment of the habitat value and mitigation requirements for each permit application submitted in the FHOZ. After consultation with CTUIR committees and commissions, and a choice approved by the Board of Trustees, the CTUIR responded on November 28, 2024, with their selection of the third option: to amend the LDC to maintain standing in the NFIP. The Oregon Department of Land Conservation and Development (DLCD) provided the Model Ordinance in November 2024, which was written with a foundation of Oregon State statutes. These proposed Code Amendments represent staff efforts to adapt the Model Ordinance to support CTUIR requirements that are grounded in relevant federal regulations.

CONCLUSIONS

Based on the applicable criteria for zone changes, staff recommend these changes be adopted to retain access to the NFIP and Flood-related FEMA funds.

1. The proposal is not in conflict with the Comprehensive Plan and may support policies for public safety and natural resources protection.
2. The Code amendment is required to retain access to the NFIP and Flood-related FEMA funds for both CTUIR and individual property owners.
3. There are eight individual flood insurance policy holders, and 116 potential flood insurance policy holders currently residing in the FHOZ. Flood insurance is typically required for individuals seeking mortgage lending to buy existing homes or build new residences within the 100-year floodplain.
4. N/A, this amendment does not pertain to a specific property
5. There is a change in circumstance based on the new requirement that the NFIP comply with the Endangered Species Act.

DECISION OPTIONS:

The Land Protection Planning Commission may recommend that the Board of Trustees approve, deny or modify the proposed amendment. In acting on this request, the Land Protection Planning Commission must choose one of the following options:

1. Recommend **approval** of the proposed Land Development Code amendment to the Board of Trustees;
2. Recommend **disapproval** of the proposed Land Development Code amendment to the Board of Trustees;
3. Recommend **modification** of the proposed Land Development Code amendment to the Board of Trustees;
4. **Continue** the hearing to a specified time, date, and place; pending further testimony or information;

RECOMMENDATION

Based on the preceding facts, findings and conclusions, staff recommends the Land Protection Planning Commission to recommend **approval of the Land Development Code amendment** without conditions.

CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION
Tribal Planning Office

**AMENDMENT / ZONE CHANGE APPLICATION
SUPPLEMENTAL SHEET**

DEAR APPLICANT:

Please fill out this APPLICATION completely and as accurately as possible. If a block does not apply, write 'N/A' in the space provided. An incomplete application cannot be processed.

- 1) Please fill out your full name, current address and phone number.
- 2) Please fill out the full name, current address and phone number of the legal property owner (s) of the site your are requesting a permit for. If you are the sole property owner, simply write "same" on the first line.
- 3) This is the location of the site as described by section, township and range. If you are not familiar with this method or you do not have access to this information, we can assist in determining the location upon request.
- 4) Indicate whether the property is fee land (tax lot) or trust land (allotment) and the parcel number. Also specify the parcel acreage.
- 5) Indicate the right of way or easement road that allows legal access to the property (e.g., county, road, street, or access road).
- 6) Indicate the current use or uses of the subject property.
- 7) Indicate the specific for which you are requesting this Amendment/Zone Change proposal.
- 8) Explain in details on a separate sheet how the proposed use conforms to the decision criteria (see attached page).
- 9) Read the statement carefully. Sign and date the application only after the application has been completely filled out.

NOTE: If the information presented is unclear or questionable, you may be required to provide further information such as lease agreements, evidence of legal access, legal ownership, etc.

**IF YOU HAVE ANY QUESTIONS CONCERNING THE APPLICATION PROCESS
OR CODE REQUIREMENTS, FEEL FREE TO EITHER STOP BY THE PLANNING
OFFICE OR CONTACT THE OFFICE AT 429-7523**

File #: _____

CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION

Tribal Planning Office

46411 Tímine Way, Pendleton, Oregon, 97801

AMENDMENT / ZONE CHANGE APPLICATION

Fee: \$150.00

Please Print

Amendment To: Land Development Code -- Section Number _____

Zone Change: Present Zone _____ Proposed _____

Applicant's Name: _____

Address: _____ Phone: _____

Lot Owner's Name: _____

Address: _____ Phone: _____

Property Description (If Applicable):

_____ Section _____ Township _____ Range _____

Tax Lot () Allotment (): _____ Present Zone: _____ Total Acreage: _____

Legal Access: _____

Present Use of Property (Description, including any existing structures and the current use): _____

Proposed Amendment/Zone Change: (Explain in detail)

- A response shall be submitted with this application explaining how this request relates to the applicable decision criteria (see Attached).

I understand that any false statements made on this application may cause subsequent approval by the Natural Resources Commission to be null and void. I hereby certify that I understand that by signing this permit application, I am giving the CTUIR Tribal Planning Office the authorization to conduct any site inspections necessary in reviewing this application.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED!

Date: _____ Applicant: _____

Agent: _____

I am the (Circle One): Owner/owner's authorized representative (If authorized representative, attach letter signed by owner)

File #: _____

TRIBAL PLANNING OFFICE USE ONLY

Date Filed _____ Reviewed By: _____
Fee Paid: _____ Hearing Date: _____

NOTES: _____

ATTACHMENT: AMENDMENT/ZONE CHANGE DECISION CRITERIA.

The Land Development Code and zoning may be amended by changing the boundaries of zones or by changing any other provisions thereof, whenever the public necessity and convenience and the general welfare requires such an amendment. Such a change may be proposed by the Natural Resources Commission on its own motion, or by motion of the Board of Trustees. Any proposed quasi-judicial amendment or change shall first be submitted to the Natural Resources Commission and the Commission shall, within forty (40) days after a hearing, recommend to the Board of Trustees' approval, disapproval, or modification of the proposed amendment.

Standards for Zone Change 1

The burden of proof is upon the one seeking change. The degree of that burden increases proportionately with the degree of impact of the change which is sought. The applicant shall in all cases establish:

- (1) Conformance with the Comprehensive Plan.
- (2) Conformance with all applicable statutes.
- (3) That there is a public need for a change of the kind in questions.
- (4) That need will be best served by changing the classification of the particular piece of property in questions as compared with other available property.
- (5) That there is proof of a change of circumstance or a mistake in the original zoning.

SECTION 2.020 DEFINITIONS:

As used in this Code, the following words and phrases shall mean:

1. Access: The right to cross between public and private property allowing pedestrians and vehicles to enter and leave property.
2. Access or Access Way: The place, means, or way by which pedestrians and vehicles shall have safe, adequate and usable ingress and egress to, through or past a property to use as required by this Code.
3. Accessory Structure or Use: A nonresidential structure or use incidental, appropriate and subordinate to the main structure or use on the same lot.
4. Adjacent: Near, close; for example, an Industrial Zone across the street or highway or lot line from a Residential Zone shall be considered as "Adjacent."
5. Agent: Any person who represents or acts for any other person in disposing of interests in a land development. This includes a real estate broker as defined in ORS 696.010(12) but does not include an attorney at law whose representation of another person consists solely of rendering legal services.
6. Aircraft: Any vehicle designed or used for flight through the air and capable carrying goods or people.
7. Aircraft landing strip or airport: Any area of land or water which is used or intended to be used by the general public for the landing and taking off of aircraft and any support area and buildings.
8. Allotment: An individual parcel of land which is held in trust by the United States Government.
9. AO: A Flood Hazard Overlay Zone rating identified on the Flood Insurance Rate Map (FIRM) and typified by an area of shallow flooding and sheet flow with Base Flood depths of 1 to 3 feet.
10. Apartment: A dwelling unit in a multiple-family building.
11. Approval:
 - a) Tentative: The official action taken by the Land Protection Planning Commission after a public hearing on the proposed subdivision or partition.
 - b) Final: The final official action taken by the Land Protection Planning Commission on the proposed subdivision or partition which had previously received tentative approval.
12. Area of Shallow Flooding: A designated AO or AH zone on the Flood Insurance Rate Map (FIRM). The Base Flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident.
13. Assessor: The County Assessor, Umatilla County.
14. Automotive, Boat or Trailer Sales Lot: An open lot used for display, sales or rental of new or used motor vehicles, boats or trailers in operative condition and where no repair work is done.
15. Automotive Repair, Major: The general repair, rebuilding or reconditioning of engines, motor vehicles or trailers; collision repair service, including body, frame or fender straightening or repairs; overall painting and paint shop.
16. Automobile Repair, Minor: Upholstering of, replacement of part for, and motor service to passenger cars and trucks not exceeding one and one-half tons capacity, but not including any operation named under "Automobile Repair, Major," or any other similar operation thereto.

17. Automobile Service Station or Filling Station: An establishment where bulk sales, fuels, oils or accessories for motor vehicles are dispensed, sold or offered for sale at retail only, and where repair service is secondary.
18. Automobile Towing: An establishment where emergency towing equipment is kept along with incidental, temporary and minor storage of vehicles and emergency repairs.
19. Automobile Wrecking: The dismantling or disassembling of motor vehicles or trailers, or the storage, sale or dumping of dismantled, partially dismantled, obsolete or wrecked vehicles or their parts. Two or more dismantled, obsolete or inoperable motor vehicles or parts thereof exposed to the public on one lot shall constitute a wrecking yard.
20. Base Flood: The flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the “100-year flood.” Designation on Flood Insurance Rate Maps always includes the letter “A.”
21. Base Flood Elevation (BFE): The computed elevation to which floodwater is anticipated to rise during the Base Flood. Base Flood Elevations are shown on Flood Insurance Rate Maps (FIRMs) and in the Flood Insurance Study on the flood profiles.
22. Basement: Any area of a building having its floor subgrade (below ground level) on all sides.
23. B.I.A.: Means the Bureau of Indian Affairs of the United States Department of the Interior.
24. Big Game: As defined in the Wildlife Code of the Confederated Tribes of the Umatilla Indian Reservation, adopted on Feb. 21, 1979.
25. Block: An area of land bounded by streets or by a combination of streets and public parks, cemeteries, railroad right-of-ways, bulkhead lines or shore lines of waterways, or corporate boundary lines of a city.
26. Board of Trustees: Means the 9 member elected body which constitutes the tribal government of the Confederated Tribes of the Umatilla Indian Reservation.
27. Boarding House or Rooming House: A building or premises where meals and lodging are offered for compensation for three (3) or more persons but not more than nine (9) persons, having no more than five (5) sleeping rooms for this purpose. An establishment where meals are served for more than nine (9) persons shall be deemed a restaurant. An establishment with more than five (5) sleeping rooms shall be deemed a hotel.
28. Building: A structure which is designated and suitable for the habitation or shelter of human beings or animals or the shelter or storage of property or for the use and occupation for some purpose of trade or manufacture.
29. Building Height: The vertical distance from the average contact ground level of the building to the highest point of the building.
30. Building Line: A line on a plat or map indicating the limit beyond which building or structures may not be erected subject to set back requirements in the Umatilla Reservation Land Development Code.
31. Building Lot: A lot occupied or intended to be occupied by a principal building or a group of such buildings and accessory buildings, together with such open spaces as are required by this Code and having the required frontage on a street, and setbacks.
32. Building, Main: A building within which is conducted the principal use permitted on the lot, as provided in this Code.
33. Camper: A construct that:
 - a. Has a floor;
 - b. Is designed to be mounted on a motor vehicle;
 - c. Is not permanently attached to a motor vehicle;

- d. Is designed to provide facilities for human habitation or for camping;
 - e. Is six feet or more in overall length;
 - f. Is five and one-half feet or more in height from floor to ceiling at any point; and
 - g. Has no more than one axle designed to support a portion of the weight of the camper.
34. Care Center or Facility: A facility, building, or land use operated by an agency, organization, or individual providing care of six or more individuals not related by blood, marriage to, or not the legal wards or fostered by the attendant adult.
35. Cemetery: Any place, dedicated or not, used, or intended to be used, for the permanent interment of human remains.
36. Chemicals: Any synthetically produced substance, including herbicides, insecticides, rodenticides, fertilizers and adjuvants.
37. Church: A permanently located building commonly used for religious worship, fully enclosed with walls (including windows and doors) and having a roof (canvas or fabric excluded) and conforming to applicable legal requirements affecting design and construction.
38. Commercial Amusement Facility: A facility which supplies refreshments and various forms of entertainment to the public.
39. Commercial Residential Use: A building, portion of a building or group of buildings designed or used for human occupancy or lodging for which a fee is charged, such as a hotel, motel, tourist camp or labor camp, but excluding quarters intended for permanent or semi-permanent occupancy, such as a duplex or apartment. A mobile home park is not included in this definition.
40. Community Building: A building used for and operated by a non-profit organization whose membership is open to any resident of the zone, neighborhood or community in which the club is located; provided that the primary objectives of the organization are the improvement of the zone, neighborhood or community and its social welfare and recreation.
41. Community Sewage System: A sewage system which will serve more than one lot or parcel or more than one unit of a Planned Unit Development.
42. Community Water System: Use of water from one supply system for drinking, bathing, culinary, sanitation, and other household purposes at more than three dwellings and for irrigation of less than one half (0.5) acre of lawn and garden area per dwelling unit.
43. Comprehensive Plan: A plan, adopted by the Board of Trustees, that sets forth the long range goals of the members of the CTUIR as they relate to Treaty-reserved rights both on and off the Reservation and the current and future needs of the people. The major emphasis of the Comprehensive plan is to guide the physical development, natural resources use and delivery of Tribal services and programs within the Reservation boundary to benefit Tribal members. The goals and objectives contained in the plan will be used to guide the actions of elected and appointed officials and Tribal departments within the CTUIR organization and influence the actions of other agencies that share common interests and are involved in implementing Tribal policies.
44. Conditional Use: A use that may be permitted or denied at the discretion of the Land Protection Planning Commission based on findings of fact as required by this code.
45. Confederated Tribes (or CTUIR): Means the Confederated Tribes of the Umatilla Indian Reservation of Oregon.
46. Construction: Means either:
- a. the first placement of permanent construction for a structure, including but not limited to pouring slabs or footings, installing piles, constructing columns, or any

