

Article 25

FLOOD, WILDFIRE and NATURAL HAZARDS (FHA)

SECTION 25.010, PURPOSE: It is the finding of Wallowa County that some areas of unincorporated Wallowa County are subject to periodic inundation, wildfire and other natural hazards which adversely affect the public health, safety, and general welfare. The purpose of the Flood, Wildfire and Natural Hazards Article is to provide additional restrictions upon uses permitted outright or conditionally in the underlying zones in order to minimize public and private losses due to flood conditions, potential wildfire and other natural hazards and to promote the public health, safety, and general welfare. This article shall apply to all special flood hazard areas, areas at risk for wildfires and areas prone to other natural hazards within the jurisdiction of Wallowa County.

SECTION 25.015, DEFINITIONS: In addition to definitions listed in Article 1, 1.065, the following definitions shall apply to this Article. In the event of a conflict, the definitions in this article shall apply. Unless specifically defined, words or phrases used in this article shall be interpreted so as to give them the meaning they have in common usage and to give this article its most reasonable application.

01. **Area of shallow flooding** means a designated AO or AH zone on the Flood Insurance Rate Map. The base flood depths range from one to three feet, a clearly defined channel does not exist, the path of flooding is unpredictable and indeterminate, and velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.
02. **Area of special flood hazard** means the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year (100 year flood zone). Designation on maps always includes the letters A or V.
03. **Base flood** means: flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the 100 year flood zone. Designation on maps always includes the letters A or V.
04. **Basement** means: any area of the building having its floor subgrade (below ground level) on all sides.
05. **Development** means: any man-made change to improved or unimproved real estate, including but not limited to: buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations located within the area of special flood hazard.
06. **Existing Manufactured home park or subdivision** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the adopted floodplain regulations.

07. **Expansion to an existing manufactured home park or subdivision** means the preparation of additional sites by the construction of facilities for servicing the lots on which manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).
08. **Flood or flooding** means: a general and temporary condition of partial or complete inundation of normally dry land area from:
- A. The overflow of inland or tidal waters, and/or
 - B. The unusual and rapid accumulation of run off or surface waters from any source.
09. **Flood insurance rate map form** means the official map on which the federal insurance administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.
10. **Flood insurance study** means the official report provided by the federal insurance administration that includes flood profiles, the flood boundary-floodway map, and the water surface elevation of the base flood.
11. **Floodplain** means a land area adjacent to a river, stream, lake, estuary, or other body of water that is subject to flooding.
12. **Floodway** means the channel of a river or other water course and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.
13. **Lowest floor** means the lowest floor of the lowest enclosed area including a 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 Section 25.065(1)(B).
14. **Manufactured home** means a structure, transportable in one or more sections which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include "recreational vehicles."
15. **New construction** means structures for which the start of construction commenced on or after the effective date of this article.
16. **Natural Hazard** means the following hazards, including but not limited to:
- *Earthquakes,
 - *Slow or fast moving Landslides,
 - *Rock fall,
 - *Wildfires,
 - *Lahars (volcanic mud flows), Debris flows, Mud flows (plastic or liquid movements in which mass (e.g. soil and rock) breaks up and flows).

*Mudslides, debris flows or blocked culverts which cause or result from Section 25.015(08)(B),

*Severe wind events.

A Natural Hazard area is an area which has a history of, or is known or believed to be prone to or is discovered to be prone to site specific damage from the above hazards.

17. **Recreational Vehicle** means a vehicle which is:
 - A. Built on a single chassis;
 - B. 400 square feet or less when measured from the largest horizontal projection;
 - C. Designed to be self-propelled or permanently towable by a one ton or less truck; and;
 - D. Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.
18. **Start of construction** includes substantial improvement and means the date the building permit was issued provided the actual start of construction, repair, reconstruction, placement, or other improvement was within 180 days of the permit date. 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 home 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, foundation, 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.
19. **Structure:** In addition to the definition in Article 1, Section 1.065 (101), structure means a walled roofed building including a gas or liquid storage tank that is principally above ground.
20. **Substantial Damage** means damage of any origin sustained by a structure where 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.
21. **Substantial Improvement** means any repair, reconstruction, or improvement of a structure where the cost equals or exceeds 50 percent of the market value of the structure 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. For the purposes of this definition substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences - whether or not that alteration affects the external dimensions of the structure.

