

Port of Hood River Addendum to the Hood River County Multi-Jurisdictional NHMP



Photos courtesy of Gary Halvorson, Oregon State Archives

Effective:

July 8, 2025 through July 7, 2030

Prepared for
Port of Hood River
1000 E Port Marina Drive
Hood River, OR 97031

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



FEMA

July 14, 2025

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

Reference: Approval of the Hood River County Multi-Jurisdictional Hazard Mitigation Plan

In accordance with applicable¹ laws, regulations and policy, the Risk Analysis Branch of FEMA Region 10 Mitigation Division has approved the local mitigation plan for the following jurisdictions:

Hood River County	City of Cascade Locks	City of Hood River
Port of Cascade Locks	Port of Hood River	Hood River County Library District
Hood River County School District	West Side Rural Fire Protection 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 July 8, 2025 through July 7, 2030.

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.

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).

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 July 8, 2025 and is considered approved as of then. Prior to July 7, 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

JF:JG

Attachment: Local Mitigation Plan Review Tool

PORT OF HOOD RIVER
Resolution No. 2024-25-23

**A RESOLUTION TO ADOPT THE PORT OF HOOD RIVER ADDENDUM TO AND INCLUSION
IN THE 2025 UPDATE TO THE HOOD RIVER COUNTY MULTI-JURISDICTIONAL NATURAL
HAZARDS MITIGATION PLAN**

Whereas, the Port of Hood River (“District” or “Port”) 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 Port has fully participated in the FEMA prescribed mitigation planning process to prepare the *Hood River County, Multi-Jurisdictional Natural Hazards Mitigation Plan*, which has established a comprehensive, coordinated planning process to eliminate or minimize these vulnerabilities; and

Whereas, the Port has identified natural hazard risks and prioritized a number of proposed actions and programs needed to mitigate the vulnerabilities within the Port District to the impacts of future disasters within the *Hood River County, Multi-Jurisdictional Natural Hazards Mitigation Plan*; and

Whereas, these proposed projects and programs have been incorporated into the *Hood River 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 Hood River County; and

Whereas, the Oregon Department of Emergency Management and Federal Emergency Management Agency, Region X officials have reviewed the *Hood River 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 its effectiveness; and

Whereas, the Commission of the Port of Hood River adopts the NHMP and directs the Executive Director to develop, approve, and implement the mitigation strategies and any administrative changes to the NHMP; NOW THEREFORE,

THE PORT OF HOOD RIVER BOARD OF COMMISSIONERS RESOLVES AS FOLLOWS:

Section 1. The Port of Hood River adopts *the Hood River County Multi-Jurisdictional Natural Hazards Mitigation Plan* as an official plan; and

Section 2. The Port will submit this Resolution to the Oregon Department of Emergency Management and Federal Emergency Management Agency, Region X officials to enable final approval of the *Hood River County Multi-Jurisdictional Natural Hazards Mitigation Plan*.

Section 3. All prior NHMP Resolutions or Plans are hereby repealed.

Adopted by the Board of Commissioners of the Port of Hood River on this 15th day of April 2025.

SIGNED

Signed by:

00DEADE439F8421...

Kristi Chapman, President

ATTEST

DocuSigned by:

1D968775DD2542A...

Michael Fox, Secretary

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Introduction

Purpose

This is an update of the Port of Hood River addendum to the Hood River County Multi-Jurisdictional Natural Hazard Mitigation Plan (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).

Updates to the Port of Hood River's addendum are further discussed throughout the NHMP and within Volume II, Appendix C, which provides an overview of alterations to the document that took place during the update process.

The Port of Hood River adopted their addendum to the Hood River County NHMP on April 15, 2025. FEMA Region X approved the Hood River County NHMP and the City's addendum on July 8, 2025. With approval of this NHMP, the City is now eligible for non-disaster and disaster mitigation project grants through July 7, 2030.

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 city 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 the Port will remain eligible for non-disaster and disaster mitigation project grants. The Port of Hood River was included with an addendum in the 2012 and 2018 Hood River County NHMP process.

The Oregon Partnership for Disaster Resilience (OPDR) at the University of Oregon's Institute for Policy Research and Engagement (IPRE) collaborated with Hood River County Emergency Management and the Port of Hood River to update their NHMP. This project is funded through the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program. Members of the Port of Hood River NHMP Steering Committee also participated in the County NHMP update process (Volume II, Appendix C).

