

JACKSON COUNTY FIRE DISTRICT NO. 5



BOARD MEETING AGENDA

March 5, 2024

3:30 p.m. at Station 5

5811 S. Pacific Hwy, Phoenix, Oregon

REMOTE

<https://us02web.zoom.us/j/7827134557?pwd=MjJ0Y1Z0bXYya0RaekFNN0NWQ2pQdz09&omn=89642163068>

Dial In #: 2532050468 * Meeting ID: 782 713 4557 * Passcode: 8300

One tap mobile +12532050468

If a member of the public wishes to speak on an agenda item, please sign in on the Public Comment sheet and submit it to the Secretary of the Board. Jackson County Fire Dist. 5 (“District”), in complying with the Americans with Disabilities Act (“ADA”), requests individuals who require special accommodations to access, attend and/or participate in District Board meetings due to a disability, to please contact the District Office, (541) 535-4222, at least one business day prior to the scheduled Board meeting to ensure that the District may assist you.

1. CALL TO ORDER/ROLL CALL – 3:30 PM
2. PLEDGE OF ALLEGIANCE – 3:32 PM
3. CONFIRMATION OF AGENDA – 3:34 PM
4. EXECUTIVE SESSION – 3:35 ORS192.660(2)(f) – *TO CONSIDER INFORMATION AND RECORDS THAT ARE EXEMPT BY LAW FROM PUBLIC INSPECTION.*
5. STAFF REPORTS – 5:30 PM

Letter of Support – The Board of Directors will receive an update on the Talent Community Initiated Project appropriations request.
6. ACTION ITEMS – 5:35 PM
 - A. The Board of Directors will vote to adopt the Jackson County Fire District #5 Addendum to the Jackson County Natural Hazard Mitigation Plan.
 - B. The Board of Directors will vote to authorize the issuance of a line of credit or Tax Anticipation Note in an amount not to exceed \$3,000,000.00.
7. LOCAL 2596 CORRESPONDENCE – 5:40 PM
8. PUBLIC COMMENT – 5:45 PM
9. ADJOURNMENT – 6:00 PM

5811 South Pacific Highway Phoenix, OR. 97535

Phone (541) 535-4222 * Fax (541)535-4226

JACKSON COUNTY FIRE DISTRICT NO. 5



February 22, 2024

The Honorable Senator Ron Wyden
221 Dirksen Senate Office Building
Washington DC 20510

The Honorable Senator Jeff Merkley
531 Hart Senate Office Building
Washington DC 20510

SUBJECT: City of Talent Community Initiated Project Appropriations Request

Dear Senator(s)

Please consider this letter as serving to support the City of Talent Community Initiated Project Appropriations Request for funding to replace all of the Asbestos/Cement (AC) water pipe within the City's water distribution system at a cost estimated at \$2.0 million.

It is our understanding that approximately 30 per cent of the talent water distribution system consists of AC pipe, which has or will soon reach the end of its useful life. The City reports a sharp increase in AC pipe failures in recent years, which places the City's fire protection system resources in increasing jeopardy.

As you are painfully aware, Talent was severely damaged during the September 8, 2020 Almeda Fire (Oregon Wildfires and Straight Line Winds DR4562OR). The Rogue Valley including the City of Talent, continues to be at risk from the threat of wildfire which has been identified in the Jackson County Multi-Jurisdictional Natural Hazard Mitigation Plan.

As Fire Chief and an Incident Commander of the Almeda Fire, I can confirm that partner agencies and cooperators in the region continue to use available resources to mitigate conditions and prepare for future events. Hazardous fuel removal, weight of fire attack and **a hardened and reliable water delivery system** remain key elements of that preparation. Please feel free to reach out to me if you require further assistance or information.

We urge you to support full funding for this appropriations request.


FIRE CHIEF

5811 South Pacific Highway Phoenix, OR. 97535

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Jackson County Fire District No. 5
MEMORANDUM

Date: MARCH 05, 2024
To: BOARD of DIRECTORS
From: CHARLES HANLEY, Fire Chief *CH*
Subject: Adoption of JCFD#5 Addendum to the Jackson County NHMP

QUESTION

Should the Board of Directors of Jackson County Fire District No.5 adopt the Jackson County Fire District #5 Addendum to the Jackson County NHMP?

BACKGROUND

Jackson County, through the University of Oregon, developed a Multi-Jurisdictional Natural Hazard Mitigation Plan. An NHMP is required under the Disaster Management Act 2000 (DMA2000) and Title 44 CFR 201. 6 (c) 5 for an agency to be eligible for federal funds for non-disaster and disaster mitigation project grants. Recovery projects related to the Almeda Fire are examples of disaster mitigation projects grants. The current document is the first iteration and is subject to amendments. All entities within Jackson County Fire District No.5 boundaries, including Phoenix, Talent and Jackson County have adopted or will adopt the NHMP and/or the jurisdictions Addendum to the Jackson County NHMP.

RECOMMENDATION

It is the recommendation of Staff, that the Board of Directors of Jackson County Fire District No.5 adopt the Jackson County Fire District #5 Addendum to the Jackson County NHMP.

ENCLOSURE(S):

JCFD5 Addendum to JACO NHMP

Jackson County Fire District #5 Addendum to the Jackson County NHMP



Photos courtesy of Oregon State Archives

Effective:

March 6, 2024-February 28, 2029

Prepared for
Jackson County Fire District #5
5811 South Pacific Ave.
OR 97535

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



Institute for Policy
Research and Engagement

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Introduction

Purpose

This is the first iteration of the Fire District #5 addendum to the Jackson County Multi-Jurisdictional Natural Hazard Mitigation Plan (MNHMP, NHMP). This addendum supplements information contained in Volume I (Basic Plan), which serves as the NHMP foundation and Volume II (Appendices), which provide additional information. This addendum meets the following requirements:

- Multi-Jurisdictional **Plan Adoption** §201.6(c)(5),
- Multi-Jurisdictional **Participation** §201.6(a)(3),
- Multi-Jurisdictional **Mitigation Strategy** §201.6(c)(3)(iv) and
- Multi-Jurisdictional **Risk Assessment** §201.6(c)(2)(iii).

Fire District #5 adopted their addendum to the Jackson County Multi-jurisdictional NHMP on **March 6**, 2024. FEMA Region X approved the Jackson County NHMP on **[date]**, 2024 and Fire District #5’s addendum on **[date]**, 2024. With approval of this NHMP, Fire District #5 is now eligible for non-disaster and disaster mitigation project grants through **February 28**, 2029.

NHMP Process, Participation and Adoption

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

In addition to establishing a comprehensive District level mitigation strategy, the Disaster Mitigation Act of 2000 (DMA2K), and the regulations contained in Title 44 CFR Part 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 Fire District #5 will gain eligibility for non-disaster and disaster mitigation project grants.

The Oregon Partnership for Disaster Resilience (OPDR) at the University of Oregon’s Institute for Policy Research and Engagement (IPRE) partnered with the Oregon Department of Emergency Management (OEM), Jackson County, and Fire District #5 to develop this NHMP. This project is funded through the Federal Emergency Management Agency’s (FEMA) Hazard Mitigation Grant Program. Members of the Fire District #5 NHMP steering committee also participated in the County NHMP update process (Volume II, Appendix B).

By creating a NHMP, locally adopting it, and having it approved by FEMA, Fire District #5 will gain eligibility for FEMA Hazard Mitigation Assistance grant program funds.

The Jackson County NHMP and Fire District #5 addendum are the result of a collaborative effort between residents, public agencies, non-profit organizations, the private sector, and regional organizations. A project steering committee guided the process of developing the NHMP.

Convener and Committee

The Senior Engineer served as the designated convener of the NHMP development and will take the lead in implementing, maintaining, and updating the addendum to the Jackson County NHMP in collaboration with the designated convener of the Jackson County NHMP (Emergency Manager).

Representatives from the Fire District #5 steering committee met formally and informally, to discuss development of their addendum (Volume II, Appendix B). The steering committee reviewed and developed Fire District #5's addendum, with particular focus on the NHMP's risk assessment (hazards, community vulnerabilities, and capabilities) and mitigation strategy (action items).

The addendum reflects decisions made at the designated meetings and during subsequent work and communication with Jackson County Emergency Management and the OPDR.

The Fire District #5 Steering Committee was comprised of the following representatives:

- Convener, Charles Hanley, Fire Chief
- Aaron Bustard, Assistant Chief
- Jennifer Snook, Chief of Police, Talent
- Joe Slaughter, Community and Economic Development Director, Phoenix
- Steve Maziarski, Battalion Chief
- David Meads, Captain
- Mike Winters

The steering committee was closely involved throughout the development of the NHMP and served as the local oversight body for the NHMP's development.

NHMP Implementation and Maintenance

The Board of Directors will be responsible for adopting the Fire District #5 addendum to the Jackson County NHMP. This addendum designates a Steering Committee and a convener to oversee the development and implementation of action items. Because the district addendum is part of the County's multi-jurisdictional NHMP, the district will look for opportunities to partner with the County. Fire District #5's steering committee will convene after adoption of the NHMP addendum on an annual schedule. The County is meeting on a semi-annual basis and will provide opportunities for the cities and special districts to report on NHMP implementation and maintenance during their meetings. The convener will be responsible for assembling the steering committee.

The steering committee 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 during the year.

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.

Fire District #5 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 Natural Hazard Mitigation Plan’s recommendations are consistent with the goals and objectives of Fire District #5’s existing plans and policies. Where possible, Fire District #5 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.

Fire District #5 currently has the following plans and programs that relate to natural hazard mitigation. For a complete list visit Fire District #5’s [website](#).

- Strategic Plan
- Facilities Master Plan
- Standard of Care
- [Rogue Valley Integrated Community Wildfire Protection Plan](#) (RVIFP, updated 2019)

During the development of this NHMP District plans, including the strategic plan, were reviewed to identify possible natural hazard mitigation strategies (action items).

Capability Assessment

The Capability Assessment identifies and describes the ability of Jackson County Fire District #5 to implement the mitigation strategy and associated action items. Capabilities can be evaluated through an examination of broad categories, including existing authorities, policies, programs, funding, and resources.

Existing Authorities

Hazard mitigation can be executed at a local scale through three (5) methods: integrating hazard mitigation actions into other local planning documents (i.e., plan integration), adopting building and/or fire codes that account for best practices in structural hardening and fire resistance, and codifying land use regulations and zoning designations that prescribe mitigation into development requirements. The extent to which a municipality, district, or multi-jurisdictional effort leverages these approaches is an indicator of that community's capabilities.

2018 -2023 Business Plan

The primary planning document for District 5 is their Business Plan. This plan identifies 4-6 strategies for each planning year, including a Facility Master Plan (leading to new Phoenix Government and Public Safety Center and a rebuilt Emigrant Lake Fire Station), equipment and vehicle replacement, Fire Code adoption by reference, recruitment and staffing.

Structural and Fire Codes

The Oregon Legislature recently adopted updated building codes for both residential (2021 adoption) and commercial structures (2022) since the last update of this Plan. These building codes are based on the 2021 version of the International Building Code, International Fire Code, and International Existing Building Code. Jackson County Building Division administers the Oregon Structural Specialty Codes, Mechanical Specialty Code, Electrical Specialty Code, and the Plumbing Specialty Code, as well as other codes and ordinances adopted by the Cities of Talent and Phoenix. Jackson County Fire District #5 administers the 2022 edition of the Oregon Fire Code (ORS 476.060).

Together, they ensure that both new residential and commercial structures are built according to the latest seismic and wind hardening standards in addition to requiring fire resistant building materials for those structures constructed in proximity or within the WUI.

Construction in the unincorporated rural areas of Jackson County is limited by lack of municipal water supplies and Jackson County zoning restrictions. The Jackson County Land Development Ordinance contains special provisions for development in identified wildfire hazard areas. All development must comply with the provisions of city and County zoning ordinances, building codes, and fire codes. The District participates in the development review and approval process with all three cities and the county.

Policies and Programs

This Plan directs Jackson County Fire District #5 and Jackson County to explore integration into other planning documents and processes. Jackson County Fire District #5 has made significant progress in integrating the NHMP into its portfolio of planning processes and programs over the last five years.

Administration

The Jackson County Fire District #5 Board of Directors has the responsibility of developing and adopting the annual department budget. Integrating hazard mitigation goals and projects into the annual budget is key to implementing the plan. The Board tries to broadly address resilience needs while it determines departmental priorities and looks for multiple-impact projects

wherever possible. They also work with staff to apply for federal and state grant funding to pursue larger projects that are outside of general funding capacity.

Community Wildfire Protection Plan

The Jackson County Community Wildfire Protection Plan (CWPP) will be incorporated into this Plan as a functioning annex.

