

THE SCIENCE BEHIND STRATEGIC COMMUNITY WILDFIRE RISK REDUCTION

DEVELOPMENT OF OREGON'S DRAFT STATEWIDE WILDFIRE HAZARD AND WILDLAND-URBAN INTERFACE MAPS

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OVERVIEW - WHY DID OSU CREATE THESE MAPS ?



OREGON

DEFENSIBLE SPACE & BEST PRACTICES



1 Trees and vegetation should be 10 feet from powerlines.

2 Trees and vegetation should be 10 feet from buildings and chimneys.

3 For trees and vegetation more than 18 feet tall, remove branches six feet from the ground.

For trees and vegetation less than 18 feet tall, remove branches up to 1/3 the height of the tree.

4 Trees and vegetation should be 10 feet from other trees.

LIMBING TREES



3 Trees and vegetation more than 18 feet, remove limbs up to six feet.

Trees and vegetation less than 18 feet, remove limbs up to 1/3 height.


POWER LINES



1 10FT

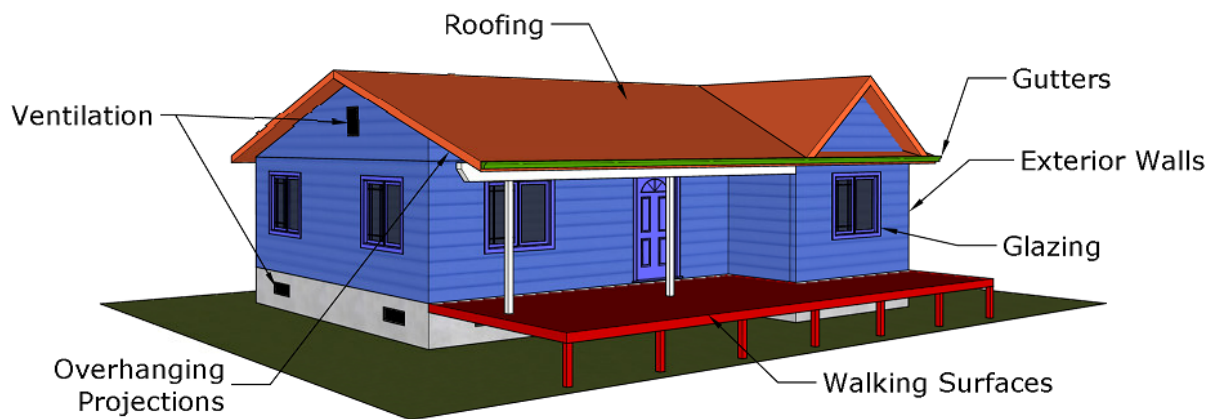

Removing or trimming trees near powerlines is dangerous. Only use an experienced, licensed contractor to perform this work.