By updating the NHMP, locally adopting it, and having it re-approved by FEMA, the Port of Hood River will maintain eligibility for FEMA Hazard Mitigation Assistance grant program funds.

The Hood River County NHMP and Port of Hood River 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 NHMP development process.

Convener and Committee

The Executive Director for the Port of Hood River served as the designated convener of the NHMP update and will take the lead in implementing, maintaining, and updating the addendum to the Hood River County NHMP in collaboration with the designated convener of the Hood River County NHMP (Emergency Manager).

Representatives from the Port of Hood River Steering Committee met formally and informally, to discuss updates to their addendum (see Attachment B and Volume II, Appendix C). The Steering Committee reviewed and revised the Port's addendum, with a focus on the NHMP's risk assessment and mitigation strategy (action items).

This addendum reflects decisions made at the designated meetings and during subsequent work and communication with Hood River County Emergency Management and OPDR. The changes are highlighted with more detail throughout this document and within Volume II, Appendix C. Other documented changes include a revision of the Port's risk assessment and hazard identification sections, NHMP mission and goals, action items, and community profile.

The Port of Hood River Steering Committee was comprised of the following representatives:

- Convener: Kevin Greenwood, Executive Director
- Ryan Klapprich, Facilities Manager
- Tor Bieker, Port Commissioner and Treasurer

The Steering Committee served as the local review body for the NHMP's development.

NHMP Implementation and Maintenance

The Port Commission will be responsible for adopting the Port Hood River addendum to the Hood River County NHMP. This addendum designates a steering committee and a convener to oversee the development and implementation of action items. Because the Port addendum is part of the County's NHMP, the Port will look for opportunities to partner with the County. The Port's Steering Committee will convene after re-adoption of the Hood River NHMP addendum on an annual schedule. The County is meeting on a semi-annual basis and will provide opportunities for jurisdictions 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 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.

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

Implementation through Existing Programs

Many of the NHMP’s recommendations are consistent with the goals and objectives of the Port’s existing plans and policies. Where possible, the Port of Hood River 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.

The Port of Hood River currently has the following plans that relate to natural hazard mitigation. For a complete list visit the Port’s [website](#):

- Capital Improvement Plan for Hood River-White Salmon Bridge (2023)
- [Strategic Business Plan](#) (2021)
- [Ken Jernstedt Airfield Airport Master Plan](#) (2018)
- [Lot 1 – Development Plan](#) (2016)
- Emergency Action Plan (2015)
- Hood River Waterfront Development Strategy (2007)
- [Marina Basin Planning Study](#) (2007)

The Port of Hood River is also subject to the following City of Hood River plans:

- [Transportation System Plan](#) (2021)
- [Housing Needs Analysis and Buildable Lands Inventory](#) (2015)
- [Economic Opportunities Analysis](#) (2011)
- [Comprehensive Plan](#) (2021) – implemented through [Zoning and Development Code](#).

Capability Assessment

Port of Hood River, Oregon

The Capability Assessment identifies and describes the ability of the Port of Hood River to implement the mitigation strategy and associated action items. This is a key component of the 2025 Natural Hazard Mitigation Plan (NHMP) update. Capabilities can be evaluated through an examination of broad categories, including existing authorities, policies, programs, funding, and resources. Information from the 2018 NHMP was not integrated into other planning mechanisms, in part due to the impact of the COVID-19 pandemic. The Port intends to integrate information from the 2025 NHMP before the next NHMP update.

The Port of Hood River is situated within the City of Hood River as well as neighboring unincorporated areas of Hood River County and was incorporated in 1933. The Port owns and operates the Hood River-White Salmon Bridge, a highly trafficked bridge over the Columbia River connecting Oregon and Washington, as well as a marine park, a wide array of economic development projects throughout Hood River, and the Ken Jernstedt Airfield.