Firewise

In the last five years, District 5 has recognized and provided support for four new Firewise communities, including:

- Lazy T Ranch
- Tyler Creek
- High Wood
- Anderson Creek

Community Emergency Response Team (CERT)/Ashland Mine/Fire Brand Collective/Lomakatsi Residents within the jurisdiction of JCFD 5 participate in the City of Ashland CERT. Citizens have previously received training in first aid, disaster preparedness, and fire safety. JCFD5 is working to reestablish local CERT, additional Firewise communities in the Ashland Mine area, home assessments using Survey 123, and continuing and developing partnerships with Lomakatsi and Fire Brand Collective.

Personnel

The following Jackson County Fire District #5 personnel have assignments related to natural hazard mitigation planning and implementation:

Emergency Management: Fire Chief

Public Information Officer: Fire Chief

Grant writing (for Public Works or emergency management): Fire Chief

Capital improvement planning: Fire Chief

Capital improvement execution: Fire Chief

These personnel integrate hazard mitigation and resilience planning into their greater work programs to the best of their abilities. However, there is limited capacity to expand upon their capabilities or work loads.

Capital Projects

Jackson County Fire District #5 has implemented recommendations from the last NHMP into its capital improvement projects over the last 5 years, including:

- Seismic rehabilitation project on Fire Station 2 (now numbered Fire Station 4)

- New Code Compliant City of Phoenix Government and Public Safety Center (includes Fire Station 3) which replaced fire station damaged by Almeda Fire in 2020.

Ongoing: JCFD5 Fire Station No. 4 (40 Neil Creek Road, Ashland) is undergoing seismic rehabilitation in 2023/24 and has been temporarily relocated to the 3300 block of Siskiyou Boulevard (Completed February 2024).

District 5 is also currently administering a FEMA grant sponsored Firefighter Apprenticeship Program.

Capital Resources

Jackson County Fire District #5 maintains three (3) fully staffed fire stations located in the communities of Phoenix, Talent, and unincorporated Ashland. **District #5 leases one communication tower on Table Mountain. Critical facilities with power generators include Fire Station 5, Fire Station 4, and Fire Station 3.**

Collaborations and Partnerships

The Fire District enjoys a cooperative relationship with the neighboring fire and forest agencies including: Medford Fire & Rescue, Medford Rural Fire District No.2, Jackson County Fire District No.3, Ashland Fire & Rescue, US Forest Service, BLM, Oregon Department of Forestry, and the California Department of Forestry and Fire Protection (CALFire) JCFD 5 is in the process of annexing the Colestin Rural Fire Protection District.

Jackson County Fire District No.5, Ashland Fire & Rescue, Medford Fire & Rescue, and Medford Rural Fire District No. 2 participate in a regional cooperative arrangement that provides (3) three 24 hour battalion chiefs and staffed fire resources that can respond to each of the respective jurisdictions.

In addition, Jackson County public safety agencies have linked their communication systems through a “joint agency” central dispatch center called ECSO (Emergency Communications of Southern Oregon). These efforts not only improve interoperability and the capability of emergency radios but locate and dispatch the closest resources to a call for service.

Findings

Several important findings from this capability assessment informed the design of the Plan’s mitigation strategy and aided in prioritizing action items.

Staffing Limitations and Capacity

Jackson County Fire District No.5 staff are assigned hazard mitigation responsibilities as a part of their larger job responsibilities. Limited capacity reduces the breadth of the programming the district can undertake in any year. The District relies upon its relationships with the County and other cities within its region to expand its operations.

Reliance upon outside funding streams and local match requirements

Jackson County Fire District #5 operates on a limited budget. Grants and limited annual revenue are directed to sustain the marketing of resilience programs. But there are few opportunities for

using local financial resources to implement more extensive hazard mitigation work. They lean heavily upon state and federal grant funds as the primary means for securing mitigation funding.

Leveraging Partnerships with Public and Nonprofit Entities

Regional planning displayed in Community Wildfire Protection Planning process demonstrates the District’s ability to effectively share information and identified priority needs.

Mitigation Strategy

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

Fire District #5’s mitigation strategy (action items) was developed during the 2024 NHMP planning process. The steering committee assessed risk, identified potential issues, and developed a mitigation strategy (action items). Fire District #5 developed actions specific to their community after first reviewing a list of recommended actions developed by the County or recommended by OPDR.

Mitigation Successes

Fire District #5 has several examples of hazard mitigation including the following projects funded through FEMA [Hazard Mitigation Assistance](#) and the Oregon Infrastructure Finance Authority’s [Seismic Rehabilitation Grant Program](#)¹.

FEMA Funded Mitigation Successes

- None to date

Seismic Rehabilitation Grant Program Mitigation Successes

- 2021: Station 4 Seismic Rehab, Jackson County Fire District #5 (\$1,630,515)

Other Mitigation Successes

- 2023: Wildfire Mitigation (defensible space, fuels reduction equipment) – Oregon State Fire Marshal (\$247,600)
- March 2024: Station 3 Reconstruction as Phoenix Public Safety Center (\$19.4 million, Oregon House Bills 5006 and 5202, FEMA matching funds). New building includes city hall, fire station, and police station. Serves as emergency operations center and community learning center (in-service training, CPR, CERT, public meetings, etc.)

Action Items

Table FD5-1 documents the title of each action along with, the lead organization, partners, timeline, cost, and potential funding resources.

¹ The Seismic Rehabilitation Grant Program (SRGP) is a state of Oregon competitive grant program that provides funding for the seismic rehabilitation of critical public buildings, particularly public schools, and emergency services facilities.

Table FD5-1 Action Items

Action Item #	Mitigation Actions	Potential Funding Resources	Lead	Partners	Timeline	Cost
Multi-Hazard Mitigation Strategies						
1.1	Relocate district facility located at Emigrant Creek Road and Dead Indian Memorial Road.	District Funding Resources	District Administration	N/A	M	H
1.2	Construct fire facility for fire protection for I-5 area at Oregon border.	District Funding Resources	District Administration	N/A	L	H
1.3	Construct fire facility for fire protection in Phoenix.	District Funding Resources	District Administration	City of Phoenix	S	H
1.4	Co-locate with Talent Irrigation District and remodel existing fire station for a new emergency operations center (EOC).	District Funding Resources, Talent Irrigation District Funding	District Administration	Talent Irrigation District	L	H
1.5	Continue to investigate fire prevention and community outreach options, as capacity allows.	District Funding Resources	District Administration	Jackson County (JaCo) Emergency Management, Cities, Media	O	L
1.6	Consider value engineering and leasing space on existing towers to improve communications signals and study additional tower siting.	District Funding Resources, Utility Partners	District Administration	JaCo Emergency Management, Utility Partners	M	L-M
1.7	Deploy ruggedized and reliable communication tools, including portable radios and tablets, to emergency responders.	District Funding Resources, FEMA HMA	District Administration	JaCo Emergency Management, Cities, OEM	M	L-M
1.8	Support development of redundancy in 911 and civilian communication networks.	District Funding Resources, FEMA HMA	District Administration	JaCo Emergency Management, Cities	O	H

Action Item #	Mitigation Actions	Potential Funding Resources	Lead	Partners	Timeline	Cost
1.9	Develop sustainability of emergency response service provision in rural service areas by hardening critical roadways against hazards.	District Funding Resources, FEMA HMA	District Administration	JaCo Emergency Management, Roads; ODOT	O	H
1.10	Develop emergency coordinator position to service Talent, Phoenix, and Fire District #5.	District Funding Resources	District Administration	Cities of Phoenix and Talent	M	H
1.11	Collaborate with City and County efforts in addressing NHMP priorities.	District Funding Resources, FEMA HMA	District Administration	JaCo Emergency Management, Cities, OEM	O	L
1.12	Develop a centralized location for integration of video and incident analytics in support of incident management.	District Funding Resources	District Administration	JaCo Emergency Management, Cities, RVCOG	S	L-M
1.13	Work with regional partners to identify current capabilities and research options to establish a disaster registry and to secure an early warning system (EWS).	District Funding Resources	District Administration	JaCo Emergency Management, Cities, RVCOG	M	L
1.14	Procure watercraft and necessary tools to integrate watercraft response capabilities into District services.	District Funding Resources	District Administration	JaCo Emergency Management, Cities	M	H
1.15	Conduct ICS training and simulations for stakeholders and leadership of service area.	District Funding Resources	District Emergency Coordinator	JaCo Emergency Management, Cities, FEMA	O	L
1.16	Conduct Standards of Cover and deployment analysis for disaster response.	District Funding Resources	District Administration	JaCo Emergency Management,, Cities	O	L
1.17	Establish Local Emergency Planning Committee (LEPC).	District Funding Resources	District Emergency Coordinator	JCFD#3, JaCo Emergency Management,	O	L

Action Item #	Mitigation Actions	Potential Funding Resources	Lead	Partners	Timeline	Cost
Air Quality Mitigation Strategies						
2.0	The steering committee, using available local resources, will study this hazard further during the implementation and maintenance phase of this NHMP, seeking to identify cost effective actions that might be implemented to reduce community vulnerability.					
Drought Mitigation Strategies						
3.0	Extend emergency water storage beyond irrigation season to be available during fire season and shoulder seasons.	District Funding Resources, FEMA, OWRD	District Administration	FEMA, OWRD	S	L
Earthquake Mitigation Strategies						
4.0	The steering committee, using available local resources, will study this hazard further during the implementation and maintenance phase of this NHMP, seeking to identify cost effective actions that might be implemented to reduce community vulnerability.					
Emerging Infectious Disease Mitigation Strategies						
5.0	Research and obtain personal protective equipment (PPE) reserves for emerging infectious disease.	District Funding Resources, FEMA, OHA	District Administration	JaCo Emergency Management	S	M
Flood Mitigation Strategies						
6.0	The steering committee, using available local resources, will study this hazard further during the implementation and maintenance phase of this NHMP, seeking to identify cost effective actions that might be implemented to reduce community vulnerability.					
Landslide Mitigation Strategies						
7.0	The steering committee, using available local resources, will study this hazard further during the implementation and maintenance phase of this NHMP, seeking to identify cost effective actions that might be implemented to reduce community vulnerability.					
Severe Weather (Extreme Heat, Windstorm, Winter Storm) Mitigation Strategies						
8.0	The steering committee, using available local resources, will study this hazard further during the implementation and maintenance phase of this NHMP, seeking to identify cost effective actions that might be implemented to reduce community vulnerability.					
Volcanic Event Mitigation Strategies						
9.0	The steering committee, using available local resources, will study this hazard further during the implementation and maintenance phase of this NHMP, seeking to identify cost effective actions that might be implemented to reduce community vulnerability.					

Action Item #	Mitigation Actions	Potential Funding Resources	Lead	Partners	Timeline	Cost
Wildfire Mitigation Strategies						
10.1	Acquire emergency water supply tanks for fire stations and other locations around the district.	District Funding Resources, FEMA HMA, CWDG, USDA	District Administration	JaCo Emergency Management, Cities	M	H
10.2	Locate high-pressure fill sites to access Talent Irrigation District water supply.	District Funding Resources, FEMA HMA, CWDG	District Administration	Talent Irrigation District	M	L-H

Source: Fire District #5 NHMP Steering Committee, 2023

Cost: L – Low (less than \$50,000), M - Medium (\$50,000-\$100,000), H - High (more than \$100,000)

Timing: O-Ongoing (continuous), S-Short (1-2 years), M-Medium (3-5 years), L-Long (5 or more years)

Priority Actions: Identified with **bold** text and **orange** highlight

Risk Assessment

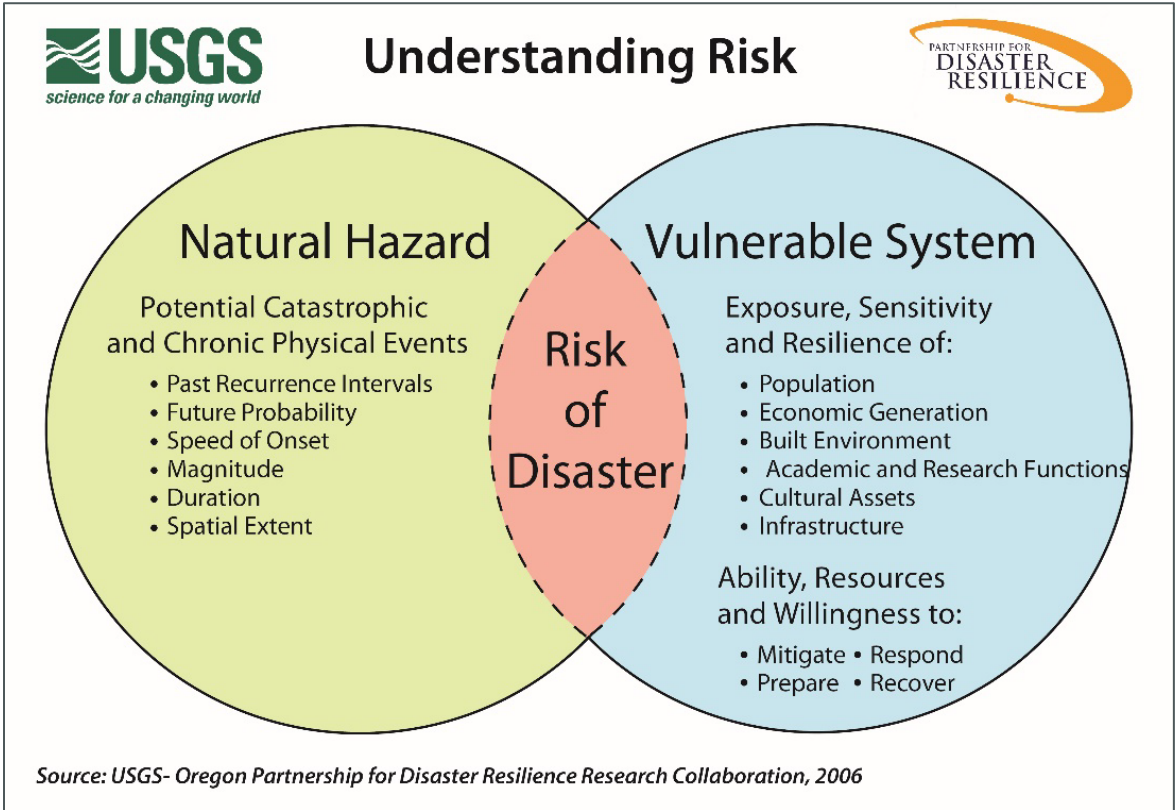
This section of the NHMP addendum addresses 44 CFR 201.6(b)(2) - Risk Assessment. In addition, this chapter can serve as the factual basis for addressing Oregon Statewide Planning Goal 7 – Areas Subject to Natural Hazards.

