Oregon Board of Forestry – Virtual Special Public Meeting

Wednesday, October 20, 2021

With the current public gathering restrictions, the Board of Forestry will hold the special meeting virtually. Public participation will be incorporated into this meeting, please review the online instructions to find out how to engage with the Board at https://www.oregon.gov/odf/board/Pages/bofmeetings.aspx. Written testimony will also be permitted for item two, submit comments to BoardofForestry@oregon.gov. The public meeting will be streamed live and accessible through the link below.

Link to view Board of Forestry Meeting available at https://www.youtube.com/c/OregonDepartmentofForestry

Prior meetings' audio and this meeting's written material available on the web at www.oregon.gov/odf/board.

2:00 – 2:05 p.m. **Board Roll Call and Meeting Instructions**

Action and Information

2:05 – 2:35 p.m. **1.** ***SB 762 Wildland Urban Interface Definition** ..... Doug Grafe and Tim Holschbach
The Department will present the hearings officer's report from recent public hearings on the proposed wildland-urban interface (WUI) definition. The Board will deliberate and vote to adopt the final rule language for the WUI definition. This is a decision item.

2:35 – 2:45 p.m. First Break

2:45 – 4:45 p.m. **2.** **State Forester Public Panel** .....Facilitated by Chair Kelly, Public Affairs, and Board Administrator
A. Public Questions to Candidates.....Register and submit online
Members of the public who wish to participate will submit their questions online through a fillable form in advance of the meeting. All members of the public whose questions are selected for the panel will have the opportunity to ask their question during the meeting. Each candidate will be given an allotted amount of time to respond. Cover letters and resumes for the final candidates will be posted online for the public to view before the meeting. Following the meeting, a recording of the public panel will be available for anyone interested in viewing.

4:45 – 5:00 p.m. Second Break

5:00 – 6:00 p.m. **3.** ***Executive Session**.....Chair Kelly and DAS Executive Recruiter
The Board will meet in executive session for the purpose of considering the employment of a chief executive officer, pursuant to ORS 192.660(2)(a) and 192.660(7). No decision will be made in Executive Session.

GENERAL INFORMATION:
Times listed on the agenda are approximate. At the discretion of the chair, the time and order of agenda items—including addition of an intermittent break—may change to maintain meeting flow.

WORK SESSIONS: Certain agenda topics may be marked with an asterisk indicating a "Work Session" item. Work Sessions provide the Board opportunity to receive information and/or make decisions after considering previous public comment and staff recommendations. No new public comment will be taken. However, the Board may choose to ask questions of the audience to clarify issues raised.

- During consideration of contested civil penalty cases, the Board will entertain oral argument only if Board members have questions relating to the information presented.
- Relating to the adoption of Oregon Administrative Rules: Under Oregon's Administrative Procedures Act, the Board can only consider those comments received by the established deadline as listed on the Notice of Rulemaking form. Additional input can only be accepted if the comment period is formally extended (ORS 183.335).

If special materials, services, or assistance is required, such as a sign language interpreter, assistive listening device, or large print material, please contact our Public Affairs Office at least three working days prior to the meeting via telephone at 503-945-7200 or by email at forestryinformation@oregon.gov.

STAFF REPORT

Agenda Item No.:	1
Work Plan:	Fire Protection
Topic:	Evolving Topic: Governor's Council on Wildfire Response
Presentation Title:	*SB 762: Wildland – Urban Interface Definition
Date of Presentation:	October 20, 2021
Contact Information:	Tim Holschbach, Deputy Chief – Policy & Planning 503-945-7434, Tim.J.Holschbach@Oregon.gov

SUMMARY

The purpose of this agenda item is to seek approval from the Board of Forestry (Board) to adopt a definition of "Wildland-Urban Interface" in Oregon Administrative Rule 629-044.

BACKGROUND

Following the 2013-2015 fire seasons, two parallel review processes were initiated, the Secretary of State (SOS) Audit and the Fire Program Review. Both of these efforts were aligned to help continue a highly functioning wildfire protection system for Oregon into the future. The Department has fully embraced the findings and recommendations from both final reports. The 2017-2108 fire seasons experience reinforced the need for the agency to continue efforts on these recommendations. Additionally, the Governor issued Executive Order 19-01 creating the Governor's Council on Wildfire Response.

- The Department's 2015 Fire Protection Program Review - Response Committee was coordinated with all agency partners through a transparent process including legislators, governor's office, forest landowners, and cooperators to reach for continuous improvement in Oregon's complete and coordinated fire protection system;
- The Secretary of State Performance Audit offered a third-party review of the Department's ability to sustain its multiple missions, as increased demand to support the fire protection effort has been required from the entire agency;
- The Governor's Council on Wildfire Response offered 37 recommendations to improve Oregon's wildfire protection system. Many of the recommendations required legislative action to be carried out.

Senate Bill 762 captured many of the recommendations of the Governor's Council on Wildfire Response, providing legislative direction to the Board of Forestry regarding the wildland-urban interface; statewide fire risk mapping; prescribed fire; directed the Department to review and clarify the enforcement of rules pertaining to forestland; and baseline standards for unprotected and under-protected lands in Oregon.

CONTEXT

For the purpose of this rulemaking, the Department developed a rules advisory committee comprised of 26 representatives from a broad range of interests including industrial, nonindustrial, federal, county, environmental, tribal, and public. This advisory committee met four times virtually. A short summary of each meeting is below:

> July 27, 2021 – Introduction of Rules Advisory Committee. Provided background of SB762, reviewed proposed charter and scope.
>
> August 3, 2021 – Confirmed charter, provided overview of WUI definition exercise to gain group perspective.
>
> August 10, 2021 – Presentation of ODF staff recommendation of WUI definition. Polled RAC on several definition options. Introduced components of economic impact statement.
>
> August 17, 2021 – ODF staff presented draft staff report and fiscal and economic impact statement to committee. ODF presented initial work plan components and solicited feedback of addition components and possible data sets that should be considered, and definitions of terms needed for development of full work plan.

The Department gained extensive feedback through the committee process. The rule advisory committee's work will continue further, to define the terms within the definition and develop the criteria to identify and classify the Wildland-Urban Interface.

On August 24, 2021, the Board directed the Department to proceed with the administrative rule filing (Attachment 3) and conduct public hearings.

ANALYSIS

The public comment period for the proposed rule changes was open from September 1 through October 1, 2021 (Attachment 1). Three public hearings were conducted September 22-24. The full transcript of the comments is contained in the Hearing's Officer report (Attachment 4) and summarized as follows:

September 22, 2021, 2:00 p.m. - 12 members of the public attended the public hearing with no oral comments provided.

September 23, 2021, 7:00 p.m. - 9 members of the public attended the public hearing with five people providing comments. The public hearing was closed at 7:29 p.m.

Support:	2
Oppose:	2
Neutral:	1

September 24, 2021, 9:00 a.m. - Seven members of the public attended the public hearing with no oral comments provided. The public hearing was closed at 9:24 a.m.

In addition, 46 written comments were submitted to the Department:

Support:	36
Oppose:	5
Neutral:	5

RECOMMENDATION

The Board approves adoption of the revisions to OAR 629-044 (Attachment 2).

NEXT STEPS

October 22, 2021 – Adopted rule will be submitted to the Secretary of State and Legislative Counsel for filing. Effective date October 27, 2021.

ATTACHMENTS

1. Draft rule changes to OAR 629-044 with strikethroughs
2. Department's proposed changes to rule with final rule language
3. Notice of Proposed Rulemaking filing – August 25, 2021
4. WUI Definition Hearing Officer's Report to Board

DIVISION 44

629-044-0200
Wildfire Hazard Zones — Definitions

As used in OAR 629, division 044, unless otherwise required by context:

(1) "Geographic Area" means the areas which result from the partitioning of all or portions of a jurisdiction into smaller segments, based on the presence of differing hazard values.

(2) "Hazard" means the potential to burn.

(3) "Hazard Factor" means the factors which most influence the potential of a geographic area to burn. Hazard factors are fire weather, topography, natural vegetative fuels, and natural vegetative fuel distribution.

(4) "Hazard Rating" means a cumulative value resulting from the summation of hazard values for all four hazard factors. It reflects the overall potential for a given geographic area to burn.

(5) "Hazard Value" means a value assigned to a hazard factor within a geographic area.

(6) "Jurisdiction" means a unit of local government authorized by law to adopt a building code or a fire prevention code.

(7) "Land Features" means roads, jurisdictional boundaries and other features created by human activity.

(8) "Natural Geographic Features" means streams, ridge lines and other features naturally occurring.

(9) "Wildfire Hazard Zone" means a geographic area having a combination of hazard factors that result in a significant hazard of catastrophic fire over relatively long periods of each year.

Statutory/Other Authority: ORS 526.016
Statutes/Other Implemented: ORS 93.270
History:
FB 2-1996, f. 3-13-96, cert. ef. 4-1-96

629-044-0210
Purpose

The purpose of OAR 629, division 044 is to set forth the criteria by which Wildfire Hazard Zones shall be determined by jurisdictions. Such a determination is necessary before the provisions of ORS 93.270(4), portions of the Oregon One and Two Family Dwelling Specialty Code, and portions of the Oregon Structural Specialty Code can become effective. The determination of Wildfire Hazard Zones by jurisdictions is voluntary.

Statutory/Other Authority: ORS 526.016
Statutes/Other Implemented: ORS 93.270
History:
FB 2-1996, f. 3-13-96, cert. ef. 4-1-96

629-044-0220
Wildfire Hazard Zones

(1) For the convenience of administration, when practical, a jurisdiction may utilize nearby natural geographic features or land features to delineate the boundaries of Wildfire Hazard Zones.

(2) It is not the intent of OAR 629, division 044 that Wildfire Hazard Zones be determined on a tax lot or an ownership specific basis, but rather that a landscape approach be used.

(3) To determine the existence of Wildfire Hazard Zones, a jurisdiction shall:

(a) Determine, for each hazard factor, the appropriate geographic areas and associated hazard values; then

(b) Overlay the geographic areas and associated hazard values determined in subsection (3)(a) above, then determine the resulting composite geographic areas and the associated hazard rating for each composite area.

(c) For each composite geographic area determined in subsection (3)(b) above, determine whether a Wildfire Hazard Zone is present from Table 5.

TABLE 5

WILDFIRE HAZARD ZONE

Hazard Rating — Wildfire Hazard Zone.

1, 2, 3, 4, 5, or 6 — NO.

7, 8, 9, 10, 11 or 12 — YES.

Statutory/Other Authority: ORS 526.016
Statutes/Other Implemented: ORS 93.270
History:
FB 2-1996, f. 3-13-96, cert. ef. 4-1-96

629-044-0230
Fire Weather Hazard Factor

(1) The reference for establishing the fire weather hazard factor shall be data provided by the Oregon Department of Forestry, which was developed following an analysis of daily fire danger rating indices in each regulated use area of the state.

(2) For geographic areas described in Table 1, select the appropriate hazard value from Table 1.

TABLE 1

FIRE WEATHER HAZARD FACTOR

County — Hazard Value.

Baker — 3.

~~Benton — 2.~~

~~Clackamas — 2.~~

~~Clatsop, Area 1 — All of Clatsop County except Area 2. — 1.~~

~~Clatsop, Area 2 — That portion of Clatsop County in Township 4 North Range 6 West. — 2.~~

~~Columbia — 2.~~

~~Coos, Area 1 — All of Coos County except Area 2. — 1.~~

~~Coos, Area 2 — That portion of Coos County east of a generally north-south straight line which extends from the boundary with Douglas County, passes through the locales of Allegany and Gaylord, to the boundary with Curry County. — 2.~~

~~Crook — 3.~~

~~Curry, Area 1 — All of Curry County except Area 2. — 1.~~

~~Curry, Area 2 — That portion of Curry County east of the north-south line between Townships 13 West and 14 West. — 2.~~

~~Deschutes — 3.~~

~~Douglas, Area 1 — That portion of Douglas County west of a generally north-south straight line which extends from the boundary with Lane County, passes through the locale of Sulpher Springs, to the boundary with Coos County. — 1.~~

~~Douglas, Area 2 — That portion of Douglas County east of Area 1 and west of the north-south line between Townships 8 West and 9 West. — 2.~~

~~Douglas, Area 3 — That portion of Douglas County east of Area 1 and north of a generally east-west straight line which extends from the city of Cottage Grove to the mouth of Winchester Bay. — 2.~~

~~Douglas, Area 4 — That portion of Douglas County east of Area 2, south of Area 3 and west of Area 5. — 3.~~

~~Douglas, Area 5 — That portion of Douglas County east of a generally north-south line which follows the western boundary of the Umpqua National Forest from the boundary with Jackson County to the boundary with Lane County. — 2.~~

~~Gilliam — 3.~~

~~Grant — 3.~~

~~Harney — 3.~~

~~Hood River — 3.~~

~~Jackson — 3.~~

~~Jefferson — 3.~~

~~Josephine, Area 1 — All of Josephine County except Area 2. — 2.~~

~~Josephine, Area 2 — That portion of Josephine County east of a generally north-south line which follows Highway 199 from the California border to the locale of Wonder and than extends straight through the locale of Galice to the boundary with Douglas County. — 3.~~

~~Klamath — 3.~~

~~Lake — 3.~~

~~Lane, Area 1 — All of Lane County except Area 2. — 1.~~

~~Lane, Area 2 — That portion of Lane County east of generally north-south straight line which extends from the boundary with Benton County through the northeast corner of Township 15 South Range 9 West and the southwest corner of Township 18 South Range 9 West to the boundary with Douglas County. — 2.~~

~~Lincoln, Area 1 — All of Lincoln County except Area 2. — 1.~~

~~Lincoln, Area 2 — That portion of Lincoln County east of a generally north-south straight line which extends from the boundary with Lane County through the southwest corner of Township 14 South Range 10 West to the northwest corner of Township 12 South Range 10 West then straight to the northeast corner of Township 14 South Range 10 West then straight through the locale of Rose Lodge to the boundary with Tillamook County. — 2.~~

~~Linn — 2.~~

~~Malheur — 3.~~

~~Marion — 2.~~

~~Morrow — 3.~~

~~Multnomah — 2.~~

~~Polk — 2.~~

~~Sherman — 3.~~

~~Tillamook, Area 1 — All of Tillamook County except Area 2. — 1.~~

~~Tillamook, Area 2 — That portion of Tillamook County east of the north-south line between Townships 7 West and 8 West. — 2.~~

~~Umatilla — 3.~~

~~Union — 3.~~

~~Wallowa — 3.~~

~~Wasco — 3.~~

~~Washington — 2.~~

Wheeler — 3.

Yamhill — 2.

Statutory/Other Authority: ORS 526.016
Statutes/Other Implemented: ORS 93.270
History:
FB 2-1996, f. 3-13-96, cert. ef. 4-1-96

629-044-0240
Topography Hazard Factor

(1) The reference for establishing the topography hazard factor shall be:

(a) The General Soil Map Report published by the Oregon Water Resources Board and the Soil Conservation Service, USDA in 1969; or

(b) The appropriate 7.5 minute quadrangle map published by the U.S. Geological Survey, USDI.

(2) For geographic areas determined by use of a reference set forth in subsection (1) above, select the appropriate hazard value from Table 2.

TABLE 2

TOPOGRAPHY HAZARD FACTOR

Map Slope Class — Hazard Value

1 (Slopes 00–03%) — 0.

2 (Slopes 03–07%) — 1.

3 (Slopes 07–12%) — 1.

4 (Slopes 12–20%) — 2.

5 (Slopes 20–35%) — 3.

6 (Slopes 35–60+%) — 3.

Statutory/Other Authority: ORS 526.016
Statutes/Other Implemented: ORS 93.270
History:
FB 2-1996, f. 3-13-96, cert. ef. 4-1-96

629-044-0250
Natural Vegetative Fuel Hazard Factor

(1) The reference for establishing the natural vegetative fuel hazard factor shall be the "Aids to Determining Fuel Models For Estimating Fire Behavior" published by the Forest Service, USDA Intermountain Forest and Range Experiment Station in 1982 as General Technical Report INT-122.

(2) Using the natural vegetative fuel models described in the reference set forth in subsection (1), and summarized in Table 3, divide the jurisdiction into geographic areas which best describe the natural vegetation expected to occupy sites for the next 10 to 15 years and then select the appropriate hazard value from Table 3.

TABLE 3

NATURAL VEGETATIVE FUEL HAZARD FACTOR

Natural Vegetative Fuel Description — Hazard Value

Little or no natural vegetative fuels are present. — 0.

Grass. Very little shrub or timber is present, generally less than one-third of the area. Main fuel is generally less than two feet in height. Fires are surface fires that move rapidly through cured grass and associated material. (Fuel model 1) — 3

Grass. Open shrub lands and pine stands or scrub oak stands that cover one-third to two-thirds of the area. Main fuel is generally less that two feet in height. Fires are surface fires that spread primarily through the fine herbaceous fuels, either curing or dead. (Fuel model 2) — 3.

Grass. Beach grasses, prairie grasses, marshland grasses and wild or cultivated grains that have not been harvested. Main fuel is generally less than four feet in height, but considerable variation may occur. Fires are the most intense of the grass group and display high rates of spread under the influence of wind. (Fuel model 3) — 3.

Shrubs. Stands of mature shrubs have foliage known for its flammability, such as gorse, manzanita and snowberry. Main fuel is generally six feet or more tall. Fires burn with high intensity and spread very rapidly. (Fuel model 4) — 3.

Shrubs. Young shrubs with little dead material and having foliage not known for its flammability, such as laurel, vine maple and alders. Main fuel is generally three feet tall or less. Fires are generally carried in the surface fuels and are generally not very intense. (Fuel model 5) — 1.

Shrubs. Older shrubs with foliage having a flammability less than fuel model 4, but more than fuel model 5. Widely spaced juniper and sagebrush are represented by this group. Main fuel is generally less than six feet in height. Fires will drop to the ground at low wind speeds and in stand openings. (Fuel model 6) — 2.

Timber. Areas of timber with little undergrowth and small amounts of litter buildup. Healthy stands of lodgepole pine, spruce, fir and larch are represented by this group. Fires will burn only under severe weather conditions involving high temperatures, low humidities and high winds. (Fuel model 8) — 1.

Timber. Areas of timber with more surface litter than fuel model 8. Closed stands of healthy ponderosa pine and white oak are in this fuel model. Spread of fires will be aided by rolling or blowing leaves. (Fuel model 9) — 2.

Timber. Areas of timber with heavy buildups of ground litter caused by overmaturity or natural events of wind throw or insect infestations. Fires are difficult to control due to large extent of ground fuel. (Fuel model 10) — 3.

Statutory/Other Authority: ORS 526.016
Statutes/Other Implemented: ORS 93.270
History:
FB 2-1996, f. 3-13-96, cert. ef. 4-1-96

629-044-0260
Natural Vegetative Fuel Distribution Hazard Factor

(1) Divide the jurisdiction into geographic areas which best describe the percentage of the area which is occupied by the foliage of natural vegetative fuels.

(2) For each geographic area determined in section (1) above, select the appropriate hazard value from Table 4.

TABLE 4

NATURAL VEGETATIVE FUEL DISTRIBUTION HAZARD FACTOR

Natural Vegetative Fuel Distribution — Hazard Value.

0 to 10% of the area — 0.

10 to 25% of the area — 1.

25 to 40% of the area — 2.

40 to 100% of the area — 3.

Statutory/Other Authority: ORS 526.016
Statutes/Other Implemented: ORS 93.270
History:
FB 2-1996, f. 3-13-96, cert. ef. 4-1-96

629-044-1000
Wildland-Urban Interface — Purpose

(1) The purpose of OAR 629-044-1000 to 629-044-1110 is to implement the provisions of ORS 477.015 to 477.061, the Oregon Forestland-Urban Interface Fire Protection Act of 1997.

(2) The purpose of OAR 629-044-1010 to 629-044-1045 is to set forth the criteria by which the forestland-urban interface shall be identified and classified pursuant to ORS 477.025 to 477.057.

(3) The purpose of OAR 629-044-1050 to 629-044-1090 is to set forth the standards an owner of land in the forestland-urban interface shall apply pursuant to ORS 477.059(2).

(4) The purpose of OAR 629-044-1095 to 629-044-1105 is to set forth the process for written evaluation and certification pursuant to ORS 477.059(3).

(5) The purpose of OAR 629-044-1110 is to set forth the processes which shall apply to special or additional costs of fire protection within the forestland-urban interface pursuant to ORS 477.060.

~~Statutory/Other Authority:~~ ~~ORS 477.027, 477.059 & 477.060~~
~~Statutes/Other Implemented:~~ ~~ORS 477.015 - 477.061~~
~~History:~~
~~DOF 9-2002, f. 9-19-02, cert. ef.11-15-02~~[FT1]

Wildland-Urban Interface

629-044-1000

Purpose

(1) The purpose of OAR 629-044-1000 to 629-044-~~1110~~ 10**05** is to ~~**identify and map the wildland-urban interface on for all lands and jurisdictions in Oregon**~~ **establish a definition of wildland-urban interface**. ~~implement the provisions of ORS 477.015 to 477.061, the Oregon Forestland-Urban Interface Fire Protection Act of 1997.~~[FT2]

~~(2) The purpose of OAR 629-044-10120 to 629-044-1045 is to set forth the criteria by which the forestland~~wildland~~-urban interface shall be identified and classified pursuant to ORS 477.025 to 477.057~~027~~.~~

~~(3) The purpose of OAR 629-044-1050 to 629-044-1090 is to set forth the standards an owner of land in the forestland-urban interface shall apply pursuant to ORS 477.059(2).~~

~~(4) The purpose of OAR 629-044-1095 to 629-044-1105 is to set forth the process for written evaluation and certification pursuant to ORS 477.059(3).~~

~~(5) The purpose of OAR 629-044-1110 is to set forth the processes which shall apply to special or additional costs of fire protection within the forestland-urban interface pursuant to ORS 477.060.~~

~~Stat. Auth.: ORS 477.027, ORS 477.059, ORS 477.060~~
~~Stats. Implemented: ORS 477.015 - ORS 477.061~~
~~Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02~~

629-044-1005

Definitions

(1) The definitions set forth in ORS 477.001, ~~477.015 and OAR 629-041-0005~~ shall apply to 629-044-1000 to 629-044-~~11101~~**005**, unless the context otherwise requires.

(2) The following words and phrases, when used in OAR 629-044-1000 to 629-044-~~11101~~**005**, shall mean the following, unless the context otherwise requires:

~~**(a) "Community Wildfire Protection Plan" means a plan developed pursuant to the federal Healthy Forests Restoration Act of 2003 and which has been approved, within the past five years, by the appropriate city or county, by the appropriate structural fire service provider and by the Oregon Department of Forestry.**~~[FT3]

~~(b) "Concentration of structures" means dwellings in a density of four or more per quarter of a quarter section (an area approximately 40 acres in size), as determined by the Public Land Survey.~~[FT4]

~~(c) "Classification" means the process set forth in ORS 477.031 to 477.052 and 477.057.~~

~~(d) "Classified by a committee" means the end result of the classification process set forth in ORS 477.031 to 477.052 and 477.057.~~[FT5]

~~(e) "Current zoning" means zoning which allows the siting of a dwelling as an outright use.~~

~~(f) "Driveway" means the primary, privately owned vehicle access road that serves a dwelling, which is controlled by the owner of the dwelling, and which is longer than 150 feet.~~

~~(g) "Dwelling" means a structure, or a part of a structure, that is used as a home, as a residence, or as a sleeping place by one or more people who maintain a household in the structure.~~

~~(h) "Fire resistant roofing " means roofing material that has been installed and is maintained to the specifications of the manufacturer and which:~~

~~(A) Is rated by Underwriter's Laboratory as Class A, Class B, Class C, or is equivalent thereto; or~~

~~(B) Is metal.~~

~~(i) "Fuel break" means a natural or a human-made area immediately adjacent to a structure or to a driveway, where material capable of allowing a wildfire to spread does not exist or has been cleared, modified, or treated to:~~

~~(A) Significantly reduce the rate of spread and the intensity of an advancing wildfire; and~~

~~(B) Create an area in which fire suppression operations may more safely occur.~~[FT6]

~~(j) "Geographic area" means an area which results from the partitioning of all or portions of a district into smaller segments, based on the presence of differing hazard factors, risks, or dwelling concentrations.~~

~~(k) "Hazard factor" means one of the three factors which most influence the potential of a wildfire to spread. The three hazard factors are topography, natural vegetative fuels, and wildfire weather.~~

~~(l) "Homeowner's association" means a non-profit corporation organized under ORS Chapter 65 and which is subject to the provisions of ORS 94.625 to 94.700.~~

~~(m) "Included rural lands" means lands which meet the definition of "rural" but which have been classified by a committee as "suburban."~~[FT7]

~~(n) "Ladder fuel" means branches, leaves, needles, and other combustible vegetation that may allow a wildfire to spread from lower growing vegetation to higher growing vegetation.~~

~~(o) "Lands" means one or more tax lots.~~

~~(p) "Non-fire resistant roofing" means roofing material that is not fire resistant including, but not limited to, cedar shakes.~~

~~(q) "Private fire department" means a private entity which provides structural fire prevention and suppression services and which meets the safety requirements set forth in OAR 437-002-0182.~~

~~(r) "Road" means a road over which the public has a right of use that is a matter of public record.~~[FT8]

~~(s) "Rural" means a geographic area which has not been classified by a committee as suburban or urban and shall include:~~[FT9]

~~(A) Lands zoned primarily for farm or forestry uses;~~

~~(B) Lands which have an average tax lot size of 10 acres or larger;~~

~~(C) Lands not zoned to allow a concentration of structures; and~~

~~(D) Lands which do not contain a concentration of structures.~~

~~(t) "Safety zone" means an adequately sized area, which is substantially free of flammable materials, and which can be used as a refuge to protect human life from an advancing wildfire.~~

~~(u) "Standards" means the actions, efforts, or measures which owners of suburban and urban lands shall take on their property, prior to a wildfire occurrence which originates on the property.~~

~~(v) "Structural fire service provider" means a local government agency or a private fire department which provides structural fire prevention and suppression services.~~

~~(w) "Structure" means a permanently sited building, a manufactured home, or a mobile home that is either a dwelling or an accessory building, which occupies at least 500 square feet of ground space, and which has at least one side that is fully covered.~~[FT10]

~~(x) "Suburban" means a geographic area which includes one or more of the following:~~

~~(A) Lands where a concentration of structures exists;~~

~~(B) Lands on which current zoning allows a concentration of structures; or~~

~~(C)~~ **Included rural lands.**[FT11]

~~(y) "Urban" means a geographic area that includes one or more of the following:~~

~~(A) Lands within a city limit; or~~

~~(B) Lands within an urban growth boundary.~~

~~(z) "Urban growth boundary" is defined by ORS 197.295.~~

~~(aa) "Wildfire" means an uncontrolled fire which is burning on forestland and which is damaging, or is threatening to damage, forest resources or structures.~~[FT12]

(a) "Wildland-Urban Interface means a geographical area where structures and other human development meets or intermingles with wildland or ~~or~~ vegetative fuels." [FT*O13]

~~(ab) "Zoning" means a local governmental zoning ordinance, a land division ordinance adopted under ORS 92.044 or 92.046, or a similar general ordinance establishing standards for implementing a comprehensive plan.~~

Stat. Auth.: ORS 477.015, as amended by section 31, chapter 592, Oregon Laws 2021 (SB 762)
Stats. Implemented: ORS 477.015, as amended by section 31, chapter 592, Oregon Laws 2021 (SB 762)
~~Stat. Auth.: ORS 477.027~~015~~, 477.059 & 477.060~~
~~Stats. Implemented: ORS 477.015 - 477.061~~
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02; DOF 3-2007, f. 8-23-07, cert. ef. 12-31-07

~~629-044-1010~~

(1) ~~Forestland~~Wildland~~-Urban Interface [FT*O14]Lands, as defined in ORS 477.015 (1), means any areas where humans and their development meets or intermix with wildland fuels. Identified By A Committee[FT*O15]~~

~~(1) A committee shall identify for classification only those lands which:~~

~~(a) Are within the county of its jurisdiction;~~

(b) ~~Are within a forest protection district;~~

(c) ~~Meet the definition of forestland; and~~

(d) ~~Meet the definition of suburban or urban.~~

~~(2) The amount of included rural lands identified for classification as suburban shall be kept to a minimum.~~

~~(3) Lands which meet all the criteria set forth in subsections (1) and (2) of this rule shall be considered to be forestland-urban interface [FT*O16]lands.~~

(4~~) A committee [FT17]shall set forth the boundaries of forestland-urban interface lands identified in subsection (3) of this rule. For clarity, natural geographic features, human-made land features, public land survey lines, and political boundary lines should be used to describe such boundaries.~~

~~Stat. Auth.: ORS 477.027[FT18]~~

~~Stats. Implemented: ORS 477.025 - ORS 477.057~~

~~Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02~~

~~629-044-1015~~

~~Forestland-Urban Interface Lands Classified By A Committee~~

~~(1) Forestland-urban interface lands shall be classified by a committee as follows:~~

~~(a) Locate the appropriate geographic areas and the associated values from the criteria set forth in OAR 629-044-1035 to 629-044-1045; then~~

~~(b) Overlay the geographic areas and the associated values, located in subsection (1)(a) of this rule, and identify the resulting composite geographic areas and the associated values; then~~

~~(c) Determine the classification for each composite geographic area identified in subsection (1)(b) of this rule, from the criteria set forth in Table 1 of this rule.~~

(d) Geographic areas determined in subsection (1)(c) of this rule to be "Extreme" may be classified by a committee as "High Density Extreme" pursuant to OAR 629-044-1020.

(2) A committee shall set forth the boundaries of the geographic areas classified by a committee pursuant to subsection (1) of this rule. For clarity, natural geographic features, human-made land features, public land survey lines, and political boundary lines should be used to describe such boundaries.[FT19]

[ED.NOTE: Tables referenced are available from the agency.]

Stat. Auth.: ORS 477.027
Stats. Implemented: ORS 477.025 - ORS 477.057
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

629-044-1020

High Density Extreme Classification[FT20]

(1)(a) The purpose of the High Density Extreme classification is to identify those lands where vegetation modification around structures alone may not be sufficient to help protect lives during a wildfire.

(b) Owners of lands classified High Density Extreme are required to provide fuel breaks adjacent to:

(A) Property lines;

(B) Roads; or

(C) Both property lines and roads.

(2) Lands may be classified by a committee as High Density Extreme when a geographic area meets all of the following criteria:[FT21]

(a) The lands have been classified by a committee as Extreme based on the hazard factors;

(b) The lands have a current zoning for residential development;

(c) The lands contain fuels which, if not modified or treated, will result in a wildfire having a significant rate of spread and intensity;

(d) The lands have:

(A) An average tax lot size of less than three acres; or

(B) A typical tax lot configuration which prevents the establishment of a 30 feet wide fuel break adjacent to structures;

(e) The lands lack:

(A) Safety zones; or (B) Effective vehicle egress which may hamper the safe evacuation of dwellings during a wildfire.

(3) Notwithstanding subsection (2) of this rule, lands may be classified by a committee as High Density Extreme when all of the following apply to a geographic area which has current zoning for residential development:

(a) The committee receives a written request for such classification from one or more of the following entities in which the lands are located:

(A) The county;

(B) The city;

(C) The structural fire service provider;

(D) The entity responsible for development of a Community Wildfire Protection Plan; or

(E) The homeowner's association.

(b) The written request contains:

(A) Certification that the request has been approved by the governing body of the entity;

(B) Justification for the requested classification, based upon:

(i) The existence of fuels which, if not modified or treated, will result in a wildfire having a significant rate of spread and intensity; or

(ii) A lack of effective vehicle egress which may hamper the safe evacuation of dwellings during a wildfire.

(4) When lands are classified by a committee as High Density Extreme, the committee shall also specify which of the following options shall apply to the lands:

(a) Option 1, where fuel breaks shall be provided adjacent to property lines pursuant to OAR 629-044-1075(1);

(b) Option 2, where fuel breaks shall be provided adjacent to roads pursuant to ORS 629-044-1075(2); or

(c) Option 3, where fuel breaks shall be provided adjacent to property lines and to roads pursuant to OAR 629-044-1075(1) and (2).

(5) Written requests received by a committee under subsection (3) of this rule automatically terminate after a period of five years.

Stat. Auth.: ORS 477.027
Stats. Implemented: ORS 477.025 - 477.057
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02; DOF 3-2007, f. 8-23-07, cert. ef. 12-31-07

629-044-1025

Periodic Forestland-Urban Interface Lands Identification And Classification

The identification and classification of forestland-urban interface lands shall be reviewed by a committee at least once every five years. [FT22]

Stat. Auth.: ORS 477.027
Stats. Implemented: ORS 477.025 - ORS 477.057
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

629-044-1030

Forestland-Urban Interface Lands Identification And Classification By The State Forester[FT23]

When the State Forester performs the duties of a committee pursuant to ORS 477.057, the State Forester shall comply with OAR 629-044-1010 to 629-044-1045.

Stat. Auth.: ORS 477.027
Stats. Implemented: ORS 477.025 - ORS 477.057
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

629-044-1035

Wildfire Weather Hazard FactorRatings

(1) The reference for establishing the wildfire weather hazard factor ratings shall be determined from the most current wildfire risk assessment data provided by the Oregon Department of Forestry, which was developed following an analysis of daily wildfire danger rating indices in each regulated use area of the state and which is described in Table 1 of OAR 629-044-0230.

(2) Wildfire hazard ratings are meant to illustrate fire risk to structures and shall be classified as follows:

(a) Low

(b) Moderate

(c) High

(d) Extreme[FT*O24]

For the geographic areas described in Table 1 of OAR 629-044-0230, select the appropriate hazard values.

(3) A committee may increase the hazard value determined in subsection (2) of this rule by one point in any geographic area which it determines to have a history of frequent wildfire occurrence.[FT25]

Stat. Auth.: ORS 477.027
Stats. Implemented: ORS 477.025 - ORS 477.057
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

629-044-1040

Topography Hazard Factor

(1) The reference for establishing the topography hazard factor shall be:

(a) A 30-meter or better Digital Elevation Model (DEM); or

(b) The appropriate 7.5 minute quadrangle map published by the U.S. Geological Survey, USDI.

~~(2) Using the reference set forth in subsection (1) of this rule, determine the geographic areas which best describe:~~

~~(a) Areas having an overall slope of 25% (14 degrees) or less; and~~

~~(b) Areas having an overall slope of more than 25% (14 degrees).~~

~~(3) Each geographic area determined in subsection (2) of this rule shall be assigned an appropriate hazard value, as follows:~~

~~(a) A hazard value of 1, for geographic areas described by subsection (2)(a) of this rule; or~~

~~(b) A hazard value of 2, for geographic areas described by subsection (2)(b) of this rule.~~

~~Stat. Auth.: ORS 477.027~~
~~Stats. Implemented: ORS 477.025 - ORS 477.057~~
~~Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02~~

~~629-044-1045~~

~~Natural Vegetative Fuel Hazard Factor~~

~~(1) The reference for establishing the natural vegetative fuel hazard factor shall be the document "Aids to Determining Fuel Models for Estimating Fire Behavior" published by the Forest Service, USDA Intermountain Forest and Range Experiment Station in 1982 as General Technical Report Technical INT-122. Information from this reference is summarized in Table 3 of OAR 629-044-0250. [Table not included. See ED. NOTE] (Is this going to change based on new NFDRS?)~~

~~(2) Using the fuel models described in the reference set forth in subsection (1) of this rule, determine the geographic areas which best describe the natural vegetative fuels expected to occupy an area for the next five years.~~

~~(3) The geographic areas determined in subsection (2) of this rule shall be assigned the appropriate hazard value, as shown in Table 3 of OAR 629-044-0250.~~

~~(4) It is recognized that natural vegetation is highly variable and that the fuel models used in subsection (2) of this rule may not always accurately reflect expected wildfire behavior, due to variations in local species and vegetation conditions. Therefore, a committee may make such modifications to the hazard values as it determines is necessary to accurately reflect the following:~~

~~(a) A hazard value of 1 shall describe vegetation that typically produces a flame length of up to 5 feet, a wildfire which exhibits very little spotting, torching, or crowning, and which results in a burned area that can normally be entered within 15 minutes.~~

~~(b) A hazard value of 2 shall describe vegetation that typically produces a flame length of 5 to 8 feet, a wildfire which exhibits sporadic spotting, torching, or crowning, and which results in a burned area that can normally be entered within one hour.~~

~~(c) A hazard value of 3 shall describe vegetation that typically produces a flame length of over 8 feet, a wildfire that exhibits frequent spotting, torching, or crowning, and which results in a burned area that normally cannot be entered for over one hour.~~

Stat. Auth.: ORS 477.027
Stats. Implemented: ORS 477.025 - ORS 477.057
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

629-044-1050

Purpose And Intent Of Standards

(1) The standards required by OAR 629-044-1055 are designed to minimize or mitigate a wildfire hazard or risk on an owners property which arises due, singly or in combination, to the presence of structures, to the arrangement or accumulation of vegetative fuels, or to the presence of other wildfire hazards.

(2) It is recognized that owners have a variety of objectives to achieve while applying the standards, including objectives related to aesthetics, dust barriers, fish and wildlife habitat, gardening, soil stabilization, sound barriers, and visual barriers. It is the intent of the standards to allow owners to meet such objectives, provided there is no compromise of the standards needed to mitigate wildfire hazards or risks.

(3) The standards are considered to be minimum measures which are intended to improve the survivability of structures during a wildfire, but which will not guarantee survivability.[FT26]

Stat. Auth.: ORS 477.059
Stats. Implemented: ORS 477.059
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

629-044-1055

Standards[FT27]

(1) Owners of lands **classified by a committee** as Low are not required to comply with the standards, however, they are encouraged to review their individual situation and to apply those standards which may be appropriate.

(2) Owners of lands classified by a committee as Moderate, High, Extreme, or High Density Extreme shall comply with the standards applicable to their lands. In meeting this requirement, owners shall apply one or more of the following:

(a) The default standards set forth in OAR 629-044-1060, which are intended for the majority of owners;

(b) The optional standards set forth in OAR 629-044-1065, which are intended for owners who are unable to meet the default standards; or

(c) The alternate standards developed pursuant to OAR 629-044-1070, which are intended for owners who wish to address site specific conditions or unique situations.

(3) Owners are encouraged to exceed the standards and to apply additional wildfire safety measures.

