Central Oregon Coast Fire & Rescue District Addendum

to the Lincoln County Multi-Jurisdictional NHMP

Photos courtesy of Central Oregon Coast Fire & Rescue District

Effective: December 17, 2025 through December 16, 2030

Prepared for
Central Oregon Coast Fire & Rescue District
125/145 NW Alsea HWY, Waldport, OR 97394

Prepared by
The University of Oregon
Institute for Policy Research & Engagement
School of Planning, Public Policy, and Management

University of Oregon | Institute for Policy Research and Engagement

This Natural Hazard Mitigation Plan was prepared by:

UNIVERSITY OF OREGON | School of Planning, Public Policy and Management | Institute for Policy Research and Engagement

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U.S. Department of Homeland Security
Federal Emergency Management Agency
Region 10

130 228th St SW
Bothell, WA 98021

December 17, 2025

Stephen Richardson
State Hazard Mitigation Officer
Oregon Department of Emergency Management
3930 Fairview Industrial Dr SE
Salem, OR 97302

Reference: Approval of the Lincoln County Multi-Jurisdictional Natural Hazard Mitigation Plan

Dear Officer Richardson:

In accordance with applicable[1] laws, regulations and policy, the Risk Analysis Branch of FEMA Region 10 Mitigation Division has approved the local mitigation plan for the following jurisdictions:

Lincoln County	City of Depoe Bay	City of Newport
City of Toledo	Beverly Beach Water District	Central Lincoln People's Utility District
Central Oregon Coast FRD	Depoe Bay Fire District	Gleneden Sanitary District
Kernville-Gleneden Beach-Lincoln Beach Water District	North Lincoln Fire and Rescue District	Otter Rock Water District
Panther Creek Water District	Salishan Sanitary District	Seal Rock Water District
Siletz Valley Fire District	SW Lincoln County Water People's Utility District	

Mitigation plans may include additional content to meet Element H: Additional State Requirements or content the local government included beyond applicable FEMA mitigation planning requirements. FEMA approval does not include the review or approval of content that exceeds these applicable FEMA mitigation planning requirements.

The approval period for this plan is from December 17, 2025 through December 16, 2030.

[1] Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended; the National Flood Insurance Act of 1968, as amended; and National Dam Safety Program Act, as amended; 44 CFR Part 201, Mitigation Planning; and Local Mitigation Planning Policy Guide (FP-206-21-0002).

The jurisdictions' plan approval ensures the eligibility for project grants under FEMA's Hazard Mitigation Assistance programs. All requests for funding are evaluated individually according to eligibility and other program requirements. Having an approved mitigation plan does not mean that mitigation grant funding will be awarded. Specific application and eligibility requirements can be found in each FEMA grant program's respective policies and annual Notice of Funding Opportunities, as applicable.

FEMA's approval is for a period of five years, effective the date FEMA received the adoption documentation. For this plan, documentation was received on December 17, 2025 and is considered approved as of then. Prior to December 16, 2030, each jurisdiction must review, revise, and submit their plan to FEMA for approval to maintain eligibility for grant funding. The enclosed plan review tool provides opportunities to incorporate into future updates.

Sincerely,

Wendy Shaw, P.E.
Risk Analysis Branch Chief
Mitigation Division

JG: MB

Attachment**:** Local Mitigation Plan Review Tool

Resolution # 2025-08

A Resolution Adopting the *District of Central Oregon Coast Fire & Rescue* Representation in the Updates to the Lincoln County Multi-Jurisdictional Natural Hazards Mitigation Plan

Whereas, the ***District of Central Oregon Coast Fire & Rescue*** recognizes the threat that natural hazards pose to people, property and infrastructure within our community; and

Whereas, undertaking hazard mitigation actions will reduce the potential for harm to people, property and infrastructure from future hazard occurrences; and

Whereas, an adopted Natural Hazards Mitigation Plan is required as a condition of future funding for mitigation projects under multiple FEMA pre- and post-disaster mitigation grant programs; and

Whereas, the ***District of Central Oregon Coast Fire & Rescue*** has fully participated in the FEMA prescribed mitigation planning process to prepare the *Lincoln County, Multi-Jurisdictional Natural Hazards Mitigation Plan*, which has established a comprehensive, coordinated planning process to eliminate or minimize these vulnerabilities; and

Whereas, the ***District of Central Oregon Coast Fire & Rescue*** has identified natural hazard risks and prioritized a number of proposed actions and programs needed to mitigate the vulnerabilities of the ***District of Central Oregon Coast Fire & Rescue*** to the impacts of future disasters within the *Lincoln County, Multi-Jurisdictional Natural Hazards Mitigation Plan*; and

Whereas, these proposed projects and programs have been incorporated into the *Lincoln County, Multi-Jurisdictional Natural Hazards Mitigation Plan* that has been prepared and promulgated for consideration and implementation by the participating cities and special districts of Lincoln County; and

Whereas, the Oregon Department of Emergency Management and Federal Emergency Management Agency, Region X officials have reviewed the *Lincoln County, Multi-Jurisdictional Natural Hazards Mitigation Plan* and pre-approved it contingent upon this official adoption of the participating governments and entities;

Whereas, the NHMP is in an on-going cycle of development and revision to improve it's effectiveness; and

Whereas, ***District of Central Oregon Coast Fire & Rescue*** adopts the NHMP and The Board directs the Fire Chief to develop, approve, and implement the mitigation strategies and any administrative changes to the NHMP.

Now, therefore, be it resolved, that the ***District of Central Oregon Coast Fire & Rescue*** adopts *the Lincoln County Multi-Jurisdictional Natural Hazards Mitigation Plan* as an official plan; and

Be it further resolved, that the District of ***District of Central Oregon Coast Fire & Rescue*** will submit this Adoption Resolution to the Oregon Department of Emergency Management and Federal Emergency Management Agency, Region X officials to enable final approval of the *Lincoln County Multi-Jurisdictional Natural Hazards Mitigation Plan.*

Adopted this 16th day of October, 2025

Board President, Jon MacCulloch

Recording Secretary, Janet Hansen

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Introduction

Purpose and Adoption

This is the Central Oregon Coast Fire & Rescue District (Central Oregon Coast FRD) addendum to the Lincoln County Multi-Jurisdiction Natural Hazards Mitigation Plan (NHMP). This addendum is not intended to be a standalone document, rather information contained herein supplements information contained in Volume I (Basic Plan) which serves as the NHMP foundation and Volume II (Appendices), which provides additional information. This addendum meets the following requirements:

- Multi-jurisdictional **Plan Requirements: Participation** §201.6(a)(4),
- Multi-Jurisdictional **Plan Content: Risk Assessment** §201.6(c)(2)(iii),
- Multi-jurisdictional **Plan Content: Mitigation Strategy** §201.6(c)(3)(iv), and
- Multi-jurisdictional **Plan Content: Documentation** §201.6(c)(5).

This is the first addendum to the Lincoln County NHMP for the Central Oregon Coast FRD.

Process, Participation, and Adoption

This section of the NHMP addendum addresses 44 CFR 201.6(a)(3), *Participation and* 44 CFR 201.6(c)(5), *Plan Adoption.*

Central Oregon Coast FRD adopted their addendum to the Lincoln County Multi-jurisdictional NHMP on October 16, 2025. FEMA Region X approved the Lincoln County NHMP and the district's addendum on December 17, 2025. With approval of this NHMP the district is now eligible to apply for the Robert T. Stafford Disaster Relief and Emergency Assistance Act's hazard mitigation project grants through December 16, 2030.

In addition to establishing a comprehensive community-level mitigation strategy, the Disaster Mitigation Act of 2000 (DMA2K), and the regulations contained in 44 CFR 201, require that jurisdictions maintain an approved NHMP to receive federal funds for mitigation projects. Local adoption, and federal approval of this NHMP ensures that the Central Oregon Coast FRD will remain eligible for hazard mitigation assistance project grants.

The Oregon Partnership for Disaster Resilience (OPDR) at the University of Oregon's Institute for Policy Research and Engagement (IPRE) collaborated with the Oregon Department of Emergency Management (OEM), Lincoln County, and Central Oregon Coast FRD to develop this addendum. Members of Central Oregon Coast FRD participated in the County NHMP update process (Attachment A and Volume II, Appendix B).

Convener and Committee

The district's Fire Chief serves as the NHMP addendum convener. The convener of the NHMP addendum will take the lead in implementing, maintaining, and updating the addendum in collaboration with the designated convener of the Lincoln County NHMP (Lincoln County Emergency Manager).

Representatives from the District met formally, and informally, to discuss the development of their addendum (Attachment A). They reviewed and developed the district's addendum, with a focus on their risk assessment and mitigation strategy (action items).

This addendum reflects decisions made at the designated meetings, and during subsequent work, and communication with OPDR.