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 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, Sections 2 and 3. The risk assessment process is graphically depicted in Figure FD5-1. Ultimately, the goal of hazard mitigation is to reduce the area of risk, where hazards overlap vulnerable systems.

Figure FD5-1 Understanding Risk



Hazard Analysis

The Fire District #5 steering committee developed their hazard vulnerability assessment (HVA), using the County’s HVA (Volume II, Appendix C) as a reference. Changes from the County’s HVA were made where appropriate to reflect distinctions in vulnerability and risk from natural hazards unique to Fire District #5, which are discussed throughout this addendum.

Table FD5-2 shows the HVA matrix for Fire District #5 listing each hazard listed in order of rank from high to low. For local governments, conducting the 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.

Three chronic hazards (wildfire, emerging infectious disease, and winter storm) and a catastrophic hazard (Cascadia Subduction Zone earthquake) rank as the top hazard threats to Fire District #5 (Top Tier). Windstorm, extreme heat event, air quality, and drought comprise the next highest ranked hazards (Middle Tier), while flood, landslide, crustal earthquake, and volcanic event hazards comprise the lowest ranked hazards (Bottom Tier).

Table FD5-2 Hazard Analysis Matrix

Hazard	History	Vulnerability	Maximum Threat	Probability	Total Threat Score	Hazard Rank	Hazard Tiers
Wildfire	16	25	100	70	211	#1	Top Tier
Emerging Infectious Disease	16	40	100	49	205	#2	
Earthquake - Cascadia	2	50	100	49	201	#3	
Winter Storm	20	50	60	70	200	#4	
Windstorm	20	50	50	70	190	#5	Middle Tier
Extreme Heat Event	20	25	70	70	185	#6	
Air Quality	18	40	60	63	181	#7	
Drought	20	25	50	63	158	#8	
Flood	16	25	50	63	154	#9	Bottom Tier
Landslide	4	20	40	70	134	#10	
Earthquake - Crustal	2	25	50	21	98	#11	
Volcanic Event	2	5	50	7	64	#12	

Source: Fire District #5 NHMP Steering Committee, 2023.

Community Characteristics

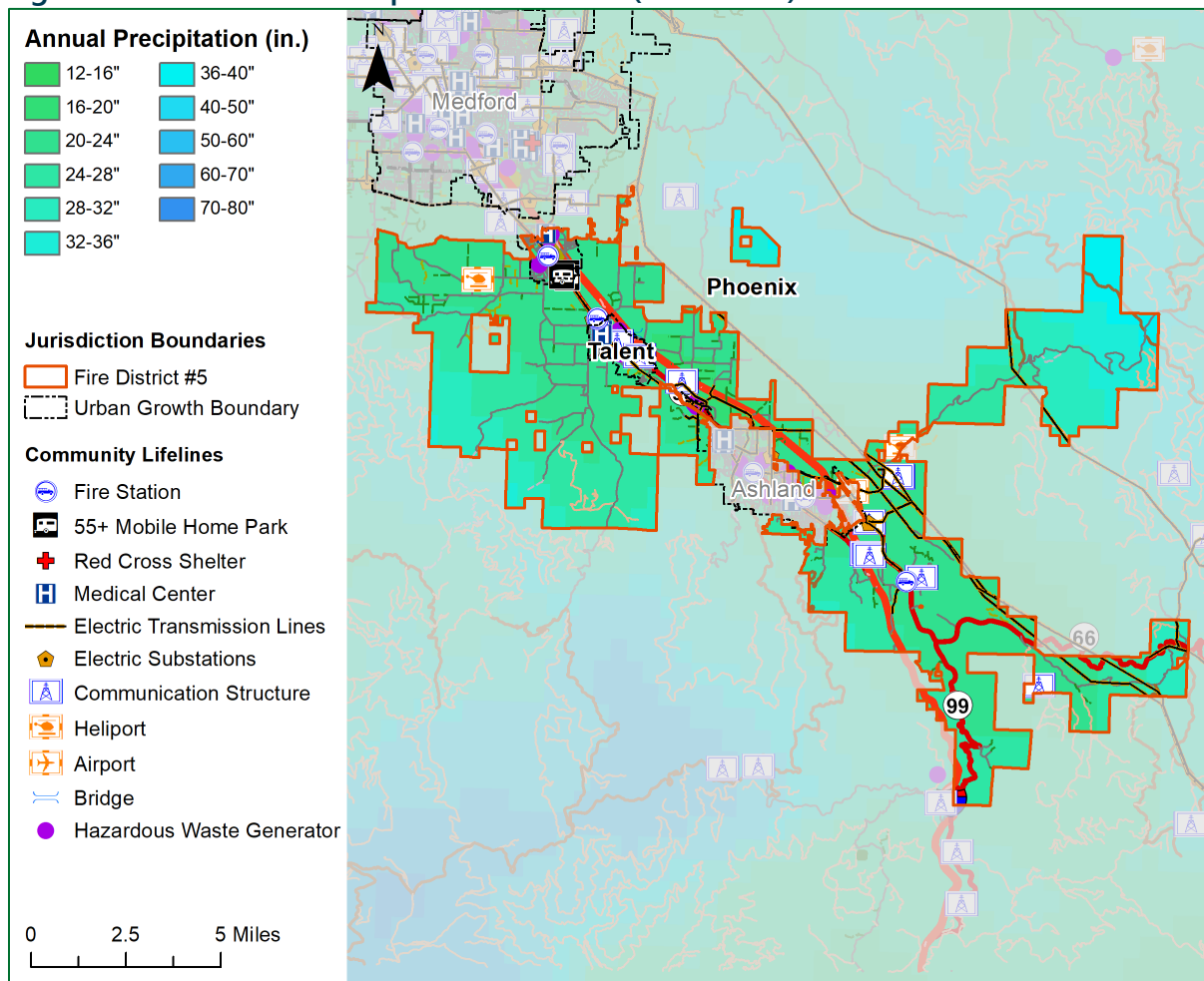
Fire District #5 directly services more than 23,000 people within their 120+ square mile district, most living within Phoenix and Talent (Figure FD5-4). Between 2016 and 2021 the region’s population reduced in size due to the Almeda Fire, which destroyed more than 2,600 homes between Ashland, Talent, Phoenix, and Medford on Labor Day weekend, 2020.² Many of the homes destroyed in Phoenix and Talent were manufactured homes along the

² Firebrand Resiliency Collective. (2023). *Almeda Fire Loss and Recovery Dashboard*. Accessed August 18, 2023. <https://experience.arcgis.com/experience/888491b7ccc949a7a98554a14aa8bf82>

Bear Creek corridor. The loss of this affordable housing has posed challenges for the community, who continues to work to rebuild needed housing. This is reflected in an extremely low vacancy rate for housing. Residential development within the cities is increasing with development in rural and forested parts of the district occurring at a slower pace.

Fire District #5's territory experiences a relatively mild climate with four distinct seasons that comes from its position on the west coast of North America and within the Cascade Range mountains. The average daily high temperature in the area is between 45- and 55-degrees Fahrenheit (F) in the winter and between 80- and 95-degrees Fahrenheit (F) in the summer. The Rogue Valley has the lowest precipitation among Oregon's western interior valleys and the fire district ranges from about 20 to 37 inches (Figure FD5-2). June through September are the driest months.

Figure FD5-2 Normal Precipitation: Annual (1991-2020)

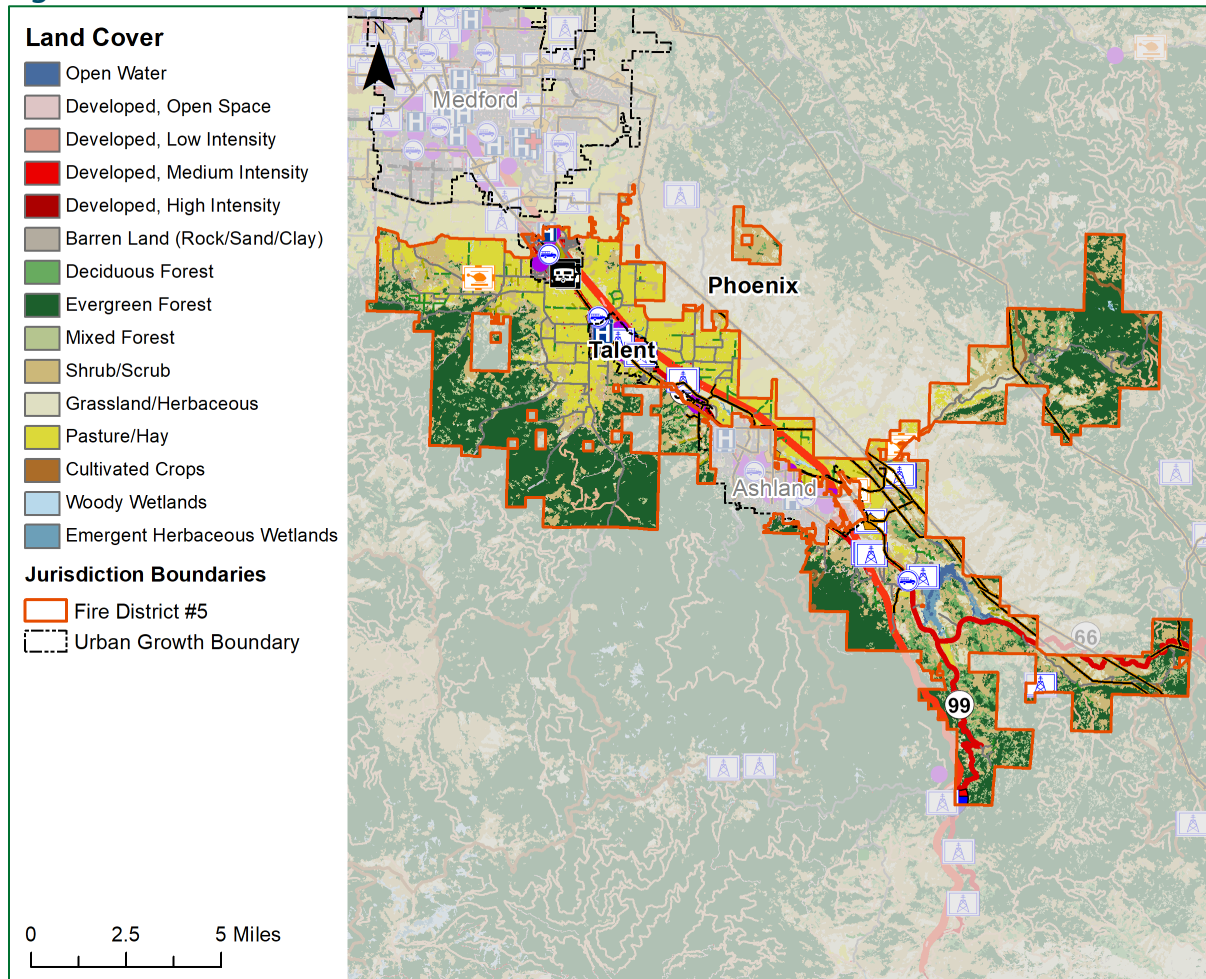


Source: OPDR, data [PRISM Climate Group](#)

The district is dominated by agricultural land including pasture/hay and cultivated crops with forest land on the edges of the district and at higher elevations (Figure FD5-3). There are two

incorporated cites in the district (Phoenix and Talent) and the unincorporated areas outside of Ashland.