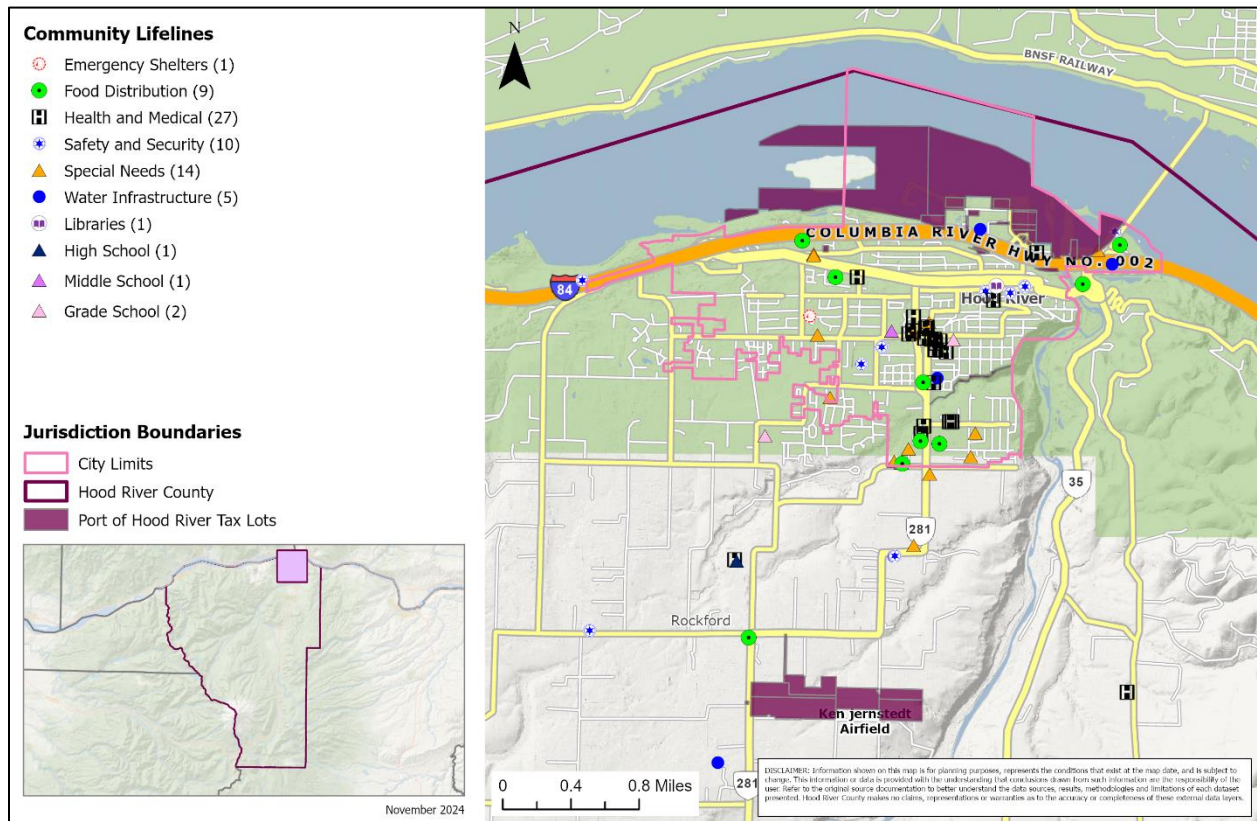
The Port has carried out many infrastructure projects over the past several decades alongside the county and other local and state partners. The Port is currently advocating on behalf of the Hood River-White Salmon Bridge Authority (HRWSBA) for state and federal funding to replace the Hood River-White Salmon Bridge, which is the primary and most significant infrastructure project planned by the Port. At the end of 2024, the project has received grant contracts totaling more than \$244 million. While most of this figure is contracted through the HRWSBA, the Port has contracted for \$19.5 million. A preliminary cost estimate of \$520 million was generated in 2022 for the replacement project; however, an updated cost estimate will be generated in 2025.

Map POHR-1 illustrates the full Port district; however, outside of the northern section of the Hood River-White Salmon Bridge (which extends into Washington state), Port property lies entirely within the City of Hood River's city boundaries (see Map POHR-2).

Existing Authorities

Hazard mitigation can be executed at a local scale through three (3) methods: integrating hazard mitigation actions into other local planning documents (i.e., plan integration), adopting building codes that account for best practices in structural hardening, and codifying land use regulations and zoning designations that prescribe mitigation into development requirements. The extent to which a municipality or multi-jurisdictional effort leverages these approaches is an indicator of that community's capabilities.

Map POHR-2 Port of Hood River Facilities



Source: Mapping by OPDR.

Data from Hood River County Community Development Department (J. Edwards, personal communication, September 2024) and Oregon Department of Geology and Mineral Industries' [HazVu website](#).

