

Town of Butte Falls Addendum to the Jackson County NHMP



Photos courtesy of Oregon State Archives

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Introduction

Purpose

This is an update to the Butte Falls 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).

Updates to Butte Falls' addendum are further discussed throughout the NHMP and within Volume II, Appendix B, which provides an overview of alterations to the document that took place during the update process.

Butte Falls adopted their addendum to the Jackson County Multi-jurisdictional NHMP on [date], 2023. FEMA Region X approved the Jackson County NHMP on [date], 2023 and the City's addendum on [date], 2023. With approval of this NHMP, the City is now eligible for non-disaster and disaster mitigation project grants through [date-1], 2028.

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 city will remain eligible for non-disaster and disaster mitigation project grants. Butte Falls was included as an addendum in the 2018 Jackson County NHMP process.

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 Butte Falls to update their NHMP. This project is funded through the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program. Members of the Butte Falls 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, Butte Falls will maintain eligibility for FEMA Hazard Mitigation Assistance grant program funds.

The Jackson County NHMP and Butte Falls addendum are the result of a collaborative effort between citizens, 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 Mayor served as the designated convener of the NHMP update 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 Town of Butte Falls steering committee met formally and informally, to discuss updates to their addendum (Volume II, Appendix B). The steering committee reviewed and revised the Town's addendum, with particular focus on the NHMP's risk assessment and mitigation strategy (action items).

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

The Butte Falls Steering Committee was comprised of the following representatives:

- Convener, Trish Callahan, Town of Butte Falls Mayor
- Chris Bray, Town of Butte Falls Public Works
- Linda Spencer
- Jeff Gorman, volunteer
- Lori Paxton, Town of Butte Falls Recorder

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 Town Council will be responsible for adopting the Butte Falls 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 Town addendum is part of the County's multi-jurisdictional NHMP, the Town will look for opportunities to partner with the County. The Town's steering committee will convene after re-adoption of the Butte Falls NHMP addendum on an annual schedule. The County is meeting on a semi-annual basis and will provide opportunities for the cities to report on NHMP implementation and maintenance during their meetings. The Town's Mayor will serve as the convener and will be responsible for assembling the steering committee.

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 Town 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 the Town's existing plans and policies. Where possible, Butte Falls 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.

Butte Falls' acknowledged comprehensive plan is the Town of Butte Falls Comprehensive Plan (1982). The Oregon Land Conservation and Development Commission first acknowledged the plan in 1983. The Town implements the plan through the Community Development Code.

Butte Falls currently has the following plans that relate to natural hazard mitigation. For a complete list visit the Town's [website](#).

- Comprehensive Plan (1982)
- Community Development Code (2007)
- Emergency Operations Plan (2012)
- Water System Master Plan (2012)
- [Building Codes and Standards: Oregon Structural Specialty Code \(Commercial\) and Oregon Residential Specialty Code](#).

Mitigation Strategy

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

The Town's mitigation strategy (action items) was reviewed and updated during the 2023 NHMP planning process. The steering committee assessed the Town's risk, identified potential issues, and developed a mitigation strategy (action items). The Town developed actions specific to their community after first reviewing a list of recommended actions developed by the County or recommended by OPDR.

Mitigation Successes

Butte Falls 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.

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.

FEMA Funded Mitigation Successes

- 2023: DR4562 - Wildfire Mitigation Advance Assistance (\$105,000)
- 2023: DR4599 – Wildfire Mitigation Project (\$450,000) - PENDING

Seismic Rehabilitation Grant Program Mitigation Successes

- 2016: Butte Falls High School (\$1,492,300)
- 2017: Butte Falls Volunteer Fire Department (\$337,540)
- 2020: Butte Falls Elementary School (\$2,497,645).

Other Mitigation Successes

- 2023: Wildfire Mitigation (brush removal, slash and burn piles) – Oregon Department of Forestry (\$450,000)
- 2023: Commercial thinning (RFQ23 Unit 3 SE)

Action Items

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

Table BA-1 Butte Falls Priority Action Items

Action Item #	Mitigation Actions	Potential Funding Resources	Lead Department(s)	Partners	Timeline	Cost
Multi-hazard						
1.1	Explore funding sources and grant opportunities for community-wide natural hazard mitigation and resiliency activities, including mitigation to trees hazardous to properties during a winter storm or windstorm.	General Fund (Staff Time)	City Administration	County Emergency Management, RVCOG, NRCS, ODG	O	L-H
1.2	Obtain generators to provide power to maintain water distribution systems and function of City Hall, the city's school, and the Fire Department.	Building Improvement Grants, HMGP, PDM	City Administration	FEMA	M	M
1.3	Work with partners to sustain a public awareness and education campaign about natural hazards through written communications and in-person events.	General Fund, FEMA, DLCD	City Administration	County Emergency Management, FEMA, OEM, NWS, ODOT, CERT, RVCOG Utilities	O	L
1.4	Obtain a generator to provide back-up power to maintain Butte Falls Elementary School's food supply.	Building Improvement Grants, HMGP, PDM	City Administration	OEM, FEMA, RVCOG	L	L-M
1.5	Consider hazard information when evaluating new City ordinances and land-use regulations through the Butte Falls Community Forest Commission's recommendations.	General Fund	City Administration	City/County GIS, FEMA, DLCD	L	L
1.6	Perform a phased analysis study on landslide/earthquake risk for City's water tanks and seek funding to address the findings of the study.	General Fund, PDM, FMA, HMGP, PA	City Administration	DOGAMI	L	M-H

Action Item #	Mitigation Actions	Potential Funding Resources	Lead Department(s)	Partners	Timeline	Cost
1.7	Identify current capabilities and research options to secure an early warning system (EWS) for extreme weather risks.	General Fund, PDM, FMA, HMGP, PA	City Administration	County Emergency Management, OMD-OEM, DLCDC, USACE, Silver Jackets	M	M
Air Quality						
See priority actions and multi-hazard actions for applicable mitigation strategies.						
Drought						
3.1	Obtain and connect a pump for emergency water connection to Medford Water Commission system.	General fund	City Administration	Medford Water Commission	M	M
Earthquake						
4.1	Implement structural and non-structural retrofits to the city's community hall and City Hall.	General Fund, SRGP, PDM	Butte Falls Fire and Rescue	Building officials, Planning, Public Works	M	H
4.2	Conduct public outreach on building safety by educating residents on building code recommendations.	Local Funding Resources, AVISTA	City Administration	Building officials, American Red Cross, DOGAMI, OEM	O	L
Extreme Heat Event						
See priority actions and multi-hazard actions for applicable mitigation strategies.						
Flood						
See priority actions and multi-hazard actions for applicable mitigation strategies.						
Landslide						
See priority actions and multi-hazard actions for applicable mitigation strategies.						