VERSION 7



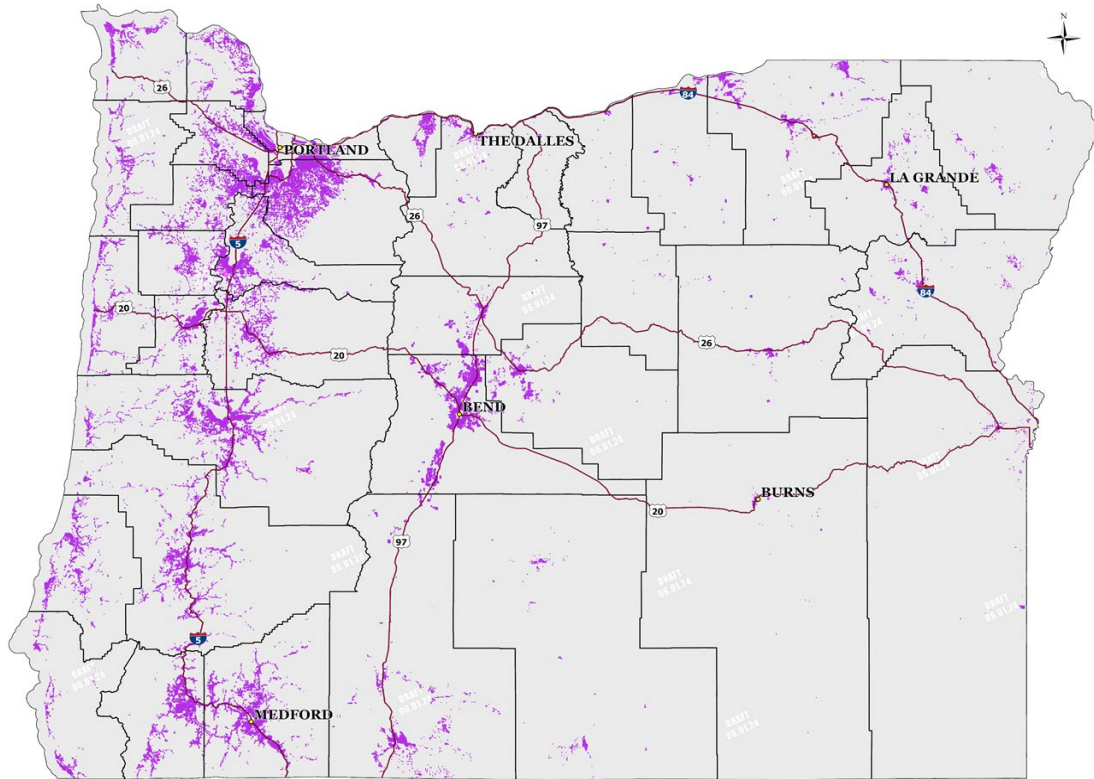
Building Codes Division

Department of Consumer and Business Services

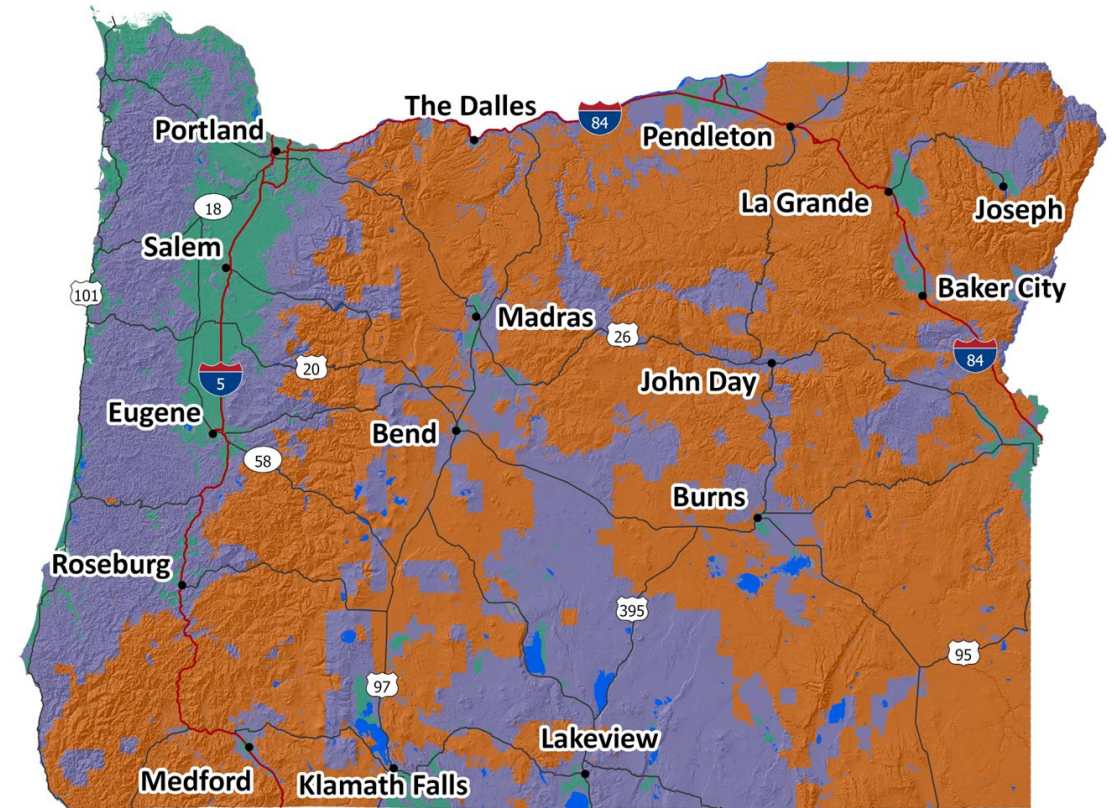


OVERVIEW - WHAT MAPS DID OSU DEVELOP?

Wildland-Urban Interface (WUI)