Land Use Regulations

Existing land use policies that define zoning and address hazardous conditions provide another source of mitigation capability. The Port of Hood River falls under both the City of Hood River and Hood River County's land use codes.

Structural Building Codes

The Oregon Legislature recently adopted updated building codes for both residential (2021 adoption) and commercial structures (2022) since the last update of the NHMP. These building codes are based on the 2021 version of the International Building Code, International Fire Code, and International Existing Building Code. New wildfire defensible space code is scheduled to be completed soon, with an effective date announced in late 2024. Fire hardening requirements were adopted on October 1, 2022, and effective April 1, 2023.

The City of Hood River administers and enforces the most recent Oregon Structural and Oregon Specialty Codes (2022), and the 2022 Oregon Fire Code. As a result, both new residential and commercial structures will be required to build 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.

Policies and Programs

The NHMP directs the Port of Hood River to explore integration into other planning documents and processes. The Port of Hood River has made significant progress in integrating the NHMP into its portfolio of planning processes and programs over the last five years.

Strategic Business Plan 2021-2026, 2021

The Port's [Strategic Business Plan](#) was developed by Port staff and the five-member Port Commission. The plan primarily focuses on business priorities for the Port, which are threefold: the replacement of the Hood River–White Salmon Interstate Bridge, the commercial development of the Lower Hanel Mill site, and ongoing infrastructure upgrades to the Ken Jernstedt Airfield. The plan includes two items of relevance to the NHMP: the fact that the bridge replacement effort is partially driven by the risk posed to the bridge by an earthquake (due to a lack of seismic upgrades) and the need to support local wildfire response operations.

Personnel

The following Port of Hood River personnel have assignments related to natural hazard mitigation planning and implementation:

- **Emergency Management:** Ryan Klapprich, Facilities Manager
- **Public Information Officer:** Kevin Greenwood, Executive Director
- **Grant writing (for Public Works or emergency management):** Kevin Greenwood, Executive Director
- **Capital improvement planning:** Kevin Greenwood, Executive Director
- **Capital improvement execution:** Ryan Klapprich, Facilities Manager

These personnel integrate hazards 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 workloads.

Capital Projects

The Port of Hood River has implemented recommendations from the last NHMP into its capital improvement projects over the last 5 years, including:

- Hood River-White Salmon Bridge replacement pre-planning projects (e.g., seismic studies and borings).
- Remodel of the north ramp at the Ken Jernstedt Airfield to increase wildfire response capacity and allow larger aircraft to land (funded via the Oregon Connect Six grant).
- Relocated fuel tank to remodeled north ramp at airport (funded via the Oregon Connect Six grant).
- Added cameras at the Ken Jernstedt Airfield to allow for remote surveillance.

Capital Resources

The Port of Hood River maintains several capital resources that have important roles to play in the implementation of the natural hazard mitigation plan, including:

- **Communication towers:** None.
- **Critical facilities with power generators:**
 - Port Facilities office (1000 E Port Marina Drive)
 - Big 7 Building – supports Blue Mountain internet (616 Industrial Street)
 - Interest in placing power generators at the airport in the future.
- **Warming/cooling/smoke shelters:**
 - Ken Jerstendt Airfield could serve as a public-facing emergency facility; it is not set up for this (e.g., no baths/showers but electric hookups) but it could be in the future. Previous master plans for the Port have identified the airport to not only serve as a community shelter but an Emergency Operations Center and/or a base of operations for wildfire fighting.
- **Community shelters:**
 - See previous bullet.
- **Food pantries:** None.
- **Fueling storage:**
 - Port Facilities office (1000 E Port Marina Drive) – two 100-gallon diesel tanks
 - Marina boat launch fuel docks – two each of 1000-gallon diesel and gas tanks
 - Ken Jernstedt Airfield north ramp – 10,000-gallon aviation gasoline (primarily used for wildfire fighting but could be used in vehicles in an emergency)
 - *Note: The Port does not currently store any jet A fuel at the airport. However, the Columbia Gorge Regional Airport in Dallesport, WA, maintains a larger airport with jet A fuel and state/federal firefighting crews tend to bring their own fuel trucks.*

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

Port of Hood River staff are assigned hazard mitigation responsibilities as a part of their larger job responsibilities. Limited capacity reduces the breadth of the programming the community can undertake in any year. The Port relies upon its relationships with the County and the City of Hood River to expand its operations.