- work beyond the excavation stage, including placing a manufactured home on an existing foundation where no modifications are required; or
- b. for a substantial improvement, altering any wall, ceiling, floor, or other structural part of a building whether or not that alteration affects the external dimensions of the building; and
 - c. within a Special Flood Hazard Area includes land preparation including but not limited to clearing, grading, filling, installing streets, walkways or utilities, footings, piers, foundations and erecting temporary forms. Placement of any fill materials such as soil, gravel, crushed stone, or other materials that change the elevation of the floodplain is considered construction within the Special Flood Hazard Area.
- 47. Construction Plans: Plans and specifications drawn to scale upon substantial paper or cloth and that contain sufficient clarity to indicate the location, nature, and extent of the work proposed and show in detail that it will conform to the provision of this code, the Uniform Building Codes, and all relevant laws and codes of the CTUIR.
 - 48. Contiguous: That which touches or connects, including that which only connects or touches a common point; the touching together of two or more tracts of land which lie alongside one another or which touch or connect with one another for any length or distance whatsoever, no matter how finite.
 - 49. Contiguous Land: Units of land under the same ownership which abut, irrespective of roadways, easements or rights-of-way.
 - 50. Corral: A pen or enclosure for confining or capturing livestock.
 - 51. Critical Facility: A facility for which even a slight chance of flooding is too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire, and emergency response installations, and installations which produce, use or store hazardous materials or hazardous waste.
 - 52. Cross Section: A profile of the ground surface perpendicular to the center line of a street, stream or valley bottom.
 - 53. Curb Lines: The line dividing the roadway from the planting strip of footway, meaning the inside (street side) of the curb.
 - 54. Dedication: A deliberate appropriation of the land by its owner for some public use and accepted for such use by or on behalf of the public.
 - 55. Density: The number of residential dwelling units per acre of land or the amount of land or the amount of land area expressed in square feet of land assignable to each dwelling unit in a residential development, including, but not limited to, one house on one lot, shall be computed as follows: The gross area of land within the development; less the total area dedicated for streets, schools or other public facilities, but not including public or private parks and recreation facilities dedicated or created as an integral part of the development; divided by the total number of dwelling units in the proposed development; equals the density. Density shall run with the land in a specific development and cannot be sold, loaned or otherwise divorced or separated from the specific development under consideration.
 - 56. Developer: Any person, corporation, partnership or other legal entity who creates or proposes to create a land development; includes any agent of a developer.
 - 57. Development: Any human 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.
 - 58. Development Permit: A permit required through this code, to be issued by the Tribal Planning Office, that reviews the land use/zoning and International Building Code requirements for new construction, manufactured structures, building additions, remodels,

- accessory buildings, and all electrical, plumbing, and mechanical improvements and for all other development on the Reservation.
59. Domestic Water Use: Shall mean any use of water for individual personal needs or for household purposes such as drinking, bathing, heating, cooking or sanitation, and other household purposes at three or fewer dwelling units and for irrigation of less than one half (0.5) acre of lawn and garden area per dwelling unit.
60. Drainage Easement: An easement required for drainage ditches, or required along a natural stream or water course to preserve the channel, to provide for the flow of water therein, and to safeguard the public against flood damage or the accumulation of surface water.
61. Duplex: A building designed exclusively for occupation by two families living independently of each other and containing two dwelling units.
62. Dwelling: A building or portion thereof designed or used as the residence or sleeping place of one or more persons.
- a) Dwelling, Single-family: A building designed or used for residence purposes by not more than one family and containing one primary dwelling unit only, except for mobile homes as defined herein; also excluding such temporary structures as tents, teepees, recreational vehicles and other similar uses.
 - b) Dwelling, Two-Family or Duplex: A building designed or used for residence purposes by not more than two families and containing two dwelling units.
 - c) Dwelling, Multiple-Family: A building or portion thereof designed or used as a residence by three or more families and containing three or more dwelling units.
63. Dwelling Unit: One room, or a suite of two or more rooms, designed for and used by one family or housekeeping unit for living and sleeping purposes, and having not more than one kitchen or kitchenette.
- a) Primary Dwelling Unit – The main dwelling unit on a lot that also contains an accessory dwelling unit as defined below.
 - b) Accessory Dwelling Unit – An interior, attached or detached residential structure that is used in connection with, or that is accessory to a single-family dwelling and meets the standards in Section 17.005 (1).
64. Easement: A grant of the right to use a parcel of land or portion thereof for specific purposes where ownership of the land or portion thereof is not transferred.
65. Elevated Building: A nonbasement building which has its lowest floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.
66. Farm Use: The current employment of land for the primary purpose of obtaining a profit in money by raising, harvesting and selling crops or by the feeding, breeding, management and sale of, or the production of, livestock, poultry, fur-bearing animals or honeybees or for dairying and the sale of dairy products or any other agricultural or horticulture use or animal husbandry or any combination thereof. Farm use includes the preparation and storage of the products raised on such land for human and animal use and disposal by marketing or otherwise.
67. Feedlot: Any tract of land or structure wherein any type of fowl or by-products thereof are raised for sale at wholesale or retail. Any area where a large concentrated number of animals cause substantial loss of vegetative cover. Any structure, pen or corral wherein cattle, horses, sheep, goats, swine, or similar animals are maintained in close quarters for the purpose of fattening such livestock for final shipment to market, or for breeding and will include a winter feeding area where large numbers of livestock are confined and fed.
68. Fence, Sight Obscuring: A fence or planting arranged in such a way to obstruct vision throughout the year.
69. 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.”

~~69.~~70. Final Drawing: The final plan for a minor partition.

71. Final Map: The final plan for major partition.

~~70.~~72. Fish Accessible Space: The volumetric space available to fish to exit or leave from and the ingress/egress space available for those access areas.

~~71.~~73. Flood or Flooding: A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters or the unusual and rapid accumulation of runoff of surface waters from any source.

74. Flood elevation study: See “Flood Insurance Study.”

~~72.~~75. Flood Insurance Rate Map (FIRM): The official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

~~73.~~76. Flood Insurance Study (FIS): The official report provided by the Federal Insurance Administration that provides flood profiles and the water surface elevation of the Base Flood.

~~74.~~77. 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 by one tenth of a foot.

~~75.~~78. Forest Practice: Any activity relating to the growing, harvesting, processing or management of trees.

~~76.~~79. Forest Purposes: The current employment of land primarily for the purpose of raising or harvesting timber products.

~~77.~~80. Frontage: All property fronting on one side of a street and measured along the street lines, between intersecting and intercepting streets or between a street and right-of-way, waterway end or dead end.

~~78.~~81. Fuel break: The clearing of vegetation, including trees, to protect structures or areas, where the potential exists for property damage or personal injury from wildfires.

~~79.~~82. Gain: The amount of money or the value of property derived from the commission of a violation, less the amount of money or value of property returned to the victim of the violation or seized by or surrendered to lawful authority before the time of decision or sentence is imposed.

~~80.~~83. Garage: An accessory building and/or accessory portion of the main building, designed or used only for the shelter or storage of vehicles owned or operated by the occupants of the main building.

84. Grazing: The use and management of land for the pasture of all wildlife users and domestics, herbivorous animals.

85. Green Infrastructure: ~~F~~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 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 surfaces by creating infiltration of stormwater in an amount equal to or greater than the infiltration lost by the placement of new impervious surfaces.

~~81.~~86. 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 Conditional Letter of Map Removal and Letter of Map Removal and have obtained any other required permits (e.g., CWA Section 404 permit).
- ~~82.87.~~ **Hazard Trees:** Standing ~~Dead~~, dying or live trees that are unstable due to structural defects or other factors that are within striking distance of a structure or area where the potential exists for property damage or personal injury.
- ~~83.88.~~ **Height of Building:** The vertical distance from the grade to the highest point of the coping of a flat roof, to the deck line of a mansard roof, or to the center height between the highest and lowest points on other types of roofs.
- ~~84.89.~~ **Home Occupations:** A home occupation is any occupation (retail, service, or manufacturing) which is clearly secondary to the main use of the premises as a dwelling place and does not change the character thereof or have any exterior evidence of such secondary use except for a sign advertising such occupation. A home occupation shall comply with the criteria specified in the section 17.005(6) of this code.
- ~~85.90.~~ **Horticulture:** The growing of fruits, vegetables, flowers, ornamental plants, and similar crops.
91. **Hourly Average Noise:** The sum of 60 noise readings taken at consecutive one-minute intervals divided by the number of noise readings (60).
92. **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.
- ~~86.93.~~ **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.
94. **Improvements:** These include but are not limited to, streets, alleys, curbs, gutters, and appurtenances, sidewalks, street lights, street signs, fire hydrants, sanitary sewers and appurtenances, public water supply and water distribution systems and other utilities.
- ~~87.95.~~ **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.
- ~~88.96.~~ **Indian Health:** Means the Indian Health Service of the U.S. Public Health Service.
- ~~89.97.~~ **Junk Yard:** A place where waste, discarded or salvaged materials are stored, bought, sold, exchanged, baled, packed, disassembled or handled, including auto wrecking yards, house wrecking yards, used lumber yards and places or yards for storage of salvaged house wrecking and structural steel materials and equipment; but not including such places where such uses are conducted entirely within a completely enclosed building, and not including pawn shops and establishments for the sale, purchase or storage of used furniture and household equipment, used cars in operative condition, or salvaged materials incidental to manufacturing operations.
- ~~90.98.~~ **Kennel:** Any premises where four or more dogs, cats or other small animals or any combination thereof at least four months of age, are kept commercially or permitted to remain for board, propagation, training or sale, except veterinary clinics and animal hospitals.
- ~~91.99.~~ **Land Development:** The subdividing or partitioning of land for any purpose or the creation of units or parcels for the purpose of sale or lease for a term of one year or more. Includes intent to dispose of any land, whether contiguous or not, including any land divided, lots,

parcels, units or interests offered as a part of a common promotional plan of advertising by a single developer or a group of developers acting in concert. If the land is contiguous or is designated or advertised as a common unit or by a common name the land shall be presumed, without regard to the number of lots covered by each individual offering, to be offered for disposition as part of a common promotional plan.

~~92.100.~~ Land Protection Planning Commission: The Commission is delegated authority by the Board of Trustees to implement elements of the Land Development Code, and to recommend changes in policies, procedures, laws or statutes relating to land use planning and environmental health and safety to the Board of Trustees.

~~93.101.~~ Landscaping: The term "landscaping" includes primarily trees, grass, bushes, shrubs, flowers and garden areas, and incidental arrangements of fountains, patios, decks, street furniture and ornamental concrete or stonework areas, and artificial turf or carpeting, but excludes artificial plants, bushes, shrubs or flowers.

~~94.102.~~ Livestock: Animals of any kind kept or raised for sale, resale, agriculture field production or pleasure.

~~95.103.~~ Lot: A unit of land that is created by a subdivision of land. For purposes of administering the provisions of this Code, the word "lot" also refers to units of land lawfully created by the partitioning process in compliance with the laws in place at the time of creation.

~~96.104.~~ Lot Line:

- a) Lot Front Line: The line abutting a street. For corner lots the front line is that with the narrowest street frontage. For double frontage lots the lot front line is that having frontage on a street which is so designated by the developer and approved as part of a final plat or map as provided for in this code.
- b) Lot Rear Line: The lot line that is opposite to and most distance from the front lot line.
- c) Lot Side Line: Any lot line that is not a lot front or rear line.

~~97.105.~~ Lot Width: The average horizontal distance between the side lot lines, measured at right angles to the lot depth at a point midway between the front and rear lot lines.

~~98.106.~~ Lowest Floor: The lowest floor of the lowest enclosed area (including basement) of a structure. 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 to render the structure in violation of the applicable non-elevation design requirements found in Chapter 3, Sub-Chapter M.

~~99.107.~~ Manufactured Home (or "Manufactured Dwelling"): A detached single-family dwelling unit (formerly known as a mobile home) that is not a recreational vehicle and which has all of the following characteristics:

- a. Designed for long-term occupancy and containing sleeping accommodations, flush toilet, a tub or shower bath and kitchen facilities, with plumbing and electrical connections provided for attachment to outside systems. It may have been designed for use with or without a permanent foundation when attached to utilities;
- b. Designed to be transported after fabrication to the site where it will be installed as a complete dwelling ready for occupancy except for minor and incidental unpacking and assembly operations, including but not limited to location on foundation supports and connection to utilities; and
- c. Consisting of one or more sections which, when assembled, constitute the entire structure.
- d. A "Manufactured Home" includes one or more sections which, when connected together following manufacturer's instructions, constitute the entire structure.

~~100.~~108. Manufactured Home Park (formerly known as a “Mobile Home Park”): Any place where four or more manufactured homes are located within 500 feet of one another on a lot, tract or parcel of land under the same ownership, the primary purpose of which is to rent —space or keep space for rent to any person for a charge or fee paid or to be paid for the rental or use of facilities, or to offer space free in connection with securing the trade or patronage of such person.