The Central Oregon Coast FRD steering committee was comprised of the following representatives:

- Convener, Jamie Mason, Fire Chief
- Wendy Rush, Office Administrator/Human Resources

Implementation and Maintenance

The Central Oregon Coast FRD Board of Directors will be responsible for adopting the addendum to the Lincoln County NHMP. This addendum designates the steering committee, and a convener to oversee the development, and implementation of action items. Because the District is part of the County's multi-jurisdictional NHMP, the District will look for opportunities to partner with the County. The district's steering committee will convene after adoption of the addendum on an annual schedule. The County is meeting on a quarterly basis and will provide opportunities for participating jurisdictions (cities and special districts) to report on NHMP implementation, and maintenance during their meetings. The steering committee, assembled by the convener, will be responsible for:

- Reviewing existing action items to determine suitability of funding;
- Reviewing existing, and new risk assessment data to identify issues that may not have been identified at NHMP creation;
- Educating, and training new steering committee members on the NHMP, and mitigation actions in general;
- Assisting in the development of funding proposals for priority action items;
- Discussing methods for continued public involvement;
- Evaluating effectiveness of the NHMP at achieving its purpose and goals (use Table 4-1, Volume I, Section 4, as one tool to help measure effectiveness); and
- Documenting successes, and lessons learned.

The convener will also remain active in the County's implementation and maintenance process (Volume I, Section 4).

The Steering Committee will be responsible for activities outlined in Volume I, Section 4.

The district will utilize the same action item prioritization process as the County (Volume I, Section 4 and Volume II, Appendix D).

Implementation through Existing Programs

Many of the NHMP's recommendations are consistent with the goals and objectives of the district's existing plans and policies. Where possible, the Central Oregon Coast FRD will implement the NHMP's recommended actions through existing plans and policies. Plans and policies already in existence have support from residents, businesses, and policy makers. Many land-use, comprehensive, and strategic plans get updated regularly, allowing them to adapt to changing conditions and needs. Implementing the NHMP's action items through such plans and policies increases their likelihood of being supported and implemented.

This NHMP is strategic and non-regulatory in nature, meaning that it does not necessarily set forth any new policy. It does, however, provide: (1) a foundation for coordination and collaboration among agencies, residents, and the district; (2) identification and prioritization of future mitigation activities; and (3) aid in meeting federal planning requirements and qualifying for assistance programs. The Central Oregon Coast FRD currently has the following plan that relates to natural hazard mitigation. For a complete list visit the district's website.

- Lincoln County Community Wildfire Protection Plan (2024)

Capability Assessment

The Capability Assessment identifies and describes the ability of the Central Oregon Coast FRD to implement the mitigation strategy and associated action items. This is a key component of the 2024 Natural Hazard Mitigation Plan (NHMP) update. Capabilities can be evaluated through an examination of broad categories, including existing authorities, policies, programs, funding, and resources.

Policies and Programs

The NHMP provides direction for the Central Oregon Coast FRD to explore integration into other planning documents and processes.

Current mitigation programs the district manages include issuing burn permits through their website, offering defensible space inspections, and smoke detectors disbursements through a partnership with the Red Cross.

Personnel

The following Central Oregon Coast FRD personnel have assignments that correspond to natural hazard mitigation.

- Fire Chief
- Captain
- Shift Captains
- Shift Engineers
- Volunteer Fire Fighters

Mitigation Successes

This is a list of funding that Central Oregon Coast FRD has sought out or received, as well as recently completed projects to improve mitigation.

- Oregon State Fire Marshal grant for increased staffing during the wildfire season.
- Increased the quantity of disaster response supplies in district-owned caches.

Mitigation Strategy

This section of the NHMP addendum addresses 44 CFR 201.6(c)(3)(iv), *Mitigation Strategy*.

The Central Oregon Coast FRD adopts the mission and hazard mitigation goals described in Volume I.

To develop the district's mitigation strategy (action items), the Steering Committee assessed the district's risk and identified potential issues to be addressed. The Steering Committee also noted what mitigation accomplishments have been made in recent years.

Priority Action Items

Table FD-1 presents a list of mitigation actions. The highest priority actions are shown with orange highlight. The district will focus their attention, and resource availability, upon these achievable, high leverage, activities over the next five years. Although this methodology provides a guide for the steering committee in terms of implementation, the steering committee has the option to implement any of the action items at any time. This option to consider all action items for implementation allows the committee to consider mitigation strategies as new opportunities arise, such as capitalizing on funding sources that could pertain to an action item that is not currently listed as the highest priority.

Table FD-1 Action Items

Mitigation Strategies		Impacted Hazard												Implementation and Maintenance			
Action Item #	Statement	Air Quality	Coastal Erosion	Drought	Earthquake	Extreme Heat	Flood	Landslide	Tsunami	Volcanic Event	Wildfire	Windstorm*	Winter Storm	Potential Funding Resources	Lead	Timeline	Cost
1	Coordinate with the Oregon Department of Forestry and local landowners to conduct recurring fuels reduction projects, including chipping and prescribed burning, within high-risk wildland-urban interface (WUI) zones identified in the Lincoln County Wildfire Risk Assessment.										X			Local funding resources, HMA, CWDG, ODF Landscape Resiliency, OWEB	Fire Chief	S	L
2	Collaborate with Oregon State University Extension to host Firewise landscaping clinics on a regular basis, aiming to educate property owners on defensible space and vegetation management best practices.										X			Local funding resources, USDA, OSFM, OSU Extension, Firewise USA™	Fire Chief	M	L
3	Develop and implement a volunteer firefighter program that includes structured training, mentorship, and incentive strategies to improve retention and increase volunteer participation across the district.										X			Local funding resources, FEMA (SAFER), OR Volunteer Firefighter Incentive Program, SDAO	Fire Chief	S	L
4	Complete infrastructure improvements to ensure reliable, all-weather access to Station 7300 in Tidewater and enhance water availability for firefighting operations in remote areas.			X							X	X	X	Local funding resources, HMA, USDA, IFA, Regional Solutions	Fire Chief	M	L
5	Implement structural and non-structural seismic retrofits at all fire stations, prioritizing Station 7200 due to its location in a high liquefaction and tsunami risk zone, in alignment with DOGAMI's seismic vulnerability assessments.				X				X					Local funding resources, HMA, OEM SPIRE	Fire Chief	M	H
6	Obtain and install backup power generators at all fire stations to ensure operational continuity during power outages caused by natural hazards such as winter storms, earthquakes, or wildfires.				X						X	X	X	Local funding resources, HMA, OEM SPIRE, SDAO	Fire Chief	S	L
7	Incorporate Firewise USA™ materials and defensible space evaluations into all residential site visits and inspections, with the goal of distributing educational handouts and promoting mitigation practices throughout the district.										X			Local funding resources, Firewise USA™, OSFM	Fire Chief	S	L
8	Work with the City of Waldport and Lincoln County Emergency Management to enhance public alert systems, including expanding Lincoln Alerts enrollment and acquiring a Cell-on-Wheels (COW) unit to maintain communications during outages.				X						X	X	X	Local funding resources, NOAA NTHMP, OEM	Fire Chief	S	L
9	Collaborate with ODOT and local agencies to assess and prioritize seismic and landslide mitigation for key evacuation and response routes, including Highway 34 and the Alsea Bay Bridge.				X			X						Local funding resources, ODOT, HMA	Fire Chief	M	H to VH

Mitigation Strategies		Impacted Hazard												Implementation and Maintenance			
Action Item #	Statement	Air Quality	Coastal Erosion	Drought	Earthquake	Extreme Heat	Flood	Landslide	Tsunami	Volcanic Event	Wildfire	Windstorm*	Winter Storm	Potential Funding Resources	Lead	Timeline	Cost
10	Support the South County CERT team in delivering hazard preparedness education at community events, schools, and through local media. This outreach will include guidance on household mitigation measures such as creating emergency kits, securing water heaters and furniture, and preparing two-week shelter-in-place supplies, with the goal of increasing community resilience and reducing reliance on emergency services during disasters.			X	X		X	X	X		X	X	X	Local funding resources, FEMA CERT, OEM, SDAO, local civic foundations	Fire Chief	S	L

Source: Central Oregon Coast FRD steering committee, 2025.
Cost: L (less than $50,000), M ($50,000-$499,999), H ($500,000-$5 million), VH (more than $5 million),
Potential Funding Sources: HMA=FEMA's Hazard Mitigation Assistance disaster and non-disaster grant programs
Timing: Short (1-4 years), Medium (4-10 years), Long (10 or more years)
Priority Actions: Identified with orange highlight
Dark Grey highlight indicates that the hazard does not impact the jurisdiction

Risk Assessment

This section of the NHMP addendum addresses 44 CFR 201.6(c)(2)(iii) - Risk Assessment.

Assessing natural hazard risk has three phases:

Phase 1: Identify hazards that can impact the jurisdiction. This includes an evaluation of potential hazard impacts – type, location, extent, etc.

Phase 2: Identify important community characteristics, assets, and system vulnerabilities. Example vulnerabilities include people, businesses, homes, roads, historic places, and drinking water sources.

Phase 3: Evaluate the extent to which the identified hazards overlap with or have an impact on, the important assets identified by the community.

