Rogue Community College
Hazard Mitigation Plan

December 2020

Developed in accordance with PUBLIC LAW 106–390—OCT. 30, 2000 (Disaster Mitigation Act of 2000), et al. by the Rogue Community College Hazard Mitigation Team with assistance from Metro Planning, Inc.

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CHAPTER 1. PREREQUISITES

1.1 INTRODUCTION

Rogue Community College is located in a region that experiences relatively frequent natural disasters. The impacts of natural hazards directly affect the safety and well-being of the students, staff and faculty of the planning area highlight the importance of developing ways to eliminate or reduce future damages from hazards.

The ultimate goal of the Rogue Community College Hazard Mitigation Plan is to promote the health, safety, and welfare of all students, staff, faculty and local interests. The purview of this document includes the five locations of Rogue Community College, commonly referred to hereafter as the 'planning area', with an emphasis on the Redwood or main campus area.

The purpose of mitigation planning in general is to take proactive measures to reduce or prevent negative impacts of future events. The concept could be summarized with the saying, 'an ounce of prevention is worth a pound of cure'.

A hazard mitigation plan is distinguishable from an emergency operations plan or disaster response plan to the extent that it plans for proactive implementation of mitigation actions prior to a hazard occurrence. Mitigation actions can be short-term or long-term activities which reduce a community's vulnerability to hazard impact through various means including avoidance, protection and preparedness. The Rogue Community College Hazard Mitigation Plan (HMP or the Plan) is a 5-year blueprint for activities with the goal to protect the college and its assets by reducing the impacts of future disasters.

1.2 AUTHORITIES

Federal Authorities

The Rogue Community College Hazard Mitigation Plan was developed in accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), which is the primary authority for providing federal disaster recovery and hazard mitigation financial assistance to states and local governments. The Stafford Act was last amended in October 2000 by Public Law (PL) 106-390 (Disaster Mitigation Act of 2000) and incorporated as federal rules in Code of Federal Regulations (CFR) 44. Program requirements related to hazard mitigation are included in 44 CFR Parts 9, 10, 13, 14, 78, 201 and 206. Federal regulatory authority for hazard mitigation planning in the mid-southern region of the U.S. resides with FEMA's Region VI office in Denton, Oregon.

Specifically, the Disaster Mitigation Act of 2000, Public Law 106-390, is U.S. federal legislation passed in 2000 that amended provisions of the United States Code related to disaster relief. The amended provisions are named after Robert Stafford, who led the passage of the Stafford Disaster Relief and Emergency Assistance Act of 1988. The 2000 act amends Chapter 68 of Title 42 of the United States Code. Its provisions are titled DISASTER RELIEF - THE PUBLIC HEALTH AND WELFARE. The chapter sets forth declarations and definitions relating to disaster relief and is used as a central document for the activities of the Federal Emergency Management Agency (FEMA). The intent of the Disaster Mitigation Act of 2000 is best summarized by the following Congressional findings and declarations:

§ 5121. CONGRESSIONAL FINDINGS AND DECLARATIONS {Sec. 101}

a) The Congress hereby finds and declares that--

1. because disasters often cause loss of life, human suffering, loss of income, and property loss and damage; and

2. because disasters often disrupt the normal functioning of governments and communities, and adversely affect individuals and families with great severity; special measures, designed to assist the efforts of the affected States in expediting the rendering of aid, assistance, and emergency services, and the reconstruction and rehabilitation of devastated areas, are necessary.

b) It is the intent of the Congress, by this Act, to provide an orderly and continuing means of assistance by the Federal Government to State and local governments in carrying out their responsibilities to alleviate the suffering and damage which result from such disasters by--

1. revising and broadening the scope of existing disaster relief programs;

2. encouraging the development of comprehensive disaster preparedness and assistance plans, programs, capabilities, and organizations by the States and by local governments;

3. achieving greater coordination and responsiveness of disaster preparedness and relief programs;

4. encouraging individuals, States, and local governments to protect themselves by obtaining insurance coverage to supplement or replace governmental assistance;

5. encouraging hazard mitigation measures to reduce losses from disasters, including development of land use and construction regulations; and

6. providing Federal assistance programs for both public and private losses sustained in disasters.