However, the terms do not 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.
 - B. Any alteration of a structure listed on the national register of historic places or a state inventory of historic places.
22. **Variance** means a grant of relief from the requirements of this article which permits construction in a manner that would otherwise be prohibited by this article. See Article 10, Variance.
23. **Water Dependent Use** means a structure for commerce or industry which cannot exist in any other location because the intrinsic nature of its operations is dependent on water.

SECTION 25.020, DESIGNATION OF THE ADMINISTRATOR: In accordance with the provisions of Article 1, Section 1.030, the Planning Director is hereby appointed to administer and implement this article.

SECTION 25.025, DUTIES AND RESPONSIBILITIES OF THE ADMINISTRATOR: The duties of the Administrator shall include, but not be limited to:

01. Permit Review

- A. Review all development permits to determine that the permit requirements of this article have been satisfied.
- B. Review all development permits to determine that all necessary permits have been obtained from those Federal, State, or local government agencies from which prior approval is required.
- C. Review all development permits to determine if the proposed development is located in a floodway. If located in a floodway, assure that the provisions of Section 25.075 are met.
- D. Review all development permits to determine if the proposed development is located in an area which might be impacted by a Natural Hazard. If located in such an area, insure that the provisions of Section 25.080 are met.

02. Use of Other Base Flood Data

When base flood elevation data is not available, the Administrator shall obtain, review and reasonably utilize available base flood elevation and floodway data as per Section 25.055.

03. Information to be Obtained and Maintained

The Administrator shall obtain and maintain information as per section 25.045.

04. Interpretation of FIRM Boundaries

The Administrator shall make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location shall be given reasonable opportunity to appeal the interpretation as provided in Section 25.030.

SECTION 25.030, VARIANCE AND APPEAL PROCEDURE

01. Appeal Board

- A. The Wallowa County Planning Commission as established by the Wallowa County Board of Commissioners shall hear and decide requests for variances per Article 10, from the requirements of this article.
- B. The Wallowa County Planning Commission shall hear and decide appeals per Article 7, when it is alleged there is an error in any requirement, decision, or determination made in the enforcement or administration of this article.
- C. In reviewing such applications, the Planning Commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of this article, and:
 - 1. The danger that materials may be swept onto other lands to the injury of others;
 - 2. The danger to life and property due to flooding and erosion damage and due to Natural Hazard damage;
 - 3. The susceptibility of the proposed facility and its contents to flood and Natural Hazard damage and the effect of such damage on the individual owner;
 - 4. The importance of services provided by the proposed facility to the community;
 - 5. The necessity to the facility of a waterfront location or a location in a Natural Hazard area, where applicable;
 - 6. The availability of the alternative locations for the proposed use which are not subject to flooding or erosion damage or to Natural Hazard damage;
 - 7. The compatibility of the proposed use with existing and anticipated development;
 - 8. The relationship of the proposed use to the comprehensive plan and the flood plain management program for that area;
 - 9. The safety of access to the property in times of flood or Natural Hazard for ordinary and emergency vehicles;
 - 10. 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;
 - 11. The cost of providing governmental services during and after flood or Natural Hazard conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

- E. Upon consideration of the factors of Section 25.030(D) and the purposes of this article, the Planning Commission may attach such conditions to the granting of variances as it deems necessary to further the purposes of this article.
- F. The Wallowa County Planning Department shall maintain the records of all appeal actions and report any variances involving flood hazards to the Federal Insurance Administration upon request.

02. Conditions for Variances

Generally, the only condition under which a variance from the flood elevation standard may be issued is for new construction or substantial improvements to be erected on a lot of one-half acre or less in

- A. size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (1-11) in Section 25.030(01)(D) have been fully considered. As the lot size increases the technical justification required for issuing the variance increases.
- B. 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 this section.
- C. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
- D. Variances shall only be issued upon the determination that the variance is the minimum necessary, considering the flood hazard or Natural Hazard, to afford relief.
- E. Variances shall only be issued upon:
 1. A showing of good and sufficient cause;
 2. A determination that failure to grant the variance would result in exceptional hardship to the applicant;
 3. 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 as described in Section 25.030(D), or conflict with existing local laws or ordinances.
- F. 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. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations should be quite rare.
- G. Variances may be issued for non-residential 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 except Section 25.030(A) and otherwise complies with Sections 25.060(01 and 02) of the GENERAL FLOOD HAZARD STANDARDS.