Wildfire Hazard



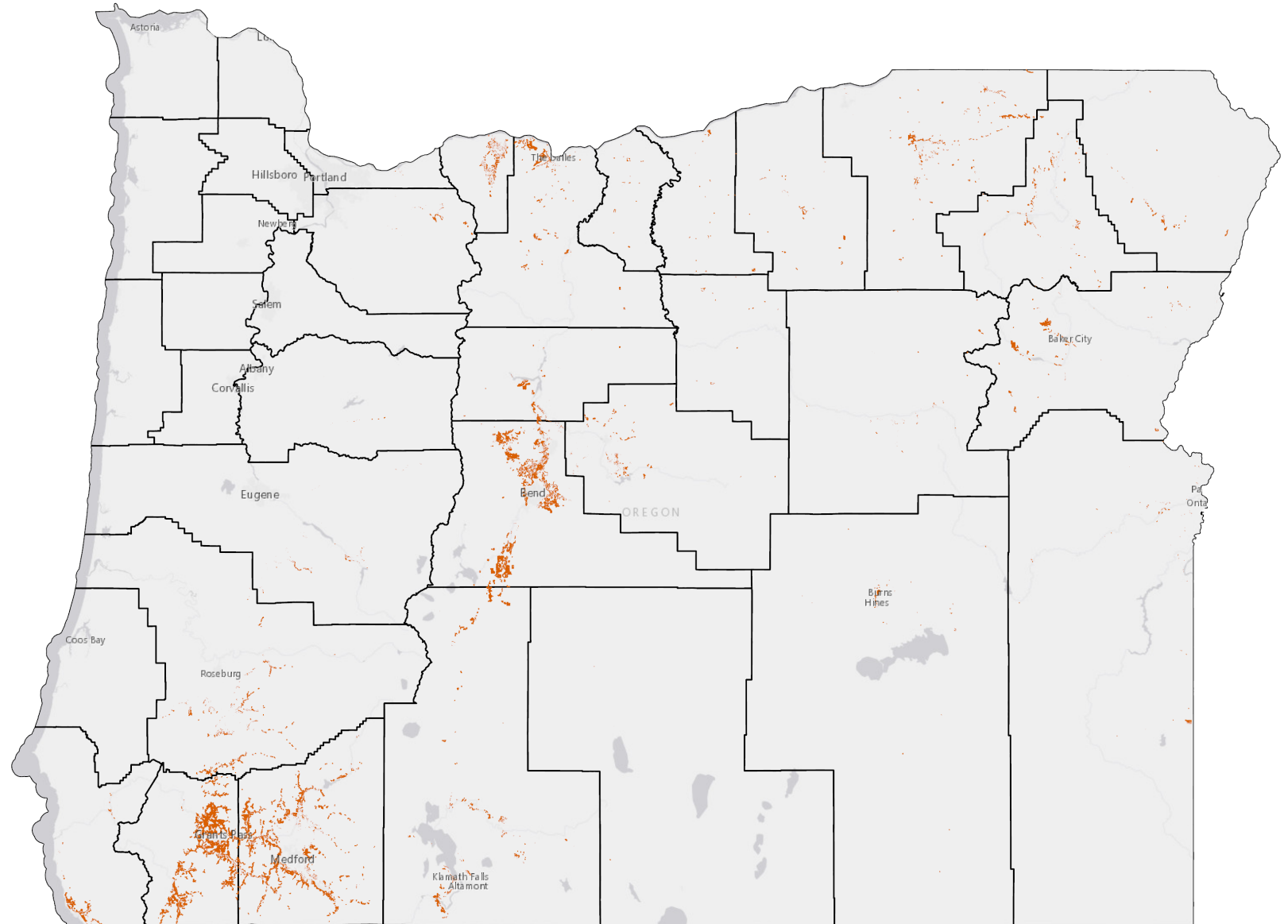
 Wildland-Urban Interface

 High Hazard  Moderate Hazard  Low Hazard

OVERVIEW – HOW WILL THE MAPS BE USED?