Action Item #	Mitigation Actions	Potential Funding Resources	Lead Department(s)	Partners	Timeline	Cost
Severe Weather						
8.1	Continue to coordinate local efforts by public and private agencies to share information with the public on the benefits of tree-trimming and tree replacement programs.	General Fund, HMA, Utilities	City Administration	Public Works, Utility companies, ODOT, USFS, BLM, ODF, Fire	O	L
Volcano (VE)						
See priority actions and multi-hazard actions for applicable mitigation strategies.						
Wildfire						
10.1	Work with partners (e.g., Oregon Department of Forestry) to sustain ongoing Firewise fuel reduction efforts.	Local Funding Resources, ODF, PDM, HMGPWF	City Administration	Property Owners	O	H
10.2	Agree to and implement a mutual aid agreement with Rogue Valley Fire Chiefs Association to provide firefighting or other services to Butte Falls.	General Fund (Staff Time)	City Administration	Rogue Valley Fire Chiefs Association	S	L
10.3	Coordinate fire mitigation action items through the Rogue Valley Integrated Community Wildfire Protection Plan.	General Fund, ODF	City Administration	Fire Plan Committee and Participating Agencies	O	L

Source: Butte Falls NHMP Steering Committee, updated 2023

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

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

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

Risk Assessment

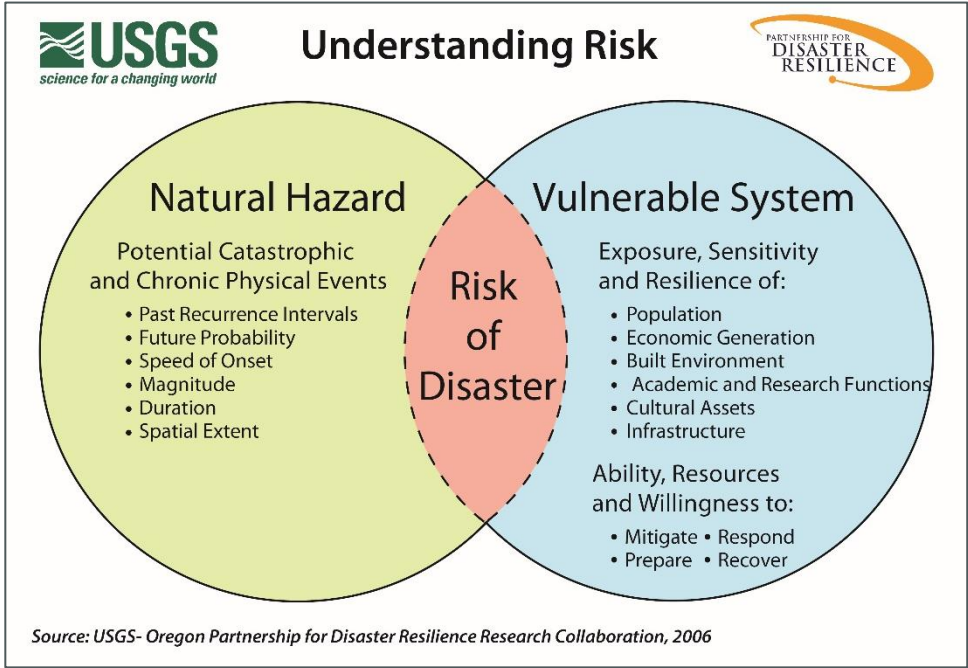
This section of the NHMP addendum addresses 44 CFR 201.6(b)(2) - Risk Assessment. In addition, this chapter can serve as the factual basis for addressing Oregon Statewide Planning Goal 7 – Areas Subject to Natural Hazards.

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

Figure BA-1 Understanding Risk



Hazard Analysis

The Butte Falls 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 Butte Falls, which are discussed throughout this addendum.

Table BA-2 shows the HVA matrix for Butte Falls 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, winter storm, and emerging infectious disease) and a catastrophic hazard (Cascadia Subduction Zone earthquake) rank as the top hazard threats to the Town (Top Tier). Extreme heat, air quality, windstorm and drought comprise the next highest ranked hazards (Middle Tier), while the landslide, flood, crustal earthquake, and volcanic event hazards comprise the lowest ranked hazards (Bottom Tier).

Table BA-2 Hazard Analysis Matrix – Butte Falls

Hazard	History	Vulnerability	Maximum Threat	Probability	Total Threat Score	Hazard Rank	Hazard Tiers
Wildfire	14	35	100	70	219	#1	Top Tier
Winter Storm	20	40	80	70	210	#2	
Emerging Infectious Disease	16	40	100	49	205	#3	
Earthquake - Cascadia	2	50	100	49	201	#4	
Extreme Heat Event	20	25	70	70	185	#5	Middle Tier
Air Quality	18	40	60	63	181	#6	
Windstorm	20	20	50	70	160	#7	
Drought	20	15	50	63	148	#8	
Landslide	6	15	50	21	92	#9	Bottom Tier
Flood	10	10	50	21	91	#10	
Earthquake - Crustal	2	15	30	21	68	#11	
Volcanic Event	2	5	50	7	64	#12	

Source: Butte Falls NHMP Steering Committee, 2023.

Community Characteristics

Table BA-3 and the following section provides information on Town specific demographics and characteristics. For additional information on the characteristics of Butte Falls, in terms of geography, environment, population, demographics, employment and economics, as well as housing and transportation see Volume III, Appendix C. Many of these community characteristics can affect how natural hazards impact communities and how communities choose to plan for natural hazard mitigation. Considering the Town specific assets during the planning process can assist in identifying appropriate measures for natural hazard mitigation.

Butte Falls is in the northeast region of the County, about 30 miles northeast of the City of Medford and about 5 miles from the Rogue River-Siskiyou National Forest. The Town and most of Jackson County are within the Rogue watershed.

Butte Falls 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. Located on the densely forested Big Butte Plateau in the Cascade Range in southern Oregon,

the town's name comes from nearby Butte Falls, a ten-foot-high basalt ledge across Big Butte Creek. The town is in a mountainous area of the Rogue Valley, approximately 2,500 feet above sea level. Mt McLoughlin, part of the Siskiyou Mountain Range, rises to 9,500 feet to the southeast.

Butte Falls averages more precipitation per month than the state of Oregon, especially during November and December. The average daily high temperature in the city is between 45- and 55-degrees Fahrenheit (F) in the winter and between 80- and 95-degrees Fahrenheit (F) in the summer. Rogue Valley has the lowest precipitation among Oregon's western interior valleys, however, Butte Falls averages more than twice the county average at about 45 inches of rain per year.² October through May are the wettest months (averaging 41.2 inches of rain during this period).

Population and Income

Butte Falls is the smallest incorporated community in Jackson County. The Town has both grown and declined in population since its incorporation in 1911. Between 2016 and 2021 the City grew by 21 people (5%). According to the State's official coordinated population forecast, between 2021 and 2040 the City's population is forecast to decline by 5% to 428. Most of the population is White/Caucasian (86%) and about 5% of the population is Hispanic or Latino. During the same period median household income increased by 11% to \$38,958. The poverty rate is 13% (18% for Seniors), 10% do not have health insurance, and 58% of renters pay more than 30% of their household income on rent (32% for owners). The city has an educated population with 91% of residents 25 years, and older holding a high school degree, 13% have a bachelor's degree or higher. Approximately 20% of the population lives with a disability, and 44% are either below 18 (25%) or over 65 (35%) years of age. About 18% of the population are 65 or older and living alone and 10% are single parents.

Transportation, Housing, and Infrastructure

In the Town of Butte Falls, transportation has played a major role in shaping the community. Butte Falls' commercial areas developed along primary routes and residential development followed nearby. Today, mobility plays an important role in Butte Falls and the daily experience of its residents and businesses as they move from point A to point B. The Town is primarily serviced through the Butte Falls Highway. In addition, the Butte Falls Discovery Loop Tour is a recreational trail system that attracts visitors and provides alternative travel corridors for bikes and pedestrians. By far, motor vehicles represent the dominant mode of travel through and within Butte Falls. Twenty-nine percent (29%) of renters and 76% of owners have two or more vehicles (6% of renters do not have access to a car). Most workers commute alone in private vehicles (80%), while 7% work from home, 8% carpool, and 5% bicycle or walk to work.

Development in the town spans a total of 0.4 square miles. The Town of Butte Falls includes a diversity of land uses but is zoned primarily residential. The city's Comprehensive Plan

² NOAA. National Centers for Environmental Information. Summary of Monthly Normals (1991-2010). Station: Fish Lk., OR US USS0022G14S. <https://www.ncei.noaa.gov/access/services/data/v1?dataset=normals-monthly-1991-2020&startDate=0001-01-01&endDate=9996-12-31&stations=USS0022G14S&format=pdf>

identifies land use needs within the city and its urban growth boundary. Since the previous NHMP (2018) the city has not annexed any land or had major development occur in the city. New development has complied with the standards of the [Oregon Building Code](#) and the city's development code including their floodplain ordinance.