~~101.~~109. Manufactured Structure: A building greater than 120 square feet that is designed to be:

- a. Transported after fabrication to the site where it will be installed;
- b. Arriving at the site where it is to be occupied, complete and ready for occupancy except for minor and incidental unpacking and assembly operations, location of foundation supports, connection to utilities and the like. Manufactured homes are a subset of manufactured structures; and
- c. Includes one or more sections which, when connected together following manufacturer’s instructions, constitute the entire structure.

~~102.~~110. Manufactured Home Subdivision (formerly known as a “Mobile Home Subdivision”): A subdivision designed and intended for residential use when the lots are exclusively for manufactured housing. New subdivisions are not specifically identified for manufactured housing and all new subdivisions are required to comply with the same subdivision standards as of the effective date of this code.

~~103.~~111. Map, Partition: A final diagram, drawing or other writing containing all the descriptions, locations, specifications, dedications, provisions, and information required by this manual concerning a partition.

~~104.~~112. Master Zoning Map: Shall be a map that specifies the areas which comprise the zones described by the text of this Code.

~~105.~~113. Motor Home: A motor vehicle that:

- a. Is reconstructed, permanently altered or originally designed to provide facilities for human habitation; or
- b. Has a structure permanently attached to it that would be a camper if the structure was not permanently attached to the motor vehicle.

~~106.~~114. Multiple Family: A building or portion thereof, designed for occupancy by three or more families living independently of each other and containing three or more dwelling units.

~~107.~~115. Municipal Water System: Use of water by a community that is situated on the Reservation or by a community that has been incorporated under the laws of the State of Oregon outside the Reservation boundaries, where such water use includes at least community, public, commercial, and industrial beneficial uses which are served through a single water supply system that is maintained and operated by the Tribal government or a city government.

~~108.~~116. Nameplate Capacity for Energy Generation Systems other than Solar: The nominal maximum power output of an energy generation facility expressed in units of alternating-current (AC) power (W, kW, MW) as reported by the system manufacturer.

~~109.~~117. Nameplate Capacity for Solar Energy Generation: The nominal maximum power output of a solar photovoltaic energy generation system under Standard Test Conditions expressed in units of direct-current (DC) power (W, kW, MW) and calculated as the combined nominal power output for all facility solar modules.

~~110.~~118. Negotiate: Any activity preliminary to the execution of a binding agreement for the sale of land in a subdivision or partition, including but not limited to advertising, solicitation and promotion of the sale of such land.

~~111.~~119. Net Metering Facility: A facility for the production of electrical energy:

- a. Where the energy generation and energy use are located on the same parcel or on contiguous parcels of land under common ownership. Land held in title by the U.S. Government in trust for the CTUIR or individual Indians shall be considered land held in common ownership for the purpose of this definition;
- b. Interconnected systems. If the energy generation facility is connected to the electric distribution system of the electric utility provider, the energy generation facility must:
 1. Be approved as a qualified net metering facility by the electrical utility provider;
 2. The electrical generation facility nameplate capacity shall not exceed 25 kilowatts (KW) for a residential use system or 2.0 megawatts (MW) for a commercial or industrial use system;
 3. The energy generated by the facility is required to offset part or all of the on-site electrical requirements.
- c. Off-grid systems. If the electrical generation facility is not interconnected to the electric distribution system of the electrical utility provider, often referred to as an “off-grid” system, all of the electricity generated must solely be used on site. If the electrical generation facility is later to be interconnected to the electric distribution system of the electric utility provider, the electrical generation facility must meet the provisions of subparagraph b of this Section.

120. New Construction: —Structures for which the “start of construction” commenced on or after the effective date of this Code and includes any subsequent improvements to such structures.

~~112.~~121. 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 CTUIR. The floodplain functions of floodplain storage, water quality, and vegetation must be maintained.

~~113.~~122. Nonconforming Lot of Record: A plot of land which is smaller than the minimum area required in a particular zone and which either was a tax lot of record or was a lot in a recorded subdivision or trust partition on the date of the adoption of this Code.

~~114.~~123. Nonconforming Structure or Use: A lawful existing structure or use at the time this Code or any amendment thereto becomes effective, which does not conform to the requirements of zone in which it is located and are found to be incompatible.

~~115.~~124. Nursery: An area where plants (trees and shrubs) are grown for transplanting, for use as stocks for budding and grafting, or for sale.

125. Off-Reservation Trust Land: Land held in trust by the United States for the benefit of the Confederated Tribes or its members located outside the boundaries of the Umatilla Indian Reservation.

126. Offsite: Mitigation occurring outside of the project area.

127. Onsite: Mitigation occurring within the project area.

~~116.~~128. 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 the soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas.

~~117.~~129. Owner: The owner of the title to real property or the authorized agent thereof having written notarized authorization recorded with the County Clerk, or the contract purchases of real property or record as shown on the last available complete tax assessment roll or county clerk's records. Does not include an interest created for security purposes.

~~118.~~130. Parcel: A unit of land that is created by a partitioning of land.

~~119.~~131. Parking Space: A durable, permanently surfaced and marked area, excluding paved area necessary for access, for the parking of a motor vehicle.

~~120.~~132. Partition: The act of partitioning land or an area or tract of land partitioned.

a) Major Partition: A partition which includes the actual creation of a road or street.

b) Minor Partition: A partition which does not require the creation of a road or street.

~~121.~~133. Partition Land: To divide an area or tract of land into two or three parcels within a calendar year when such area or tract of land exists as a unit or contiguous units of land under single ownership at the beginning of such year. "Partition Land" does not include divisions of land resulting from the creation of cemetery lots. "Partition Land" does not include the sale of a lot in a recorded subdivision, even though the lot may have been acquired prior to the sale with other contiguous lots of property by a single owner.

~~122.~~134. Pedestrian Access Way: A dedicated public pedestrian right-of-way as required in certain zones such as the Neighborhood Residential and Neighborhood Services zone to provide pedestrian access mid-block within a longer block.

135. Permit: A document issued by the Tribal Planning Office that authorizes the applicant to start construction (*see* "Start of Construction"), development, or use of the project for which the permit was issued and in the manner approved by the Tribal Planning Office.

~~123.~~136. Pervious Surface: Surfaces that allow rain and snowmelt to seep into the soil and gravel below. Pervious surface may also be referred to as permeable surface.

~~124.~~137. Plat, Subdivision: The final map, diagram, drawing, replat or other writing containing all the descriptions, locations, specifications, dedications, provisions, and information required by this code concerning a subdivision.

~~125.~~138. Pre-commercial Thinning: The removal of trees to reduce stocking and thereby accelerate growth on the more desirable trees; not for immediate financial gain.

~~126.~~139. Preliminary Drawing: A drawing of a proposed minor partition.

~~127.~~140. Prescribed Fire: Fire used as a management tool under specified conditions for burning a defined area.

~~128.~~141. Primary Use: The first use to which property is or may be devoted, and to which all other uses on the premises are derived as accessory or secondary uses. As used relative to dwelling units, the primary dwelling would be the first dwelling unit to be located on a specific parcel or lot.

~~129.~~142. Principal Use: The primary or predominant use to which the property is or may be devoted, and to which all other uses on the premises are necessary.

~~130.~~143. Public: The Confederated Tribes of the Umatilla Indian Reservation or assigned designees (BIA, Umatilla County, the State of Oregon, or other public agency).

~~131.~~144. Public Use: A use owned or operated by a public organization for the benefit of the public generally. This does not include landfill sites, garbage dumps or utility facilities.

~~132.~~145. Quasi-judicial: A zoning action entailing application of a general rule or policy to specific individuals or situations.

~~133.~~146. Range Improvement:—Physical improvement. Any structure or excavation to facilitate management of range or livestock.

147. Rangeland: Land on which the natural plant cover is composed principally of native grasses, forbs or shrubs valuable for forage. Land used for grazing by livestock and big game animals on which the natural potential climax community of plants is dominated by grasses, grass-like plants, forbs and shrubs.

~~134.~~148. 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.

~~135.~~149. Recreation Parks: An area designated by the landowner for picnicking or overnight camping and offered to the general public, whether or not a fee or charge is made for such accommodations.

~~136.~~150. Recreational Vehicle: _____ A vehicle which is:

- a. A motor home, camper, or travel trailer;
- b. designed as a temporary living quarters for recreation, emergencies, camping, travel, or seasonal use, but not for permanent occupation;
- c. licensed or intended by its manufacturer to be licensed for use on public highways (lack of a required license does not exempt a recreational vehicle from this definition);
- d. Built on a single chassis; and
- e. Designed to be self-propelled or permanently towable by a light duty truck.

~~137.~~151. Reserve Strip: A strip of property contiguous to a public way which is offered to the County or Tribe for street purposes, which offer is not accepted by the County until additional adjacent right-of-way is acquired by the County, and across which the access rights are abandoned until such time as the additional adjacent Right-of-way is acquired by the County.

~~138.~~152. Residential: Any dwelling unit or group of units built or used for human occupancy.

~~139.~~153. Right-of-way: The area between the boundary lines of a street, road, or other easement.

~~154.~~ Riparian: Of, adjacent to, or living on, the bank of a river, lake, pond, or other water body.

~~155.~~ Riparian Areas: Those areas associated with varying amount of surface water and a vegetative complex dependent upon water. Also, those lands adjacent to creeks, streams, lakes, ponds, and rivers where the vegetation is strongly influenced by the presence of water.

~~156.~~ 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) to 170 feet horizontally on each side of the stream. 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.

~~140.~~157. Riparian Buffer Zone Fringe: The area outside of the RBZ and floodway but still within the Special Flood Hazard Area.

~~141.~~158. Road or Street: A public or private way actually created to provide ingress or egress for persons to one or more lots, parcels, areas of tracts of land, excluding a private way created to provide ingress or egress to such land in conjunction with the use of such land for forestry, mining or agricultural purposes.

~~142.~~159. Roadway: The portion of a street, right-of-way developed for vehicular traffic.

~~143.~~160. Sale or lease: Every disposition or transfer of land in a subdivision or an interest or estate therein, by a subdivider or developer or their agents. Includes the offering of land as a prize or gift when a monetary charge or consideration for whatever purposes is required by the subdivider, developer or their agents.

~~144.~~161. Sanitary Landfill: Shall be an area regulated by the Confederated Tribes for the purpose of dumping refuse, including incineration, reduction or dumping of ashes, animals, garbage, combustible and non-combustible materials.

~~145.~~162. Scenic Area: Land and other natural features that are valued for their aesthetic values and appearance.

~~146.~~163. School: _____ A place or institution for the instruction of children in a setting other than their primary place of residence; also, an institution for instruction in a skill or business. A school includes the building or group of buildings in which instruction is given or in which students work and live.

~~147.~~164. Semi-Public Use: A structure or use commonly intended for a semi-public purpose such as assembly or accessory use, by a church, lodge, club or other non-profit organization.

~~148.~~165. Setback: The minimum allowable horizontal distance from a given point or line of reference, such as property line, to the nearest vertical wall or other element of a building or structure as defined herein.

~~149.~~166. Sidewalk: A pedestrian walkway with permanent surfacing.

~~150.~~167. Sign: A name identification, description, display or illustration, which is affixed to or painted or represented directly or indirectly upon a building or other outdoor surface or piece of land and which directs attention to an object, product, place, activity, person, institution, organization or business. All signs within the Umatilla Indian Reservation are administered under Chapter 18 of this Code and the following are the definitions applicable:

- a) Advertising Sign: A sign which directs attention to a business, commodity, service or entertainment sold, manufactured or offered.
- b) Area: A total or whole considered with reference to its constituent parts.
- c) Awning sign: A sign constructed of a fabric-like non-rigid material which is part of a fabric or plastic awning. Awning signs constructed of a flammable substance are prohibited.
- d) Banner: Any sign made of a flexible fabric-like material except an awning sign.
- e) Billboard: An advertising sign used as an outdoor display for the purpose of directing attention to a business, commodity, service or entertainment sold, manufactured or offered at a location other than the location of the billboard sign.
- f) Border: A strip along the edges of a sign that out-lines the display.
- g) Canopy: Any shelter-like structure attached to a building and projecting over public or private property.
- h) Commercial/Business Sign: Signs which are placed on buildings listing the name of one or more businesses, activities, products, or professional offices conducted or sold within a building, group of buildings, or commercial center.
- i) Construction Sign: Sign which identifies firms or builders which are erected on the construction site prior to or during the period of construction.
- j) Directional Sign: An on-premises or off-premise sign which carries no advertising message but simply the name or logo of an establishment and information directing persons to parking areas, entrance or exit ways, etc.
- k) Directory Sign: A free-standing sign which contains or lists the names of businesses, activities or offices located within a building, group of buildings, commercial center or geographic area.
- l) Faces: The direction in which a display is aimed.