The local level rationale for the identified mitigation strategies (action items) is presented herein, and within Volume I, Section 2, and Volume II, Appendix C.

Hazard Analysis

The district developed their hazard analysis, using the County's (Volume I, Section 2) as a reference. Where appropriate, changes were made to distinguish the district's risks from those in the County's hazard analysis, as detailed throughout this addendum.

Table FD-2 shows the hazard analysis matrix listing each hazard in rank from high to low. For local governments, conducting hazard analysis is a useful step in planning for hazard mitigation, response, and recovery. The method provides the jurisdiction with a sense of hazard priorities but does not predict the occurrence of a particular hazard. See Volume I, Section 2 for methodology details.

Windstorm, wildfire, Cascadia Subduction Zone earthquake, local tsunami, riverine flood, winter storm, drought, and landslide are the **high hazard threats** to the city. Distant tsunami and crustal earthquake are the **low hazard threats**.

The fire district's primary capabilities center on emergency response and public safety, with a focus on fire suppression, rescue operations, and hazard mitigation. While protecting people is central to its mission, the district operates in close coordination with county and city agencies that hold broader responsibilities for managing the overall impacts of hazard events on communities.

Through this collaborative approach, the fire district provides essential expertise, personnel, and resources during emergencies, supporting the efforts of other jurisdictions. The county and cities maintain primary responsibility for comprehensive disaster management and recovery, while the fire district leads in life safety and incident response.

Given this operational scope, the fire district is not directly affected by the following hazards and does not have infrastructure or responsibilities that warrant profiling them in its hazard analysis:

air quality/smoke, coastal erosion, coastal flood, extreme heat event, tornado, and volcanic event. These hazards fall outside the district's direct impact zone or operational purview and are more appropriately addressed by other agencies within the broader emergency management framework.

In addition, hazards identified within the "bottom tier" have low vulnerability and/or low probability to the district. As such the district has elected to not include mitigation strategies. Instead, the district will collaborate with the County and applicable cities to implement mitigation strategies related to these hazards.

Table FD-2 Hazard Analysis Matrix

Hazard	History	Vulnerability	Maximum Threat	Probability	Total Threat Score	Hazard Rank	Hazard Tiers
Windstorm	20	50	100	70	240	#1	
Wildfire	12	45	90	56	203	#2	
Earthquake (Cascadia)	2	50	100	49	201	#3	
Local Tsunami	2	50	100	49	201	#4	*Top Tier*
Flood (Riverine)	16	40	80	63	199	#5	
Winter Storm	18	20	90	70	198	#6	
Drought	10	35	80	56	181	#7	
Landslide	14	30	80	56	180	#8	
Distant Tsunami	10	20	60	35	125	#9	*Bottom Tier*
Earthquake (Crustal)	8	20	50	21	99	#10	

Source: Central Oregon Coast FRD steering committee, 2025.

Community Characteristics and Assets

The following section provides information on Central Oregon Coast FRD specific demographics and assets (see Table FD-4). Many of these community characteristics can affect how natural hazards impact communities, and how communities choose to plan for natural hazard mitigation. Considering the District specific assets during the planning process can assist in identifying appropriate measures for natural hazard mitigation.

Community Characteristics

The district serves as the primary fire and emergency response agency for the City of Waldport and surrounding rural communities, including Tidewater, Five Rivers, and parts of the Alsea River corridor. The district encompasses a diverse and hazard-prone landscape, including coastal lowlands, forested hills, and river valleys, and is bordered by neighboring fire districts such as Yachats and Seal Rock.

The district serves a diverse and dynamic population centered around the City of Waldport and extending into surrounding rural communities. As of 2022, Waldport had a permanent population of approximately 1,950 with a median age of 59.9, reflecting a significantly older demographic. About 37% of residents are over the age of 65, and 31% of those living in tsunami

inundation zones fall into this age group, highlighting a critical need for tailored evacuation and sheltering strategies.

The district also experiences substantial seasonal population fluctuations, with up to 1,463 temporary residents during peak tourism periods. Events such as Beachcomber Days and the Blues Festival can triple the local population, pushing the total to over 4,000 people at times. This influx includes visitors staying in short-term rentals, RV parks, and hotels, many of whom may be unfamiliar with local hazards and emergency procedures.

Economically, about 12% of the population lives in poverty, and the median household income is $49,659. Approximately 9% lack health insurance, and many residents live in manufactured homes, which are more vulnerable to natural hazards like earthquakes and winter storms. Additionally, 44% of the adult population is in the labor force, with a large portion commuting to nearby cities for work.

The district also supports a youth population of around 490 students attending local schools, which serve a broader area from Yachats to South Beach. These schools have been relocated outside of tsunami zones and maintain disaster supply caches and reunification plans.

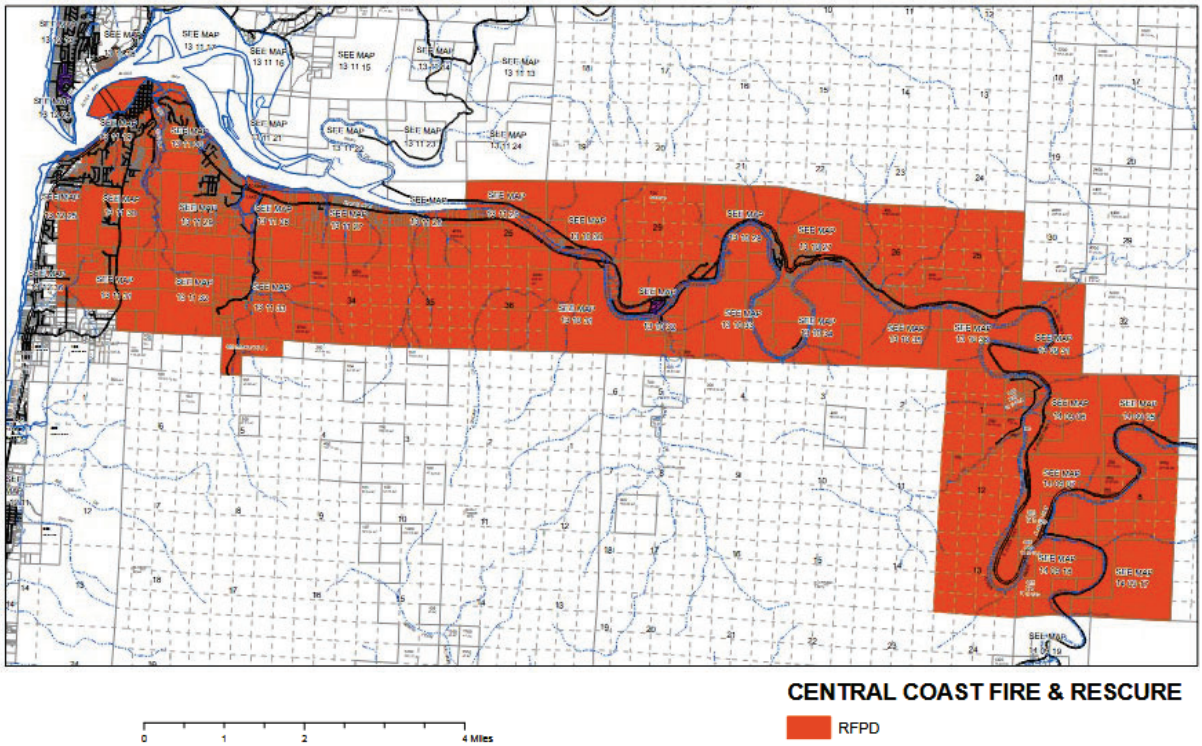
Facilities and Property Assets Inventory

This section provides information on district specific assets. Assets that may be affected by hazard events include residential and nonresidential buildings, critical facilities, and infrastructure. Considering the district specific assets during the planning process can assist in identifying appropriate measures for natural hazard mitigation.

COCFRD operates three stations, Station 72 (Main Station in Waldport), Station 73 (Tidewater), and Station 74 (Five Rivers), and maintains mutual aid agreements to ensure regional coverage and resilience. Table FD-5 lists the facilities that, if damaged, could significantly impact the public safety and economic conditions of the district.

The district's facilities are located within the service area (see figure FD-3) which includes the City of Waldport. The service area extends from Waldport to roughly 15 miles east along the Highway 34.

Map FD-1 District Boundaries



Source: Lincoln County GIS - Click link for more information

Hazard Identification

This section profiles the district's hazards and assesses their vulnerabilities, distinct from the countywide planning area. Detailed hazard profiles of the most significant countywide hazards are described in Volume I, Section 2. The detailed profiles include hazard characteristics, history, location, extent, previous occurrences, and probability of future occurrences. An event that affects the County, or applicable cities where district assets are located (Waldport), is likely to affect the district as well. However, not all hazards impact the district assets. The district chose to profile the hazards shown in Table FD-2 due to the impact these hazards have upon their assets. Factors included during discussions by the district included the number of potential assets damaged, extent of damage, and length of time required for repairs (economic losses were also considered).

Additional information is found in the Risk Assessment for Region 1, Oregon Coast, Oregon SNHMP (2020).