Two-thirds of housing units are single-family and 23% are mobile homes. Most homes (53%) were built before 1970. Newer homes are more likely to be built to current seismic, flood, wildfire, and other hazard standards. Just under two-thirds of housing units are owner occupied, 25% are renter occupied, while 3% are seasonal homes, and 11% are vacant.

Economy

Traditionally, Butte Falls has built its economy on logging. According to economic Town data, Butte Falls finds their main economic drivers in the sectors of agriculture, forestry, fishing and hunting, tourism, and education.³

About 44% of the resident population 16 and over is in the labor force (209 people) and are employed in a variety of occupations including management, business, and financial (34%), transportation and material moving (16%), professional and related (14%), food preparation and serving (9%), and building and grounds cleaning and maintenance (8%) occupations.

Most workers residing in the city (98%, 121 people) travel outside of the city for work primarily to Medford and surrounding areas.⁴ A significant population of people travel to the city for work, (88% of the workforce, 80 people) primarily from Medford and surrounding areas.⁵

³ City Data.com, Butte Falls, <http://www.city-data.com/city/Butte-Falls-Oregon.html> and as verified by City staff.

⁴ U.S. Census Bureau. LEHD Origin-Destination Employment Statistics (2002-2020). Longitudinal-Employer Household Dynamics Program, accessed on August 17, 2023 at <https://onthemap.ces.census.gov>.

⁵ Ibid.

Table BA-3 Community Characteristics

Population Characteristics		
2016 Population Estimate	430	
2021 Population Estimate	451	
2040 Population Forecast*	428	
Race		
American Indian and Alaska Native	0%	
Asian	0%	
Black/ African American	0%	
Native Hawaiian and Other Pacific Islander	3%	
White	86%	
Some Other Race	0%	
Two or More Races	10%	
Hispanic or Latino/a (of any race)	5%	
Limited or No English Spoken	0	0
Vulnerable Age Groups		
Less than 5 Years	21	4%
Less than 18 Years	118	25%
65 Years and Older	78	16%
85 Years and Older	11	2%
Age Dependency Ratio		70.3
Disability Status (Percent age cohort)		
Total Disabled Population	95	20%
Children (Under 18)	17	14%
Working Age (18 to 64)	51	18%
Seniors (65 and older)	27	35%

Household Characteristics		
Housing Units		
Single-Family (includes duplexes)	124	64%
Multi-Family	26	13%
Mobile Homes (includes RV, Van, etc.)	44	23%
Household Type		
Family Household	113	68%
Married couple (w/ children)	27	16%
Single (w/ children)	16	10%
Living Alone 65+	30	18%
Year Structure Built		
Pre-1970	102	53%
1970-1989	46	24%
1990-2009	44	24%
2010 or later	2	1%
Housing Tenure and Vacancy		
Owner-occupied	119	61%
Renter-occupied	48	25%
Seasonal	5	3%
Vacant	22	11%
Vehicles Available (Occupied Units)		
No Vehicle (owner occupied)	0	0%
Two+ vehicles (owner occupied)	91	76%
No Vehicle (renter occupied)	3	6%
Two+ vehicles (renter occupied)	14	29%

Income Characteristics		
Households by Income Category		
Less than \$15,000	15	9%
\$15,000-\$29,999	34	20%
\$30,000-\$44,999	43	26%
\$45,000-\$59,999	8	5%
\$60,000-\$74,999	29	17%
\$75,000-\$99,999	14	8%
\$100,000-\$199,999	24	14%
\$200,000 or more	-	0%
Median Household Income	\$38,958	
Gini Index of Income Inequality	0.43	
Poverty Rates (Percent age cohort)		
Total Population	59	13%
Children (Under 18)	11	11%
Working Age (18 to 64)	34	12%
Seniors (65 and older)	14	18%
Housing Cost Burden (Cost > 30% of household income)		
Owners with a Mortgage	38	32%
Owners without a Mortgage	17	14%
Renters	28	58%

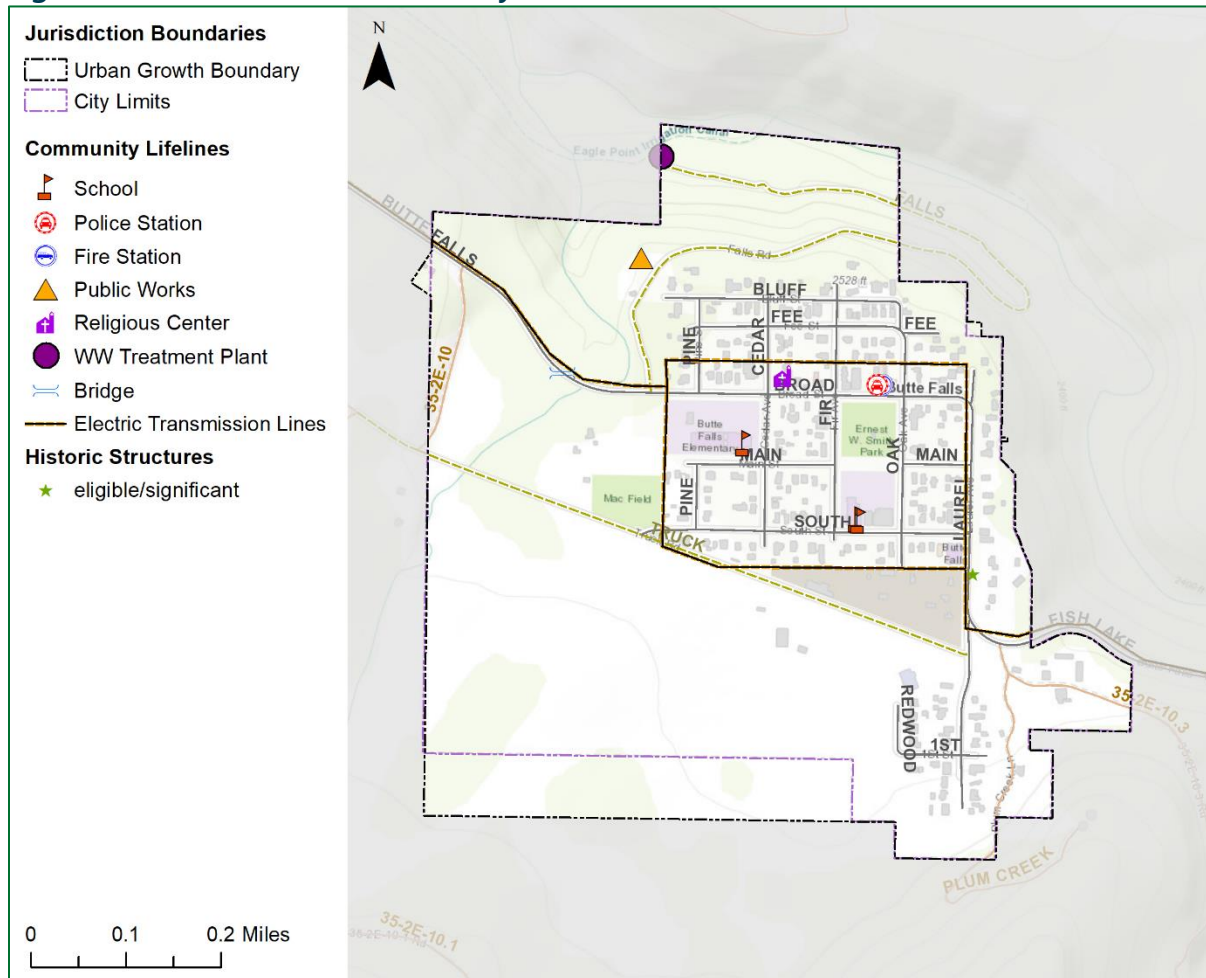
Employment Characteristics		
Labor Force (Population 16+)		
In labor Force (% Total Population)	209	44%
Unemployed (% Labor Force)	30	14%
Occupation (Top 5) (Employed 16+)		
Management, Business, & Financial	60	34%
Transportation and Material Moving	29	16%
Professional & Related	25	14%
Food Preparation & Serving	16	9%
Blding & Grounds Cleaning & Maint.	14	8%
Health Insurance		
No Health Insurance	47	10%
Public Health Insurance	279	59%
Private Health Insurance	219	46%
Transportation to Work (Workers 16+)		
Drove Alone	134	80%
Carpooled	13	8%
Public Transit	0	0%
Motorcycle	0	0%
Bicycle/Walk	9	5%
Work at Home	11	7%

Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates; Portland State University, Population Research Center, "Annual Population Estimates, Table 4", 2016 and 2021; and "Population Forecasts, Summary Tab", 2022.
 Note: * = Population forecast within UGB

Community Assets

This section outlines the resources, facilities, and infrastructure that, if damaged, could significantly impact the public safety, economic conditions, and environmental integrity of Butte Falls. Community lifelines and historic structures in Butte Falls are shown in Figure BA-2 and Table BA-4. 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 BA-2 Butte Falls Community Lifelines and Historic Structures



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 BA-4 Butte Falls Community Lifelines

Facility Name	Community Lifeline Category	Lifeline Type	Earthquake-Liquefaction Hazard	Flood Hazard	Landslide Hazard	Wildfire Hazard
Butte Falls STP	food, water, and shelter	wastewater treatment	none		moderate	moderate
Butte Falls Charter School	safety and security	school	none		low	low
Butte Falls Elementary School	safety and security	school	none		low	low
Butte Falls Community School Partnership	safety and security	shelter/command station	none	none	low	moderate
Butte Falls Police Department	safety and security	police station	none		low	low
Butte Falls Volunteer Fire Department	safety and security	fire station	none		low	low
Butte Falls High School	safety and security	school	none		low	low
Butte Falls Community Bible Church	safety and security	religious center	none		low	low
Butte Falls Public Works	transportation	public works	none		moderate	moderate
Butte Falls Prospect Cutoff Bridge	transportation	bridge	none		low	low

Source: Oregon Department of Geology and Mineral Industries, Butte Falls NHMP Steering Committee

Infrastructure:

Infrastructure that provides services for the Town include:

Transportation Networks:

- John Dyck Bypass
- Broad St
- Butte Falls Rd (Co. Rd 821)
- Butte Falls/Prospect Rd
- Fish Lake Rd
- Falls Rd

Water Facilities:

- Complete potable water system
- Complete sewage treatment system
- Bulk water plan

- Water bottling plant

Special Service Districts:

- Southern Oregon Education Service District
- 911 Service District

Private Utilities:

- Pacific Power
- Century Link
- DishNet, Direct TV, Satellite
- Hunter (schools)

Critical Facilities

Facilities that are critical to government response and recovery activities (i.e., life, safety, property, and environmental protection). These facilities include: 911 Centers, Emergency Operations Centers, Police and Fire Stations, Public Works facilities, sewer and water facilities, hospitals, bridges, roads, shelters, and more. Facilities that, if damaged, could cause serious secondary impacts may also be considered “critical.” A hazardous material facility is one example of this type of critical facility.

Fire Stations:

- Butte Falls Fire Department
- Fire office
- Fire garage

Law Enforcement:

- Butte Falls Police Department

Public Works:

- Public Works Building
(located at Waste Water Treatment Plant)

Government:

- USFS Butte Falls Ranger District Office (staff up during summer months)

Town Buildings:

- Butte Falls Town Hall
- Butte Falls Community Hall

Private:

- Butte Falls General Store
- Butte Falls Service Station
- Cafes in Town (2)

Essential Facilities

Facilities that are essential to the continued delivery of key government services and/or that may significantly impact the public’s ability to recover from the emergency. These facilities may include: Town buildings such as the Public Services Building, the Town Hall, and other public facilities such as schools.

Hospitals/Immediate Medical Care Facilities:

- Community Health Center

Schools:

- Butte Falls Elementary School
- Butte Falls Charter School
- Butte Falls High School
- Butte Falls Community School Partnership at the Landing

County Buildings:

- Butte Falls Library

Potential Shelter Sites:

- All Butte Falls Schools (Red Cross designated)
- Butte Falls Assembly of God
- Forest Service Complex
- Butte Falls Community Bible
- Butte Falls Community School Partnership at the Landing

Hazard Characteristics

The following sections briefly describe relevant information for each profiled hazard. 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 Town’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). *This hazard was not assessed in the previous version of this NHMP.*

Volume I, Section 2 describes the characteristics of air quality hazards, their history, and how they relate to future climate projections, 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.

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

Drought

The steering committee determined that the Town’s probability for drought is **high** (which is the same as the County’s rating) and that their vulnerability to drought is **low** (which is lower than the County’s rating). *These ratings have not changed since the previous version of this NHMP.*

Volume I, Section 2 describes the characteristics of drought hazards, their history, and how they relate to future climate projections, 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 Town receives its main water supply from Ginger Springs. The Town has an adequate supply have high quality water and draws 3.6 million gallons per week (mgw). In addition, the Town maintains an emergency connection to Medford Water Commission; however, they do not currently have a pump. For more information on the future of Butte Fall’s water supply visit their [website](#).

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

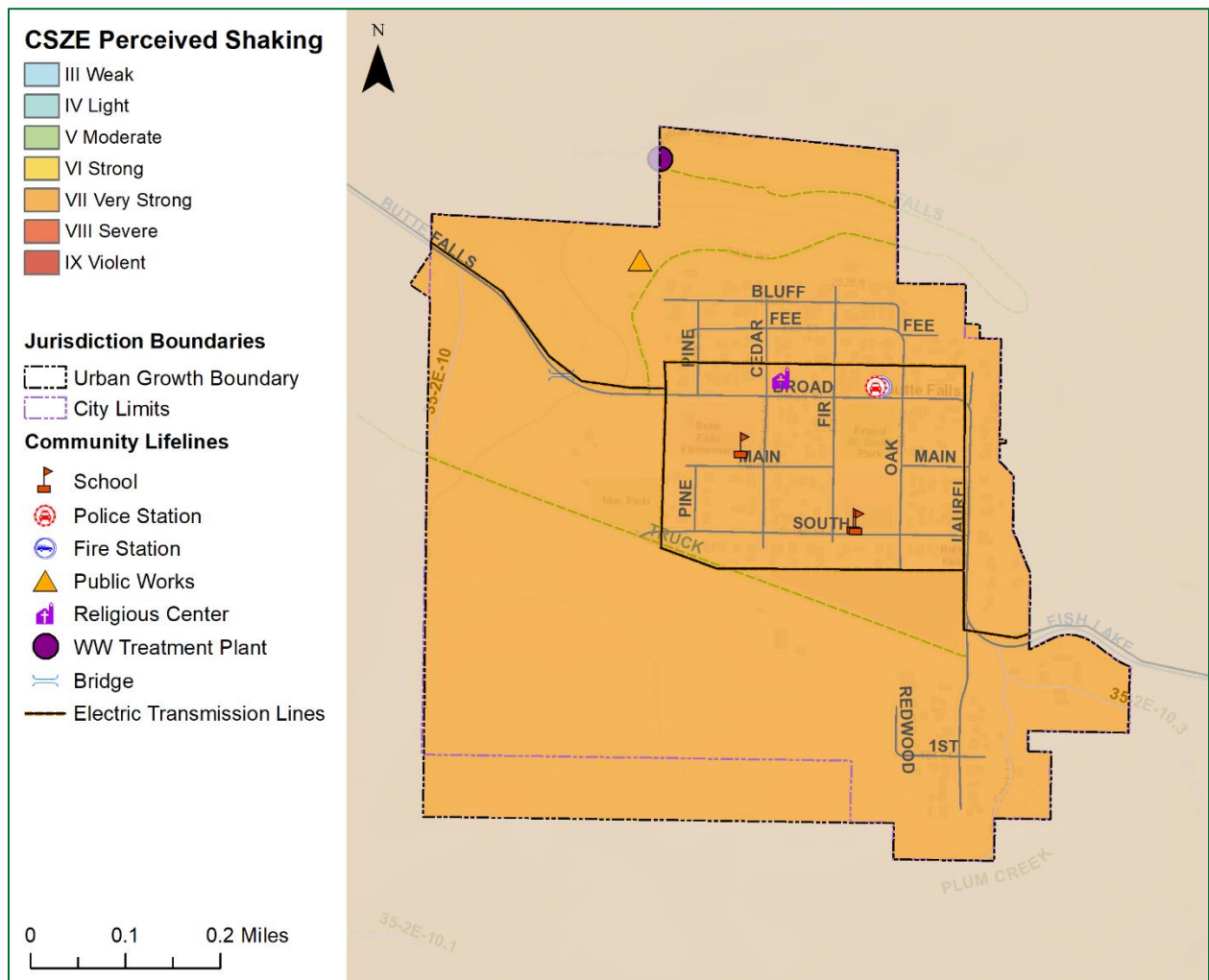
Earthquake (Cascadia)