- m) Festival Sign: Signs which are placed to commemorate or attract attention to a festival recognized by the Tribe.
- n) Free Standing Sign: A sign that is not attached to any building structure. Such signs shall include, but not be limited to, signs mounted on poles.
- o) Ground Sign: A sign which is mounted on an extends from the ground.
- p) Holiday Decorations: Normal and reasonable decorations associated with the celebration of a nationally or Tribally recognized holiday.
- q) Identification Sign: A sign which carries no advertising message and is used to identify the name of a residence, institution, profession, or non-retail business occupying the premises on which the sign is located.
- r) Illuminated Sign: A sign that is illuminated by electric of other devices mainly for clear visibility at night.
- s) Marquee Sign: A sign affixed to a hood or projecting roof structure over the entrance to a building, store, or place of public assembly with changeable letters.
- t) Natural Grade: The highest elevation at which the base of the sign and the ground meet.
- u) Outdoor Advertising Device: Twirling, balloons, flags, lights and other similar materials used to attract attention.
- v) Political Sign: A sign attracting attention to political candidates or issues during an election campaign.
- w) Portable Sign: A sign which rests on the ground or other surface, but is not directly attached to such surface, and which is designed or constructed to be mobile or movable.
- x) Principal Sign: A primary permanent on-premise sign designed primarily to identify or advertise a business or facility to motorists and pedestrians.
- y) Reader Board: A permanent sign affixed either to the wall of a structure or to an existing free-standing sign which is composed of a surface to which letters may be attached on a temporary basis. Reader boards shall not serve as a substitution for identification signs.
- z) Roof Line: The highest point of the roof of the building or structure.
- aa) Roof Sign: A sign constructed upon the roof of a building.
- bb) Sign, Flashing: Any illuminated sign on which the artificial light is not maintained stationary and/or constant in intensity and color at all times when such sign is in use. For the purpose of this code any moving, illuminated sign shall be considered a flashing sign.
- cc) Sign Surface Area: The display area of a sign as measured by the shape of the sign including any border or trim and all elements of the matter displayed, but excluding the base or apron, supports or other structural members.
- dd) Temporary Sign: A sign that can be used for a limited period of time as specified by this code.
- ee) Traffic Signs: A sign indicating federal, state, or tribal regulations for automobile, truck, bicycle or pedestrian traffic.
- ff) Tribe: The Confederated Tribes of the Umatilla Indian Reservation.
- gg) Wall Sign: A sign affixed to the surface of the exterior wall of a building, or which forms an angle of less than thirty (30) degrees with such wall and does not project out from the wall more than twenty-four (24) inches. No wall sign shall extend above the roof line of the building upon which it is located. In cases of flat roofs,

no sign shall extend above the parapets. Mansard roofs with an angle of sixty (60) degrees or more from horizontal shall be considered as wall space for the placement of graphics.

~~151.~~168. Site Plan: A plan prepared to scale, showing accurately and with complete dimensioning, all property lines, easements, and required separation distances between the proposed structures, property lines, streams, and utility improvements.

~~152.~~169. Small Scale Solar Project: A solar power project that does not exceed 3 MW.

~~153.~~170. Solar Power Project: A solar photovoltaic facility for electrical energy generation where energy generation exceeds that allowed under Net Metering. Facilities typically consisting of ground or roof-mounted solar panels and electrical equipment to convert the energy to transmissible electrical power for use off site.

~~154.~~171. Special Flood Hazard Area (SFHA): The land in the ~~flood plain~~floodplain subject to a one percent ~~or greater~~ chance of flooding in any given year. Designation on Flood Insurance Rate Maps always includes the letter “A.” “Special flood hazard area” is synonymous in meaning and definition with the phrase “area of special flood hazard,” and “Flood Hazard Overlay Zone.”

~~155.~~172. Start of Construction:

- a. Generally: The date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement commenced within 180 days of the permit issuance date. Includes “substantial improvement.” Otherwise, the start of construction shall be the actual start of construction, as defined below.
- b. Actual Start: Either the first placement of a permanent part of a structure on a site, such as the pouring of a slab or footings, installation of piles, construction of columns, any work beyond the stage of excavation, or the placement of a manufactured structure on a foundation. Land preparation, such as clearing, grading and filling, excavation for a basement, footings, piers, foundations or the erection of temporary forms shall not be considered the actual start of construction. For substantial improvements, the actual start of construction shall be 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.

~~156.~~173. Stream: A natural water course with a definite bed, banks, and zone of riparian vegetation as it existed under natural conditions. Any act of obliteration of the bed, banks, or vegetation of a stream does not cancel the existence of the stream, if natural processes will in the course of time and in the absence of human interference restore it to a condition similar to that existing prior to such act of obliteration.

~~157.~~174. Structural Alteration: Any change in the supporting members of a building, such as bearing wall, column, beam or girder, floor or ceiling joist, roof rafters, roof diaphragms, foundations, piles, or retaining walls or similar components.

~~158.~~175. Structure: Anything constructed or built, any edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner, which requires location on the ground or is attached to something having a location on the ground, including swimming and wading pools and covered patios, excepting outdoor areas such as paved areas, driveways, walks and fences. For floodplain management purposes, a structure (in the Special Flood Hazard Area): ~~includes a~~ walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home or dwelling.

~~159.~~176. Structure Height: The vertical distance from the average contact ground level of the structure to the highest point of the structure.

~~160.~~177. Subdivide Land: To divide an area or tract of land into four or more lots within a calendar year, when this area or tract of land exists as unit or contiguous units of land under single ownership at the beginning of that year.

~~161.~~178. Subdivider: Any person who causes land to be subdivided into a subdivision for himself or for others, or who undertakes to develop a subdivision but does not include a public agency or officer authorized by law to make subdivisions.

~~162.~~179. Subdivision: An area or tract of land divided into four or more lots within a ten year time period beginning from the date of approval of a land partition, when this area or tract of land exists as a unit or contiguous units of land under single ownership at the beginning of that time period.

~~163.~~180. Subdivision Review Committee: A committee as set forth in subsection of the Subdivision Manual to review subdivision and other development proposal.

~~164.~~181. Substantial Damage: Damage of any origin sustained by a structure whereby the cost of restoring the structure to its pre-damage condition would equal or exceed 50 percent its pre-damage market value.

~~165.~~182. Substantial Improvement: Any repair, reconstruction, or improvement to a structure, the cost of which equals or exceeds 50 percent of its market value either:

- a. Before the improvement or repair is started; or
- b. If the structure has been damaged and is being restored, before the damage occurred; but not including either:
 1. Improvement to a structure to correct a violation of a tribal statute which has been identified by the tribal official responsible for the administration of the statute and is the minimum improvement necessary to comply with the statute, or
 2. Alteration of a structure listed on the National Register of Historic Places or the Tribal Inventory of Historic Places.
- c. Substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

~~166.~~183. Surface Mining: Includes all or any part of the process of mining minerals by the removal of overburden and extraction of natural mineral deposits thereby exposed by any method by which more than 50 cubic yards of minerals are extracted (does not include excavation for a basement, footings, piers or foundations associated with the construction of a structure) or by which at least one acre of land is affected within a period of 12 consecutive calendar months, including open pit mining operations, auger mining operations, river gravel extraction, production of surface mining refuse, the construction of adjacent or off-site borrow pits (except those constructed for use as access roads), and prospecting and exploration activities coming within the quantity or area specification set forth herein or when such activities affect more than one acre of land for each eight acres of land prospected or explored; but excluding excavations of sand, gravel, clay or other similar materials conducted by the landowner or tenant for the primary purpose of construction, reconstruction or maintenance of access roads and excavation or grading operations conducted in the process of farming or cemetery operations, on-site road construction or other on-site construction, or underground mines.

~~167.~~184. Temporary Use: The purpose for which land or a structure is designated, arranged or intended, or for which it is occupied or maintained for six months or less.

~~168.~~185. Tentative Map: A map setting forth the proposed plan or a major partitioning in conformance with the provisions of this Code and subject to review and modification.

~~169.~~186. Tentative Plan: A preliminary map, drawing or chart of the subdivision, dedication, or portion thereof, containing the elements and requirements set forth within this Code and which the subdivider submits for tentative approval at a public hearing.

~~170.~~187. Timber Harvest: The removal of timber from parent property in an amount greater than 5,000 board foot gross volume.

- ~~171.~~188. **Trailer Park:** A parcel of land upon which two or more trailers occupied for dwelling or sleeping purposes are located, regardless of whether a charge is made for such accommodations.
- ~~172.~~189. **Tribal Planning Office:** The Office of the Confederated Tribes of the Umatilla Indian Reservation, under the direction of the Comprehensive Planning Manager, which is responsible for planning, maintenance, research, enforcement, and administration of the Land Development Code. Other duties of the office include environmental health, and building inspection services.
190. **Trust Land:** Means any land in which the legal title is in the United States and beneficial or equitable title in the Tribe or an Indian Allottee.
- ~~173.~~191. **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.
- ~~174.~~192. **Use:** The purpose for which land or a structure is designed, arranged or intended, or for which it is occupied or maintained.
- ~~175.~~193. **Utilities:** Include electric, telephone, natural gas, water, sewer and other services that provide energy, communication, or sanitation needs.
- ~~176.~~194. **Utility facility:** A building necessary for the transmission, maintenance, and/or function of a utility, where personnel are only periodically present to maintain or upgrade equipment. Utility Facilities do not include “Wind Power Generation Facility” or “Net Metering Facility.”
- ~~177.~~195. **Value:** The market value of the property at the time and place of the violation, or if such cannot be reasonably ascertained, the cost of replacement of the property within a reasonable time after the violation.
- ~~178.~~196. **Variance:** An authorization granted by the Land Protection Planning Commission for an action or development which is otherwise prohibited by the Land Development Code.
- ~~179.~~197. **Veterinary Clinic:** A business established in which veterinary services are rendered to domestic animals.
- ~~180.~~198. **Violation:** The circumstances which exist when the required approval for a land use or practice has not been granted and the violator has commenced the use or practice.
- ~~181.~~199. **Violator:** Any person, including but not limited to the landowner, timber or crop owner, equipment operators, and building contractors, who commits a violation.
- ~~182.~~200. **Water Dependent:** A structure or use which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.
- ~~183.~~201. **Water Well:** Any artificial opening or artificially altered natural opening, however made, by which ground water is sought or through which ground water flows under natural pressure, providing that this definition does not include a natural spring, or is artificially withdrawn or injected. The well includes the borehole, casing, casing seal, well cap, access port, and where used or required liner pipes, screens, and pressure gauge.
- ~~184.~~202. **Wind Power Generation Facility:** An energy facility that consists of one or more wind turbines or other such devices and their related or supporting facilities that produce electric power from wind for sale or use off-site and are:
- a. Connected to a common meter, control or dispatch, switching station; or
 - b. Constructed, maintained, or operated as a contiguous group of devices.
- ~~185.~~203. **Winter Range:** Are those area that are utilized by big game during the winter months.

~~186.204.~~ Yard, Front: An open space extending the full width of the lot between a building and the front lot line, unoccupied and unobstructed from the ground upward except as specified elsewhere in this Code. Distances referred to throughout this Code shall constitute building setback requirements.

~~187.205.~~ Yard, Rear: An open space extending the full width of the lot between a building and the rear lot line, unoccupied and unobstructed from the ground upward, except as specified elsewhere in this Code.

~~188.206.~~ Yard, Side: An open space extending from the front yard to the rear yard between a building and the nearest side lot line, unoccupied and unobstructed from the ground upward, except as specified elsewhere in this Code.

~~189.207.~~ Zone: A specifically delineated area or district within which regulations and requirements uniformly govern land use, placement, spacing, lot area and buildings.

~~190.208.~~ Zoning Map: See Master Zoning Map.

SUB-CHAPTER M. FHO -- FLOOD HAZARD OVERLAY ZONE

SECTION 3.294 GENERAL INFORMATION:

The flood hazard areas of the Umatilla Indian Reservation 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. These flood losses are caused by the cumulative effect of changes in stream morphology, bedload (size, density, roughness of material), slope and related sinuosity of the stream, and in changes in carrying capacity of the stream due to the placement of fill material or other development in areas of special flood hazards, which increase flood heights and velocities, [harms habitat critical to protected species](#), and when structures and materials are inadequately anchored, damage uses and properties in other areas. Uses that are placed in harm's way, inadequately floodproofed, elevated, or otherwise protected from flood damage also contribute to flood loss.

SECTION 3.295 PURPOSE:

The purpose of the Flood Hazard Overlay Zone ([FHOZ](#)) is to promote and protect the public health, safety and general welfare, to protect soils, water quality, and quantity, to maintain and improve fish and wildlife habitat and minimize public and private flood losses due to flood, mudflow or flood-related erosion by provisions designed to:

1. Restrict or prohibit uses which are dangerous to health, safety, or property in times of flood, mudslide and flood-related erosion hazards or which cause increased susceptibility to damage from these events;
2. Require that uses vulnerable to floods, mudslide and flood-related erosion hazards, including public facilities which serve such uses, locate or install such facilities as may be necessary for flood protection at the time of initial construction;
3. Ensure that potential buyers are notified when property is in a Special Flood Hazard Area;
4. Minimize the expenditure of public money for costly flood control projects;
5. Minimize the need for rescue and relief efforts associated with flooding, mudslide and flood-related erosion hazards and generally undertaken at the expense of the general public;
6. Minimize interruptions to commerce;
7. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines as well as streets and bridges located in a Special Flood Hazard Area;
8. Ensure that those who occupy the Special Flood Hazard Areas assume responsibility for their actions;
9. [Protect Tribal resources;](#)
- 9.10. [Preserve natural and beneficial floodplain functions;](#)
- 10.11. Afford citizens and residents of the Umatilla Indian Reservation the opportunity to obtain flood insurance through the National Flood Insurance Program by ensuring compliance with 44 CFR 60, Requirements for Flood Plain Management Regulations; and
- 11.12. Minimize pain and suffering resulting from flooding and its aftermath.

SECTION 3.300 COMPLIANCE:

A lot may be used and a structure or part of a structure may be constructed, reconstructed, altered, occupied or used in a ~~Flood Hazard Overlay Zone~~[FHOZ](#) only as these overlay standards permit or allow (see Chapter 15, Enforcement Procedures).