(Pub. L. 93-288, title I, § 101, May 22, 1974, 88 Stat. 143; Pub. L. 100-707, title I, § 103(a), Nov. 23, 1988, 102 Stat. 4689.)

1.3 LOCAL ADOPTION

Upon provisional approval of this Plan by the State of Oregon Office of Emergency Management and the Federal Emergency Management Agency, the governing body for the college will formally adopt the HMP. Following local adoption, a copy of the adoption document will be included in Appendix A of this HMP.

1.4 DOCUMENT STRUCTURE

This document is structured to match the mandated elements for hazard mitigation plans under federal and state requirements. It consists of five chapters and seven appendices, each of which satisfies a specific grouping of requirements as described in the *Local Multi-Hazard Mitigation Planning Guidance* published by FEMA in July of 2008. Code of Federal Regulations (CFR) requirements pertaining to each respective plan section is included directly following each corresponding heading. The document is organized into chapters (1.), sections (1.1), and subsections (1.1.1). Tables and figures are numbered in order of appearance within each chapter.

Chapter 1 includes prerequisites for hazard mitigation plans and describes the purpose, authorities, process of local adoption, etc., and provides general profiles of the college. Chapter 2 describes the process through which this plan was developed, via planning team and public meetings, and the input of citizens and local officials. Chapter 3 includes the risk and vulnerability assessments for the college, describing the hazards that occur in the region, and an inventory of local assets and critical facilities that represent varying degrees of vulnerability to hazard impacts.

Chapter 4 describes the mitigation strategy for the college, representing this Plan's primary function moving forward. It outlines the Plan's overarching goals and intended activities and projects the college intends to implement. Chapter 5 describes the approach to plan maintenance; including processes for local adoption, monitoring, and evaluation criteria; strategy for incorporation with other planning mechanisms; and review and update schedules.

1.5 PARTICIPATING JURISDICTION

This is a singe jurisdiction plan covering Rogue Community College. The planning area is defined as the extents of each College campus, with specific attention given to the main campus (Redwood). The planning area is shown on the map below.

1.5.1 Rogue Community College Profile

General

Established in 1970, Rogue Community College serves residents in Jackson and Josephine counties at campuses and learning centers in Grants Pass, Medford, White City and the Illinois Valley.

A comprehensive, two-year, public community college, RCC offers six two-year degrees, 75 career and technical training programs, 17 Career Pathways certificates; and a variety of workforce and short-term training, academic skills, and continuing and community education classes; plus services to the business community.

One of 17 community colleges in Oregon, RCC is accredited by the Northwest Commission on Colleges and Universities. RCC also is approved by the Veterans Administration as a veterans training institution.

CAMPUSES and LEARNING CENTERS included in this plan

- Redwood Campus, 3345 Redwood Hwy., Grants Pass, OR 97527 • 541-956-7500
- Riverside Campus, 117 S. Central, Medford, OR 97501 • 541-956-7500
- Table Rock Campus, 7800 Pacific Ave., White City, OR 97503 • 541-956-7500
- Illinois Valley Learning Center, 24311 Redwood Hwy., Kerby, OR 97531 • 541-956-7500
- Esther Bristol Education Center, 4th and H streets, Grants Pass, OR 97526 • 541-956-7500

Following is the 2018 profile for student enrolment at the College:

TOTAL ANNUAL ENROLLMENT 2017-2018(Data as of 8/16/2018)

Credit	6,879 (45.75%)
Dual Credit	2,053 (13.65%)
Non-Credit	6,104 (40.6%)
Total	**15,036**
Veterans	743

GENDER

Women	8,454 (56.23%)
Men	6,582 (43.77%)

AGE

Less than 18	2,536 (15.67%)
18-24	4,197 (27.79%)
25-64	7,631 (50.75%)
65 and over	703 (4.68%)
Unknown	167