Figure FD5-3 Land Cover



Source: OPDR, data from [National Land Cover Database](#) (2021)

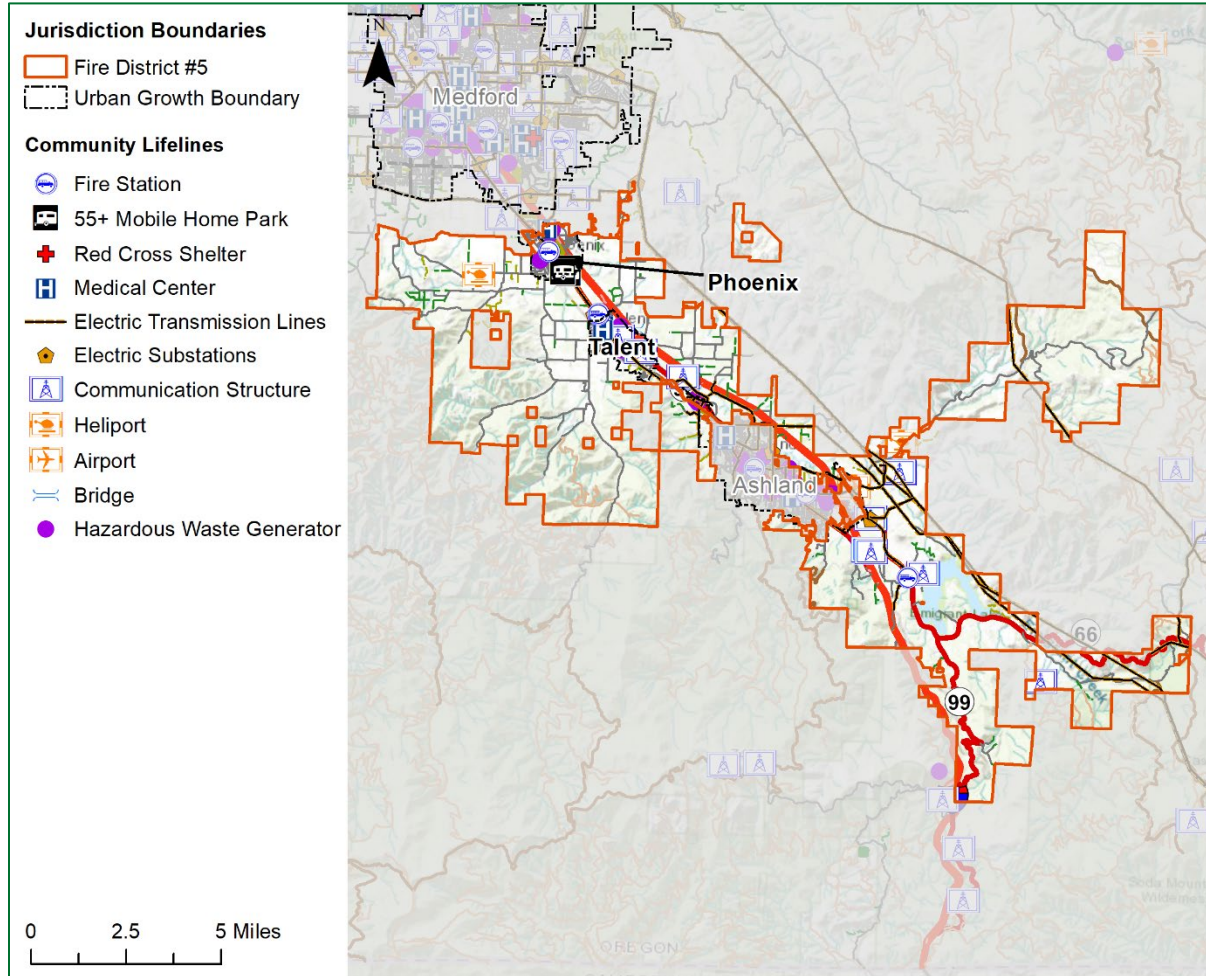
For more information on the characteristics of each partner jurisdiction (Jackson County, Phoenix, and Talent) please review Volume II, Appendix C and the applicable city addenda in Volume III.

Community Assets

This section outlines the resources, facilities (including fire stations), and infrastructure that, if damaged, could significantly impact the public safety, economic conditions, and environmental integrity of the district. Fire District #5 facilities and community lifelines are shown in Figure FD5-4 and Table FD5-3. In addition, the fire district has several underground and above ground water storage tanks. There are numerous bridge crossings within the district that are necessary to maintain access during hazard events. Some of the smaller bridges in the district have load limits that prevent usage by fire apparatus.

Community Lifelines are fundamental services that enable all other aspects of society to function. FEMA developed the Community Lifelines construct for objective-based response to prioritize the rapid stabilization of these facilities after a disaster. Mitigating these facilities will increase the community's resilience.

Figure FD5-4 Facilities and Community Lifelines



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries.

Note: To view detail click this [link](#) to access Oregon HazVu

Table FD5-3 Facilities

Facility Name	Jurisdiction	Community Lifeline Category	Lifeline Type	Earthquake-Liquefaction Hazard	Flood Hazard	Landslide Hazard	Wildfire Hazard
Station 3 (ca. 2023)	Phoenix	safety and security	fire station	low	minimal	low	low
Station 4 (ca. 1976)	County (Talent)	safety and security	fire station	low	minimal	low	moderate
Station 5 (ca. 2004)	County (Ashland)	safety and security	fire station	low	minimal	low	moderate

Source: Oregon Department of Geology and Mineral Industries, Fire District #5 NHMP Steering Committee

Hazard Profiles

The following sections briefly describe relevant information for each profiled hazard. For more information on the vulnerabilities of each partner jurisdiction (Jackson County, Phoenix, and Talent) please review Volume I, Section 2 and the applicable city addenda in Volume III. More information on Jackson County Hazards can be found in Volume 1 Section 2 *Risk Assessment* and in the [Risk Assessment for Region 4, Southwest Oregon, Oregon SNHMP \(2020\)](#).

Air Quality

The steering committee determined that the district’s probability for poor air quality is **high** (which is the same as the County’s Rating) and that their vulnerability to poor air quality is also **high** (which is the same as the County’s Rating).

Volume I, Section 2 describes the characteristics of air quality hazards, their history, and how they relate to future climate projections (see [OCCRI report](#)), as well as the location, extent, and probability of a potential event. Increases in wildfire conditions have shown an increasing potential for air quality hazards.

Future Projections

According to the Oregon Climate Change Research Institute “Future Climate Projections, Jackson County,”³ climate change is expected to reduce outdoor air quality. Warmer temperatures may increase ground-level ozone concentrations, while increases in the number and size of wildfires may increase concentrations of smoke and fine particulate matter. Moreover, increases in pollen abundance and the duration of the pollen season may increase aeroallergens. Such poor air quality is expected to exacerbate allergy and asthma conditions and increase the incidence of respiratory and cardiovascular illnesses and death. In Jackson County, the number of smoke wave days is projected to decrease by 20%, but the intensity of smoke on those days is projected to increase by 81%.

Increasingly poor outdoor air quality will have exponentially high impacts upon those living in older homes, manufactured housing, RVs, and campgrounds, or the unhoused. The need to install new or upgraded air conditioning systems or HVAC filtration systems will impact the cost of housing.

Additional information on air quality can be found in Volume I, Section 2.

Drought

The steering committee determined that Fire District #5’s probability for drought is **high** (which is the same as the County’s rating) and that their vulnerability to drought is **moderate** (which is the same as the County’s rating).

³ Oregon Climate Change Research Institute, *Future Climate Projections, Jackson County, Oregon*. February 2023.

Volume I, Section 2 describes the characteristics of drought hazards, their history, and how they relate to future climate projections (see [OCCRI report](#)), as well as the location, extent, and probability of a potential event. Due to the climate of Jackson County, past and present weather conditions have shown an increasing potential for drought.

The District utilizes hydrants that are supplied with municipal water systems in Phoenix and Talent. The fire district maintains, and inspects, below ground and above ground water storage tanks throughout the district. Two of three fire stations have water availability issues and need storage tanks to refill fire apparatus. The Fire District is actively working with community groups to locate additional water storage tanks at strategic locations throughout the district. Additionally, the Fire District is partnering with the Talent Irrigation District (TID) to locate high pressure fill sites and locate hydrants to access TID water.

Future Projections

According to the Oregon Climate Change Research Institute “Future Climate Projections, Jackson County,”⁴ drought, as represented by low summer soil moisture, low spring snowpack, low summer runoff, and low summer precipitation, is projected to become more frequent in Jackson County by the 2050s.

Increasingly frequent droughts will have economic and social impacts upon those who depend upon predictable growing periods (ranches, farms, vineyards, gardeners) as well as upon the price and availability of fresh vegetables. It may also stress local jurisdiction’s ability to provide water for irrigation or commercial and household use.

Please review Volume I, Section 2 for additional information on this hazard.

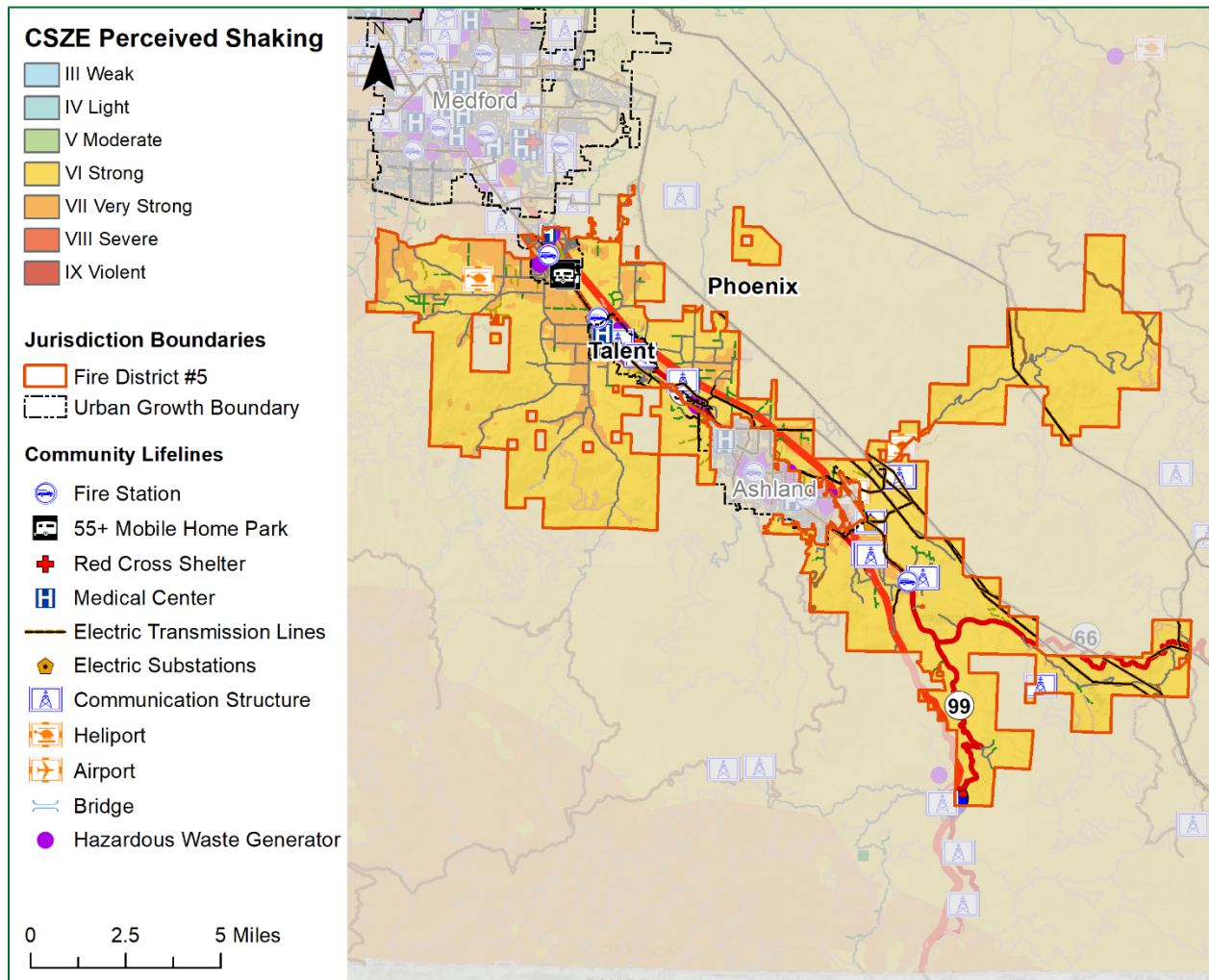
Earthquake (Cascadia)

The steering committee determined that Fire District #5’s probability for a Cascadia Subduction Zone (CSZ) earthquake is **moderate** (which is the same as the County’s rating) and that their vulnerability to a CSZ earthquake is **high** (which is the same as the County’s rating).