- H. Any applicant to whom a variance in a flood hazard area is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

SECTION 25.035 ZONING PERMIT: A zoning permit shall be obtained before construction or development begins within any flood or natural hazard area - including filling. A zoning permit for development in a flood hazard area shall not be approved without all necessary permits having been acquired from those Federal, State, or local governmental agencies from which prior approval is required.

SECTION 25.040, APPLICATION: Application for a zoning permit shall be made on forms furnished by Wallowa County and must include but not be limited to plans drawn to scale on a topographic map 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, if located in a flood hazard area, the following information is required:

01. Elevation, in relation to mean sea level, of the lowest floor - including basement of all structures.
02. Elevation, in relation to mean sea level, to which any structure has been flood proofed.
03. Certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet the flood proofing criteria in Section 25.065(2).
04. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.

SECTION 25.045, INFORMATION TO BE OBTAINED AND MAINTAINED: Wallowa County shall:

01. Where base flood elevation data is provided through the flood insurance study or required as in Section 25.055, obtain and record the actual elevation in relation to mean sea level of the lowest floor including basements of all new or substantially improved structures and whether or not the structure contains a basement.
02. For all new or substantially improved flood proofed structures:
 - A. Verify and record the actual elevation in relation to mean sea level.
 - B. Maintain the flood proofing certifications required in Section 25.040(3).
03. Maintain for public inspection all records pertaining to the provisions of this article.

04. Notify adjacent communities prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
05. Require that periodic maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.
6. Create and maintain County maps indicating areas prone to Natural Hazards.
 - A. Evaluate the risks to people and property from development in identified Natural Hazard areas.
7. Maintain Permit records for development within areas prone to Natural Hazards. These records shall include, but not be limited to:
 - A. An evaluation of the effects of the proposed development on existing development.
 - B. An evaluation of the effects of the proposed development on the management of natural resources.

SECTION 25.050, FLOOD HAZARD AREA: The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled, The Flood Insurance Study for Wallowa County, dated February 17, 1988 with accompanying flood insurance rate maps is hereby adopted by reference and declared to be a part of this article. The Flood Insurance Study is on file at the Wallowa County Planning Department.

SECTION 25.055, USE OF OTHER BASE FLOOD DATA: When base flood elevation data has not been provided in accordance with Section 25.050 flood hazard areas; Wallowa County shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State, or other sources in order to administer Sections 25.065 and 25.075. Where elevation data is not available either through the flood insurance study or from another authoritative source, applications for zoning permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding and will not have a negative impact on existing downstream structures.

The test of reasonableness is a local judgment and includes use of historical data, high-water marks, photographs of past flooding, etc. where available. Failure to elevate at least two feet above natural grade in these zones may result in higher insurance rates and denial of requested permit.

SECTION 25.060, GENERAL FLOOD HAZARD STANDARDS: Applicants should understand that within the historical flood plain, streams and rivers can unpredictably change course and endanger property and structures. Wallowa County is under no obligation to protect private property or structures at public expense located within the floodplain. In addition to the following regulations, Wallowa County cautions that those who build within a floodplain do so at their own risk as far as the County is concerned.

The following standards are required in all flood hazard areas. In addition to flood hazard areas established by the Flood Insurance Study for Wallowa County, a flood hazard area may be established by side hill flows and by the potential disruption of side hill flows by mudslides, debris flows or blocked culverts.

01. Anchoring:

- A. All new construction and substantial improvements shall be anchored to prevent floatation, collapse, or lateral movement of the structure.
- B. All manufactured homes must be anchored to prevent floatation, collapse or lateral movement and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors. Reference FEMA's Manufactured Home Installation In Flood Hazard Area Guidebook for additional techniques, and State of Oregon Building Codes (2000 Oregon One and Two Family Dwelling Code and 1998 Oregon Structural Specialty Code).