The steering committee determined that the Town’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). *The probability rating decreased and the vulnerability rating stayed the same since the previous version of this NHMP.*

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 Butte Falls 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 Butte Falls as well.

Figure BA-3 displays perceived shaking hazards from a Cascadia Subduction Zone earthquake event. As shown in the figure below, the area of greatest concern within the Town of Butte Falls are to the south/southeast of the community (darker areas).

Figure BA-3 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.

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.

As noted in the community profile, approximately 66% of residential buildings were built prior to 1990, which increases the Town’s vulnerability to the earthquake hazard. Information on specific public buildings’ (schools and public safety) estimated seismic resistance, determined by DOGAMI in 2007, is shown in Table BA-5; each “X” represents one building within that ranking category. Of the facilities evaluated by DOGAMI using a Rapid Visual Survey (RVS), one (1) has a very high (100% chance) collapse potential.

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.

Table BA-5 Rapid Visual Survey Scores

Facility	Site ID*	Level of Collapse Potential			
		Low (< 1%)	Moderate (>1%)	High (>10%)	Very High (100%)
Public Safety					
City Hall (prev. Butte Falls Police Department) (431 Broad St)	Jack_pol06	X			
Butte Falls Volunteer Fire Department (431 Broad St) - see Mitigation Successes	Jack_fir12				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](#)

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

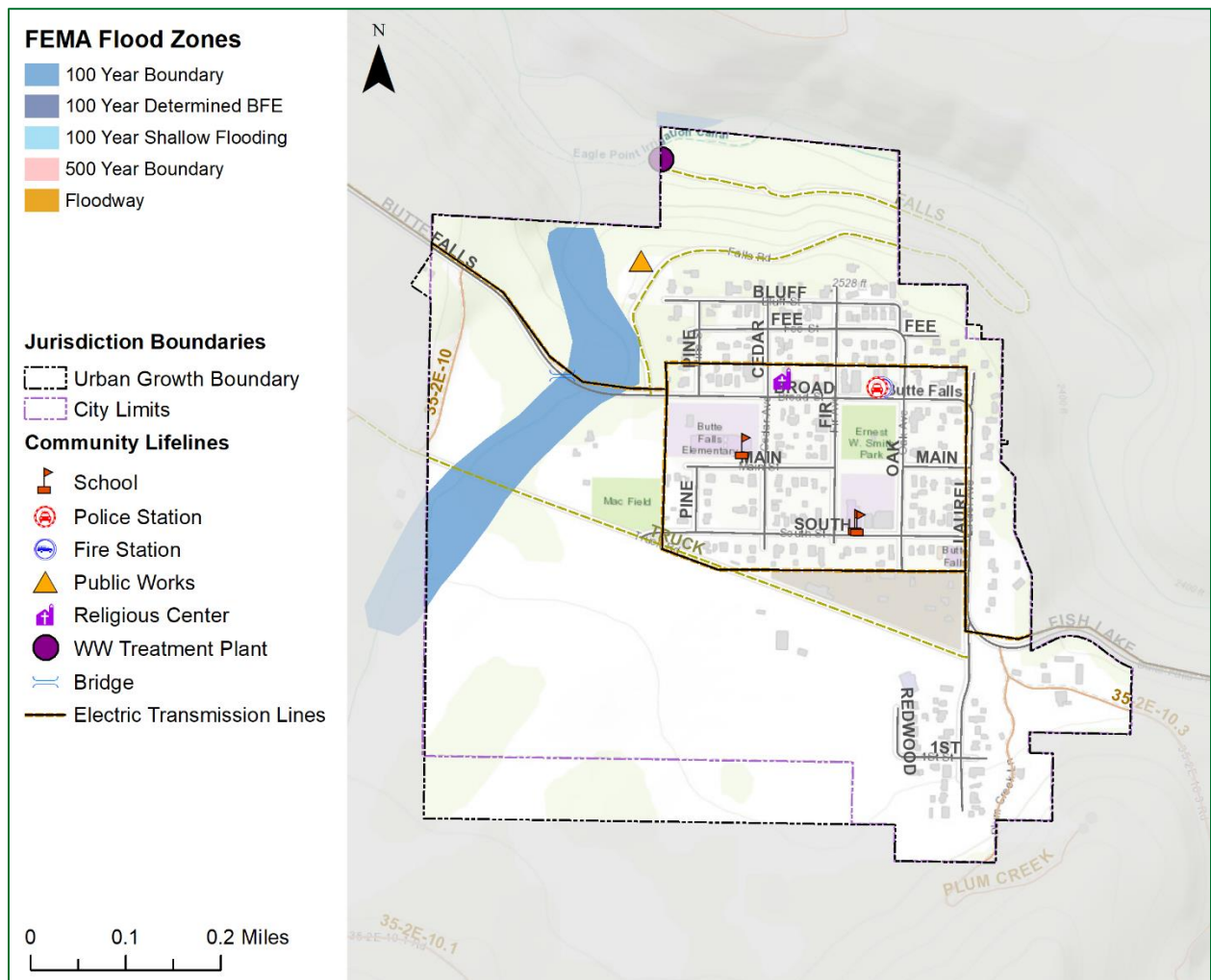
Earthquake (Crustal)

The steering committee determined that the Town’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 **low** (which is the same as the County’s rating). *These ratings have not changed since the previous version of this NHMP.*

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 Butte Falls 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 Butte Falls as well.

Figure BA-4Error! Reference source not found. shows the liquefaction risk to the community lifelines and historic structures that are identified in more detail in Table BA-4 Butte Falls Community Lifelines. As shown in the figures, the area of greatest concern near the Town of Butte Falls (liquefaction hazard orange areas) is to the southwest of the Town.

Figure BA-4 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.

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, Butte Falls is currently unable to perform a quantitative risk assessment, or exposure analysis, for the earthquake (Cascadia subduction zone and crustal) hazards. Identified Community Lifelines that are exposed to this hazard are shown in Table BA-4. Note that even if a facility has exposure, *it does not mean there is a high risk (vulnerability)*. No development changes affected the jurisdiction's overall vulnerability to this hazard.