Stat. Auth.: ORS 477.059
Stats. Implemented: ORS 477.059
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

~~629-044-1060~~

~~Default Standards~~[FT28]

~~(1) Where structures exist on lands classified by a committee as Moderate, High, Extreme, or High Density Extreme owners shall:~~

~~(a) Provide and maintain primary fuel breaks which comply with the requirements of OAR 629-044-1085 and which are:~~

~~(A) Immediately adjacent to structures, for a distance of at least 30 feet, or to the property line, whichever is the shortest distance. The distance shall be measured along the slope and from the furthest extension of the structure, including attached carports, decks, or eaves.~~

~~(B) Immediately adjacent to driveways, for a distance of at least ten feet from the centerline of a driveway, or to the property line, whichever is the shortest distance. The distance shall be measured along the slope. Including the driving surface, a fuel break shall result in an open area which is not less than 13 1/2 feet in height and 12 feet in width or to the property line, whichever is the shortest distance.~~

~~(b) Provide and maintain secondary fuel breaks which comply with the requirements of OAR 629-044-1085 and which are immediately adjacent to primary fuel breaks, for the distance necessary to comply with the total fuel break distance specified in Table 2~~ [FT29]~~of this rule, or to the property line, whichever is the shortest distance. The distance shall be measured along the slope and from the furthest extension of the structure, including attached carports, decks, or eaves.~~ [FT30]

~~(c) Remove any portion of a tree which extends to within 10 feet of the outlet of a structure chimney or a stove pipe;~~

~~(d) Maintain the portion of any tree which overhangs a structure substantially free of dead plant material;~~

~~(e) Maintain the area under decks substantially free of firewood, stored flammable building material, leaves, needles, and other flammable material; and~~

~~(f) During times of the year when wildfire may be a threat, locate firewood, flammable building material, and other similar flammable material:~~

~~(A) At least 20 feet away from a structure; or~~

~~(B) In a fully enclosed space.~~

~~(2) On all lands classified by a committee as High Density Extreme, owners shall comply with subsection (1) of this rule and with the standards set forth in OAR 629-044-1075.~~

~~[ED.NOTE: Tables referenced are available from the agency.]~~

~~Stat. Auth.: ORS 477.059~~
~~Stats. Implemented: ORS 477.059~~
~~Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02~~

~~629-044-1065~~

~~Optional Standards~~

~~(1) Where structures exist on lands classified by a committee as Moderate, High, Extreme, or High Density Extreme, owners shall provide fuel breaks which comply with the requirements of OAR 629-044-1085 and which are immediately adjacent to structures for a distance of thirty feet or to the property line, whichever is the shortest distance. The distance shall be measured along the slope and from the furthest extension of the structure, including attached carports, decks, or eaves.~~

~~(2) Where structures exist on lands classified by a committee as Moderate, owners shall comply with subsection (1) of this rule and with one or more of the options set forth in subsection (6) of this rule.~~

~~(3) Where structures exist on lands classified by a committee as High, owners shall comply with subsection (1) of this rule and with two or more of the options set forth in subsection (6) of this rule.~~

~~(4) Where structures exist on lands classified by a committee as Extreme, owners shall comply with subsection (1) of this rule and with three or more of the options set forth in subsection (6) of this rule.~~

~~(5) Where structures exist on lands classified by a committee as High Density Extreme, owners shall comply with subsection (1) of this rule, with three or more of the options set forth in subsection (6) of this rule, and with subsection (7) of this rule.~~

~~(6) Optional standards are:~~

~~(a) Option 1, fire resistant structures. This option is intended to reduce the likelihood of a structure being ignited by a wildfire. To comply with this option, owners of structures shall:~~

~~(A) Have fire resistant roofing material;~~

~~(B) Have all permanent openings into and under the structure completely covered with noncombustible, corrosion-resistant, mesh screening material, which has openings no greater than 1/4 inch in size;~~

~~(C) Where there are attachments to the structure, such as decks and porches:~~

~~(i) Maintain the area under the attachments substantially free of firewood, flammable building material, leaves, needles, and other flammable material; or~~

~~(ii) Cover openings to the area under the attachments with noncombustible, corrosion-resistant mesh screening material, which has openings no greater than 1/4 inch in size;~~

~~(D) Remove any portion of a tree which extends to within 10 feet of the outlet of a structure chimney or a stove pipe;~~

~~(E) Maintain the portion of any tree which overhangs a structure substantially free of dead plant material; and~~

~~(F) During times of the year when wildfire may be a threat, locate firewood, flammable building material, and other similar flammable material:~~

~~(i) At least 20 feet away from the structure; or~~

(ii) In a fully enclosed space.

(b) Option 2, secondary fuel break. This option is intended to provide additional separation between structures and natural vegetation. To comply with this option, owners of structures shall provide and maintain secondary fuel breaks which comply with the requirements of OAR 629-044-1085 and which are immediately adjacent to primary fuel breaks, for the distance necessary to create a total fuel break of 100 feet, or to the property line, whichever is the shortest distance. The distance shall be measured along the slope and from the furthest extension of the structure, including attached carports, decks, or eaves.

(c) Option 3, wildfire safe access. This option is intended to provide a more safe vehicle access to and from structures during a wildfire. To comply with this option, owners of a driveway shall provide and maintain a primary fuel break which complies with the requirements of OAR 629-044-1085 and which is immediately adjacent to a driveway for a distance of ten feet from the centerline of the driveway, or to the property line, whichever is the shortest distance. The distance shall be measured along the slope. Including the driving surface, a fuel break shall result in an open area which is not less than 13 1/2 feet in height and 12 feet in width or to the property line, whichever is the shortest distance.

(d) Option 4, low ignition risk property. This option is intended to reduce the likelihood of a wildfire ignition. To comply with this option, owners shall at all times use the following fire prevention practices:

(A) Open fires shall be:

(i) Built, ignited and maintained in compliance with all applicable permit and fire safety requirements;

(ii) Tended and maintained under the control of a person 16 years of age or older;

(iii) Conducted only when weather conditions permit safe burning;

(iv) Conducted in a location which has had all surrounding material cleared of flammable material sufficient to prevent unintended spread of the fire; and

(v) Conducted only when adequate and appropriate fire tools and/or a water supply are present to assist in preventing unintended spread of the fire.

(B) Grills, incinerators, outdoor fireplaces, permanent barbecues, and similar outdoor devices shall be maintained in good repair, in safe condition, and all openings shall normally be completely covered by a spark arrester, by a screen, or by a device which prevents unintended spread of a fire.

(C) Ashes and coals resulting from the use of grills, incinerators, outdoor fireplaces, permanent barbecues, and similar outdoor devices shall be disposed of in a manner which prevents unintended spread of a fire.

(D) The use of outdoor equipment or devices capable of generating heat, open flame, or sparks shall be conducted in compliance with all applicable permit and fire safety requirements; and

(E) Chimneys and stove pipes shall be used only if their openings are completely covered with a spark arrester which meets or exceeds the following standard: constructed of 12 USA standard gauge wire which has openings no larger than 1/2 inch in size.

(7) On all lands classified by a committee as High Density Extreme, owners comply with the standards set forth in OAR 629-044-1075.

Stat. Auth.: ORS 477.059
Stats. Implemented: ORS 477.059
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

629-044-1070

Alternate Standards

(1) Where structures exist on lands classified by a committee as Moderate, High, Extreme, or High Density Extreme, owners shall comply with all standards described in a cooperative agreement made pursuant to ORS 477.406.

(2) Cooperative agreements which describe alternate standards shall be valid only if:

(a) On forms provided by the State Forester or in a format prescribed by the State Forester;

(b) Signed by the District Forester and by the owner; and

(c) The alternate standards provide, in the judgement of the District Forester, for equal or better protection from wildfire than do the standards of OAR 629-044-1060, 629-044-1065, and 629-044-1075 which apply to the classification of the lands for which the cooperative agreement is made.

Stat. Auth.: ORS 477.059
Stats. Implemented: ORS 477.059
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

629-044-1075

Additional Standards For Lands Classified As High Density Extreme

(1) On all lands classified by a committee as High Density Extreme with Option 1, owners shall provide fuel breaks which comply with the requirements of OAR 629-044-1085 and which are immediately adjacent to all property lines, for a distance of twenty feet or to the adjacent property line, whichever is the shortest distance. The distance shall be measured along the slope.

(2) On all lands classified by a committee as High Density Extreme with Option 2, owners shall provide fuel breaks which comply with the requirements of OAR 629-044-1085 and which are immediately adjacent to all road centerlines, for a distance of at least thirty feet, or to the property line, whichever is the shortest distance. The distance shall be measured along the slope and from the center of the driving surface.

(3) On all lands classified by a committee as High Density Extreme with Option 3, owners shall comply with subsections (1) and (2) of this rule.

Stat. Auth.: ORS 477.059
Stats. Implemented: ORS 477.059
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02; DOF 3-2007, f. 8-23-07, cert. ef. 12-31-07

629-044-1080

Modification Of Standards

The District Forester may, in writing, reduce or waive any standard of OAR 629-044-1060, 629-044-1065, 629-044-1075, and 629-044-1085 if the forester finds that conditions so warrant. Reductions or waivers made under this rule:

(1) May be made only after a written request from the owner;

(2) Are intended to be few in number;

(3) Must address:

(a) A site specific condition or a unique situation which does not warrant the development of alternate standards under OAR 629-044-1070; or

(b) A conflict with the requirements of other codes, laws, ordinances, or regulations, as described in ORS 477.023(2), and which does not warrant the development of alternate standards under OAR 629-044-1070; and

(4) Shall be:

(a) On forms provided by the State Forester or in a format prescribed by the State Forester;

(b) Signed by the District Forester and by the owner.[FT31]

Stat. Auth.: ORS 477.059
Stats. Implemented: ORS 477.059
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

629-044-1085

Fuel Break Requirements[FT32]

(1) The purpose of a fuel break is to:

(a) Slow the rate of spread and the intensity of an advancing wildfire; and

(b) Create an area in which fire suppression operations may more safely occur.

(2) A fuel break shall be a natural or a human-made area where material capable of allowing a wildfire to spread:

(a) Does not exist; or

(b) Has been cleared, modified, or treated in such a way that the rate of spread and the intensity of an advancing wildfire will be significantly reduced.

(3) A primary fuel break shall be comprised of one or more of the following:

(a) An area of substantially non-flammable ground cover. Examples include asphalt, bare soil, clover, concrete, green grass, ivy, mulches, rock, succulent ground cover, or wildflowers.

(b) An area of dry grass which is maintained to an average height of less than four inches.

(c) An area of cut grass, leaves, needles, twigs, and other similar flammable materials, provided such materials do not create a continuous fuel bed and are in compliance with the intent of subsections (1) and (2) of this rule.

(d) An area of single specimens or isolated groupings of ornamental shrubbery, native trees, or other plants, provided they are:

(A) Maintained in a green condition;

(B) Maintained substantially free of dead plant material;

(C) Maintained free of ladder fuel;

(D) Arranged and maintained in such a way that minimizes the possibility a wildfire can spread to adjacent vegetation; and

(E) In compliance with the intent of subsections (1) and (2) of this rule.

(4) A secondary fuel break shall be comprised of single specimens or isolated groupings of ornamental shrubbery, native trees, or other plants, provided they are:

(a) Maintained in a green condition;

(b) Maintained substantially free of dead plant material;

(c) Maintained free of ladder fuel;

(d) Arranged and maintained in such a way that minimizes the possibility a wildfire can spread to adjacent vegetation; and

(e) In compliance with the intent of subsections (1) and (2) of this rule.

Stat. Auth.: ORS 477.059
Stats. Implemented: ORS 477.059
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

629-044-1090

Apparent Conflicts With Standards

Pursuant to ORS 477.023:[FT33]

(1) The standards set forth in OAR 629-044-1060 to 629-044-1085 do not supercede or replace any federal law or regulation, any other state agency law or regulation, or any more restrictive local government ordinance or code.

(2) Apparent conflicts with other laws and regulations, for which the forester is responsible and has jurisdiction, shall be resolved within the scope of the forester's authority and documented, as provided in OAR 629-044-1070 or 629-044-1080.

(3) Compliance with OAR 629-044-1070 to 629-044-1080 does not relieve the owner of the requirements of any other law or regulation which applies to the lands in question.

Stat. Auth.: ORS 477.059
Stats. Implemented: ORS 477.023 & ORS 477.059
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

629-044-1095

Written Evaluation

(1) Pursuant to ORS 477.059[FT34], the forester shall provide to the owners of lands classified by a committee a copy of OAR 629-044-1000 to 629-044-1110 and an evaluation form[FT35]:

(a) Two years before the obligations of ORS 477.059(4) become effective on the lands for the first time;

(b) Every five years thereafter; and

(c) When requested by an owner.

(2) The intent of an evaluation form provided pursuant to subsections (1), (5) or (6) of this rule is to allow owners to self-certify compliance with the standards of OAR 629-044-1060 to 629-044-1085. Completion and return of the evaluation form to the forester is optional.

(3) In lieu of completing and returning an evaluation form provided pursuant to subsections (1), (5) or (6) of this rule, an owner may have it completed and returned by an accredited assessor.

(4) Completed and returned evaluation forms shall become void:

(a) Five years after they are provided by the forester;

(b) When the ownership of a tax lot changes;

(c) When a structure is added to a tax lot; or

(d) Pursuant to a determination made in accordance with the provisions of subsection (3) of OAR 629-044-1100.

(5) When the ownership of a tax lot changes, the previous owner shall notify the new owner of the voiding of the evaluation form under subsection (4)(b) of this rule. The new owner may, as provided in subsection (1)(c) of this rule, request that the forester provide a current copy of OAR 629-044-1000 to 629-044-1110 and a new evaluation form.

(6) When a structure is added to a tax lot, the owner may request that the forester provide a current copy of OAR 629-044-1000 to 629-044-1110 and a new evaluation form.

Stat. Auth.: ORS 477.059
Stats. Implemented: ORS 477.059
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

629-044-1100

Certification

(1) An owner of lands classified by a committee shall be considered to be certified as meeting the standards set forth in OAR 629-044-1060 to 629-044-1085 if:

(a) They sign and return to the forester an evaluation form provided[FT36] pursuant to OAR 629-044-1095; or

(b) They use the services of an Accredited Assessor who signs and returns to the forester an evaluation form provided pursuant to OAR 629-044-1095; and

(c) The evaluation form has not become void pursuant to OAR 629-044-1095(4).

(2) The forester may make a determination of whether the lands of an owner meet the standards set forth in OAR 629-044-1060 to 629-044-1085 at any time following the completion and return of an evaluation form provided pursuant to 629-044-1095. Such a determination must be made prior to the occurrence of a wildfire on an owners tax lot.

(3) If the forester determines that an evaluation form provided pursuant to OAR 629-044-1095 was returned by the owner and that it incorrectly or falsely indicated the lands meet the standards set forth in 629-044-1060 to 629-044-1085, the owner shall be notified in writing that both the evaluation form and the certification granted under subsection (1) of this rule will become void on a specified date. In making such a determination, the forester shall:

(a) Not base the determination on technicalities or omissions which, in the sole judgment of the forester, are minor in nature; and

(b) First provide the owner a reasonable time to:

(A) Provide evidence that the property does meet the standards set forth in OAR 629-044-1060 to 629-044-1085; or

(B) Bring their property into compliance with the standards set forth in OAR 629-044-1060 to 629-044-1085.

Stat. Auth.: ORS 477.059
Stats. Implemented: ORS 477.059
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

629-044-1105

Accredited Assessors[FT37]

(1) An Accredited Assessor shall obtain accreditation from the District Forester prior to conducting any activities allowed or required by OAR 629-044-1100 in a district.

(2) To request accreditation, prospective Accredited Assessors shall make application to the District Forester and sign an accreditation agreement on forms provided by the State Forester or in a format prescribed by the State Forester.

(3) Accredited Assessors will not be considered to be accredited until the District Forester reviews and approves both their application and their signed accreditation agreement.

~~(4) Applications to become an Accredited Assessor shall include, but will not be limited to:~~

~~(a) For a Type 1 Accredited Assessor:~~

~~(A) The person's Oregon Construction Contractors Board or Oregon Landscape Contractors Board license number; and~~

~~(B) Evidence that the person has had at least two years total experience related to:~~

~~(i) Wildland fire prevention or suppression; or~~

~~(ii) Management of properties which contain forestland.~~

~~(b) For a Type 2 Accredited Assessor:~~

~~(A) A statement that the person is acting as an authorized agent of a structural fire service provider;~~

~~(B) The signature of the Fire Chief of the structural fire service provider;~~

~~(C) Evidence that the person is a full time paid employee or a volunteer employee in good standing of the structural fire service provider; and~~

~~(D) Evidence that the person has had at least two years total experience related to wildland fire prevention or suppression.~~

~~(c) For a Type 3 Accredited Assessor:~~

~~(A) A statement that the person is acting as an authorized agent of a homeowner's association;~~

~~(B) The signatures of the persons who constitute the governing body of the homeowner's association;~~

~~(C) Evidence that the person is a full time paid employee or a volunteer employee in good standing of the homeowner's association; and~~

~~(D) Evidence that the person has had at least two years total experience related to:~~

~~(i) Wildland fire prevention or suppression; or~~

~~(ii) Management of properties which contain forestland.~~

~~(5) Accreditation agreements shall include, but will not be limited to:~~

~~(a) For a Type 1 Accredited Assessor, a requirement to perform certification services only while currently registered with the Oregon Construction Contractors Board or the Oregon Landscape Contractors Board;~~

~~(b) For a Type 2 Accredited Assessor:~~

~~(A) A requirement to perform certification services only while acting as an authorized agent of a structural fire service provider; and~~

~~(B) A prohibition on collecting either a fee or any other form of remuneration directly from the owner of the lands, for performing certification services;~~

~~(c) For a Type 3 Accredited Assessor:~~

(A) A requirement to perform certification services only while acting as an authorized agent of a homeowner's association; and

(B) A prohibition on collecting either a fee or any other form of remuneration directly from the owner of the lands, for performing certification services;

(d) A requirement to make a determination of whether a property meets the standards set forth in OAR 629-044-1060 to 629-044-1085 only in a truthful manner;

(e) A requirement to send any required records to the State Forester within a specified period of time;

(f) A requirement to maintain any required records for a minimum of six years; and

(g) A requirement to not perform certification services if:

(A) Notified of a suspension under subsection (6) of this rule; or

(B) Notified of a revocation under subsections (7), (8) or (9) of this rule.

(6) The District Forester may suspend the certification authority of an Accredited Assessor at any time the District Forester determines the Accredited Assessor has failed to comply with all requirements of the accreditation agreement. In taking such action, the District Forester shall:

(a) Suspend the certification authority of an Accredited Assessor only after providing fifteen days prior written notice to the Accredited Assessor;

(b) Not more than fifteen days after suspending the certification authority of an Accredited Assessor, either initiate action for the State Forester to revoke the accreditation of the Accredited Assessor or restore the certification authority of the Accredited Assessor.

(7) The State Forester shall revoke the certification authority of an Accredited Assessor if the District Forester provides evidence that such action is warranted due to a failure of the Accredited Assessor to comply with all requirements of the accreditation agreement. In taking such action, the State Forester shall:

(a) Take the revocation action not more than sixty days after receiving the evidence from the District Forester; and

(b) Revoke the certification authority of an Accredited Assessor only after providing thirty days prior written notice to the Accredited Assessor.

(8) An Accredited Assessor may, not more than 30 days after receipt of the written notice required in subsection (7)(b) of this rule, request a review of the proposed revocation by the State Forester. If such a request is made, the State Forester shall:

(a) Conduct the requested review within 30 days of the receipt of the request; and

(b) Either affirm or cancel the proposed certification revocation action.

(9) An Accredited Assessor who has had their certification authority revoked pursuant to this rule may appeal the decision of the State Forester to the Board of Forestry, in the same manner as appeals under ORS 477.260(2).

Stat. Auth.: ORS 477.059
Stats. Implemented: ORS 477.059
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

629-044-1110

Special Assessments

(1) When, pursuant to ORS 477.060, the forester assesses the owners of lands classified by a committee, the funds so received shall be:

(a) Allocated exclusively to the forest protection district wherein the lands are located;

(b) Used exclusively for activities pertaining to the lands from which the funds have been received;

(c) Used only in accordance with an annual written plan which may provide for:

(A) The full or partial funding of targeted fire prevention and suppression resources which are needed to minimize cost and risk while maximizing the effectiveness and efficiency of the protection of values at risk from wildfire;

(B) The full or partial funding of projects which will assist, encourage or promote owners to minimize and mitigate wildfire hazards and risks. Examples include:

(i) Providing labor and/or equipment for fuels reduction activities;

(ii) Assisting owners who are physically or financially unable to complete the work necessary to meet the standards set forth in OAR 629-044-1060 to 629-044-1085; and

(iii) Providing rebates for owners who have lands which meet the standards set forth in OAR 629-044-1055 to 629-044-1085.

(C) The full or partial funding of special or unique costs of assessment processing, certification administration, or program administration, so long as such an amount does not exceed $10 per tax lot or parcel of real property.

(2) Assessments levied pursuant to ORS 477.060 shall be:

(a) Levied only after being approved by an advisory and guidance committee, pursuant to ORS 477.240;

(b) Levied on a per tax lot or parcel of real property basis;

(c) Levied in an amount which does not exceed $25 per tax lot or parcel of real property. The determination of lots or parcels of real property shall be made pursuant to ORS 477.295; and

(d) Based on the classification of the lands classified by a committee. [FT38]

Stat. Auth.: ORS 477.060
Stats. Implemented: ORS 477.060
Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02

Appendix

660-006-0035

Fire-Siting Standards for Dwellings and Structures

The following fire-siting standards or their equivalent shall apply to all new dwelling or structures in a forest or agriculture/forest zone:

(1) The dwelling shall be located upon a parcel within a fire protection district or shall be provided with residential fire protection by contract. If the dwelling is not within a fire protection district, the applicant shall provide evidence that the applicant has asked to be included within the nearest such district. If the governing body determines that inclusion within a fire protection district or contracting for residential fire protection is impracticable, the governing body may provide an alternative means for protecting the dwelling from fire hazards. The means selected may include a fire sprinkling system, onsite equipment and water storage or other methods that are reasonable, given the site conditions. If a water supply is required for fire protection, it shall be a swimming pool, pond, lake, or similar body of water that at all times contains at least 4,000 gallons or a stream that has a continuous year round flow of at least one cubic foot per second. 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. Road access shall be provided to within 15 feet of the water's edge for firefighting pumping units. The road access shall accommodate the turnaround of firefighting equipment during the fires season. Permanent signs shall be posted along the access route to indicate the location of the emergency water source.

(2) Road access to the dwelling shall meet road design standards described in OAR 660-006-0040.

(3) The owners of the dwellings and structures shall maintain a primary fuel-free break area surrounding all structures and clear and maintain a secondary fuel-free break area on land surrounding the dwelling that is owned or controlled by the owner in accordance with the provisions in "Recommended Fire Siting Standards for Dwellings and Structures and Fire Safety Design Standards for Roads" dated March 1, 1991, and published by the Oregon Department of Forestry.[FT39]

(4) The dwelling shall have a fire retardant roof.

(5) The dwelling shall not be sited on a slope of greater than 40 percent.

(6) If the dwelling has a chimney or chimneys, each chimney shall have a spark arrester.

Stat. Auth.: ORS 197.040, 197.230 & 197.245
Stats. Implemented: ORS 197.040, 197.230, 197.245, 215.700, 215.705, 215.720, 215.740, 215.750, 215.780 & Ch. 792, 1993 OL
Hist.: LCDC 1-1990, f. & cert. ef. 2-5-90; LCDC 1-1994, f. & cert. ef. 3-1-94; LCDD 2-1998, f. & cert. ef. 6-1-98; LCDD 2-2011, f. & cert. ef. 2-2-11

660-006-0040

Fire Safety Design Standards for Roads

The governing body shall establish road design standards, except for private roads and bridges accessing

~~only commercial forest uses, which ensure that public roads, bridges, private roads and driveways are constructed so as to provide adequate access for fire fighting equipment. Such standards shall address maximum grade, road width, turning radius, road surface, bridge design, culverts, and road access taking into consideration seasonal weather conditions. The governing body shall consult with the appropriate Rural Fire Protection District and Forest Protection District in establishing these standards.~~

DIVISION 44

Wildland-Urban Interface

629-044-1000

Purpose

(1) The purpose of OAR 629-044-1000 to 629-044-10**05** is to **establish a definition of wildland-urban interface**.

629-044-1005

Definitions

(1) The definitions set forth in ORS 477.001, shall apply to 629-044-1000 to 629-044-1**005**, unless the context otherwise requires.

(2) The following words and phrases, when used in OAR 629-044-1000 to 629-044-1**005**, shall mean the following, unless the context otherwise requires:

(a) "Wildland-Urban Interface means a geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels."

Stat. Auth.: ORS 477.015, as amended by section 31, chapter 592, Oregon Laws 2021 (SB 762)
Stats. Implemented: ORS 477.015, as amended by section 31, chapter 592, Oregon Laws 2021 (SB 762)

Hist.: DOF 9-2002, f. 9-19-02, cert. ef.11-15-02; DOF 3-2007, f. 8-23-07, cert. ef. 12-31-07

OFFICE OF THE SECRETARY OF STATE
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NOTICE OF PROPOSED RULEMAKING

INCLUDING STATEMENT OF NEED & FISCAL IMPACT

CHAPTER 629
DEPARTMENT OF FORESTRY

FILED
08/25/2021 2:21 PM
ARCHIVES DIVISION
SECRETARY OF STATE

FILING CAPTION: Establishing definition of "wildland-urban interface"

LAST DAY AND TIME TO OFFER COMMENT TO AGENCY: 10/01/2021 5:00 PM

The Agency requests public comment on whether other options should be considered for achieving the rule's substantive goals while reducing negative economic impact of the rule on business.

CONTACT: Tim Holschbach
503-945-7434
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OREGON DEPARTMENT OF FORESTRY
2600 STATE ST BLDG D
SALEM,OR 97310

Filed By:
Hilary Olivos-Rood
Rules Coordinator

HEARING(S)

Auxilary aids for persons with disabilities are available upon advance request. Notify the contact listed above.

DATE: 09/22/2021
TIME: 2:00 PM
OFFICER: ODF Protection Division Representative
ADDRESS: Virtual Public Hearing
Hosted by Oregon Department Forestry
2600 State St
Salem, OR 97210
SPECIAL INSTRUCTIONS:
To provide comment at this hearing, visit link, https://www.oregon.gov/odf/board/Pages/rac.aspx.

DATE: 09/23/2021
TIME: 7:00 PM
OFFICER: ODF Protection Division Representative
ADDRESS: Virtual Public Hearing
Hosted by Oregon Department Forestry
2600 State St
Salem, OR 97210
SPECIAL INSTRUCTIONS:
To provide comment at this hearing, visit link, https://www.oregon.gov/odf/board/Pages/rac.aspx.

DATE: 09/24/2021
TIME: 9:00 AM
OFFICER: ODF Protec
ADDRESS: Virtual Pub
Hosted by Oregon Dep
2600 State St
Salem, OR 97210
SPECIAL INSTRUCTIO
To provide comment a
https://www.oregon.g

NEED FOR THE RULE(S):

This rule is necessary to meet the statutory obligations of ORS 477.015, amended during the 2021 legislative session, directing the State Board of Forestry to define "wildland-urban interface" within 100 days of passage.

DOCUMENTS RELIED UPON, AND WHERE THEY ARE AVAILABLE:

Rules Advisory Committee documents can be located online, at https://www.oregon.gov/odf/board/Pages/rac.aspx.
Board of Forestry documents can be located online, at https://www.oregon.gov/odf/board/Pages/bofmeetings.aspx.

FISCAL AND ECONOMIC IMPACT:

This definition is a new administrative rule. The term is not connected to any current statute or rule. In its present state, the impact is indeterminate. Additional fiscal and economic impact analysis will be necessary as the definition is utilized in future rulemaking. Future rulemaking will identify the applicable geographic area that this definition applies to.

COST OF COMPLIANCE:

(1) Identify any state agencies, units of local government, and members of the public likely to be economically affected by the rule(s). (2) Effect on Small Businesses: (a) Estimate the number and type of small businesses subject to the rule(s); (b) Describe the expected reporting, recordkeeping and administrative activities and cost required to comply with the rule(s); (c) Estimate the cost of professional services, equipment supplies, labor and increased administration required to comply with the rule(s).

This definition is a new administrative rule. The term is not connected to any current statute or rule. In its present state, the effect and cost of compliance are indeterminate, therefore no impact can be identified. Further analysis regarding the cost of compliance will be necessary as the definition is utilized in future rulemaking. Future rulemaking will identify the applicable geographic area that this definition applies to.

DESCRIBE HOW SMALL BUSINESSES WERE INVOLVED IN THE DEVELOPMENT OF THESE RULE(S):

Organizations representing small businesses are members of the rules advisory committee.

WAS AN ADMINISTRATIVE RULE ADVISORY COMMITTEE CONSULTED? YES

RULES PROPOSED:

629-044-0200, 629-044-0210, 629-044-0220, 629-044-0230, 629-044-0240, 629-044-0250, 629-044-0260, 629-044-1000, 629-044-1005, 629-044-1010, 629-044-1015, 629-044-1020, 629-044-1025, 629-044-1030, 629-044-1035, 629-044-1040, 629-044-1045, 629-044-1050, 629-044-1055, 629-044-1060, 629-044-1065, 629-044-1070, 629-044-1075, 629-044-1080, 629-044-1085, 629-044-1090, 629-044-1095, 629-044-1100, 629-044-1105, 629-044-1110

REPEAL: 629-044-0200

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-0200~~
~~Wildfire Hazard Zones - Definitions~~
~~As used in OAR 629, division 044, unless otherwise required by context:¶~~
~~(1) "Geographic Area" means the areas which result from the partitioning of all or portions of a jurisdiction into smaller segments, based on the presence of differing hazard values.¶~~
~~(2) "Hazard" means the potential to burn.¶~~
~~(3) "Hazard Factor" means the factors which most influence the potential of a geographic area to burn. Hazard factors are fire weather, topography, natural vegetative fuels, and natural vegetative fuel distribution.¶~~
~~(4) "Hazard Rating" means a cumulative value resulting from the summation of hazard values for all four hazard factors. It reflects the overall potential for a given geographic area to burn.¶~~
~~(5) "Hazard Value" means a value assigned to a hazard factor within a geographic area.¶~~
~~(6) "Jurisdiction" means a unit of local government authorized by law to adopt a building code or a fire prevention code.¶~~
~~(7) "Land Features" means roads, jurisdictional boundaries and other features created by human activity.¶~~
~~(8) "Natural Geographic Features" means streams, ridge lines and other features naturally occurring.¶~~
~~(9) "Wildfire Hazard Zone" means a geographic area having a combination of hazard factors that result in a significant hazard of catastrophic fire over relatively long periods of each year.~~
~~Statutory/Other Authority: ORS 526.016~~
~~Statutes/Other Implemented: ORS 93.270~~

REPEAL: 629-044-0210

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-0210~~
~~Purpose~~
~~The purpose of OAR 629, division 044 is to set forth the criteria by which Wildfire Hazard Zones shall be determined by jurisdictions. Such a determination is necessary before the provisions of ORS 93.270(4), portions of the Oregon One and Two Family Dwelling Specialty Code, and portions of the Oregon Structural Specialty Code can become effective. The determination of Wildfire Hazard Zones by jurisdictions is voluntary.~~
~~Statutory/Other Authority: ORS 526.016~~
~~Statutes/Other Implemented: ORS 93.270~~

REPEAL: 629-044-0220

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-0220~~
~~Wildfire Hazard Zones~~
~~(1) For the convenience of administration, when practical, a jurisdiction may utilize nearby natural geographic features or land features to delineate the boundaries of Wildfire Hazard Zones.¶~~
~~(2) It is not the intent of OAR 629, division 044 that Wildfire Hazard Zones be determined on a tax lot or an ownership specific basis, but rather that a landscape approach be used.¶~~
~~(3) To determine the existence of Wildfire Hazard Zones, a jurisdiction shall:¶~~
~~(a) Determine, for each hazard factor, the appropriate geographic areas and associated hazard values; then¶~~
~~(b) Overlay the geographic areas and associated hazard values determined in subsection (3)(a) above, then determine the resulting composite geographic areas and the associated hazard rating for each composite area.¶~~
~~(c) For each composite geographic area determined in subsection (3)(b) above, determine whether a Wildfire Hazard Zone is present from Table 5.¶~~
~~TABLE 5¶~~
~~WILDFIRE HAZARD ZONE¶~~
~~Hazard Rating - Wildfire Hazard Zone.¶~~
~~1, 2, 3, 4, 5, or 6 - NO.¶~~
~~7, 8, 9, 10, 11 or 12 - YES.~~
~~Statutory/Other Authority: ORS 526.016~~
~~Statutes/Other Implemented: ORS 93.270~~

REPEAL: 629-044-0230

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-0230~~
~~Fire Weather Hazard Factor~~
~~(1) The reference for establishing the fire weather hazard factor shall be data provided by the Oregon Department of Forestry, which was developed following an analysis of daily fire danger rating indices in each regulated use area of the state.¶~~
~~(2) For geographic areas described in Table 1, select the appropriate hazard value from Table 1.¶~~
~~TABLE 1¶~~
~~FIRE WEATHER HAZARD FACTOR¶~~
~~County - Hazard Value.¶~~
~~Baker - 3.¶~~
~~Benton - 2.¶~~
~~Clackamas - 2.¶~~
~~Clatsop, Area 1 - All of Clatsop County except Area 2. - 1.¶~~
~~Clatsop, Area 2 - That portion of Clatsop County in Township 4 North Range 6 West. - 2.¶~~
~~Columbia - 2.¶~~
~~Coos, Area 1 - All of Coos County except Area 2. - 1.¶~~
~~Coos, Area 2 - That portion of Coos County east of a generally north-south straight line which extends from the boundary with Douglas County, passes through the locales of Allegany and Gaylord, to the boundary with Curry County. - 2.¶~~
~~Crook - 3.¶~~
~~Curry, Area 1 - All of Curry County except Area 2. - 1.¶~~
~~Curry, Area 2 - That portion of Curry County east of the north-south line between Townships 13 West and 14 West. - 2.¶~~
~~Deschutes - 3.¶~~
~~Douglas, Area 1 - That portion of Douglas County west of a generally north-south straight line which extends from the boundary with Lane County, passes through the locale of Sulpher Springs, to the boundary with Coos County. - 1.¶~~
~~Douglas, Area 2 - That portion of Douglas County east of Area 1 and west of the north-south line between Townships 8 West and 9 West. - 2.¶~~
~~Douglas, Area 3 - That portion of Douglas County east of Area 1 and north of a generally east-west straight line which extends from the city of Cottage Grove to the mouth of Winchester Bay. - 2.¶~~
~~Douglas, Area 4 - That portion of Douglas County east of Area 2, south of Area 3 and west of Area 5. - 3.¶~~
~~Douglas, Area 5 - That portion of Douglas County east of a generally north-south line which follows the western boundary of the Umpqua National Forest from the boundary with Jackson County to the boundary with Lane County. - 2.¶~~
~~Gilliam - 3.¶~~
~~Grant - 3.¶~~
~~Harney - 3.¶~~
~~Hood River - 3.¶~~
~~Jackson - 3.¶~~
~~Jefferson - 3.¶~~
~~Josephine, Area 1 - All of Josephine County except Area 2. - 2.¶~~
~~Josephine, Area 2 - That portion of Josephine County east of a generally north-south line which follows Highway 199 from the California border to the locale of Wonder and than extends straight through the locale of Galice to~~

~~the boundary with Douglas County. - 3.¶~~
~~Klamath - 3.¶~~
~~Lake - 3.¶~~
~~Lane, Area 1 - All of Lane County except Area 2. - 1.¶~~
~~Lane, Area 2 - That portion of Lane County east of generally north-south straight line which extends from the boundary with Benton County through the northeast corner of Township 15 South Range 9 West and the southwest corner of Township 18 South Range 9 West to the boundary with Douglas County. - 2.¶~~
~~Lincoln, Area 1 - All of Lincoln County except Area 2. - 1.¶~~
~~Lincoln, Area 2 - That portion of Lincoln County east of a generally north-south straight line which extends from the boundary with Lane County through the southwest corner of Township 14 South Range 10 West to the northwest corner of Township 12 South Range 10 West then straight to the northeast corner of Township 14 South Range 10 West then straight through the locale of Rose Lodge to the boundary with Tillamook County. - 2.¶~~
~~Linn - 2.¶~~
~~Malheur - 3.¶~~
~~Marion - 2.¶~~
~~Morrow - 3.¶~~
~~Multnomah - 2.¶~~
~~Polk - 2.¶~~
~~Sherman - 3.¶~~
~~Tillamook, Area 1 - All of Tillamook County except Area 2. - 1.¶~~
~~Tillamook, Area 2 - That portion of Tillamook County east of the north-south line between Townships 7 West and 8 West. - 2.¶~~
~~Umatilla - 3.¶~~
~~Union - 3.¶~~
~~Wallowa - 3.¶~~
~~Wasco - 3.¶~~
~~Washington - 2.¶~~
~~Wheeler - 3.¶~~
~~Yamhill - 2.~~
~~Statutory/Other Authority: ORS 526.016~~
~~Statutes/Other Implemented: ORS 93.270~~

REPEAL: 629-044-0240

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-0240~~
~~Topography Hazard Factor~~
~~(1) The reference for establishing the topography hazard factor shall be:¶~~
~~(a) The General Soil Map Report published by the Oregon Water Resources Board and the Soil Conservation Service, USDA in 1969; or¶~~
~~(b) The appropriate 7.5 minute quadrangle map published by the U.S. Geological Survey, USDI.¶~~
~~(2) For geographic areas determined by use of a reference set forth in subsection (1) above, select the appropriate hazard value from Table 2.¶~~
~~TABLE 2¶~~
~~TOPOGRAPHY HAZARD FACTOR¶~~
~~Map Slope Class - Hazard Value¶~~
~~1 (Slopes 00-03%) - 0.¶~~
~~2 (Slopes 03-07%) - 1.¶~~
~~3 (Slopes 07-12%) - 1.¶~~
~~4 (Slopes 12-20%) - 2.¶~~
~~5 (Slopes 20-35%) - 3.¶~~
~~6 (Slopes 35-60+%) - 3.~~
~~Statutory/Other Authority: ORS 526.016~~
~~Statutes/Other Implemented: ORS 93.270~~

REPEAL: 629-044-0250

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-0250~~
~~Natural Vegetative Fuel Hazard Factor~~
~~(1) The reference for establishing the natural vegetative fuel hazard factor shall be the "Aids to Determining Fuel Models For Estimating Fire Behavior" published by the Forest Service, USDA Intermountain Forest and Range Experiment Station in 1982 as General Technical Report INT-122.¶~~
~~(2) Using the natural vegetative fuel models described in the reference set forth in subsection (1), and summarized in Table 3, divide the jurisdiction into geographic areas which best describe the natural vegetation expected to occupy sites for the next 10 to 15 years and then select the appropriate hazard value from Table 3.¶~~
~~TABLE 3¶~~
~~NATURAL VEGETATIVE FUEL HAZARD FACTOR¶~~
~~Natural Vegetative Fuel Description - Hazard Value¶~~
~~Little or no natural vegetative fuels are present. - 0.¶~~
~~Grass. Very little shrub or timber is present, generally less than one-third of the area. Main fuel is generally less than two feet in height. Fires are surface fires that move rapidly through cured grass and associated material. (Fuel model 1) - 3¶~~
~~Grass. Open shrub lands and pine stands or scrub oak stands that cover one-third to two-thirds of the area. Main fuel is generally less that two feet in height. Fires are surface fires that spread primarily through the fine herbaceous fuels, either curing or dead. (Fuel model 2) - 3.¶~~
~~Grass. Beach grasses, prairie grasses, marshland grasses and wild or cultivated grains that have not been harvested. Main fuel is generally less than four feet in height, but considerable variation may occur. Fires are the most intense of the grass group and display high rates of spread under the influence of wind. (Fuel model 3) - 3.¶~~
~~Shrubs. Stands of mature shrubs have foliage known for its flammability, such as gorse, manzanita and snowberry. Main fuel is generally six feet or more tall. Fires burn with high intensity and spread very rapidly. (Fuel model 4) - 3.¶~~
~~Shrubs. Young shrubs with little dead material and having foliage not known for its flammability, such as laurel, vine maple and alders. Main fuel is generally three feet tall or less. Fires are generally carried in the surface fuels and are generally not very intense. (Fuel model 5) - 1.¶~~
~~Shrubs. Older shrubs with foliage having a flammability less than fuel model 4, but more than fuel model 5. Widely spaced juniper and sagebrush are represented by this group. Main fuel is generally less than six feet in height. Fires will drop to the ground at low wind speeds and in stand openings. (Fuel model 6) - 2.¶~~
~~Timber. Areas of timber with little undergrowth and small amounts of litter buildup. Healthy stands of lodgepole pine, spruce, fir and larch are represented by this group. Fires will burn only under severe weather conditions involving high temperatures, low humidities and high winds. (Fuel model 8) - 1.¶~~
~~Timber. Areas of timber with more surface litter than fuel model 8. Closed stands of healthy ponderosa pine and white oak are in this fuel model. Spread of fires will be aided by rolling or blowing leaves. (Fuel model 9) - 2.¶~~
~~Timber. Areas of timber with heavy buildups of ground litter caused by overmaturity or natural events of wind throw or insect infestations. Fires are difficult to control due to large extent of ground fuel. (Fuel model 10) - 3.~~
~~Statutory/Other Authority: ORS 526.016~~
~~Statutes/Other Implemented: ORS 93.270~~

REPEAL: 629-044-0260

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-0260~~
~~Natural Vegetative Fuel Distribution Hazard Factor~~
~~(1) Divide the jurisdiction into geographic areas which best describe the percentage of the area which is occupied by the foliage of natural vegetative fuels.¶~~
~~(2) For each geographic area determined in section (1) above, select the appropriate hazard value from Table 4.¶~~
~~TABLE 4¶~~
~~NATURAL VEGETATIVE FUEL DISTRIBUTION (HAZARD FACTOR¶~~
~~Natural Vegetative Fuel Distribution - Hazard Value.¶~~
~~0 to 10% of the area - 0.¶~~
~~10 to 25% of the area - 1.¶~~
~~25 to 40% of the area - 2.¶~~
~~40 to 100% of the area - 3.~~
~~Statutory/Other Authority: ORS 526.016~~
~~Statutes/Other Implemented: ORS 93.270~~

AMEND: 629-044-1000

RULE SUMMARY: 629-044-1000 amended to remove unsupported purpose statements due to the enrollment of Senate Bill 762 of the 2021 legislative session. ORS 477.059 and ORS 477.060 were repealed on July 19, 2021.