National Flood Insurance Program (NFIP)

FEMA updated the Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRMs) in 2019 (effective October 18, 2019). The district is not a community which has authority to adopt and enforce floodplain management regulations for the areas within its jurisdiction.

There are no repetitive loss or severe repetitive loss properties owned or operated by the district. For specific information for communities within the district's service area see Volume I, Section 2 and the addenda for the city of Waldport (Volume II) for more information.

Vulnerability Assessment

Development and population forecasts are not expected to increase or decrease the impact of their profiled hazards.

The district faces significant hazard exposure across its facilities, particularly due to its coastal and riverine geography. Station 7200, located in Waldport, is the most at-risk asset. It lies within the tsunami inundation zone and is also situated in an area with high liquefaction potential, making it highly vulnerable to both a Cascadia Subduction Zone (CSZ) earthquake and a subsequent local tsunami. Structural damage and access issues are likely in such an event, potentially compromising emergency response capabilities.

Station 7300, located in Tidewater, is not exposed to tsunami risk but is susceptible to earthquake damage and landslides due to its inland, hilly terrain. These hazards could isolate the station or impair its operational capacity during a major seismic event.

Station 7400, in Alsea, appears to be the least vulnerable among the district's facilities. It is not located in any identified tsunami, flood, or landslide zones and has minimal exposure to wildfire or liquefaction risks, making it a potentially critical fallback location in a regional disaster.

Table FD-3 provides the ranking of hazards of concern based on total threat score and Table FD-4 shows hazard impact to the district's assets.

Hazard area extent and location maps are included in Attachment B. Information shown on the maps is for planning purposes, represents the conditions that exist at the map date, and is subject to change. Refer to the original source documentation to better understand the data sources, results, methodologies and limitations of each dataset presented.

2007 Rapid Visual Survey

Oregon began implementing seismic building codes in the 1970s, though more rigorous standards were not adopted until 1991 and further strengthened in the early 2000s. In 2007, the Oregon Department of Geology and Mineral Industries (DOGAMI) conducted a statewide seismic needs assessment, which included estimates of seismic vulnerability for public buildings in Lincoln County, such as schools and emergency services facilities. For more information click this link DOGAMI Report O-07-02, Statewide Seismic Needs Assessment.

Table FD-3 Hazard Identification and Impact

Hazard	Description of Impact	Total Threat Score
Windstorm	Severe wind events can down trees and power lines, blocking access along Highway 34 and other key routes. Past storms have isolated fire stations and cut off access to eastern parts of the district, delaying emergency response and requiring mutual aid from neighboring districts.	240
Wildfire	The district includes significant wildland-urban interface (WUI) areas, particularly along Highway 34 and in Tidewater and Five Rivers. Wildfires could threaten Station 73 and Station 74, as well as hundreds of homes, especially during peak tourist seasons when population density increases.	203
Earthquake (CSZ Event)	A major CSZ earthquake would likely cause widespread liquefaction, especially near Alsea Bay and along the Alsea River. Fire Station 72 is in a high liquefaction zone and could be severely damaged. Access to many parts of the district would be compromised due to bridge failures and landslides.	201
Local Tsunami	A local tsunami following a CSZ earthquake could inundate low-lying areas including Station 72, the Port of Alsea, and much of downtown Waldport. Rapid evacuation would be critical, but landslides and infrastructure damage could hinder movement to high ground.	201
Flood (Riverine)	Riverine flooding along the Alsea River and its tributaries can block access to rural areas like Tidewater and Five Rivers. Floodwaters may isolate residents and delay emergency services, especially during concurrent storm events.	199
Winter Storm	Ice and snow can block roads and damage power infrastructure, as seen in the 2024 storm that cut off access east of Milepost 9 on Highway 34. Fire stations may become inaccessible, and power outages can disrupt communications and emergency operations.	198
Drought	Extended drought conditions increase wildfire risk across the district's forested areas. Limited water availability could strain firefighting resources, especially in remote areas without reliable hydrant systems.	181
Landslide	Frequent landslides along Highway 34 and Barkley Road can block critical access routes to Stations 73 and 74. These events can isolate communities and delay emergency response, particularly during or after heavy rainfall or seismic activity.	180

Hazard	Description of Impact	Total Threat Score
Distant Tsunami	While less destructive than a local tsunami, a distant tsunami could still flood low-lying coastal areas, including parts of downtown Waldport and the Port of Alsea. Access to these areas may be restricted, and infrastructure could be damaged by wave action and debris.	125
Earthquake (Crustal)	Crustal earthquakes may cause localized damage to infrastructure and buildings, particularly older structures not built to modern seismic standards. Fire stations and bridges could be affected, impacting response capabilities.	99

Source: Central Oregon Coast FRD steering committee, 2025.

Table FD-4 Facilities Summary

Name/Number	Address	Identified Hazard Exposure										
		AQ	CE	DR	EQ	FL	LS	TS	VE	WF	WS	WT
Stations												
Station 72 – Main Station	125 NW Alsea Hwy, Waldport, OR 97394	X			X			X				
Station 73 – Tidewater	10096 E Alsea Hwy, Tidewater, OR 97390	X			X	X	X			X	X	X
Station 74 – Five Rivers	20341 Alsea Hwy, Tidewater, OR 97390	X				X				X	X	X

Source: Information provided by Central Oregon Coast FRD
Grey highlight indicates that the hazard does not impact the jurisdiction.

Table Key:
"X" – Facility may be exposed and may be impacted by the identified hazard per a visual inspection of the mapped hazard area
[blank] = facility exposure has not been assessed for this hazard

Hazard Descriptions:

AQ = Air Quality	EH = Extreme Heat	LS = Landslide	WF = Wildfire
CE = Coastal Erosion	EQ = Earthquake	TS = Tsunami	WS = Windstorm/Tornado
DR = Drought	FL = Flood	VE = Volcanic Event	WT = Winter Storm

Attachment A: Public Involvement Summary

Members of the Steering Committee provided edits and updates to the NHMP prior to the public review period as reflected in the final document. In addition, a survey was distributed that included responses from residents of the district (Volume II, Appendix F).

To provide the public information regarding the draft NHMP addendum, and provide an opportunity for comment, an announcement was provided from August 7 through 21, 2025 on the County's website and publicized by the district. Comments were reviewed and integrated into the NHMP as applicable. Additional opportunities for stakeholders and the public to be involved in the planning process are addressed in Volume II, Appendix B.

Various agencies and organizations contributed input through multiple channels, including comments on the draft. These groups include local and regional hazard mitigation agencies, development regulators, neighboring communities, businesses, academia, nonprofits, and community-based organizations serving underserved and socially vulnerable populations (see Volume II, Appendix B).

Steering Committee

Steering Committee members possessed familiarity with the district and how it is affected by natural hazard events. The Steering Committee guided the update process through several steps including goal confirmation and prioritization, action item review and development, and information sharing, to update the NHMP and to make the NHMP as comprehensive as possible. The Steering Committee met formally on the following dates:

Meeting #1: April 16, 2025 (virtually via Zoom)
During this meeting, the Steering Committee reviewed the previous NHMP, and were provided updates on hazard mitigation planning, the NHMP update process, and project timeline. The Steering Committee:

- Reviewed recent history of hazard events in the district.
- Reviewed and confirmed the County NHMP's mission and goals.
- Discussed the NHMP public outreach strategy.
- Reviewed and provided feedback on the draft risk assessment update including community vulnerabilities and hazard information.
- Reviewed and updated their existing mitigation strategy (actions).
- Reviewed and updated their implementation and maintenance program.

Meeting Attendees

- Convener, Jamie Mason, Fire Chief
- Wendy Rush, Office Administrator/Human Resources