Reliance upon outside funding streams and local match requirements

The Port of Hood River operates on a limited budget with a small staff. This leaves few opportunities for using local financial resources to implement hazard mitigation work. They lean heavily upon state and federal grant funds as the primary means for securing mitigation funding. Hazard mitigation grants such BRIC require 25% local funding match, as well as extra staff capacity and expertise to navigate the application process and manage the funding.

Leveraging Partnerships with Public and Nonprofit Entities

The Port has a long history of successful partnerships with City and County governments in both Oregon and Washington state, ODOT, WSDOT, and the federal government.

Mitigation Strategy

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

The Port’s mitigation strategy (action items) was first developed during the 2012 NHMP planning process and revised during the 2018 update. During this process, the Steering Committee assessed the Port’s risk, identified potential issues, and developed a mitigation strategy (action items).

During the 2025 update process, the Port re-evaluated their mitigation strategy (action items). During this process action items were updated, noting what accomplishments had been made and whether the actions were still relevant; any new action items were identified at this time (see Attachment B for more information on changes to action items).

Action Items

Table POHR-1 documents the title of each action along with potential funding sources (HMA stands for FEMA’s Hazard Mitigation Assistance disaster and non-disaster grant programs), the coordinating organization and any partner organizations, the timeline, and the anticipated cost.

For the timeline, O=Ongoing (continuous), S=Short (1-2 years), M=Medium (3-5 years), and L=Long (5 or more years). For cost, L=Low (\$50,000 or less), M=Medium (\$50,000 to \$500,000), H=High (\$500,000 to \$5 million), and VH=Very High (\$5 million or more).

Table POHR-1 Action Items

Action Item #	Mitigation Action Title	Potential Funding Sources	Coordinating Organization	Partner Organizations	Timeline	Cost
Multi-Hazard Mitigation Strategies						
1.1	Retrofit or build a facility at the Ken Jernstedt Airfield for use as a community shelter, 911 dispatch, Emergency Operations Center, and/or point of distribution for emergency resources (e.g., wildfire fighting).	HMA; State Funding (OEM, ODF); Bond	Port of Hood River/County Emergency Management	State Agencies (ODF, OEM); USFS	M	VH
1.2	Purchase power generators and fuel for Port facilities, including for an interim Port administration building during relocation.	HMA; State Funding (OEM, ODHS)	Port of Hood River	County Emergency Management; City of Hood River	M	M
Air Quality/Smoke Mitigation Strategies						
2.0	Given that Air Quality/Smoke is categorized as low risk in the Hazard Vulnerability Assessment, the Steering Committee decided not to develop any mitigation action items for this hazard. This is in line with the decision-making process for low-risk hazards used by the 2025 Hood River County NHMP Steering Committee for the County Mitigation Strategy.					
Drought Mitigation Strategies						
3.0	Given that Drought is categorized as low risk in the Hazard Vulnerability Assessment, the Steering Committee decided not to develop any mitigation action items for this hazard. This is in line with the decision-making process for low-risk hazards used by the 2025 Hood River County NHMP Steering Committee for the County Mitigation Strategy.					
Earthquake/CSZ Event Mitigation Strategies						
4.1	Replace Hood River-White Salmon Bridge with a new seismically resilient bridge to withstand strong shaking.	HMA; State Funding (Seismic Rehabilitation Grant Program, ODOT)	Port of Hood River/ The Hood River-White Salmon Bridge Authority	City of Hood River; County Emergency Management; City of White Salmon, WA; City of Bingen, WA; Klickitat County, WA; State Agencies (ODOT); Washington State Department of Transportation	M	VH