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

Emerging Infectious Disease

The steering committee determined that the Town'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). *These ratings have not changed since the previous version of this NHMP.*

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).⁶

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 Town as well.

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

Flood

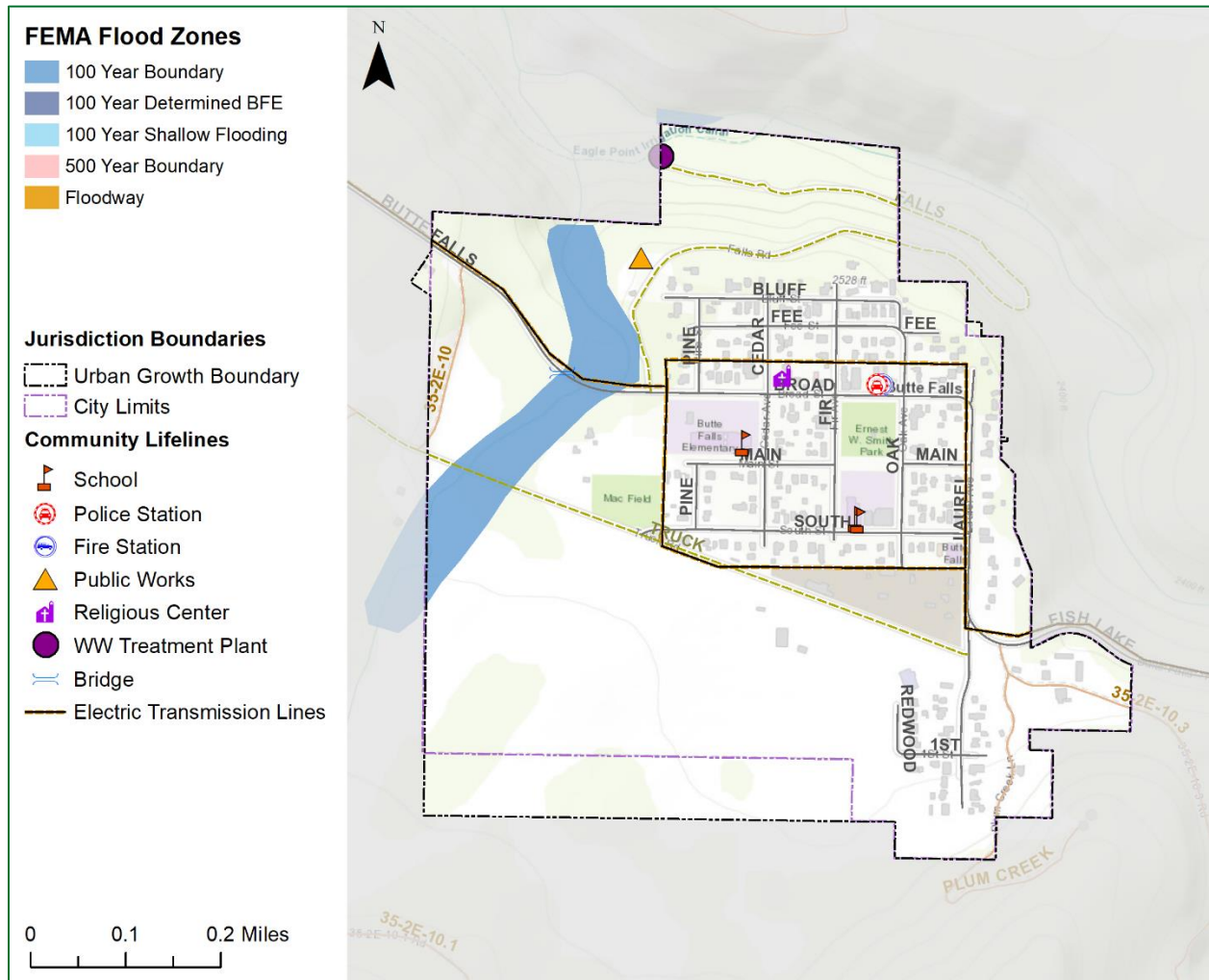
The steering committee determined that the Town's probability for flood is **low** (which is lower than the County's rating) and that their vulnerability to flood is **low** (which is lower than the County's rating). *These ratings have not changed since the previous version of this NHMP.*

Volume I, Section 2 describes the characteristics of flood hazards, their history, and how they relate to future climate projections, as well as the location, extent, and probability of a potential event. Portions of Butte Falls have mapped FEMA flood zones (Figure BA-5). Other portions of

⁶ 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.

Butte Falls could be subject to flooding from local storm water drainage; however, areas of known flood hazard do not impact development or infrastructure.

Figure BA-5 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.

Big Butte Creek is the chief source of flooding in the Butte Falls area, although Hukill Creek also travels through the Town’s western edge. There is a low potential for flood from this water source, but the canal will likely show signs of stress or potential urban flooding in the event of heavy rains or winter storms. Big Butte Creek is a primary drinking water source for residents of the Rogue Valley. The Eagle Point Irrigation Canal begins just downstream from Butte Falls and diverts 100 cubic feet per second (cfs) of water for irrigation within the Little Butte Creek Watershed.

The Town is at minor 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.

Vulnerability Assessment

Due to insufficient data and resources, Butte Falls is currently unable to perform a quantitative risk assessment, or exposure analysis, for this hazard. Identified community lifelines that are exposed to this hazard are shown in Table BA-4. Note that even if a facility has exposure, *it does not mean there is a high risk (vulnerability)*. No development changes affected the jurisdiction's overall vulnerability to this hazard.

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 the Town to be aware of flooding impacts and assess its level of risk. The Town has been proactive in mitigating flood hazards by purchasing floodplain property.

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 FEMA Flood Insurance Study (January 19, 2018) has a brief history of flooding in Jackson County (Volume I, Section 2). Currently, no critical or essential facilities in Butte Falls are located in the floodplain.

The amount of property in potential flood areas is not a large area but damage could be significant as it would affect residential, commercial, and public property. 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. The Town sewer system can overflow during flood events and cause further property damage.

National Flood Insurance Program (NFIP)

The effective Flood Insurance Rate Map (FIRM) for Butte Falls was created in 1976 (effective June 30, 1976); note Butte Falls was not included in the Jackson County Flood Insurance Study of 2011, revised January 19, 2018. The City complies with the NFIP through enforcement of their flood damage prevention ordinance and their floodplain management program. The Community Repetitive Loss record for Butte Falls identifies zero (0) Repetitive Loss Properties⁷ and zero (0)

⁷ A Repetitive Loss (RL) property is any insurable building for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period, since 1978. A RL property may or may not be currently insured by the NFIP.

Severe Repetitive Loss Properties⁸. For details on the repetitive loss properties Volume I, Section 2.

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

Landslide

The steering committee determined that the Town's probability for landslide is **low** (which is lower than the County's rating) and that their vulnerability to landslide is **low** (which is the same as the County's rating). *These ratings have not changed since the previous version of this NHMP.*

Volume I, Section 2 describes the characteristics of landslide hazards, history, how they relate to future climate projections, as well as the location, extent, and probability of a potential event within the region.

Landslide susceptibility exposure for Butte Falls is shown in Figure BA-6. Most of Butte Falls demonstrates a low susceptibility to landslide exposure, with corridors of moderate and high susceptibility concentrated around the edges of the Town. Approximately 7% of Butte Falls has high and approximately 10% moderate landslide susceptibility exposure.⁹ The chief concern for landslide is along Butte Falls Road west of town between mile post 11 and 12 (landslides in past has sunken the road and guard rails). An additional concern is in the southeast corner of town where water is located on steep slopes; however, the slopes in this area have not experienced landslides.