ETHNICITY

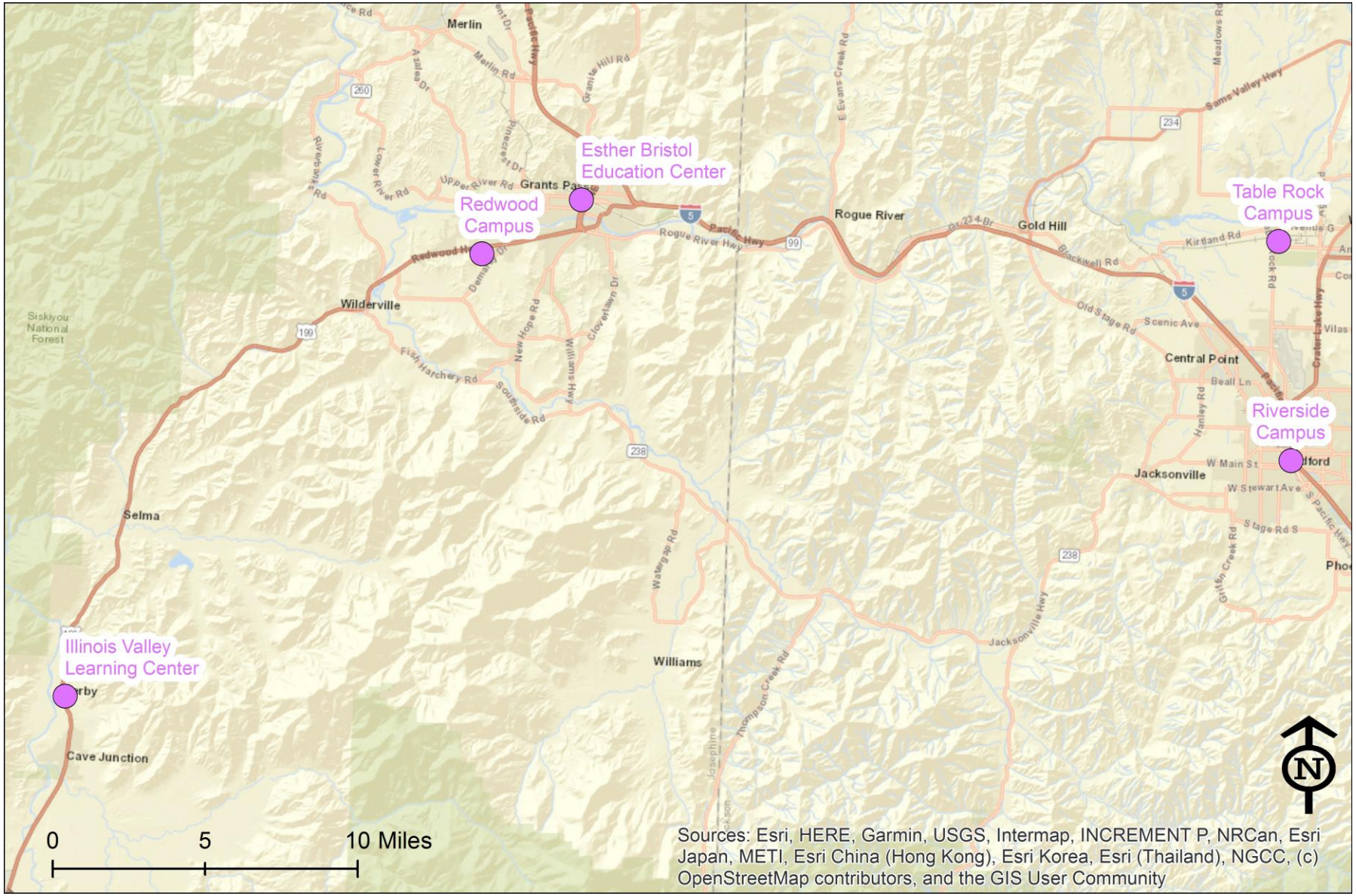
American Indian/Alaskan Native	60
Asian	35
Black	46
Not Reported	18
Pacific Islander	20
White	1300
Blank	480

Geography

Rogue Community College is located in three separate watershed districts:

• The Illinois Valley Learning Center is located within the Illinois Valley Watershed Council.
• The Redwood Campus and Esther Bristol Education Center are located within the Applegate Partnership & Watershed Council.
• The Riverside Campus, RCC/SOU Higher Education Center and the Table Rock Campus are located within the Rogue River Watershed Council.