CHANGES TO RULE:

629-044-1000
Wildland-Urban Interface - Purpose ¶

~~(1)~~ The purpose of OAR 629-044-1000 to 629-044-1~~110 is to implement the provisions of ORS 477.015 to 477.061, the Oregon Forestland-Urban Interface Fire Protection Act of 1997.¶~~
~~(2) The purpose of OAR 629-044-1010 to 629-044-1045 is to set forth the criteria by which the forestland-urban interface shall be identified and classified pursuant to ORS 477.025 to 477.057.¶~~
~~(3) The purpose of OAR 629-044-1050 to 629-044-1090 is to set forth the standards an owner of land in the forestland-urban interface shall apply pursuant to ORS 477.059(2).¶~~
~~(4) The purpose of OAR 629-044-1095 to 629-044-1105 is to set forth the process for written evaluation and certification pursuant to ORS 477.059(3).¶~~
~~(5) The purpose of OAR 629-044-1110 is to set forth the processes which shall apply to special or additional costs of fire protection within the forestland-urban interface pursuant to ORS 477.060~~005 is to establish a definition of wildland-urban interface.
Statutory/Other Authority: ORS 477.027, ~~477.059, 477.060~~ORS 526.016
Statutes/Other Implemented: ORS 477.015 - 477.0~~61~~27

AMEND: 629-044-1005

RULE SUMMARY: 629-044-1005 amended to remove unsupported definitions due to the enrollment of Senate Bill 762 of the 2021 legislative session. ORS 477.059 and ORS 477.060 were repealed on July 19, 2021.

CHANGES TO RULE:

629-044-1005
Definitions ¶

(1) The definitions set forth in ORS 477.001~~, 477.015 and OAR 629-041-0005~~ shall apply to 629-044-1000 to 629-044-11~~10~~,005 unless the context otherwise requires.¶
(2) The following words and phrases, when used in OAR 629-044-1000 to 629-044-11~~10~~005, shall mean the following, unless the context otherwise requires~~:~~¶
~~(a) "Community Wildfire Protection Plan" means a plan developed pursuant to the federal Healthy Forests Restoration Act of 2003 and which has been approved, within the past five years, by the appropriate city or county, by the appropriate structural fire service provider and by the Oregon Department of Forestry.¶~~
~~(b) "Concentration of structures" means dwellings in a density of four or more per quarter of a quarter section (an area approximately 40 acres in size), as determined by the Public Land Survey.¶~~
~~(c) "Classification" means the process set forth in ORS 477.031 to 477.052 and 477.057.¶~~
~~(d) "Classified by a committee" means the end result of the classification process set forth in ORS 477.031 to 477.052 and 477.057.¶~~
~~(e) "Current zoning" means zoning which allows the siting of a dwelling as an outright use.¶~~
~~(f) "Driveway" means the primary, privately owned vehicle access road that serves a dwelling, which is controlled by the owner of the dwelling, and which is longer than 150 feet.¶~~
~~(g) "Dwelling" means a structure, or a part of a structure, that is used as a home, as a residence, or as a sleeping place by one or more people who maintain a household in the structure.¶~~
~~(h) "Fire resistant roofing " means roofing material that has been installed and is maintained to the specifications of the manufacturer and which:¶~~
~~(A) Is rated by Underwriter's Laboratory as Class A, Class B, Class C, or is equivalent thereto; or¶~~
~~(B) Is metal.¶~~
~~(i) "Fuel break" means a natural or a human-made area immediately adjacent to a structure or to a driveway, where material capable of allowing a wildfire to spread does not exist or has been cleared, modified, or treated to:¶~~
~~(A) Significantly reduce the rate of spread and the intensity of an advancing wildfire; and¶~~
~~(B) Create an area in which fire suppression operations may more safely occur.¶~~
~~(j) "Geographic area" means an area which results from the partitioning of all or portions of a district into smaller segments, based on the presence of differing hazard factors, risks, or dwelling concentrations.¶~~
~~(k) "Hazard factor" means one of the three factors which most influence the potential of a wildfire to spread. The three hazard factors are topography, natural vegetative fuels, and wildfire weather.¶~~
~~(l) "Homeowner's association" means a non-profit corporation organized under ORS chapter 65 and which is subject to the provisions of ORS 94.625 to 94.700.¶~~
~~(m) "Included rural lands" means lands which meet the definition of "rural" but which have been classified by a committee as "suburban."¶~~
~~(n) "Ladder fuel" means branches, leaves, needles, and other combustible vegetation that may allow a wildfire to spread from lower growing vegetation to higher growing vegetation.¶~~
~~(o) "Lands" means one or more tax lots.¶~~
~~(p) "Non-fire resistant roofing" means roofing material that is not fire resistant including, but not limited to, cedar shakes.¶~~
~~(q) "Private fire department" means a private entity which provides structural fire prevention and suppression services and which meets the safety requirements set forth in OAR 437-002-0182.¶~~

~~(r) "Road" means a road over which the public has a right of use that is a matter of public record.¶~~
~~(s) "Rural" means a geographic area which has not been classified by a committee as suburban or urban and shall include:¶~~
~~(A) Lands zoned primarily for farm or forestry uses;¶~~
~~(B) Lands which have an average tax lot size of 10 acres or larger;¶~~
~~(C) Lands not zoned to allow a concentration of structures; and¶~~
~~(D) Lands which do not contain a concentration of structures.¶~~
~~(t) "Safety zone" means an adequately sized area, which is substantially free of flammable materials, and which can be used as a refuge to protect human life from an advancing wildfire.¶~~
~~(u) "Standards" means the actions, efforts, or measures which owners of suburban and urban lands shall take on their property, prior to a wildfire occurrence which originates on the property.¶~~
~~(v) "Structural fire service provider" means a local government agency or a private fire department which provides structural fire prevention and suppression services.¶~~
~~(w) "Structure" means a permanently sited building, a manufactured home, or a mobile home that is either a dwelling or an accessory building, which occupies at least 500 square feet of ground space, and which has at least one side that is fully covered.¶~~
~~(x) "Suburban" means a geographic area which includes one or more of the following:¶~~
~~(A) Lands where a concentration of structures exists;¶~~
~~(B) Lands on which current zoning allows a concentration of structures; or¶~~
~~(C) Included rural lands.¶~~
~~(y) "Urban" means a geographic area that includes one or more of the following:¶~~
~~(A) Lands within a city limit; or¶~~
~~(B) Lands within an urban growth boundary.¶~~
~~(z) "Urban growth boundary" is defined by ORS 197.295.¶~~
~~(aa) "Wildfire" means an uncontrolled fire which is burning on forestland and which is damaging, or is threatening to damage, forest resources or structures.¶~~
~~(ab) "Zoning" means a local governmental zoning ordinance, a land division ordinance adopted under ORS 92.044 or 92.046, or a similar general ordinance establishing standards for implementing a comprehensive plan;~~
"Wildland-Urban Interface" means a geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels.
Statutory/Other Authority: ORS 477.027, ~~477.059, 477.060~~ORS 526.016
Statutes/Other Implemented: ORS 477.015 - 477.0~~61~~27

REPEAL: 629-044-1010

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1010~~
~~Forestland-Urban Interface Lands Identified By A Committee~~
~~(1) A committee shall identify for classification only those lands which:¶~~
~~(a) Are within the county of its jurisdiction;¶~~
~~(b) Are within a forest protection district;¶~~
~~(c) Meet the definition of forestland; and¶~~
~~(d) Meet the definition of suburban or urban.¶~~
~~(2) The amount of included rural lands identified for classification as suburban shall be kept to a minimum.¶~~
~~(3) Lands which meet all the criteria set forth in subsections (1) and (2) of this rule shall be considered to be forestland-urban interface lands.¶~~
~~(4) A committee shall set forth the boundaries of forestland-urban interface lands identified in subsection (3) of this rule. For clarity, natural geographic features, human-made land features, public land survey lines, and political boundary lines should be used to describe such boundaries.~~
~~Statutory/Other Authority: ORS 477.027~~
~~Statutes/Other Implemented: ORS 477.025 - 477.057~~

REPEAL: 629-044-1015

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1015~~
~~Forestland-Urban Interface Lands Classified By A Committee~~
~~(1) Forestland-urban interface lands shall be classified by a committee as follows:¶~~
~~(a) Locate, for each hazard factor, the appropriate geographic areas and the associated values from the criteria set forth in OAR 629-044-1035 to 629-044-1045; then¶~~
~~(b) Overlay the geographic areas and the associated values, located in subsection (1)(a) of this rule, and identify the resulting composite geographic areas and the associated values; then¶~~
~~(c) Determine the classification for each composite geographic area identified in subsection (1)(b) of this rule, from the criteria set forth in Table 1 of this rule.¶~~
~~(d) Geographic areas determined in subsection (1)(c) of this rule to be "Extreme" may be classified by a committee as "High Density Extreme" pursuant to OAR 629-044-1020.¶~~
~~(2) A committee shall set forth the boundaries of the geographic areas classified by a committee pursuant to subsection (1) of this rule. For clarity, natural geographic features, human-made land features, public land survey lines, and political boundary lines should be used to describe such boundaries.¶~~
~~[ED. NOTE: Tables referenced are available from the agency.]~~
~~Statutory/Other Authority: ORS 477.027~~
~~Statutes/Other Implemented: ORS 477.025 - 477.057~~

REPEAL: 629-044-1020

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1020~~
~~High Density Extreme Classification~~
~~(1)(a) The purpose of the High Density Extreme classification is to identify those lands where vegetation modification around structures alone may not be sufficient to help protect lives during a wildfire.¶~~
~~(b) Owners of lands classified High Density Extreme are required to provide fuel breaks adjacent to:¶~~
~~(A) Property lines;¶~~
~~(B) Roads; or¶~~
~~(C) Both property lines and roads.¶~~
~~(2) Lands may be classified by a committee as High Density Extreme when a geographic area meets all of the following criteria:¶~~
~~(a) The lands have been classified by a committee as Extreme based on the hazard factors;¶~~
~~(b) The lands have a current zoning for residential development;¶~~
~~(c) The lands contain fuels which, if not modified or treated, will result in a wildfire having a significant rate of spread and intensity;¶~~
~~(d) The lands have:¶~~
~~(A) An average tax lot size of less than three acres; or¶~~
~~(B) A typical tax lot configuration which prevents the establishment of a 30 feet wide fuel break adjacent to structures;¶~~
~~(e) The lands lack:¶~~
~~(A) Safety zones; or (B) Effective vehicle egress which may hamper the safe evacuation of dwellings during a wildfire.¶~~
~~(3) Notwithstanding subsection (2) of this rule, lands may be classified by a committee as High Density Extreme when all of the following apply to a geographic area which has current zoning for residential development:¶~~
~~(a) The committee receives a written request for such classification from one or more of the following entities in which the lands are located:¶~~
~~(A) The county;¶~~
~~(B) The city;¶~~
~~(C) The structural fire service provider;¶~~
~~(D) The entity responsible for development of a Community Wildfire Protection Plan; or¶~~
~~(E) The homeowner's association.¶~~
~~(b) The written request contains:¶~~
~~(A) Certification that the request has been approved by the governing body of the entity;¶~~
~~(B) Justification for the requested classification, based upon:¶~~
~~(i) The existence of fuels which, if not modified or treated, will result in a wildfire having a significant rate of spread and intensity; or¶~~
~~(ii) A lack of effective vehicle egress which may hamper the safe evacuation of dwellings during a wildfire.¶~~
~~(4) When lands are classified by a committee as High Density Extreme, the committee shall also specify which of the following options shall apply to the lands:¶~~
~~(a) Option 1, where fuel breaks shall be provided adjacent to property lines pursuant to OAR 629-044-1075(1);¶~~
~~(b) Option 2, where fuel breaks shall be provided adjacent to roads pursuant to ORS 629-044-1075(2); or¶~~
~~(c) Option 3, where fuel breaks shall be provided adjacent to property lines and to roads pursuant to OAR 629-044-1075(1) and (2).¶~~
~~(5) Written requests received by a committee under subsection (3) of this rule automatically terminate after a period of five years.~~

~~Statutory/Other Authority: ORS 477.027~~
~~Statutes/Other Implemented: ORS 477.025 - 477.057~~

REPEAL: 629-044-1025

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1025~~
~~Periodic Forestland-Urban Interface Lands Identification And Classification~~
~~The identification and classification of forestland-urban interface lands shall be reviewed by a committee at least once every five years.~~
~~Statutory/Other Authority: ORS 477.027~~
~~Statutes/Other Implemented: ORS 477.025 - 477.057~~

REPEAL: 629-044-1030

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1030~~
~~Forestland-Urban Interface Lands Identification And Classification By The State Forester~~
~~When the State Forester performs the duties of a committee pursuant to ORS 477.057, the State Forester shall comply with OAR 629-044-1010 to 629-044-1045.~~
~~Statutory/Other Authority: ORS 477.027~~
~~Statutes/Other Implemented: ORS 477.025 - 477.057~~

REPEAL: 629-044-1035

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1035~~
~~Wildfire Weather Hazard Factor~~
~~(1) The reference for establishing the wildfire weather hazard factor shall be data provided by the Oregon Department of Forestry, which was developed following an analysis of daily wildfire danger rating indices in each regulated use area of the state and which is described in Table 1 of OAR 629-044-0230.¶~~
~~(2) For the geographic areas described in Table 1 of OAR 629-044-0230, select the appropriate hazard values.¶~~
~~(3) A committee may increase the hazard value determined in subsection (2) of this rule by one point in any geographic area which it determines to have a history of frequent wildfire occurrence.¶~~
~~[ED. NOTE: Tables referenced are available from the agency.]~~
~~Statutory/Other Authority: ORS 477.027~~
~~Statutes/Other Implemented: ORS 477.025 - 477.057~~

REPEAL: 629-044-1040

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1040~~
~~Topography Hazard Factor~~
~~(1) The reference for establishing the topography hazard factor shall be:¶~~
~~(a) A 30-meter or better Digital Elevation Model (DEM); or¶~~
~~(b) The appropriate 7.5 minute quadrangle map published by the U.S. Geological Survey, USDI.¶~~
~~(2) Using the reference set forth in subsection (1) of this rule, determine the geographic areas which best describe:¶~~
~~(a) Areas having an overall slope of 25% (14 degrees) or less; and¶~~
~~(b) Areas having an overall slope of more than 25% (14 degrees).¶~~
~~(3) Each geographic area determined in subsection (2) of this rule shall be assigned an appropriate hazard value, as follows:¶~~
~~(a) A hazard value of 1, for geographic areas described by subsection (2)(a) of this rule; or¶~~
~~(b) A hazard value of 2, for geographic areas described by subsection (2)(b) of this rule.~~
~~Statutory/Other Authority: ORS 477.027~~
~~Statutes/Other Implemented: ORS 477.025 - 477.057~~

REPEAL: 629-044-1045

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1045~~
~~Natural Vegetative Fuel Hazard Factor~~
~~(1) The reference for establishing the natural vegetative fuel hazard factor shall be the document "Aids to Determining Fuel Models for Estimating Fire Behavior" published by the Forest Service, USDA Intermountain Forest and Range Experiment Station in 1982 as General Technical Report Technical INT-122. Information from this reference is summarized in Table 3 of OAR 629-044-0250. [Table not included. See ED. NOTE.]¶~~
~~(2) Using the fuel models described in the reference set forth in subsection (1) of this rule, determine the geographic areas which best describe the natural vegetative fuels expected to occupy an area for the next five years.¶~~
~~(3) The geographic areas determined in subsection (2) of this rule shall be assigned the appropriate hazard value, as shown in Table 3 of OAR 629-044-0250. [Table not included. See ED. NOTE.]¶~~
~~(4) It is recognized that natural vegetation is highly variable and that the fuel models used in subsection (2) of this rule may not always accurately reflect expected wildfire behavior, due to variations in local species and vegetation conditions. Therefore, a committee may make such modifications to the hazard values as it determines is necessary to accurately reflect the following:¶~~
~~(a) A hazard value of 1 shall describe vegetation that typically produces a flame length of up to 5 feet, a wildfire which exhibits very little spotting, torching, or crowning, and which results in a burned area that can normally be entered within 15 minutes.¶~~
~~(b) A hazard value of 2 shall describe vegetation that typically produces a flame length of 5 to 8 feet, a wildfire which exhibits sporadic spotting, torching, or crowning, and which results in a burned area that can normally be entered within one hour.¶~~
~~(c) A hazard value of 3 shall describe vegetation that typically produces a flame length of over 8 feet, a wildfire that exhibits frequent spotting, torching, or crowning, and which results in a burned area that normally cannot be entered for over one hour.¶~~
~~[ED. NOTE: Tables referenced are available from the agency.]~~
~~Statutory/Other Authority: ORS 477.027~~
~~Statutes/Other Implemented: ORS 477.025 - 477.057~~

REPEAL: 629-044-1050

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1050~~
~~Purpose And Intent Of Standards~~
~~(1) The standards required by OAR 629-044-1055 are designed to minimize or mitigate a wildfire hazard or risk on an owners property which arises due, singly or in combination, to the presence of structures, to the arrangement or accumulation of vegetative fuels, or to the presence of other wildfire hazards.¶~~
~~(2) It is recognized that owners have a variety of objectives to achieve while applying the standards, including objectives related to aesthetics, dust barriers, fish and wildlife habitat, gardening, soil stabilization, sound barriers, and visual barriers. It is the intent of the standards to allow owners to meet such objectives, provided there is no compromise of the standards needed to mitigate wildfire hazards or risks.¶~~
~~(3) The standards are considered to be minimum measures which are intended to improve the survivability of structures during a wildfire, but which will not guarantee survivability.~~
~~Statutory/Other Authority: ORS 477.059~~
~~Statutes/Other Implemented: ORS 477.059~~

REPEAL: 629-044-1055

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1055~~
~~Standards~~
~~(1) Owners of lands classified by a committee as Low are not required to comply with the standards, however, they are encouraged to review their individual situation and to apply those standards which may be appropriate.¶~~
~~(2) Owners of lands classified by a committee as Moderate, High, Extreme, or High Density Extreme shall comply with the standards applicable to their lands. In meeting this requirement, owners shall apply one or more of the following:¶~~
~~(a) The default standards set forth in OAR 629-044-1060, which are intended for the majority of owners;¶~~
~~(b) The optional standards set forth in OAR 629-044-1065, which are intended for owners who are unable to meet the default standards; or¶~~
~~(c) The alternate standards developed pursuant to OAR 629-044-1070, which are intended for owners who wish to address site specific conditions or unique situations.¶~~
~~(3) Owners are encouraged to exceed the standards and to apply additional wildfire safety measures.~~
~~Statutory/Other Authority: ORS 477.059~~
~~Statutes/Other Implemented: ORS 477.059~~

REPEAL: 629-044-1060

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1060~~
~~Default Standards~~
~~(1) Where structures exist on lands classified by a committee as Moderate, High, Extreme, or High Density Extreme owners shall:¶~~
~~(a) Provide and maintain primary fuel breaks which comply with the requirements of OAR 629-044-1085 and which are:¶~~
~~(A) Immediately adjacent to structures, for a distance of at least 30 feet, or to the property line, whichever is the shortest distance. The distance shall be measured along the slope and from the furthest extension of the structure, including attached carports, decks, or eaves.¶~~
~~(B) Immediately adjacent to driveways, for a distance of at least ten feet from the centerline of a driveway, or to the property line, whichever is the shortest distance. The distance shall be measured along the slope. Including the driving surface, a fuel break shall result in an open area which is not less than 13 1/2 feet in height and 12 feet in width or to the property line, whichever is the shortest distance.¶~~
~~(b) Provide and maintain secondary fuel breaks which comply with the requirements of OAR 629-044-1085 and which are immediately adjacent to primary fuel breaks, for the distance necessary to comply with the total fuel break distance specified in Table 2 of this rule, or to the property line, whichever is the shortest distance. The distance shall be measured along the slope and from the furthest extension of the structure, including attached carports, decks, or eaves.¶~~
~~(c) Remove any portion of a tree which extends to within 10 feet of the outlet of a structure chimney or a stove pipe;¶~~
~~(d) Maintain the portion of any tree which overhangs a structure substantially free of dead plant material;¶~~
~~(e) Maintain the area under decks substantially free of firewood, stored flammable building material, leaves, needles, and other flammable material; and¶~~
~~(f) During times of the year when wildfire may be a threat, locate firewood, flammable building material, and other similar flammable material:¶~~
~~(A) At least 20 feet away from a structure; or¶~~
~~(B) In a fully enclosed space.¶~~
~~(2) On all lands classified by a committee as High Density Extreme, owners shall comply with subsection (1) of this rule and with the standards set forth in OAR 629-044-1075.¶~~
~~[ED. NOTE: Tables referenced are available from the agency.]~~
~~Statutory/Other Authority: ORS 477.059~~
~~Statutes/Other Implemented: ORS 477.059~~

REPEAL: 629-044-1065

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1065~~
~~Optional Standards~~
~~(1) Where structures exist on lands classified by a committee as Moderate, High, Extreme, or High Density Extreme, owners shall provide fuel breaks which comply with the requirements of OAR 629-044-1085 and which are immediately adjacent to structures for a distance of thirty feet or to the property line, whichever is the shortest distance. The distance shall be measured along the slope and from the furthest extension of the structure, including attached carports, decks, or eaves.¶~~
~~(2) Where structures exist on lands classified by a committee as Moderate, owners shall comply with subsection (1) of this rule and with one or more of the options set forth in subsection (6) of this rule.¶~~
~~(3) Where structures exist on lands classified by a committee as High, owners shall comply with subsection (1) of this rule and with two or more of the options set forth in subsection (6) of this rule.¶~~
~~(4) Where structures exist on lands classified by a committee as Extreme, owners shall comply with subsection (1) of this rule and with three or more of the options set forth in subsection (6) of this rule.¶~~
~~(5) Where structures exist on lands classified by a committee as High Density Extreme, owners shall comply with subsection (1) of this rule, with three or more of the options set forth in subsection (6) of this rule, and with subsection (7) of this rule.¶~~
~~(6) Optional standards are:¶~~
~~(a) Option 1, fire resistant structures. This option is intended to reduce the likelihood of a structure being ignited by a wildfire. To comply with this option, owners of structures shall:¶~~
~~(A) Have fire resistant roofing material;¶~~
~~(B) Have all permanent openings into and under the structure completely covered with noncombustible, corrosion-resistant, mesh screening material, which has openings no greater than 1/4 inch in size;¶~~
~~(C) Where there are attachments to the structure, such as decks and porches:¶~~
~~(i) Maintain the area under the attachments substantially free of firewood, flammable building material, leaves, needles, and other flammable material; or¶~~
~~(ii) Cover openings to the area under the attachments with noncombustible, corrosion-resistant mesh screening material, which has openings no greater than 1/4 inch in size;¶~~
~~(D) Remove any portion of a tree which extends to within 10 feet of the outlet of a structure chimney or a stove pipe;¶~~
~~(E) Maintain the portion of any tree which overhangs a structure substantially free of dead plant material; and¶~~
~~(F) During times of the year when wildfire may be a threat, locate firewood, flammable building material, and other similar flammable material:¶~~
~~(i) At least 20 feet away from the structure; or¶~~
~~(ii) In a fully enclosed space.¶~~
~~(b) Option 2, secondary fuel break. This option is intended to provide additional separation between structures and natural vegetation. To comply with this option, owners of structures shall provide and maintain secondary fuel breaks which comply with the requirements of OAR 629-044-1085 and which are immediately adjacent to primary fuel breaks, for the distance necessary to create a total fuel break of 100 feet, or to the property line, whichever is the shortest distance. The distance shall be measured along the slope and from the furthest extension of the structure, including attached carports, decks, or eaves.¶~~
~~(c) Option 3, wildfire safe access. This option is intended to provide a more safe vehicle access to and from structures during a wildfire. To comply with this option, owners of a driveway shall provide and maintain a primary fuel break which complies with the requirements of OAR 629-044-1085 and which is immediately adjacent to a driveway for a distance of ten feet from the centerline of the driveway, or to the property line, whichever is the~~

~~shortest distance. The distance shall be measured along the slope. Including the driving surface, a fuel break shall result in an open area which is not less than 13 1/2 feet in height and 12 feet in width or to the property line, whichever is the shortest distance.¶~~
~~(d) Option 4, low ignition risk property. This option is intended to reduce the likelihood of a wildfire ignition. To comply with this option, owners shall at all times use the following fire prevention practices:¶~~
~~(A) Open fires shall be:¶~~
~~(i) Built, ignited and maintained in compliance with all applicable permit and fire safety requirements;¶~~
~~(ii) Tended and maintained under the control of a person 16 years of age or older;¶~~
~~(iii) Conducted only when weather conditions permit safe burning;¶~~
~~(iv) Conducted in a location which has had all surrounding material cleared of flammable material sufficient to prevent unintended spread of the fire; and¶~~
~~(v) Conducted only when adequate and appropriate fire tools and/or a water supply are present to assist in preventing unintended spread of the fire.¶~~
~~(B) Grills, incinerators, outdoor fireplaces, permanent barbecues, and similar outdoor devices shall be maintained in good repair, in safe condition, and all openings shall normally be completely covered by a spark arrester, by a screen, or by a device which prevents unintended spread of a fire.¶~~
~~(C) Ashes and coals resulting from the use of grills, incinerators, outdoor fireplaces, permanent barbecues, and similar outdoor devices shall be disposed of in a manner which prevents unintended spread of a fire.¶~~
~~(D) The use of outdoor equipment or devices capable of generating heat, open flame, or sparks shall be conducted in compliance with all applicable permit and fire safety requirements; and¶~~
~~(E) Chimneys and stove pipes shall be used only if their openings are completely covered with a spark arrester which meets or exceeds the following standard: constructed of 12 USA standard gauge wire which has openings no larger than 1/2 inch in size.¶~~
~~(7) On all lands classified by a committee as High Density Extreme, owners comply with the standards set forth in OAR 629-044-1075.~~
~~Statutory/Other Authority: ORS 477.059~~
~~Statutes/Other Implemented: ORS 477.059~~

REPEAL: 629-044-1070

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1070~~
~~Alternate Standards~~
~~(1) Where structures exist on lands classified by a committee as Moderate, High, Extreme, or High Density Extreme, owners shall comply with all standards described in a cooperative agreement made pursuant to ORS 477.406.¶~~
~~(2) Cooperative agreements which describe alternate standards shall be valid only if:¶~~
~~(a) On forms provided by the State Forester or in a format prescribed by the State Forester;¶~~
~~(b) Signed by the District Forester and by the owner; and¶~~
~~(c) The alternate standards provide, in the judgement of the District Forester, for equal or better protection from wildfire than do the standards of OAR 629-044-1060, 629-044-1065, and 629-044-1075 which apply to the classification of the lands for which the cooperative agreement is made.~~
~~Statutory/Other Authority: ORS 477.059~~
~~Statutes/Other Implemented: ORS 477.059~~

REPEAL: 629-044-1075

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1075~~
~~Additional Standards For Lands Classified As High Density Extreme~~
~~(1) On all lands classified by a committee as High Density Extreme with Option 1, owners shall provide fuel breaks which comply with the requirements of OAR 629-044-1085 and which are immediately adjacent to all property lines, for a distance of twenty feet or to the adjacent property line, whichever is the shortest distance. The distance shall be measured along the slope.¶~~
~~(2) On all lands classified by a committee as High Density Extreme with Option 2, owners shall provide fuel breaks which comply with the requirements of OAR 629-044-1085 and which are immediately adjacent to all road centerlines, for a distance of at least thirty feet, or to the property line, whichever is the shortest distance. The distance shall be measured along the slope and from the center of the driving surface.¶~~
~~(3) On all lands classified by a committee as High Density Extreme with Option 3, owners shall comply with subsections (1) and (2) of this rule.~~
~~Statutory/Other Authority: ORS 477.059~~
~~Statutes/Other Implemented: ORS 477.059~~

REPEAL: 629-044-1080

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1080~~
~~Modification Of Standards~~
~~The District Forester may, in writing, reduce or waive any standard of OAR 629-044-1060, 629-044-1065, 629-044-1075, and 629-044-1085 if the forester finds that conditions so warrant. Reductions or waivers made under this rule:¶~~
~~(1) May be made only after a written request from the owner;¶~~
~~(2) Are intended to be few in number;¶~~
~~(3) Must address:¶~~
~~(a) A site specific condition or a unique situation which does not warrant the development of alternate standards under OAR 629-044-1070; or¶~~
~~(b) A conflict with the requirements of other codes, laws, ordinances, or regulations, as described in ORS 477.023(2), and which does not warrant the development of alternate standards under OAR 629-044-1070; and¶~~
~~(4) Shall be:¶~~
~~(a) On forms provided by the State Forester or in a format prescribed by the State Forester;¶~~
~~(b) Signed by the District Forester and by the owner.~~
~~Statutory/Other Authority: ORS 477.059~~
~~Statutes/Other Implemented: ORS 477.059~~

REPEAL: 629-044-1085

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1085~~
~~Fuel Break Requirements~~
~~(1) The purpose of a fuel break is to:¶~~
~~(a) Slow the rate of spread and the intensity of an advancing wildfire; and¶~~
~~(b) Create an area in which fire suppression operations may more safely occur.¶~~
~~(2) A fuel break shall be a natural or a human-made area where material capable of allowing a wildfire to spread:¶~~
~~(a) Does not exist; or¶~~
~~(b) Has been cleared, modified, or treated in such a way that the rate of spread and the intensity of an advancing wildfire will be significantly reduced.¶~~
~~(3) A primary fuel break shall be comprised of one or more of the following:¶~~
~~(a) An area of substantially non-flammable ground cover. Examples include asphalt, bare soil, clover, concrete, green grass, ivy, mulches, rock, succulent ground cover, or wildflowers.¶~~
~~(b) An area of dry grass which is maintained to an average height of less than four inches.¶~~
~~(c) An area of cut grass, leaves, needles, twigs, and other similar flammable materials, provided such materials do not create a continuous fuel bed and are in compliance with the intent of subsections (1) and (2) of this rule.¶~~
~~(d) An area of single specimens or isolated groupings of ornamental shrubbery, native trees, or other plants, provided they are:¶~~
~~(A) Maintained in a green condition;¶~~
~~(B) Maintained substantially free of dead plant material;¶~~
~~(C) Maintained free of ladder fuel;¶~~
~~(D) Arranged and maintained in such a way that minimizes the possibility a wildfire can spread to adjacent vegetation; and¶~~
~~(E) In compliance with the intent of subsections (1) and (2) of this rule.¶~~
~~(4) A secondary fuel break shall be comprised of single specimens or isolated groupings of ornamental shrubbery, native trees, or other plants, provided they are:¶~~
~~(a) Maintained in a green condition;¶~~
~~(b) Maintained substantially free of dead plant material;¶~~
~~(c) Maintained free of ladder fuel;¶~~
~~(d) Arranged and maintained in such a way that minimizes the possibility a wildfire can spread to adjacent vegetation; and¶~~
~~(e) In compliance with the intent of subsections (1) and (2) of this rule.~~
~~Statutory/Other Authority: ORS 477.059~~
~~Statutes/Other Implemented: ORS 477.059~~

REPEAL: 629-044-1090

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1090~~
~~Apparent Conflicts With Standards~~
~~Pursuant to ORS 477.023:¶~~
~~(1) The standards set forth in OAR 629-044-1060 to 629-044-1085 do not supercede or replace any federal law or regulation, any other state agency law or regulation, or any more restrictive local government ordinance or code.¶~~
~~(2) Apparent conflicts with other laws and regulations, for which the forester is responsible and has jurisdiction, shall be resolved within the scope of the forester's authority and documented, as provided in OAR 629-044-1070 or 629-044-1080.¶~~
~~(3) Compliance with OAR 629-044-1070 to 629-044-1080 does not relieve the owner of the requirements of any other law or regulation which applies to the lands in question.~~
~~Statutory/Other Authority: ORS 477.059~~
~~Statutes/Other Implemented: ORS 477.023, 477.059~~

REPEAL: 629-044-1095

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1095~~
~~Written Evaluation~~
~~(1) Pursuant to ORS 477.059, the forester shall provide to the owners of lands classified by a committee a copy of OAR 629-044-1000 to 629-044-1110 and an evaluation form:¶~~
~~(a) Two years before the obligations of ORS 477.059(4) become effective on the lands for the first time;¶~~
~~(b) Every five years thereafter; and¶~~
~~(c) When requested by an owner.¶~~
~~(2) The intent of an evaluation form provided pursuant to subsections (1), (5) or (6) of this rule is to allow owners to self-certify compliance with the standards of OAR 629-044-1060 to 629-044-1085. Completion and return of the evaluation form to the forester is optional.¶~~
~~(3) In lieu of completing and returning an evaluation form provided pursuant to subsections (1), (5) or (6) of this rule, an owner may have it completed and returned by an accredited assessor.¶~~
~~(4) Completed and returned evaluation forms shall become void:¶~~
~~(a) Five years after they are provided by the forester;¶~~
~~(b) When the ownership of a tax lot changes;¶~~
~~(c) When a structure is added to a tax lot; or¶~~
~~(d) Pursuant to a determination made in accordance with the provisions of subsection (3) of OAR 629-044-1100.¶~~
~~(5) When the ownership of a tax lot changes, the previous owner shall notify the new owner of the voiding of the evaluation form under subsection (4)(b) of this rule. The new owner may, as provided in subsection (1)(c) of this rule, request that the forester provide a current copy of OAR 629-044-1000 to 629-044-1110 and a new evaluation form.¶~~
~~(6) When a structure is added to a tax lot, the owner may request that the forester provide a current copy of OAR 629-044-1000 to 629-044-1110 and a new evaluation form.~~
~~Statutory/Other Authority: ORS 477.059~~
~~Statutes/Other Implemented: ORS 477.059~~

REPEAL: 629-044-1100

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1100~~
~~Certification~~
~~(1) An owner of lands classified by a committee shall be considered to be certified as meeting the standards set forth in OAR 629-044-1060 to 629-044-1085 if:¶~~
~~(a) They sign and return to the forester an evaluation form provided pursuant to OAR 629-044-1095; or¶~~
~~(b) They use the services of an Accredited Assessor who signs and returns to the forester an evaluation form provided pursuant to OAR 629-044-1095; and¶~~
~~(c) The evaluation form has not become void pursuant to OAR 629-044-1095(4).¶~~
~~(2) The forester may make a determination of whether the lands of an owner meet the standards set forth in OAR 629-044-1060 to 629-044-1085 at any time following the completion and return of an evaluation form provided pursuant to 629-044-1095. Such a determination must be made prior to the occurrence of a wildfire on an owners tax lot.¶~~
~~(3) If the forester determines that an evaluation form provided pursuant to OAR 629-044-1095 was returned by the owner and that it incorrectly or falsely indicated the lands meet the standards set forth in 629-044-1060 to 629-044-1085, the owner shall be notified in writing that both the evaluation form and the certification granted under subsection (1) of this rule will become void on a specified date. In making such a determination, the forester shall:¶~~
~~(a) Not base the determination on technicalities or omissions which, in the sole judgment of the forester, are minor in nature; and¶~~
~~(b) First provide the owner a reasonable time to:¶~~
~~(A) Provide evidence that the property does meet the standards set forth in OAR 629-044-1060 to 629-044-1085; or¶~~
~~(B) Bring their property into compliance with the standards set forth in OAR 629-044-1060 to 629-044-1085.~~
~~Statutory/Other Authority: ORS 477.059~~
~~Statutes/Other Implemented: ORS 477.059~~

REPEAL: 629-044-1105

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1105~~
~~Accredited Assessors~~
~~(1) An Accredited Assessor shall obtain accreditation from the District Forester prior to conducting any activities allowed or required by OAR 629-044-1100 in a district.¶~~
~~(2) To request accreditation, prospective Accredited Assessors shall make application to the District Forester and sign an accreditation agreement on forms provided by the State Forester or in a format prescribed by the State Forester.¶~~
~~(3) Accredited Assessors will not be considered to be accredited until the District Forester reviews and approves both their application and their signed accreditation agreement.¶~~
~~(4) Applications to become an Accredited Assessor shall include, but will not be limited to:¶~~
~~(a) For a Type 1 Accredited Assessor:¶~~
~~(A) The person's Oregon Construction Contractors Board or Oregon Landscape Contractors Board license number; and¶~~
~~(B) Evidence that the person has had at least two years total experience related to:¶~~
~~(i) Wildland fire prevention or suppression; or¶~~
~~(ii) Management of properties which contain forestland.¶~~
~~(b) For a Type 2 Accredited Assessor:¶~~
~~(A) A statement that the person is acting as an authorized agent of a structural fire service provider;¶~~
~~(B) The signature of the Fire Chief of the structural fire service provider;¶~~
~~(C) Evidence that the person is a full time paid employee or a volunteer employee in good standing of the structural fire service provider; and¶~~
~~(D) Evidence that the person has had at least two years total experience related to wildland fire prevention or suppression.¶~~
~~(c) For a Type 3 Accredited Assessor:¶~~
~~(A) A statement that the person is acting as an authorized agent of a homeowner's association;¶~~
~~(B) The signatures of the persons who constitute the governing body of the homeowner's association;¶~~
~~(C) Evidence that the person is a full time paid employee or a volunteer employee in good standing of the homeowner's association; and¶~~
~~(D) Evidence that the person has had at least two years total experience related to:¶~~
~~(i) Wildland fire prevention or suppression; or¶~~
~~(ii) Management of properties which contain forestland.¶~~
~~(5) Accreditation agreements shall include, but will not be limited to:¶~~
~~(a) For a Type 1 Accredited Assessor, a requirement to perform certification services only while currently registered with the Oregon Construction Contractors Board or the Oregon Landscape Contractors Board;¶~~
~~(b) For a Type 2 Accredited Assessor:¶~~
~~(A) A requirement to perform certification services only while acting as an authorized agent of a structural fire service provider; and¶~~
~~(B) A prohibition on collecting either a fee or any other form of remuneration directly from the owner of the lands, for performing certification services;¶~~
~~(c) For a Type 3 Accredited Assessor:¶~~
~~(A) A requirement to perform certification services only while acting as an authorized agent of a homeowner's association; and¶~~
~~(B) A prohibition on collecting either a fee or any other form of remuneration directly from the owner of the lands, for performing certification services;¶~~

~~(d) A requirement to make a determination of whether a property meets the standards set forth in OAR 629-044-1060 to 629-044-1085 only in a truthful manner;¶~~
~~(e) A requirement to send any required records to the State Forester within a specified period of time;¶~~
~~(f) A requirement to maintain any required records for a minimum of six years; and¶~~
~~(g) A requirement to not perform certification services if:¶~~
~~(A) Notified of a suspension under subsection (6) of this rule; or¶~~
~~(B) Notified of a revocation under subsections (7), (8) or (9) of this rule.¶~~
~~(6) The District Forester may suspend the certification authority of an Accredited Assessor at any time the District Forester determines the Accredited Assessor has failed to comply with all requirements of the accreditation agreement. In taking such action, the District Forester shall:¶~~
~~(a) Suspend the certification authority of an Accredited Assessor only after providing fifteen days prior written notice to the Accredited Assessor;¶~~
~~(b) Not more than fifteen days after suspending the certification authority of an Accredited Assessor, either initiate action for the State Forester to revoke the accreditation of the Accredited Assessor or restore the certification authority of the Accredited Assessor.¶~~
~~(7) The State Forester shall revoke the certification authority of an Accredited Assessor if the District Forester provides evidence that such action is warranted due to a failure of the Accredited Assessor to comply with all requirements of the accreditation agreement. In taking such action, the State Forester shall:¶~~
~~(a) Take the revocation action not more than sixty days after receiving the evidence from the District Forester; and¶~~
~~(b) Revoke the certification authority of an Accredited Assessor only after providing thirty days prior written notice to the Accredited Assessor.¶~~
~~(8) An Accredited Assessor may, not more than 30 days after receipt of the written notice required in subsection (7)(b) of this rule, request a review of the proposed revocation by the State Forester. If such a request is made, the State Forester shall:¶~~
~~(a) Conduct the requested review within 30 days of the receipt of the request; and¶~~
~~(b) Either affirm or cancel the proposed certification revocation action.¶~~
~~(9) An Accredited Assessor who has had their certification authority revoked pursuant to this rule may appeal the decision of the State Forester to the Board of Forestry, in the same manner as appeals under ORS 477.260(2).~~
~~Statutory/Other Authority: ORS 477.059~~
~~Statutes/Other Implemented: ORS 477.059~~

REPEAL: 629-044-1110

RULE SUMMARY: The enrollment of Senate Bill 762 of the 2021 legislative session repealed the authorizing statute of this rule.