SECTION 3.305 LOCATION OF FLOOD HAZARD OVERLAY ZONE:

1. The ~~Flood Hazard Overlay Zone~~FHOZ shall be the Special Flood Hazard Areas as identified by the Federal Insurance Administration in the “Flood Insurance Study for Umatilla County Oregon and Incorporated Areas” dated September 3, 2010, a scientific and engineering report which includes the Umatilla Indian Reservation, as may be amended from time to time, with the accompanying Flood Insurance Rate Maps (FIRMs), [panels 1036G; 1041G; 1042G; 1061G; 1062G; 1066G; 1067G; 1078G; 1086G; 1079G; 1087G; 1083G; 1091G; 1084G; 1092G; 1103G; 1102G; and 1104G](#) also as may be amended and adopted by the Board of Trustees. The FIRMs and Flood Insurance Study (FIS) shall be available for review at the Tribal Planning Office.
2. Where base flood elevation (BFE) data has not been provided in accordance with Subsection 1 of this Section the Comprehensive Planning Manager shall obtain, review and reasonably utilize any flood elevation data available from a federal, state or other source in order to administer development and uses within potential special flood hazard areas. If no base data exists, the Development Permit applications shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness shall be made through the use of historical data, high-water marks, photographs of past flooding, etc., where available.

SECTION 3.306 FLOODWAYS:

1. Fill, substantial improvements, and other development shall be prohibited unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments will not result in any increase in flood levels during the occurrence of the base flood discharge and that there is a substantial public need.
2. If the preceding subsection is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this subchapter.

SECTION 3.307 BEFORE FLOODWAY:

In areas where a floodway has not been designated, no fill, new construction, substantial improvements, or other development shall be permitted within Zones AE 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 by more than one tenth of a foot at any point within the community.

SECTION 3.308 STANDARDS FOR PROTECTION OF SFHA FLOODPLAIN FUNCTION

Adherent to the National Marine Fisheries Service (NMFS) 2016 Biological Opinion, mitigation is necessary to ensure a no net loss in floodplain functions. The Federal Emergency Management Agency (FEMA)’s 2024 Draft Oregon Implementation Plan identifies proxies that provide measurable action 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. The standards described below apply to all special flood hazard areas as defined in Section 2.020.

SECTION 3.309 NO NET LOSS STANDARDS:

1. No net loss of the proxies for the floodplain functions mentioned below 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 of 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 permit, the applicant shall provide the Planning Office with an affidavit stating:
 - a. A legal right by the project proponent to implement the proposed activities to achieve no net loss (e.g., property owner agreement);
 - b. Property owner's assurance that financial and management means are in place for the long-term maintenance and monitoring of the project to achieve no net loss;
 - c. The property owner understands that they must maintain a Mitigation Area Management Plan on the premises at all times, including the title of the responsible site manager (e.g. property owner, or role with in a business, organization, or trust), stipulating what activities are allowed on site, and posting of signage identifying the site as a mitigation area.
 - d. The affidavit must be recorded, and must bind subsequent purchasers and sellers even if they were not party to the original agreement.
2. 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.
3. 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.

Table 1: No Net Loss Standards

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

Notes: **Riparian Buffer Zone (RBZ)** impacts must be offset in the RBZ, on-site or off-site. Additional standards may apply in the RBZ (See: Section 3.312 Riparian Buffer Zone)

4. Undeveloped Space

- a. Development proposals shall not reduce the fish-accessible 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 space.
- c. Lost undeveloped space must be replaced with fish-accessible 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 elevation 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.

5. Impervious Surfaces

- a. Impervious surface mitigation shall be mitigated through any of the following options:
 - i. Development proposals shall not result in a net increase in impervious surface area within the SFHA, or
 - ii. Use green infrastructure to infiltrate and treat stormwater produced by the new impervious surface, as documented by a licensed engineer, or
 - iii. If prior methods are not feasible and documented by a licensed engineer, stormwater retention is required to ensure no increase in peak volume or flow and to maximize infiltration, and treatment is required to minimize pollutant loading. See Section 3.318 for stormwater retention specifications.

6. Trees

- a. Development proposals shall result in no net loss of trees 6-inches dbh or greater within the special flood hazard area. This requirement does not apply to forest management activities consistent with the CTUIR Forest Management Plan and completed in consultation with the CTUIR Range, Agriculture and Forestry Program, provided there is no other development.

- i. Trees exceeding 6-inches dbh that are removed from the RBZ, Floodway, or RBZ-fringe must be replaced at the ratios in Table 1.
 - ii. Replacement trees must be native species that would occur naturally in the Level III ecoregion of the impact area.
- 7. Compliance with No Net Loss Standards by agreement with off-site habitat restoration projects
 - a. Compliance with the No Net Loss Standards may be met by written agreement between the developer and the habitat restoration projects under the following conditions:
 - i. The habitat restoration must occur within the same watershed and in the footprint of the DFIRM Floodplain Map most recently adopted by CTUIR, within the boundaries of the Umatilla Indian Reservation;
 - ii. The party performing habitat restoration provides a map and description of the habitat restoration to be conducted, including the tax lot or allotment number, and the elevation and reach of the DFIRM Floodplain Map;
 - iii. The party performing habitat restoration demonstrates compliance with all provisions of the No Net Loss requirements;
 - iv. The party performing habitat restoration accepts responsibility for the delay multiplier stated in Section 3.309.2 above, and agrees to increase the footprint of mitigation each year of delay following the issuance of the relevant Development Permit;
 - v. A single tax parcel or allotment may only be affiliated with development mitigation for one Development Permit at a time until all habitat restoration affiliated with that Development Permit has been completed.
 - vi. The Applicant must provide written agreement acknowledging conditions i-v above signed by the property owner and the party conducting habitat restoration prior to the issuance of a Development Permit.

SECTION 3.310 STORMWATER MANAGEMENT:

- 1. Any development proposal that cannot mitigate as specified in Section 3.317.5 must include the following:
 - a. Water quality (pollution reduction) treatment for post-construction stormwater runoff from any net increase in impervious area; and
 - b. Water quantity treatment (retention facilities).
 - c. Retention facilities must:
 - i. Limit discharge to match the pre-development peak discharge rate (i.e. the discharge rate of the site based on its natural groundcover and grade before any development occurred) for the 10-year peak flow using a continuous simulation for flow between 50 percent of the 2-year event and the 10-year flow event (annual series).

- ii. Treat stormwater to remove sediment and pollutants from impervious surfaces such that at least 80 percent of the suspended solids are removed from the stormwater prior to discharging to the receiving water body.
 - iii. Be designed to not entrap fish and drain to the source of flooding.
 - iv. Be certified by a licensed engineer.
 - d. Stormwater treatment practices for multi-parcel facilities, including subdivisions, shall have an enforceable operation and maintenance agreement to ensure the system functions as designed. This agreement will include:
 - i. Access to stormwater treatment facilities at the site by the Confederated Tribes of the Umatilla Indian Reservation for the purpose of inspection and documentation of repairs needed.
 - ii. A legally binding document specifying the parties responsible for 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 Confederated Tribes of the Umatilla Indian Reservation for five years.

SECTION 3.311 ACTIVITIES EXEMPT FROM NO NET LOSS STANDARDS:

The following activities are not subject to the no net loss standards in section 3.317; however, they may not be exempt from floodplain development permit requirements.

1. Normal maintenance of structures, such as re-roofing and replacing siding, provided there is no change in the footprint or expansion of the roof of the structure;
2. Normal street, sidewalk, and road maintenance, including filling potholes, repaving, and installing signs and traffic signals, that does not alter contours, use, or alter culverts and is less than six inches above grade. Activities exempt do not include expansion of paved areas;
3. Routine maintenance of landscaping that does not involve grading, excavation, or filling;
4. Routine agricultural practices such as tilling, plowing, harvesting, soil amendments, and ditch cleaning that does not alter the ditch configuration provided the spoils are removed from the Special Flood Hazard Area or tilled into fields as a soil amendment;
5. Routine forest management practices consistent with the CTUIR Forest Management Plan that do not meet the definition of development, including harvesting of trees as long as root balls are left in place; and forest road construction or maintenance that does not alter contours, use, or alter culverts and is less than six inches above grade;
6. Removal of noxious weeds and hazard trees, and replacement of non-native vegetation with native vegetation;

7. Normal maintenance of above ground utilities and facilities, such as replacing downed power lines and utility poles provided there is no net change in footprint;
8. Normal maintenance of a levee or other flood control facility prescribed in the operations and maintenance plan for the levee or flood control facility. Normal maintenance does not include repair from flood damage, expansion of the prism, expansion of the face or toe or additional protection on the face or toes with rock armor.
9. Habitat restoration activities.

SECTION 3.312 RIPARIAN BUFFER ZONE (RBZ):

1. The ~~Riparian Buffer Zone~~RBZ is measured from the ordinary high-water line of a fresh waterbody (lake; pond; ephemeral, intermittent, or perennial stream) to 170 horizontally on each side of the waterbody. The ~~Riparian Buffer Zone~~RBZ includes the area between these outer boundaries on each side of the stream, including the stream channel.
2. Habitat restoration activities in the RBZ are considered self-mitigating and are not subject to the no net loss standards described above.
3. 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.
4. 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.
5. 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 spaces.

SECTION 3.315 LIMITATIONS ON ALL USES:

No structural fill (temporary or permanent), including fill for roads, levees, deposits, obstructions, storage of materials or equipment, or other uses shall be permitted in a Special Flood Hazard Area, which acting alone or in combination with existing or future uses affects the efficiency or capacity of the floodway or increases flood heights.

SECTION 3.320 LIMITATIONS ON FILL:

1. Any fill proposed to be deposited in a Special Flood Hazard Area must have a substantial beneficial purpose as allowed and permitted by this Code and the amount must not be greater than is necessary to achieve that purpose, as demonstrated by a plan submitted according to section 3.335, "Procedure," found in this subchapter.
2. Such fill or other material shall be protected against erosion by rip-rap, vegetative cover or bulkheading sufficient to withstand hydraulic forces of a high water event one foot above a Base Flood. Such protection shall be established with pre-construction drawings with an engineers stamp and statement verifying the design for this purpose.
3. Fill material shall not contain solid waste materials or contaminants. Fill shall be limited to rock, sand, gravel and soil to the extent necessary to establish vegetation for the purpose of preventing erosion and retaining fill material on site.
4. If fill is placed in a floodway, Section 3.306 must be satisfied to demonstrate the encroachment will not result in any increase in flood levels during the occurrence of the base flood discharge. Where placement of fill cannot meet this requirement, impacts to undeveloped space must adhere to the no net loss standards in Section 3.309(4)

SECTION 3.325 LIMITATIONS ON STRUCTURES:

1. Land partition or subdivision lots intended as a site for a structure for human occupancy shall contain a building site and access road with a ground level elevation no lower than one foot above the elevation of a Base Flood; be accessible to a roadway, no portion of which is less than one foot above the elevation of a Base Flood; replacement of water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system; [comply with the No Net Loss standards in Section 3.309](#); and any on-site waste disposal systems existing or permitted shall be located to avoid impairment to them or contamination from them during flooding. Where Base Flood elevations do not exist, Base Flood elevation data shall be provided by the applicant for subdivision and land partition proposals or other proposed developments in a Special Flood Hazard Area.
2. A permitted structure in a Special Flood Hazard Area shall be constructed and placed on the building site to offer the minimum obstruction to the flow of flood waters. Whenever possible, structures shall be constructed with the longitudinal axis parallel to the direction of flood flow and shall be placed approximately on the same flood flow lines as those of adjoining structures.
3. Anchoring: All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
4. 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.
 - c. Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and elevated or located to prevent water from entering or accumulating within the components during conditions of flooding.
5. Utilities:
 - a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
 - b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters; and
 - c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

SECTION 3.326 RESIDENTIAL STRUCTURES:

1. New construction or substantial improvement of any residential structure shall have the lowest support structure, beam or joist, including basement floor, elevated at least 12 inches (one foot) above the base flood elevation.
2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must be certified by a registered professional engineer or architect, or must meet the following minimum criteria:
 - a. A minimum of two openings having an area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
 - b. The bottom of all openings shall be no higher than one foot above grade; and

- c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.
3. No residential structure shall be placed within a Special Flood Hazard Area designated as a floodway.

SECTION 3.327 MANUFACTURED STRUCTURES:

1. All manufactured structures to be placed or substantially improved shall be elevated on a permanent foundation, reinforced piers or a combination of the two so that the bottom of the longitudinal chassis frame is at least 12 inches (one foot) above the Base Flood Elevation, is securely anchored to an adequately designed foundation system to resist floatation, collapse and lateral movement, and shall be installed using methods and practices which minimize flood damage. Methods of anchoring may include but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to other anchoring requirements for resisting wind forces.
2. For existing manufactured home parks and for manufactured structures not placed in a manufactured home park where the cost estimate or actual contract costs, whichever is greater, for repairs, reconstruction, or improvements of the streets, utilities and pads equals or exceeds fifty (50%) percent of the value of the streets, utilities and pads to be repaired, reconstructed or improved:
 - a. Pads or lots shall be elevated on compacted fill at least one foot above the Base Flood elevation;
 - b. Access for a hauler shall be provided;
 - c. In the instance of elevation on pilings:
 - i. Piling foundations shall be placed in stable soil no more than ten feet apart;
 - ii. Reinforcement adequate to resist hydrostatic loads shall be provided for pilings more than six feet above the ground level; and
 - iii. i and ii above shall be designed to withstand water, wind, mudflow and flood related erosion as evidenced by drawings and an engineer's stamp verifying the durability of the pilings to withstand projected forces on the foundation and utility connections.
 - d. No manufactured structure shall be placed within a Special Flood Hazard Area designated as a floodway.