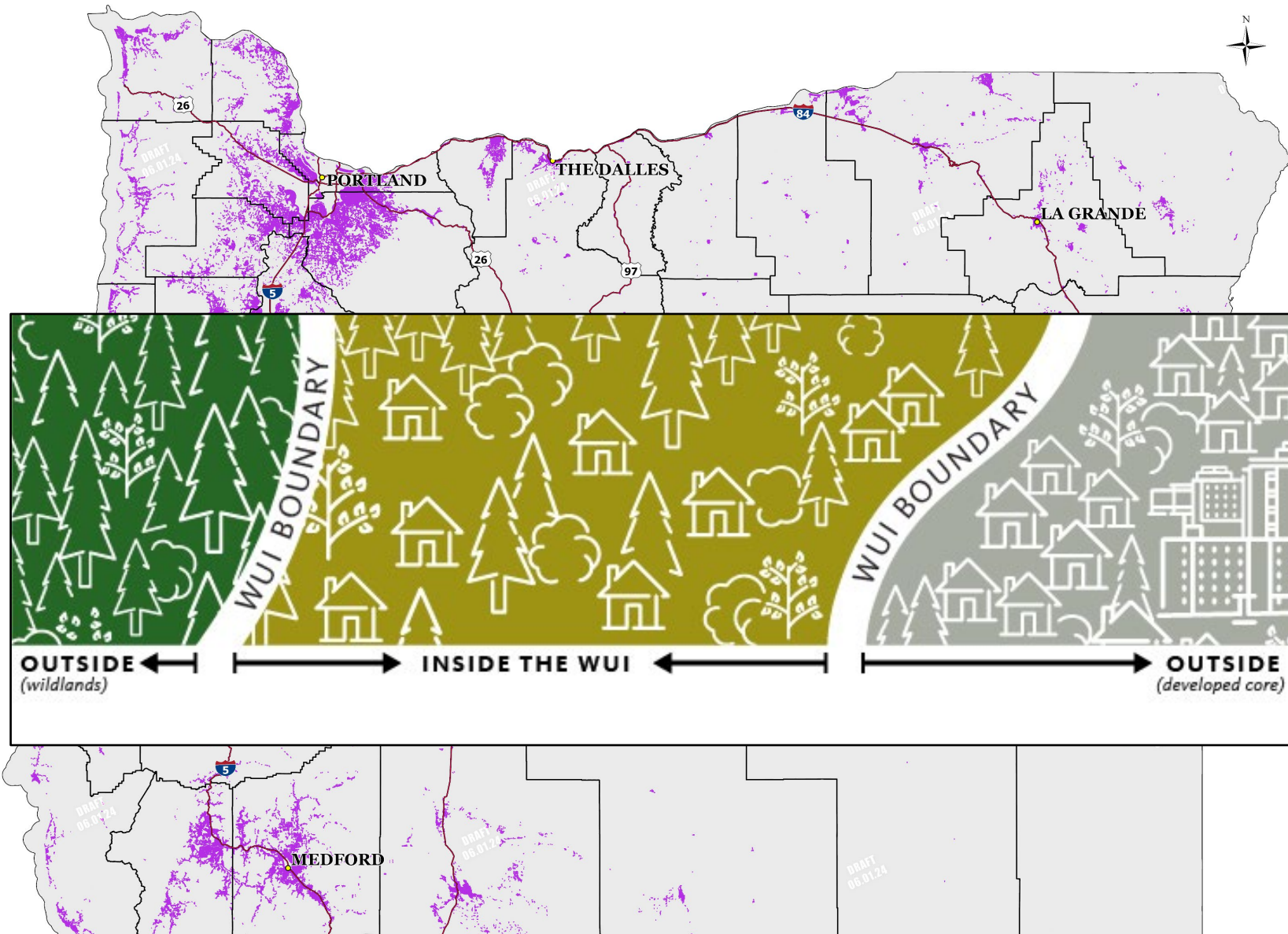
 High Hazard Tax Lot intersecting WUI


Only properties that are designated as both high hazard **AND** partially or wholly in the WUI could potentially be affected by either new defensible space standards or fire hardening building codes.



OREGON'S WILDLAND-URBAN INTERFACE (WUI)

- Areas in the WUI:
 - Have at least 1 structure per 40 acres; and
 - Are surrounded by wildland vegetation or within 1.5 miles of a large block of vegetation