Figure FD5-5 displays perceived shaking hazards from a Cascadia Subduction Zone earthquake event. As shown in the figure below, the areas of greatest concern within Fire District #5 are near populated areas (darker areas).

⁴ Oregon Climate Change Research Institute, *Future Climate Projections, Jackson County, Oregon*. February 2023.

Figure FD5-5 Cascadia Subduction Zone Perceived Shaking



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries.
 Note: To view detail click this [link](#) to access Oregon HazVu.

Volume I, Section 2 describes the characteristics of earthquake hazards and their history, as well as the location, extent, and probability of a potential event. Generally, an event that affects the County is likely to affect Fire District #5 as well. The causes and characteristics of an earthquake event are appropriately described within Volume I, Section 2, as well as the location and extent of potential hazards. Previous occurrences are well documented within Volume I, Section 2 and the community impacts described by the County would generally be the same for Fire District #5 as well.

The local faults, the County’s proximity to the Cascadia Subduction Zone, potential slope instability, and the prevalence of certain soils subject to liquefaction and amplification combine to give the County a high-risk profile. Due to the expected pattern of damage resulting from a CSZ event, the Oregon Resilience Plan divides the State into four distinct zones and places Jackson County predominately within the “Valley Zone” (Valley Zone, from the summit of the Coast Range to the summit of the Cascades). Within the Southwest Oregon region, damage and

shaking is expected to be strong and widespread - an event will be disruptive to daily life and commerce and the main priority is expected to be restoring services to business and residents.

Information on the estimated seismic resistance of two fire district stations, determined by DOGAMI in 2007, is shown in Table FD5-4; each “X” represents one building within that ranking category. Station 3 was destroyed by the Almeda Drive Fire and is being rebuilt as part of the Public Safety Center (2024). One of the two other fire stations was evaluated by DOGAMI using a Rapid Visual Survey (RVS), and it does not have high (>10% chance) or very high (100% chance) collapse potential. Note that Station 2 received funding from the Seismic Rehabilitation Grant Program (SRGP) in 2021 for mitigation (seismic retrofits).

Table FD5-4 Rapid Visual Survey Scores

Facility	Site ID*	Level of Collapse Potential			
		Low (< 1%)	Moderate (>1%)	High (>10%)	Very High (100%)
Public Safety					
Jackson County Fire District #5 - Station 3 (116 W 2nd St, Phoenix) - See Mitigation Successes	Jack_fir03	<i>Destroyed by the Almeda Drive Fire</i>			
Jackson County Fire District #5 - Station 2 (716 S Pacific Hwy, Talent) - See Mitigation Successes	Jack_fir15	X			

Source: DOGAMI 2007. Open File Report 0-07-02. Statewide Seismic Needs Assessment Using Rapid Visual Assessment.
 “*” – Site ID is referenced on the [RVS Jackson County Map](#)

In addition to building damages, utility (electric power, water, wastewater, natural gas) and transportation systems (bridges, pipelines) are also likely to experience significant damage.

Utility systems will be significantly damaged, including damaged buildings and damage to utility infrastructure, including water and wastewater treatment plants and equipment at high voltage substations (especially 230 kV or higher which are more vulnerable than lower voltage substations). Buried pipe systems will suffer extensive damage with approximately one break per mile in soft soil areas. There would be a much lower rate of pipe breaks in other areas. Restoration of utility services will require substantial mutual aid from utilities outside of the affected area.

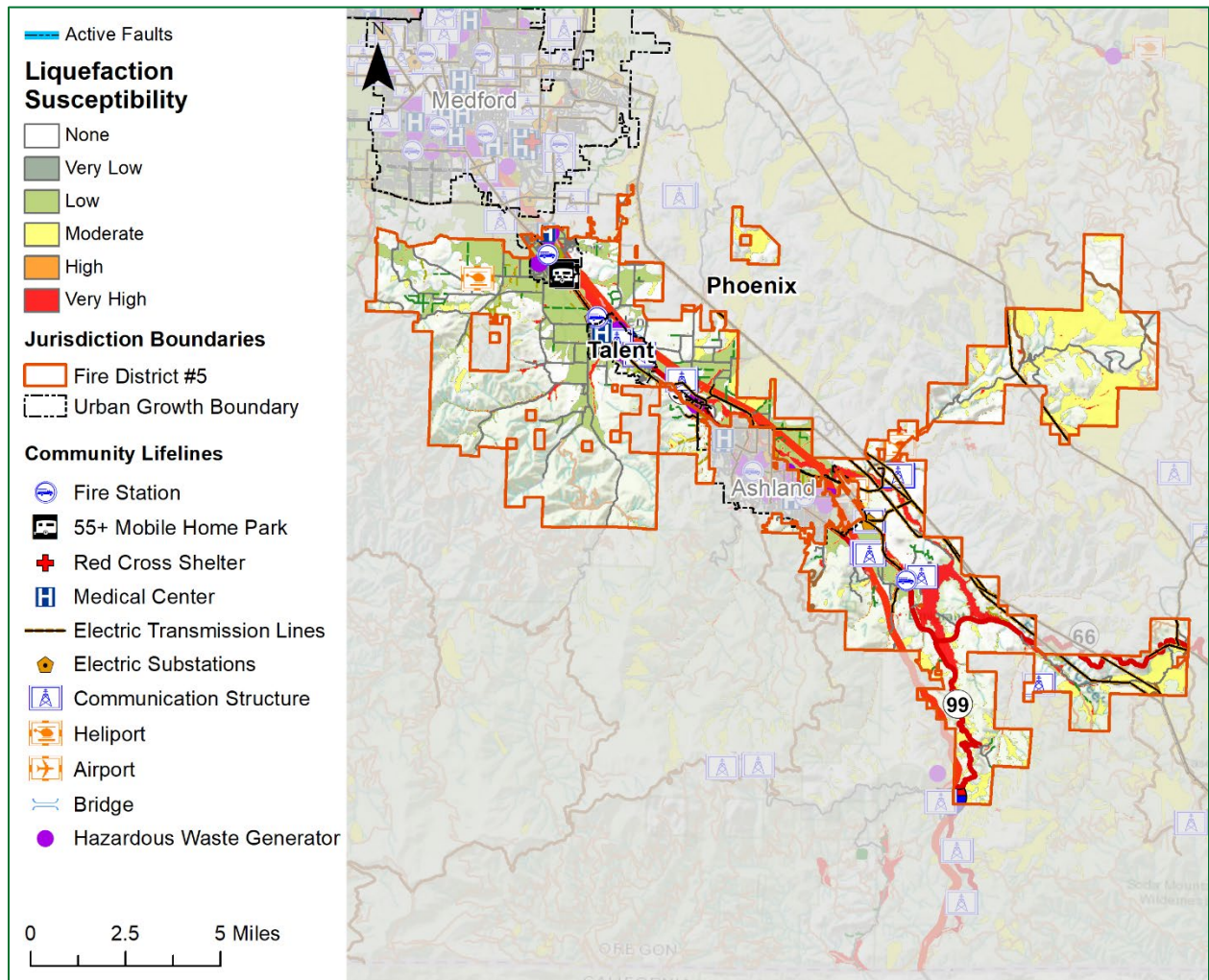
Please review Volume 1, Section 2 for additional information on this hazard.

Earthquake (Crustal)

The steering committee determined that Fire District #5’s probability for a crustal earthquake is **low** (which is the same as the County’s rating) and that their vulnerability to crustal earthquake is **moderate** (which is higher than County’s rating).

Figure FD5-6 shows the liquefaction risk to the community lifelines that are identified in more detail in Table FD5-3. As shown in the figure, the area of greatest concern near Fire District #5 (liquefaction hazard orange to red areas) are near populated areas.

Figure FD5-6 Liquefaction Susceptibility



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries.
 Note: To view detail click this [link](#) to access Oregon HazVu.

Volume I, Section 2 describes the characteristics of earthquake hazards, history, as well as the location, extent, and probability of a potential event. Generally, an event that affects the County is likely to affect Fire District #5 as well. The causes and characteristics of an earthquake event are appropriately described within Volume I, Section 2, as well as the location and extent of potential hazards. Previous occurrences are well-documented within Volume I, Section 2 and the community impacts described by the County would generally be the same for Fire District #5 as well.

Earthquake-induced damages are difficult to predict and depend on the size, type, and location of the earthquake, as well as site-specific building and soil characteristics. Presently, it is not possible to accurately forecast the location or size of earthquakes, but it is possible to predict the behavior of soil at any site. In many major earthquakes, damages have primarily been caused by the behavior of the soil.

Vulnerability Assessment

Due to insufficient data and resources, Fire District #5 is currently unable to perform a quantitative risk assessment for this hazard, however an exposure assessment was conducted. Identified Community Lifelines that are exposed to this hazard are shown in Table FD5-3. Note that even if a facility has exposure, *it does not mean there is a high risk (vulnerability)*. In addition, water storage tanks are potentially vulnerable to earthquakes.

Future Projections

Future development (residential, commercial, or industrial) within Jackson County will be at risk to earthquake impacts, although this risk can be mitigated by the adoption and enforcement of high development and building standards. Reducing risks to vulnerable populations should be considered during the redevelopment of existing properties.

Please review Volume I, Section 2 for additional information on this hazard.

Emerging Infectious Disease

The steering committee determined that Fire District #5's probability for emerging infectious disease is **moderate** (which is the same as the County's rating) and that their vulnerability is **high** (which is the same as the County's rating).

Emerging infectious diseases are those that have recently appeared in a population or those whose incidence or geographic range is rapidly increasing or threatens to increase. Emerging infections may be caused by biological pathogens (e.g., virus, parasite, fungus, or bacterium) and may be: previously unknown or undetected biological pathogens; biological pathogens that have spread to new geographic areas or populations; previously known biological pathogens whose role in specific diseases was previously undetected; and biological pathogens whose incidence of disease was previously declining but whose incidence of disease has reappeared (re-emerging infectious disease).⁵

Volume I, Section 2 describes the characteristics of emerging infectious disease and their history, as well as the location, extent, and probability of a potential event within the region. Generally, an event that affects the County is likely to affect the Fire District as well.

Future Projections

Vulnerable populations within Jackson County, including children, elderly, those living with disabilities, and unhoused individuals, will be a greater risk to emerging infectious diseases in the future.

Please review Volume I, Section 2 for additional information on this hazard.

⁵ Baylor College of Medicine, *Emerging Infectious Disease*, URL: <https://www.bcm.edu/departments/molecular-virology-and-microbiology/emerging-infections-and-biodefense/emerging-infectious-diseases>, accessed September 17, 2017.