02. 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/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

03. Utilities:

- A. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood water 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 must be approved by DEQ.
- C. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

04. Subdivision Proposals

- A. All subdivision proposals shall be consistent with the need to minimize flood damage;

- B. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
- C. All subdivision proposals shall have roads designed and constructed to ensure access during flooding and to not cause flooding or make flooding worse.
- D. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage,
and;
- E. Where base flood damage elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

SECTION 25.065, SPECIFIC FLOOD HAZARD STANDARDS: In all areas of special flood hazards where base flood elevation data has been provided as set forth in Section 25.050, flood hazard area or Section 25.055, use of other base flood data, the following provisions are required:

01. RESIDENTIAL CONSTRUCTION:

- A. New construction and substantial improvement of any residential structure shall have the lowest floor, including basements, elevated to one foot or more above base flood elevation, or two feet above the surrounding grade in unmapped areas.
- B. 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 floodwater. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria.
 - 1. A minimum of two openings having a total net area of not less than one square inch per square foot of enclosed area subject to flooding shall be provided.
 - 2. The bottom of all openings shall be no higher than one foot above grade.
 - 3. Openings may be equipped with screens, louvers or other coverings or devices provided that they permit the automatic entry and exit of floodwater.

02. NONRESIDENTIAL CONSTRUCTION: New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including the basement, elevated at or above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

- A. Be flood proofed 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 hydro-static and hydrodynamic loads and effects of buoyancy.
 - 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 subsection based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to Wallowa County as set forth in Section 25.045(2).
 - D. Insure that nonresidential structures that are elevated but not flood proofed meet the same standards for space below the lowest floor as described in Section 25.065 (1)(B).
 - E. Insure that an applicant who is flood proofing nonresidential buildings be notified that flood insurance premiums will be based on rates that are one foot below the flood proofed level, for example, a building constructed to the base flood level will be rated as one foot below that level.
03. **MANUFACTURED HOMES:** All manufactured homes to be placed or substantially improved within zone A, no base flood elevations determined; AH, flood depths of 1 to 3 feet [usually areas of ponding], base flood elevations determined; and AE, base flood elevations determined; shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at one foot or more above the base flood elevation and securely anchored to an adequately anchored foundation system in accordance with the provisions of Section 25.060(2)(B).
04. **RECREATIONAL VEHICLES:** Recreational vehicles placed on sites within Zone A, AH, and AE must either:
- 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, be attached to the site by only quick disconnect type utilities and security devices, and have no permanently attached additions,
or;
 - C. Meet the requirements of Section 25.065(03) above and the elevation and anchoring requirements for manufactured homes.

SECTION 25.070, STANDARDS FOR SHALLOW FLOODING AREAS AO ZONE: Shallow flooding areas appear on FIRMS as AO zones with depth designations. The base flood depths in these zones range from one to three feet 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:

01. New construction and substantial improvements of residential structures within AO zones shall have the lowest floor - including the basement - elevated above the highest adjacent grade of the building site to one foot or more above the depth number specified on the FIRM - at least two feet above the natural grade if no depth number is specified.
02. New construction and substantial improvements of non-residential structures within AO zones shall either:
 - A. Have the lowest floor - including the basement - elevated above the highest adjacent grade of the building site to one foot or more above the depth number specified on the FIRM - at least two feet above the natural grade if no depth number is specified, 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 25.065(2)(C).
03. Provide adequate drainage paths around structures on slopes to guide floodwater around and away from proposed structures.

SECTION 25.075, FLOODWAY: Located within areas of special flood hazard established in Section 25.050 are areas designated as floodway. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential; the following provisions apply:

01. Prohibit encroachments - including fill - new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
02. All new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 25.060 through 25.070.

SECTION 25.080, NATURAL HAZARDS: The purpose of this section is the identification of, and placement of additional restrictions on uses permitted outright and conditionally within areas subject to natural hazards other than flooding or wildfire which adversely affect the public health, safety, and general welfare.