Figure 1-1 Map of Rogue Community College Campus Locations



Recent Oregon Disaster Declarations
Presidential (Major) Disaster Declarations

2017

DR-4296
Severe Winter Storm and Flooding

Declared on Tuesday, January 24, 2017 - 19:00

FM-5195

Pipeline Fire

Declared on Thursday, August 3, 2017 - 20:00

DR-4328

Severe Winter Storms, Flooding, Landslides, And Mudslides

Declared on Monday, August 7, 2017 - 20:00

2018

FM-5243
Graham Fire

Declared on Thursday, June 21, 2018 - 20:00

FM-5255

Substation Fire

Declared on Tuesday, July 17, 2018 - 20:00

FM-5256

Garner Fire Complex

Declared on Wednesday, July 18, 2018 - 20:00

2019

DR-4432
Severe Winter Storms, Flooding, Landslides, And Mudslides

Declared on Wednesday, May 1, 2019 - 20:00

DR-4452

Severe Storms, Flooding, Landslides, And Mudslides

Declared on Monday, July 8, 2019 - 20:00

FM-5285

Mile Post 97 Fire

Declared on Friday, July 26, 2019 - 20:00

CHAPTER 2. PLANNING PROCESS

44 CFR Requirement §201.6(b): *In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process* ***shall*** *include:*
(1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
(2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia, and other private and non-profit interests to be involved in the planning process;
(3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.
Requirement §201.6(c) (1): *The plan* ***shall*** *document] the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.*

Rogue Community College played the lead role in initiating the update of this plan. Funding for the plan was provided by the college. Metro Planning, Inc. was contracted to facilitate the planning process, develop the hazard and vulnerability analyses, and compile the updated document and mitigation strategy to meet new federal standards. Public participation was encouraged throughout all steps of the planning process.

The planning process itself followed a four-step outline prescribed in FEMA publication, *Local Multi-Hazard Mitigation Planning Guidance* (2008):

1) Organize resources
2) Assess risks
3) Develop the mitigation plan
4) Implement the plan and monitor progress

The first step (organize resources) was addressed by assembling the Hazard Mitigation Team as coordinated by the College Office of Risk Management. In keeping with the goal of including neighboring communities, agencies, businesses, non-profits, and other interested parties in the planning process, invitations to review the plan document and participate in the planning process were extended to the following entities: Rural Metro Fire Dept., Grants Pass Fire Dept., Illinois Valley Fire District, and Jackson County Fire District #3.

The second step (assess risks), was conducted via the hazard mitigation team's review and consideration of personal knowledge, existing technical reports, studies and planning documents and input from various data sources brought forth by the HMT members during meetings.

The third step (develop the mitigation plan), was coordinated in the latter stages by the project consultant and included input from the HMT and data sources referred to in Step 2. Action item development and prioritization for the mitigation plan emphasized a review of costs vs. benefits and the social, technical, administrative, political, legal, economic, and environmental considerations of mitigation related projects. Plan development involved preparing a public review draft and a public comment period to solicit input from the public and interested parties. Comments and recommendations from these sources were incorporated into the final version of the Hazard Mitigation Plan submitted to the State and FEMA and ultimately adopted by the participating jurisdictions.

The fourth and final step, (plan implementation and monitoring), will occur on an ongoing and annual basis prior to and following State and FEMA approval. Adoption of the approved plan by the college is the first step toward implementing the plan. Feasibility study and scoping of

mitigation projects are secondary steps, followed by grant writing coordinated through OEM to secure funding and ultimately the implement the projects. Other mitigation projects that do not require outside funding will be enacted on an ongoing basis. Monitoring will also occur on an ongoing basis as action items are implemented, following major disaster events, and during annual plan review meetings of the Hazard Mitigation Team or as otherwise agreed upon by the team members.

In the chapter that follows, the Hazard Mitigation Team is profiled in ***Section 2.1 (Hazard Mitigation Team)***. ***Section 2.2 (Team Meetings)*** provides a recap of HMT meetings and primary agenda points for each, and ***Section 2.3 (Public Review)*** describes the process for providing an opportunity for gathering public input.