CHANGES TO RULE:

~~629-044-1110~~
~~Special Assessments~~
~~(1) When, pursuant to ORS 477.060, the forester assesses the owners of lands classified by a committee, the funds so received shall be:¶~~
~~(a) Allocated exclusively to the forest protection district wherein the lands are located;¶~~
~~(b) Used exclusively for activities pertaining to the lands from which the funds have been received;¶~~
~~(c) Used only in accordance with an annual written plan which may provide for:¶~~
~~(A) The full or partial funding of targeted fire prevention and suppression resources which are needed to minimize cost and risk while maximizing the effectiveness and efficiency of the protection of values at risk from wildfire;¶~~
~~(B) The full or partial funding of projects which will assist, encourage or promote owners to minimize and mitigate wildfire hazards and risks. Examples include:¶~~
~~(i) Providing labor and/or equipment for fuels reduction activities;¶~~
~~(ii) Assisting owners who are physically or financially unable to complete the work necessary to meet the standards set forth in OAR 629-044-1060 to 629-044-1085; and¶~~
~~(iii) Providing rebates for owners who have lands which meet the standards set forth in OAR 629-044-1055 to 629-044-1085.¶~~
~~(C) The full or partial funding of special or unique costs of assessment processing, certification administration, or program administration, so long as such an amount does not exceed $10 per tax lot or parcel of real property.¶~~
~~(2) Assessments levied pursuant to ORS 477.060 shall be:¶~~
~~(a) Levied only after being approved by an advisory and guidance committee, pursuant to ORS 477.240;¶~~
~~(b) Levied on a per tax lot or parcel of real property basis;¶~~
~~(c) Levied in an amount which does not exceed $25 per tax lot or parcel of real property. The determination of lots or parcels of real property shall be made pursuant to ORS 477.295; and¶~~
~~(d) Based on the classification of the lands classified by a committee.~~
~~Statutory/Other Authority: ORS 477.060~~
~~Statutes/Other Implemented: ORS 477.060~~

Oregon Department of Forestry Proposed OAR WUI Definition
HEARING OFFICER'S REPORT

Date: October 4, 2021

To: Oregon Department of Forestry Fire Protection Division
From: Tom Fields
Subject: Hearing Officer's Report on SB 762 Public Hearing

Hearing Dates: 2021 September 22, 23, 24
Hearing Location: Virtual (Zoom)

A public hearing called pursuant to Senate Bill 762, relating to defining the wildland-urban interface, was convened at 2:00 pm, September 22, 7:00 p.m., September 23, and 9:00 a.m. September 24.

Before receiving oral comments, I briefly summarized the purpose for the hearing and described the role and limitations of the Hearing Officer. I indicated that the proceedings of the public hearing were being recorded. While oral comments would cease at the close of the public hearing on September 24, I explained that written comments would be accepted by the Department until 5:00 pm October 1, 2021. ODF Deputy Protection Chief of Policy provided an overview and answered questions of the proposed definition of the wildland-urban interface prior to the hearing.

Summary of Oral Comments

September 22, 2021, 2:00 p.m.
12 members of the public attended the public hearing with no oral comments provided.

September 23, 2021, 7:00 p.m.
9 members of the public attended the public hearing with five people providing comments. The public hearing was closed at 7:29 p.m.

Matthew Brady – Southern Oregon Farmer
Position: Opposed

My name is Matthew Brady and I am a former Assistant Unit Forester with Douglas Forest Protective Association, serving 21 years as a fire warden. My property is classified as Class 1 and 3 forestland. I am concerned that the proposed definition of the WUI is overly broad and creates a risk of confusion and over regulation for farmers and ranchers. I understand that the Department is moving forward with a definition that the legislature rejected in a manner that it would include most of Oregon. While I understand that the Department has provided verbal assurance that the definition would not include structures outside of occupied buildings, such as fences, trails, county roads, irrigation and drainage infrastructure and cropland, assurances often last only as long as the agency personnel who provided them. I have seen many instances where overly broad language would have serious consequences for further regulation. I have also seen the impotent and unfunded administration of 1997's SB 360 from within Oregon's complete and coordinated system. The current ODF administration does not inspire my confidence in their assurances of the interpretation of this defninition. It is entirely possible that croplands that are classified as forestlands wil be considered as part of "vegetative fuels", potentially where croplands meet farm homes and farm infrastructure to be part of the WUI and subject to defensible space and building hardening standards. Farming and ranching are uncertain enough

businesses without having to destroy crops that contribute to his livelihood to meet regulatory requirements. I do not believe the legislature or the Department intend this result, but it would be easily allowed under the proposed WUI definition. In my professional career as a fire warden for the state of Oregon, I enforced ORS 477 and OAR 629 for over 15 years. I can say, without a doubt, that the current language is ambiguous at best and a disservice to current and future fire wardens who may have to make administrative decisions based on upon it. The WUI definition should include the definition of structures as primary residences, not in subsequent definitions. I strongly urge the department to go back to the drawing board and work on a definition that is narrowly crafted, specific and thoughtfully developed to align with the existing Oregon law and policy and ensures that we are mapping only areas where urban development meets wildland fuels as we develop the WUI maps. Thank you for the opportunity to comment.

Mary Ann Cooper – Oregon Farm Bureau Federation
Position: Opposed

Served on the RAC and represents the Oregon Farm Bureau Federation representing about 7,000 family farms and foresters across the state. The proposed language risk drastic over regulation. I have concerns over the presentation provided prior to the hearing. It was not a majority approval from the RAC supporting the proposed definition. The vote was 13-8 with all state agencies involved voting in favor of the definition. While most western states have adopted the international WUI code, almost none of them use the defninition as regulatory. Most allow individual communities to choose to adopt the code and have not adopted statewide. There is also some variation in the language, so not an accurate representation when the Department says that most western states have adopted the international WUI code. Oregon would possibly be the only state with defensible space and home hardening rules tied to the WUI definition. I strongly oppose the broad definition.

Roger Johnson – Sisters/Camp Sherman RFPD Fire Chief, Deschutes County Fire Defense Board Chief, Oregon Fire Chiefs Wildfire Committee Chair, Oregon Fire Chiefs Wildfire Initiative Member
Position: Support

International WUI Code is the gold standard of wildfire codes in the country and is developed with broad stakeholder engagement. The international WUI code is part of the international code series, which Oregon has a long history of adopting. Oregon has adopted the international building code, the international fire code, they're all part of the international code council family of codes. So it seems logical and consistent the state of Oregon practice to adopt international codes, and specifically international code council family codes. I submitted written testimony that provides a list of western states that have enacted WUI code definitions in their state and how they are used to regulate it. And it sounds like Mary Ann has researched as well and so it will be a good cross check to see what kind of cross section of information to see the similar information there. There are some independently adopted ones there and there are some broadly adopted ones, but it seems that every state looked at the code and what works best for their state. Certainly, I do feel that the international WUI code definition does fit with Oregon. And the international code is consistent with other national definitions. The US Fire Administration WUI definition is very similar to the internation WUI code council definition. The Burea of Land Management definition of the WUI is similar, the National Wildfire Coordination Group definition is very similar. So there are numerous national wildfire organizations that are recognized standards bodies that have adopted a definition very similar to the international code council. So I would encourage the Board of Forestry to join with other national organizations states in adopting language consistent with the international WUI code and appreciate the time and opportunity to provide testimony tonight.

Jocelyn Rosen
Position: Undecided

I'm not really prepared, but I happen to be a Firewise. I have to study this more but I'm a Firewise person and I'm concerned because I'm a member of the national Firewise Communities USA program and have been to the NFPA and have spoken on their behalf at several events. There's so much fire science that I was completely unaware of. The average Joe doesn't have the (knowledge). It's incredible the amount of research and fire science that exists. It's like epidemiology or any other science. It's gone way beyond friends that I have who are firefighters. So I really respect the field and the expertise and all of the studies that you have done that the average community citizen is not privy to. There are just vast amounts of research studies that have videos and all kinds of materials to study…so thank you for what you do.

Joseph Vale
Position: Support

The proposed definition is consistent with what other states have adopted. I appreciate the work and, since I joined late, I am interesting in hearing about next steps. I appreciate the work by the Governor's Wildfire Council and what turned into SB 762 and how complicated this issue is. This is such a critical piece of that because it's really going to direct where we put our emphasis and our funding and the types of community protection programs that we institute. Having a good definition of where our built landscape, in terms of where it intermingles with our fire landscape is key in that. So I appreciate your work on that.

September 24, 2021, 9:00 a.m.
Seven members of the public attended the public hearing with no oral comments provided. The public hearing was closed at 9:24 a.m.

Summary of Written Comments

46 people provided written testimony.
Support: 36
Opposed: 5
Neutral: 5

September 18, 2021

From: Olivia Smith <tomandolivia@msn.com>
Position: Support

To the members of the Board of Forestry:
Please consider the following during rule making to implement SB 762.

Oregon should adopt the Wildlife Urban Interface Code (WUI) definition that is most commonly used throughout the United States, especially in the West, and by the federal government: "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels". The state should do so because:

1. Adopting a scientifically sound, comprehensive, and nationally recognized WUI definition based on best practices is essential to protect life, property, and firefighter safety in the wake of increasingly extreme and dangerous wildfire conditions.
2. The International WUI Code definition is nationally recognized and used in professional applications at the local, state, and federal level. Nearly every western state, and many states across the nation, have already adopted all or part of the International WUI Code.
3. The International WUI definition is recognized by the Council of Western State Foresters, federal agencies, fire managers, and other government and professional bodies.
4. The 2020 wildfire season in Oregon burned over 1 million acres and destroyed more than 4000 homes. One-sixth of Oregonians were under evacuation orders! Oregon must improve our wildfire response systems, and the status quo of unfunded and inconsistent WUI approaches is no longer acceptable.
5. IN 2021, over 850,000 acres and over 160 residences have already burned in Oregon, and the fire season is not yet over.
6. Oregon needs a consistent and clear definition that is recognized by scientists, fire managers, and government bodies, not a one-off definition that risks unintended consequences and could allow interests to game the process.
7. Having a nationally recognized WUI definition is important to ensure Oregon is eligible to secure federal funds for programs related to the WUI.

Thank you,

Olivia Smith
4023 SE 33rd Place
Portland, OR 97202
503-238-4340Respectfully submitted,

From: Deborah Clark
Position: Support

I support the position of the League of Women Voters (Oregon) that Oregon should adopt the International Wildland-Urban Interface Code Definition, which is: "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels". Why? Because

- Oregon needs a consistent and clear definition that is recognized by scientists, fire managers, and government bodies, not a one-off definition that risks unintended consequences and could allow interests to game the process.
- The International WUI Code definition is nationally recognized and used in professional applications at the local, state, and federal level. Nearly every western state, and many states across the nation, has already adopted all or part of the International WUI Code.

Note: Adopting this definition is simply the foundational starting point, which will be detailed and refined in additional public processes over the next five months. To account for unique circumstances and features, issues will be addressed in the extensive Wildland-Urban Interface criteria development process that will follow the adoption of the Wildland-Urban Interface definition.

Deborah Clark
deborah.clark@lifetime.oregonstate.edu

From: Lewis McFarland
Position: Support

I believe it is time to start restricting development in wildfire prone areas. The proposed rules below are only a starting point.

- Oregon should adopt the International WUI Code Definition: *"that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels"*.
- Adopting a scientifically sound, comprehensive, and nationally recognized WUI definition based on best practices is essential to protect life, property, and firefighter safety in the wake of increasingly extreme and dangerous wildfire conditions.
- The International WUI Code definition is nationally recognized and used in professional applications at the local, state, and federal level. Nearly every western state, and many states across the nation, have already adopted all or part of the International WUI Code.
- The International WUI definition is recognized by the Council of Western State Foresters, federal agencies, fire managers, and other government and professional bodies.
- The 2020 wildfire season in Oregon burned over 1 million acres and destroyed more than 4000 homes. One-sixth of Oregonians were under evacuation orders! Oregon must improve our wildfire response systems, and the status quo of unfunded and inconsistent WUI approaches is no longer acceptable.
- IN 2021, over 850,000 acres and over 160 residences have already burned in Oregon, and the fire season is not yet over.
- Oregon needs a consistent and clear definition that is recognized by scientists, fire managers, and government bodies, not a one-off definition that risks unintended consequences and could allow interests to game the process.
- Having a nationally recognized WUI definition is important to ensure Oregon is eligible to secure federal funds for programs related to the WUI.
- Customized issues will be addressed in the extensive WUI criteria development process that will follow the adoption of the WUI definition, to account for unique local circumstances and features. **Adopting this definition is simply the foundational starting point, which will be detailed and refined in additional public processes over the next 5 months.**

Lewis McFarland
Bend OR
lewismc41@gmail.com

From: Brian Belet
Position: Support

To: Oregon Board of Forestry
The current standard Wildland Urban Interface [WUI] definition, used most commonly throughout the United States – and especially in the West – is "that geographical area where structures and other

human development meets or intermingles with wildland or vegetative fuels." I urge the Oregon Board of Forestry to adopt this definition for uses within our state.
This definition is not only used widely already by many states and agencies (including the Council of Western State Foresters), it is based on scientifically sound research and is designed to protect life, property, and firefighter safety as we encounter increasingly dangerous wildfire conditions.

Both 2020 and 2021 have greeted us with terrible wildfire seasons, and our current year is not over yet! In Oregon we need a consistent and clear definition that is recognized by scientists, fire managers, and government bodies. We cannot afford the chaos that comes from working it out as we go along. In addition, having a nationally recognized WUI definition is important to ensure Oregon is eligible to secure federal funds for programs related to future wildfires.

While there may be some customizing needed to address details that are specific to our state, adopting this standard WUI definition will serve as a very good starting point.

I live in Sherwood, and am very fortunate that I was not immediately threatened by the recent cycles of wildfires. I have suffered from poor air quality as a result of nearby fires, with September of last year being the worst experience ever. However, I view myself as a citizen of the entire state, and my concern extends to all of those who have suffered directly and severely from the wildfires of these past two years. In short, we are all in this together.

To close, I write to urge you to adopt the standard WUI listed above. This act will be a most sensible and practical first step in implementing SB 762, the omnibus wildfire bill that was recently passed by our state legislature. Thank you for your time and consideration.

Brian Belet
Sherwood, OR
408/655-4916

From: **League of Women Voters**
Position: **Support**

September 22, 2021
To: Oregon Board of Forestry
Jim Kelly, Chair
sb762.rulemaking@oregon.gov
Re: Wildland Urban Interface (WUI) proposed definition

The League of Women Voters of Oregon supported SB 762, the omnibus wildfire bill. We have adopted a number of positions related to forestry and also have positions related to the general public health and safety of Oregonians. You, as the Board of Forestry, have recommended that Oregonians consider that the state should adopt the WUI definition that is most commonly used throughout the United States, especially in the West, and by the federal government - the "International Wildfire Urban Interface Code" definition: "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels". We agree.

As a reminder: on the final day of the 2021 session, the legislature passed Oregon's first comprehensive, forward-looking wildfire preparedness and resiliency bill, Senate Bill 762. This bill is a critical step for

Oregon to increase community preparedness, reduce future wildfire risk, and build resiliency to withstand the increasing severity and frequency of wildfires in Oregon.

Now it is time to implement SB 762 – the bill requires several state agencies to take actions and make investments towards achieving that wildfire resiliency.

• Oregon should adopt the International WUI Code Definition: "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels".

• Adopting a scientifically sound, comprehensive, and nationally recognized WUI definition based on best practices is essential to protect life, property, and fire fighter safety in the wake of increasingly extreme and dangerous wildfire conditions.

• The International WUI Code definition is nationally recognized and used in professional applications at the local, state, and federal level. Nearly every western state, and many states across the nation, have already adopted all or part of the International WUI Code.

• The International WUI definition is recognized by the Council of Western State Foresters, federal agencies, fire managers, and other government and professional bodies.

• The 2020 wildfire season in Oregon burned over 1 million acres and destroyed more than 4000 homes. One-sixth of Oregonians were under evacuation orders! Oregon must improve our wildfire response systems, and the status quo of unfunded and inconsistent WUI approaches is no longer acceptable.

• In 2021, over 850,000 acres and over 160 residences have already burned in Oregon, and the fire season is not yet over, although the League celebrates this last weekend of rain. Unfortunately, there doesn't seem to be much rain in the coming weeks. Two days of rain does not stop the fire season.

• Oregon needs a consistent and clear definition that is recognized by scientists, fire managers, and government bodies, not a one-off definition that risks unintended consequences and could allow interests to game the process.

• Having a nationally recognized WUI definition is important to ensure Oregon is eligible to secure federal funds for programs related to the WUI.

• Customized issues will be addressed in the extensive WUI criteria development process that will follow the adoption of the WUI definition, to account for unique local circumstances and features. Adopting this definition is simply the foundational starting point, which will be detailed and refined in additional public processes over the next 5 months.

This rule is the first step in implementing SB 762. Another rulemaking committee is developing the set of specific maps identifying which properties are most at risk. The League continues to work with the Dept. of Forestry to assure adequate opportunities for public participation for all voices. As part of that responsibility, we have provided our members with information about this rulemaking and others around SB 762. We expect to see opportunities to comment on the criteria and refined definitions acknowledging the diversity of Oregon related to those maps in the coming months. We support a fair and open appeals process, although we also expect an expeditious one as we recognize the urgency to move toward action on the ground as soon as reasonably possible. For now, we support this foundational definition as work continues to refine the work specifically for a diverse Oregon.

Thank you for the opportunity to discuss this proposed rule and we urge your support for this definition of the Wildland Urban Interface as the foundation for setting criteria and refinement of the use of this definition in creating the risk maps, defensible space requirements and other actions required under SB 762.

Rebecca Gladstone	Peggy Lynch	Josie Koehne
LWVOR President	Natural Resources Coordinator	Forestry Portfolio

Cc: Acting State Forester Nancy Hirsch (Nancy.Hirsch@oregon.gov)
Tim J. Holschbach, Deputy Chief-Policy & Planning Protection-Fire Division

September 21, 2021

From Jackson County Fire District 3
Position: Support

Dear Oregon Board of Forestry
My name is Bob Horton, and I am the Fire Chief at Jackson County Fire District 3. Thank you for the opportunity to submit testimony commending the Board of Forestry for your work to implement SB 762. Our Fire District has worked along the way both on SB 762 and by participating in RAC1 and RAC2. We are appreciative to be part of the process and fully support ODF's recommendations from the rule-making process.

We appreciate the adoption of the International Wild land-Urban Interface (WUI) code definition as Oregon's definition. Addressing wildfire risk within the WUI is one of the most critical portions of SB 762. By adopting the international definition, the Board of Forestry has enabled our state to use the most objective, science-based, practices to identify the WUI and focus risk reduction efforts there. Furthermore, the International WUI Code definition for WUI has also gone through a thorough vetting process with national stakeholders representing diverse interests.

Again, thank you for your work to implement this milestone legislation to help reduce the risk of the impacts of wildfire for all Oregonians.

Sincerely,

Robert B. Horton, MPA, CFO, CPM CEO I Fire Chief
Fire District 3
Jackson County, OR

From Southern Oregon Forest Restoration Collaborative (SOFRC)
Position: Support

The Southern Oregon Forest Restoration Collaborative (SOFRC) engages with diverse constituencies on forest health and wildfire risk projects to support resilient landscapes, thriving communities and workforce development. We have developed a strategic plan, the Rogue Basin Collaborative Forest Restoration Strategy that covers 4.1 million acres in southern Oregon that has been widely adopted including being incorporated into the Jackson-Josephine County Wildfire Plan.

SOFRC recommends adopting the international WUI definition for the following reasons:
Oregon should adopt the International WUI Code Definition: "***that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels.***"
Adopting a scientifically sound, comprehensive, and nationally recognized WUI definition based on best practices is essential to protect life, property, and firefighter safety in the wake of increasingly extreme and dangerous wildfire conditions.

The International WUI definition is recognized by the Council of Western State Foresters, federal agencies, fire managers, and other government and professional bodies.
Oregon needs a consistent and clear definition that is recognized by scientists, fire managers, and government bodies, not a one-off definition that risks unintended consequences and could allow interests to game the process.

Having a nationally recognized WUI definition is important to ensure Oregon is eligible to secure federal funds for programs related to the WUI.

Adopting this definition is a foundational starting point, which will be detailed and refined in additional public processes over the next 5 months.

Thank you for the opportunity to provide comments.
--
Terry Fairbanks
Southern Oregon Forest Restoration Collaborative (SOFRC)
Coordinator Rogue Forest Partners
tfairbanks@sofrc.org
541-292-4498

From: **Scott Lewis, Fire Defense Board Chief, Multnomah County, Assistant Fire Chief, Gresham Fire and Emergency Services**
Position: **Support**

Dear Oregon Board of Forestry,
My name is Scott Lewis, and I am a Fire Defense Board Chief for Multnomah County and the Assistant Chief at Gresham Fire & Emergency Services. Thank you for the opportunity to submit testimony commending the Board of Forestry for your work to implement SB 762. The fire service worked diligently with the Legislature to create and pass SB 762 last session and continues to do so through the rulemaking process.

In particular, I'd like to express gratitude for your adoption of the International definition of the Wildland-Urban Interface (WUI). Addressing wildfire risk within the WUI is one of the most critical portions of SB 762. By adopting the International definition, the Board of Forestry has enabled our state to use the most objective, science-based, practices to identify the WUI and focus risk reduction efforts there.

All too often, Model Code language is corrupted by special interest groups on both sides of an issue. Maintaining Model Code language assures that the consensus method remains a viable and accepted forum for differences to be heard and understood.
Again, thank you for your work to implement this milestone legislation for the Fire service.

Respectfully,

Scott Lewis
SCOTT LEWIS | Assistant Chief
GRESHAM FIRE & EMERGENCY SERVICES
1333 NW Eastman Parkway, Gresham, OR 97030
Voice: 503.618.2355 | Email: Scott.Lewis@greshamoregon.gov
www.greshamoregon.gov/Fire-and-Emergency-Services/
1333 NW Eastman Parkway, Gresham, Oregon 97030-3813
Phone 503-618-2355 • Fax 503-666-8330
GreshamOregon.gov/fire

From: Robert Mathis, Interim Fire Chief, Portland International Airport
Position: Support

Dear Oregon Board of Forestry,
My name is Robert Mathis and I am the Interim Fire Chief at Portland International Airport. Thank you for the opportunity to submit testimony commending the Board of Forestry for your work to implement SB 762. The fire service worked diligently with the Legislature to create and pass SB 762 last session and continues to do so through the rulemaking process.

In particular, I'd like to express gratitude for your adoption of the International definition of the Wildland-Urban Interface (WUI). Addressing wildfire risk within the WUI is one of the most critical portions of SB 762. By adopting the International definition, the Board of Forestry has enabled our state to use the most objective, science-based, practices to identify the WUI and focus risk reduction efforts there.

Again, thank you for your work to implement this milestone legislation for the Fire service.

Rob
Fire Department
Assistant Fire Chief
Port of Portland
T: 503.460.4612
C: 206.491.0997
Rob.Mathis@portofportland.com

From: Lang Johnson, Fire Chief, Grants Pass Fire Rescue
Position: Support

Dear Oregon Board of Forestry,

My name is Lang Johnson and I am the Fire Chief for Grants Pass Fire Rescue. Thank you for the opportunity to submit testimony commending the Board of Forestry for your work to implement SB 762. The fire service worked diligently with the legislature to create and pass SB 762 las t session and continues to do so through the rulemaking process.

I'd like to express gratitude for your adoption of the International definition of the Wildland-Urban Interface (WUI). Addressing wildfire risk within the WUI is one of the most critical portions of SB 762. By

adopting the International definition, the Board of Forestry has enabled our state to use the most objective, science-based, practices to identify the WUI and focus risk reduction efforts there.

Again, thank you for your work to implement this milestone legislation for the Fire service.

Lang S. Johnson
Fire Chief
Grants Pass Fire Rescue
541-450-6201
541-476-1929

From: Don Johnson, Fire Chief, City of Lake Oswego
Position: Support

9/22/2021
To: Oregon Board of Forestry
Our work in Municipal Fire has changed significantly in the last two decades as a result or warmer global temperatures. We now find Wild land Firefighting a fundamental duty of the fire service and we need to ensure our focus is sharp in our efforts maintain readiness and address the challenges ahead.
With the passage of Senate Bill 762, I am encouraged that the Oregon Board of Forestry is taking the lead and is focusing on a science-based practices to identify Wildland Urban Interface (WUI) areas and to focus our collective efforts on the challenges presented. Fundamental our success is to define the problem by adopting an objectively reasonable definition of WUI Areas - the definition is where it all begins.

I strongly encourage the Board to adopt the International definition of Wild land Urban Interface Areas, as that definition is based in science and is objective, rather than some of the more subjective definitions offered by special interest groups.

We are ready to stand strong with the Board in doing the important work for the State of Oregon to reduce the risk of wildfires. Please adhere to the Science and include the International definition of WUI in the implementation of Senate Bill 762.
Sincerely,

Don Johnson, Fire Chief City of Lake Oswego

From: Shawn Olson, President, Oregon Fire Marshal's Association
Position: Support

Dear Oregon Board of Forestry,

My name is Shawn Olson and I am the Oregon Fire Marshal's Association President. Thank you for the opportunity to submit testimony commending the Board of Forestry for your work to implement SB 762. The fire service worked diligently with the Legislature to create and pass SB 762 last session and continues to do so through the rulemaking process.

In particular, I'd like to express gratitude for your adoption of the International definition of the Wild/and-Urban Interface (WU/). Addressing wildfire risk within the WU/ is one of the most critical

portions of SB 762. By adopting the International definition, the Board of Forestry has enabled our state to use the most objective, science-based, practices to identify the WU/ and focus risk reduction efforts there.

Again, thank you for your work to implement this milestone legislation for the Fire service.

Sincerely,

Shawn Olson
President-Oregon Fire Marshal's Association

From: **Robert Palmer, Fire Chief, Mid-Columbia Fire and Rescue**
Position: **Support**

September 22, 2021

Dear Oregon Board of Forestry,
My name is Robert Palmer, and I am the Fire Chief at Mid-Columbia Fire and Rescue in The Dalles, Oregon. I want to thank you for the opportunity to submit testimony commending the Board of Forestry for your work to implement SB 762. The fire seNice worked diligently with the Legislature to create and pass SB 762 last session and continues to do so through the rulemaking process.

In particular, please let me express my gratitude for your adoption of the International definition of the Wild/and-Urban Interface (WU/). Addressing wildfire risk within the WU/ is one of the most critical portions of SB 762. By adopting the International definition, the Board of Forestry has enabled our state to use the most objective, science-based, practices to identify the WU/ and focus risk reduction efforts there.

Again, thank you for your work to implement this milestone legislation for the Fire seNice.

Sincerely,

Robert. F. Palmer Fire Chief

From: **Vicki Purslow, EdD, Board of Directors Chair, Jackson County Fire District #5**
Position: **Support**

Dear Committee:
We cannot deny that the communities of Phoenix, Talent and Oregon experienced a significant wildland urban interface fire. In light of the homes and businesses lost as a result of the Almeda Fire, I urge the committee to adopt the International WUI Code Definition as part of the implementation of SB 762.

Sincerely,

Vicki Purslow
Vicki Purslow, EdD
Chair, Board of Directors
Jackson County Fire District No. 5
5811 South Pacific Highway, Phoenix OR 97535

P: 541-941-3640
purslow@jcfd5.com

From: **Mary Sullivan Murphy**
Position: **Opposed**

I strongly oppose WUI SB 762. Please listen to the folks who make their living off the land and have done so for millennium. We do not need more land put aside to make environmentalists feel like they are doing something when they are doing nothing but hindering common people making a living & locking up more land.

If in fact we want to do something about the devastating wildfires that have plagues our state for the last several years, we need to clean up all the tinder on the forest floor, get rid of fallen trees and stop this madness about "let it burn." Since we have stopped logging on federal lands, it has taken 30 yrs to get here, but here we are. The forests go up in smoke and the loggers who used to "jump" any fires that started are now just a memory. Thousands of miles of logging roads have been allowed to grow over in the name of "nature" but these logging roads are the very roads that allowed fire fighters/loggers to get to a fire early and put it out.

These "environmental engineers" who have come out of our universities have destroyed our forests with their ideas. We need a combination of actual people who have been in the forests and know them on the ground, not these people like Alan Jouret who only read about them in books. Our state is on fire because of people just like him.

Please spare us this abdominal bill. I strongly, strongly oppose as does anyone who actually loves nature. The best way to prevent fires is to clean up the forests. They are tinderboxes now and this addition will do nothing to protect what is there to is to CLEAN IT UP and I stongly oppose this bill. Please listen to common folk not do gooders who do nothing for the environment except keep people out and have ridiculous policies like "let it burn." As soon as I saw KS Wild supporting this, I knew it would do no good for common folk. I know the environmentals have your ear, but there are others out there who really think they stink!!

Sincerely,

M. S. Murphy

From: **Manuel De Aquino**
Position: **Neutral**

To Whom It May Concern:
In late June of 2021, the Oregon House passed SB 762 to fund nearly $200 million in wildfire response, recovery and mitigation. The passage of SB 762 is a step in the right direction. It pushes fire policy toward a more community health and safety focus. No question that fire suppression is important for public safety. However, a century of full suppression goals have left us with explosive conditions throughout the West.

The Oregon Board of Forestry has opened a comment period from now until October 1 on the state adopting a definition of the "Wildland Urban Interface," which will define how and where money will be allocated by this bill. This definition will determine who has access to state funds for defensible space

and home hardening. Oregon needs a science-based WUI definition to protect firefighters, life, and property. The International WUI Code Definition: "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels" is a great starting place. There are many aspects of Senate Bill 762 that ensure the state is implementing wildfire preparedness strategies to meet this moment of climate-induced wildfires. Having a science based definition will allow Oregon to get more federal funding to address fire hazards near communities.

Sincerely yours,
Manuel De Aquino
Ashland, Oregon

From: George Walter
Position: Support

My name is Greg Walter, I am a small business in Southern Oregon. I submit this letter in support (mostly) of SB762 regarding the Wildland Urban Interface. I also want to include an important point I feel strongly about which is allowing ODF to extinguish all fires below 7000 feet in elevation especially in time of drought to exceptional drought. Summer conditions are just too extreme to allow fires to burn in those conditions.

I would thus like to have ODF with the flexibility to prioritize putting out all fires, starting on Memorial Day and throughout the season. As I am sure you all have witnessed, everything is so dry, esp. east of the Cascades.

Here are a few other points that would good on a year around basis.

- Oregon needs a science-based WUI definition to protect firefighters, life, and property.
- The International WUI Code Definition: "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels" is a great starting place for Oregon.
- We should be focusing our investments in the WUI where the risks to communities from wildfire are the greatest, but be prepared to also extinguish all fires if conditions warrant.
- Most western states have already adopted the international WUI Code, and Oregon needs to catch up.
- Having a science based definition will allow Oregon to get more federal funding to address fire hazards near communities.

Thank you for your efforts in keeping communities safe and lessening the chance of mega-fires occurring.

Sincerely,

Greg Walter
P.O. Box 1547
Cave Junction, Or. 97523

From: **Constance Palaia and Kevin Marr**
Position: **Support**

We own a small hospitality business on the banks of the Rogue River in Grants Pass. We believe that a first step in insuring the health and safety of our community and our river is to adopt the International Wildland Urban Interface code wording.

Sincerely yours,

Constance Palaia and Kevin Marr
Motel Del Rogue

From: **Elisabeth Zinser**
Position: **Support**

Greetings: I write to express my wholehearted support for SB762 and the definition put forth for the Wildland Urban Interface. This is a significant step forward in science-based decisions about managing our wildlands to help them be healthy and to mitigate devastating fires for communities nurtured by these wildlands. Thank you for your leadership in this direction.

Elisabeth Zinser
Ashland

From: **Char Hersh**
Position: **Support**

I support the WUI Definition.

From: **Bonnie Johnson**
Position: **Support**

Dear Rule makers,
We need this proposed definition of the Urban Wildlands Interface. As more and more structures encroach into wildlands, we need to protect nature as much as homeowners.

We know with the climate change acceleration our fire situation is only getting worse. We need to keep as many living trees as possible to sequester carbon while protecting defensible spaces. The definition provided in this rule will help local Oregon communities qualify for Firewise funding, and is supported by diverse groups as my local League of Women Voters along with responsible environmental groups and my neighborhood Firewise community.

Please pass this WUI definition in SB 762.

Sincerely,
Bonnie Johnson
1455 Woodland Drive
Ashland, OR. 97520

From: **J. Allen Hallmark**
Position: **Support**

To Oregon Rule Makers:

I support a definition of Wildland Urban Interface, which will determine who has access to state funds for defensible space and home hardening.

Oregon needs a science-based definition of Wildland Urban Interface that will discourage people from building homes in these area and, if they do, encourage them to build them with wildfire safety in mind.

Please adopt a WUI standard that is strong and will help prevent loss of home in these areas and the loss of lives of firefighters and all the resources needed to protect homes that could be used to fight the fires themselves.

Thank you,
J. Allen Hallmark
Medford, OR 97504
458-226-6970

From: **Rich Fairbanks, Fairbanks Forest Management LLC**
Position: **Support**

The definition:

'..... that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels'

works fine for not only treating house-adjacent fuels, but also for brushing out evacuation routes. It could even be stretched to include strategic fuel treatments on ridges adjacent to structures. Please stick with that definition.

Rich Fairbanks
Fairbanks Forest Management LLC
(541) 899 5272

From: **Roger Johnson, Sisters-Camp Sherman RFPD**
Position: **Support**

September 23, 2021

Chair Kelly and members of the Board:
Thank you for the opportunity to provide testimony today in support of the adoption of the International WUI Code definition of the Wildland Urban Interface. I am Roger Johnson and I serve as the Fire Chief for the Sisters-Camp Sherman Rural Fire Protection District and the Deschutes County Fire Defense Board Chief. I also chair the Oregon Fire Chiefs Wildfire Policy Committee and represent Oregon on the Executive Committee of the Western Fire Chiefs Wildfire Initiative.

The International WUI Code is the gold standard of wildfire codes in the country and is developed with broad stakeholder engagement. The International WUI Code is part of the International Code Council series of model codes, which Oregon has a long history of adopting, including the International Building Code and International Fire Code.

The International WUI Code definition of WUI is similar in terms and meaning as other nationally recognized definitions:

International Code Council WUI definition:
That geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels.

US Fire Administration WUI definition:
The WUI is the zone of transition between unoccupied land and human development. It is the line, area or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

Bureau of Land Management:
WUI: The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. (Glossary of Wildland Fire Terminology, 1996).

National Wildfire Coordinating Group:
The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetation fuels. Source: 2009 Guidance for Implementation Federal Wildland Fire Management Policy and Fire Management Board Memorandum 19-004a

Most of the Western United States has adopted WUI codes and definitions similar to the International WUI Code. The following examples are provided courtesy of the Western Fire Chiefs Association:

Nevada
In Nevada, the State Fire Marshal adopted the 2018 WUI Code under authority of NRS 477. NRS 477 covers most of the State (Counties with less than 100,000 population) and Washoe County (Reno-Sparks), Carson City and most if not all of Clark (Las Vega) have adopted the WUI Code separately from the State. Chapter 2 of the Code defines WILDLAND-URBAN INTERFACE AREA as "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels." The objective of Chapter 3 of the WUI Code is to provide simple baseline criteria for determining wildland-urban interface areas. It requires the legislative body (Agency with Jurisdiction) declare the wildland-urban interface areas within the jurisdiction. The wildland-urban interface areas shall be based on the findings of fact. The wildland-urban interface areas shall be recorded on maps available for inspection by the public.

Hawaii
3.3.289 * Wildland/Urban Interface.
An area where wildland fuels abut structures, with a clear line of demarcation between residential, business, and public structures and wildland fuels.

California
The CA codified it within the California Building Code Title 24 Part 2 CBC:

Section 702A WILDLAND-URBAN INTERFCE FIRE AREA is a geographical area identified by the state ass a "Fire Hazard Severity Zone" in accordance with the Public Resources Code Section 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires.

Washington
https://fortress.wa.gov/doh/arcgis/arcgis/rest/services/WTN/Wildland_Urban_Interface/MapServer/0
The Wildland-Urban Interface (WUI) is the area where houses meet or intermingle with undeveloped wildland vegetation. This makes the WUI a focal area for human-environment conflicts such as wildland fires, habitat fragmentation, invasive species, and biodiversity decline. Using geographic information systems (GIS), Martinuzzi et al. (2010) integrated U.S. Census and USGS National Land Cover Data, to map the Federal Register definition of WUI (Federal Register 66:751, 2001). These data are useful within a GIS for mapping and analysis at national, state, and local levels. Notes from the WTN Team: This dataset has been edited only minimally from its original source. We have: (1) clipped the data set to fit Washington State, and (2) recoded all forms of Intermix to simply 'Intermix', and all forms of Interface to 'Interface'. Any other category was recoded to 'Neither'.

Montana
https://up.codes/viewer/montana/iwuic-2012/chapter/2/definitions#2
That geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels.

Utah
https://ffsl.utah.gov/wp-content/uploads/06_Utah_Wildland_5thdnd.pdf
The line, area or zone where structures or other human development (including critical infrastructure that if destroyed would result in hardship to com- munities) meet or intermingle with undeveloped wildland or vegetative fuel.

I encourage the Board of Forestry to join other national organizations and states in adopting language consistent with the International WUI code definition of "Wildland Urban Interface"

Sincerely,
Roger Johnson
Fire Chief
Sisters-Camp Sherman RFPD

From: **Diarmuid McGuire**
Position: **Support**

Dear Rulemakers,
The International WUI Code Definition makes sense for Oregon. We know from firsthand experience that we must protect ourselves by addressing "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels."

I am concerned about how this clear, concise definition will be applied on the ground. We must recognize that the interface between wildlands and urban areas can be found both at the edges of and within zones of human development.

Our recent Almeda Fire burned through an urban area. The fuse of "vegatative fuels" that conducted the fires to homes and commercial structures were mostly well within recognized "urban growth boundaries." Four municipalities were affected. No area that we normally think of as forest or wildland was involved.

Clearly patches or belts of wildland can be found with our developed communities. We must recognize this reality and allocate resources accordingly.

Best regards,
Diarmuid McGuire

From: Peggy Lynch (with attachment 2021 YTD Structures Lost)
Position: Support

To: Oregon Board of Forestry, Jim Kelly, Chair
Re: Wildland Urban Interface (WUI) proposed definition

Please consider this attached information as an addendum to LWVOR's testimony in support of the WUI Code definition. **This is NOT to assume Mr. Garrett's position on the issue,** but he provided the data I had asked for related to the 2021 fire season so far.

Rural subdivisions in SE Oregon were dramatically affected tragically. So this is not just about urban Oregon but wherever we place homes near fire prone areas. So, using a broad foundational definition is important as a beginning while respecting the on-going rulemaking that will help refine the definitions and criteria to be used to determine the five fire risk areas and the subsequent land maps.
We ask that you support the proposed WUI definition without amendments.

Peggy Lynch, LWVOR NR Action

-

Please find attached a comprehensive table that captures structures lost to 2021 fires as well as other fire related impact information.

Matthew Garrett
Director of Wildfire Recovery
Office of Governor Kate Brown

From: Jim Bronson
Position: Neutral (informational)

Dear Rule Making Representatives,

- Oregon needs a science-based WUI definition to protect firefighters, life, and property.
- The International WUI Code Definition: "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels" is a great starting place for Oregon.
- We should be focusing our investments in the WUI where the risks to communities from wildfire are the greatest.
- Most western states have already adopted the international WUI Code, and Oregon needs to catch up.

- Having a science based definition will allow Oregon to get more federal funding to address fire hazards near communities.

Thank you for considering my key points.

Jim Bronson
650-815-5885

From: **Ann Vileisis**
Position: **Support**

Greetings,
I am writing to urge you to adopt the International WUI Code definition of "wildland urban interface" as you implement SB 762 to help protect Oregonians from wild fire risks.

The International WUI Code Definition is as follows: "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels."

I think Oregon should focus taxpayer dollars on wildfire risk reduction investments in Wildlands Urban Interface (WUI) locations, where the risks to communities from wildfire are the greatest —and where the state can be most effective and efficient.

The science based International WUI Code definition has already been adopted by many other western states. Having this well-vetted definition would be a solid starting place for Oregon's wildfire risk reduction program —and could help us to secure more federal funding to address fire hazards near communities.

Thanks for considering my input on this important policy!