Action Item #	Mitigation Action Title	Potential Funding Sources	Coordinating Organization	Partner Organizations	Timeline	Cost
4.2	Address seismic issues in identified vulnerable and critical facilities, including the Big 7 building, via structural and non-structural retrofits.	HMA; State Funding (Seismic Rehabilitation Grant Program); Bond	Port of Hood River	County Emergency Management	M	VH
Extreme Heat Mitigation Strategies						
5.0	Given that Extreme Heat is categorized as low risk in the Hazard Vulnerability Assessment, the Steering Committee decided not to develop any mitigation action items for this hazard. This is in line with the decision-making process for low-risk hazards used by the 2025 Hood River County NHMP Steering Committee for the County Mitigation Strategy.					
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/Debris Flow 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.					
Volcanic Event Mitigation Strategies						
8.0	Given that Volcanic Event is categorized as low risk in the Hazard Vulnerability Assessment, the Steering Committee decided not to develop any mitigation action items for this hazard. This is in line with the decision-making process for low-risk hazards used by the 2025 Hood River County NHMP Steering Committee for the County Mitigation Strategy.					
Wildfire Mitigation Strategies						
9.1	Purchase jet A fuel tank and fuel for the north ramp at the Ken Jernstedt Airfield to support wildfire fighting.	HMA; State Funding (ODF, OSFM); USFS (Community Wildfire Defense Grant); Existing Staff Resources	Port of Hood River	County Emergency Management; State Agencies (ODF, OSFM); USFS	M	VH

Action Item #	Mitigation Action Title	Potential Funding Sources	Coordinating Organization	Partner Organizations	Timeline	Cost
Windstorm Mitigation Strategies						
10.0	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.					
Winter Storm Mitigation Strategies						
11.1	Develop countywide plan for addressing trucks stranded during storms on I-84 without using Port of Hood River or Port of Cascade Locks property.	HMA; State Funding (ODOT); Existing Staff Resources	Port of Hood River/Port of Cascade Locks	County Emergency Management; City of Hood River; City of Cascade Locks; State Agencies (ODOT)	M	M

Source: Port of Hood River NHMP Steering Committee, updated 2025

Potential Funding Sources: HMA=FEMA’s Hazard Mitigation Assistance disaster and non-disaster grant programs

Cost: L=Low (less than \$50,000), M=Medium (\$50,000-\$500,000), H=High (\$500,000-\$5 million), VH=Very High (\$5 million or more)

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

Risk Assessment

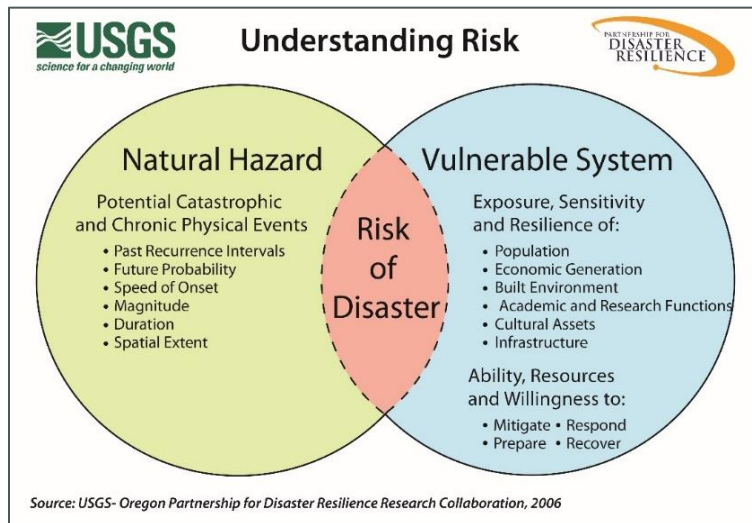
This section of the NHMP addendum addresses 44 CFR 201.6(b)(2) - Risk Assessment. In addition, this chapter can serve as the factual basis for addressing Oregon Statewide Planning Goal 7 – Areas Subject to Natural Hazards.

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 POHR-1. Ultimately, the goal of hazard mitigation is to reduce the area of risk, where hazards overlap vulnerable systems.

Figure POHR-1 Understanding Risk



Hazard Analysis

The Port of Hood River Steering Committee developed their hazard vulnerability assessment (HVA), using their previous HVA and the County’s HVA (Volume I, Section 2) 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 Hood River, which are discussed throughout this addendum.

Table POHR-2 shows the HVA matrix for the Port of Hood River listing each hazard 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.

Winter Storm, a Cascadia Subduction Zone (CSZ) Event, Earthquake (crustal), and Wildfire are the **high hazard threats** to the Port. Landslide/Debris Flow, Windstorm, and Flood are all **moderate hazard threats** to the Port. Extreme Heat, Drought, Air Quality/Smoke, and a Volcanic Event are the **low hazard threats** to the Port.