Flood

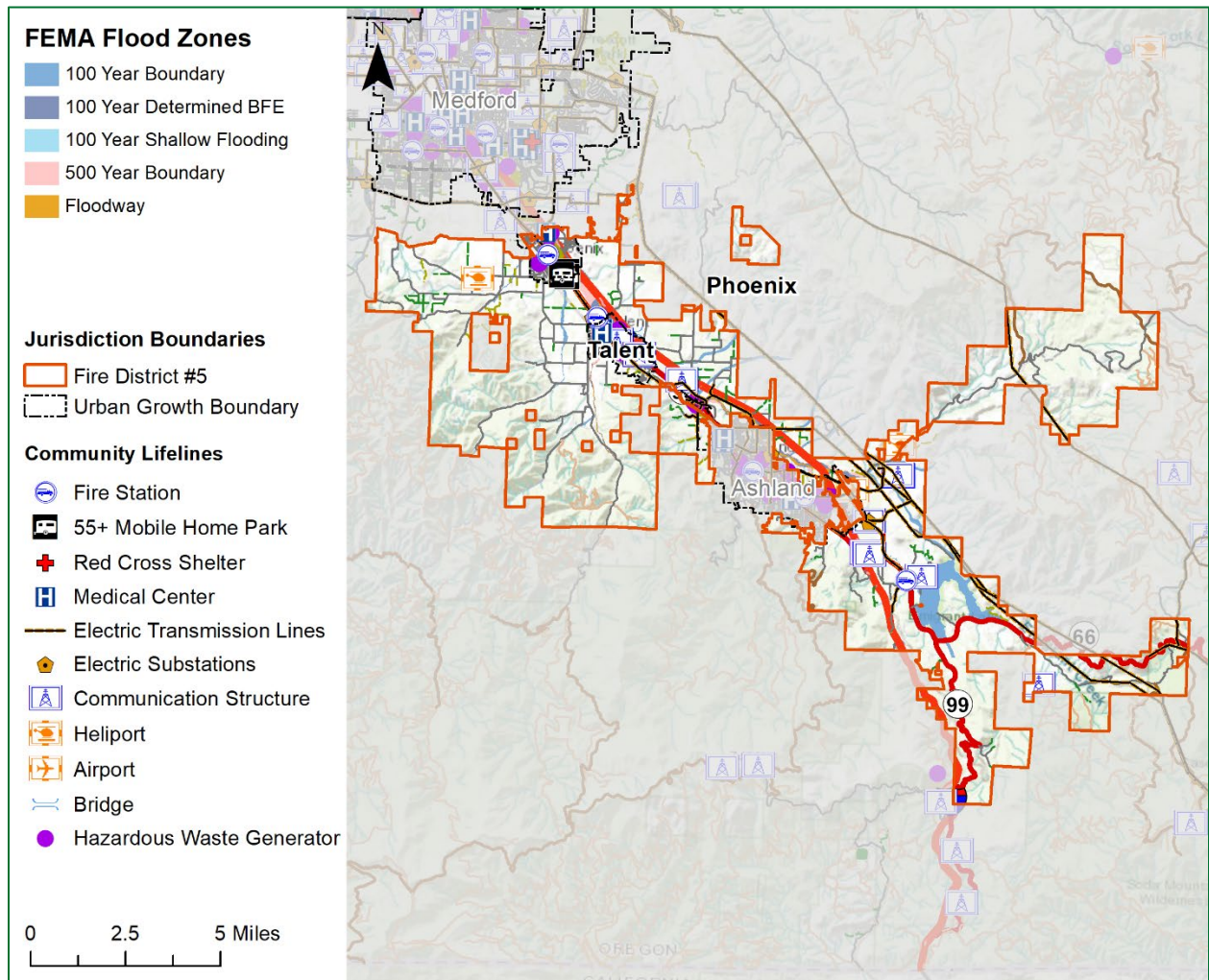
The steering committee determined that Fire District #5's probability for flood is **high** (which is the same as the County's rating) and that their vulnerability to flood is **moderate** (which is the same as the County's rating).

Volume I, Section 2 describes the characteristics of flood hazards, their history, and how they relate to future climate projections (see [OCCRI report](#)), as well as the location, extent, and probability of a potential event. Portions of Fire District #5 have mapped FEMA flood zones (Figure FD5-7). Other portions of Fire District #5 could be subject to flooding from local storm water drainage; however, areas of known flood hazard do not impact development or infrastructure.

The main flood sources described in the [Jackson County Flood Insurance Study](#) (2018) for Fire District #5 Ashland Creek, Bear Creek, Wagner Creek, and Emigrant Lake. The impact of flooding in the cities and unincorporated parts of the County (including White City) minimally impact the district (Table FD5-3 and Figure FD5-7). Significant flooding may occur from heavy rain on snow events or by dam failure of the Emigrant Lake dam.⁶

⁶ Jackson County Fire District #5. [Standards of Cover](#) (2017).

Figure FD5-7 FEMA Flood Zones



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries.
 Note: To view detail click this [link](#) to access Oregon HazVu.

Fire District #5 generally has minimal risk from two types of flooding: riverine and urban. Riverine flooding occurs when streams overflow their banks and inundate low-lying areas. This is a natural process that adds sediment and nutrients to fertile floodplain areas. It usually results from prolonged periods of precipitation over a wide geographic area. Most areas are generally flooded by low velocity sheets of water. Urban flooding occurs as land is converted to impervious surfaces and hydrologic systems are changed. Precipitation is collected and transmitted to streams at a much faster rate, causing floodwaters that rise rapidly and peak with violent force. During urban flooding, storm drains can back up and cause localized flooding of streets and basements. For more information on flood vulnerability see applicable city addenda in Volume III.

Vulnerability Assessment

Due to insufficient data and resources, Fire District #5 is currently unable to perform a quantitative risk assessment for this hazard, however an exposure assessment was conducted.

Identified community lifelines that are exposed to this hazard are shown in Table FD5-3. Note that even if a facility has exposure, *it does not mean there is a high risk (vulnerability)*.

Floods can have a devastating impact on almost every aspect of the community, including private property damage, public infrastructure damage, and economic loss from business interruption. It is important for Fire District #5 to be aware of flooding impacts and assess its level of risk.

The economic losses due to business closures often total more than the initial property losses that result from flood events. Business owners and their employees are significantly impacted by flood events. Direct damages from flooding are the most common impacts, but indirect damages, such as diminished clientele, can be just as debilitating to a business.

The [Jackson County Flood Insurance Study](#) (January 19, 2018) has a brief history of flooding in Jackson County (Volume I, Section 2). Fire District #5 facilities are at minimal flood risk.

Floodwaters can affect building foundations, seep into basements or cause damage to the interior, exterior, and contents of buildings, dependent upon the velocity and depth of the water and by the presence of floating debris.

Future Projections

According to the Oregon Climate Change Research Institute ([OCCRI report](#)) “Future Climate Projections, Jackson County,”⁷ winter flood risk at mid-elevations in Jackson County, where temperatures are near freezing during winter and precipitation is a mix of rain and snow, is projected to increase as winter temperatures increase. The temperature increase will lead to an increase in the percentage of precipitation falling as rain rather than snow. The projected increases in total precipitation, and in rain relative to snow, likely will increase flood magnitudes in the region. Vulnerable populations adjacent to floodways (including the unhoused, manufactured home communities, and campground occupants) will be more at risk as the winter flood risk increases.

National Flood Insurance Program (NFIP)

FEMA updated the Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRMs) in 2018 (effective January 19, 2018). Fire District #5 is not a community which has authority to adopt and enforce floodplain management regulations for the areas within its jurisdiction. All partner jurisdictions (Jackson County and cities) participate in the National Flood Insurance Program (NFIP). For more information on the NFIP see applicable county (Volume I, Section 2) and city addenda (Volume III).

Please review Volume I, Section 2 for additional information on this hazard.

⁷ Oregon Climate Change Research Institute, *Future Climate Projections, Jackson County, Oregon*. February 2023.

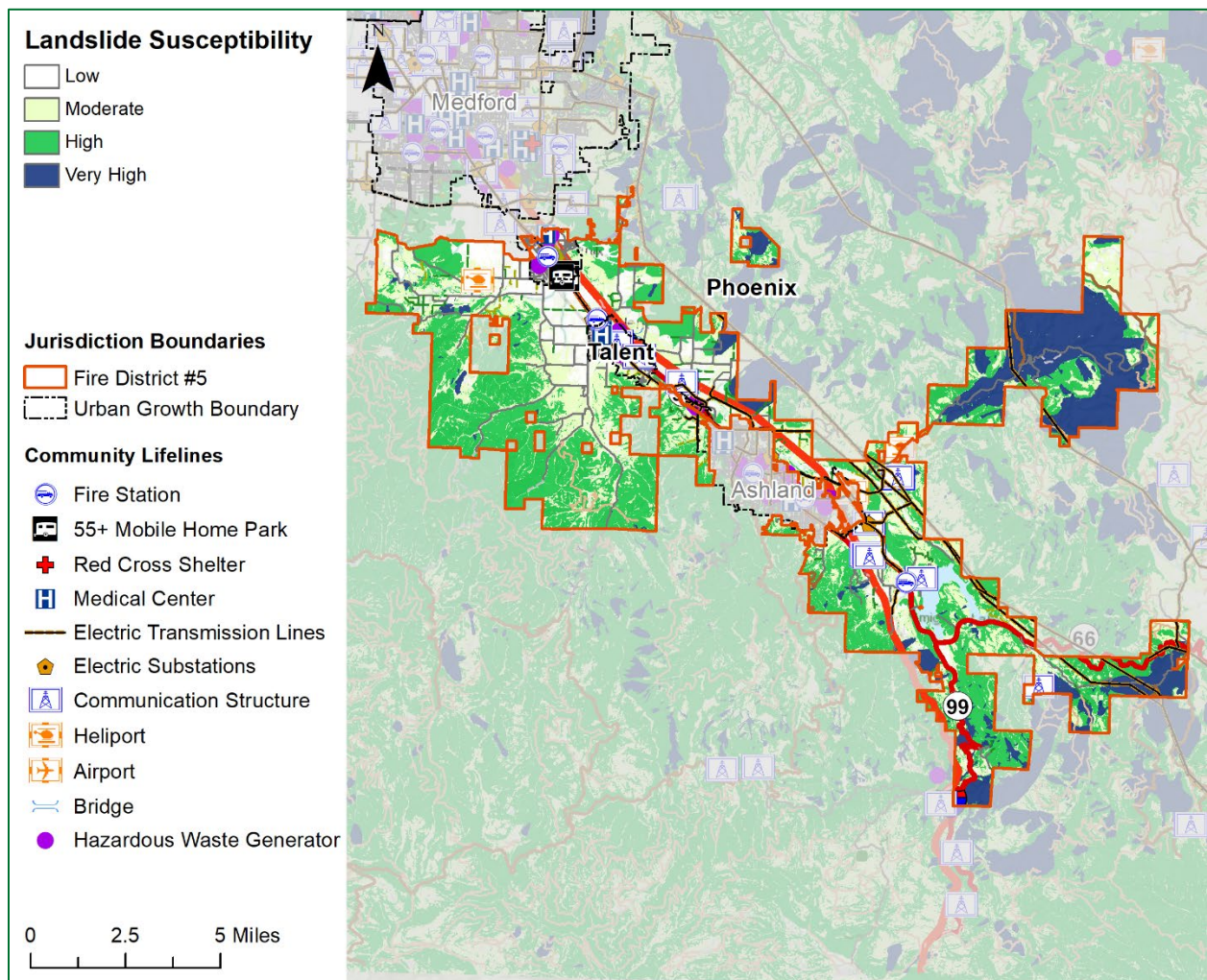
Landslide

The steering committee determined that Fire District #5's probability for landslide is **high** (which is the same as the County's rating) and that their vulnerability to landslide is **moderate** (which is higher than the County's rating).

Volume I, Section 2 describes the characteristics of landslide hazards, history, how they relate to future climate projections (see [OCCRI report](#)), as well as the location, extent, and probability of a potential event within the region.

Landslide susceptibility exposure for Fire District #5 is shown in Figure FD5-8. Most of Fire District #5 demonstrates a low susceptibility to landslide exposure, with corridors of moderate and high susceptibility concentrated around higher elevations of the district. The chief concern for landslide is along rural transportation corridors and waterways.

Figure FD5-8 Landslide Susceptibility Exposure



Source: Oregon Partnership for Disaster Resilience. Oregon Department of Geology and Mineral Industries.

Note: To view detail click this [link](#) to access Oregon HazVu.

Vulnerability Assessment

Due to insufficient data and resources, Fire District #5 is currently unable to perform a quantitative risk assessment for this hazard, however an exposure assessment was conducted. Identified community lifelines that are exposed to this hazard are shown in Table FD5-3. *Note that even if an area has a high percentage of land in a high or very high landslide exposure susceptibility zone, that does not mean there is a high risk (vulnerability), because risk is the intersection of a hazard and assets.*

Future Projections

Landslides are often triggered by rainfall when the soil becomes saturated. As a surrogate measure of landslide risk, the Oregon Climate Change Research Institute ([OCCRI report](#)) report presents a threshold based on recent precipitation (cumulative precipitation over the previous 3 days) and antecedent precipitation (cumulative precipitation on the 15 days prior to the previous 3 days). By the 2050s under the higher emissions scenario, the average number of days per year in Jackson County on which the landslide risk threshold is exceeded is projected to remain about the same, with an increase of 0.2 days. However, landslide risk depends on multiple factors, and this metric, which is based on precipitation, does not reflect all aspects of the hazard. Additional triggers, such as earthquakes, wildfires, or development, can increase risks of landslides. Future development along slopes or adjacent to riverbanks will be a greater risk of impact from this hazard.

Please review Volume I, Section 2 for additional information on this hazard.

Severe Weather

Severe weather can account for a variety of intense and potentially damaging weather events. These events include windstorms and winter storms. The following section describes the unique probability and vulnerability of each identified weather hazard. Other more abrupt or irregular events such as hail are also described in this section.

Extreme Heat Event

The steering committee determined that Fire District #5's probability for extreme heat event is **high** (which is the same as the County's Rating) and that their vulnerability to an extreme heat event is **moderate** (which is the same as the County's Rating).

Jackson County's NHMP Volume I, Section 2, adequately describes the causes and characteristics of extreme heat, as well as the history, location, extent, and probability of a potential event and how it relates to future climate projections (see [OCCRI report](#)). Generally, an event that affects the County is likely to affect Fire District #5 as well. A severe heat episode or "heat wave" occurs about every two to three years, and typically lasting two to three days but can last as many as five days. A severe heat episode can be defined as consecutive days of temperatures in the high

90s and above 100. Severe heat hazard in Southern Oregon can be described as the average number of days with temperatures greater than or equal to 90-degrees Fahrenheit.⁸

Extreme heat events can and have occurred in Fire District #5, and while they typically do not cause loss of life, they are becoming more frequent and have the potential to impact economic activity as well as quality of life and have caused threat to life in some cases.