A. Permit Evaluation:

01. Initial Evaluation: Each development permit shall be initially evaluated on forms provided by the Planning Department to ascertain if the development is within a potential Natural Hazard area. This initial evaluation will be done by the Planning Department or its designee and shall be based on inventories, maps, area history and current status, photographs and other information. A Site Investigation is required if the area in question has experienced a mass earth movement or has a slope greater than 25%. The Planning Department or its designee may ask the Wallowa County Natural Resources Technical Advisory Committee to participate in the initial evaluation.
02. Site Investigation: If the Planning Department or its designee finds the development to be within a Natural Hazard area, then a Site Evaluation must be done by the applicant including an evaluation of the risk to people and property from developing in a permit specific Natural Hazard area. This evaluation shall include an assessment of:
 - A. The type of Natural Hazard.
 - B. The effects of new development in identified hazard areas on existing development, adjoining properties, and public rights of way; and
- C. The evaluation of the risk to people and property from natural hazards and shall include provisions to:
 1. Evaluate the risk to people and property from natural hazards. The evaluation shall include, but not be limited to:
 - A. The frequency and severity of the hazard, and
 - B. The limitations of identified hazard areas to sustain different types and intensities of land use. Open space, recreation and low density uses should be preferred in hazard areas; and the beneficial impact on natural resources and the environment from the occurrence of natural disasters.
 2. Avoid development in areas of high risk; and
 3. Prohibit, where appropriate, development of essential facilities (defined in ORS 455.447(1)(a)) in identified hazard areas.
- D. The effects of development in a Natural Hazard area on the management of natural resources.
- E. Expert analysis by a Registered Professional Engineer or Certified Engineering Geologist, at the expense of the applicant, in areas of extreme hazard or when requested by the Planning Director or Commission.
- F. The Planning Department or Commission may request an independent expert analysis. This analysis may be in addition to the applicant's analysis and, the permit fee shall be raised to cover the expense of the independent analysis.

B. PROTECTION STANDARDS

01. Earthquake - as Wallowa County is not an earthquake prone area and no areas of high seismic risk are known to exist, any development which meets existing siting and code standards is in compliance with this Article.
02. Wildfire - When a proposed development is determined to be in an area of Wildfire Hazard as determined in the 2017 Wallowa County Community Wildfire Protection Plan (CWPP), the proposal must meet the standards set forth in Section 25.090 Wildfire Hazard Overlay Zone.
03. Earth Movement and Debris Flow (Landslide, debris flow, rock fall, mud flow, Lahar)
 - A. The site evaluation for a development in an area of earth movement and debris flow must also include:
 1. The adequacy of the grading and drainage plan for the collection and transmission of storm and ground water in order that the drainage from the proposed development will not adversely affect adjoining properties or public rights of way.
 2. the effects of slope alteration (cut and fill) on erosion and run off for surrounding properties.
 3. an evaluation of where the retention of existing vegetation and natural topographic features will be beneficial as a soil stabilizer or is of scenic significance.
 - B. The Wallowa County Natural Resources Technical Advisory Committee will review the site evaluation and make recommendations to the Review Authority.
04. Severe Wind Event - Wallowa County has been known to experience high winds. Due to the topography of the County, micro bursts from thunderstorms and winds channeled by valleys have done considerable damage. As it is difficult to predict where these events will occur, any development which meets existing siting and code standards is in compliance with this Article. However, in areas known to be prone to such events, buildings should be constructed to exceed normal standards, and siting and construction standards should take the likelihood of severe wind events into account.

C. AGENCY COORDINATION

01. In accordance with ORS 197.180 and Goal 2, state agencies shall coordinate their natural hazard plans and programs with local governments and provide local governments with hazard inventory information and technical assistance.
02. Local governments shall coordinate their land use plans and decisions with emergency preparedness and response programs. Special attention should be given to emergency access when considering development in identified hazard areas.