2.1 HAZARD MITIGATION TEAM

Stakeholder for the Hazard Mitigation Team (HMT) were identified early on in the process. Invitations were sent as indicated in Section 2.0 above. The HMT is comprised of representatives from the college, the public, and local and regional stakeholders. Professional fields represented by the HMT include:

- College administration, maintenance and technology
- Emergency Response and Management
- Fire Departments
- General Public and Interested Stakeholders

Listed below are the chairpersons and members of the Rogue Community College Multi-Jurisdiction Hazard Mitigation Team. Listed below is the chairperson and members of the Rogue Community College Multijurisdictional Hazard Mitigation Team.

Table 2-1 Hazard Mitigation Team

Representative	Agency (Office)
Sean Taggart, Chair	Rogue Community College
Wendy Jones	Rogue Community College
Al Sheldon	Rogue Community College
Courtney Rasmussen	Rogue Community College
Joshua Ogle	Rogue Community College
Grant Lagorio	Rogue Community College
Jeanne Lee	Rogue Community College
Charlie Phenix	Rural Metro Fire
John Miles	Rogue Community College
Richard Pellerini	Rogue Community College
Tim Stacy	City of Grants Pass Fire
Laurie Roe	Rogue Community College
Mike McClure	Rogue Community College
Greg McKown	Rogue Community College
Jed Truett	Metro Planning, Inc.

2.2 TEAM MEETINGS-PUBLIC INVOLVEMENT

44 CFR Requirement 201.6(b)
An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include: (2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process. (3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

The planning process began with a kickoff meeting on May 29, 2019 to discuss the overarching goals and timelines for the plan development process, and to create a list of invitees to serve on the Hazard Mitigation Team (HMT). Based on contact information provided by the College Director of Risk Management, invitation emails were sent to representatives of various agencies and jurisdictions. The list is as follows:

Name	Title	Company
Sean Taggart	Director, Risk Mgmt.	Rogue Community College
Wendy Jones	Risk Mgmt. Coordinator	Rogue Community College
Grant Lagorio	Director, Facilities & Ops.	Rogue Community College
Curtis Sommerfeld	VP of College Services	Rogue Community College
Josh Ogle	Director, Inst. Media/Help Desk/Telecom.	Rogue Community College
Mike McClure	Director, IT-Network Services	Rogue Community College
Al Sheldon	Director, IT Programming Services & QA	Rogue Community College
Greg McKown	Construction Project Manager	Rogue Community College
Richard Holloway	Deputy Fire Marshal	Rural Metro Fire Department
Tim Stacy	Fire Inspector	Grants Pass Fire Department
Charles Phenix	Resource Specialist	Rural Metro Fire Department
Tanner Farrington	Deputy Fire Marshal	Medford Fire Department
Laurie Roe	Director, Institutional Research & Effectiveness	Rogue Community College
Joe Hyatt	Fire Marshal	Grants Pass Fire Department
Kamron Ismaili	Division Chief	Illinois Valley Fire District
John Patterson	Deputy Chief/Fire Marshal	Jackson County Fire District #3

A detailed listing of persons that participated on the HMT and their functions is presented in Section 2.1 (Hazard Mitigation Team), representing those who responded to the invitation Emails.

Team Meetings
HMT meetings and work sessions were held at the Rogue Community College Redwood Campus. The meeting for the public review draft was open to the public and posted in the local Grants Pass paper.

Team members and attendees were encouraged to weigh in on information included in the plan. More specifically, they reviewed data (including maps) of the campuses and provided corrections where the data was incorrect or insufficient. The team members were also key in

developing new mitigation actions for HMP. The overall process involved substantial back and forth between the consultant and the team members. Team members input has not been documented separately, but has been integrated into this planning document. Specific materials discussed in each meeting are detailed as follows (and a list of attendees for each meeting is included as Appendix C below):

The first of these meetings was held June 21, 2019. Main points covered in the meeting were:

- Orientation of attendees on the purpose and benefits of the hazard mitigation plan
- Establish timeline and schedule for project
- Data collection with regard to:
    - Previous/recent hazard occurrences
    - Inventory of planning mechanisms
    - Land Use and Development Trends
- Establish points of contact with regard to additional data collection
- Discuss examples of mitigation projects the HMT may decide to pursue