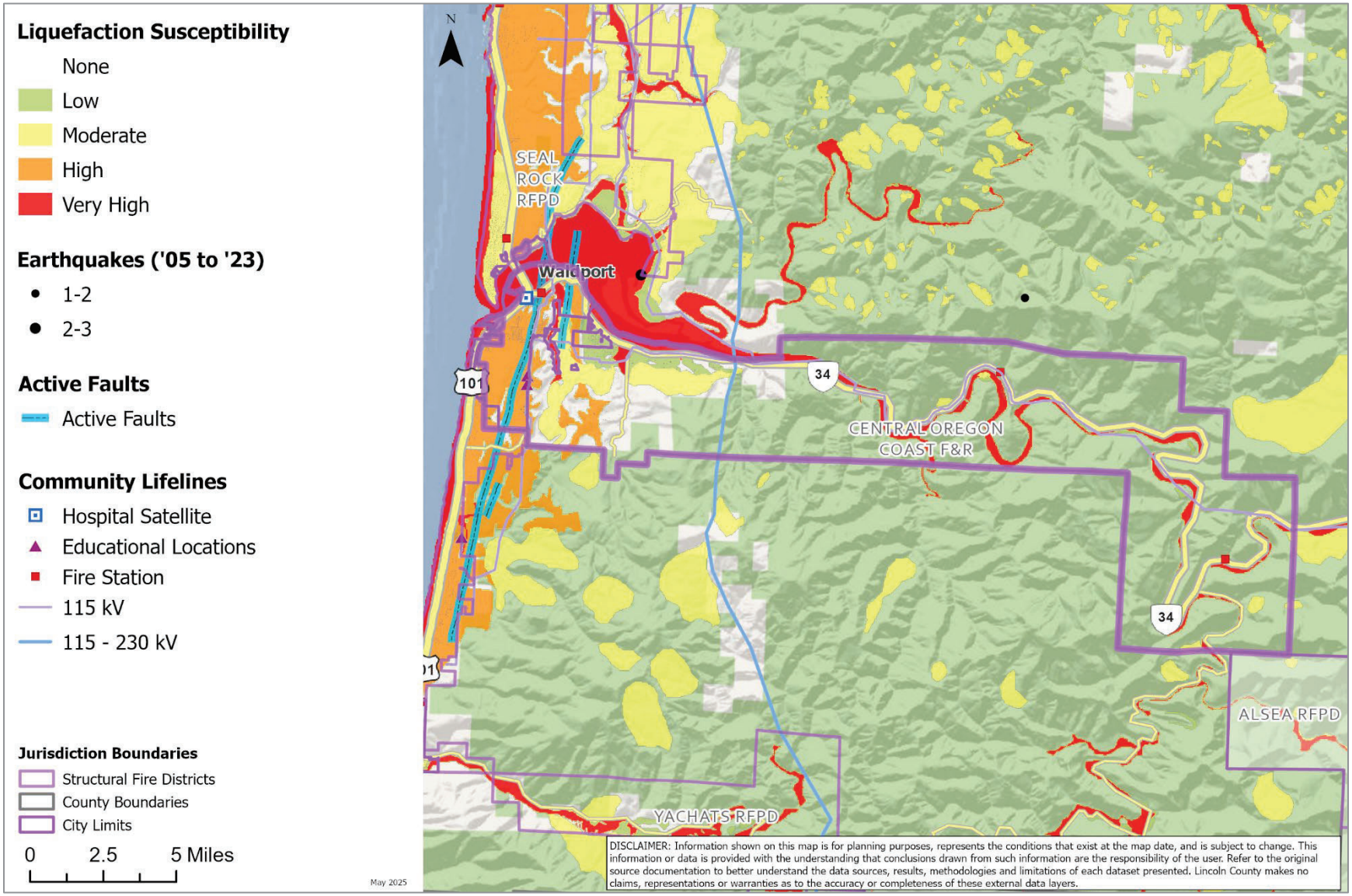
Meeting Summary

The meeting focused on developing the district's hazard mitigation strategies and reviewing its capabilities and vulnerabilities. Key findings included a heightened concern for wildfire risk due to increased probability and seasonal population surges, particularly during events like Beachcomber Days and the Blues Festival. Winter storms were also highlighted as a significant hazard, with past events cutting off access to key areas and stations. The district's infrastructure challenges, such as limited emergency power and access issues during storms, were emphasized, along with the need for seismic retrofits and improved volunteer firefighter recruitment and retention.

The meeting also reviewed the recently developed evacuation plan and developed mitigation actions, including enhancing water resources at the Tidewater Station, expanding Firewise education, and seeking funding for mass sheltering capabilities. The district's aging population and limited commercial base were noted as challenges to sustaining a robust volunteer force. The group discussed leveraging grants and partnerships, such as with OSFM and the Red Cross, to bolster preparedness and response capabilities. The next steps involve reviewing the draft addendum and preparing for the county-wide steering committee meeting.