Sincerely,

Ann Vileisis
PO. Box 1286
Port Orford OR 97465

From: **John O'Renick (with attachment Temp Chapters Sequestering Carbon...)**
Position: **Neutral**

Folks:

If we clean up the excess fuels in our forests before they immolate us the age-old way, sash and burn/controlled burns, we will create vast, nasty, carcinogenic air pollution, that already kills 107,000 Americans and 7 million people around the planet each year; create black carbon to speed ice melt; waste all of the energy and useful chemicals in those fuels while we take more fossil carbon out of the ground; *not* create a great many good paying jobs, and dump all of that carbon back into the atmosphere uselessly. Doing so will speed climate change, increase drought, and create more wildfires in a self-reinforcing feedback loop that will grow exponentially.

There is a better way.

There are already pyrolizers/wood gasifiers made to be dragged out to the woods, being manufactured all over Europe and Asia. You chip woody biomass and run it through the pyrolizer, creating 20 to 50 percent char; enough producer gas that *won't* condense--mostly clean-burning hydrogen--to run the process, and condense/catalyze the rest into pyrolysis oils that can replace fuel oil, or be refined into a host of useful chemicals now made from petroleum. Spreading the char back onto the forest floor--or onto farmlands and urban gardens--sequesters that atmospheric carbon for centuries or millennia; I'm sure you know about *Terra Preta*? The same crews could also spread silicate rock dust onto the soil, drawing down atmospheric carbon through enhanced weathering, and--by choosing the right crushed rock--enhance soils we are now strip mining. They could thin the forests first, and bring out poles, timber, and firewood, perhaps make wood pellet fuel, replant where needed, and enhance wildlife habitat while they are there. And I think that the least expensive way to get this new occupation, Forest Keepers, started is with the Civilian Climate Corps.

I've been working on a book I call *Pumping the Brakes on Climate Change: a Review of the Technologies and Politics that could Leave the Future a Future*, for way too long now. Rather than go into greater detail here, I will abridge the chapter in which I talk about pyrolyzing forest wastes, and attach it below.

I would very much appreciate a "ping back" so I know that the appropriate people have seen this. I would like to talk to the State Forester about this, if Ms. Hirsch can find the time to phone/email me. Please note that I will CC this to anyone whom I think might help, and I would appreciate any suggestions from you folks as to who else should see it. And Derek, please do put me on that email list so that I hear about future opportunities to give public testimony on this issue.

Thank you all.

John O'Renick
jman97216@gmail.com
971-352-2948

From: **Nick Browne, Clackamas Fire Department Fire Chief**
Position: **Support**

Dear Oregon Board of Forestry,

My name is Nick Browne and I am the Fire Chief at Clackamas Fire. Thank you for the opportunity to submit testimony commending the Board of Forestry for your work to implement SB 762. The fire service worked diligently with the Legislature to create and pass SB 762 last session and continues to do so through the rulemaking process. In particular, I'd like to express gratitude for your adoption of the International definition of the Wildland-Urban Interface (WUI). Addressing wildfire risk within the WUI is one of the most critical portions of SB 762. By adopting the International definition, the Board of Forestry has enabled our state to use the most objective, science-based, practices to identify the WUI and focus risk reduction efforts there.

Again, thank you for your work to implement this milestone legislation for the Fire service.

Sincerely,

Brandon Paxton On behalf of Fire Chief Nick Browne.

From: **Ralph Satain, Ashland Fire and Rescue Fire Chief**
Position: **Support**

September 22, 2021
RE: Support of Definition

Dear Oregon Board of Forestry,
My name is Ralph Sartain, and I am the Fire Chief for Ashland Fire & Rescue. Thank you for the opportunity to submit testimony commending the Board of Forestry for your work to implement SB 762. The fire service worked diligently with the Legislature to create and pass SB 762 last session and continues to do so through the rulemaking process.

In particular, I'd like to express gratitude for your adoption of the International definition of the Wildland-Urban Interface (WUI). Addressing wildfire risk within the WUI is one of the most critical portions of SB 762. By adopting the International definition, the Board of Forestry has enabled our state to use the most objective, science-based, practices to identify the WUI and focus risk reduction efforts there.

Again, thank you for your work to implement this milestone legislation for the Fire service.
Respectfully,

Ralph Sartain, MO, IAAI-CFI, NAFI-CFEI
Fire Chief
Ashland Fire and Rescue
455 Siskiyou Boulevard
Ashland, OR 97520
ralph.sartain@ashland.or.us
Office: 541-552-2229
Fax: 541-488-5318

From: **Tamika Ann Dew**
Position: **Support**

To Whom It May Concern:
Like many Oregonians, my family's life has been impacted by the fires that we have experienced in 2020 and 2021. The 2020 wildfire season in Oregon burned over 1 million acres and destroyed more than 4000 homes. One-sixth of Oregonians were under evacuation orders! While we were fortunate not to have been impacted in that way, the geographical location of our home in the Perrydale region of Polk County has smoke blowing into us from many directions. It was impossible to work on our small farm without a mask. In 2021, over 850,000 acres and over 160 residences have already burned in Oregon. While we have not been as impacted as last year, we have invested in an air purifier for our home and did have to wear masks on a few days when working outside.

For these reasons, I urge Oregon to adopt the International Wildland Urban Interface (WUI) Code Definition: "*that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels*". Adopting a scientifically sound, comprehensive, and nationally recognized WUI definition based on best practices is essential to protect life, property, and firefighter safety in the wake of increasingly extreme and dangerous wildfire conditions.
The International WUI Code definition is nationally recognized and used in professional applications at the local, state, and federal level. Nearly every western state, and many states across the nation, have already adopted all or part of the International WUI Code. The International WUI definition is recognized by the Council of Western State Foresters, federal agencies, fire managers, and other government and professional bodies.

· Oregon must improve our wildfire response systems, and the status quo of unfunded and inconsistent WUI approaches is no longer acceptable. Oregon needs a consistent and clear definition that is recognized by scientists, fire managers, and government bodies, not a one-off definition that risks unintended consequences and could allow interests to game the process. Additionally, having a nationally recognized WUI definition is important to ensure Oregon is eligible to secure federal funds for programs related to the WUI.

· For these reasons, please support the International WUI so we can move forward in implementing the wildfire omnibus bill.

--
Tomika Anne Dew
tomika13245@gmail.com
971-235-7668

From: **Jason Clark, Talent City Council Seat 6**
Position: **Support**

Dear Board Members,
I am writing to you from Talent, Oregon, which lost approximately 1/3 of our housing and 80% of our businesses on September 8th. I am writing to encourage you to adopt a science-based definition of Wildland Urban Interface. Oregon's definition should be based on the International WUI Code Definition, *that geographical areas with structures and other human development meets or intermingles with wildland or vegetative fuels.* Adopting a science based definition will allow more federal dollars to flow into Oregon communities like Talent, so that we can be more resilient when the next wild fire comes.

Thank you,

Jason Clark
Talent City Council Seat 6

From: **Matthew Brady**
Position: **Opposed**

My name is Matthew Brady and I am fifth generation farmer in the community of Azalea in southern Douglas County. My wife Mary and I raise sheep, hay, pumpkins and timber on our home farm and the farm I grew up on in Glide. Our farm is an enrolled member of the Douglas Forest Protective Association

(DFPA), and is classified as Class I and Class III forestland. I am also a former Assistant Unit Forester with DFPA until I resigned my position this April and worked the previous 21 fire seasons in its employ. I am here today to express my concern that the definition of the wildland urban interface (WUI) proposed by the Department is overly broad and creates a risk of confusion and overregulation for farmers and ranchers. I understand that the Department is moving forward with the same overly broad definition the legislature rejected that would define the WUI in a manner that could include most of Oregon. While I understand that the Department has provided verbal assurance that the terms "structures and other human development" will not be interpreted to include features outside of occupied buildings such as fences, trails, county roads, irrigation, and drainage infrastructure, and cropland, assurances often only last as long as the agency personnel who provided them. The currently proposed definition of WUI includes all areas of the state classified as Forestland that are not reserved by Wilderness designation. I have seen many instances where overly broad language can have serious consequences for future regulation. I have also seen the impotent and unfunded administration of 1997's SB360 from within Oregon's Complete and Coordinated System. The current ODF Administration does not inspire my confidence in their assurances on the interpretation of this definition. It is entirely possible that crop lands that are classified as Forestland will be considered part of vegetative fuels, potentially requiring areas where crop lands meet farm homes and farm infrastructure to be part of the WUI and potentially subject to new regulatory requirements for defensible space and building hardening standards. Farming and ranching are uncertain enough businesses without the potential for having to destroy crops that contribute to my livelihood to meet regulatory requirements. I do not believe that the legislature or the Department intend this result, but it would be easily allowed under the proposed WUI definition. In my professional career as a Fire Warden for the State of Oregon I administered Oregon Forest Law as set forth in ORS 477 on OAR 629 for over 15 years. I can say without a doubt that the current language is ambiguous at best, and is a disservice to current and future Fire Wardens who may have to make administrative decisions based upon it. If the Department intends further define structures as buildings used as a primary residence and buildings appurtenant to that use, that should be clearly stated in the definition of WUI, not in subsequent definitions. I'm sure you will hear the argument that the proposed language is needed to maintain consistency with international codes. While there may be perceived benefits of this by members of the fire service community, the reality is that this definition must serve the needs of the residents of Oregon. It needs to clearly state which buildings will and will not fall under the designation of WUI. I strongly urge the Department to go back to the drawing board and work on a definition that is narrowly crafted, specific, and thoughtfully developed to align with existing Oregon law and policy, and ensures that we are really only mapping those areas where urban development meets wildland fuels as we develop the WUI maps. Thank you for the opportunity to comment.

From: **Wynne Furthm**
Position: **Support**

Dear Board of Forestry -
Twenty five years ago our home, located in a classic "WUI", adjacent to both state and federal parklands, burned to the ground in a 12,000 acre fire caused by young people camping (illegally) in what they believed was a safe and responsible manner. Amazingly, no human lives were directly lost. The death of my mother within a year led us to wonder if the stresses of that loss worsened her health. (Certainly the three year struggle with insurance companies that ensued didn't do much for my father's well-being either.)

That house was eventually rebuilt, adjacent to a fire hydrant and with fire retardant construction and an aggressive vegetation management plan. The four generations of children's books that were in the

house were briefly readable ash, and then they were gone. The neighborhood is now part of a "Fire Safe" program - and we all know we aren't really fire safe.

When the house was built, 25 years before it burned down, fog dripped from the trees much of the year, the undergrowth was moss, ferns, huckleberries and salal. As the climate has changed over the fifty years we have had that home, the fog has largely disappeared, the ferns and moss are gone, as is the salal. Drought has stressed the big trees and many are dying. It will only get worse.

As you work to address fires in Oregon, you need to make hard choices, or ones that seem hard as we face a new reality. Build on a strong foundation by adopting the International Wildlife Urban

Thank you.

Wynne Furthm Portland, Oregpn

From: **Charlotte Poulos**
Position: **Support**

I live in Phoenix Oregon where the Almeda Fire destroyed my town and immediate neighborhood. My home was one house away from destruction. We need to adopt the WUI Code like other Western States have. What is stopping us? I feel I can't stay in Oregon the way it is now.

Thank you,
--
Charlotte Poulos
912 N Rose St
Phoenix, OR 97535

From: **David Stone**
Position: **Neutral**

Fireproofing existing homes in the WUI is just the first step. Real preparedness is strict fire-prevention building codes applied to new construction and even banning new and replacement construction in fire-prone neighborhoods.

Beyond that, buildings constructed in fire-prone neighborhoods before climate change began causing such large and frequent fires must be required to carry enough insurance to cover their losses and their share of fire fighting costs.

Taxpayers are tired of paying the cost of fire firefighting to save buildings of those who insist on returning to burned

David Stone
Dns@efn.org

From: **Robert Madden, Bend Fire and Rescue Retired Deputy Fire Chief**
Position: **Support**

Oregon Board of Forestry

My name is Robert Madden, retired Deputy Chief from Bend Fire and Rescue. Thank you for the opportunity to submit testimony to the Board of Forestry on the implementation of Senate Bill 762. I support the adoption of the international definition of the wild land urban interface (WUI) for the State of Oregon.

I represent the Central Oregon Fire Chiefs on the Deschutes Collaborative Forest Project Steering Committee (DCFP). The DCFP has brought many diverse stakeholders together to reach consensus on local forest management projects focused on mitigating fire risks in the WUI. The Central Oregon Fire Chiefs and DCFP support the objective, science based definition of the WUI.

The State of Oregon is in position to take a national leadership role in the development of sound community development and forest management practices to reduce the potential of devastating WUI fires. Thanks again to the Board of Forestry for implementing the programs of SB 762 to build resilient landscapes, fire adapted communities, and effective response to wildfires.

Bob Madden

From: **Marko Bey, Executive Director, Lomakatsi Restoration Project**
Position: **Support**

Dear Mr. Kelly,
Lomakatsi Restoration Project is frequently called upon by our local, regional and state elected officials and natural resource managers to provide input on legislative solutions to the growing threat of wildfire across Oregon. We provided input on and fully supported the omnibus state wildfire legislation SB 762. We also support the Board of Forestry's recommendation to adopt the International Wildfire Urban Interface Code definition of "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels."
SB 762 is a critical step for Oregon to increase community preparedness, reduce future wildfire risk, and build resiliency to withstand the increasing severity and frequency of wildfires in Oregon. As state agencies move to implement SB 762, several actions and investments are necessary to achieve wildfire resiliency:

- Oregon should adopt the International WUI Code definition: "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels".
- Adopting a scientifically sound, comprehensive, and nationally recognized WUI definition based on best practices is essential to protect life, property, and fire fighter safety in the wake of increasingly extreme and dangerous wildfire conditions.
- The International WUI Code definition is nationally recognized and used in professional applications at the local, state, and federal level. Nearly every western state, and many states across the nation, have already adopted all or part of the International WUI Code.

- The International WUI definition is recognized by the Council of Western State Foresters, federal agencies, fire managers, and other government and professional bodies.
- The 2020 wildfire season in Oregon burned over one million acres and destroyed more than 4000 homes, with one-sixth of Oregonians under evacuation orders. Oregon must improve our wildfire response systems, and the status quo of unfunded and inconsistent WUI approaches is no longer acceptable.
- In 2021, over 850,000 acres and over 160 residences have already burned in Oregon.
- Oregon needs a consistent and clear definition that is recognized by scientists, fire managers, and government bodies, not one-off definitions that risk unintended consequences and could allow interests to game the process.
- Having a nationally recognized WUI definition is important to ensure Oregon is eligible to secure federal funds for programs related to the WUI.
- Customized issues will be addressed in the extensive WUI criteria development process that will follow the adoption of the WUI definition, to account for unique local circumstances and features. Adopting this definition is simply the foundational starting point, which will be detailed and refined in additional public processes over the next five months.

Defining the WUI is the first step in implementing SB 762. We understand that a rulemaking committee is developing the set of specific maps identifying which properties are most at risk, with a process for soliciting public participation from Oregon's diverse communities. As an organization with deep ties to Tribal, Latinx, and rural frontier forest-based communities, Lomakatsi supports a fair and open appeals process with opportunities to comment on the criteria and refined definitions related to those maps in the coming months. We also recognize the urgency for implementing ecological hazardous fuels reduction in the WUI to help protect people, homes, wildlife habitat, and other community assets.

Thank you for the opportunity to share our perspective on this proposed rule. Lomakatsi fully supports this definition of the Wildland Urban Interface as the foundation for setting criteria and refinement of the use of this definition in creating the risk maps, defensible space requirements and other actions required under SB 762.

Sincerely,

Marko Bey
Executive Director
Lomakatsi Restoration Project

Cc: Acting State Forester Nancy Hirsch (Nancy.Hirsch@oregon.gov)
Tim J. Holschbach, Deputy Chief-Policy & Planning Protection-Fire Division
(Tim.J.Holschbach@oregon.gov)

From: **Michele Tesdal, City Councilor, Detroit, Oregon**
Position: **Opposed**

Hello,

I am a Detroit, Oregon resident who was a natural resource specialist for 21 years and is a city councilor.

I am against the government overreach that Senate Bill 762 will create. I have watched the Wildland Urban Interface (WUI) - ODF meeting videos. I respect the knowledge and the carefulness that the advisory council (RAC) team uses - it is impressive and they have spent many hours trying to make this senate bill fair. I thank the folks on that team who are keeping the citizens in mind while making decisions. I recognize that all want healthy forests and safety for the citizens, but it will not come by regulating the citizens and that is what this bill does.

The Oregon forests are mismanaged and this bill will place the burden on the home owners. The trees stands are too dense and have too much competition with each other to grow big, stay healthy and in turn more fire resistant. This is managements fault. You know this and I know this. With the dry weather and the act of 'keeping an eye on the fire" when ignition happens because "it is in a remote location", or because the managers KNOW that the stand is too dense and needs to be thinned/cleared, is where the disaster of entire towns and loss of human and wildlife happens. Our forests are like match sticks that just need a strike to light them all up.

A stronger forest stand is what is needed, not a definition of where wildland and the urban life comes together.

We do not need to be told that we live in a WUI. We know this already. This is 100% for more government control. Keep the forest healthy, thin your stands. When the weather is dry, they have more of a chance at staying healthy because they will have more resources during stressful times. Encourage the wildlife to come back by having more open spaces with thinning - Encourage the forest diversity that way.

This bill WILL price the people out of the privately owned wildlands. The cost of building is extremely high already and even average income people cannot build right now. This bill will sift out economically poor and average families. Wealthy people can withstand cost increases. We WANT to use fire resistant tactics when rebuilding or building but, we do not want to be regulated to do so. If we are regulated, higher insurance prices will follow and people are already being denied homeowner insurance due to the past wildland fires.

Many of us lost everything and some have lost their lives. The people understand and do not need more rules. There are too many regulations already slowing our towns recovery.

Finally, humans and wildlands can mix in a beneficial way and they have for centuries. Please vote no to more regulations, please vote for liberty of the people. Please vote no on Senate Bill 762.

Michele Tesdal
Detroit, Oregon
City Councilor

From: **Corbin Hammond**
Position: **Opposed**

Good morning,
I am Corbin Hammond and I am here today to express my concern that the definition of the wildland urban interface proposed by the Department is overly broad and creates a risk of confusion and overregulation for farmers and ranchers.

I understand that the Department is moving forward with the same overly broad definition the legislature rejected that would define the WUI in a manner that could include most of Oregon.

While I understand that the Department has provided verbal assurance that the terms "structures and other human development" will not be interpreted to include features outside of occupied buildings such as fences, trails, county roads, irrigation, and drainage infrastructure, and cropland, assurances often only last as long as the agency personnel who provided them, and I have seen many instances where overly broad language can have serious consequences for future regulation.
I am also worried that croplands will be considered part of vegetative fuels, potentially requiring areas where crop lands meet farm homes and farm infrastructure to be part of the WUI and potentially subject to new regulatory requirements for defensible space and building hardening standards. I do not believe that the legislature or the Department intend this result, but it would be easily allowed under the proposed WUI definition.

The definition proposed by ODF is not only contrary to their previous statutory charge, but it is also contrary to the definition used as recently as 2020 in the "Communities at Risk" report by ODF to the legislature, which focused on clustered or concentrated development at the urban interface.

I strongly urge the Department to go back to the drawing board and work on a definition that is narrowly crafted and thoughtfully developed to align with existing Oregon law and policy, and ensures that we are really only mapping those areas where urban development meets wildland fuels as we develop the WUI maps.

Thank you for the opportunity to comment.

From: **Carol Ampel**
Position: **Support**

To the Oregon Board of Forestry:

The wildfires that have destroyed so much of the human-built environment are far and away the most costly in terms of human life and property. These are the most important places to start as we invest in the effort to reduce the damage from fires that are clearly going to be a regular and likely increasing result of climate change. A science-based definition of the Wildland-Urban Interface is greatly needed in order to ensure our fire-prevention and fire-fighting resources are being used most effectively in the most critical places - not the back country, though it is precious to me, but the edge, where homes, livelihoods and people are at greatest risk.

Defining the WUI by referral to the best scientific knowledge has been adopted by most other western states, and we in Oregon need to get on board with it, too. Our forests and communities deserve it.

Thank you for your work and for considering my comments.

Sincerely,
Carol Ampel
1014 Black Oak Drive
Medford, OR 97504

From: **Darlene Chirman, M.S. Ecology, University of California at Davis**
Position: **Support**

Oregon Board of Forestry
As part of implementation of SB762, Oregon needs o define the Wildland Urban Interface (WUI). I urge you to adopt the international definition for Oregon, as many other states have done. I am a retired ecologist, and lived for decades in the Wildland Urban Interface in the hills above Santa Barbara California.

I applaud the legislature, the Board of Forestry, and the Department of Forestry for moving ahead in defining and mapping the WUI, as the basis for making our WUI communities safer in future wildfires.

Thank you, Darlene Chirman
M.S. Ecology, University of California at Davis

Darlene Chirman
7017 SE Martins Street
Portland OR 7206
805-455-3541
darlene.chirman@gmail.com

From: **Amelia Porterfield, Senior Policy Advisor**
Position: **Support**

September 30, 2021

Chair Kelly and Members of the Oregon Board of Forestry:
Thank you for the opportunity to provide comments following the Board of Forestry's vote to adopt the International Wildland Urban Interface Code definition in rule.

The Nature Conservancy (TNC) is a science-based, non-partisan organization committed to conserving the lands and waters on which all life depends. In Oregon, TNC has over 80,000 supporters and members in every county. TNC scientists and conservation practitioners based in Ashland, Klamath Falls, Bend, and Baker City lead restoration efforts to increase landscape resilience, reduce wildfire risk to communities, and sustain the many benefits these ecosystems provide to nature and people. We focus on the ecology and restoration of Oregon's dry forests as landowners, forest stewards, and fire managers; lead training and workforce capacity development; and plan and implement large-scale, prescribed fire projects in partnership with local, state, federal, and tribal partners on thousands of acres each year.

It is through this lens that we provide our strong support of the Board's vote to adopt the widely supported International WUI Code Definition: "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels".

Oregon's wildfire seasons have been growing longer and more intense in recent years, with wildfires burning millions of acres and destroying thousands of homes. The state made an important nvestment this year in SB 762, setting Oregon on a path to improve our wildfire resiliency and response systems. This means we must move past an outdated and unsuccessful status quo and modernize our approach to this critical issue. Adopting a broadly accepted, scientifically grounded and consistent Wildland Urban Interface definition is the keystone of that legislation. After participating in the Governor's Council on

Wildfire Response, working closely with legislators for over a year to help craft and pass SB 762, and serving on the WUI Definition RAC this summer, TNC firmly believes that the International WUI Code definition is the best choice for Oregon, for several reasons:

- The International WUI Code definition meets the charge of SB 762 to consider "national best practices", as this definition is widely utilized by varying types of jurisdictions across the American West. It is nationally recognized by the Council of Western State Foresters, federal agencies, scientists, land managers and the fire professionals charged with keeping communities safe in the face of future wildfires. - Adopting a nationally recognized definition in its entirety avoids unintended consequences that could arise by wordsmithing, merging multiple definitions or writing a new definition from scratch. This definition is clear, consistent and well understood, and should be adopted as written.

- Utilizing this best practice definition provides the best chance to support equity in the state's wildfire mitigation activities and investments for vulnerable individuals and families who have fewer options for moving or relocating from sparsely populated, vegetated areas on the margins of cities and towns.

- Adopting this nationally recognized WUI definition is important to ensure Oregon is eligible to leverage federal funding opportunities for programs focused on investments in the WUI.

- The International WUI Code includes focus "to safeguard life and property from the intrusion of wildland fire and to prevent structure fires from spreading to wildland fuels", grounding this model in creating resilient landscapes and communities to better ensure that those who live in impacted areas, and those who risk their lives to keep our communities safe from fire, remain front of mind in subsequent discussions.

- The International WUI Code definition provides sufficient direction while preserving space for ongoing rulemaking discussions to refine terms and classify the WUI in a way that authentically incorporates the nuances of Oregon's diverse landscapes and communities.

While adopting the WUI definition is a foundational starting point for implementing SB 762, it is important to recognize that the definition itself is in no way the end point. A thorough process to further classify and map the WUI has been launched and will continue for the next several months, with RAC meetings already underway. Customization will be addressed in the extensive WUI criteria development process, allowing continued stakeholder input to account for unique local circumstances and features. Future public processes, within ODF and within other implicated agencies, will further refine the application of policy updates and will aim investments and protection for communities found to be most at risk.

This work will require ongoing engagement by agency leadership and staff, stakeholders, and the public. Following the active debate and discussion within the legislative process as SB 762 was passed, we are heartened to see that robust participation and engagement from stakeholders representing varied sectors and regions of the state has continued into rulemaking. TNC remains committed to working alongside the Board, ODF staff and other RAC members to ensure this legislation implements successfully and continues to be grounded in best available science and best practices.

The Nature Conservancy offers our appreciation to the Board and to ODF staff for its attention to this important issue and reiterates our support for the adoption of the International WUI Code definition of

the Wildland Urban Interface as written: "The geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels."

Thank you again for the opportunity to provide our input into this process.

From: **Doug Heiken**
Position: **Neutral (informational)**

Please accept the following comments from Oregon Wild concerning the definition of "wildland urban interface." Oregon Wild represents 20,000 members and supporters who share our mission to protect and restore Oregon's wildlands, wildlife, and water as an enduring legacy.

Lacking a clear indication of what the proposed WUI definition might be or how it might be used, we will offer some information about the most effective ways to keep communities safe and some cautions about relying on commercial logging to reduce fuels.

Fire is a natural process in our forests, so fuel reduction should be narrowly focused on the "structure ignition zone."
In fact, the old growth ecosystems we know and love were created by fire, and the fish & wildlife we hunt and fish evolved with fire. We should not adopt policies that try to prevent fire from playing it natural ecological role. Rather, the best case for modifying fire behavior is in the immediate vicinity of homes and buildings. This strategy is not only the most ecologically appropriate, but also the most effective and cheapest.

Logging to reduce wildland fuels in the "wildland urban interface" is often promoted as a way to keep communities safe. There is a lot of controversy whether this is an effective strategy. The best available science indicates that the most effective way to keep communities safe from wildfire is:

- Adopting planning requirements and building codes that ensure communities are organized and structures are built and maintained to minimize wildlife fire risks. These practices include: discourage or prohibit construction in fuel-rich ecosystems, especially where fire is expected to return relatively frequently; provide good ingress and egress for fire fighting vehicles; create evacuation plans for families, neighborhoods, and communities; for homes: screened vents; fire-resistant roofs/siding; double-paned windows, clean gutters; enclosed eaves/soffits; fuel tanks, decks, and wood piles kept away from structures; shrubs and trees trimmed away from structures; etc.;
- Modify insurance policies and disaster relief programs so that property owners are rewarded for home hardening and using fire safe practices within the home ignition zone, and so they face the consequences if they do not;
- Wildlife fuel modification should be narrowly focused close to communities, should focus on small fuels that are most hazardous, should retain all large trees, and should retain canopy cover to help maintain cool/moist microclimate and help suppress the growth of surface and ladder fuels which makes ongoing fuel maintenance more affordable.

Logging commercial sized trees miles away (over even hundreds of feet away) from homes is not an effective strategy to keep communities safe, and it could even make things worse.

After the 2020 fires subsided Jack Cohen repeated his main point that community protection from wildfires is a home ignition problem:

Wildfires, and thus extreme wildfires, are inevitable. Does that mean wildland-urban (WU) fire disasters are inevitable as well? Absolutely not! WU fire research has shown that homeowners can create ignition resistant homes to prevent community wildfire disasters.

...

The "big flames" of high intensity wildfires are not causing total home destruction.

Surprisingly, research has shown that home ignitions during extreme wildfires result from conditions local to a home. A home's ignition vulnerabilities in relation to nearby burning materials within 100 feet principally determine home ignitions. This area of a home and its immediate surroundings is called the home ignition zone (HIZ). Typically, lofted burning embers initiate ignitions within the HIZ – to homes directly and nearby flammables leading to homes. Although an intense wildfire can loft firebrands more than one-half mile to start fires, the minuscule local conditions where the burning embers land and accumulate determine ignitions. Importantly, most home destruction during extreme wildfires occurs hours after the wildfire has ceased intense burning near the community; the residential fuels – homes, other structures, and vegetation – continue fire spread within the community.

Uncontrollable extreme wildfires are inevitable; however, by reducing home ignition potential within the HIZ we can create ignition resistant homes and communities. Thus, community wildfire risk should be defined as a home ignition problem, not a wildfire control problem. Unfortunately, protecting communities from wildfire by reducing home ignition potential runs counter to established orthodoxy.

...

fuel treatments do not stop extreme wildfires. So let's call a spade a spade and not pretend that many, or even most fuel treatment projects actually reduce home ignition potential during extreme wildfires. Because local conditions determine home ignitions, the most effective "fuel treatment" addressing community wildfire risk reduces home ignition potential within HIZs and the community. ... To make this shift, land managers, elected officials, and members of the public must question some of our most deeply ingrained assumptions regarding fire. For the sake of fiscal responsibility, scientific integrity, and effective outcomes, it's high time we abandon the tired and disingenuous policies of our century-old all-out war on wildfire and fuel treatments conducted under the guise of protecting communities. Instead, let's focus on mitigating WU fire risk where ignitions are determined – within the home ignition zone.

Jack Cohen and Dave Strohmaie 2020. Community destruction during extreme wildfires is a home ignition problem. Wildfire Today, September 21, 2020.
https://wildfiretoday.com/2020/09/21/community-destruction-during-extreme-wildfires-is-a-home-ignition-problem/

Tim Ingalsbee summarizes Jack Cohen's recommendations about protecting homes:

Key Points of Jack Cohen's Research Paper

- Home ignitability, rather than wildland fuels, is the principal cause of home losses during wildland/urban interface fires. Key items are flammable roofing materials (e.g. cedar shingles) and the presence of burnable vegetation (e.g. ornamental trees, shrubs, wood piles) immediately adjacent to homes.
- Cohen's Structure Ignition Assessment Model (SIAM) indicates that intense flame fronts (e.g. crown fires) will not ignite wooden walls at distances greater than 40 meters (approx. 130 feet) away. Field tests of experimental crown fires revealed that wooden walls can successfully survive intense flame fronts from as close as 10 meters (approx. 30 feet) away!
- Current strategies for wildland fuel reduction may be inefficient and ineffective for reducing home losses, for extensive wildland fuel reduction on public lands does not effectively reduce home ignitability on private lands.
- The so-called "wildland/urban interface zone" overgeneralizes and misrepresents the zone of prime fire risk and fuel hazards: the home and its adjacent vegetation.

- Opportunities to use prescribed fire for the sake of ecosystem restoration may be greatly enhanced in wildland/urban interface areas if home ignitability is reduced.
- The primary and ultimate responsibility for home wildfire protection lies with private homeowners, not public land management agencies (or taxpayers).
- Given nonflammable roofs, Stanford Research Institute found that 95 percent of homes survived where vegetation clearance of 10 to 18 meters was maintained around the homes.

Citing Jack D. Cohen, Ph.D. 1999. Reducing the Wildland Fire Threat to Homes: Where and How Much? https://www.fs.fed.us/rm/pubs_other/rmrs_1999_cohen_j001.pdf presented this paper at the Fire Economics Symposium in San Diego, California on April 12, 1999.

Top experts support focusing investments from the home outward. This means that first you harden the home, then you create defensible space up to 100 feet outward, and then you consider creating operable space for firefighters around homes and communities. In Oregon, if we focus efforts to reduce fuels around census-designated places, experts tell us that we would only need to address between 100-150,000 acres of land.

...

In areas of the Western US with wildfire risk, the most strategic actions we can take are to focus our limited resources on homes and communities, and emphasis needs to be on hardening homes, following guidelines for creating defensible space from the homes outward (e.g. California Fire Safe Council), and dealing with the problem of ignitions caused by power lines.

Law, B. 2021. Response to Questions for the Record, *attached to* STATEMENT OF DR. BEVERLY LAW, PROFESSOR EMERITUS, OREGON STATE UNIVERSITY, BEFORE THE UNITED STATES HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON NATIONAL PARKS, FORESTS AND PUBLIC LANDS, APRIL 29, 2021, CONCERNING "WILDFIRE IN A WARMING WORLD: OPPORTUNITIES TO IMPROVE COMMUNITY COLLABORATION, CLIMATE RESILIENCE, AND WORKFORCE CAPACITY" https://naturalresources.house.gov/imo/media/doc/Law,%20Beverly%20-%20Testimony%20-%20NPFPL%20Ov%20Hrg%2004.29.21.pdf. (link to Statement, without Response to Questions).

The main cause of home ignition is ember showers, and the main way to defend against that is to make homes and other structures less prone to ignition though home hardening and fuel reduction within the structure ignition zone.

Fuel reduction proponents need to recognize that forest fuel conditions do not determine the likelihood that nearby homes will burn. Even fuel conditions within "defensible space" barely register when looking at the probability of structure loss to wildfire. See Alexandra D. Syphard, and Jon E. Keeley 2019. Factors Associated with Structure Loss in the 2013–2018 California Wildfires. Fire 2019, 2(3), 49; https://doi.org/10.3390/fire2030049, https://www.mdpi.com/2571-6255/2/3/49/htm ("...defensible space and "hardening homes" via building construction practices or structure retrofits, collectively referred to as the home ignition zone (HIZ), have often been considered the primary factors that matter in terms of structures surviving wildfire [34,35]. Despite the widespread advocacy of these practices, there has been little empirical study of their effectiveness under actual wildfires, and there is still debate on how much defensible space is critical to home survival despite the regulated distance of 30 m (100 ft). In this study based on more than 40 k records of structures exposed to wildfires from 2013 to 2018 [in diverse regions of California], we found that, overall, defensible space distance explained very little variation in home survival and that structural characteristics were generally more important. Although the relative importance and relative risk ratios of different factors recorded by building inspectors varied slightly from region to region, there were also general similarities, particularly in that structure survival was highest when homes had enclosed or no eaves; multiple-pane windows, and screened vents. The only region in which defensible space distance explained at least 1% variation in structure survival was

the Bay Area, where survived structures had an average of 9.7 m (~32 ft) of defensible space versus 7.4 m (~24 ft) for destroyed structures. ... One potential explanation for the limited importance of defensible space in these data may be that the defensible space distance classes were defined rather broadly, too broad to discern critical details that may have a much bigger impact. Of the few studies quantifying the most effective distance of defensible space for making a significant difference in structure survival probability, Syphard et al. and Miner [19,21] both found the optimum distance to be much shorter than the required 30 m, with the ideal range between 5–22 m. Distances longer than that provided no additional significant protection. Furthermore, these and other studies have shown that more nuanced characteristics of landscaping are most critical for structure protection, including vegetation touching the structure or trees overhanging the roof [36]. The arrangement of vegetation and irrigation are also important factors not accounted for [20]. In fact, despite defensible space traditionally being divided into zones, with the first being from 0–9 m (30 ft) from the structure, newer recommendations are beginning to isolate and focus heavily on the first zone being from 0–1.5 m (5 ft) [37], which may be the most critical zone to account for.").

In the last 30 years in California, more homes are destroyed by fire in interface areas with less wildland vegetation and more human created fuels such as homes, wood piles, propane tanks, vehicle fuel tanks, etc. Kramer, Heather Anu; Mockrin, Miranda H.; Alexandre, Patricia M.; Radeloff, Volker C. 2019. High wildfire damage in interface communities in California. International Journal of Wildland Fire. 10 p. https://doi.org/10.1071/WF18108.
https://www.fs.fed.us/nrs/pubs/jrnl/2019/nrs_2019_kramer_001.pdf ("We examined where wildfire damages occur among urban, rural and WUI (intermix and interface) areas for approximately three decades in California (1985–2013). We found that interface WUI contained 50% of buildings destroyed by wildfire, whereas intermix WUI contained only 32%. The proportion of buildings destroyed by fires among classes was similar, though highest in interface WUI areas (15.6%). Our results demonstrate that the interface WUI is where most buildings were destroyed in California, despite less wildland fuel. ... Within fire perimeters, buildings in the interface WUI had the highest chance of destruction from wildfire. This may have been due to non-wildland fuel in these areas (e.g. homes, vehicles, propane tanks and landscaping vegetation) or other factors ... Our results highlight that wildfire can cause extensive damage, even in areas with relatively little wildland vegetation. ... [O]ver half of all destroyed buildings in our dataset (54%) were located in 'unburnable' land-cover classes ... [C]ertain actions may be especially beneficial in the interface WUI. For instance, for individual buildings, using fire-resistant building materials and maintaining defensible space in the home ignition zone ...")

Even in the context of extreme fire in the WUI, it's the houses (not the trees) that are the most hazardous fuels, as evidenced by this photo from the 2018 Paradise fire. Fire is often carried from structure-to-structure, not from tree-to-structure.

Thomas Curwen and Joseph Serna. The Camp fire burned homes but left trees standing. The science behind the fire's path. LA Times. Nov 20, 2018. https://www.latimes.com/local/california/la-me-camp-fire-lessons-20181120-story.html

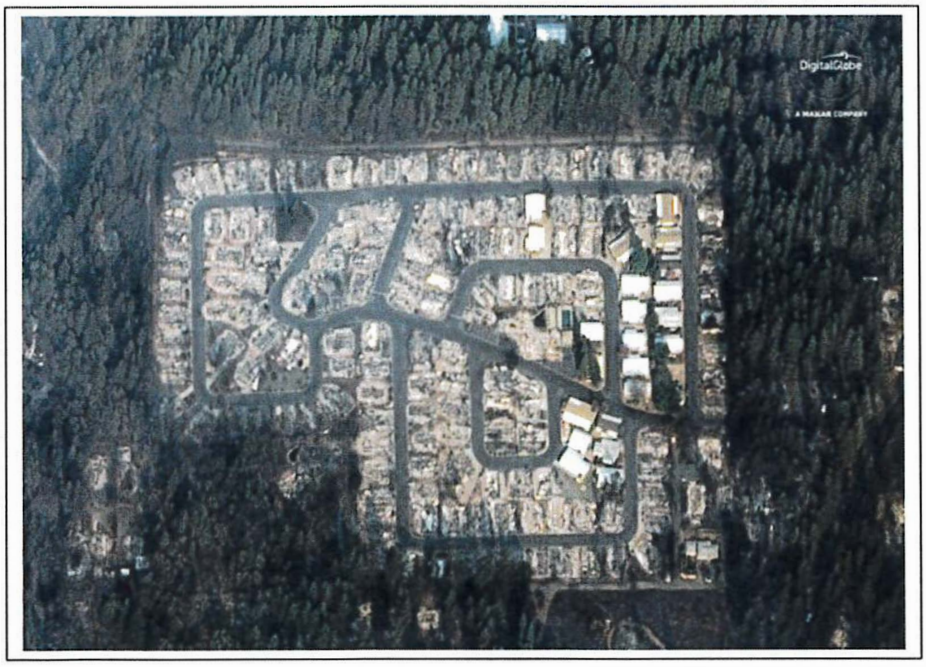

Figure 1. Camp Fire, showing the devastation of homes in the Kilcrease Circle community of Paradise. Note the surrounding green, mature forest with little or no scorching. The homes were not burned by a high-intensity crown fire, but were ignited by embers, followed by home-to-home ignitions. Photo: Digital Globe, a Maxar company via Reuters, 11/17/2018.

http://forestpolicypub.com/2019/01/09/letter-to-president-trump-from-govs-newsom-brown-and-inslee/

https://www.theguardian.com/environment/2020/jan/24/trump-administration-wildfire-science-promote-logging-california-emissions

Focus on surface and ladder fuels. Logging to Reduce Canopy Fuels Could Make Fire Worse.

Another important factor to consider when planning effective fuel reduction strategies is that efforts need to focus on surface and ladder fuels, not canopy fuels. Modifying canopy conditions has complex effects, and logging could make things worse instead of better. Significant reduction of canopy cover it can have complex effects on fire hazard with potential to increase fire hazard by making the stand hotter/drier/windier, generating more hazardous slash, stimulating the growth of future surface and ladder fuels, and creating additional roads increase human ignition risks.

Most structures that are burned by wildfire as ignited by surface fires as opposed to canopy fires. U.S. Dep't of Agriculture Forest Service Rocky Mountain Research Station, FOURMILE CANYON PRELIMINARY FINDINGS 69, 90 (Oct. 2011), available at http://www.scribd.com/doc/68850263/Fourmile-Canyon-Fire-Prelim-Report (83% of the homes that burned were ignited by surface fire as opposed to crown fire. This indicates that the "survival or loss of homes exposed to wildfire flames and firebrands (lofted burning embers) is not determined by the overall fire behavior or distance of firebrand lofting but rather, the condition of the Home Ignition Zone (HIZ) – the design, materials and maintenance of the home in relation to its immediate surroundings within 100 feet.")