- The WUI has a small footprint, just 4.4% of the area of Oregon



 Wildland-Urban Interface

Wildfire Hazard =



Average Intensity

Flame Length

0 - 2 f

2 - 4 f

4 - 6 f

6 - 8 f

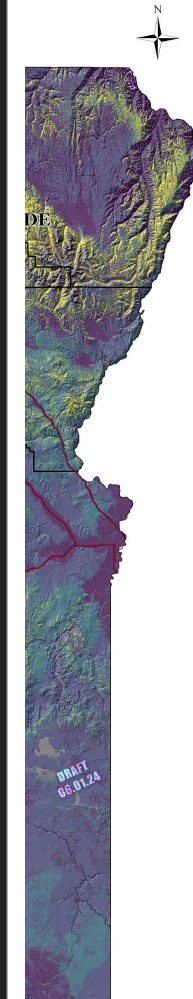
8 - 12 f

greater

County

Major

0 12.5 25 50



WILDFIRE HAZARD

➤ Legislation requires OSU account for:

1. Climate
2. Weather
3. Topography
4. Vegetation



Burn probability

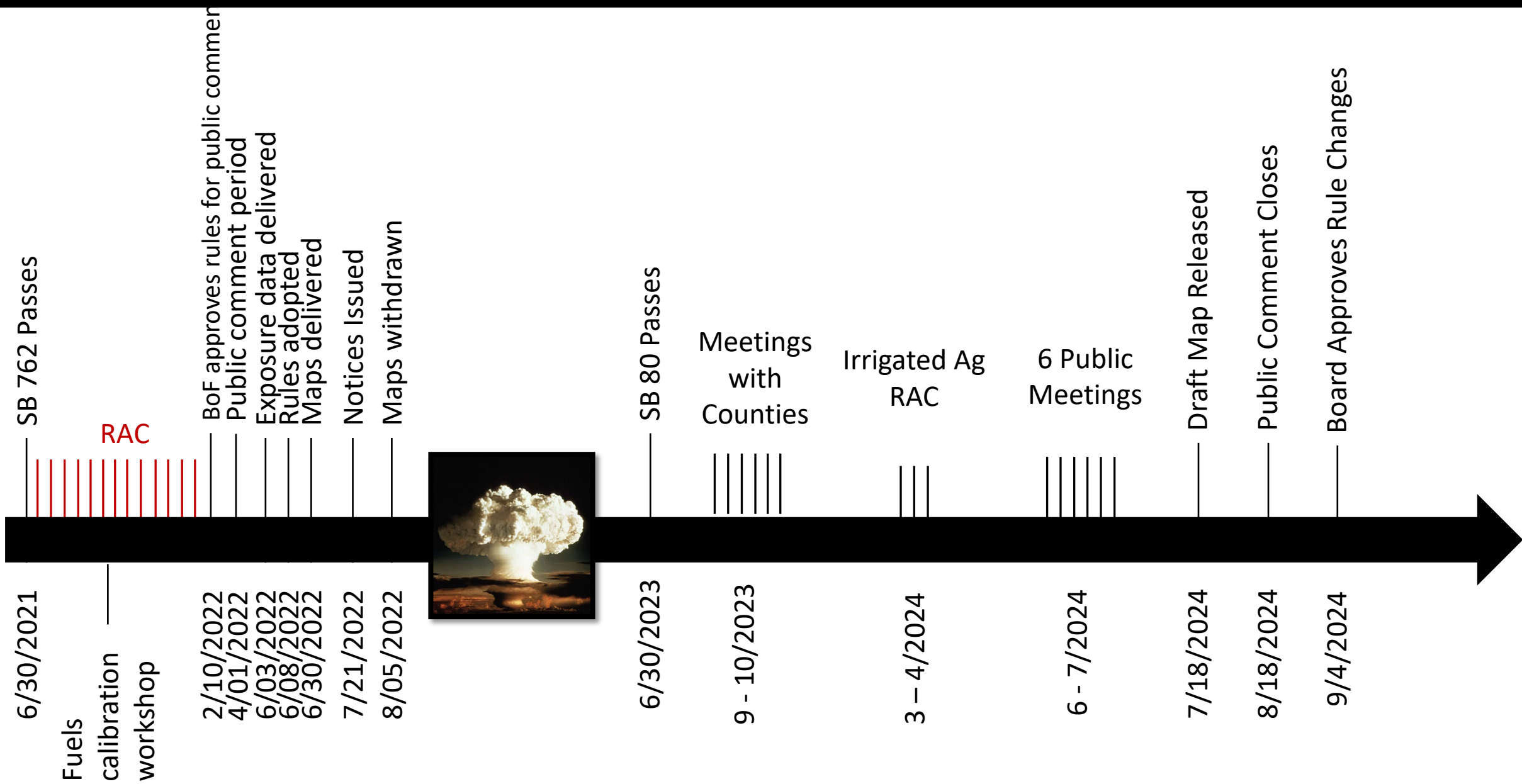
is the average annual likelihood that a specific location will experience wildfire.