SECTION 3.328 NONRESIDENTIAL CONSTRUCTION:

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall have the lowest floor elevation 12 inches (one foot) above Base Flood Elevation as measured from the concrete pad or bottom of the floor joists or floor insulation, whichever provides the greatest elevation; or together with attendant utility and sanitary facilities shall;

1. Be floodproofed so that below one foot above the Base Flood Elevation the structure is watertight with walls substantially impermeable to the passage of water;
2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural

design, specifications and plans. —Such certifications shall be provided to the Comprehensive Planning Manager as set forth in Section 3.335(1)(g)(ii).

4. Nonresidential structures that are elevated and not floodproofed must meet the same standards for space below the lowest floor as described in Section 3.326(2).
5. Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on one foot below the floodproofed level.

SECTION 3.329 RECREATIONAL VEHICLES:

Recreational vehicles placed on [FHOZ](#) sites are required to:

1. Be on the site for fewer than 180 consecutive days;
2. Be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; and
3. Be removed from the flood hazard area during periods of forecast high water or actual high water events.

SECTION 3.330 LIMITATIONS ON STORAGE OF MATERIAL AND EQUIPMENT:

1. The storage or processing of materials that are buoyant, flammable, explosive or that could be injurious to human, animal or plant life in time of flooding is prohibited in a Special Flood Hazard Area.
2. Storage of other material or equipment may be allowed in a Special Flood Hazard Area if not subject to major damage by floods, if firmly anchored to prevent flotation, or if readily removable from the area within the limited time available after flood warning. If material or equipment is stored with the intent to be removed from the Special Flood Hazard Area during a flood warning or actual flood event, the owner of the land shall establish a removal plan indicating what and how the material or equipment is to be removed, and the location where the material will be moved. The owner shall also have available at all times the capacity to carry out the removal plan. The plan shall be available for inspection by the Comprehensive Planning Manager and the owner shall be able to demonstrate the adequacy of the plan. Plans found by the Comprehensive Planning Manager to be inadequate shall be revised to meet this standard or the material and equipment shall be removed from the Special Flood Hazard area within 30 days of the finding of inadequacy and a subsequent removal order.

SECTION 3.332 SUBDIVISION PROPOSALS:

1. All subdivision proposals shall be consistent with the need to minimize flood damage;
2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage;
3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and
4. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals.
5. Subdivisions shall not be allowed in the floodway.

SECTION 3.333 WATER DEPENDENT USES AND STRUCTURES:

Water dependent uses and structures shall be conditional uses. Such uses may include fish acclimation facilities, water control structures, water gathering and piping structures, treated water/wastewater outflow structures, and any other use or structure that may require placement in the Special Flood Hazard Area due to its unique water dependent nature.

SECTION 3.334 CRITICAL FACILITIES:

Construction of new critical facilities shall be located outside of the Special Flood Hazard Area (SFHA) (100 year floodplain).

SECTION 3.335 PROCEDURE:

The Comprehensive Planning Manager is hereby appointed to administer, implement, and enforce this ordinance by granting or denying development permits in accordance with its provisions pertinent to development within the Special Flood Hazard Area of the Umatilla Indian Reservation.

In a Special Flood Hazard Area, a lot may be developed or used only after the following requirements have been met and upon issuance of a Development Permit by the Tribal Planning Office (including manufactured homes):

1. An applicant shall submit with an application for a Development Permit sufficient evidence to indicate that the lowest floor elevation of a structure designed part of the structure will be at least one foot above Base Flood Elevation (BFE) as measured from the concrete pad or bottom of the floor joists or floor insulation, whichever provides the greatest elevation. A Development Permit is also required for all development as defined in this Code, including the placement of manufactured homes. This evidence shall include sketches showing:
 - a. The nature, location, dimensions and elevation of the lot, and its location in relation to the Floodway and the Special Flood Hazard Area;
 - b. Development plan showing existing and proposed elevations or contours of the ground; pertinent structure, fill or storage elevations; size, location and spatial arrangement of all proposed and existing structures on the site, location and elevation of streets and all existing and proposed underground facilities;
 - c. A typical valley cross-section showing the channel, of the stream, elevation of land areas adjoining each side of the channel, cross sections of areas to be occupied by the proposed development, and high-water information if appropriate, as determined by the Comprehensive Planning Manager;
 - d. Profile showing the slope of the bottom of the channel of flow line of the stream for a distance of not more than 0.5 miles up or down stream, if appropriate, as determined by the Comprehensive Planning Manager (this may be required especially for proposed development where the river is eroding near a cutbank or the river exhibits some other morphologic or hydrologic instability);
 - e. Specifications for building construction and materials, flood proofing, filling, dredging, grading, channel improvements, storage of materials, water supply and sanitation facilities;
 - f. Obtain and record the actual elevation (in relation to mean sea level) of the lowest habitable floor (including the basement) of all new or substantially improved structures, and whether or not the structure contains a basement and all other information required on the most current version of the Federal Emergency Management Agency Elevation Certificate, FEMA Form 81-31;
 - g. For all new or substantially improved flood proofed structures:
 - i. Verify and record the actual elevation (in relation to mean sea level) to which the structure was floodproofed;
 - ii. Maintain the flood proofing certifications.
2. An applicant shall submit with the application for a permit sufficient evidence concerning his construction methods and materials to indicate that minimum flood damage will occur in the event of inundation. This evidence shall be sufficient to indicate that:

- a. Proposed repairs and renovations will use materials and equipment that are resistant to flood damage, and construction methods and practices that will minimize flood damage;
 - b. New construction, including manufactured structures will be protected against flood damage, will be designed or modified and anchored to prevent flotation, collapse and lateral movement of the structure, will use materials and equipment that are resistant to flood damage, and will use construction methods and practices that will minimize flood damage.
3. All applications shall be reviewed to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.

SECTION 3.336 STANDARDS FOR SHALLOW FLOODING AREAS (AO) ZONES:

Shallow flooding areas appear on FIRMs as AO zones with depth designations. The base flood depths in these zones range from 1 to 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. In these areas the following provisions apply:

1. New construction and substantial improvements of residential structures within AO zones shall have the lowest floor, including a basement, elevated above the highest grade adjacent to the building, 12 inches or more above the depth number specified on the FIRM (at least 24 inches if no depth is specified). Manufactured homes shall have the bottom of the longitudinal chassis frame elevated above the highest adjacent grade 12 inches or more above the depth number specified on the FIRM (at least 24 inches if no depth is specified).
2. New construction and substantial improvements of nonresidential structures within AO zones shall either:
 - a. Have the lowest floor, including basement, elevated above the highest adjacent grade of the building site, 12 inches or more above the depth number specified on the FIRM; or
 - b. Together with attendant utility and sanitary facilities, be completely flood proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as in section 3.328(3); and shall
 - c. Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.
3. Recreational vehicles placed in sites within AO zones on the FIRM shall
 - a. Be on the site for fewer than 180 consecutive days;
 - b. Be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; and
 - c. Recreational vehicles are to be removed from the flood hazard area during periods of forecast high water or actual high water events.

SECTION 3.340 DESTRUCTION OF NONCONFORMING USE OR STRUCTURES:

If a non-conforming use or structure in a Special Flood Hazard Area is destroyed by any means, restoration, repair or replacement shall comply with the standards of this subchapter.

[...]

CHAPTER 8. VARIANCES

SECTION 8.010 AUTHORIZATION TO GRANT OR DENY VARIANCES:

The Land Protection Planning Commission may authorize variances from the requirements of this Code where it can be shown that owing to special and unusual circumstances related to a specific lot, strict application of the Code would cause an undue or unnecessary hardship. No variance shall be granted to allow the use of property for a purpose not authorized within the zone in which the proposed use would be located. In granting a variance, the Land Protection Planning Commission may attach conditions which it finds necessary to protect the interests of the surrounding property or vicinity or otherwise achieve the purposes of this Code.

SECTION 8.015 CIRCUMSTANCES FOR GRANTING A VARIANCE:

A variance may be granted only in the event that all of the following circumstances exist:

1. Exceptional or extraordinary circumstances apply to the property which do not apply generally to other properties in the same zone or vicinity and result from lot size or shape, topography or other circumstances over which the owners of property since enactment of this Code have had no control.
2. The variance is necessary for the preservation of a property right of the applicant substantially the same as possessed by the owners of other property in the same zone or vicinity.
3. The variance would not be materially detrimental to the purposes of this Code or to property in the same zone or vicinity in which the property is located or otherwise conflict with the objectives of any Reservation Plan or Policy.
4. The variance requested is the minimum variance which would alleviate the hardship.

[...]

SECTION 8.016 GRANTING A VARIANCE TO THE FLOOD HAZARD OVERLAY ZONE REQUIREMENTS:

1. In approving a variance to the standards of the Flood Hazard Overlay Zone, the Commission shall consider all technical evaluations, relevant factors and standards specified in other sections of this code; and
 - a. The danger that material may be swept onto other lands to the injury of others;
 - b. The danger to life and property due to flooding or erosion damage;
 - c. The susceptibility of the proposed development, including supplies and materials, to flood damage and the effect of such damage on the individual owner;
 - d. The importance to the community of the services provided by the proposed development;
 - e. The nature of the development necessitates its placement at a waterfront location in order to properly function, where applicable;
 - f. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - g. The proposed use is compatible with existing and anticipated development;
 - h. The relationship of the proposed use to the Comprehensive Plan;
 - i. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - j. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and

- k. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electricity, water systems, streets and bridges.
2. As with other variances, the Commission may attach such conditions to the granting of variances as it deems necessary to further the purposes of the Flood Hazard Overlay Zone.
3. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places without regard to the procedures set forth in the Flood Hazard Overlay Zone.
4. Variances shall not be granted within a designated floodway if any increase in flood levels during a base flood would result.
5. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
6. Variances shall only be granted upon:
 - a. Showing of good and sufficient cause;
 - b. Determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - c. 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 as identified in Subsection 1 of this Section or conflict with other existing laws.
7. Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. As such, variances from flood elevations should be quite rare.
- 7.8. 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 Flood Hazard Overlay Zone: undeveloped space; pervious surface; or trees 6 inches dbh or greater (see Section 3.309 and associated options in Table 1).
- 8.9. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria, and otherwise complies with Section 3.325(5) and 3.325(6).
- 9.10. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the Base Flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest flood elevation.

[...]

CHAPTER 19. FEE SCHEDULE

SECTION 19.100 ADMINISTRATIVE PERMITS:

- | | |
|---|---|
| 1. Development Permits | Based on International Building Codes fee schedule. |
| 2. Development Permit for a land use not requiring a building code inspection | \$25.00 |
| 3. Forest Practices Permit | \$25.00 |
| 4. Home Occupation Permit | No Fee |
| 5. Removal/Fill Permit | \$35.00 |

SECTION 19.200 PUBLIC HEARING REQUESTS

1.	Conditional Use	\$100.00
2.	Variance	\$100.00
3.	Zone Change	\$150.00
4.	Planned Unit Development	\$150.00
5.	Amendment to Comprehensive Plan	\$150.00
6.	Land Development Code Text Amendment	\$150.00

SECTION 19.300 SIGN REGULATIONS:

1.	All signs requiring a permit	\$50.00
2.	Home Business Identification signs	\$10.00
3.	Residential Subdivision Signs	\$10.00

SECTION 19.400 SUBDIVISION REQUESTS:

1.	Minor Partitions	\$35.00
2.	Major Partitions	\$35.00
3.	Subdivision	\$150.00

SECTION 19.500 APPEALS REQUESTS:

1.	Appeal Filing --	\$50.00
2.	Appeal Transcript --	Total cost shall be payed by the appealing party.

SECTION 19.600 SPECIAL PLAN REVIEW AND INSPECTIONS:

Plan reviews and inspections which are not covered by the standard codes administered by CTUIR staff (Building; Plumbing; Electrical; and Mechanical) shall be payed by the applicant. These special reviews and inspections may include, but are not limited to, elevators; fire/life safety; and habitat assesement review affiliated with development in the Flood Hazard Overlay Zone. Plan review fees must be paid prior to issuance of a Development Permit.



NFIP Oregon Implementation Program Guidance

Model Floodplain Management Ordinance

For Participating Communities in the
Implementation Plan Area

November 2024



FEMA

Federal Emergency Management Agency
Region X
Department of Homeland Security

Note to Communities: This document presents the draft model ordinance 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
OHW	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)

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.

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

786 **5.2.3.4 MANUFACTURED DWELLINGS**

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

800 **5.2.3.5 RECREATIONAL VEHICLES**

801 Recreational vehicles placed on sites are required to:

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

808 **5.2.3.6 APPURTENANT (ACCESSORY) STRUCTURES**

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

- 812 A. Appurtenant structures located partially or entirely within the floodway
813 must comply with requirements for development within a floodway
814 found in section 5.2.4;
- 815 B. Appurtenant structures must only be used for parking, access, and/or
816 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

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

6.1.3 TREES

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

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

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

6.2 STORMWATER MANAGEMENT

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

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

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

C. Retention facilities must:

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

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

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

iv. Be certified by a qualified professional.