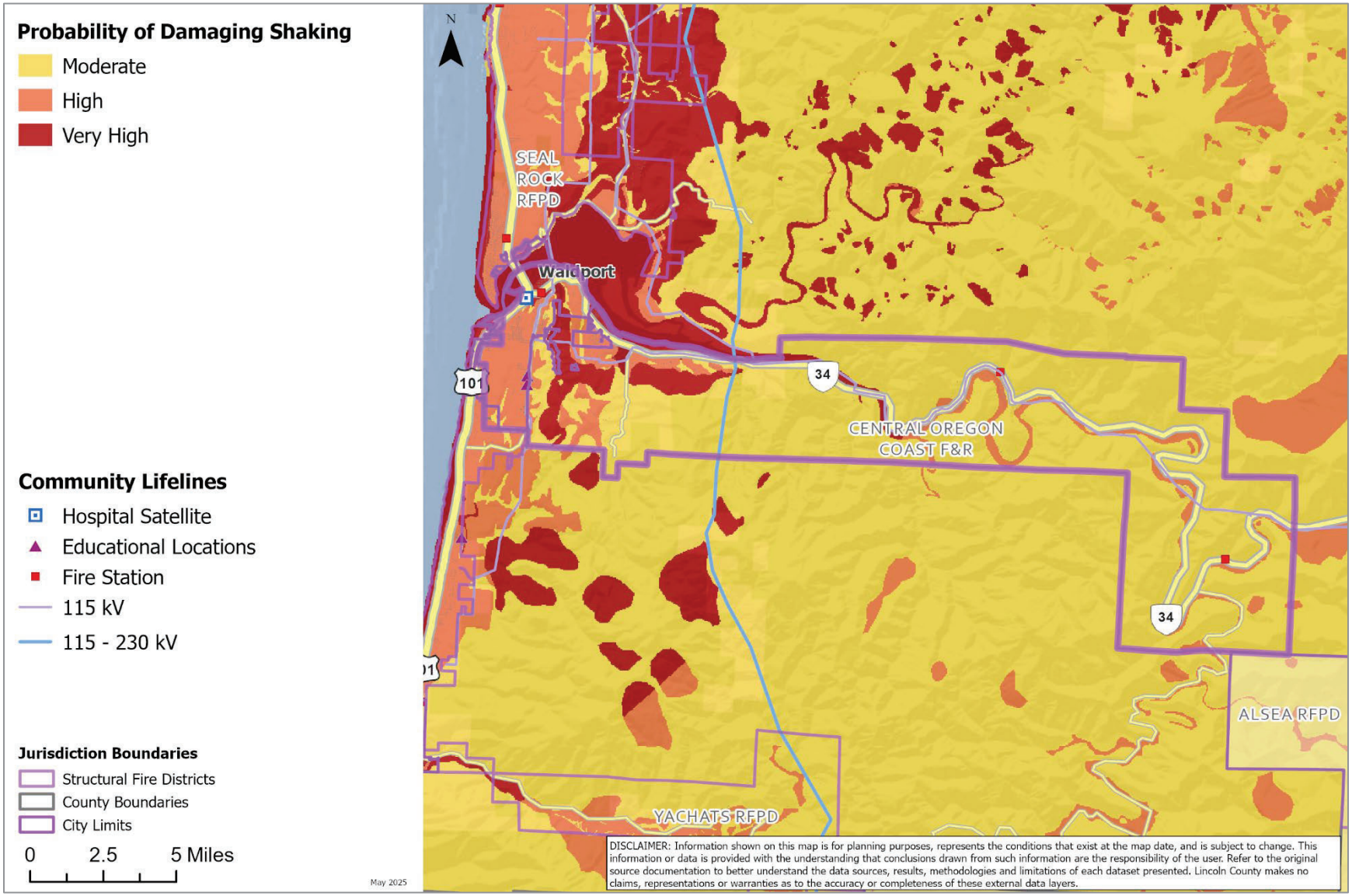
Attachment B: Hazard Maps

Map FD-2 Earthquake Liquefaction (Soft Soil) Hazard and Active Faults



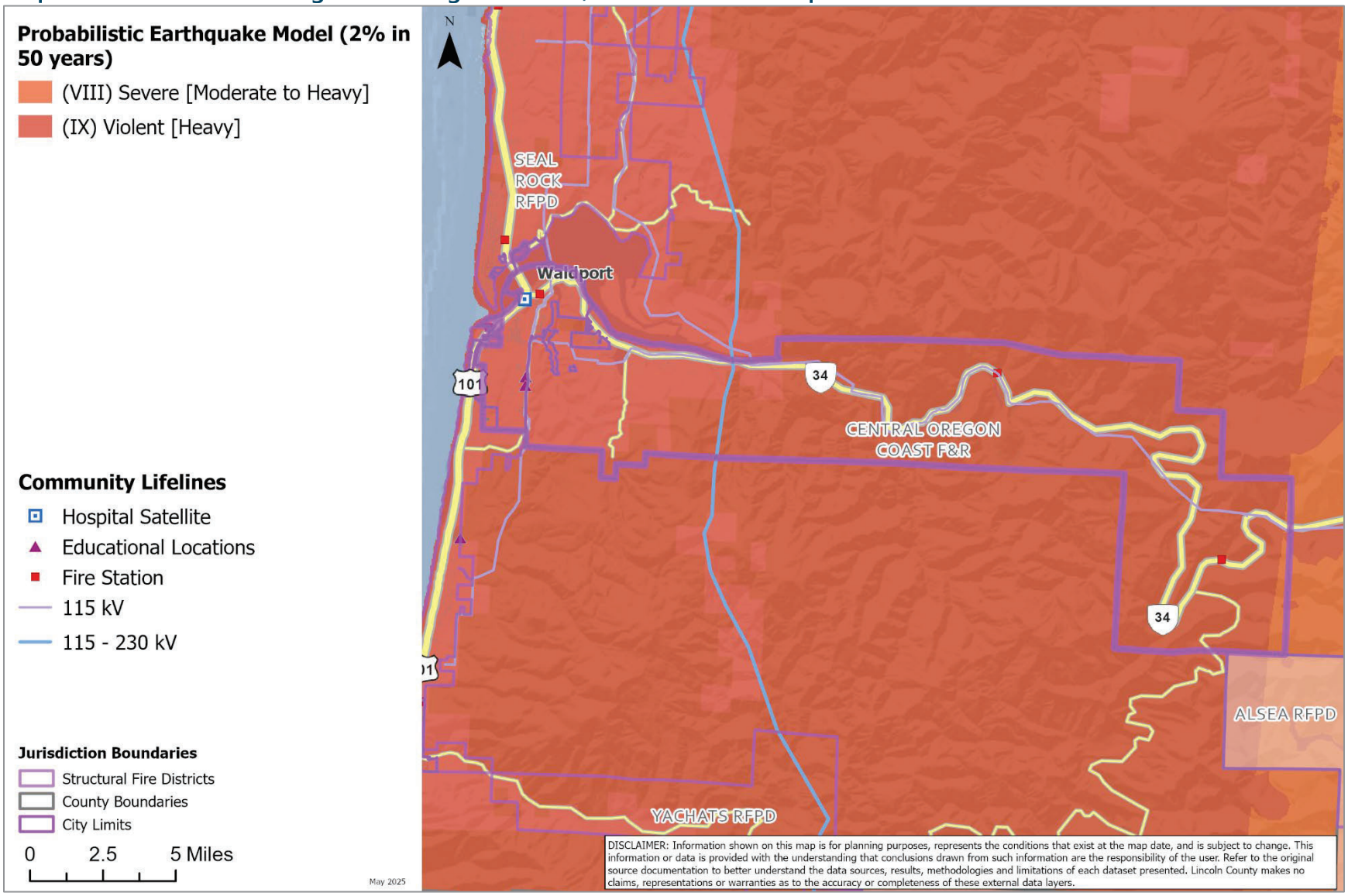
Source: Oregon Explorer: Map Viewer – To view map detail click hyperlink to left.

Map FD-3 Probability of Damaging Shaking



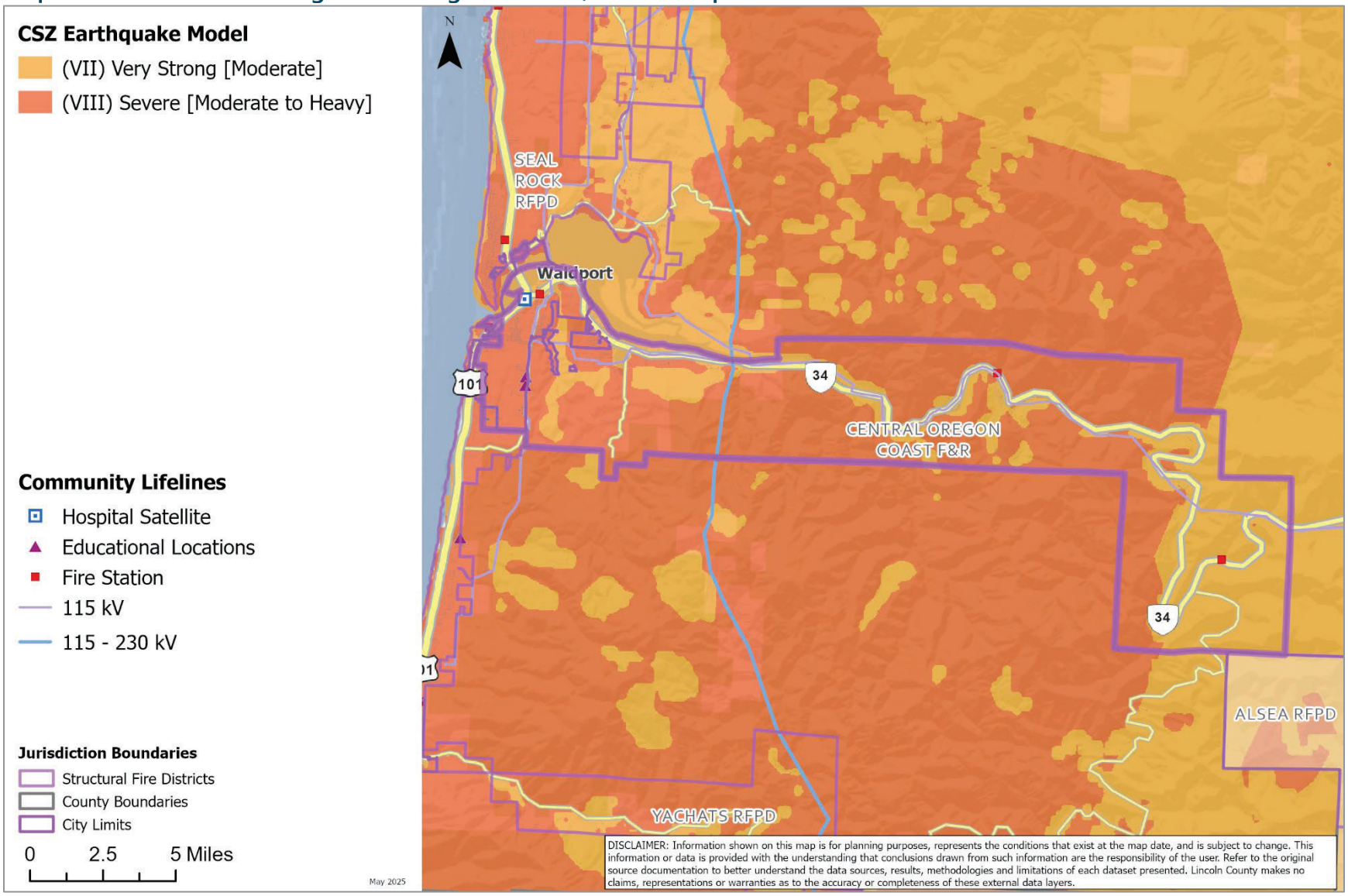
Source: Oregon Explorer: Map Viewer – To view map detail click hyperlink to left.

Map FD-4 Perceived Shaking and Damage Potential, Probabilistic Earthquake Model



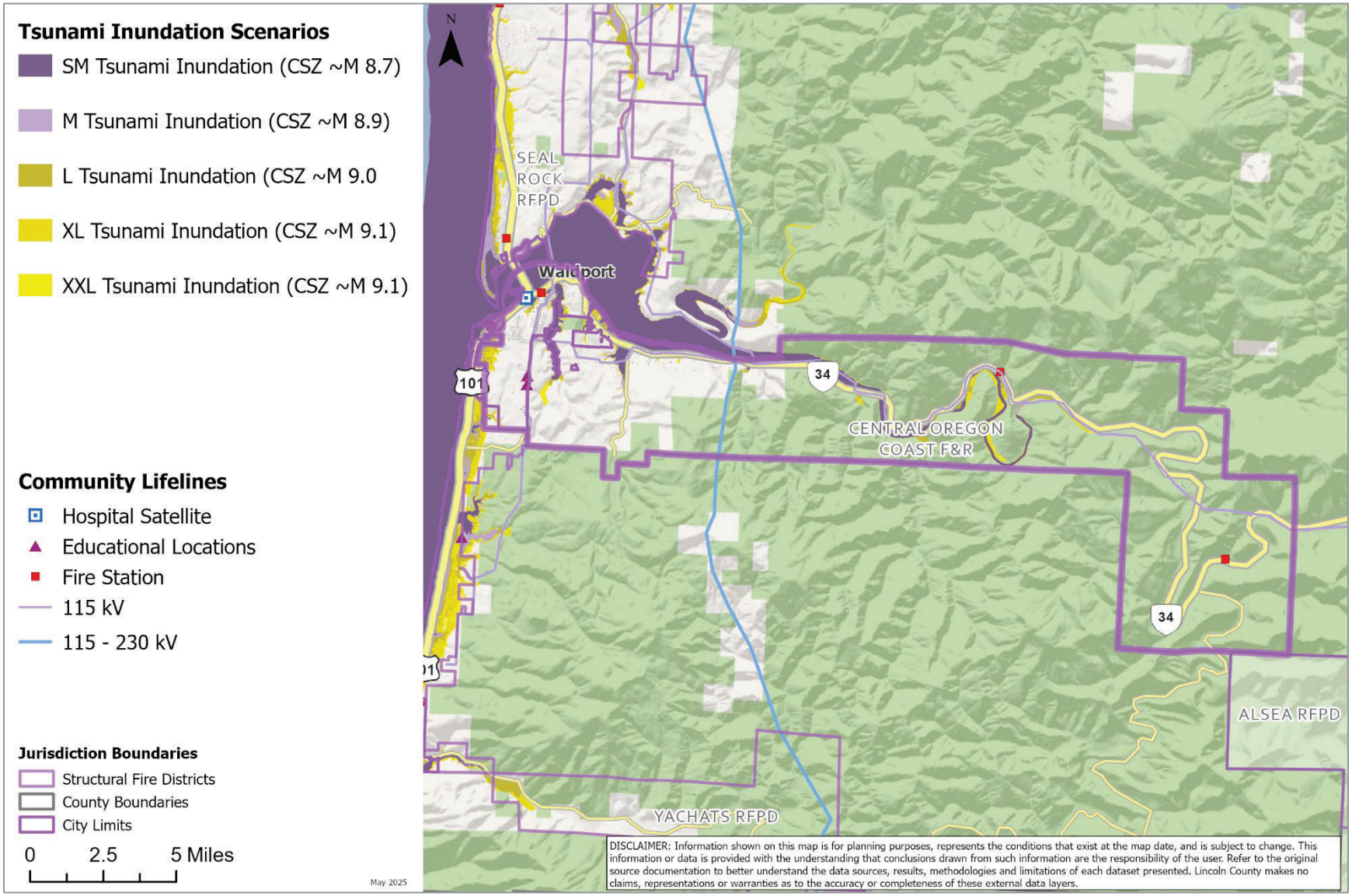
Source: Oregon Explorer: Map Viewer – To view map detail click hyperlink to left.