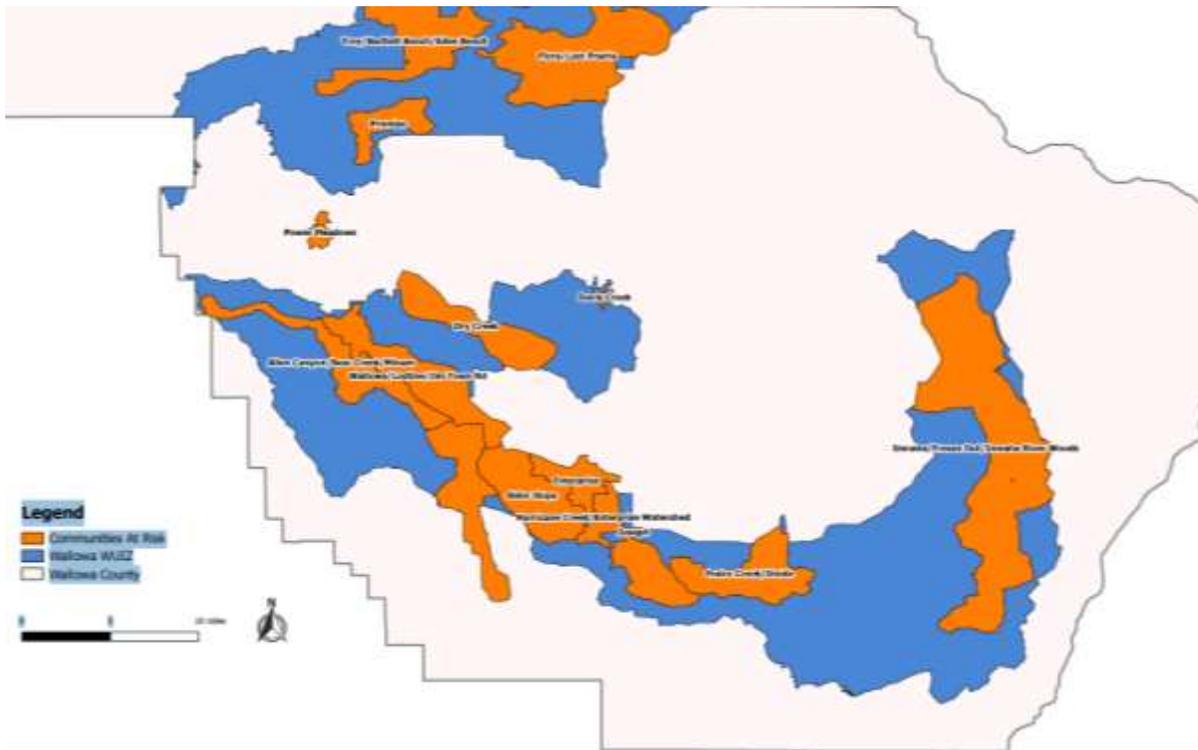
03. State hazard agencies shall assist local governments by developing model ordinances and hazard evaluation and risk assessment methodologies.

SECTION 25.090 WILDFIRE HAZARD OVERLAY ZONE

Purpose: The purpose of the WHO zone is to minimize wildfire risk to life and property and to implement the wildfire policies in Chapter VII Areas Subject to Natural Disasters and Hazards the Wallowa County Comprehensive Plan based on information provided in the 2017 Wallowa County Community Wildfire Protection Plan, which has been adopted as a supporting document to the Wallowa County Comprehensive Plan.

01. **Applicability:** The WHO zone shall apply to Timber Commercial (TC) and the Timber Grazing (TG) Zones, to Communities at Risk (CARs) and to the Wildland Urban Interface (WUI) Zone, in unincorporated areas, as mapped in the 2017 Wallowa County Community Wildfire Protection Plan (CWPP) and as generally shown below. The Planning Department shall maintain GIS maps showing the precise location of CARs and WUI Zones to determine whether a property is located within these fire management areas. Figure 1 shows the general location of CARs and WUI Zones in Wallowa County.

Figure 1 Wallowa County Communities at Risk and Wildland Urban Interface Zones



03. **Definitions:** In addition to definitions listed in Section 25.015 and Article 1, 1.065, the following definitions shall apply to this section. In the event of a conflict, the definitions in this section shall

apply. Unless specifically defined, words or phrases used in this article shall be interpreted so as to give them the meaning they have in common usage and to give this Section its most reasonable application.

A. **Wallowa County Community Wildfire Protection Plan (CWPP)** means: The 2017 CWPP adopted by the Wallowa County Board of Commissions as a supporting document to the Wallowa County Comprehensive Plan.

B. **Communities at Risk (CAR)** means: Any one of sixteen distinct communities areas described as at risk from wildfire from wildland fire with the following conditions: (1) a group of homes and other structures with basic infrastructure and services (such as utilities and collectively maintained transportation routes) in or adjacent to federal land; (2) has conditions conducive to large-scale wildland fire; and (3) faces a significant threat to human life or property because of a wildland fire. The 2017 CWPP identifies, characterizes and maps sixteen CARs in Wallowa County.