The HMT next convened July 9, 2019. Main points and work conducted included the following:

- General hazard assessment by type
- Vulnerability assessment by type
- Initial discussion of mitigation ideas
- Overview of Social, Technical, Administrative, Political, Legal, Economic and Environmental criteria; and Benefit-Cost considerations for prioritizing action items
- Discussion of funding priorities for grant programs administered by OEM and FEMA
- Discussion of proposed mitigation activities

The final meeting in the planning process was the Public Review Draft Presentation hosted by Rogue Community College on August 13, 2019. The public was invited to this meeting via and in attendance alongside HMT representatives. No members from the public attended this meeting. Materials covered in this meeting include the following:

- Presentation of the public review draft of the updated hazard mitigation plan
- Ranking of hazard mitigation action items
- Description of opportunities for public review
- Discuss methods to capture public and team input
- Discussion of timeline and method for final plan submittal

Data Collection and Agency Cooperation
A vital component of the planning process was data collection coordinated through various agencies and departments. Information was shared and compiled during HMT meetings, and also collected through follow-up correspondence and work sessions with various RCC departments.

Public Comment and Involvement
A strategy to involve the public in the update of the Rogue Community College Hazard Mitigation Plan was developed at an early stage in the planning process; both through announcements and invitations to public meetings and also by encouraging team members to carry on a dialogue with stakeholders and colleagues for the purpose of capturing input for

mitigation ideas and problem areas. Planning meetings and the public review draft presentation were open to the public but not attended by members of the general public.

A copy of the draft plan was made available to the HMT and general public to solicit feedback and recommendations prior to submittal to OEM and FEMA. Additional opportunity for public comment is available on an ongoing and continuing basis throughout the 5-year planning cycle as described in Section 5.4.

CHAPTER 3. RISK ASSESSMENT

44 CFR Requirement §201.6(c) (2)
The plan shall include A risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.

The purpose of the risk assessment is to identify and describe the hazards that affect the planning area, as well as, inventory and analyze potential losses for human life and material assets. Through a better understanding of potential hazards and the degree of risk they pose, more successful mitigation strategies can be developed and implemented.

This risk assessment follows the four-step process described in the FEMA publication 386-2, *Understanding Your Risks: Identifying Hazards and Estimating Losses* (2002), listed as follows:

- Identify Hazards
- Profile Hazard Events
- Inventory Assets
- Estimate Losses

This chapter is organized into four (4) sub-sections that address the four steps in the risk assessment process.

The first, ***3.1 Identifying Hazards***, lists the hazards that were considered and ultimately profiled in the plan and the methods, definitions and data sources used for the hazard identification and profile process.

Section 3.2 Hazard Profiles presents a detailed outline for each identified hazard. Each hazard profile is addressed as a plan subsection and includes a general description; discussion of previous occurrences; probability of future occurrence; magnitude and severity; and assessment of overall vulnerability to each hazard.

Section 3.3 Vulnerability Assessment provides an overview of risk exposure. It includes subsections that identify potentially vulnerable assets in the planning area and identifies opportunities and tools for current and future mitigation planning. Subsections of the vulnerability assessment include potential dollar loss estimates, vulnerable structures, and an overview of existing planning mechanisms.

3.1 IDENTIFYING HAZARDS

44 CFR Requirement §201.6(c) (2) (i)
The risk assessment shall include a description of the type…of all-natural hazards that can affect the jurisdiction.

The Hazard Mitigation Team (HMT) reviewed information on hazards required for consideration. Hazards identified by the HMT as relevant to the planning area and selected for detailed profile and mitigation efforts pursuant to the goals of this plan are listed below in Table 3-1.

The HMT determined that there were a variety of hazards that impacted the various RCC campuses. These included the following:

- Dam Failure
- Drought
- Earthquake
- Extreme Heat
- Flood
- Hailstorm
- Tornado
- Wildfire
- Thunderstorm (Lightning, Wind, Hail)
- Winter Storm

It was further determined by the HMT that the only hazards that would achieve any sort of success with the creation of fundable hazard mitigation actions would be limited to Wildfire and Earthquake, in part because all of the campuses are outside of the 100-year floodplain (see Image 3-1 below). Accordingly, Wildfire and Earthquake are further defined/profiled in this plan and action items in Chapter 4 are oriented to these two as well.