Table POHR-2 Hazard Analysis Matrix – Port of Hood River

Hazard	History (x2)	Probability (x7)	Vulnerability (x5)	Maximum Threat (x10)	Total Threat Score	Rank	Hazard Tier
Winter Storm	9	10	9	10	233	1	High
CSZ Event	2	6	8	10	186	2	High
Crustal Earthquake	2	5	8	10	181	3	High
Wildfire	7	8	6	8	180	4	High
Landslide/Debris Flow	4	3	5	8	134	5	Moderate
Windstorm	2	3	5	7	121	6	Moderate
Flood	3	6	4	5	118	7	Moderate
Extreme Heat	4	8	2	4	114	8	Low
Drought	4	7	3	4	112	9	Low
Air Quality/Smoke	5	6	2	4	103	10	Low
Volcanic Event	2	2	5	6	103	11	Low

Source: Port of Hood River Steering Committee (2025); Analysis by OPDR.

Hazard and Community Characteristics

Port of Hood River facilities are entirely contained within the City of Hood River (except for the northern section of the Hood River-White Salmon Bridge, which is in Washington state, and the Ken Jernstedt Airfield, which lies south of city boundaries). The Port’s Steering Committee was actively involved in the determination of risk and vulnerability along with the City of Hood River and the County NHMP Steering Committee. As such, the Port’s hazard and community characteristics are identical to the City’s regarding the type, location, and extent for identified natural hazards. Moreover, the Port does not have the authority to adopt and enforce floodplain management or other land use regulations for the areas within its jurisdiction.

Please review the County Risk Assessment (Volume I, Section 2) and the City of Hood River Addendum (Volume III) for additional information on the community characteristics of the City and hazard vulnerability for the Port.

Community Assets

Table POHR-3 lists key community assets for the Port of Hood River. For a full list of critical and essential facilities and infrastructure¹ in the City of Hood River, see the City of Hood River Addendum (Volume III)

Table POHR-3 Port of Hood River Assets

Facility Name	Details
Hood River-White Salmon Interstate Bridge	Includes all spans of the steel truss composite bridge.
Ken Jerstedt Airfield	A 120-acre visual approach Basic Utility, Stage II airport, serving single-engine and small twin-engine airplanes, with approximately 105 aircraft based at the facility and handling about 20,000 operations annually. Includes a 1,353 sq. ft. office, 43,338 sq. ft. maintenance hangar and 36 T-hangar spaces.
Hood River Waterfront	Includes 105 acres of land (primarily Port-owned); 50 acres are developed with light industrial or commercial properties, 45 acres are dedicated to parks, recreation sites, trails, and other open space, and the remaining 10 acres are vacant. Includes 7,000 sq. ft. of commercial overlay.
Waterfront Industrial Property	Halyard Building (2010): 21,148 sq. ft. flex-space light industrial building; Jensen Building (2010): 71,857 sq. ft. classic light industrial building; Maritime Building (1975): 38,806 sq. ft. basic industrial building.
Waterfront Recreation Property	Includes The Spit, Event Site, and The Hook plus a trail system that support recreational pursuits including windsurfing, kiteboarding, stand-up paddle boarding, and kayaking.
Marina Basin	Two major components, both built in the 1970s: (1) a gated, semi-private marina with 154 slips, 11 boathouses, and 110 parking spaces for tenant use; and (2) a public boat launch that includes a two-lane boat ramp, 150 ft of transient dock for visitor tie-up, 55 trailer and 28 vehicle parking spaces, and a public restroom.
Port Marina Park	22 acres of active and passive opens space and four commercial buildings: Marina Park Office Building No. 1 (1973, renovated 2012): 5,738 sq. ft. hosting the Hood River Chamber of Commerce and Visitors Center; Marina Park Office Building No. 2: 2,406 sq. ft. hosting a State DMV office; Port Office Building and Shop (1970s, renovated 2008): 4,934 sq. ft. office and 3,226 sq. ft. hosting Port administration and facilities maintenance and a small business accelerator; Marina Park includes an 839 sq. ft. structure which houses the Hood River Yacht Club, lawn space, picnic shelter, beaches, restrooms, and a multi-use field.

¹ Critical and essential facilities and infrastructure are those that are essential to the continued delivery of key government services, that may significantly impact the public’s ability to recover from a natural hazard event, and that are key to government response and recovery activities (i.e., life, safety, property, and environmental protection).