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

i. Access to stormwater treatment facilities at the site by 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 and is less than six inches above grade. Activities exempt do not include expansion of paved areas;

C. Routine maintenance of landscaping that does not involve grading, excavation, or filling;

D. Routine agricultural practices such as tilling, plowing, harvesting, soil amendments, and ditch cleaning that does not alter the ditch configuration provided the spoils are removed from 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

1147 place and forest road construction or maintenance that does not alter
1148 contours, use, or alter culverts and is less than six inches above grade;

1149 F. Removal of noxious weeds and hazard trees, and replacement of non-native
1150 vegetation with native vegetation;

1151 G. Normal maintenance of above ground utilities and facilities, such as
1152 replacing downed power lines and utility poles provided there is no net
1153 change in footprint;

1154 H. Normal maintenance of a levee or other flood control facility prescribed in
1155 the operations and maintenance plan for the levee or flood control facility.
1156 Normal maintenance does not include repair from flood damage, expansion
1157 of the prism, expansion of the face or toe or addition of protection on the
1158 face or toe with rock armor.

1159 I. Habitat restoration activities.

1160 **6.4 RIPARIAN BUFFER ZONE (RBZ)**

1161 A. The Riparian Buffer Zone is measured from the ordinary high-water line of a
1162 fresh waterbody (lake; pond; ephemeral, intermittent, or perennial stream)
1163 or mean higher-high water of a marine shoreline or tidally influenced river
1164 reach to 170 feet horizontally on each side of the stream or inland of the
1165 MHHW. The riparian buffer zone includes the area between these outer
1166 boundaries on each side of the stream, including the stream channel.

1167 B. Habitat restoration activities in the RBZ are considered self-mitigating and
1168 are not subject to the no net loss standards described above.

1169 C. Functionally dependent uses are only subject to the no net loss standards for
1170 development in the RBZ. Ancillary features that are associated with but do
1171 not directly impact the functionally dependent use in the RBZ (including
1172 manufacturing support facilities and restrooms) are subject to the beneficial
1173 gain standard in addition to no net loss standards.

1174 D. Any other use of the RBZ requires a greater offset to achieve no net loss of
1175 floodplain functions, on top of the no net loss standards described above,
1176 through the beneficial gain standard.

1177 E. Under FEMA's beneficial gain standard, an area within the same reach of
1178 the project and equivalent to 5% of the total project area within the RBZ
1179 shall be planted with native herbaceous and shrub vegetation and
1180 designated as open space.
1181

1182 Table 1 No Net Loss Standards

Basic Mitigate Ratios	Undeveloped Space (ft³)	Impervious Surface (ft²)	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%

1183 Notes:

- 1184 1. Ratios with asterisks are indicated in the BiOp
- 1185 2. Mitigation multipliers of 100% result in the required mitigation occurring at the same value
- 1186 described by the ratios above, while multipliers of 200% result in the required mitigation
- 1187 being doubled.
- 1188 a. For example, if only 500 ft² of the total 1000 ft² of required pervious surface
- 1189 mitigation can be conducted onsite and in the same reach, the remaining 500 ft² of
- 1190 required pervious surface mitigation occurring offsite at a different reach would
- 1191 double because of the 200% multiplier.
- 1192 3. RBZ impacts must be offset in the RBZ, on-site or off-site.
- 1193 4. Additional standards may apply in the RBZ (See 6.4 Riparian Buffer Zone)

APPENDIX A: Section 6.0 Alternate Language to Achieve No Net Loss

6.0 STANDARDS FOR PROTECTION OF SFHA FLOODPLAIN FUNCTIONS

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. 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 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.
- 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.
- 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 habitat and flood storage volume created by undeveloped space within the special flood hazard area. A development proposal with an activity that would impact undeveloped space shall achieve no net loss of fish-accessible and egress-able space and flood storage volume.
 - i. Lost undeveloped space must be replaced with fish-accessible and egress-able compensatory volume based on the ratio in Table 1.

- ii. Hydrologically connected to the waterbody that is the flooding source;

6.1.2 Designed so that there is no increase in velocity 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 through the use of ratios prescribed in Table 1, or
- B. Use low impact development or green infrastructure to infiltrate and treat stormwater produced by the new impervious surface, as documented by a qualified professional, or
- C. If prior methods are not feasible and documented by a qualified professional stormwater retention is required to ensure no increase in peak volume or flow and to maximize infiltration, and treatment is required to minimize pollutant loading. See section 6.2.C for stormwater retention specifications.

6.1.3 TREES

- A. Development proposals shall result in no net loss of trees 6-inches dbh or greater within the special flood hazard area.
 - i. Trees of or exceeding 6-inches dbh that are removed from the RBZ, Floodway, or RBZ-fringe must be replaced at the ratios in Table 1 and planted within the special flood hazard area.
 - ii. Replacement trees must be native species that would occur naturally in the Level III ecoregion of the impact area.

6.2 STORMWATER MANAGEMENT

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

- A. Water quality (pollution reduction) treatment for post-construction stormwater runoff from any net increase in impervious area; and
- B. Water quantity treatment (retention or detention facilities) unless the outfall discharges into the ocean.
- C. Retention and detention facilities must:
 - i. Limit discharge to match the pre-development peak discharge rate (i.e., the discharge rate of the site based on its natural groundcover and grade before any development occurred) for the 10-year peak flow using a continuous simulation for flows between 50 percent of the 2-year event and the 10-year flow event (annual series).

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

iii. Be designed to not entrap fish.

iv. Be certified by a qualified professional.

D. Detention facilities must:

i. Drain to the source of flooding.

ii. Designed by a qualified professional.

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

v. Access to stormwater treatment facilities at the site by the **COMMUNITY TYPE (e.g., city, county)** for the purpose of inspection and repair.

vi. 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.

vii. 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.

viii. 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 and is less than six inches above grade. Activities exempt do not include expansion of paved areas;
- C. Routine maintenance of landscaping that does not involve grading, excavation, or filling;
- D. Routine agricultural practices such as tilling, plowing, harvesting, soil amendments, and ditch cleaning that does not alter the ditch configuration provided the spoils are removed from special flood hazard area or tilled into fields as a soil amendment;
- E. Routine silviculture practices (harvesting of trees), including hazardous fuels reduction and hazard tree removal as long as root balls are left in place;
- 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.
- J. Pre-emptive removal of documented susceptible trees to manage the spread of invasive species.
- K. Projects that are covered under separate consultations under Section 4(d), 7, or 10 of the Endangered Species Act (ESA).

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. Functionally dependent uses are only subject to the no net loss standards in Section 6.1 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.

C. 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.

D. 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, shrub and tree vegetation.

Table 1 No Net Loss Standards

Basic Mitigate Ratios	Undeveloped Space (ft³)	Impervious Surface (ft²)	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
Mitigation multipliers					
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. 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 a development would create 1,000 square feet of new impervious surface, then 1,000 square feet of new pervious surface would need to be created. However, if only 500 square feet can be created within the same reach, the remaining 500 square feet created within a different reach would need to be double the required amount because of the 200 percent multiplier. In other words, another 1,000 square feet of pervious surface would need to be created at the location in the different reach, in addition to the 500 square feet created within the same reach.

APPENDIX B: Additional and Updated Definitions

Ancillary Features: Features of a development that are not directly related to the primary purpose of the development.

Fish Accessible Space: The volumetric space available to an adult or juvenile individual of the identified 16 ESA-listed fish to access.

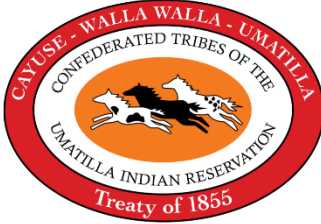
Fish Egress-able Space: The volumetric space available to an adult or juvenile individual of the identified 16 ESA- fish to exit or leave from.

Floodplain Storage Capacity: The volume of floodwater that an area of floodplain can hold during the 1-percent annual chance flood.

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

Pervious Surface: Surfaces that allow rain and snowmelt to seep into the soil and gravel below. Pervious surface may also be referred to as permeable surface.

Undeveloped Space: The volume of flood capacity and fish-accessible/egress-able habitat from the existing ground to the Base Flood Elevation that has not been reduced due to activity that meets FEMA's definition of development. Examples of development that impede undeveloped space includes, but is 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.



(541)-276-3099



lppc@ctuir.org



Land Protection Planning
Commission
46411 Timine Way
Pendleton, Oregon 97801

Public Hearing Notice Dissemination Record

File # ZC-25-002: Land Development Code Amendment

Applicant CTUIR Tribal Planning Office
46411 Timine Way
Pendleton, OR 97801

**Land Protection Planning
Commission Public Hearing Date** April 8, 2025

Public Postings

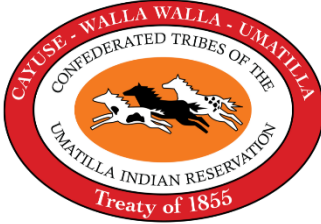
East Oregonian Wednesday, March 26, 2025

**Confederated Umatilla Journal
(CUJ)** Thursday, March 6, 2025 & Thursday, April 3, 2025

Posted in Five Public Places

1. Mission Market: March 28, 2025
2. BIA Umatilla Agency: March 28, 2025
3. CTUIR Housing Department: March 28, 2025
4. Nixyáawii Governance Center: March 28, 2025
5. CTUIR Website: <https://ctuir.org/events/lppc-public-hearing-zc-25-002/>

Attached are copies of the public hearing notices that were posted, published and mailed to all interested parties, subject property owners and adjacent property owners, as required by Land Development Code Section 13.020.



(541)-276-3099



tpo@ctuir.org



46411 Timine Way
Pendleton, Oregon 97801

Public Hearing Notice

NOTICE IS HEREBY GIVEN that the Land Protection Planning Commission of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) will hold the following public hearing:

Land Development Code Amendment #ZC-25-002 – Applicants, Tribal Planning Office, 46411 Timine Way, Pendleton, OR 97801 seeks a recommendation from the Land Protection Planning Commission to the CTUIR Board of Trustees to amend the Land Development Code to incorporate changes as required by the National Flood Insurance Program (NFIP) and the Endangered Species Act. Land Development Code Amendments are subject to the CTUIR Land Development Code Chapters 9 and 13.

This hearing will be held on Tuesday, April 8, 2025, beginning at 9:00 a.m. Individuals may attend the meeting in the Walúula and Wanaqit conference rooms at the Nixyáawii Governance Center, virtually, or by phone. Information on joining the meeting online is available at <https://ctuir.org/events/lppc-public-hearing-zc-25-002/>. Participation in the hearing will also be available by phone at 872-242-7793 starting at 9:00 a.m. on the day of the hearing. The conference ID will be 637 753 409#.

Staff reports and other materials pertaining to the hearing will be available for review at the link above or can be requested from the Tribal Planning Office by calling 541-276-3099.

The public is entitled and encouraged to participate in the hearing and submit testimony regarding the request. Written comments may be sent to tpo@ctuir.org or to the Tribal Planning Office at 46411 Timine Way Pendleton, OR 97801 for receipt by 4:00 p.m. April 7, 2025.

Meeting information & hearing
materials available here!



PUBLIC HEARING NOTICE

NOTICE IS HEREBY GIVEN that the Land Protection Planning Commission of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) will hold the following public hearing:

Land Development Code Amendment #ZC-25-002 – Applicants, Tribal Planning Office, 46411 Timine Way, Pendleton, OR 97801 seek a recommendation from the Land Protection Planning Commission to the CTUIR Board of Trustees to amend the Land Development Code to incorporate changes as required by the National Flood Insurance Program (NFIP) and the Endangered Species Act. Land Development Code Amendments are subject to the CTUIR Land Development Code Chapters 9 and 13.

This hearing will be held on **Tuesday, April 8, 2025 beginning at 9:00 a.m.** Individuals may attend the meeting in the Walúula and Wanaqit conference rooms at the Nixyáawii Governance Center, virtually, or by phone. Information on joining the meeting online is available at <https://ctuir.org/events/lppc-public-hearing-zc-25-002/>. Participation in the hearing will also be available by phone at 872-242-7793 starting at 9:00 a.m. on the day of the hearing. The conference ID will be 637 753 409#.

Staff reports and other materials pertaining to the hearing will be available for review at the link above or can be requested from the Tribal Planning Office by calling 541-276-3099.

The public is entitled and encouraged to participate in the hearing and submit testimony regarding the request. Written comments may be sent to tpo@ctuir.org or to the Tribal Planning Office at 46411 Timine Way Pendleton, OR 97801 for receipt by 4:00 p.m. April 7, 2025.

ZC-25-002 Public Notice Recipients

Trust & Allotment Recipients

None.

Taxlot Recipients

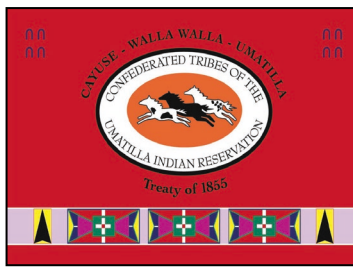
None.