Removing canopy fuels creates canopy gaps and thus "radiation reaching the forest floor and air movement beneath the residual live tree canopy are increased, and both contribute to fuel drying. More open canopies also contribute to greater understory vegetation growth. The consequences of these changes on fire behavior are not fully understood, but such conditions may favor ignition and spread of fire more readily than in forests having few canopy gaps ..." Kaufmann M.R., G.H. Aplet, M. Babler, W.L. Baker, B. Bentz, M. Harrington, B.C. Hawkes, L. Stroh Huckaby, M.J. Jenkins, D.M. Kashian, R.E. Keane, D. Kulakowski, C. McHugh, J. Negron, J. Popp, W.H. Romme, T. Schoennagel, W. Shepperd, F.W. Smith, E. Kennedy Sutherland, D. Tinker, and T.T. Veblen. 2008. The status of our scientific understanding of lodgepole pine and mountain pine beetles – a focus on forest ecology and fire behavior. The Nature

Conservancy, Arlington, VA. GFI technical report 2008-2. http://csfs.colostate.edu/pdfs/LPP_scientific-LS-www.pdf.

"Thinning is most effective when it removes understory trees, because larger overstory trees are more resistant to heat injury (Agee and Skinner 2005). In addition, shade and competition from larger trees slows the recruitment of younger trees in the understory." Keeley, J.E.; Aplet, G.H.; Christensen, N.L.; Conard, S.C.; Johnson, E.A.; Omi, P.N.; Peterson, D.L.; Swetnam, T.W. 2009. Ecological foundations for fire management in North American forest and shrubland ecosystems. Gen. Tech. Rep. PNW-GTR-779. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 92 p. http://www.fs.fed.us/pnw/pubs/pnw_gtr779.pdf.

"Removing approximately half of the basal area of a mature stand of lodgepole pine in southeastern British Columbia, by thinning from below to uniform 4 m inter-tree spacing, resulted in decreased canopy interception of rainfall and increased within-stand solar radiation, windspeed, and nearsurface air temperature." Whitehead, R.J. G. Russo, B.C. Hawkes, S.W. Taylor, B.N. Brown, H.J. Barclay, and R.A. Benton. 2006. Effect of a spaced thinning in mature lodgepole pine on within-stand microclimate and fine fuel moisture content. In P.L. Andrews and B.W. Butler (compilers). Fuels Management - How to Measure Success. USDA Forest Service, Rocky Mountain Research Station, Fort Collins, Colorado, Proceedings RMRS-P-41. Pp. 523-536. http://www.fs.fed.us/rm/pubs/rmrs_p041.html.

A recent study of crown damage related to the Biscuit fire showed that
The most important predictors of total crown damage were the percentage of pre-fire shrub-stratum vegetation cover and average daily temperature. ... The median level of damage was 32% within large conifer cover and 62% within small conifer cover. Open tree canopies with high levels of shrub-stratum cover were associated with the highest levels of tree crown damage, while closed canopy forests with high levels of large conifer cover were associated with the lowest levels of tree crown damage.
...
[Random forest analysis] RFA explained 45% of variation in total crown damage. Shrubstratum cover was, by far, the most important predictor variable (Fig. 4); increasing shrub-stratum cover was associated with increasing crown damage (Fig. 5). Average temperature and burn period were similarly important and were ranked second and third, respectively. Large conifer cover was ranked fourth and was associated with decreasing total damage.
...
Furthermore, the ability of conifers to resist fire damage increases with age, as the height to the base of the crown rises and the insulating capacity of the bark increases. This is consistent with the fact that, within the Biscuit Fire, median crown damage within large conifer cover was 32%, compared to 62% within small conifer cover.
...
In addition, mixed-sized conifer cover experienced levels of damage that were intermediate between small and large (median = 52%), which suggests that multi-storied conifer stands did not increase the level of damage by increasing vertical fuel continuity. Instead, it seems likely that the small tree component of the mixed-sized stands was damaged, while the large tree component was not.
Jonathan R. Thompson, Thomas A. Spies 2009. Vegetation and weather explain variation in crown damage within a large mixed-severity wildfire. Forest Ecology and Management 258 (2009) 1684–1694. See also, Jonathan R. Thompson. 2008. Patterns of Crown Damage within a Large Wildfire in the Klamath-Siskiyou Bioregion. PhD dissertation.
http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/9025/Thompson_Dissertation_FINAL.pdf.

In areas with relatively high productivity that can support shrubs, canopy removal via thinning is very likely to stimulate the proliferation of shrubs and create the very conditions that favor more severe crown damage during fire. This study also challenges the very popular notion that dense forests are a fire hazard. A meta-analysis of the effects of partial cutting showed that understory growth was stimulated in all cases. D. Zhou, S. Q. Zhao, S. Liu, and J. Oeding. 2013. A meta-analysis on the impacts of partial cutting on forest structure and carbon storage. Biogeosciences, 10, 3691–3703, 2013. https://www.biogeosciences.net/10/3691/2013/bg-10-3691-2013.pdf. ("Understory C was stimulated significantly by partial cutting in all of the studies. This stimulation can be mostly attributed to an increase in the availability of light, water, and nutrients to the understory because of tree removal (Aussenac, 2000; Kleintjes et al., 2004; Deal, 2007)")

Johnson et al (2009) simulated thinning in a densely stocked stand of Ponderosa pine with an understory of Douglas-fir and grand fir.
The predicted fire type after treatment is surface fire for all thinning options, but the more open stands are characterized predominantly by fuel model 2, so flame lengths increase and potential BA mortality remains above 20 percent regardless of surface fuel treatment. The 200 and 300 TPA... treatments have a more closed canopy and fire behavior is influenced less by grass fuels, so flame lengths and potential BA mortality are lower than the more open stands.
...
The 200 TPA treatment has the greatest long-term effect on crown fire potential, with a predicted surface fire type for 50 years with pile-and burn or no surface fuel treatment and 40 years with prescribed fire treatment. The 50 TPA (124 TPH) treatment had the most short-lived effect on crown fire potential, with regeneration causing a drop in canopy base height in 30 years regardless of surface fuel treatment.
Morris Johnson, David L. Peterson, and Crystal Raymond 2009. Fuel treatment guidebook: illustrating treatment effects on Fire hazard. Fire Management Today 69(2)
http://www.fs.fed.us/fire/fmt/fmt_pdfs/FMT69-2.pdf p 32-33.

Models show that maintaining canopy cover is a useful way to reduced fire hazard, while removing canopy increases fire hazard.
Compared with the original conditions, a closed canopy would result in a 10 percent reduction in the area of high or extreme fireline intensity. In contrast, an open canopy has the opposite effect, increasing the area exposed to high or extreme fireline intensity by 36 percent. Though it may appear counterintuitive, when all else is equal open canopies lead to reduced fuel moisture and increased midflame windspeed, which increase potential fireline intensity.
Rutherford V. Platt, Thomas T. Veblen, and Rosemary L. Sherriff. 2006. Are Wildfire Mitigation and Restoration of Historic Forest Structure Compatible? A Spatial Modeling Assessment. Annals of the Association of American Geographers, 96(3), 2006, pp. 455–470.
http://www.colorado.edu/geography/class_homepages/geog_4430_f10/Platt%20et%20al_Wildfire%20Mitigatnion_AnAAG_2006.PDF. See also, Jim Agee. Risk Assessment for Decision-making Related to Uncharacteristic Wildfire, Conference Portland, Oregon Nov 17-20, 2003
http://www.docstoc.com/docs/37210605/Risk-Assessment-for-Decision-Making-Related-to-Uncharacteristic.

Policy-makers need to have a realistic understanding of the limited ability of logging to control fire.
We are concerned that many people (including foresters) have a false sense of control over nature when in reality fuel reduction has a low probability of encountering fire and has a modest/marginal effect on fire behavior, and wildfires continue to burn with a characteristic mix of low, moderate, and severe

effects. Fuel reduction efforts should be adjusted accordingly and the agencies should consider alternatives that are based on working with, instead of against, natural processes.

After the extreme 2020 wildfires in Oregon's western Cascades, Bev Law testified before Congress saying:
The takeaway from the 2020 fires in Oregon is that we will always have available fuel in the forests that can burn. Grasslands and shrublands can burn too. We are not going to be able to cut our way to less fire, nor are we going to be able to suppress all fire. We need to be prepared for the large fire events by hardening our homes and protecting our communities. We may need to improve forest management, and that discussion needs to include how we manage industrial forestlands so they do not pose increased risks to communities.

...

Increasing the use of prescribed fires and managing wildland fires may promote resilience to more frequent fire (Schoennagel et al. 2017)." However, the scope and scale of this work is very expensive, and thinning vast landscapes has not been shown to have a high-probability of success in encountering fire or altering fire behavior. In Oregon, we have millions of acres of dry forests, and just addressing a portion of this landscape will costs billions of dollars. Because of the short period of treatment effectiveness (10-20 yr), the treatments will need to be repeated into the future. It is important for policymakers to know that there are ecological and carbon costs from landscape scale thinning, and that it is not an effective tool to ensure community safety. Rather, as Dr. Jack Cohen has demonstrating, working from the home outward is the best approach to ensuring fire safe communities.

...

It is highly unlikely that attempt to manage the flammability of vast landscapes by cutting will be effective or achievable over time. See responses to (#5a, 16c). State and federal agencies need to support individuals and communities to be fire wise, create and maintain defensible space and protect critical infrastructure. Home hardening works. Emergency planning and early warning systems are the most effective ways to save lives and livelihoods in extreme fire weather.
Law, B. 2021. Response to Questions for the Record, *attached to* STATEMENT OF DR. BEVERLY LAW, PROFESSOR EMERITUS, OREGON STATE UNIVERSITY, BEFORE THE UNITED STATES HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON NATIONAL PARKS, FORESTS AND PUBLIC LANDS, APRIL 29, 2021, CONCERNING "WILDFIRE IN A WARMING WORLD: OPPORTUNITIES TO IMPROVE COMMUNITY COLLABORATION, CLIMATE RESILIENCE, AND WORKFORCE CAPACITY"
https://naturalresources.house.gov/imo/media/doc/Law,%20Beverly%20-%20Testimony%20-%20NPFPL%20Ov%20Hrg%2004.29.21.pdf (link to Statement, without Response to Questions).

The agencies are moving across the landscape often using commercial logging as the primary tool to aggressively manage fuels and reducing stand density which causes significant cumulative impacts on soil, water, wildlife habitat, carbon storage, and other values. These public resources are now exposed to the unprecedented compound effects of both logging and fire. The agency thinks it has found great alignment between its desire for timber production, risk reduction, and other restoration goals, but this view is just too convenient. It requires constant validation and reassessment. The view that everything aligns may be hiding significant trade-offs and causing the agency to overlook other viable options, such as decreasing reliance on logging and increasing reliance on fire as tools to achieve more optimal forest management outcomes. The accumulation of evidence does not support logging for fuel reduction as a sound strategy to manage fuel and fire.

- *Most fires are climate-driven, rather than fuel-driven.* The warming climate is likely to make this effect even more pronounced. Schoennagel et al 2017. Adapt to more wildfire in western North American forests as climate changes. PNAS 2017; published ahead of print April 17, 2017. www.pnas.org/cgi/doi/10.1073/pnas.1617464114; https://headwaterseconomics.org/wp-

content/uploads/Adapt_To_More_Wildfire.pdf; Odion, D.C. et al 2014. Examining Historical and Current Mixed-Severity Fire Regimes in Ponderosa Pine and Mixed-Conifer Forests of Western North America. PLOS One. February 2014 | Volume 9 | Issue 2 http://www.californiachaparral.org/images/Odion_et_al_Historical_Current_Fire_Regimes_mixed_conifer_2014.pdf; See also, Alisa Keyser and Anthony Westerling, 2017. Climate drives inter-annual variability in probability of high severity fire occurrence in the western United States, Environmental Research Letters. Accepted Manuscript online 4 April 2017 https://doi.org/10.1088/1748-9326/aa6b10.

- *There is a relatively low probability that fuel treatments will interact with wildfire before fuels regrow and render the fuel reduction effort ineffective*. Tania Schoennagel highlights the problem of removing fuels from a vast forest landscape that has a low annual probability of burning by saying that forest fuel reduction "is like trying to scoop water out of the ocean to make it less wet." "A recent study conducted by researchers at the University of Montana found that only about 7 percent of fuel-reduction treatment areas in the entire United States were subsequently hit by wildfires since 1999. ... If someone had the magical ability to predict, within the past decade, that a major fire was going to strike that particular portion of the 240,000-acre Scapegoat Wilderness, then thinning and logging theoretically could have helped. But it doesn't work that way, and fires are sparked in random places by lightning and humans, and they are pushed by erratic winds and weather. ... According to Tania Schoennagel, a forest landscape ecologist and fire researcher at the University of Colorado, ... 'it's little bit of a crapshoot probability game whether the treatment you put in is going to encounter wildfire in the 10 to 15 years it remains effective in reducing fire severity. Simply because forests in the West are so vast, the chance of burning in a place we've pre-treated is so low. It's not a very effective lever. We don't know where fires are going to happen.'" David Erickson (2017). Experts: More logging and thinning to battle wildfires might just burn taxpayer dollars. CREDIT: MISSOULIAN.COM. Oct 1, 2017. http://www.america.easybranches.com/montana/Experts--More-logging-and-thinning-to-battle-wildfires-might-just-burn-taxpayer-dollars-152776 *citing* Kevin Barnett, Sean A. Parks, Carol Miller, and Helen T. Naughton. 2016. Beyond Fuel Treatment Effectiveness: Characterizing Interactions between Fire and Treatments in the US. Forests [open access] 2016, 7, 237; doi:10.3390/f7100237. http://www.mdpi.com/1999-4907/7/10/237. See also, William L. Baker, Jonathan J. Rhodes. 2008. Fire Probability, Fuel Treatment Effectiveness and Ecological Tradeoffs in Western U.S. Public Forests. pp.1-7 (7). The Open Forest Science Journal, Volume 1. 2008. http://api.ning.com/files/1kp0vDW*F1cqOeO4-GdXE1AHOATghmIAN2x9qLpH3aA_/FireandFuelTreatments.pdf; "According to a recent analysis, annually less than one percent of U.S. Forest Service fuel reduction treatments in forested areas subsequently burned, on average. From 2000 to 2015, almost 17 million acres of federal land were treated for fuels reduction, equating to approximately four percent of U.S. Forest Service and Bureau of Land Management lands. During the same time period, more than 93 million acres burned. The odds of putting fuel treatments in the wrong place are extremely high." Pohl, Kelly 2019. "For communities, land use planning is more effective than logging on federal lands to reduce future wildfire disasters." https://headwaterseconomics.org/wildfire/solutions/land-use-planning-is-more-effective/. Also, "In real landscapes treatments are static, restricted to a small portion of the landscape and against a background of stochastic fire and dynamic vegetation, thus the likelihood of fire encountering a treatment during the period treatments remain effective is small. ... Allocating priorities to treat based on merchantable timber (THIN), vegetation departure (VDEP), area suitable for prescribed fire and restoration wildfire (FIRE) and conditional flame length (CFL) had similar or lower success odds than random allocation ... [S]uccess odds declined sharply as desired success levels increased suggesting that fuel management goals need to be tempered to consider the stochastic nature of wildfire." Barros, Ana M. G.; Ager, A. A.; Day, M. A.; Palaiologou, P. 2019.

Improving long-term fuel treatment effectiveness in the National Forest System through quantitative prioritization. Forest Ecology and Management. 433: 514-527. https://www.fs.fed.us/rm/pubs_journals/2019/rmrs_2019_barros_a001.pdf.

- *The effects of fuel reduction are modest*. Even extensive fuel reduction reduces the extent of wildfire by less than 10 percent. See M. A. Cochrane, C. J. Moran, M. C. Wimberly, A. D. Baer, M. A. Finney, K. L. Beckendorf, J. Eidenshink, and Z. Zhu. 2012. Estimation of wildfire size and risk changes due to fuels treatments. International Journal of Wildland Fire. http://dx.doi.org/10.1071/WF11079. http://www.publish.csiro.au/?act=view_file&file_id=WF11079.pdf. Andrew Larson, a forest ecologist from the University of Montana said

"Even after you go and thin a forest, when it's dry like it is now, it's still going to carry a fire, it's still going to generate smoke. So, in terms of day to day life, the experience we have during the fire season, we need to not get our hopes up," Larson says. "You can anticipate more smoke. Even if we were to double, triple, increase the amount of area logged or thinned by a factor of ten or 20, we're still going have smoke, we're not going to stop the fires. We may change how they burn, and that's an important outcome, it's something that a lot of my research is directed at. But we need to make sure people don't get their hopes up and expect something that the forestry profession, that managers in the Forest Service, the Department of Interior, can't deliver on."

ERIC WHITNEY 2017. Forest Ecologist Comments On Senator Daines' Fire Call. Montana Public Radio. Sept 14, 2017. http://mtpr.org/post/forest-ecologist-comments-senator-daines-fire-call. Also, Hurteau et al (2019) found that "fuel availability and flammability only reduced the cumulative area burned in the Sierra by about 7.5 percent over the course of the century ... because vegetation re-growth happens with sufficient speed that the fuel limitation efects from fre are short-lived." Matthew D. Hurteau, Shuang Liang, A. LeRoy Westerling & Christine Wiedinmyer 2019. Vegetation-fire feedback reduces projected area burned under climate change. Scientific Reports, volume 9, Article number: 2838 (2019), https://www.nature.com/articles/s41598-019-39284-1; https://doi.org/10.1038/s41598-019-39284-1; https://news.ucmerced.edu/news/2019/scientists-simulate-forest-fire-dynamics-understand-area-burn-future-wildfires

- *Commercial logging will often make fire hazard worse, not better*. Reducing the forest canopy will make the stand hotter, drier, and windier, produce more activity fuels, and stimulate the growth of ladder fuels. Professor Char Miller said "... decades of data show that intense logging creates more destructive fires than the ones that burn through roadless areas, parkland and wilderness." Char Miller. 2017. Op-Ed: What the Trump administration doesn't understand about wildfires. LA Times. Oct 1, 2017. http://www.latimes.com/opinion/op-ed/la-oe-miller-zinke-fire-memo-20171001-story.html. See also, Jain, Theresa B.; Battaglia, Mike A.; Han, Han-Sup; Graham, Russell T.; Keyes, Christopher R.; Fried, Jeremy S.; Sandquist, Jonathan E. 2012. A comprehensive guide to fuel management practices for dry mixed conifer forests in the northwestern United States. USDA Forest Service Gen. Tech. Rep. RMRS-GTR-292. 2012 http://www.firescience.gov/projects/09-2-01-16/project/09-2-01-16_09-2-01-16_rmrs_gtr292web.pdf. A meta-analysi of the effects of partial cutting showed that understory growth was stimulated in all cases. D. Zhou, S. Q. Zhao, S. Liu, and J. Oeding. 2013. A meta-analysis on the impacts of partial cutting on forest structure and carbon storage. Biogeosciences, 10, 3691–3703, 2013. https://www.biogeosciences.net/10/3691/2013/bg-10-3691-2013.pdf. ("Understory C was stimulated significantly by partial cutting in all of the studies. This stimulation can be mostly attributed to an increase in the availability of light, water, and nutrients to the understory because of tree removal (Aussenac, 2000; Kleintjes et al., 2004; Deal, 2007)") Removing commercial sized logs as part of fuel reduction degrades habitat while doing little to modify fire behavior. If conducted at large scales, the effects of commercial logging for fuel reduction will be socially and ecologically unacceptable. Lehmkuhl, John; Gaines, William; Peterson, Dave W.; Bailey, John; Youngblood, Andrew, tech. eds. 2015. Silviculture and monitoring guidelines for integrating restoration of dry mixed-conifer forest and spotted owl habitat management in the

eastern Cascade Range. Gen. Tech. Rep. PNW-GTR-915. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 158 p. http://www.fs.fed.us/pnw/pubs/pnw_gtr915.pdf. ("Tradeoffs between fire resistance and NSO habitat quality are real. Our results demonstrate that balancing the goals of increasing fire resilience while maintaining habitat function, especially nesting and roosting, for the NSO in the same individual stand is a difficult, if not an impossible, task. Even lighter thinning treatments typically reduce canopy cover below 40 percent. The reality is that nesting and roosting NSO habitat is by definition very susceptible to high-severity fire; owl habitat value and fire risk are in direct conflict on any given acre. …"). Montana Public Radio reported on Senator Daines statement that "'radical environmentalists' would try to stop efforts to remove dead trees from Montana forests. [Ecologist Andrew Larson said] "That's an attitude that I'm always kind of disappointed to encounter," Larson said, "because a healthy forest has dead trees and dead wood. The snags — standing dead trees — and dead logs are some of the most important habitat features for biodiversity. You can't have an intact, healthy wildlife community without dead wood in your forest." ERIC WHITNEY 2017. Forest Ecologist Comments On Senator Daines' Fire Call. Montana Public Radio. Sept 14, 2017. http://mtpr.org/post/forest-ecologist-comments-senator-daines-fire-call;

- *Retaining mature forest canopy is more fire resilient than most logged sites*. Canopy removal via thinning not only makes the forest hotter, drier, and windier, it also stimulates the growth of shrubs and create the very conditions that favor more severe crown damage during fire. This challenges the very popular notion that dense forests are a fire hazard. A meta-analysis of the effects of partial cutting showed that understory growth was stimulated in all cases. D. Zhou, S. Q. Zhao, S. Liu, and J. Oeding. 2013. A meta-analysis on the impacts of partial cutting on forest structure and carbon storage. Biogeosciences, 10, 3691–3703, 2013. https://www.biogeosciences.net/10/3691/2013/bg-10-3691-2013.pdf. ("Understory C was stimulated significantly by partial cutting in all of the studies. This stimulation can be mostly attributed to an increase in the availability of light, water, and nutrients to the understory because of tree removal (Aussenac, 2000; Kleintjes et al., 2004; Deal, 2007)"). "Thinning is most effective when it removes understory trees, because larger overstory trees are more resistant to heat injury (Agee and Skinner 2005). In addition, shade and competition from larger trees slows the recruitment of younger trees in the understory." Keeley, J.E.; Aplet, G.H.; Christensen, N.L.; Conard, S.C.; Johnson, E.A.; Omi, P.N.; Peterson, D.L.; Swetnam, T.W. 2009. Ecological foundations for fire management in North American forest and shrubland ecosystems. Gen. Tech. Rep. PNW-GTR-779. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 92 p. http://www.fs.fed.us/pnw/pubs/pnw_gtr779.pdf. Zald & Dunn (2018) looked at fire severity in a mixed ownership landscape and found that stand age was inversely related to fire severity suggesting that older forests are more resistant and resilient to fire and that time-since-fire has the opposite of the assumed effect on fire hazard. "**…we found daily fire weather was the most important predictor of fire severity, followed by stand age and ownership, followed by topographic features. Estimates of pre-fire forest biomass were not an important predictor of fire severity.** Adjusting for all other predictor variables in a general least squares model incorporating spatial autocorrelation, mean predicted RdNBR was higher on private industrial forests (RdNBR 521.85 ± 18.67 [mean ± SE]) vs. BLM forests (398.87 ± 18.23) with a much greater proportion of older forests. **Our findings suggest intensive plantation forestry characterized by young forests and spatially homogenized fuels, rather than pre-fire biomass, were significant drivers of wildfire severity.** This has implications for perceptions of wildfire risk, shared fire management responsibilities, and developing fire resilience for multiple objectives in multi-owner landscapes." Harold S. J. Zald, Christopher J. Dunn. 2018. Severe fire weather and intensive forest management increase fire severity in a multi-ownership landscape. Ecological Applications. *Online Version of Record before inclusion in an issue.* 26 April 2018. https://doi.org/10.1002/eap.1710. Also, https://phys.org/news/2018-04-high-wildfire-severity-young-plantation.html

- *Only a small fraction of needed density reduction can support an economically viable timber sale*. See Rainville, Robert; White, Rachel; Barbour, Jamie, tech. eds. 2008. Assessment of timber availability from forest restoration within the Blue Mountains of Oregon. Gen. Tech. Rep. PNW-GTR-752. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 65 p. http://www.fs.fed.us/pnw/pubs/pnw_gtr752.pdf ("Hoping to boost their economies and also restore these forests, local leaders are interested in the economic value of timber that might be available from thinning treatments on these lands. … [W]e found that on lands where active forestry is allowable, thinning of most densely stocked stands would not be economically viable. … In the 46 percent of the three Blue Mountains national forests that is forested, thinning with timber removal is an unlikely treatment method. This does not mean that other vegetative management options (prescribed fire, wildland fire use, or thinning without commercial timber removal) could not be used to reduce fire hazard, but it is doubtful that these areas would produce much commercial timber. … Commercial thinning would only be possible where the value of the timber harvested exceeds the cost of the harvesting, hauling, road maintenance, and contractual requirements (i.e., a positive net revenue exists). Because most simulated thinnings harvested low volumes of small trees, commercial removal was possible on only 39,900 (± 4,600) acres, or less than 10 percent of the densely stocked acres (table 4-8). … … even when considered under the most favorable of assumptions, most densely stocked stands would not be treatable without significant investments.")
- *The agencies are failing to treat the areas of highest hazard and choosing instead to treat areas that produce profitable timber sales*. Vaillant & Reinhardt 2017. An Evaluation of the Forest Service Hazardous Fuels Treatment Program—Are We Treating Enough to Promote Resiliency or Reduce Hazard? J. For. 115(4):300 –308. July 2017. https://doi.org/10.5849/jof.16-067. https://www.fs.fed.us/pnw/pubs/journals/pnw_2017_vaillant001.pdf. ("[W]e evaluated the [nationwide] extent of fuel treatments and wildfire occurrence within lands managed by the National Forest System (NFS) between 2008 and 2012 … The very high hazard class had the lowest treatment percentage and the highest incidence of uncharacteristically high-severity wildfire out of all the hazard classes. … Areas of very low hazard often are favored for treatment because they are less complex to plan and implement, are more economical to treat, … [T]reatments may be placed where they can accomplish multiple objectives, including production of wood products. This may result in selection of locations that are less important for hazard mitigation.")
- *Building codes and land use planning are more effective than logging to reduce community wildfire hazard*. Pohl, Kelly 2019. "For communities, land use planning is more effective than logging on federal lands to reduce future wildfire disasters." https://headwaterseconomics.org/wildfire/solutions/land-use-planning-is-more-effective/. ("[W]e have the knowledge and tools to reduce risk posed by homes in wildfire-prone areas. ... [T]here are many land use planning tools available that can mean the difference between home survival and loss."). The fire threat to communities is caused by, and may be best addressed by, land use practices, not forest fuels. Forest fuels policy needs to recognize that structures themselves represent hazardous fuels that can carry fire from structure-to-structure, or from structure-to-forest. There are already too many homes in the wildland urban interface, and more are being built every day. Radeloff, Helmers, Kramer et al 2017. Rapid growth of the US wildland-urban interface raises wildfire risk. Proceedings of the National Academy of Sciences. Mar 2018, 2017. https://www.pnas.org/cgi/doi/10.1073/pnas.1718850115. ("Abstract: … Here we report that the WUI in the United States grew rapidly from 1990 to 2010 in terms of both number of new houses (from 30.8 to 43.4 million; 41% growth) and land area (from 581,000 to 770,000 km2; 33% growth), making it the fastest-growing land use type in the conterminous United States. The vast majority of new WUI areas were the result of new housing (97%), not related to an increase in wildland vegetation. Within the perimeter of recent wildfires (1990–2015), there were 286,000 houses in

2010, compared with 177,000 in 1990. Furthermore, WUI growth often results in more wildfire ignitions, putting more lives and houses at risk. Wildfire problems will not abate if recent housing growth trends continue."). This also shows that people are quite willing to tolerate fire hazard in order to enjoy the quality of life associated with living near the forest.

- *Unlogged areas provide many benefits such as wildlife cover, snag & wood recruitment, carbon storage, soil/watershed quality, microclimate buffering, etc.* Forests are naturally adaptive and natural processes will accomplish many of the benefits attributed to thinning. "Counter to many regional studies, our results indicated that treated and long-unaltered, untreated areas may be moving in a similar direction. Treated and untreated areas experienced declines in tree density, increases in the size of the average individual, and losses of surface fuels in most size classes. The number of large trees increased in untreated areas, but decreased in treated areas. Our results suggested that untreated areas may be naturally recovering from the large disturbances associated with resource extraction and development in the late 1800s, and that natural recovery processes, including self thinning, are taking hold. ... In a study of forest restoration need across eastern Washington and Oregon, over 25% of required restoration could be achieved through transition to later stages of forest stand development through successional processes as western landscapes recover from widespread historic degradation (Haugo et al., 2015)." Zachmann, L. J., D. W. Shaw, and B. G. Dickson. 2018. Prescribed fire and natural recovery produce similar long-term patterns of change in forest structure in the Lake Tahoe basin, California. Forest Ecology and Management 409:276–287. http://www.csp-inc.org/wp-content/uploads/2017/11/Zachmann_et_al_2017.pdf
- *Wildfire effects are more ecologically beneficial than logging.* The 2017 Fuels Report for the 130,000 acre East Hills Project on this Fremont-Winema NF admits that wildfires are expected to have beneficial effects even under the no action alternative - "Overall expected value of fire effects is moderately beneficial. This assumes that fires burn throughout the range of conditions – actual current practice is to suppress fires that are most likely to be beneficial." https://www.fs.usda.gov/nfs/11558/www/nepa/101283_FSPLT3_4264365.pdf. This would indicate a need to modify fire suppression practices and work *with* fire when weather conditions are favorable.

Considering all of this, forest managers need to recognize that they cannot log their way out of the fuel predicament they are in. Forest managers will eventually come to realize that the vast majority of the ecological work will be accomplished by wild and prescribed fire.

Oregon Wild supports the objective of preparing the forest for wildfire, but this does not mean that extensive commercial logging is required. Preparing for fire can often be done best by doing non-commercial pre-treatment followed by prescribed fire at the appropriate time, when the weather and fuels are relatively cool and moist. Fire is preferable because it has a lighter ecological footprint on soil, water, and large wood habitat.

Schoennagel et al (2017) make a compelling case for a new approach to managing fire and fuel with a greater emphasis on using wild and prescribed fire instead of mechanical fuel reduction.
Key aspects of an adaptive resilience approach are (i) recognizing that fuels reduction cannot alter regional wildfire trends; (ii) targeting fuels reduction to increase adaptation by some ecosystems and residential communities to more frequent fire; (iii) actively managing more wild and prescribed fires with a range of severities; and (iv) incentivizing and planning residential development to withstand inevitable wildfire. … Managing ecosystems, people, and wildfire in a changing climate is a complex but critical challenge that requires effective and innovative policy strategies. Our key message is that wildfire policy and management require a new paradigm that hinges on the critical need to adapt to inevitably more fire in the West in the coming decades. … Three primary factors have produced gradual

but significant change across western North American landscapes in recent decades: the warming and drying climate, the build-up of fuels, and the expansion of the wildland–urban interface. … Increasing the use of prescribed fires and managing rather than aggressively suppressing wildland fires can promote adaptive resilience as the climate continues to warm. … Strategic planning for more managed and uncontrolled wild fires on the landscape today may help decrease the proportion of large and severe wildfires in the coming decades and may enhance adaptive resilience to changing climate. Prescribed fires, ignited under cooler and moister conditions than are typical of most wildfires, can reduce fuels and minimize the risk of uncontrolled forest wildfire near communities. In contrast to wildfires, prescribed fire risks are relatively low, and more than 99% of prescribed fires are held within planned perimeters successfully. … We need to develop a new fire culture. Despite these and various legal and operational challenges, the benefits of prescribed fire and managed wildfires to ecosystems and communities are high. Promoting more wildfire away from people and prescribed fires near people and the WUI are important steps toward augmenting the adaptive resilience of ecosystems and society to increasing wildfire. … [T]he effectiveness of this [fuel reduction] approach at broad scales is limited. Mechanical fuels treatments on US federal lands over the last 15 y (2001–2015) totaled almost 7 million ha (Forests and Rangelands, https://www.forestsandrangelands.gov/), but the annual area burned has continued to set records. Regionally, the area treated has little relationship to trends in the area burned, which is influenced primarily by patterns of drought and warming. Forested areas considerably exceed the area treated, so it is relatively rare that treatments encounter wildfire. … [R]oughly 1% of US Forest Service forest treatments experience wildfire each year, on average. The effectiveness of forest treatments lasts about 10–20 y, suggesting that most treatments have little influence on wildfire. … [T]he prospects for forest fuels treatments to promote adaptive resilience to wildfire at broad scales, by regionally reducing trends in area burned or burn severity, are fairly limited. … Home loss to wildfire is a local event, dependent on structural fuels (e.g., building material) and nearby vegetative fuels. Therefore, fuels management for home and community protection will be most effective closest to homes, which usually are on private land in the WUI where ignition probabilities are likely to be high. … The majority of home building on fire-prone lands occurs in large part because incentives are misaligned, where risks are taken by homeowners and communities but others bear much of the cost if things go wrong. Therefore, getting incentives right is essential, with negative financial consequences for land-management decisions that increase risk and positive financial rewards for decisions that reduce risk. …

Schoennagel et al 2017. Adapt to more wildfire in western North American forests as climate changes. PNAS 2017; published ahead of print April 17, 2017. www.pnas.org/cgi/doi/10.1073/pnas.1617464114; https://headwaterseconomics.org/wp-content/uploads/Adapt_To_More_Wildfire.pdf. Others seem to agree that fire is the preferred tool for management of fire-dependent forests that are suffering from fire exclusion and climate stress. M P North, R A York, B M Collins, M D Hurteau, G M Jones, E E Knapp, L Kobziar, H McCann, M D Meyer, S L Stephens, R E Tompkins, C L Tubbesing. 2021. Pyrosilviculture Needed for Landscape Resilience of Dry Western United States Forests, Journal of Forestry; https://doi.org/10.1093/jofore/fvab026 ("A management paradigm shift in fire use is needed to restore western forest landscape resilience. We propose a "pyrosilviculture" approach with the goals of directly increasing prescribed fire and managed wildfire and modifying thinning treatments to optimize more managed fire.") We would caution adoption of this paper's recommendation of using "revenue thinning" to pay for prescribed fire treatments, as large-scale commercial logging will have unacceptable trade-offs such as wildlife habitat, snag habitat, water quality, and carbon storage.

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Sincerely,

Doug Heiken

Doug Heiken
dh@oregonwild.org

From: Mary Ann Cooper, Vice President of Policy, Oregon Farm Bureau
Position: Opposed

Mr. Holschbach,
Thank you for the opportunity to come on the proposed rule definition of Wildland Urban Interface (WUI) under SB 762. By way of background, Oregon Farm Bureau Federation (OFB) is a voluntary, grassroots, nonprofit organization representing Oregon's farmers and ranchers in the public and policymaking arenas. As Oregon's largest general farm organization, its primary goal is to promote educational improvement, economic opportunity, and social advancement for its members and the farming, ranching, and natural resources industry. Today, OFB represents nearly 7,000 farm and ranch families who live and work across all 36 Oregon counties. Many of our members have farms and ranches that are likely to be mapped as part of the WUI and are understandably concerned about the regulatory consequences that could flow from such a designation.

The Oregon Farm Bureau is a member of the rulemaking advisory committee that provided feedback to the Department on the proposed rule and continues to serve in that capacity for the ongoing rulemaking efforts around SB 762. We appreciate that the Department is undertaking a monumental task under tight time constraints as it works to implement SB 762. We have a shared goal of increasing Oregon's fire resiliency and ensuring that we can protect our communities and our citizens from Oregon's growing wildfire risk. While we may differ in how to best achieve this goal, we want to reiterate that fire policy is critical for our members and their communities, and we all want to reduce wildfire risk.

With that in mind, we encourage the Board not to move forward with the overly broad proposed definition of the WUI, and instead adopt a definition that defines the WUI more narrowly to only capture those areas immediately adjacent to urban areas where wildfire poses a substantial risk of loss of human lives and property. Throughout the Rulemaking Advisory Committee (RAC) process, OFB and others consistently raised concerns about the proposed overly broad WUI definition, which could result in much of the state being mapped as part of the WUI, and having the potential to be subject to new defensible space requirements. We were repeatedly assured that further definitions of the terms in the WUI definition paired with both the mapping and criteria setting exercises would ensure that the WUI definition was effectively narrowed. However, as those processes continue to move forward, we are seeing the Department continue to push overly broad definitions of each of the terms within the WUI definition. In short, the ongoing process is serving to validate our concerns with the overly broad WUI definition, not alleviate them.

The proposed definition of the WUI is overly broad and creates a risk of confusion and overregulation in our rural communities. The definition of the WUI was the final subject of contention in SB 762. The legislature didn't have the votes to pass the bill with the broad definition of WUI that you are proposing, so a compromise was reached to push defining the WUI to rulemaking. This compromise was essential to the bill's passage and to obtaining bipartisan support, including support from OFB.

Instead of undertaking this analysis, has chosen to move forward with the exact same overly broad definition the legislature rejected. Given that the plain meaning of structures and other human development could include features outside of occupied buildings such as fences, trails, county roads, irrigation, and drainage infrastructure, and potentially even cropland, and would definitely include single homes on hundreds of acres, this definition would effectively include nearly all of rural Oregon and is contrary to the stated intent of legislators, who assured our organizations that the WUI would not be applied so broadly. It would also be contrary to the plain language of the term "wildland urban interface" – which plainly means the area where wildland areas interface (i.e., meet) urban areas.

While we understand that the definition comes from the International WUI Code, that body is made up solely of governmental entities, and the definition was not made with statewide regulatory systems in mind. Given that Oregon has a statewide regulatory system, it is essential that it is narrowly crafted and thoughtfully developed to align with existing Oregon law and policy. It is also worth noting that during the RAC meeting on this issue, all the members representing landowners and three local government representatives voted against this definition and the positive votes were from NGO's, enforcement agencies, and other government representatives who would not be negatively affected by a broad definition. However, some government entities, such as the fire service, expressed an interest in working toward consensus. A broad definition would not only have overly negative impacts on property owners, it also fails to focus investments and other work mandated by SB 762.
The proposed definition is not only contrary to their previous statutory charge, but it is also contrary to the definition used as recently as 2020 in the "Communities at Risk" report by ODF o the legislature, which focused on clustered or concentrated development at the urban interface.

The two primary reasons the agency has proposed appear to be an allegiance to the International WUI Code, and a false understanding that other states approach their regulation in this manner. As noted above, the International WUI Code was not developed with a diversity of stakeholders – as is the requirement for ODF rulemaking – and was developed for use and modification at the local level. Similarly, other states have not wholesale adopted the international WUI code for purposes of their regulatory program. The states that adopt the international WUI code definition at the state level – whether informally or formally - do not have a statewide regulatory system flowing from that definition, and the states who have a statewide wildfire program do not base their regulation solely on the International WUI definition. For example, while California has similar regulatory requirements, they are based on their own definition of the "Wildland-Urban Interface Fire Area1" (25 CCR § 4202). Colorado also developed its own definition that guides its regulations. Other states, like Montana, Utah, and Idaho adopt definitions that are similar, but not identical to the international WUI code, and do not have the same regulations flowing from their code adoption. New Mexico and Arizona have no regulations tied to their code adoption, and appear to use it for planning purposes only. Wyoming does not adopt the international WUI code, though two counties have adopted parts on their own.

If Oregon adopts this approach, we would be unique in having a statewide regulatory program flowing from wholesale adoption of this very broad WUI definition designed for local implementation and modification. This approach is contrary to the legislative directive to "consider" a definition based on national standards. Simply put, there is no other state (or federal) program which would declare nearly the entirety of a state's rural areas as "urban" or within the "interface" between urban and wildland.

We appreciate the assurances from the agency that this broad definition will be narrowed through the future adoption of criteria, and that the intent is that regulatory programs would only attach to high and extreme risk hazard designations (though the statute allows broader application both by the Department and by communities). However, we cannot support an overly broad definition of WUI that

is unworkable under Oregon's system, with the promise that it may be narrowed in the future through the application of criteria. This is particularly true given that there does not appear to be consensus within the agency and the committee about what is intended to fall under the WUI definition, how much the definition will be modified through the application of criteria to make it workable, and ultimately how agricultural lands should be treated in this analysis.