**Miscellaneous
Assets**

Wasco Business Building (2004): 14,650 sq. ft. building; Big 7: (1984, renovated in the 1990s): 38,854 sq. ft. office and industrial building; Timber Incubator Building (1997): 10,000 sq. ft. building located in 29-acre John Weber Business Park

Source: Port of Hood River Steering Committee (2025)

The vulnerability for Earthquake (Crustal/CSZ), Flood, Landslide/Debris Flow, Volcano, and Wildfire was determined based on data from the 2021 DOGAMI Risk Report for Hood River County. The remaining hazards were not included in the Risk Report; their vulnerability was determined based on the County Risk Assessment (Volume I, Section 2) and the City of Hood River addendum (Volume III).

Table POHR-4 identifies the hazards to which each of the assets listed in Table POHR-3 are vulnerable, if any. The vulnerability for Earthquake (Crustal/CSZ), Flood, Landslide/Debris Flow, Volcano, and Wildfire was determined based on data from the 2021 DOGAMI Risk Report for Hood River County. The remaining hazards were not included in the Risk Report; their vulnerability was determined based on the County Risk Assessment (Volume I, Section 2) and the City of Hood River addendum (Volume III).

Table POHR-4 Port of Hood River Asset Hazard Vulnerability

Facility Name	Air Quality/ Smoke	Drought	Earthquake (Crustal/CSZ)	Extreme Heat	Flood	Landslide/ Debris Flow	Volcano	Wildfire	Windstorm	Winter Storm
Hood River- White Salmon Interstate Bridge			X							X
Ken Jernstedt Airfield			X				X	X	X	X
Hood River Waterfront	X		X	X	X		X	X	X	X
Waterfront Industrial Property			X				X	X	X	X
Waterfront Recreation Property	X		X	X					X	X
Marina Basin			X		X		X	X	X	X
Port Marina Park			X				X	X	X	X
Miscellaneous Assets			X					X		X

Source: Port of Hood River Steering Committee (2025). Analysis by OPDR.

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 City of Hood River (Volume II, Appendix G).

To provide the public information regarding the draft NHMP addendum, and provide an opportunity for comment, an announcement was provided for 15 days from November 19 to December 4, 2024 on the County's website. 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 C.

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 C.

Port of Hood River Steering Committee

Steering Committee members possessed familiarity with the community of Hood River 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: Port of Hood River Steering Committee, May 29, 2024 (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:

- Updated recent history of hazard events in the port's 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:

- Kevin Greenwood, Executive Director
- Ryan Klapprich, Facilities Manager
- Tor Bieker, Port Commissioner and Treasurer

Attachment B: Action Item Changes

Table POHR-5 is an accounting of the status (complete or not complete) and major changes to actions since the previous NHMP. All actions were renumbered in this update to be consistent with other jurisdictions that are participating in the multi-jurisdictional NHMP. Actions identified as still relevant are included in the updated action plan (Table POHR-1).

Previous NHMP Actions that are Complete:

None.

Previous NHMP Actions that are Not Complete and No Longer Relevant:

Multi-Hazard #2: *Research and develop teleconferencing solution for emergency communications during hazard event; possible join with retrofitting House 3 (Port property).* No longer a priority for either the Port or the City of Hood River. Broader interoperability issues are addressed as part of the County’s Mitigation Strategy.

Table POHR-5 Status of All Hazard Mitigation Actions in the Previous Plan

2018 Action Item	2025 Action Item	Status	Still Relevant? (Yes/No)
Multi-Hazard Mitigation Strategies			
-	1.1	New	-
-	1.2	New	-
-	1.3	New	-
-	1.4	New	-
-	1.5	New	-
-	1.6	New	-
-	1.7	New	-
Air Quality Mitigation Strategies			
-	2.0	New	-
Drought Mitigation Strategies			
-	3.0	New	-
Earthquake/CSZ Event Mitigation Strategies			
Earthquake #1	4.1	Not Complete	Yes
-	4.2	New	-
Extreme Heat Mitigation Strategies			
-	5.0	New	-

2018 Action Item	2025 Action Item	Status	Still Relevant? (Yes/No)
Flood Mitigation Strategies			
-	6.0	New	-
Landslide/Debris Flow Mitigation Strategies			
-	7.0	New	-
Volcanic Event Mitigation Strategies			
-	8.0	New	-
Wildfire Mitigation Strategies			
-	9.1	New	-
-	9.2	New	-
Windstorm Mitigation Strategies			
-	10.0	New	-
Winter Storm Mitigation Strategies			
-	11.1	New	-