C. **Wildland Urban Interface (WUI) Zone** means: An area within or adjacent to an at-risk community that has been identified by a community in its wildfire protection plan. The 2017 CWPP identifies, maps and characterizes two WUI Zones (North and South).

05. **Levels of Protection:** The degree of wildfire hazard protection depends on the degree of wildfire hazard as determined in the 2017 CWPP.

A. The Planning Director shall maintain maps, overlain with tax lots, showing the probability of wildfire occurrence for public review, and shall make the final administrative determination regarding the level of protection appropriate for specific properties within WUI Zones and CARs.

B. The following standards apply in addition to any siting or related standards that apply in the base zone. In cases of conflict, the more restrictive standard shall apply.

06. **Where Level 1 and Level 2 Design Standards Apply.**

A. Level 1 fire safety design standards shall apply to land within:

1. Timber Grazing (TG) or Timber Commercial (TC) zones; and
2. CARs and WUI Zones classified as having a “high” or “extreme” risk of wildfire occurrence as documented in the 2017 CWPP. The following CARs were ranked as having “extreme” wildfire risk: Allen Canyon / Bear Creek; Imnaha Corridor; Lostine Canyon; and Wallowa Lake – Ski Run. The following CARs were ranked as having “high” wildfire risk: Alder Slope; Davis Creek; Divide / Prairie Creek; and Joseph.

B. Level 2 fire safety design standards shall apply to land outside TG and TC zones to CARs and portions of WUI Zones classified as having “medium” or “low” risk of wildfire occurrence as documented and mapped in the 2017 CWPP.

07. Level 1 Fire Safety Design Standards. The following standards shall apply to (a) all new structures associated with private businesses and additions to structures associated with private businesses, and all new dwellings and additions to dwellings, (b) accessory structures greater than 1000 square feet, and additions to structures greater than 1000 square feet, and (c) public and private infrastructure projects.

A. Access: Roads and driveways must be wide enough for fire equipment passage, and dead end roads and cul-de-sacs must be large enough for fire equipment to turn around. (See 18.035.03 and Article 32, Road Design, for standards). There shall be more than one functioning entrance/exit to a dwelling, business or public building.

B. Fuel Break Areas: Fuel-free break areas shall be provided surrounding new primary structures of any size and accessory structures of 100 square feet or greater, as follows:

1. **Primary Fuel Break Area.** A primary fuel-free break area shall be maintained for a distance of 30 feet surrounding any new structure as defined in Subsection 07 above. The primary safety area is a fire fuel break extending a minimum distance around structures. The goal within the primary safety area is to remove fuels that will produce flame lengths in excess of one foot. Vegetation within the primary safety zone may include green lawns and shrubs less than 24 inches in height. Trees shall be spaced with greater than 15 feet between the crowns and pruned to remove dead and low (less than eight feet) branches. Accumulated leaves, needles, limbs and other dead vegetation shall be removed from beneath trees. Nonflammable materials (e.g., rock) instead of flammable materials (e.g., bark mulch) shall be placed next to the structure. As slope increases, the primary safety area shall increase away from the structure and down the slope at a 45-degree angle from the structure, as shown in Table 1.

Table 1 Level 1 Primary Fuel Break Area Measurement

Percent Slope	Additional Primary Safety Area (feet)
Less than 10%	None required
Less than 20%	50' additional
Less than 30%	75' additional
Less than 40%	100' additional

2. **Secondary Fuel Break Area.** A secondary fuel-free break area shall be cleared and maintained on land surrounding the structure, provided that the land is owned or controlled by the applicant. The secondary fuel-free break extends around the primary safety area. The goal of the secondary fuel-free break shall be to reduce fuels so that the overall intensity of any wildfire would be lessened and the likelihood of crown fires and crowning is

reduced. Vegetation within the secondary fuel-free break shall be pruned and spaced so that fire will not spread between crowns of trees. Small trees and brush growing underneath larger trees shall be removed to prevent spread of fire up into the crowns of the larger trees. Dead fuels shall be removed. The minimum width of the secondary fuel-free break is 100 feet around the primary fuel break area.