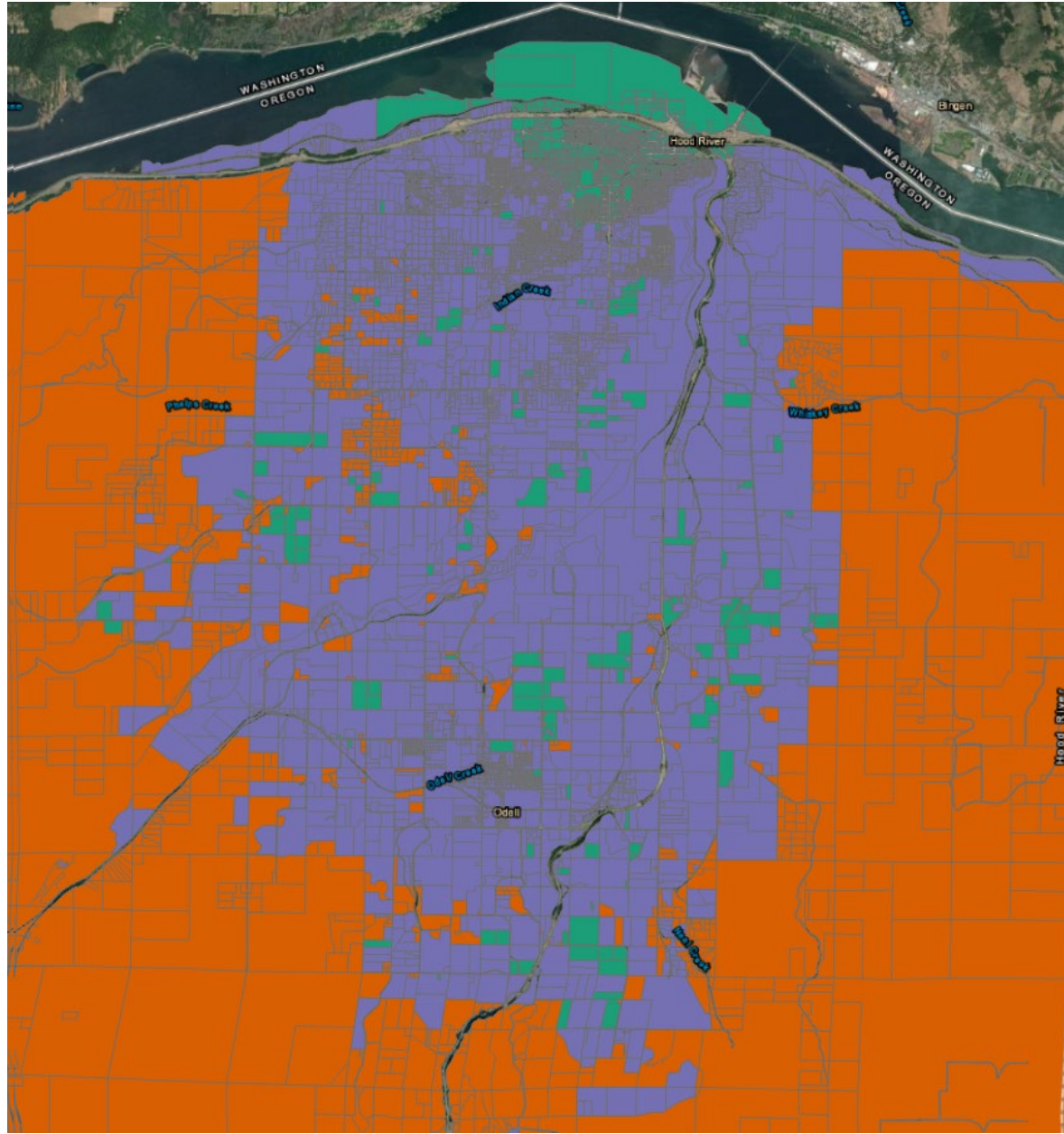


Fire intensity

is the amount of energy produced by a fire, usually reported as “flame length.”