We strongly urge you to reconsider the proposed overly broad WUI definition and instead adopt a definition that focuses on the areas where a concentration of dwellings meet undeveloped wildland vegetation. This is the "donut hole" approach which staff has supported in the past, and best meets the goals of the legislation to regulate those areas at highest risk We have proposed several definitions based on current Oregon law, the 2020 report, and federal standards. We encourage you to consider these approaches and the previous work of the department.
Thank you for the opportunity to comment.
Sincerely,

Mary Anne Cooper
Vice President of Public Policy Oregon Farm Bureau Federation maryanne@oregonfb.org

1 Defined as "a geographical area identified by the state as a "Fire Hazard Severity Zone", or other areas designated by the enforcing agency to be a significant risk from wildfires, established under Title 24, Part 2, Chapter 7A"

Respectfully submitted,

Tom Fields
Hearing Officer

FIRE DEPARTMENT

9/22/2021

To: Oregon Board of Forestry

From: Don Johnson

Fire Chief, City of Lake Oswego

Re: Senate Bill 762

Our work in Municipal Fire has changed significantly in the last two decades as a result or warmer global temperatures. We now find Wildland Firefighting a fundamental duty of the fire service and we need to ensure our focus is sharp in our efforts maintain readiness and address the challenges ahead.

With the passage of Senate Bill 762, I am encouraged that the Oregon Board of Forestry is taking the lead and is focusing on a science-based practices to identify Wildland Urban Interface (WUI) areas and to focus our collective efforts on the challenges presented. Fundamental our success is to define the problem by adopting an objectively reasonable definition of WUI Areas – *the definition is where it all begins.*

I strongly encourage the Board to adopt the International definition of Wildland Urban Interface Areas, as that definition is based in science and is objective, rather than some of the more subjective definitions offered by special interest groups.

We are ready to stand strong with the Board in doing the important work for the State of Oregon to reduce the risk of wildfires. Please adhere to the Science and include the International definition of WUI in the implementation of Senate Bill 762.

Sincerely,

Don Johnson, Fire Chief City of Lake Oswego

The Nature Conservancy
Protecting nature. Preserving life.™

The Nature Conservancy in Oregon
821 SE 14th Avenue
Portland, OR 97214-2537

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nature.org/oregon

September 30, 2021

Comments on Proposed Definition of Wildland Urban Interface

Submitted by: Amelia Porterfield, Senior Policy Advisor

Chair Kelly and Members of the Oregon Board of Forestry:

Thank you for the opportunity to provide comments following the Board of Forestry's vote to adopt the International Wildland Urban Interface Code definition in rule.

The Nature Conservancy (TNC) is a science-based, non-partisan organization committed to conserving the lands and waters on which all life depends. In Oregon, TNC has over 80,000 supporters and members in every county. TNC scientists and conservation practitioners based in Ashland, Klamath Falls, Bend, and Baker City lead restoration efforts to increase landscape resilience, reduce wildfire risk to communities, and sustain the many benefits these ecosystems provide to nature and people. We focus on the ecology and restoration of Oregon's dry forests as landowners, forest stewards, and fire managers; lead training and workforce capacity development; and plan and implement large-scale, prescribed fire projects in partnership with local, state, federal, and tribal partners on thousands of acres each year.

It is through this lens that we provide our strong support of the Board's vote to adopt the widely supported International WUI Code Definition: "*that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels*".

Oregon's wildfire seasons have been growing longer and more intense in recent years, with extreme wildfires burning millions of acres and destroying thousands of homes. The state made an important investment this year in SB 762, setting Oregon on a path to improve our wildfire resiliency and response systems. This means we must move past an outdated and unsuccessful status quo and modernize our approach to this critical issue. Adopting a broadly accepted, scientifically grounded and consistent Wildland Urban Interface definition is the keystone of that legislation.

After participating in the Governor's Council on Wildfire Response, working closely with legislators for over a year to help craft and pass SB 762, and serving on the WUI Definition RAC this summer, TNC firmly believes that the International WUI Code definition is the best choice for Oregon, for several reasons:

- The International WUI Code definition meets the charge of SB 762 to consider "national best practices", as this definition is widely utilized by varying types of jurisdictions across the American West. It is nationally recognized by the Council of Western State Foresters, federal agencies, scientists, land managers and the fire professionals charged with keeping communities safe in the face of future wildfires.

CITY OF
ASHLAND

September 22, 2021

RE: Support of Definition

Dear Oregon Board of Forestry,

My name is Ralph Sartain, and I am the Fire Chief for Ashland Fire & Rescue. Thank you for the opportunity to submit testimony commending the Board of Forestry for your work to implement SB 762. The fire service worked diligently with the Legislature to create and pass SB 762 last session and continues to do so through the rulemaking process.

In particular, I'd like to express gratitude for your adoption of the International definition of the Wildland-Urban Interface (WUI). Addressing wildfire risk within the WUI is one of the most critical portions of SB 762. By adopting the International definition, the Board of Forestry has enabled our state to use the most objective, science-based, practices to identify the WUI and focus risk reduction efforts there.

Again, thank you for your work to implement this milestone legislation for the Fire service.

Respectfully,

Ralph Sartain **MO, IAAI-CFI, NAFI-CFEI**
Fire Chief
Ashland Fire & Rescue
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Ashland, OR 97520

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MID-COLUMBIA FIRE & RESCUE
The Dalles, OR

1400 West Eighth Street
The Dalles, Oregon 97058
541-296-9445 Fax: 541-296-8656

September 22, 2021

Dear Oregon Board of Forestry,

My name is Robert Palmer, and I am the Fire Chief at Mid-Columbia Fire and Rescue in The Dalles, Oregon. I want to thank you for the opportunity to submit testimony commending the Board of Forestry for your work to implement SB 762. The fire service worked diligently with the Legislature to create and pass SB 762 last session and continues to do so through the rulemaking process.

In particular, please let me express my gratitude for your adoption of the International definition of the Wildland-Urban Interface (WUI). Addressing wildfire risk within the WUI is one of the most critical portions of SB 762. By adopting the International definition, the Board of Forestry has enabled our state to use the most objective, science-based, practices to identify the WUI and focus risk reduction efforts there.

Again, thank you for your work to implement this milestone legislation for the Fire service.

Sincerely,

Robert. F. Palmer
Fire Chief

OREGON FARM BUREAU

Locally Grown and GROWING STRONG

September 30, 2021

Tim Holschbach
Oregon Department of Forestry
2600 State Street, Bldg D
Salem, Oregon 97310
Submitted Via Email: sb762.rulemaking@oregon.gov

Re: Oregon Farm Bureau Comments on the Definition of Wildland Urban Interface

Mr. Holschbach,

Thank you for the opportunity to come on the proposed rule definition of Wildland Urban Interface (WUI) under SB 762. By way of background, Oregon Farm Bureau Federation (OFB) is a voluntary, grassroots, nonprofit organization representing Oregon's farmers and ranchers in the public and policymaking arenas. As Oregon's largest general farm organization, its primary goal is to promote educational improvement, economic opportunity, and social advancement for its members and the farming, ranching, and natural resources industry. Today, OFB represents nearly 7,000 farm and ranch families who live and work across all 36 Oregon counties. Many of our members have farms and ranches that are likely to be mapped as part of the WUI and are understandably concerned about the regulatory consequences that could flow from such a designation.

The Oregon Farm Bureau is a member of the rulemaking advisory committee that provided feedback to the Department on the proposed rule and continues to serve in that capacity for the ongoing rulemaking efforts around SB 762. We appreciate that the Department is undertaking a monumental task under tight time constraints as it works to implement SB 762. We have a shared goal of increasing Oregon's fire resiliency and ensuring that we can protect our communities and our citizens from Oregon's growing wildfire risk. While we may differ in how to best achieve this goal, we want to reiterate that fire policy is critical for our members and their communities, and we all want to reduce wildfire risk.

With that in mind, we encourage the Board not to move forward with the overly broad proposed definition of the WUI, and instead adopt a definition that defines the WUI more narrowly to only capture those areas immediately adjacent to urban areas where wildfire poses a substantial risk of loss of human lives and property.

to the legislature, which focused on clustered or concentrated development at the urban interface.

The two primary reasons the agency has proposed appear to be an allegiance to the International WUI Code, and a false understanding that other states approach their regulation in this manner. As noted above, the International WUI Code was not developed with a diversity of stakeholders – as is the requirement for ODF rulemaking – and was developed for use and modification at the local level.

Similarly, other states have not wholesale adopted the international WUI code for purposes of their regulatory program. The states that adopt the international WUI code definition at the state level – whether informally or formally - do not have a statewide regulatory system flowing from that definition, and the states who have a statewide wildfire program do not base their regulation solely on the International WUI definition. For example, while California has similar regulatory requirements, they are based on their own definition of the "Wildland-Urban Interface Fire Area[1]" (25 CCR § 4202). Colorado also developed its own definition that guides its regulations. Other states, like Montana, Utah, and Idaho adopt definitions that are similar, but not identical to the international WUI code, and do not have the same regulations flowing from their code adoption. New Mexico and Arizona have no regulations tied to their code adoption, and appear to use it for planning purposes only. Wyoming does not adopt the international WUI code, though two counties have adopted parts on their own.

If Oregon adopts this approach, we would be unique in having a statewide regulatory program flowing from wholesale adoption of this very broad WUI definition designed for local implementation and modification. This approach is contrary to the legislative directive to "consider" a definition based on national standards. Simply put, there is no other state (or federal) program which would declare nearly the entirety of a state's rural areas as "urban" or within the "interface" between urban and wildland.

We appreciate the assurances from the agency that this broad definition will be narrowed through the future adoption of criteria, and that the intent is that regulatory programs would only attach to high and extreme risk hazard designations (though the statute allows broader application both by the Department and by communities). However, we cannot support an overly broad definition of WUI that is unworkable under Oregon's system, with the promise that it *may* be narrowed in the future through the application of criteria. This is particularly true given that there does not appear to be consensus within the agency and the committee about what is intended to fall under the WUI definition, how much the definition will be modified through the application of criteria to make it workable, and ultimately how agricultural lands should be treated in this analysis.

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[1] Defined as "a geographical area identified by the state as a "Fire Hazard Severity Zone", or other areas designated by the enforcing agency to be a significant risk from wildfires, established under Title 24, Part 2, Chapter 7A"

= Life in Balance

RESTORING ECOSYSTEMS **SUSTAINING** COMMUNITIES

Lomakatsi Restoration Project is a non-profit, grassroots organization that for more than 26 years has worked within low-income, forest-based, tribal and Latinx communities throughout Oregon and Northern California to create social equity and sustainable economic opportunities by restoring dry forest ecosystems and creating fire-adapted communities. Lomakatsi's mission is to restore ecosystems and the sustainability of communities, cultures and economies.

October 1, 2021

To: Oregon Board of Forestry
Jim Kelly, Chair
sb762.rulemaking@oregon.gov

RE: Wildland Urban Interface (WUI) proposed definition – **Support**

Dear Mr. Kelly,

Lomakatsi Restoration Project is frequently called upon by our local, regional and state elected officials and natural resource managers to provide input on legislative solutions to the growing threat of wildfire across Oregon. We provided input on and fully supported the omnibus state wildfire legislation SB 762. We also support the Board of Forestry's recommendation to adopt the International Wildfire Urban Interface Code definition of "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels."

SB 762 is a critical step for Oregon to increase community preparedness, reduce future wildfire risk, and build resiliency to withstand the increasing severity and frequency of wildfires in Oregon. As state agencies move to implement SB 762, several actions and investments are necessary to achieve wildfire resiliency:

- Oregon should adopt the International WUI Code definition: "that geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels".
- Adopting a scientifically sound, comprehensive, and nationally recognized WUI definition based on best practices is essential to protect life, property, and fire fighter safety in the wake of increasingly extreme and dangerous wildfire conditions.
- The International WUI Code definition is nationally recognized and used in professional applications at the local, state, and federal level. Nearly every western state, and many states across the nation, have already adopted all or part of the International WUI Code.
- The International WUI definition is recognized by the Council of Western State Foresters, federal agencies, fire managers, and other government and professional bodies.
- The 2020 wildfire season in Oregon burned over one million acres and destroyed more than 4000 homes, with one-sixth of Oregonians under evacuation orders. Oregon must improve our

Sequestering Carbon while Improving Soils while Making Biofuels.

Incorporating **char** (charcoal) into the soil stores, sequesters, that carbon out of the atmosphere for centuries, maybe millennia; a 2019 IPCC report called biochar one of the top five natural climate change solutions.[1] Char stores water and nutrients for plants, and provides a home for beneficial bacteria. It can triple the productivity of depleted soils (google ***Terra Preta)***, and we are strip mining both farm and forest soils; we need to start taking care of them or they will stop feeding us. Sequestering char in soil kills another two birds with one stone. Four, actually—

—We get the char by **pyrolyzing** (gasifying) wood wastes, farm and garden wastes, which, depending on the heat of the process, leaves 20 to 50 percent of the biomass as char, and condensing/catalyzing the "synthesis" or "producer" gas—mostly carbon monoxide and hydrogen—into pyrolysis oils that can replace fuel oil. There are still an awful lot of oil furnaces in use in this country. Wood-waste pyrolysis oils could make them carbon negative until they die a natural death and can affordably be replaced with something cleaner. The gasses that don't condense, mostly hydrogen, can cleanly provide all of the energy needed to run the process.

Pyrolysis oils contain too much oxygen to make good motor fuels, though new refining processes using electron beam "cold plasmas," or microwaves, and less heat energy, might help. But that excess oxygen seems to be what makes bioplastics biodegradable? Any biochemists reading? What else could we do with pyrolysis oils?

You also get wood vinegar (acetic acid, CH_3COOH), a clean green replacement for some herbicides and pesticides; hydrogen, methane, and methanol (CH_3OH), acetone ($(CH_3)_2CO$), formaldehyde (HCHO), many different hydrocarbons (CxHy), furfurals, and levoglucosan ($C_6H_{10}O_5$, useful chemicals now extracted from petroleum that otherwise would combine into toxic smoke.

The char left is best "popped" or "activated": steam it while it's still hot to open the cells and make it more porous. That's what makes activated charcoal so useful: a tiny piece has an unbelievable amount of surface area on which to absorb/adsorb stuff. Soak it full of plant nutrients like compost tea and minerals that particular soil needs, or just incorporate it into the

compost heap and let it absorb nutrients while the compost composts, **add crushed silicates** (see Enhanced Weathering below) and spread/'till it on/into farm/forest/urban soils. Instant carbon sequestration and greatly improved soil.

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Four pages clipped: you folks already know about the miserable 2019, 2020, and 2021 fire seasons.

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From now on each wildfire season is only going to be worse than the last, until there is nothing left to burn. This is how a warming planet turns to desert.

Unless we stop it.

A century of misguided wildfire suppression has left our forests choked with brushy fuels and dead wood, while ever-increasing drought dries them to tinder. Those excess fuels spread fire into the crowns, destroying the forest instead of merely clearing out the underbrush. It is imperative that we clean that up, and doing so the right way will help reverse climate change. But the age-old ways of clearing brush, prescribed burns or slash, pile and burn, can easily get out of control and become wildfires that can spread to farms and homes. A bunch—20?—of prescribed burns got out of control in Northeastern Oregon, end Oct. 2019. They did a lot of "collateral" damage.

Open burning is inefficient. Either the flames don't get enough air to completely combust the gasses, alcohols, tars, soot and water in them—but they are hot enough to do chemistry with those ingredients, creating thousands of nasty toxins—or they get too much air, cooling them below the ignition point of CO (carbon monoxide). Burning CO to CO_2 provides the heat needed to ignite the rest of the nasties you want to oxidize.

Open burning creates vast toxic air pollution, which kills 107,000 Americans each year, and black carbon to poison lungs and speed melting of the world's glaciers; *wastes all of the energy in those fuels*, while we take fossil carbon out of the ground for energy, and dumps all of

the carbon sequestered in that biomass back into the atmosphere. There it will speed global warming, which will worsen drought, which will create more wildfires to emit more carbon, another self-reinforcing feedback loop that, if the last three wildfire seasons are any indication, is also growing exponentially. We need to make use of those accumulated fuels, instead of burning them in place, to *cleanly* offset fossil fuels. We could clean up all of this, avoid lots of air pollution and fossil carbon, and sequester lots of atmospheric carbon, by turning that waste wood into clean, carbon-neutral energy, biochemical feedstocks, **char**, and jobs.

> "*Biochar is an organic compound used as soil amendment and is believed to be potentially an important global resource for mitigation. Enhancing the carbon content of soil and/or use of biochar have become increasingly important as a climate change mitigation option with possibly large co-benefits for other ecosystem services. Enhancing soil carbon storage and the addition of biochar can be practiced with limited competition for land. ...*"
>
> –IPCC Special Report: *Climate Change and Land*

There are already pyrolysis-process units on the market, designed to pull out to woods or farm behind a truck; we could be doing this right now. The crew running one would sell environmental and tree farm-management services, prevent wildfire—that service has value we have to figure out how to pay for—thin the forests under the supervision of the Forest Service, BLM, state forest agency, or landowner, and harvest firewood, wood pellets, poles, char, and pyrolysis oils. Cleaning up the fuel load would keep inevitable future wildfires smaller, more manageable, and away from towns, farms, and homes; we would start where there are people and infrastructure to protect, and work outward from there. The workers might replant after cleaning up a clearcut or a swath of beetle kill or after a fire. Incorporate current tree planters and woodland fire fighters into this new occupation, "Forest Keepers." And begin it as soon as possible, because every year we wait will cost us more in homes and towns and lives and thousands of square miles of timber lost, and climate change accelerated.

Leave wildlife foods or plant more, leave snags for birds to nest in, brush piles over stumps here and there where small animals can escape predators, and enough cover for the larger wildlife. And all of the otherwise-unusable brush and waste wood they would otherwise pile and burn, the crews would chip and run through the pyrolyzer, extracting all those useful chemicals,

avoiding vast air pollution and useless atmospheric carbon, harvesting clean energy, avoiding petroleum, and making char.

The crews could sell some of that char to farmers and gardeners, and spread the rest back on the forest floor, to sequester that atmospheric carbon and enhance the soil. Crops/plants/trees would grow faster and sequester even more carbon while creating more food/fiber/wood products. All of that has value to society and to landowners, and I suggest it be one of the first tasks undertaken by the Civilian Climate Corps, if that legislation, introduced Apr. 20, 2021 by AOC and Ed Markey, passes.

I think you have to stand on a peak in the Coast Range and look around, then try to "bushwhack" through the brush, to appreciate how overgrown our forests are, how big and steep and rugged those young mountains, how vast this task will be. It is not a one-time fix; we will have to clean up the new growth every few years. It will be hard work, and it will have to pay decently. But it would be long-term employment for those who want it, good-paying work for rugged, outdoorsy folks, those who choose to work as loggers, tree planters, and woodland fire fighters; year-round employment, a lot easier on them than fighting fires—eight hour workdays instead of 24—and the idea is to help them prevent future wildfires. It might also be good summer work for young people saving money for college, and work to offer unskilled immigrants. I have done similarly hard work with Latinx immigrants who didn't mind working their butts off for a wage that allowed them care for their families, and they lasted at it a lot longer than I did. Let them in and offer them useful work, maybe on a schedule that leaves them a couple of days a week for education and citizenship classes.

We could stretch the time between clean-ups with goats. Lots and lots of goats. Just please vet them first to be sure they aren't carrying diseases or parasites that could harm the wildlife, and use planned grazing techniques. And try lambs, too. Tastier. Sorry, vegans.

Some biochar schemes, like **Pacific Biochar**'s, involve chipping waste wood in the forest, trucking the chips to, say, a lumber mill that already burns biomass to generate electricity (many do), adding equipment to gasify the chips, and burning the gas in the boiler while selling the char to farmers and the "juice" to the grid. I was told long ago, by someone at PNNL, that trucking wood waste to a central processing plant would be uneconomical, but these folks are

making it work. Many mills, including some now shut down, are central to their own tree farms, so they wouldn't have to truck the fuel very far. Repurposing already-paid-for generators will save money, making this happen faster. They should be able to burn pyrolysis gases far more cleanly than an open burn, cleaner than dry hogged fuel. And if Ethan Novek's CO_2 capture technology (see below) proves itself to be around 1/10 the cost of other carbon-capture technologies, adding it to scrub the exhausts could take this scheme from 20-50 percent carbon negative to near 100 percent. This is a BECCS (bio-energy with carbon capture and storage) scheme that makes sense. Most don't.

Pacific Biochar has been making char for a decade, now, and farmers will pay enough for it to make its production profitable, according to founder and CEO Josiah Hunt. Note me: Interview. Pacific Biochar was awarded the first carbon credits for biochar in the United States, from both Puro and Carbonfuture, in Dec. 2020, trailblazing the way for rapid growth of this industry. They say they have a "shovel-ready plan" to grow the industry fast enough to draw down more than 1 million tons of CO_2 in as little as three years, if that growth is supported by sales of carbon credits.[2] I wonder if they're publicly traded?

In one study, adding char to a vineyard increased production of pinot noir grapes by 1.2 tons per acre, repaying the cost of the char in one year.

Other key players are the Sonoma Biochar Initiative, the United States Biochar Initiative, and the International Biochar Initiative.

Wilson Biochar (wilsonbiochar.com) sells what they call the Ring of Fire Biochar Kiln ($1095), and they also have a plan to hire teenagers to clean up the forests with them. This is a simple, sheet metal, open burner, that excludes air from the bottom, only allowing air to reach the flames from the top. That would slow, not prevent, the char igniting, and they say it makes for a cleaner burn. But fire has been my favorite thing to play with for 68 years, and unless all you are burning is tinder, no hot coals, no fire. Getting a clean burn while excluding air from the coals is counterintuitive enough that I'm going to need to see it. They simply quench the fire with water when they judge that it's burned down far enough. They may be reducing brushy fuels to char, but they are wasting all of the energy and useful chemicals in the pyrolysis gases, and if they are making less smoke, they are still making quite a bit, and dumping much—half? of

the carbon in the wood back into the atmosphere without getting any use or value from it. Sorry, Wilson, but thumbs down. Buy a portable pyrolysis device.

The managers of the Mt. Hood National Forest contracted with Elder Demolition to use a device called a TigerCat 650 Carbonator, which looks to be about the size of a 20-foot shipping container, to make char from some of the debris left by the Riverside Fire. That's the fire that destroyed the McKenzie River corridor, 138,054 acres and at least 57 homes, fall 2020 (above), and it left a huge mess of dead wood. This way of disposing of it is cleaner than open burning, though it still makes smoke, and again it wastes the energy/chemicals in the wood gas it burns. The biochar produced is only about 4 percent of the original volume of wood waste. At $1.29 per pound (average price for biochar in the U.S. in 2019), biochar is still prohibitive for many farmers and gardeners. Doing something like this on a large-enough scale would help bring the price down. This is a start, and it will clean up that waste wood with a little less pollution than would be created by open burning. It is still a great waste of energy that could replace fossil fuels, a fair amount of avoidable air pollution, and carbon uselessly returned to atmosphere.[3]

Buy a portable pyrolysis device. Or several hundred.

Most of our native forests were long ago turned into tree farms; they need to be managed as farms. No self-respecting farmer would let his/her fields go to weeds the way forest managers do, but it's not their fault. The Forest Service and state forest agencies don't have the budgets to clean up the forests, certainly not as fast as we need, to get ahead of future megafires. Pyrolyzing those wastes could be a free-enterprise solution (birthed by a rational energy policy), that would create free-market jobs as fast as we could create markets and build refineries for pyrolysis and waste-wood products.

If the taxpayers lent entrepreneurs and co-ops start-up money out of the Remediation Fund to buy the pyrolysis units, trucks and equipment they'd need, this might happen a lot faster. We would eventually get the money back, and could lend it to the next climate-change-fighting start-up industry. Of course, making strategic loans to vital new industries is something only hellhole socialist slave-states like Canada, Sweden and Denmark do. …

Actually, we do do it here, but mostly with the wrong industries.

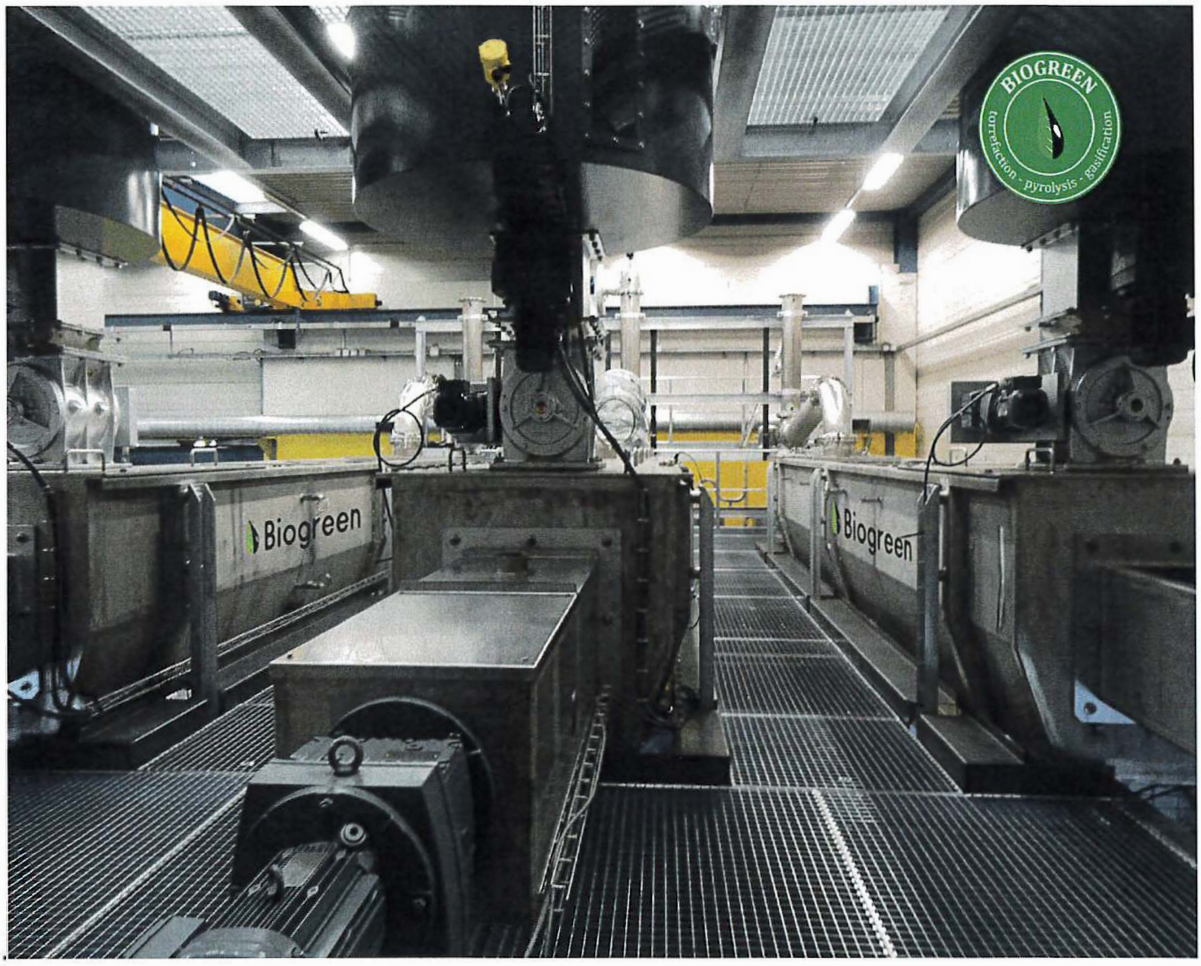
And as above, because it deserves repeating, we could start this industry with the Civilian Climate Corps. If we do it fast enough, we might head off the immolation and desertification of the entire western United States, the Rockies, Appalachia, the Ozarks, Upper Michigan. …

We could also pyrolize urban yard/garden debris to make char for urban gardens. I'd love to add char and silicates to mine. It's available, but still scarce and expensive. If it were made where we live—the feedstocks are available everywhere—we wouldn't even have to truck it far. And it could be a lower-carbon way of cleaning up those wastes than composting them.

Biogreen®[4] (France) is a process/patent owned by ETIA, a subsidiary of French engineering group VOW ASA. ETIA makes larger pyrolysis units tailored to the user's needs, for cooking sewage sludge, waste plastics, tires and rubber into syngas/energy, useful chemicals, and char; and biomass into biochar, oils, solid fuels and syngas. They say they are close to a process to break down and reform plastics, too, and that they are "committed to industry decarbonization and green technologies and to create value from what is currently perceived as waste." Entrepreneurs making a buck (I hope) fighting climate change and producing clean, green replacements for petrochemicals from trash. Way cool.

A Biogreen® pyrolysis plant can be mounted into a few shipping containers, or they can be much larger.

Biogreen uses electrically heated screw conveyors, purged of oxygen, to continuously process wastes. Lower temperatures cook out wood vinegar; at 450 °C they get more char; at over 800 °C, mostly gases. Intermediate temperatures produce more oils. They can slow or speed up the screw; control of temperature and dwell time lets them process different feedstocks and produce the end products a customer wants. Their spokesman Geoff Lindsay told me that their plants require 200 to 400 kW, so they are going to be tied to the grid, hopefully to renewable electricity. They'll be great for turning wastes into energy and char in/around cities, towns, mills, manufacturing and food processing plants. But they won't work out in the woods.



A larger Biogreen® pyrolysis plant. The long, round-bottomed bins are the reactors, that house electrically-heated screw conveyors (Spirajoule®) where the volatiles are cooked out of wastes in a "slow" pyrolysis process. ETIA has been working to develop industrial pyroprocessing since 2003; they are currently commissioning four systems, up to 1,000 kg/hour, in Europe, and are hoping to build a demonstration plant somewhere on the U.S. West Coast soon.

—Photos courtesy of ETIA Biogreen®

Nettenergy[v] makes farm- and forest-size pyrolysis units in the Netherlands, and sells them as far as Australia. Running continuously, their 10-tonne unit (fits in a 40-foot shipping container) produces 2500 liters of biocrude oil with a HHV of 24 MJ/l,* 1,000 kg of biochar, and 2500 liters of wood vinegar every day, plus syngas equal to 50 kW/h for *every hour* of operation. You could do a lot with 50 kWh, times 24 hours a day = 1200 kWh, if you could affordably get that syngas out of the woods.

Nettenergy's 2 tonne (per 24 hours) autarkic** mobile pyrolysis plant. Their 10-ton unit processes five times as much biomass per day. *--Image courtesy of Nettenergy*

* HHV of 24 MJ/l means high heat value of 24 mega-Joules, or 6.667 kWh or 22,748 BTU, per liter. The HHV of fuel oil is 36,720 BTU per liter, gasoline 30,116, ethanol 20,103.

**Autarkic is related to the word autarky, a completely self-sufficient country, from the Greek word for self-sufficiency. Some pyrolysis processes need no outside energy; like this one, they run entirely on some of the syngas they produce.

Feedstocks can include wood, rice husks, bagasse, sludge, tobacco, palm-oil residues, straw, olive stone residue, nut hulls, coconut shells, almost any woody biomass. The biomass needs to be very dry, 15 percent water or less, and ground very fine, for *fast* pyrolysis, which takes only seconds, and produces about 60 percent oils, 20 percent char and 20 percent syngas. Slow

pyrolysis can take as long as several hours (usually much less), and produces more charcoal and wood vinegar. There are wet pyrolysis techniques; I'm not sure yet, but I think those must be slow pyrolysis, too? But wet—or at least damp?—pyrolysis sounds better for out-in-the-woods where you don't want to have to dry the biomass, and if it didn't work, Nettenergy's pyroprocessors wouldn't be as productive as they are.

"In terms of CO_2 balance, the Bio Crude Oil produced by such a plant [10-tonne unit] *represents a potential reduction of 16,600 tonnes of CO_2 emissions per year. If the bio-gas is used fully, this would represent a further 25,509 tonnes of equivalent emissions reduction. If the Bio-char was used for sequestration, rather than for industrial uses, then the CO_2 sink potential represents further 18,412 tonnes in reduced emissions."* —https://pyrotechenergy.com/

--One 10-tonne portable pyrolysis plant avoids 16,600 + 25,509 + 18,412 = 60,521 tonnes of CO_2 per year.

Manufacturers of mobile and stationary pyrolysis plants include Pyrotech Energy, Vivex Engineering, Klean Industries, Kingtiger Group (China), Beston (Henan) Machinery Co. ltd., NARGIS Renewable Energy Solutions, Ruixin Environmental Specialty Equipment Manufacturing Co., Ltd., VACUCLEAN, Innovaclean, Arena Comet NV, Frontier Laboratories Ltd., and dozens of others; find lists at energy-xprt.com or Venture Radar.com.[vi]

Society would rather spend a billion dollars "recovering from" (many people never recover) a disaster later than a million dollars preventing one now (one reason is that rebuilding after disasters is huge business). If removing excess fuels so wildfires don't become deadly megafires in a way that doesn't accelerate climate change, selling firewood and fuel pellets, pyrolysis oils, wood vinegar, char and industrial chemicals, enhancing soils and so yields for Weyerhaeuser or the USFS, and sequestering carbon doesn't pay for itself, carbon credit money might fill the gap. This needn't burden taxpayers.

"National Geographic documentary on terra preta and biochar: solve multiple environmental crisis simultaneously" at Photobucket[vii] is a good read, that explains how creating "magic soil" could help feed the future as well as fight climate change. National Geographic has done a lot of good reporting on *terra preta*.

Much of what we need is new, and not yet fully understood. In "Beware the Biochar Initiative," in Permaculture Research Institute's newsletter, Dr. Mae-Wan Ho warns that biochar doesn't improve all soils, and can speed the release of carbon by decomposition in some. So we need test plots in lots of different soils. She also warns that the supply of oxygen in the atmosphere is finite, and that all this sequestering of carbon *dioxide* will deplete Earth's O_2—every molecule of CO_2 contains two atoms of oxygen.

That's why it's important to sequester carbon, not CO_2, and biochar is a simple, low-tech way to do that while solving other problems. We need to learn to do this right, but we need to get started and learn by doing it. And that's going to mean lots of jobs for agricultural scientists and technicians and foresters and woods-workers and. …

If some of our carbon-sequestering processes take oxygen out of the atmosphere, new, clean processes for smelting metals (see under **Concrete, Steel, and Aluminum**, below) will put some back. We have to be careful with this, too. We're at about 20.9 percent atmospheric O_2 now. Decreasing that below 19.5 percent would make it a little hard to breathe; increasing it to just 23 percent would mean even more, and more destructive, wildfires.

Life is fragile. When you've been in a sweet spot for 10,000 years, when your entire civilization is adapted to it, it's a bad idea to mess with it. Ignorant. Childish. Selfish.

"Koko love Man. But Man stupid." —Koko the gorilla

"*Alternatively, "thermo-catalytic depolymerization," which utilizes microwaves, has recently been used to efficiently convert organic matter to biochar on an industrial scale, producing about 50 percent char. …* " "Biochar," *Wikipedia.* And fuel or plastics or….

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More clipped. I would be happy to email a PDF of the whole book to any of you who might care to read it.

* * *

Enhanced Weathering, Sequestering Carbon Essentially for Free is as simple as using the right crushed rock to sweeten acid soils. Spread crushed basalt, olivine, serpentine or other silicate rock, instead of crushed limestone that emits carbon to the atmosphere as it decomposes, on soils that need "liming," and it will pull CO_2 out of the atmosphere and lock it away in the soil. Same number of jobs, mining, crushing, hauling and spreading rock on fields. Same necessary expense, unless we use already-crushed mining wastes chosen for their plant nutrient profile and lack of toxic heavy metals. Along with adding char to soils, and using the right cements to rebuild our infrastructure, *enhanced weathering has the potential to sequester more carbon than anything else we can do*. And if we spread the stuff on farm/forest/garden/urban soils, some will end up in the oceans, where it will help reverse ocean acidification, too. That's, what, three birds with one stone? Four? And another pattern solved?[viii]

The title of a July 9, 2020 article at *phys.org,*[ix] pretty much says it all: "Applying rock dust to croplands could absorb up to 2 billion tonnes of CO_2 from the atmosphere," per year. The article, which reports on a study led by Professor David Beerling, Director of the Leverhulme Centre for Climate Change Mitigation at the University of Sheffield, England, says that the U.S., China and India have the potential to sequester the most carbon and "need to step up to the challenge."

Project Drawdown says that enhanced weathering works better on wetter, warmer, mineral-poor tropical soils, and points out that it is good to do where acid rains have damaged or are damaging the soils. The acids carbonate the silicates, sequestering carbon, faster, as the silicates sweeten, de-acidify, the soil. Sand and small gravel mixed with the rock dust would make an application last longer, and loosen and improve the structure of clay-based soils.

The folks cleaning up the forests are going to drag tankers full of pyrolysis oils to a refinery, then back to the woods empty. They could pull a second trailer, loaded with rock dust and perhaps compost, back out, and blow it onto the soil along with the char, another environmental service they could be paid for performing.

Olivine can sequester about 2/3 ton of CO_2 per ton of rock. Mining and crushing that would take a lot of energy. If it's fossil energy, as much as four-fifths of the impact could be lost, so we have to do this with renewable or nuclear energy. If we assay existing mine tailings first,

to see what we can use, we should have clean, abundant, non-fossil electricity with which to mine, crush, haul and spread silicates by the time we've used up what we have on hand. To have any effect, we will need tens of gigatons of rock per year, an output far greater than that of the coal industry; it will create that many more jobs, too. And again, it should cost farmers and foresters no more than sweetening soils with crushed limestone, and the right rock could provide nutrients lime doesn't. Add a little lime if your soils need calcium.

Ignoring the oceans, soil holds 70 percent of the world's carbon, four times as much as all biomass and three times as much as the atmosphere. But since the start of the industrial revolution, unsustainable farming methods, deforestation, and draining of bogs—loss of peat lands contributes as much to climate change as automobiles?[x] and when they are gone it seems impossible to bring them back—has already released half to ¾ of what the soil once held. Caring for the soil is the base of the food pyramid that keeps us all alive. Many farmers and foresters get that. Not enough, yet.

A rock called peridotite, on the surface in Oman (most of the world's supply), Northern California, Papua New Guinea, Albania and other places, reacts with air and water to form a carbonate.[xi] Peridotite has the potential to store huge quantities of carbon out of the atmosphere; and if it's "like a giant battery with a lot of chemical potential," maybe there's a way to extract electrical energy while we're sequestering carbon?

Project Vesta[xii] has spread crushed **olivine**, $(Mg\ Fe)_2SiO_4$, on a California beach to prove outside the laboratory that water and wave action breaking it down can suck CO_2 out of the oceans and atmosphere, and sequester it as limestone on the sea bed. They say that seven cubic kilometers of "green sand" spread on 2 percent of the world's beaches and in shallow "high-energy" seas, where currents move fast enough to roll gravel along and keep its surface eroded clean, could absorb a year's worth of carbon emissions. That's about 1,000 "megacarrier"—big cargo ship—loads. No small undertaking, but they think they can do this for $10 to $11 per ton of olivine, which sequesters—they say—1.25 tons of CO_2 (3/4 ton or 1.25. All good).

This intervention should be much more cost effective than some other means of CCS. And it works by drawing CO_2 out of the water (which then draws more out of atmosphere). That should de-acidify, raise the pH, of the oceans, giving the tiny crustaceans at the bottom of the

ocean food chain, that pretty much all other ocean life directly or indirectly depends upon, a chance. Absorbing CO_2 makes waters more acidic, and the increasing acidity dissolves the shells of anything that uses calcium carbonate. The Project Vesta people say that the breakdown of olivine makes more calcium carbonate available to shellfish. Draw down atmospheric carbon, de-acidify the oceans, give its food web a chance, and grow more oysters. Four birds, one stone. Elegant. And, yum.

These folks do present their form of enhanced weathering as an "only" solution, which is why it would take 1,000 megacarriers full of crushed rock a year. But spreading char and silicates on farm and forest soils will also draw down carbon, as will making *terra preta*, using carbon-sequestering cements, growing algae and Azolla and re/afforestation. Using all of these techniques together, we might draw atmospheric carbon down before it's too late. But we need to get on it now. There will be no countering a major planetary methane burp.

Serpentine, $Mg_3Si_2O_5(OH)_4$, works the same way as basalt and olivine, and might sequester even more carbon. If we use what is locally available we will burn less energy hauling rock.