Map FD-5 Perceived Shaking and Damage Potential, CSZ Earthquake Model



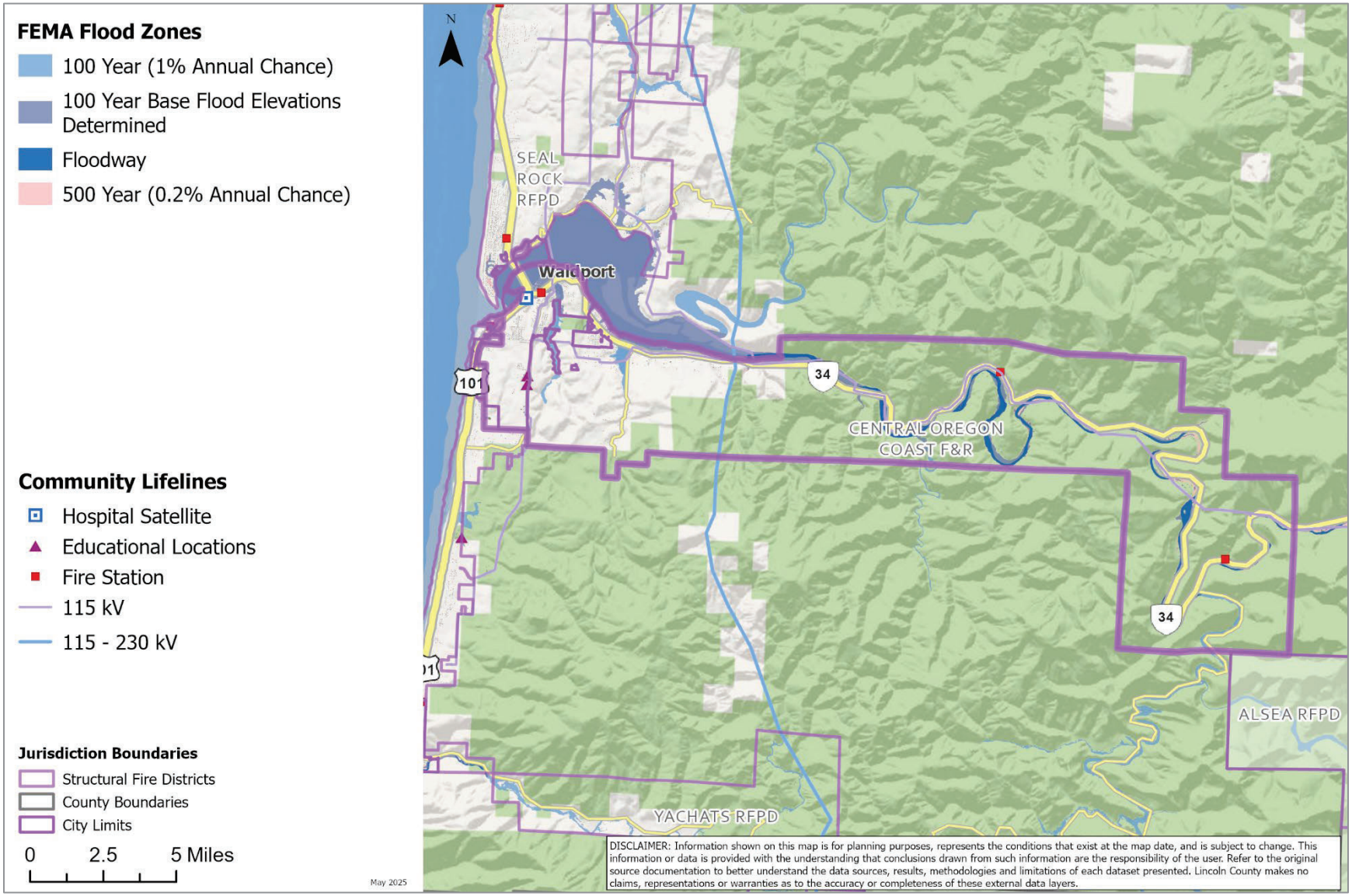
Source: Oregon Explorer: Map Viewer – To view map detail click hyperlink to left.

Map FD-6 Tsunami Inundation Scenarios



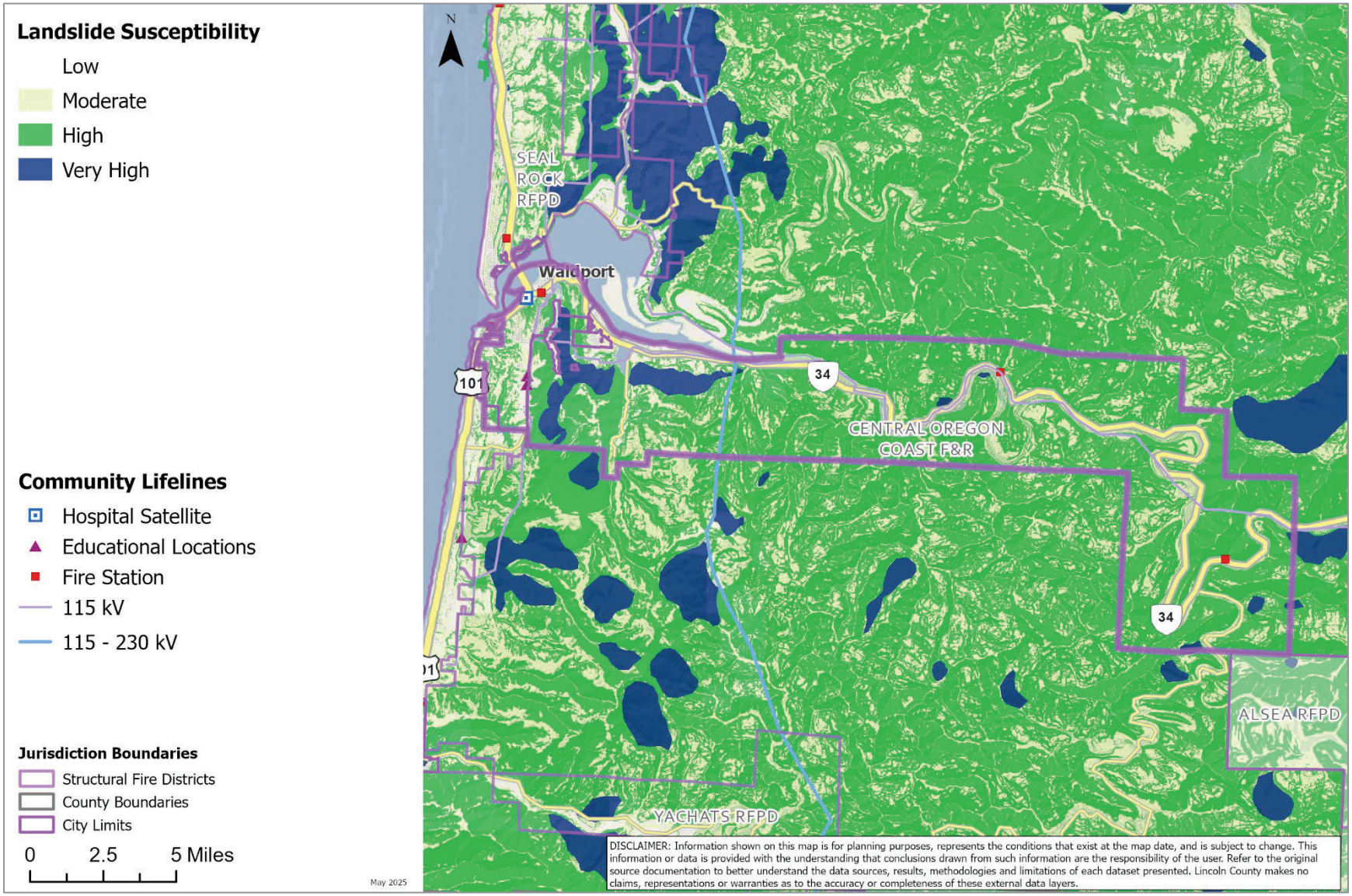
Source: Oregon Explorer: Map Viewer – To view map detail click hyperlink to left.