Future Projections

According to the Oregon Climate Change Research Institute ([OCCRI report](#)) “Future Climate Projections, Jackson County,”⁹ average temperature is expected to continue increasing during the twenty-first century if global emissions of greenhouse gases continue. The number, duration, and intensity of extreme heat events will increase as temperatures continue to warm. In Jackson County, the number of extremely hot days (days on which the temperature is 90°F or higher) and the temperature on the hottest day of the year are projected to increase by the 2020s and 2050s. The number of days per year with temperatures 90°F or higher is projected to increase by an average of 28 days (range 12–38 days) by the 2050s, relative to the 1971–2000 historical baselines. The temperature on the hottest day of the year is projected to increase by an average of about 7°F (range 3–8°F) by the 2050s. Higher temperatures and longer/more extreme heat events will have negative impacts upon vulnerable populations such as those over 65+, children, those living in older or temporary housing, and field workers.

See the Risk Assessment (Volume I, Section 2) for additional information on this hazard.

Windstorm

The steering committee determined that Fire District #5’s probability for windstorm is **high** (which is the same as the County’s rating) and that their vulnerability to windstorm is **high** (which is higher than the County’s rating).

Volume I, Section 2 describes the characteristics of windstorm hazards, their history, and how they relate to future climate projections (see [OCCRI report](#)), as well as the location, extent, and probability of a potential event within the region. Because windstorms typically occur during winter months, they are sometimes accompanied by ice, freezing rain, flooding, and snow. Other severe weather events that may accompany windstorms, including thunderstorms, hail, and lightning strikes are standard for Fire District #5.

Volume I, Section 2 describes the impacts caused by windstorms, including power outages, downed trees, heavy precipitation, building damages, and storm-related debris. Additionally, transportation and economic disruptions result as well. Fire District #5 regularly experiences high winds. Pacific Power has mitigated the risk of power loss by trimming trees near their above ground infrastructure.

⁸ DLCD. Oregon State Natural Hazard Mitigation Plan. 2020.

⁹ Oregon Climate Change Research Institute, *Future Climate Projections, Jackson County, Oregon*. February 2023.

Damage from high winds generally has resulted in downed utility lines and trees but has minimal impact upon Fire District #5. Electrical power can be out anywhere from a few hours to several days. Outdoor signs have also suffered damage.

Future Projections

Limited research suggests little if any change in the frequency and intensity of windstorms in the Northwest as a result of climate change. Those impacted by windstorms at present, including older residential or commercial developments with above-ground utilities, poor insulation or older construction, heavy tree canopies, or poor storm drainage, will continue to be impacted by windstorms in the future.

Please review Volume I, Section 2 for additional information on this hazard.

Winter Storm (Snow/Ice)

The steering committee determined that Fire District #5's probability for winter storm is **high** (which is the same as the County's rating) and that their vulnerability to winter storm is **high** (which is higher than the County's rating).

Volume I, Section 2 describes the characteristics of winter storm hazards, their history, and how they relate to future climate projections (see [OCCRI report](#)), as well as the location, extent, and probability of a potential event within the region. Severe winter storms can consist of rain, freezing rain, ice, snow, cold temperatures, and wind. They originate from troughs of low pressure offshore that ride along the jet stream during fall, winter, and early spring months. Severe winter storms affecting Fire District #5 typically originate in the Gulf of Alaska or in the central Pacific Ocean. These storms are most common from November through March.

Major winter storms can and have occurred in the Fire District #5 area and while they typically do not cause significant damage, they are frequent and have the potential to impact economic activity. Road closures due to winter weather are an uncommon occurrence but can interrupt commuter and commercial traffic.

Future Projections

According to the Oregon Climate Change Research Institute ([OCCRI report](#)) "Future Climate Projections, Jackson County,"¹⁰ cold extremes will become less frequent and intense as the climate warms. In Jackson County, the number of cold days (maximum temperature 32°F or lower) per year is projected to decrease by an average of 3 days (range -2– -5 days) by the 2050s, relative to the 1971–2000 historical baselines, under the higher emissions scenario. The temperature on the coldest night of the year is projected to increase by an average of 6°F (range 3–9°F) by the 2050s. The intensity of extreme precipitation is expected to increase as the atmosphere warms and holds more water vapor. In Jackson County, the number of days per year with at least 0.75 inches of precipitation is not projected to change substantially. However, by the 2050s, the amount of precipitation on the wettest day and wettest consecutive five days per year is projected to increase by an average of 15% (range -3–32%) and 11% (range -3–34%),

¹⁰ Oregon Climate Change Research Institute, *Future Climate Projections, Jackson County, Oregon*. February 2023.

respectively. If these precipitation events occur in the winter, heavier winter storms with larger impacts upon transportation routes, vulnerable populations, and economic activity can be expected.

Please review Volume I, Section 2 for additional information on this hazard.

Volcanic Event

The steering committee determined that Fire District #5's probability for a volcanic event is **low** (which is the same as the County's rating) and that their vulnerability to a volcanic event is **low** (which is the same as the County's rating).

Volume I, Section 2 describes the characteristics of volcanic hazards and their history, as well as the location, extent, and probability of a potential event within the region. Generally, an event that affects the County is likely to affect Fire District #5 as well. Fire District #5 is very unlikely to experience anything more than volcanic ash during a volcanic event.

Future Projections

Although the science of volcano predictions is improving, it remains challenging to predict a potential volcanic event. Ash fall, which will be the greatest impact, will impact the entire County. Impacts will be felt hardest by property managers (ranches, farmers, etc.) and by those relying upon clean surface water (for drinking water production and irrigation).

Please review Volume I, Section 2 for additional information on this hazard.

Wildfire

The steering committee determined that Fire District #5's probability for wildfire is **high** (which is the same as the County's rating) and that their vulnerability to wildfire is **high** (which is the same as the County's rating).

Volume I, Section 2 describes the characteristics of wildfire hazards, their history, and how they relate to future climate projections (see [OCCRI report](#)), as well as the location, extent, and probability of a potential event within the region. The location and extent of a wildfire vary depending on fuel, topography, and weather conditions. Weather and urbanization conditions are primarily at cause for the hazard level. Ashland, Talent, Phoenix, and unincorporated areas of Jackson County were severely affected by the Almeda Drive Fire in September 2020 which destroyed more than 2,600 homes between Ashland, Talent, Phoenix, and Medford on Labor Day weekend, 2020.¹¹ Other fires near the district include the Siskiyou (2009), and East Antelope (2002).

The potential community impacts and vulnerabilities described in Volume I, Section 2 are generally accurate for Fire District #5 as well. The [Rogue Valley Integrated Community Wildfire Protection Plan](#) (RVIFP, updated 2019) assesses wildfire risk, maps wildland urban interface

¹¹ Firebrand Resiliency Collective. (2023). *Almeda Fire Loss and Recovery Dashboard*. Accessed August 18, 2023. <https://experience.arcgis.com/experience/888491b7ccc949a7a98554a14aa8bf82>

areas, and includes actions to mitigate wildfire risk. Fire District #5 is included in the RVIFP and will update Fire District #5's wildfire risk assessment if the RVIFP presents better data during future updates (an action item is included within Volume I, Section 4 to participate in updates to the integrated fire plan and to continue to maintain and update their RVIFP). The district is actively reducing fuels in and around the district. Fire District #5 hereby incorporates the RVIFP into this addendum by reference to provide greater detail to sensitivity and exposure to the wildfire hazard.

Property can be damaged or destroyed with one fire as structures, vegetation, and other flammables easily merge to become unpredictable and hard to manage. Other factors that affect ability to effectively respond to a wildfire include access to the location and to water, response time from the fire station, availability of personnel and equipment, and weather (e.g., heat, low humidity, high winds, and drought).

Vulnerability Assessment

Due to insufficient data and resources, Fire District #5 is currently unable to perform a quantitative risk assessment for this hazard, however an exposure assessment was conducted. Identified community lifelines that are exposed to this hazard are shown in Table FD5-3. Note that even if a facility has exposure, *it does not mean there is a high risk (vulnerability)*.

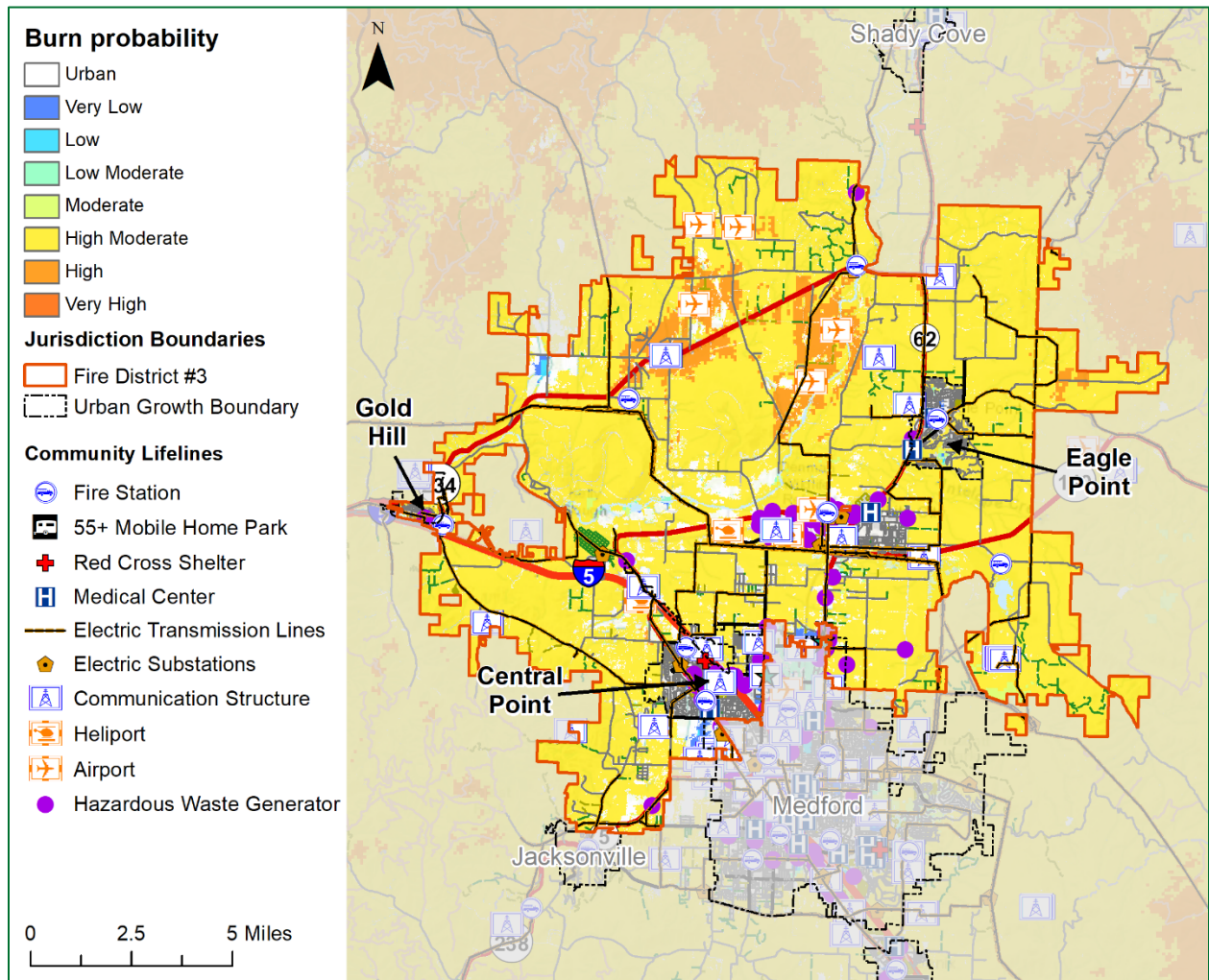
Future Projections

According to the Oregon Climate Change Research Institute "Future Climate Projections, Jackson County,"¹² wildfire frequency, intensity, and area burned are projected to continue increasing in the Northwest. Wildfire risk, expressed as the average number of days per year on which fire danger is very high, is projected to increase in Jackson County by 13 days (range -6– 29) by the 2050s, relative to the historical baseline (1971–2000), under the higher emissions scenario. Similarly, the average number of days per year on which vapor pressure deficit is extreme is projected to increase by 29 days (range 12–42) by the 2050s. Communities at risk to wildfire include those within the urban wildfire interface or along river or creek corridors, like Bear Creek, where fire can travel quickly. Communities will need to address growing wildfire risks if populations are not restricted from expanding further into higher risk areas.

Please review Volume I, Section 2 for additional information on this hazard.