3. The fuel-free break standards shall be completed and approved by the Planning Director prior to issuance of any septic, building, or manufactured dwelling permits. Maintenance of the fuel-free breaks shall be the continuing responsibility of the property owner.
4. Structures shall not be sited on slopes of 40 percent or greater under any circumstances.

C. Building Requirements:

1. Roofs of new or expanded structures shall be made of non-flammable fire-resistive [updated 09/23/2021 to match Building Code] material.
2. All building vents and other openings shall be screened.
3. All chimneys shall have a spark arrestor.

D. Water for Fire Suppression. The dwelling shall be located on a parcel within a fire protection district or shall be provided with fire protection by contract.

If the above criteria cannot be met, then:

1. The applicant shall provide evidence that he/she has asked to be included within the nearest such district. If the Planning Director determines that inclusion within a fire protection district or contracting for residential fire protection is impracticable, the Planning Director may consider an alternative means for protecting the dwelling from fire hazards. The means selected may include a fire sprinkling system, on-site equipment, and water storage, or given the site conditions, other methods that are reasonable.
2. If a water supply is required for fire protection, it shall be a swimming pool, pond, lake, or similar body of water that contains at all times at least 4,000 gallons, or a stream that has a continuous year around flow of at least one cubic foot per second. The water source for fire protection shall be an independent system. Water stand pipes shall be located at least 50 feet from the dwelling. The applicant shall provide verification from the Water Resources Department that any permits or registrations required for water diversion or storage have been obtained or that permits or registrations are not required for the use.
3. Road accesses shall be provided to within 15 feet of the water's edge for firefighting pumping units. The road access shall accommodate the turn-around of fire-fighting equipment during the fire season. Permanent signs shall be posted along the access route to indicate the location of the emergency water source.

08. Level 2 Fire Safety Design Standards. The following standards shall apply to (a) all new structures associated with private businesses and additions to structures associated with private businesses, and all new dwellings and additions to dwellings, (b) accessory structures greater than 1000

square feet, and additions to structures greater than 1000 square feet, and (c) public and private infrastructure projects.

A. Level 2 standards are the same as Level 1 standards with the following exceptions:

1. Primary Fuel Break Area. The primary fuel break areas shall extend a minimum of 20 feet around structures. Additional primary fuel breaks based on slope percentage will increase at half the rate specified in the Level 1 standard, as follows:

Table 2 Level 2 Primary Fuel Break Area Measurement

Percent Slope	Additional Primary Safety Area (feet)
Less than 10%	None required
Less than 20%	25' additional
Less than 30%	37.5' additional
Less than 40%	50' additional

2. Secondary Fuel Break Area. The secondary fuel-free break area shall extend 80 feet around the primary fuel break area, provided that the land is owned or controlled by the applicant.

09. Adjustment to Fuel Break Area Standards. Where Level 1 or 2 fuel-free break standards can't reasonably be met they must be.

A. **Adjustment Standards.** However, if a structure cannot reasonably satisfy fuel-free breaks on the subject property due to the size, shape, topography, or other physical characteristics of the property, the standards may be modified by one or more of the following alternatives:

1. Irrevocable easements for fuel-free break safety zones may be obtained from adjacent property owners so that the fuel-free break safety zone can be maintained. The easement(s) shall be recorded with the County Clerk.
2. The area of an existing road right-of-way or access easement in use and adjacent to the subject property may be utilized to satisfy the fuel free break safety zone requirement.
3. Rivers, streams or lakes may be used as fire breaks where appropriate, provided that riparian vegetation standards are met. Structures shall be sited so that a primary safety zone can be completed around the structure outside of the river or stream corridor setback/buffer area. The area within the river or stream setback/buffer area shall be exempt from the secondary fuel-free break area requirements.

B. Alternative to Fully Meeting Applicable Secondary Fuel Break Standard. If the secondary fuel break standard cannot reasonably be met based on the standards set forth in Subsection 09.A above, then the standard shall be met to the extent possible given the physical characteristics of the site, and the Planning Director shall require that the structure be constructed in accordance with the International Fire Code Institute Urban Wildland Interface Code: (1) Section 505 Class 2 Ignition Resistant Construction if the secondary fuel break is at least 50 feet wide, or (2) Section 504 Class 1 Ignition Resistant Construction if the secondary fuel break width is less than 50 feet.