PROJECT HISTORY



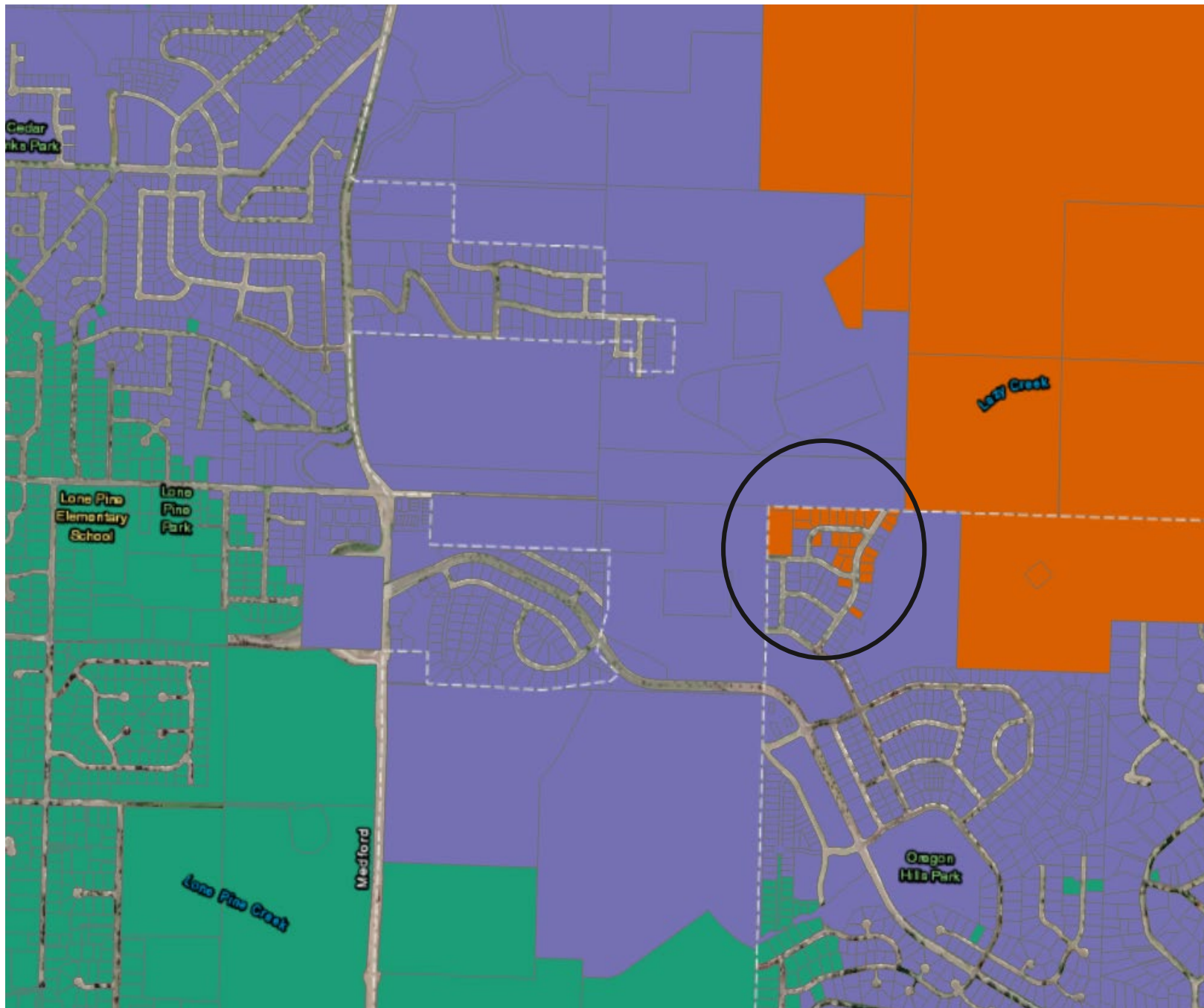


THEMES 1 & 2

1. Hazard too high in hay and pasturelands
2. Hazard too high in and adjacent to irrigated land

THEME 3

3. Too much variation among adjacent and nearby neighbors





Burn Probability

0.00001	0.0289
0.00001	0.0253
	0.0253

X

Flame Length Modifier

10	30
10	30
	30

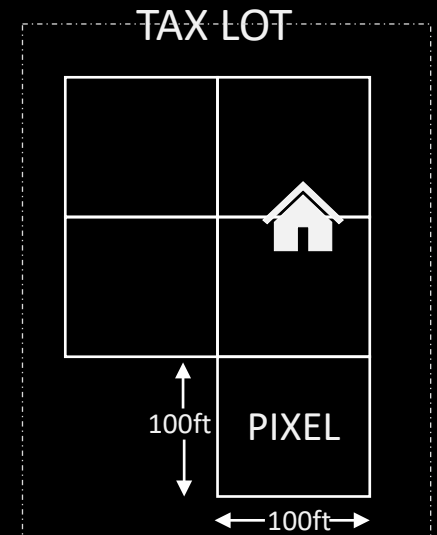
=

Hazard



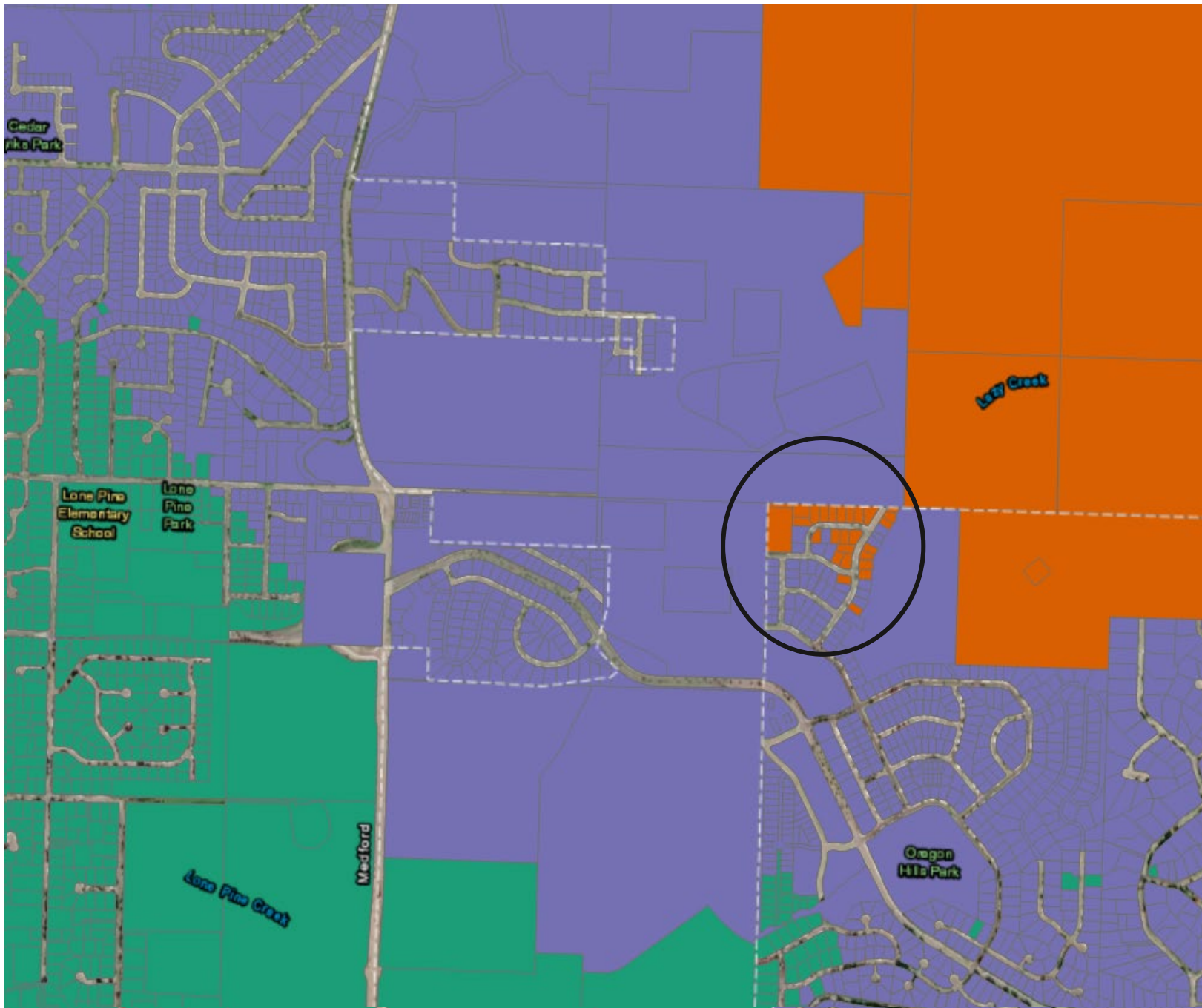
HAZARD CALCULATION: STEP 1

➤ Calculations were first made for all 100-foot pixels then summarized across a tax lot