¹² Oregon Climate Change Research Institute, *Future Climate Projections, Jackson County, Oregon*. February 2023.

Figure FD5-9 Burn Probability



Source: Oregon Partnership for Disaster Resilience. USFS Pacific Northwest Region Wildfire Risk Assessment (PNRA)
 Note: To view detail click this [link](#) to access Oregon Explorer’s CWPP Planning Tool.

Attachment A: Public Involvement Summary

Members of the steering committee provided content and edits 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 within Fire District #5 boundaries (Volume III, Appendix F).

To provide the public information regarding the draft NHMP addendum and provide an opportunity for comment the plan was also posted and announced on the County's website **October 17, 2023**. There were no public comments provided. Additional opportunities for stakeholders and the public to be involved in the planning process are addressed in Volume II, Appendix B.

A diverse array of agencies and organizations were provided an opportunity to provide input to inform the plan's content through a variety of mechanisms including the opportunity for comment on the draft plan. The agencies and organizations represent local and regional agencies involved in hazard mitigation activities, those that have the authority to regulate development, neighboring communities, representatives of businesses, academia, and other private organizations, and representatives of nonprofit organizations, including community-based organizations, that work directly with and/or provide support to underserved communities and socially vulnerable populations. For more information on the engagement strategy see Volume II, Appendix B.

Website Posting



[Home](#) > [News List](#) > News Post

2023 Natural Hazard Mitigation Plan Update

Public Comment Notice to Close on December 5, 2023

Jackson County is updating its multi-jurisdictional Natural Hazard Mitigation Plan (NHMP). This work is being performed in cooperation with the University of Oregon's Institute for Policy Research and Engagement - Oregon Partnership for Disaster Resilience and the Oregon Department of Emergency Management, utilizing funds from the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program. With re-adoption of the plan, Jackson County will maintain its eligibility to apply for federal funding towards natural hazard mitigation projects.

PLAN OVERVIEW

The Natural Hazard Mitigation Plan is not an operational response plan. It does not describe how the County or any of the cities or towns will respond to natural disasters. Additionally, the County and each incorporated city are responsible for the planning, response, recovery, and mitigation activities within their jurisdictional boundaries. The NHMP is a framework that guides decision-making and policy development around the reduction or elimination of risk to life and property resulting from air quality, drought, earthquake, emerging infectious diseases, flood, heat, landslide, wildfire, windstorm, and winter storm events. This NHMP update will engage state and local partners to understand risks from natural hazards and develop long-term strategies to reduce the impacts of disasters on people, property, and the environment.

PUBLIC COMMENT NOTICE

To provide public comment, please describe the feedback and reference page number, table, or figure of concern:

1. Send an email to JacksonEM@jacksoncountyor.gov
2. Send a fax to 541-774-6705
3. Mail or drop-off hard copies: 10 S. Oakdale, Rm 214, Medford, OR 97501

Posted for Comment on November 21, 2023

- [Central Point](#)

Posted for Comment on October 17, 2023

- [Jackson County Fire District #3](#)
- [Jackson County Fire District #5](#)

Posted for Comment on October 6, 2023

- [Gold Hill](#)
- [Jacksonville](#)
- [Shady Cove](#)

Posted for Comment on September 28, 2023 or before

- [Eagle Point](#)
- [Medford Water](#)

Posted for Comment on September 11, 2023 or before

- [Jackson County](#)
- [Ashland](#)
- [Butte Falls](#)
- [Phoenix](#)
- [Rogue River](#)
- [Talent](#)

City of Medford has a stand-alone NHMP, which is available on the [City of Medford's website](#).

NATURAL HAZARD MITIGATION PLANNING

Natural disasters occur when natural hazard events greatly impact people, structures, and the environment. The ever-increasing costs associated with natural disasters over the past decades have heightened interest in identifying and implementing effective means of reducing these impacts.

Natural hazards mitigation planning is a process for identifying and understanding the hazards facing a jurisdiction and prioritizing actions the jurisdiction can take to reduce injuries and deaths; damage to buildings, critical facilities, and infrastructure; interruption in essential services; economic hardship; and environmental harm. Reducing impacts also speeds up recovery and lowers its cost.

The Federal Emergency Management Agency (FEMA) approves NHMPs that meet federal requirements at 44 CFR 201. Having a current, FEMA-approved NHMP establishes eligibility for certain FEMA grants that fund natural hazard mitigation planning and projects. Approval lasts five years. Jackson County's current NHMP is valid through July 2, 2023.

PROJECT TIMELINE

- [Kickoff Steering Committee Meeting #1 Presentation](#) - October 28, 2022
- [Steering Committee Meeting #2 Presentation](#) - November 30, 2022
- [Steering Committee Meeting #3 Presentation](#) - February 3, 2023
- Individual Meetings with Participating Jurisdictions (Cities and Special Districts) - February through June 2023
- [Steering Committee Meeting #4 Presentation](#) - April 11, 2023
- Review Copy Made Available for Public Comment - September 11, 2023
- Local Adoption - December 2023

Fire District #5 Steering Committee

Steering committee members possessed familiarity with the communities within Fire District #5 and how it is affected by natural hazard events. The steering committee guided the development process through several steps including goal confirmation and prioritization, action item development, and information sharing, to make the NHMP as comprehensive as possible. The steering committee met formally on the following date:

Meeting #1: Fire District #5 steering committee, February 14, 2023 (via Zoom)

During this meeting, the steering committee was provided information on hazard mitigation planning, the NHMP process, and project timeline. The steering committee:

- Reviewed history of hazard events in Fire District #5.
- Reviewed and confirmed the NHMP's mission and goals.
- Discussed the NHMP public outreach strategy.
- Discussed development activity and community lifelines.
- Reviewed and provided feedback on the draft risk assessment including community vulnerabilities and hazard information.
- Developed mitigation strategy (actions).
- Reviewed their implementation and maintenance program.

Meeting Attendees:

- Convener, Charles Hanley, Fire Chief
- Aaron Buster, Assistant Chief
- Jennifer Snook, Chief of Police, Talent
- Joe Slaughter, Community and Economic Development Director, Phoenix
- Mike Winter

Jackson County Fire District No. 5

MEMORANDUM

Date: MARCH 05, 2024
To: BOARD of DIRECTORS
From: CHARLES HANLEY, Fire Chief *CH*
Subject: RESOLUTION R-1-24

QUESTION

Should the Board of Directors of Jackson County Fire District No.5 authorize the issuance, negotiated sale, execution and delivery of a line or credit or taxable non-revolving line of credit and note, series 2024 in an amount not exceeding \$3,000,000.00?

BACKGROUND

Jackson County Fire District No.5 is a tax supported entity that has adopted or will adopt a budget for the 2023-2025 biennial year (s) and provide for the collection of ad valorem property tax in Year (2) of the 2023-2025 Biennial Budget. In anticipation of the collection of such taxes and revenues, the Fire District has previously authorized a line of credit and/or executed the issuance, negotiated sale, execution and delivery of a taxable non-revolving line of credit and note. This is a short-term note, issued at a discount, with a maturity period less than a year. Tax anticipation notes are used by the Fire District to bridge property tax collection funding gaps.

SUMMARY

Jackson County Fire District No. 5 pursuant to the Oregon State Constitution and Oregon Revised Statutes 287A is authorized in anticipation of taxes and other revenues to borrow money and expects to have funding available to pay back the note within the allotted period.

RECOMMENDATION

It is the recommendation of Staff, that Jackson County Fire District No.5, enter into an agreement with KeyBank National Association, First Interstate Bank and/or Peoples Bank and authorize a line of credit or the issuance, negotiated sale, execution and delivery of a taxable non-revolving line of credit and note, series 2024 in an amount not exceeding \$3,000,000.00.

ENCLOSURE(S):

R-1-24

JACKSON COUNTY FIRE DISTRICT NO. 5



JACKSON COUNTY FIRE DISTRICT 5 RESOLUTION R-1-24

A RESOLUTION OF JACKSON COUNTY FIRE DISTRICT NO. 5, JACKSON COUNTY, OREGON AUTHORIZING THE ISSUANCE, NEGOTIATED SALE, EXECUTION AND DELIVERY OF A LINE OF CREDIT OR TAXABLE NON-REVOLVING LINE OF CREDIT AND NOTE, SERIES 2024, IN AN AMOUNT NOT EXCEEDING \$3,000,000; APPOINTING AN AUTHORIZED OFFICER; APPOINTING NOTE COUNSEL AND PURCHASER; AND RELATED MATTERS.

WHEREAS, the Board of Directors (the "Board") of Jackson County Fire District No. 5, Jackson County, Oregon (the "District") is authorized pursuant to the Constitution and Oregon Revised Statutes Section 287A.180 to borrow money in anticipation of taxes and other revenues, provided the borrowing may not be issued in a principal amount that exceeds 80 percent of the taxes or other revenues, except grant moneys, that the District has budgeted or otherwise reasonably expects to have available to pay the borrowing; and

WHEREAS, the District has adopted or will adopt a budget for the 2023-2025 fiscal period, providing for the collection of ad valorem property tax revenues and other budgeted revenues, and for the borrowing and repayment of \$3,000,000 in anticipation of such taxes and other revenues for the payment of current expenses: and

WHEREAS, the District adopts this resolution to provide the terms under which the District will issue a Note (the "Note") to meet current expenses. Such Note shall not mature later than thirteen (13) months after the date the Note is issued and shall provide that at the time of any draw on said Note, the cumulative and outstanding borrowing represented by said Note after said draw will not result in a principal amount outstanding under the Note that exceeds 80 percent of the taxes or other revenues, except grant moneys, that the District has budgeted or otherwise reasonably expects to have available to pay the Note, NOW, THEREFORE,

THE BOARD OF DIRECTORS OF JACKSON COUNTY FIRE DISTRICT NO. 5, JACKSON COUNTY, OREGON HEREBY RESOLVES AS FOLLOWS:

Section 1. Authorization.

The Chairperson of the Board, or their designee (the "Authorized Officer") is hereby authorized to execute and deliver the Note and the Taxable Non-Revolving Line of Credit (the "Line") between the District and Peoples Bank, First Interstate Bank and/or KeyBank National Association (the "Bank") and to authorize the issuance, sale, execution, and delivery of the Note in the maximum aggregate principal amount of \$3,000,000.

Section 2. Security for the Note.

The District's ad valorem property taxes subject to the limits of Article XI, Sections 11 and 11b of the Oregon Constitution, the full faith and credit of the district, and any unused Line Proceeds as defined in the Line are hereby irrevocably pledged to the punctual payment of the amounts due under the Line and the Note.

5811 South Pacific Highway Phoenix, OR. 97535

Phone (541) 535-4222 * Fax (541)535-4226

JACKSON COUNTY FIRE DISTRICT NO. 5



Section 3. Delegation for Establishment of Terms and Sale of the Note and Line.

The District hereby authorizes the Administrative Analyst and Fire Chief (each an "Authorized Officer"), either acting alone on behalf of the District and without further action by the Board to perform the following:

Establish the final principal amount, dated date, denominations, interest rate, payment dates, optional and mandatory redemption provisions, if any, and all other terms of the Note in accordance with this Resolution and the Line:

Negotiate the terms under which the Note shall be sold, enter into the Line with the Bank, with such changes as the Authorized Officer deems appropriate, and execute and deliver the Note and the Line:

Enter into covenants regarding the use of the proceeds of the Note and the current expenses financed with the proceeds of the Note:

Pledge the District's legally available revenues, taxes and other funds to pay the amounts due under the Note and the Line; and:

Execute and deliver any other certificates, documents or agreement that are necessary to issue, sell and deliver the Note and the Line in accordance with this Resolution.

Section 4. Appointment of Note Counsel.

The Law Office of Local Government Law Group P.C. is appointed as note counsel to the District with respect to the Note.

Section 5. Resolution to Constitute Contract.

In consideration of the purchase and acceptance of the Note by those who shall own the same from time to time (the "Noteholders"), the provisions of this Resolution shall be part of the contract of the District with the Noteholders and shall be deemed to be and shall constitute a contract between the District and the Noteholders. The covenants, pledges, representations and warranties contained in this Resolution or in the closing documents executed in connection with the Note and the Line, including without limitation the district's covenants and pledges contained herein, and the other covenants and agreements herein set forth to be performed by or on behalf of the District shall be contracts for the equal benefit protection and security of the Noteholders, all of which shall be of equal rank without preference, priority, or distinction of any of such Note over any other thereof, except as expressly provided in or pursuant to this Resolution.

ADOPTED, this 5th day of March 2023.

JACKSON COUNTY FIRE DISTRICT NO. 5, JACKSON COUNTY, OREGON

By: _____
Chairperson

ATTEST:

By: _____
Witness

5811 South Pacific Highway Phoenix, OR. 97535
Phone (541) 535-4222 * Fax (541)535-4226