* * *

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[1] IPCC, 2019: "Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems," *In press,* https://www.ipcc.ch/site/assets/uploads/2019/11/SRCCL-Full-Report-Compiled-191128.pdf

[2] Press Release, "Pacific Biochar Secures First U.S. Biochar Carbon Credits," *Digital Journal*, Dec 17, 2020, http://www.digitaljournal.com/pr/4919670

[3] George Plaven, "Forest Service begins making biochar at wildfire recovery site," (Salem, Oregon) *Capital Press*, Dec. 3, 2020; https://www.capitalpress.com/ag_sectors/timber/forest-service-begins-making-biochar-at-wildfire-recovery-site/article_691de1b6-34bf-11eb-b393-ab6ccecca049.html?utm_medium=social&utm_source=email&utm_campaign=user-share\

[4] Biogreen pyrolysis equipment, last accessed June 9, 2020. http://www.biogreen-energy.com

[v] Nettenergy, a pyrolysis company. Nettenergy B.V., Burg. Colijnstraat 81 2771 GH Boskoop, The Netherlands, +31 172 232223, info@nettenergy.com, http://www.nettenergy.com

[vi] Find a list of mobile pyrolysis plants at https://www.energy-xprt.com/companies/keyword-pyrolysis-system-12725/page-2 or at https://www.ventureradar.com/keyword/pyrolysis

[vii] National Geographic documentary on terra preta and biochar: solve multiple environmental crisis simultaneously. *Photobucket*, Nov. 21, 2008, last accessed June 9, 2020. https://global.mongabay.com/news/bioenergy/2008/11/national-geographic-documentary-on.html

[viii] Akshat Rathi, "The ultimate guide to negative-emission technologies," *Quartz,* Oct. 7, 2018, https://qz.com/1416481/the-ultimate-guide-to-negative-emission-technologies/

[ix] "Applying rock dust to croplands could absorb up to 2 billion tonnes of CO_2 from the atmosphere," *University of Sheffield,* July 9, 2020, https://phys.org/news/2020-07-croplands-absorb-billion-tonnes-CO_2.html?utm_source=nwletter&utm_medium=email&utm_campaign=daily-nwletter

[x] Irene Banos Ruiz, "When nature harms itself: Five scary climate feedback loops," *DW*, April 5, 2018. https://www.dw.com/en/when-nature-harms-itself-five-scary-climate-feedback-loops/a-43649814

[xi] Henry Fountain and Vincent Fournier, "How Oman's Rocks Could Help Save the Planet." *The New York Times, Climate*, April 26, 2018, https://www.nytimes.com/interactive/2018/04/26/climate/oman-rocks.html

[xii] Poppe de Boer and Olaf Schuiling, "Mitigation of CO_2 emissions by stimulated natural rock weathering; fast weathering of olivine in high-energy shallow seas." *Utrecht Universary*, Oct. 19, 2015, https://projectvesta.org/science/

STAFF REPORT

Agenda Item No.:	2
Work Plan:	Administrative
Topic:	State Forester Recruitment
Presentation Title:	State Forester Public Panel
Date of Presentation:	October 20, 2021
Contact Information:	John Paschal, Department of Administrative Services john.paschal@oregon.gov Tricia Kershaw, Oregon Department of Forestry patricia.e.kershaw@oregon.gov

SUMMARY

The Board of Forestry (Board) will meet to provide the public an opportunity to engage in the interview process for a new State Forester, the chief executive officer for the Oregon Department of Forestry (ODF).

CONTEXT

Former State Forester Peter Daugherty stepped down effective May 31, and under ORS 526.031, the Board of Forestry shall appoint a new State Forester. The Board will host a special meeting for members of the public and the Board to ask questions of the final State Forester candidates in a virtual forum.

Questions from the public were solicited online in advance of the meeting, and the Board chair selected the final questions to be used at the meeting. All members of the public whose questions were selected will have the opportunity to ask their question during the virtual special Board meeting. Each candidate will be given an allotted amount of time to respond. Cover letters and resumes for the final candidates will be posted online for the public to view. Following the meeting, a recording of the public panel will be available for anyone interested in viewing. For anyone interested in providing additional feedback following the public interview process, written comments must be submitted to the Board by no later than 11:59 p.m., October 25, 2021, to ensure Board members have appropriate time to review and consider those comments.

RECOMMENDATION

Information item only.

ATTACHMENTS

Final State Forester candidates are listed alphabetically.

(1) Candidate Mukumoto cover letter and resume
(2) Candidate O'Rourke cover letter and resume
(3) Candidate Paul cover letter and resume

September 9, 2021

Mr. John Paschal, Recruiting Manager

Dear Mr. Paschal,

With over three decades working in Forestry, I am happy to submit my application for State Forester, REQ-70038. My leadership experience includes diverse and significant accomplishments in economic development, natural resource management, complex turnaround solutions, strategic team development initiatives, organizational planning, and layered multilateral controversial project implementation.

I am a graduate-level forester who has managed all aspects of forests. As Chair of the Oregon Parks and Recreation Commission and serving as Vice-Chair on the Oregon State Board of Forestry, I am familiar with the State processes for developing program rules and policies, long and short-range goals and plans, program evaluation, and budget preparation.

As a management consultant and forester, I have worked in all phases of forest land management, from planning, harvesting, and fire management. My background includes working with user groups such as Tribes, industry, conservation groups, and landowners. For example, I served as the Chair of the Metolius River Multi-Party Monitoring Group for eight years, providing a platform for collaborative development of forest restoration projects.

I have great respect for the employees of the Oregon Department of Forestry. They are hardworking and mission-oriented. The department, in my opinion, was caught in extraordinary conditions brought on by climate change and extreme fires. It would be my honor to serve this organization to implement the changes needed to continue into the next bienniums.

I have attached my resume to this letter. I look forward to talking to you about the application process and the potential for an interview with the appropriate stakeholders and the Board of Forestry.

Sincerely,

Calvin Mukumoto

Attachment: Resume for Cal Mukumoto

Calvin Teruo Mukumoto

Experience Summary

Cal's extensive leadership career includes diverse and significant accomplishments in economic development, natural resource management, complex turnaround solutions, strategic team development initiatives, organizational planning, and layered multilateral controversial project implementation. He has worked extensively in the Native American business community, served on the Boards of six Tribal enterprises, and is also a graduate-level forester who has managed all aspects of forests. He was Chair of the Oregon Parks and Recreation Commission, has served on the Oregon State Board of Forestry and the U.S. Board for the Forest Stewardship Council.

Cal derives satisfaction from solving complex business problems using strategic approaches including nuanced project management, business viability assessments, contract negotiations, short and long-range financial analysis, organizational development, personal community, and media outreach and assemblage of teams skilled in legal, finance, engineering, and marketing. Cal has successful hands-on experience guiding significant operational restructuring at the senior level.

Cal is fully engaged in his community and his professional relationships. He is intrigued by challenges and welcomes the opportunity to bring innovation to your business model. He is also proud to have been serving Indian Country for decades.

Cal Mukumoto brings a career, which represents over three decades of solving complex business problems with success. He will provide exceptional support for your complex needs and works to maximize return in every engagement.

Chronological Summary

Current

The Mukumoto Consultancy

Owner

Coos Bay, Oregon

Practicing as a management consultant providing project management, interim management, and problem-solving skills for the benefit of customers. Currently, Cal manages a timber company, provides support to the Oregon State Forester, and is involved with bioenergy fiber assessments, development engagements, and due diligence analysis.

2009 to October 2014

Coquille Economic Development Corporation

CEO/Board Chair

North Bend, Oregon

Cal was CEO/Chair for the Coquille Economic Development Corporation. CEDCO's goal is to develop long-term economic self-sufficiency for the Coquille Tribe. CEDCO manages The Mill Casino - Hotel and RV Park, Tribal One Broadband, and Orca Communications. CEDCO employs approximately 500 employees and is a significant employer of Coos County, OR. Cal also served as CEO and Board Chair for Mith-ih-Kwuh Economic Development Corporation, another wholly-owned enterprise of the Coquille Tribe. Mith-ih-Kwuh holds investments for the Coquille Tribe in real estate, entertainment, and technology. Cal served as a board member for Nasomah, the Coquille Tribe's health insurance company.

Established Tribal One Broadband as an 8(a) firm with the SBA giving the Tribe a significant advantage in obtaining Federal government contracts. The company is now bidding and receiving contracts nationally. Cal managed the company through a period of high leverage as the country entered into the nation's worst economic recession.

Trimmed company operations and improved efficiency and profitability of the company.
Established several economic development initiatives during a period of low cash flow.

1992-2009
Mukumoto Associates, LLC
Owner
Bend, Oregon
Management consultant providing business management, marketing, and planning services to forest products companies, American Indian Tribes, and others. Examples of activities were as follows:

- Served as client's Chief Financial Officer responsible for financial planning, record-keeping, and risk management.
- Project manager for bioenergy fuel assessments, development engagements, and due diligence analysis.
- Project manager for the development and implementation of biomass plant ($50 million +), which included developing wood supply agreements, financing arrangements, power sales agreements, construction and equipment contracts.
- Interim CEO for economic development corporation.
- Coordinated the Indian Forest Management Assessment Team. In 1994, Senator John McCain said regarding the assessment, "This is the way all (Congressionally mandated) scientific studies should be conducted in the future."
- Chair of the Metolius Pilot Monitoring Team for the Metolius Basin Forest Management Stewardship Pilot Project, Deschutes National Forest.
- Member of the Regional Community Economic Revitalization Team (covering the States of Washington, Oregon, and California) of the Northwest Forest Plan. Received along with other team members the Silver Hammer Award for Reinventing Government from Vice President Al Gore.
- Expert witness in Federal Court in a case involving a breach of Trust responsibility. Testified on forest product values and marketing.
- Lead the successful development and implementation of an intranet customer care system for a national cellular phone company—trained Company employees in its use and maintenance. The team received a performance award from the company for the quality product and on-time delivery.
- Acted as operations manager for a nutraceutical with sales of over $40 million—reduced manufacturing costs, which supported company growth in sales to $50 million per year.
- Worked as turnaround consultant in forest products, manufacturing, and packaged goods companies.
- Steering committee member for the Business Alliance for Sustainable Energy, a group for developing the energy conservation and renewable energy cluster of Central Oregon.

1990-1992
Warm Springs Forest Products Industries
Merchandising Manager
Warm Springs, Oregon

- Established an export and domestic log sales program. Identified new log sorts, introduced new sorts to the market, and trained local loggers in export market requirements. Set up log sales accounting and quality processes.
- Introduced new lumber markets and target size control methods to the company.
- Provided (1990-1991) company-wide financial proformas to owners and banking institutions.
- Acted as Interim Human Resources Manager coordinating organizational development programs.

1988-1990
The Timber Exchange, Inc.
Investment Analyst/Export Sales Manager
Portland, Oregon

- Appraised timberland or timber assets for sale. Projects were generally greater than $5 million, with the most significant sale at $30 million.
- Prepared financial forecasts.
- Managed export sales programs for clients.
- Developed new business ventures such as managing log export sales to Asia and pole markets in Italy.
- Assisted the company President from the startup phase to a period of stable and profitable cash flow.

1980-1988
Makah Tribal Council
Neah Bay, Washington
Operations Manager (1987 -1988)

- General management responsibility for the government (107 employees) of the Makah Indian Tribe.
- Lead the turnaround of the government operations from insolvency to financial stability.
- Established an automated financial system.
- Stabilized cash flow and reduced fixed costs.

Forest Manager (1983-1987)
Responsible for all forestry activities covering a 30,000-acre reservation.

- Instrumental in establishing Makah Forestry Enterprise, a log brokerage firm. The enterprise increased timber sale profits by over 26%.
- Facilitated mission, goal, action planning and budgeting sessions for the Makah Tribal Council.
- Analyzed the delivery systems of U.S. Government services to the Makah Tribe, which resulted in the establishment of a field office for the tribe.
- Facilitated the startup planning of the American Indian Trade and Development Council (an organization promoting Indian products and trade with tribes).

Supervisory Forester (1981-1983)

- Managed timber sales administration, logging and sales planning, tree nursery operations, and long-term forest management.
- Completed the integration of the Bureau of Indian Affairs and Makah Tribal Council forestry programs that reduced program costs by over 25%.

Forester (1980-1981)

- Managed the forest development, roadside maintenance, and tree nursery programs.
- Doubled the production capacity of the tree nursery to 400K seedlings per year.

- Negotiated the first seedling sales contract for the Makah nursery.

1977-1980
Colorado State Forest Service, Colorado State University
Forester
Golden, Colorado

- Forester in the Denver metropolitan and foothills area for the Colorado State Forest Service, a division of Colorado State University.
- Coordinated landowners in four Mountain Pine Beetle control areas (the largest covered 112 square miles).
- Administered and led fire control activities for the district.
- Served on the Jefferson County Fire Council.
- Worked with the media and represented the State at many public meetings. Was credited for providing the best public relations opportunity for the Colorado State Forest Service.
- In 1978, supervised fifty employees in a Mountain Pine Beetle control program.

Education

1972 - 1977 Humboldt State University Arcata, California
Bachelor of Science, Forest Management

1985-1987 University of Washington Seattle, Washington
Master of Business Administration, Executive MBA Program

1984 Nissho Iwai Corporation Tokyo, Japan
Internship, studying the Japanese forest products market

Boards, Committees, and Memberships

Oregon Parks Forever
Portland, Oregon
Board of Trustees member

Southwestern Oregon Community College
Coos Bay, Oregon
Budget Committee member

Oregon State Parks and Recreation Commission
Salem, Oregon
Former Chair of the Commission

Oregon State Board of Forestry
Salem, Oregon
Former Board member and Vice-Chair

Coquille Economic Development Corporation
North Bend, Oregon
Former Board member and Chair

Mith-ih-kwuh Corporation
North Bend, Oregon
Former Board member and Chair

The Nasomah Health Group
North Bend, Oregon
Former Board member

Makah Forestry Enterprise
Neah Bay, Washington
Former Vice-Chair, Board of Directors

Warm Springs Composite Products
Warm Springs, Oregon
Former Secretary-Treasurer and Board member

Quinault Nation Single Board Enterprise
Taholah, Washington
Former Member of the Board of Directors

Forest Stewardship Council
Washington, DC
Former Board member
Member

Society of American Foresters
Member

Awards received

Intertribal Timber Council
1988 Northwest Award for Outstanding Service to Indian Forestry

Colorado State Forest Service, Colorado State University
1978 Outstanding Performance Award (State level)

Publications

The Medicine Wheel, Jan 2019, Michigan State University Press

Sustainability Unpacked, September 2010, Routledge

September 1, 2021

Dear Hiring Officials:

I am applying for the State Forester position. Throughout my career, I have been involved in natural resources management gaining experience in natural resources, administration, disaster management, and organizational transformation. I currently work for NOAA-Fisheries as the Oregon Coast Branch Chief and serve as the agency lead for forestry and fire issues. I am working with the State of Oregon on Habitat Conservation Plan development for the Western Oregon State Forests, the Elliott State Forest, and the Private Forest Accord. I am well-versed in the forestry issues in Oregon.

Over the past thirty years, I have held leadership positions in forestry, land management, and water resources. At the Bureau of Reclamation in Klamath Falls, I addressed deep-seeded problems regarding budget, administration, union grievances, construction loans and contracts, in addition to critical issues with water management and endangered species. As the Team Leader for the Southern California Conservation Strategy with the US Forest Service, I settled a lawsuit and led a team that addressed species issues, habitats, and corridors across 3.8 million acres and all activities on the Forests. At the US Army Corps of Engineers, I successfully integrated an existing habitat conservation plan with the Corps' Mitigation Rule to optimize conservation and funding. On both the Siuslaw and Willamette National Forests, I led efforts that supported a successful timber program driven by social, ecological, and economic factors. Throughout my career, I have worked in fire management, disaster assistance, and emerging land management issues infusing new ideas into organizations.

In addition to the skills list above, I have created diverse, supportive, and employee-of-choice workplaces. I have addressed tough personnel and budget issues and resolved them. I am skilled at budget and strategic planning and decision-making. I have developed and honed my skills in facilitation, mediation, and organizational transformation. I am interested in a position where I can build on the strengths of the current program and create a system that can address critical issues facing natural resource managers. I want to use my organizational and problem-solving skills coupled with my natural resources background to address and resolve challenges facing the State of Oregon.

Thank you for your consideration.

Sincerely,

Tere O'Rourke

Therese Marie O'Rourke

Therese "Tere" O'Rourke

EXPERIENCE

Regulatory

Chief, Oregon Coast Branch, *NOAA-Fisheries, National Marine Fisheries Service. Western Oregon.* Oversees Coast Branch office, supervises on- and off-site staff. Implements Endangered Species Act, Magnuson-Stevens Act, Marine Mammal Protection Act, and other environmental laws and policies. Facilitates leadership team meetings. Serves as a technical expert for forest planning, habitat conservation planning, mitigation, and conservation banking. Facilitates cross-divisional team for federal lands issues. Creatively resolves issues. Works extensively with bodies such as watershed counsels, local, State and Federal legislators, Tribes and other governmental entities.

Chief, South Coast Regulatory Branch**,** *Los Angeles District****,*** *U.S. Army Corps of Engineers, Carlsbad, CA.* Oversaw South Coast Branch office, supervised twenty on- and off-site staff. Implemented Clean Water Act, Rivers and Harbors Act, Endangered Species Act, National Environmental Policy Act, and other environmental laws and policies. Collaborated with NMFS to create a Programmatic Agreement for all Essential Fish Habitat and associated species and resources. Served as a technical expert for watershed planning, hydrology, soils, and biology. Addressed controversial issues such as border wall, international water border issues, high speed rail, and energy projects. Served as national expert regarding conflict management and facilitation, threatened and endangered species, land management, and NEPA. Worked extensively with political bodies such as County Supervisors, local, State and Federal legislators, Associations of Governments, and other governmental entities. Facilitated project management and leadership team meetings.

Assistant Field Supervisor, *U.S. Fish and Wildlife Service, Carlsbad, CA.* Supervised ecological services staff implementing the Endangered Species Act and other State and Federal laws and Acts. Worked extensively with the Coachella Valley Association of Governments to develop and implement the multiple species habitat conservation plan for the Coachella Valley. Facilitated recovery teams. Led critical habitat reviews and 5-year species reviews. Was a primary negotiator for Transnet (a local tax) regarding environmental mitigation for infrastructure projects. Was the primary point person for public and congressional relations. Developed partnerships for conservation, created and implemented habitat conservation plans; assisted federal, state and local agencies (Border Patrol, Homeland Security, various military bases, BLM, Forest Service, and others). Addressed issues of agricultural community and Tribes through habitat restoration and alternative agricultural practices.

Land Management

***Staff Officer**, Siuslaw and Willamette National Forests, U.S. Forest Service, Corvallis, OR.* Facilitated and led resolution of issues related to land management, climate change, endangered species, mitigation, land use conflicts, budget, and personnel. Solved problems regarding land management, budget/work plan, conflict within publics, and trade-offs within programs across the Forests. On the Siuslaw: Oversaw the Forest terrestrial and aquatic restoration and stewardship program. Managed stewardship grantee, groups, and contractors. Developed and strengthened workforce and partnerships to expand and implement the Forest Program of Work. Oversaw and led operations of Forest-wide programs for Natural Resources including silviculture, stewardship, timber, wildlife, ecology, planning, hydrology, fisheries, minerals, geology, botany, aquatic and vegetation restoration, tripartite land acquisition and other resources. On the Willamette: Managed recreation program including developed and dispersed camping, ski areas, day use sites, special use permits, special events, etc. Managed and implemented Forest-wide Lands program including land adjustment, tripartite land acquisition, special uses, easements, and other realty issues. Created a model for Special Uses Modernization. Served as technical expert on National Mitigation Team creating training tools and technical guides for field units regarding mitigation banks, in-lieu fee programs and permittee responsible mitigation. Led and managed Wilderness program including all aspects of natural resources management, fire, and visitor use. Oversaw and led the Heritage program. Facilitated resolution of Union issues.

***Area Manager,** Bureau of Reclamation, Klamath Falls, OR.* Directed the delivery of water to irrigators and ranchers under the Klamath Basin Area Project. Coordinated with the Services to implement restoration activities located within the Klamath Basin and ensured operations compliance with biological opinion(s). Facilitated multi-agency science review for implementation of salmon management and recovery efforts in coordination with farmers, ranchers, Tribes, and agencies. Developed and implemented annual- and long-term strategic plans. Worked with Irrigation Districts, Farm Bureau, and local interests to modernize agricultural operations using solar energy, irrigation techniques, and soil modifications. Coordinated with representatives of federal, state and local agencies, state and federal legislators in California and Oregon, irrigation interests; Chairpersons and staff of the Klamath, Yurok, Karuk, and Hoopa Valley Tribes, and national representatives of environmental groups regarding tradeoffs between limited water supply, water rights, endangered fish species, and Tribal rights. Addressed conflicts relating to limited water supplies. Advised on water rights issues. Resolved Union issues.

***Team Leader,** Southern California Conservation Strategy, U.S. Forest Service, San Diego, CA.* Led a team focused on compliance with the Endangered Species Act. Completed a complex, political environmental analysis combining collaborative decision-making, intergovernmental cooperation and coordination, and interpretation of new regulations. Implemented NEPA, ESA, and other federal laws. Activities analyzed included all recreation, trail management, engineering, roads, bridges and facilities management throughout Southern California National Forests on 3.8 million acres. Negotiated and implemented a lawsuit settlement between government agencies and special interest groups. Completed a precedent-setting, large-scale environmental

consultation (on time and under budget) involving several levels of government, individuals and groups. Nominated for Chief's Award for Teamwork.

***District Ranger**, White River National Forest*, *U.S. Forest Service, Dillon, CO.* Managed large recreation program. Coordinated and interfaced with city managers, city and county staff, and elected officials regarding issues with emphasis on recreationally based-community development, mining issues, timber harvesting and ecosystem management. Created one of the first Stewardship projects in the country. Promoted federal, state, and local community projects through collaborative efforts and relationship building. Developed partnerships and acquired grants for community projects. Created an intergovernmental working group from several federal agencies, state agencies and the county. Facilitated resolution of historic and current recreation and land issues.

International

***International Coordinator,** U.S. Forest Service, Washington, DC.* Worked throughout Latin America as a liaison for the U.S. State Department, World Bank, and the U.S. Forest Service. Created NEPA training in Spanish and Portuguese and delivered training throughout Latin America. Crafted and saw to fruition the signing of a bilateral agreement between the U.S. and Brazilian governments. Worked with Federal, State and local Brazilian governments to coordinate and improve wildland fire fighting techniques, mining practices, and timber harvesting techniques. Worked with G-7 countries to coordinate projects in the Amazonian region for the United Nations conference. Worked in Indonesia, southern African countries (Malawi, Botswana, etc.) to stimulate intergovernmental relations and coordination.

International Technical Expert. Served on numerous international assignments bringing creative ideas and technical experience to foreign governments.

- Introduced and advised regarding aspects of Forest planning and workforce management to Indonesian local and national governments. Indonesia Ministry of Environment and Forestry, Aceh and Jakarta, Indonesia. 2018.
- Worked with Peruvian government to develop National Park funding strategy, create volunteer program, and expand outreach and education program. Offered experience and ideas from municipal and national backgrounds to create framework for fund distribution and work planning for the Peruvian government. Paracas National Park, Peru. 2005.
- Worked with the Guatemalan government to create a community-based approach to promote cultural, recreational, and economic use of National Park resources. Mirador National Park, Peten, Guatemala. 2003. 2004.

Non-profit organizations

***Senior Program Manager**, The Nature Conservancy, San Diego, CA*. Managed operations in Orange, Riverside and San Diego counties including land acquisition, land management (with a focus on wildlife corridors and land use), budget and personnel management. Responsible for TNC's land management, special use permits, tentative maps, subdivision maps, and parcel maps. Facilitated research for wildlife corridors and climate change. Negotiated major transaction with development corporation, transferred

property to the State, developed and implemented wildlife corridor program; organized and redesigned staffing and administration.

***Managing Editor**, American Forestry Association, Washington, DC.* Served as managing editor for the *Urban Forest Forum;* contributing writer to *American Forests* magazine; database manager for urban foresters; Congressional liaison regarding forestry issues; wrote natural resource issues papers for the Board; lead organizer for annual conference.

EDUCATION

MS, **Biology**, Environmental Science and Policy, 1993, George Mason University, Fairfax, VA. Thesis: *A socioeconomic and environmental analysis of non-timber forest products in southwestern VA.* Course work in biology, biogeochemistry, climate change, natural resources, law and policy, anthropology, economics.

***BS,* Forestry**, 1984, Michigan State University, East Lansing, MI. Emphasis in communications, watershed management, urban forestry, entomology and plant physiology, Asian studies, and public relations.

Additional course work and training in project management, habitat restoration, ground water management, bioengineering, wetland mitigation, facilitation, leadership, management, public administration, Portuguese, Spanish, legislative processes, GIS.

Certifications: Facilitator, Wings Seminars, 2017. Master Practitioner, Neuro-Linguistic Programming – Wings Seminars, 2015; Certified Professional Facilitator – Newton Learning Corporation, 2002. Certified Arborist – 1987.

Trainings: Extensive trainings in hydrology, soils, wetlands, botany, wildlife, Natural Resources policy – NEPA, ESA, EFH, CWA, and others.

***Teaching experience**:* Clean Water Act regulations and permitting, Endangered Species Act, National Environmental Policy Act, Mitigation Banking, In-lieu Fee programs for Mitigation for the Corps of Engineers and Environmental Law Institute, Integrated Pest Management (San Diego State University), Tropical Ecology (American University), Neuro-Linguistic Programming, Leadership, and Communication.

Language skills: Fluent Spanish and Portuguese; Some Bahasa, Cantonese, Quechua.

Chronological Experience:

2020-present ***Branch Chief****, Oregon Coast. NOAA-Fisheries National Marine Fisheries Service, Roseburg, OR.* Habitat Conservation Planning. Species Recovery. Coastal issues.

2016-2020 ***Staff Officer****, Siuslaw and Willamette National Forests, US Forest Service, Corvallis, OR.* Land Management. Climate Adaptation. Restoration. Recreation.

2015-2016 ***Area Manager,*** *Bureau of Reclamation, Klamath Falls, OR.* Farming. Water Management. Tribal Relations. Endangered Species. Construction.

2008- 2015 ***Regulatory Branch Chief,*** *Los Angeles District, Army Corps of Engineers, Carlsbad, CA.* Waters and Wetland Regulatory Permitting and Mitigation.

2003-2008 ***Assistant Field Supervisor,*** *US Fish and Wildlife Service, Carlsbad, CA.* Endangered Species Recovery, Habitat Conservation, Bio-Monitoring/Science.

2001-2003 ***Senior Program Manager****, The Nature Conservancy, San Diego, CA*. Land Acquisition, Wildlife Corridors, Climate Change Science and Policy.

1999 - 2001 ***Southern California Conservation Strategy. Program Manager,*** *US Forest Service, San Diego, CA.* Forest Planning, Organizational Transformation.

1995-1999 ***District Ranger****, White River National Forest. US Forest Service, Dillon, CO.* Recreation. Stewardship. Community Involvement and Leadership.

1989-1995 ***International Technical Assistance and Training Coordinator,*** *US Forest Service, International Programs; Fire & Aviation Management. Washington, DC.*

1981 - 1989 ***Arborist and Municipal Employee***, several municipalities and a non-profit.

September 9, 2021

RE: Oregon State Forester recruitment

Dear Oregon Board of Forestry,

Please see my attached resume for the Oregon State Forester recruitment. I believe you'll find that my past work experience, skills, and abilities demonstrate strong competencies in the required skills, desired skills, and desired attributes for the position. This experience includes a deep familiarity with western forests, forestry, climate change adaptation and mitigation, fire management and fire ecology, and natural resource protection—experience I've gained over the course of my career through a diversity of education, roles, and responsibilities.

In addition to working for the Oregon Department of Forestry (ODF) for the first 14 years of my state government career, I've spent the past 15 years gaining experience in various executive management roles across three different state agencies. This includes two years as the Agency Director for the Department of State Lands (DSL). My background and education has provided me not only with extensive experience as a practical forester familiar with western conditions, but also with a diversity of management and executive leadership work in Oregon state government systems. This encompasses almost two decades of experience in the principles and practices of budgeting, organizational development, employee relations, the planning and coordinating of state agency services, financial management, and interpreting statutes, legal opinions, and state and federal regulations.

In addition, you'll find I have strong competencies in stakeholder management and relationship-building—skills that are critical to being an effective agency leader. I've developed these across many types of relationships over the course of my career which include the Governor's office, the State Legislature, government agencies (Federal, State and Local), and a wide range of public stakeholders. I believe the success I've had in my career is very much connected to success in developing these essential skills.

Principles that guide me as an executive leader include placing the highest priority on ethical behavior and transparency, with an emphasis on forward-looking organizational leadership. An example of this was my executive work at the DSL, leading the department and working directly with each State Land Board member (the Governor, Secretary of State, and State Treasurer) on a long-term solution for the Common School Trust Lands that make up the Elliott State Forest. These lands had been resulting in a net loss to the Common School Fund

for multiple years, and the goal of this project was to identify the needs for structural financial management changes due to changing circumstances. This was a highly contentious public policy effort that played out over a number of years, involving a broad diversity of public input and government agency interests. I believe the Elliott State Forest is currently on a positive trajectory for its future as a result of my accomplishments in my tenure with that department.

You will also find that I have a strong commitment towards fostering and sustaining a culturally competent and diverse work environment. The source of this commitment stems from my years growing up in Hawaii, often referred to as a 'melting pot' of diversity. My deep appreciation of diversity, equity, and inclusion from my lived experience during the first 18 years of my life is always with me. As an agency director I offered and encouraged various types of training directed at the benefits of workforce diversity, and I invited guest speakers periodically to present to our entire agency staff. I also personally facilitated as an agency director—co-leading with my HR Director—a day-long Speed of Trust® training for every agency employee. This training emphasizes the value-added of building trust across teams, which also allows for organizations to benefit from greater cultural diversity in the workplace. Specifically related to recruitments, I strive to conduct them in a way that attracts as much diversity as possible. For example, having a recruitment open for an extended period and advertised in a way that gains national or even international exposure is more likely to result in a more diverse applicant pool. Expanding diversity within any workplace has both tangible and intangible benefits that only help make an organization better—something I've lived in my youth and in my professional experience as well.

My background as a practical forester familiar with western conditions extends all the way back to my graduate education at the University of Washington College of Forest Resources. After completing my Master of Science degree, I was hired by the Oregon Department of Forestry and worked for their Monitoring Program both collecting field data and analyzing that data to help ensure science and data-based decisions around forest policy, rules, and statutes. Throughout the course of my 14-year career with the ODF, you'll find proven leadership, vision and a commitment to forests and forest ecosystems, the development and implementation of forest policy, and the various communities that depend upon the social, economic, and environmental resources associated with forests. This was demonstrated in the multiple roles I served with the agency, from forest hydrologist, to policy unit manager, to both the Private and State Forest Division Chief roles. These roles also required honing my skills in facilitating the often difficult and controversial decisions faced by the Board of Forestry, with an authentic respect for both science and values throughout my tenure there.

You'll also see from my background that I have proven experience leading a natural resource agency, which included anticipating future challenges and

ensuring that the agency was well positioned to adapt to change. In my multiple executive leadership roles with both DSL and ODF, I've also demonstrated the ability to work cooperatively with federal and state partners and stakeholders in striving to make Oregon a forestry leader, acknowledging and promoting the need for new models of forestry that lead to public and private forests that are both ecologically complex and economically viable.

I am also in the unique position to both understand and appreciate the history of forestry in Oregon, while also having a broader view informed by experience both outside of ODF and the state of Oregon. My eight years of experience with DSL and my graduate school experience at Duke University in North Carolina both opened my eyes to different forestry perspectives. These experiences are complemented by the fact that I am an inherently curious leader that thrives on exploring new approaches to solving old problems. You'll find that I'm am an eager learner who is openminded and will not hesitate to question the status quo in the pursuit of finding viable solutions to seemingly intractable challenges. At the same time I fully appreciate the value and importance of understanding 'where we've come from' and being respectful of the historic legacy of forestry and its culture.

Finally, you'll find that my colleagues and friends know me as a person who constantly strives to embody a public servant that is driven towards fulfilling the greater public good, with honesty and integrity as core values of mine. I am a forward-looking organizational leader with a proven track record of identifying the effective utilization of agency resources to carry out the organization's priorities, while ensuring the work is in alignment with the agency's mission, vision, and values. I have also successfully provided leadership and management over a number of agency improvement efforts throughout my career, contributing to my broad experience in successful organizational growth and development. Further, I've accomplished this with the ability to be firm, fair, and unbiased in carrying out my professional responsibilities; highly effective in communicating orally and in writing; and successful in supervising, organizing, and motivating employees. And the fact that I've worked at both the Assistant Director and Director levels for a diversity of State agencies will provide valuable insights and perspectives to the position, the agency, and the Board.

I very much appreciate your time and attention in reviewing my application and look forward to the opportunity to interview for the Oregon State Forester position.

Regards,

Jim Paul

JIM PAUL

PROFESSIONAL EXPERIENCE

ASSISTANT DIRECTOR, ADMINISTRATIVE SERVICES DIVISION, OREGON DEPARTMENT OF CORRECTIONS – MARCH 2018 TO PRESENT

Manage and direct the Department of Corrections Administrative Services Division, which includes leadership and management of the Information Technology, Facilities, and Distribution Services sections. Responsible for the development of program rules and policies, long- and short-range goals and plans, program evaluation, and budget preparation. Manage directly and through subordinates about 180 professional, technical and clerical employees; a biennial operating budget of approximately $65 million; and a capital improvement/renewal budget of approximately $120 million.

Responsible for executing principles and processes involved in business and organizational planning, coordination and execution. Oversight of Division strategic planning, resource allocation, and the implementation of Division strategies, priorities, and organizational development. Serve as a senior-level manager, information technology strategist, and advisor to the Executive Team and Director on emerging technologies. Facilitate strong communication with the Governor's office, the Legislature, other agencies, and stakeholders to ensure alignment between business and technology initiatives. Responsible for providing leadership within the department in aligning facilities and technology planning with agency's long-term strategic direction.

AGENCY DIRECTOR, OREGON DEPARTMENT OF STATE LANDS – FEBRUARY 2016 TO FEBRUARY 2018

Responsible for the development of program rules and policies, long- and short-range goals and plans, program evaluation, and budget preparation for the Department of State Lands. Managed directly and through subordinates an agency with over 100 professional, technical and clerical employees; and a biennial budget of over $40 million. Responsible for exercising strong business acumen to produce revenue and other benefits from Common School Fund financial assets of over $1 billion, and from the management of 1.5 million acres of Common School Fund real property assets. Land management oversight responsibilities that included climate change adaptation and mitigation, and ensuring natural resource protection across a broad range of land and waterway environments. Fostered positive relationships and strong communication with the Governor's office, Legislature, and other agencies and elected officials.

Regular interactions with the Governor's office, the Legislature, and stakeholders to successfully manage the Department's finance, business, and technology initiatives. Communicated information effectively in a variety of settings, from one-one-one to agency-wide, and through various presentations and written formats. Extensive experience with managing and providing oversight over complex finances and budgets and the state legislative process. Successful in working in a nonpartisan capacity overseeing the work of the State Land Board that frequently involved managing to successful agency outcomes within a heightened political environment.

ASSISTANT DIRECTOR, COMMON SCHOOL FUND PROPERTY PROGRAM, OREGON DEPARTMENT OF STATE LANDS – MAY 2010 TO JANUARY 2016

Provided leadership over and management of the Common School Fund Property Program, which included responsibility for the development of program rules and policies, long- and short-range goals and plans, program evaluation, and budget preparation. Responsible for organizational and budget oversight of multiple programs that included real property management for the agency, and unclaimed property and estate program administration. Managed directly and through subordinates about 35 professional, technical and clerical employees.

Maintained and developed program rules and policies to produce revenue and other benefits from 1.5 million acres of Common School Fund real property assets. Responsible for oversight and implementation of property development and management, various types of contracts, land leasing, exchanges, and sales. Provided leadership, vision, and commitment to natural resource management , natural resource policy, and the various communities that depend upon social, economic, and environmental resources associated with forest, waterways, and rangeland environments. Increased public awareness of the Department and its programs and built support among the public, legislators, beneficiaries, and constituents. Represented the Department at the State Legislature for program-specific budget and policy issues.

PRIVATE FORESTS DIVISION CHIEF, OREGON DEPARTMENT OF FORESTRY – JUNE 2008 TO APRIL 2010

Provided leadership and management to the Private Forests Division, which included responsibility for the development of program rules and policies, long- and short-range goals and plans, program evaluation, and budget preparation. Managed directly and through subordinates about 30 professional, technical and clerical employees. Oversight of the Division included responsibility of multiple programs including the Private Forest, Resources Planning, and Partnership Development programs. Division responsibilities also included policy and rule development, interpretation of statutes, legislative proposals, budget oversight and management, and enterprise alignment necessary

to carry out the mission of the Board of Forestry and the Department. Represented the Department at the State Legislature for division-specific budget and policy issues.

STATE FORESTS DIVISION CHIEF, OREGON DEPARTMENT OF FORESTRY – JUNE 2006 TO MAY 2008

Managed and directed the State Forests Division, which included responsibility for the development of program rules and policies, development of long- and short-range goals and plans, program evaluation, and budget preparation. Managed directly and through subordinates over 50 professional, technical and clerical employees. Oversight of the Division included leadership and management of the State Forest and Urban and Community Forestry programs. Division responsibilities also included policy and rule development, interpretation of statutes, legislative proposals, and enterprise alignment necessary to carry out the mission of the Board of Forestry and the Department. Represented the Department at the State Legislature for division-specific budget and policy issues.

POLICY UNIT MANAGER, PRIVATE FORESTS PROGRAM, OREGON DEPARTMENT OF FORESTRY – FEBRUARY 2005 TO MAY 2006

Responsible for supervision and management of the Unit, including the development of program rules and policies to implement Legislative and Board of Forestry direction articulated in the Forestry Program for Oregon, Agency Strategic Plan, Forest Practices Act, and Oregon Plan for Salmon and Watersheds. Developed, recommended, and administered cooperative agreements with other state agencies and stakeholders to maintain and improve program effectiveness and success. Responsible for implementation of the Board of Forestry Work Plans specific to the program.

OPERATIONS UNIT MANAGER, STATE FORESTS PROGRAM, OREGON DEPARTMENT OF FORESTRY – OCTOBER 2003 TO JANUARY 2005

Responsible for supervision and management of the Unit, including the development of program rules and policies, development of long- and short-range goals and plans, program evaluation, and budget preparation. Provided oversight and coordination of the development of Annual Operations Plans statewide, and the rules and policies necessary to complete those plans. Oversaw the development and implementation of the first-ever State Forests Watershed Analysis Manual for the State Forests Program.

FOREST HYDROLOGIST, FOREST PRACTICES PROGRAM, OREGON DEPARTMENT OF FORESTRY – SEPTEMBER 1999 TO SEPTEMBER 2003

The senior technical advisor to agency staff and field offices on hydrology, riparian management, and fish/aquatic biology issues. Provided analysis and recommendations for policy, technical, and administrative changes related to forest practices policies, rules, and statutes. Evaluated water related issues and regulations of other natural resource agencies to ensure consistency with forest practices program, and provided support to the forest practices monitoring program. Presented technical material to the Board of Forestry in support of furthering the agency's short-term and long-term goals for water related issues.

POLICY ANALYST, FOREST PRACTICES PROGRAM, OREGON DEPARTMENT OF FORESTRY – JANUARY 1998 TO AUGUST 1999

Provided technical and other support to the Board of Forestry advisory committee on salmon and watersheds. Also provided technical assistance and evaluation of policy implications on issues involving the effectiveness of forest practices in meeting water quality standards. Lead the implementation of adopted policies and rules through the development of guidance, administrative procedures, training, and field consultation.

MONITORING ASSISTANT, FOREST PRACTICES PROGRAM, OREGON DEPARTMENT OF FORESTRY – JUNE 1996 TO DECEMBER 1997

Responsible for assisting with the field data collection, supervision, and management of the landslide monitoring project in the completion of the "ODF Storm Impacts and Landslides of 1996 Study". Co-author of final report, providing recommendations for the development of program rules and policies to address findings.

EDUCATION

Master of Science, Forest Engineering (Hydrology), University of Washington, Seattle, WA

Master of Forestry (first year), Duke University School of Forestry, Durham, NC

Bachelor of Arts, Politics, Whitman College, Walla Walla, WA

STAFF REPORT

Agenda Item No.:	3
Topic:	*Executive Session
Date of Presentation:	October 20, 2021
Contact Information:	Department of Administrative Services, Chief Human Resources Office and Department of Forestry Human Resources Office

SUMMARY

The Board will meet in Executive Session for the purpose of considering the employment of a chief executive officer, pursuant to ORS 192.660(2)(a) and 192.660(7). No decision will be made in Executive Session.