Table 3-1 Identified/Profiled Hazards

Hazard Type	Method of Identification
Earthquake	Previous/Potential occurrences
Wildfire	Previous occurrences, high mitigation priority

Source: HMT

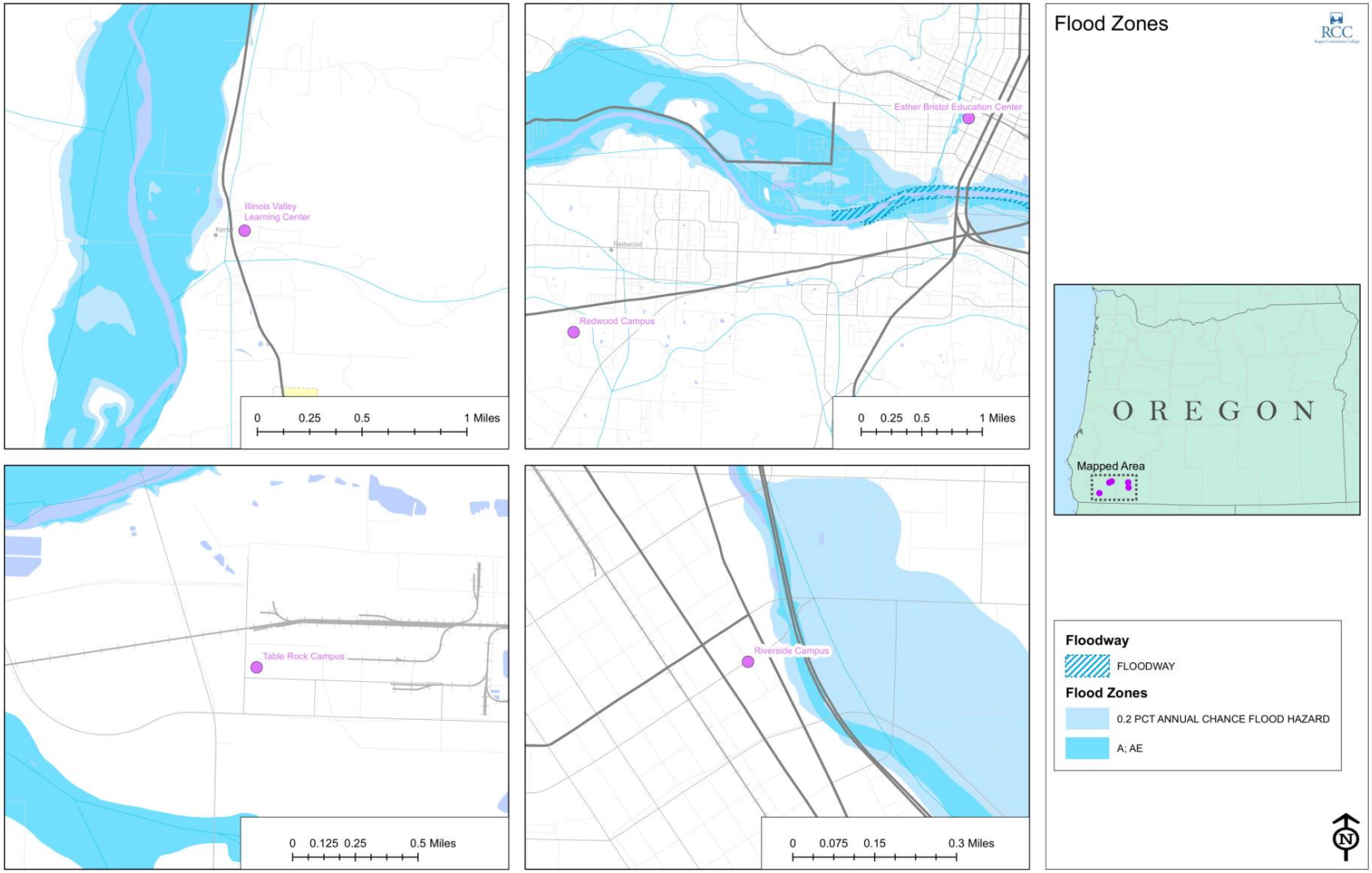

Flood Zones
RCC
Illinois Valley Learning Center
Kerby
0 0.25 0.5 1 Miles
Esther Bristol Education Center
Redwood
Redwood Campus
0 0.25 0.5 1 Miles
OREGON
Mapped Area
Table Rock Campus
0 0.125 0.25 0.5 Miles
Riverside Campus
0 0.075 0.15 0.3 Miles
Floodway
FLOODWAY
Flood Zones
0.2 PCT ANNUAL CHANCE FLOOD HAZARD
A; AE
N