Agency Recipients

Contact	Agency	Address
Director	Umatilla County Public Works Department	3920 Westgate Pendleton, OR 97801
Florinda Coleman	UEC	P.O. Box 1148 Hermiston, OR 97838-3148
Operations Manager	Pacific Power	P.O. Box 220 Pendleton, OR 97801
District 12	ODOT	1327 SE 3 rd Street Pendleton, OR 97801
Superintendent	BIA	via e-mail
Director	Umatilla County Community Development Department	216 SE 4 th Street, Room 104 Pendleton, OR 97801
Director	City of Pendleton Community Development Department	500 SW Dorion Ave. Pendleton, OR 97801
John Graves Region 10	National Flood Insurance Program (NFIP)/FEMA	130 228 th Street SW Bothell, WA 98021-8627
Ashley Zacherle Tribal Affairs Advisor, Region 10	National Flood Insurance Program (NFIP)/FEMA	via e-mail
Jeremy Britton	U.S. Army Corps of Engineers	via e-mail
Michelle Sanders	U.S. Army Corps of Engineers	via e-mail
Steve Cheney	Union Pacific Railroad	via e-mail
Aaron Hunt	Union Pacific Railroad	via e-mail
Ty K. Wyman	Dunn Carney Allen Higgins & Tongue, LLP (Union Pacific Railroad counsel)	via e-mail
Aaron Donat	Marathon/Tesoro Pipeline	825 N. 300 W, Suite 200 Salt Lake City, UT 84103
Audie Neuson	Williams NW Pipeline	295 Chipeta Way Salt Lake City, UT 84108
Hans Rudolf	Oregon Department of Forestry	1055 Airport Road Pendleton, OR 97801

**Confederated Tribes *of the*
Umatilla Indian Reservation
Tribal Planning Office**

Zoning, Development Permits
Environmental Health & Public Transit



46411 Timine Way
Pendleton, OR 97801

www.ctuir.org
Phone 541-276-3099

email: info@ctuir.org
Fax: 541-276-3099

MEMORANDUM

DATE: March 13, 2025
TO: Tribal Staff Review Committee
FROM: Lora Elliott, Assistant Planner, Tribal Planning Office
REGARDING: Meeting Thursday, March 20, 2025, 9:00 am, in the Waluula and Wanaquit Conference Rooms at the Nixyáawii Governance Center or via Microsoft Teams

The Tribal Staff Review Committee will meet on Thursday, March 20, 2025 at 9:00 am to review the following application:

Land Development Code Amendment #ZC-25-002 – Applicants, Tribal Planning Office, 46411 Timine Way, Pendleton, OR 97801 seek a recommendation from the Land Protection Planning Commission to the CTUIR Board of Trustees to amend the Land Development Code to incorporate changes as required by the National Flood Insurance Program (NFIP) and the Endangered Species Act. Land Development Code Amendments are subject to the CTUIR Land Development Code Chapters 9 and 13.

You may attend this TSRC meeting in person or through Microsoft Teams Video Conference:

**Microsoft Teams [Need help?](#)
[Join the meeting now](#)
Meeting ID: 226 795 692 394
Passcode: SM73ey7u**

**Dial in by phone
[+1 872-242-7793,,604775299#](#) United States, Chicago
[Find a local number](#)
Phone conference ID: 604 775 299#**

The application and supporting materials for this request will be posted on the **Free4all shared Drive** in the **TPO** folder shortly. If you have questions or need further information, please contact Dani Schulte or Lora Elliott at 541-276-3099.

Each committee member should review the proposals:

- To determine its compatibility with the Tribes' Comprehensive Plan, Land Development Code, and other Tribal Statutes, Resolutions, and Policies;
- To determine the overall impacts this request may impose on Tribal services and utilities, the environment, wildlife, and on the Reservation

Please see application materials on the Z:/drive. Written comments will be accepted until the end of the day on Thursday, March 27, 2025.

A public hearing with the Land Planning Protection Commission is proposed to be scheduled for April 8, 2025 at 9:00 a.m.

From: [Dani Schulte](#)
To: [Lora Elliott](#)
Subject: FW: Pre-TSRC: FEMA Biological Opinion Implementation Consultation
Date: Friday, March 28, 2025 6:47:08 AM
Attachments: [image001.png](#)
[image002.png](#)
[DRAFT LDC multiple sections 2.18.2025_CRPP.docx](#)

CTUIR Logo



Dani Schulte

Senior Planner - Planning Program Manager
Planning, Confederated Tribes of the Umatilla Indian Reservation

541-429-7525

46411 Timíne Way, Pendleton, Oregon, 97801

DaniSchulte@ctuir.org

From: Carey Miller <CareyMiller@ctuir.org>
Sent: Thursday, February 20, 2025 5:54 PM
To: Dani Schulte <DaniSchulte@ctuir.org>
Subject: RE: Pre-TSRC: FEMA Biological Opinion Implementation Consultation

Dani,

For the draft permit, there are many places where they refer to all other necessary or applicable local, state, or federal permits. Can we add in tribal permits to these statements?

Definitions: Undeveloped Space. You have added vaults and tanks behind structures. Not sure if it is relevant, but I have been reviewing a number of stream gages but along with the gage they have a cabinet and/or posts that hold solar panels to run the gage. These are next to streams but often just on posts. I realize fairly small, but may want clarity as to whether these fall in the scope. Are these types of activities considered “not substantial improvements”?





FHOZ: just a couple of small comments in track changes.
Carey

Carey L. Miller
Tribal Historic Preservation Officer/Senior Archaeologist
Confederated Tribes of the Umatilla Indian Reservation
Cultural Resources Protection Program
46411 Timíne Way, Pendleton, OR 97801
ph. (541)429-7234
careymiller@ctuir.org
Office Hours: Monday-Thursday

From: Dani Schulte <DaniSchulte@ctuir.org>
Sent: Wednesday, February 19, 2025 10:15 AM
To: Gordy Schumacher <GordySchumacher@ctuir.org>; Lora Elliott <LoraElliott@ctuir.org>; Audie Huber <AudieHuber@ctuir.org>; Carey Miller <CareyMiller@ctuir.org>; Eric Quaempts <EricQuaempts@ctuir.org>; Marty King <MartyKing@ctuir.org>; Mike Lambert <MikeLambert@ctuir.org>; Andrew Wildbill <AndrewWildbill@ctuir.org>; Jude Love <JudeLove@ctuir.org>
Cc: Stacy Schumacher <StacySchumacher@ctuir.org>
Subject: RE: Pre-TSRC: FEMA Biological Opinion Implementation Consultation

Hi folks,

I just wanted to check in about the code amendment. Please send any revisions you recommend by this Friday. Here is the most recent draft with all of our meeting comments incorporated. In order to fold in the idea of swapping habitat restoration at one site for development at another site, I went with a written agreement between property owners and habitat restoration project managers. This means that habitat restoration project managers have to affirmatively opt in to development offsets, giving DNR pretty broad discretion on what to take on. But it also means that once the

agreement is signed and the Development Permit is issued, DNR (or other entities who might do habitat restoration) is locked in to that commitment.

Since we're still reviewing internally, and NFIP wants to review our proposed code amendments to make sure there aren't any compliance gaps with the changes we've made, it looks like we're going to be on track for an April 8th Public Hearing. Look out for a TSRC invitation sometime in March.

Thank you!

Dani Schulte, AICP

Senior Planner

Tribal Planning Office

Confederated Tribes of the Umatilla Indian Reservation

46411 Timine Way; Pendleton, OR 97801

☎: (541) 429-7525 | ✉: danischulte@ctuir.org

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From: Dani Schulte

Sent: Thursday, February 13, 2025 9:21 AM

To: Gordy Schumacher <GordySchumacher@ctuir.org>; Lora Elliott <LoraElliott@ctuir.org>; Audie Huber <AudieHuber@ctuir.org>; Carey Miller <CareyMiller@ctuir.org>; Eric Quaempts <EricQuaempts@ctuir.org>; Marty King <MartyKing@ctuir.org>; Mike Lambert <MikelLambert@ctuir.org>; Andrew Wildbill <AndrewWildbill@ctuir.org>; Jude Love <JudeLove@ctuir.org>

Cc: Stacy Schumacher <StacySchumacher@ctuir.org>

Subject: RE: Pre-TSRC: FEMA Biological Opinion Implementation Consultation

Thank you Gordy. That might be helpful depending on where the boundary of the stream is measured. If you're using the stream order lines, they're probably not specific enough, but if there is a layer in our GIS that identifies where the typical stream flooding area is, or the "Ordinary High Water Mark", that would help me tremendously.

However it appears that the RMA is far more restrictive than the system we are required to implement for the NFIP, which would put us at risk of lawsuits from property owners that would probably win. Regulatory takings are protected by the 5th amendment of the Constitution's Due Process clause, not all federal law applies to tribes but I'm pretty sure that one does. For now, we will apply the NFIP's 170-foot requirement.

I'll just note that these are the **pre-implementation** mitigation measures. The NFIP

expects to complete a NEPA EIS within the next 2 years, and we will have to do this all over again to comply with what they eventually come up with as the full implementation measures. Hopefully we'll have some time to figure out how this works, and to create a more efficient review process between now and then.

Thank you,

Dani Schulte, AICP

Senior Planner

Tribal Planning Office

Confederated Tribes of the Umatilla Indian Reservation

46411 Timine Way; Pendleton, OR 97801

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From: Gordy Schumacher <GordySchumacher@ctuir.org>

Sent: Thursday, February 13, 2025 7:25 AM

To: Dani Schulte <DaniSchulte@ctuir.org>; Lora Elliott <LoraElliott@ctuir.org>; Audie Huber <AudieHuber@ctuir.org>; Carey Miller <CareyMiller@ctuir.org>; Eric Quaempts <EricQuaempts@ctuir.org>; Marty King <MartyKing@ctuir.org>; Mike Lambert <Mikelambert@ctuir.org>; Andrew Wildbill <AndrewWildbill@ctuir.org>; Jude Love <JudeLove@ctuir.org>

Cc: Stacy Schumacher <StacySchumacher@ctuir.org>

Subject: RE: Pre-TSRC: FEMA Biological Opinion Implementation Consultation

Hey Dani, I haven't been able to read all of this but I did catch the part on Riparian Buffer Zones.

You should know that the Forest Management Plan already lays out a "Riparian Management Zone" and is equal to 75 ft times the stream order. This same RMZ is also described in the Agricultural Management Plan.

Stacy has maps of these areas and I am sure they will be updated with a Forest Management Plan revision, hopefully starting later this year.

Just thought I would share.

Goirdy

Gordy Schumacher, SRM CPRM CP02-534

Range, Ag. & Forestry Program Manager

**Confederated Tribes of the
Umatilla Indian Reservation**

46411 Timine Way

Pendleton, OR 97801
541-429-7238 (Office)
541-215-0120 (Cell)
GordySchumacher@ctuir.org

From: Dani Schulte <DaniSchulte@ctuir.org>

Sent: Monday, February 10, 2025 1:22 PM

To: Lora Elliott <LoraElliott@ctuir.org>; Audie Huber <AudieHuber@ctuir.org>; Carey Miller <CareyMiller@ctuir.org>; Eric Quaempts <EricQuaempts@ctuir.org>; Gordy Schumacher <GordySchumacher@ctuir.org>; Marty King <MartyKing@ctuir.org>; Mike Lambert <MikeLambert@ctuir.org>; Andrew Wildbill <AndrewWildbill@ctuir.org>; Jude Love <JudeLove@ctuir.org>

Subject: RE: Pre-TSRC: FEMA Biological Opinion Implementation Consultation

Hi folks,

Thanks for the meeting this morning.

As discussed, the draft Land Development Code updates are still ongoing, and any input you can provide would be very helpful. Please review the attached draft code sections and send them back to me by **next Friday, February 21st**. As you go through your review, keep in mind a few specific questions I have for DNR:

1. What relevant standards are you aware of that we could use to evaluate mitigation measures? (i.e. # square feet of constructed wetlands to mitigate square # feet of new pavement; habitat restoration fee for square feet of undeveloped space removed)
2. What types of **Qualified Professionals** would you recommend to evaluate things like Green Infrastructure, stormwater treatment, fish accessibility, and sufficiency of a riparian habitat management plan? Are there job titles or certifications you look for when CTUIR does this kind of habitat work?
3. Where do you see opportunities to bring these floodplain-related measures in-line with the Codes you administer? And vice versus, re: bringing your codes into consistency with these requirements? Something as simple as cross-referencing where relevant might be enough.

And while reviewing, here are the No Net Loss categories FEMA is requiring we implement, just to bring them back to the top of mind:

1. Pervious Surface area (square footage)
2. Undeveloped Space (cubic footage)
3. Trees over 6" diameter at breast height.

Thank you for your feedback! I'll do my best to incorporate all input I receive, and see you again at the formal Tribal Staff Review Committee when this code amendment is ready to go to LPPC for a hearing.

Thank you,

Dani Schulte, AICP

Senior Planner

Tribal Planning Office

Confederated Tribes of the Umatilla Indian Reservation

46411 Timine Way; Pendleton, OR 97801

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-----Original Appointment-----

From: Lora Elliott <LoraElliott@ctuir.org>

Sent: Friday, January 31, 2025 1:22 PM

To: Lora Elliott; Audie Huber; Carey Miller; Eric Quaempts; Gordy Schumacher; Marty King; Mike Lambert; Andrew Wildbill; Jude Love; Dani Schulte

Cc: Jeremy Wolf

Subject: Pre-TSRC: FEMA Biological Opinion Implementation Consultation

When: Monday, February 10, 2025 11:00 AM-12:00 PM (UTC-08:00) Pacific Time (US & Canada).

Where: ConfRm-NGC-L202A-Waluula and Wanaqit

Greetings everyone,

As promised, here are the materials for this upcoming meeting. They include:

1. Powerpoint presentation which will serve as the agenda
2. Draft LDC – just the definitions section
3. Draft LDC – multiple sections with floodplain references (preliminary, definitely not a complete draft)
4. Model Ordinance – the basis for the LDC updates
5. Habitat Assessment Guide – the basis for permit-by-permit evaluations
6. Model PICM Permit – a template for the permit-by-permit application form

Thank you,
Lora Elliott

The opinions expressed by the author are his or her own and are not necessarily those of the Confederated Tribes of the Umatilla Indian Reservation. The information, contents and attachments in this email are Confidential and Private.