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.

Vulnerability Assessment

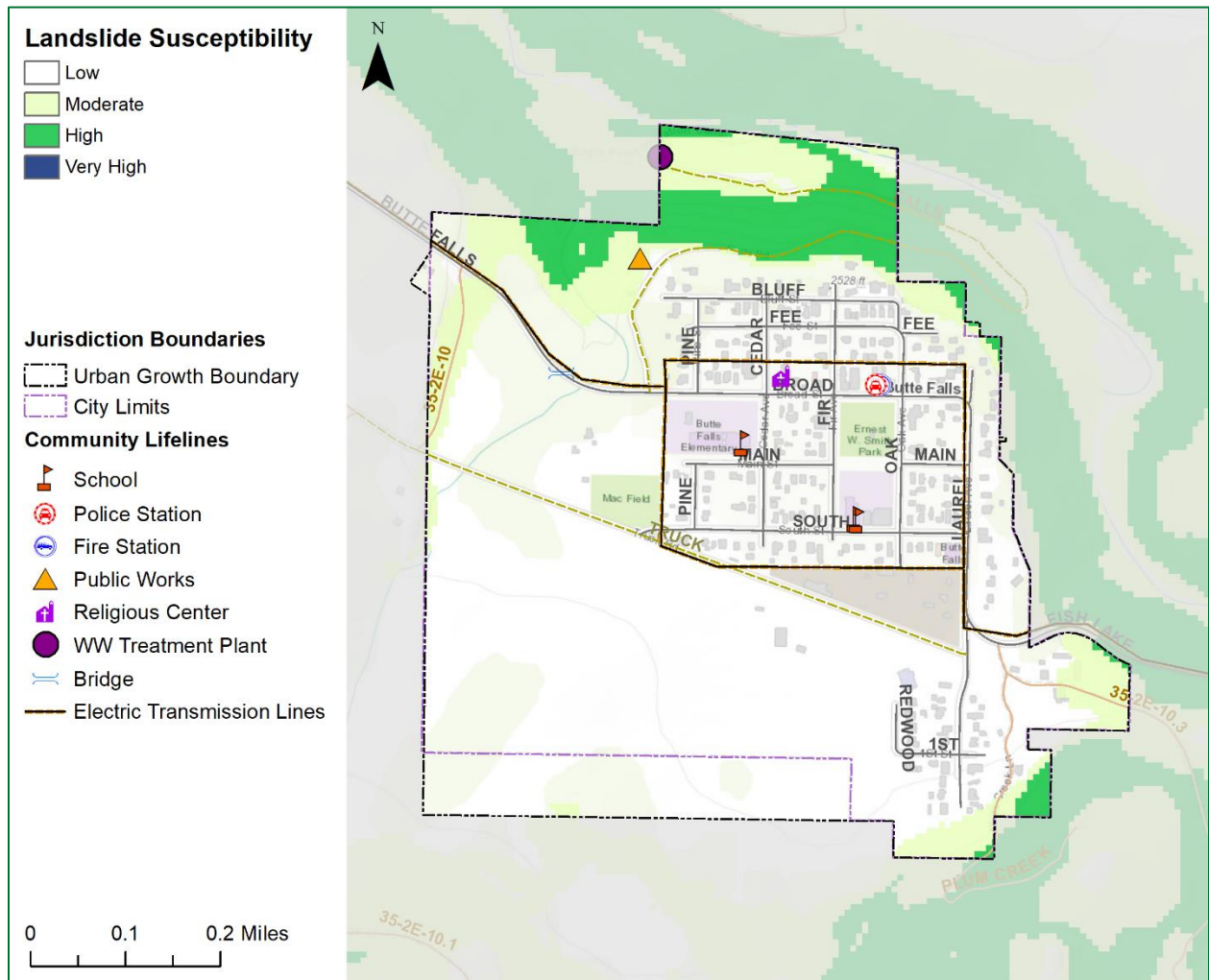
Due to insufficient data and resources, Butte Falls is currently unable to perform a quantitative risk assessment, or exposure analysis, for this hazard. Identified community lifelines that are exposed to this hazard are shown in Table BA-4. *Note that even if an area has a high percentage of land in 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.*

No development changes affected the jurisdiction's overall vulnerability to this hazard.

⁸ A Severe Repetitive Loss (SRL) property is a single family property (consisting of 1 to 4 residences) that is covered under flood insurance by the NFIP and has incurred flood-related damage for which 4 or more separate claims payments have been paid under flood insurance coverage, with the amount of each claim payment exceeding \$5,000 and with cumulative amount of such claims payments exceeding \$20,000; or for which at least 2 separate claims payments have been made with the cumulative amount of such claims exceeding the reported value of the property.

⁹ DOGAMI Open-File Report, O-16-02, Landslide Susceptibility Overview Map of Oregon (2016)

Figure BA-6 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.

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 the Town’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). *This hazard was not assessed in the previous version of this NHMP.*

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. Generally, an event that affects the County is likely to affect the City 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.¹⁰

Extreme heat events can and have occurred in the town, 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.

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

Windstorm

The steering committee determined that the Town’s probability for windstorm is **high** (which is the same as the County’s rating) and that their vulnerability to windstorm is **moderate** (which is the same as the County’s rating). *These ratings have not changed since the previous version of this NHMP.*

Volume I, Section 2 describes the characteristics of windstorm hazards, their history, and how they relate to future climate projections, 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 Butte Falls.

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. Butte Falls regularly experiences high winds and had 75 mph winds in 2008 that left the Town without power for two to three days. Pacific Power has mitigated the risk of power loss by trimming trees near their above ground infrastructure along Butte Falls Highway as it approaches the Town from the west.

Damage from high winds generally has resulted in downed utility lines and trees. Electrical power can be out anywhere from a few hours to several days. Outdoor signs have also suffered damage. If the high winds are accompanied by rain (which they often are), blowing leaves, and debris clog drainage-ways, which in turn causes localized urban flooding.

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

¹⁰ DLCD. *Oregon State Natural Hazard Mitigation Plan*. 2020.

Winter Storm (Snow/Ice)

The steering committee determined that the Town'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). *These ratings have not changed since the previous version of this NHMP.*

Volume I, Section 2 describes the characteristics of winter storm hazards, their history, and how they relate to future climate projections, 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 the Town 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 Butte Falls 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.

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

Volcanic Event

The steering committee determined that the Town'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). *These ratings have not changed since the previous version of this NHMP.*

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 Butte Falls as well. Butte Falls is very unlikely to experience anything more than volcanic ash during a volcanic event.