HAZARD CALCULATION: Step 2

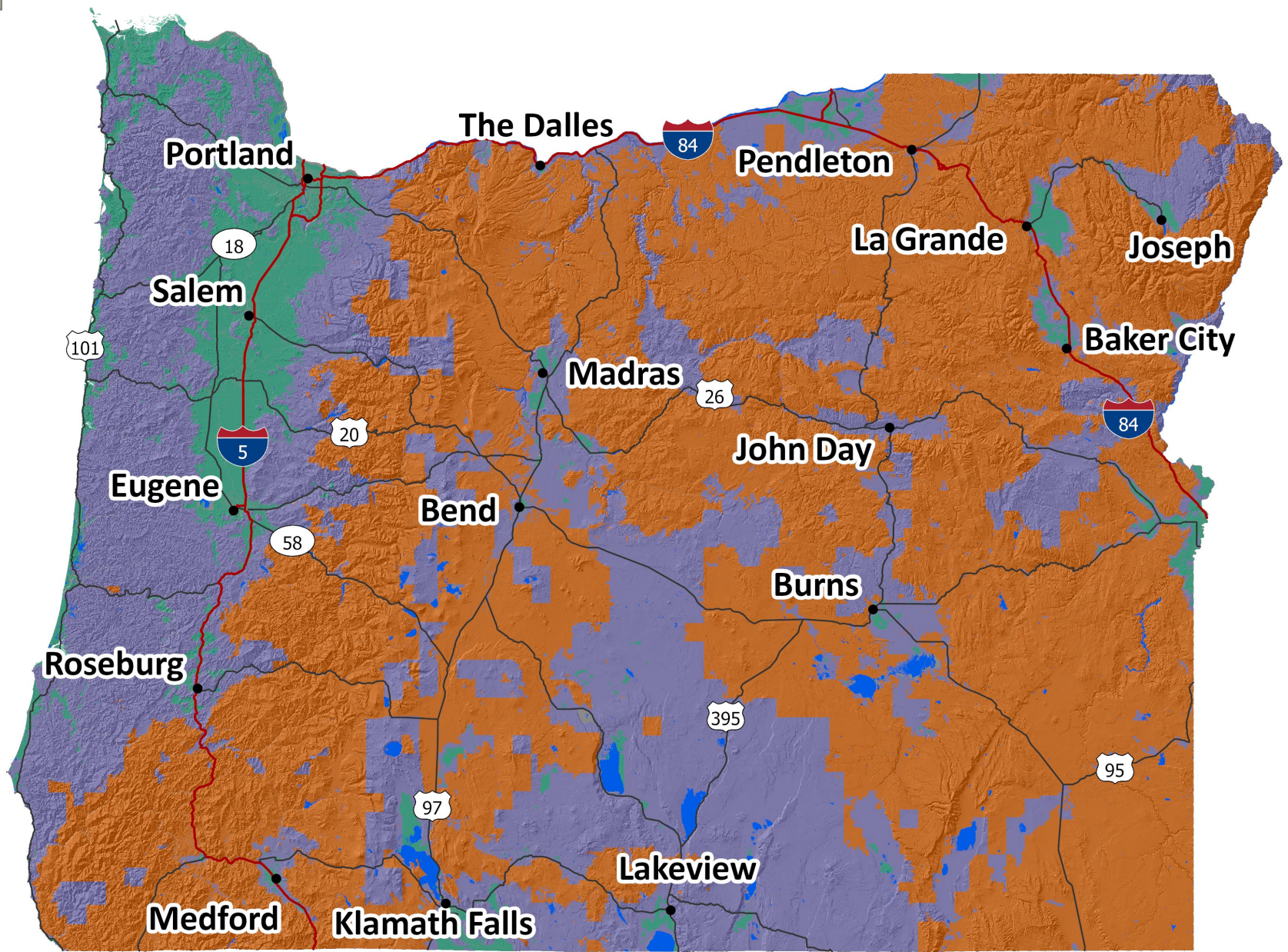
- Based on public feedback, we smoothed hazard zone transitions to reduce the instances of neighbor-to-neighbor differences.



THEME 4



4. Pre-existing defensible space and structure hardening are not reflected in hazard classifications



IDENTIFY AREAS WITHIN HIGH HAZARD TAX LOTS AND WITHIN THE WUI

- All tax lots statewide are assigned to one of the three hazard classes
- Only tax lots that are designated as both high hazard AND partially or wholly in the WUI could potentially be affected by either new defensible space standards or fire hardening building codes.

NEXT STEPS

- Final maps will be made public in early January
- Tax lot level hazard and WUI maps will be available on the Oregon Wildfire Risk Explorer
- Letters will be mailed to owners of tax lots characterized as in the WUI *and* high hazard.
- 60-day appeals window begins the day the maps are posted to the Explorer

oregon-explorer.apps.geocortex.com/webviewer/?app=665fe61be984472da6906d7ebc9a190d

Oregon Wildfire Risk Explorer

Home Layers Legend

Welcome to the Oregon Wildfire Risk Explorer! [About](#)

Search the **DRAFT** Oregon Statewide Wildfire Hazard Map.

Select Location:

Select a location by any of the following ways:

1. Address Search
Start typing a value
2. Click or tap on the map
3. Use your device location
Use my location >>
4. Latitude/Longitude Search
Lat/Lon: 44.59564N 123.41766W
Clear Submit >>

OREGON EXPLORER

Oregon Explorer is a collaboration of OSU Libraries & Press and Institute for Natural Resources | Contact Us

<https://tools.oregonexplorer.info/viewer/wildfire>



Contact OSU for information about:

- The science behind the maps
- Extensions contacts and resources
- <https://hazardmap.forestry.oregonstate.edu/home>

Contact ODF for information about:

- Administrative rules related to the wildfire hazard map
- Information regarding the wildfire hazard map appeals process
- <https://www.oregon.gov/odf/fire/pages/wildfire-hazard.aspx>

Contact OSFM for information about:

- Creating defensible space
- Defensible space code details and process
- <https://oregondefensiblespace.org/>

Contact BCD for information about:

- Home hardening building codes
- <https://www.oregon.gov/bcd/codes-stand/pages/wildfire-hazard-mitigation.aspx>

Contact DFR for information about:

- Home insurance market
- Requirements of insurers
- <https://dfr.oregon.gov/insure/home/pages/wildfire-risk-map-insurance.aspx>

Contact the Wildfire Programs Advisory Council for information about:

- Statewide wildfire policy direction
- Other statewide wildfire programs
- <https://www.oregon.gov/gov/policies/pages/wildfire-programs-council.aspx>

THANK YOU!

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