Map FD-7 Flood Hazard Zones (100- and 500-year floodplains)



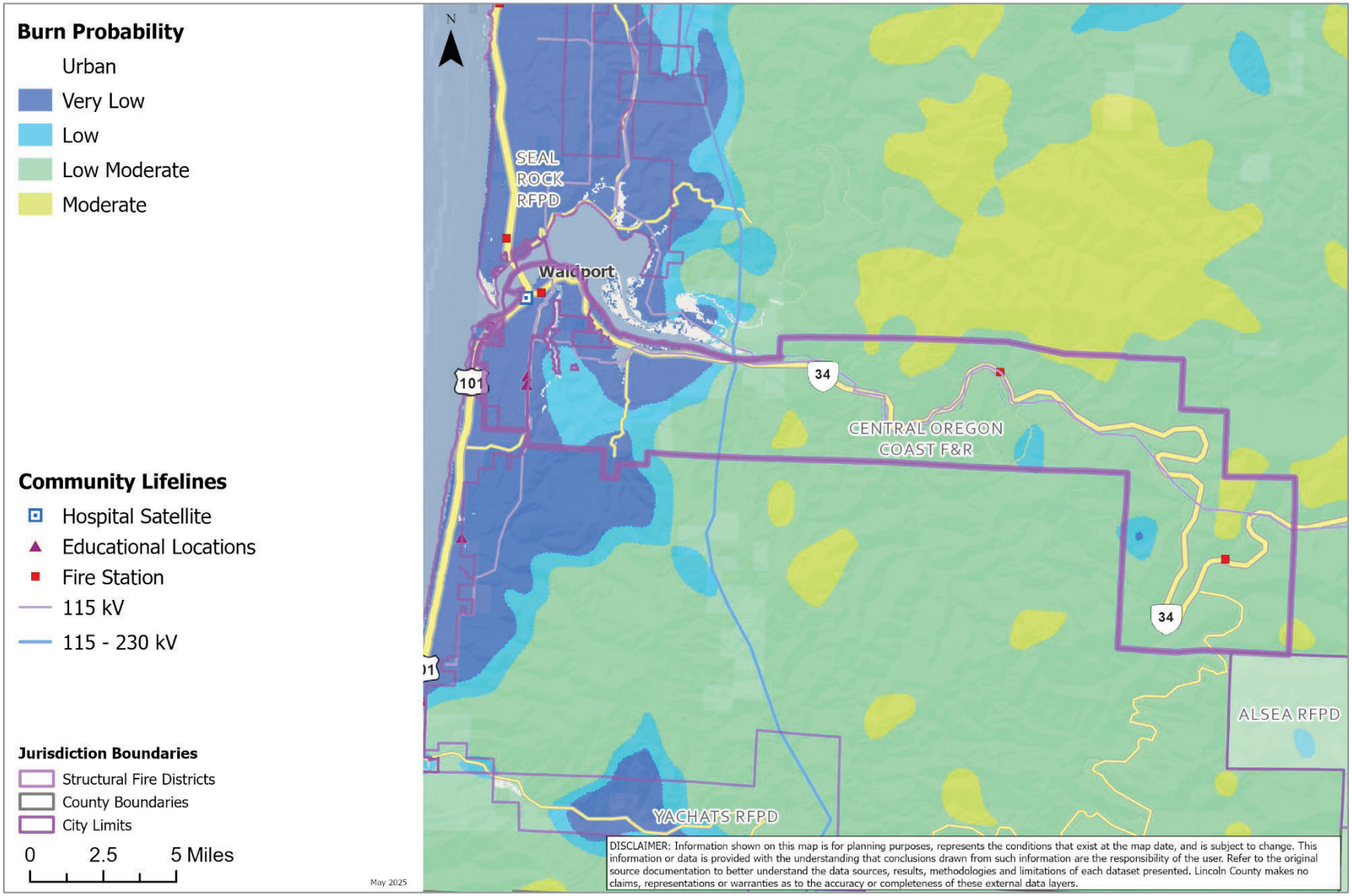
Source: Oregon Explorer: Map Viewer – To view map detail click hyperlink to left.

Map FD-8 Landslide Susceptibility Exposure



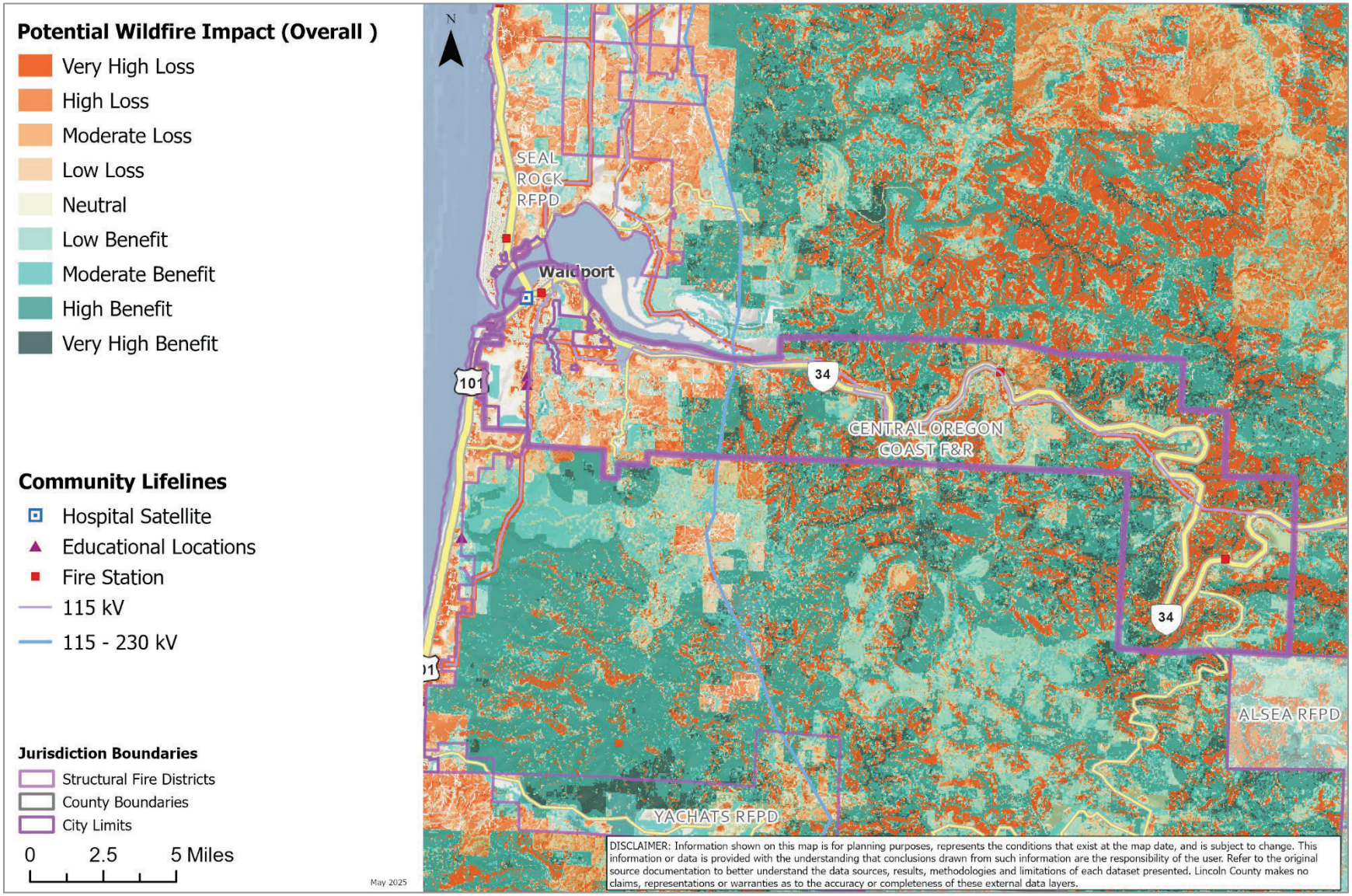
Source: Oregon Explorer: Map Viewer – To view map detail click hyperlink to left.

Map FD-9 Burn Probability and Fire History (1992-2022)



Source: Oregon Explorer: Map Viewer – To view map detail click hyperlink to left.

Map FD-10 Potential Wildfire Impact (Overall)



Source: PNW Quantitative Wildfire Risk Assessment (2023, layer name = icNVC), To view map detail click hyperlink to left..