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

Wildfire

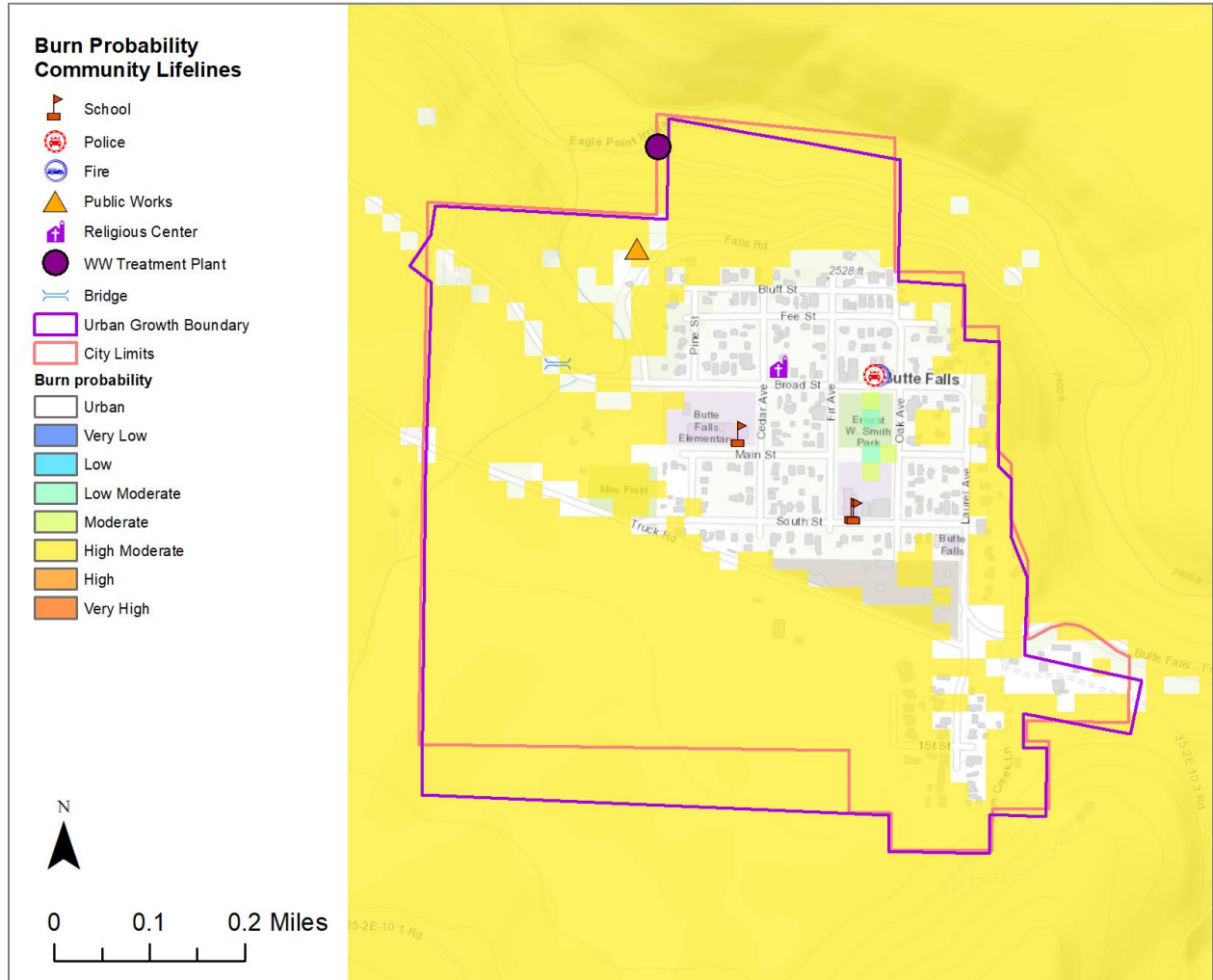
The steering committee determined that the Town's probability for wildfire is **high** (which is the same as the County's rating) and that their vulnerability to wildfire is **moderate** (which is the same as the County's rating). *The probability rating stayed the same and the vulnerability rating decreased since the previous version of this NHMP.*

Volume I, Section 2 describes the characteristics of wildfire hazards, their history, and how they relate to future climate projections, 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. Wildfires near Butte Falls in recent times have included the Double Day wildfire in 2008, which approached the Town from the south.

Figure BA-7 shows burn probability in Butte Falls for community lifelines and historic buildings.

Figure BA-7 Burn Probability in Butte Falls and Community Lifelines



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.

The potential community impacts and vulnerabilities described in Volume I, Section 2 are generally accurate for the Town as well. The [Rogue Valley Integrated Community Wildfire Protection Plan \(RVIFP, updated 2017\)](#) assesses wildfire risk, maps wildland urban interface areas, and includes actions to mitigate wildfire risk. The Town is included in the RVIFP and will update the Town'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 forest service and Town are actively reducing fuels in and around town but anticipate an increase in wildfire risk with maturation of the forest near town. The Town 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, Butte Falls is currently unable to perform a quantitative risk assessment, or exposure analysis, for this hazard. Identified community lifelines that are exposed to this hazard are shown in Table BA-4. Note that even if a facility has exposure, *it does not mean there is a high risk (vulnerability)*. No development changes affected the jurisdiction's overall vulnerability to this hazard.

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

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 Butte Falls (Volume III, Appendix F).

To provide the public information regarding the draft NHMP addendum, and provide an opportunity for comment, an announcement (see below) was provided from **Month Day through Month Day** on the City's website. There were **XX [to be updated following public comment period]** comments provided. Additional opportunities for stakeholders and the public to be involved in the planning process are addressed in Volume III, Appendix B.

Website Posting

Posting to be inserted

Butte Falls Steering Committee

Steering committee members possessed familiarity with the community of Butte Falls 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 date:

Meeting #1: Butte Falls steering committee, February 23, 2023 (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 city.
- Reviewed and confirmed the NHMP's mission and goals.
- Discussed the NHMP public outreach strategy.
- Discussed development changes and community lifelines.
- Reviewed and provided feedback on the draft risk assessment update including community vulnerabilities and hazard information.
- Reviewed and updated their existing mitigation strategy (actions).
- Reviewed and updated their implementation and maintenance program.

Meeting Attendees:

- Convener, Linda Spencer, Town of Butte Falls Mayor
- Chris Bray, Town of Butte Falls Public Works



- Trish Callahan, Town Council (Business Owner)



AGENDA

Meeting: Jackson County NHMP Update: Butte Falls Addendum
Date: 2/23/23
Time: 10:00am – 11:00am
Location: <https://uoregon.zoom.us/j/97239702413>

Meeting Goals:

- To share information that the student team needs to draft jurisdictional addenda, namely:
 - To review and update Butte Falls' hazard vulnerability assessment
 - To review and update Butte Falls' action items

I. Welcome and Introductions

II. Development Information and Community Lifelines

- a. Development information (if not already provided)
- b. Review Community Lifelines for any missed facilities

III. Jurisdiction-Specific Risk Assessment

- a. Review Butte Falls-specific Hazard Vulnerability Assessment (HVA)

IV. Jurisdiction-specific Mitigation Strategy

- a. Update action items
- b. Prioritize action items

V. Overview of Implementation and Maintenance

VI. Next Steps

- a. We will send your jurisdiction's addendum to you for your review and give you two weeks to review the addendum and provide us with any edits
- b. One more Steering Committee meeting (date and time TBA)

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Attachment B: Action Item Changes

Volume I, Section 3 provides a summary list of actions for the Town. Below is an accounting of the major changes to actions since the previous NHMP.

Renumbered 2017 Actions:

2017 Action Item	2023 Action Item
Multi-Hazard #1	Multi-Hazard 1.1
Multi-Hazard #2	Multi-Hazard 1.2
Multi-Hazard #3	Multi-Hazard 1.3
Multi-Hazard #4	Multi-Hazard 1.4
Multi-Hazard #5	Multi-Hazard 1.5
Multi-Hazard #7	Multi-Hazard 1.6
Multi-Hazard #8	Multi-Hazard 1.7
Drought #1	Drought 3.1
Earthquake #1	Earthquake 4.1
Earthquake #2	Earthquake 4.2
Severe Weather #1	Severe Weather 8.1
Wildfire #2	Wildfire 10.2
Wildfire #3	Wildfire 10.3

Previous NHMP Actions Completed:

- (2017) MH #6 “Perform a phased analysis study on landslide/earthquake risk for water tank” was completed.
- (2017) WF #1 “Remove fuels from vacant lots/alleys” was completed.

Previous NHMP Actions Removed/Deleted:

- (2017) FL#1 “Promote green infrastructure/low impact development as stormwater mitigation strategy” was removed.

New NHMP Actions:

The following actions were added to the 2023 NHMP:

- Wildfire: 10.1