Image 3-1

3.1.1 Methods and Definitions

44 CFR Requirement §201.6(c) (2) (i):
The risk assessment shall include a description of the type, location and extent of all-natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.

The hazard profiles below were developed from information provided by the State of Oregon Natural Hazard Mitigation Plan, FEMA, the National Weather Service, and other sources. Geographic information is provided for each hazard based on the impact areas of previous occurrences.

A common set of definitions/classifications was established for the probability of future hazard occurrences and the magnitude/severity of impacts for the purpose of describing the identified hazards in a quantitative and qualitative way (to the extent that data allows). Every effort is made to use these definitions strictly and consistently, but some overlap or generalizations may be present.

Classifications used to categorize probability of future occurrence were based on statistical assessments of previous occurrences (or recurrence interval) and equated to a percent probability of occurrence in a given year whenever possible. Probability of future occurrence classifications used for this plan are listed below.

Figure 3-1 Probability of Future Occurrence Classifications

- **High -** Greater than 50 percent probability of occurrence in a given year
- **Medium -** 10 to 50 percent probability of occurrence in a given year
- **Low –** Less than 10 percent probability of occurrence in a given year

Potential magnitude/severity for each hazard is classified based on a scenario where the most extreme documented event occurs. It is acknowledged here that the categories established may involve some degree of overlap and therefore classification of hazards is inherently subjective. The magnitude/severity classifications used are listed below.

Figure 3-2 Magnitude and Severity and Extent Classifications

- **Level 4-Catastrophic**—Severe property damage on a regional or metropolitan scale; shutdown of critical facilities, utilities & infrastructure for extended periods, and/or multiple injuries/fatalities
- **Level 3-Critical**—Severe property damage on a neighborhood scale; temporary shutdown of critical facilities, utilities and infrastructure, and/or injuries or fatalities
- **Level 2-Limited**—Isolated occurrences of moderate to severe property damage; brief shutdown of critical facilities, utilities and infrastructure, and/or potential injuries
- **Level 1-Negligible**— Isolated occurrences of minor property damage; minor disruption of critical facilities, utilities and infrastructure, and/or potential minor injuries

Definitions for overall vulnerability are subjective and based primarily on future probability and severity, with additional considerations for potential impacts to special needs populations, the location of buildings, critical facilities, and infrastructure. It is important to note that vulnerability classification is general and may involve some degree of overlap. Definitions for overall vulnerability classifications used are listed below.

Figure 3-3 Overall Vulnerability Classifications

- **High Vulnerability**— High probability of occurrence and Level-3 or Level-4 potential severity.
- **Moderate Vulnerability**— Moderate/high probability and Level-1 or Level-2 potential severity
- **Low Vulnerability**— Low probability and Level-1 or Level-2 potential severity

3.1.2 Data Sources and Data Limitations

Data Sources
The majority of information contained in the Hazard Profiles and Vulnerability Assessment sections came from the following agencies, technical documents, and tools:

Agency Sources:

- Federal Emergency Management Agency (FEMA)
- National Weather Service (NWS)
- National Oceanic and Atmospheric Administration (NOAA)
- National Climatic Data Center (NCDC)
- National Severe Storms Laboratory (NSSL)
- U.S. Geological Survey (USGS)
- Local and regional media (current and historical)

Technical Documents and Plans:

- Federal Emergency Management Agency (FEMA). Publication 386-2, *Understanding Your Risks: Identifying Hazards and Estimating Losses*; HAZUS Multi-Hazard Loss Estimation software; et al.
- State of Oregon Natural Hazard Mitigation Plan (2015 Edition)

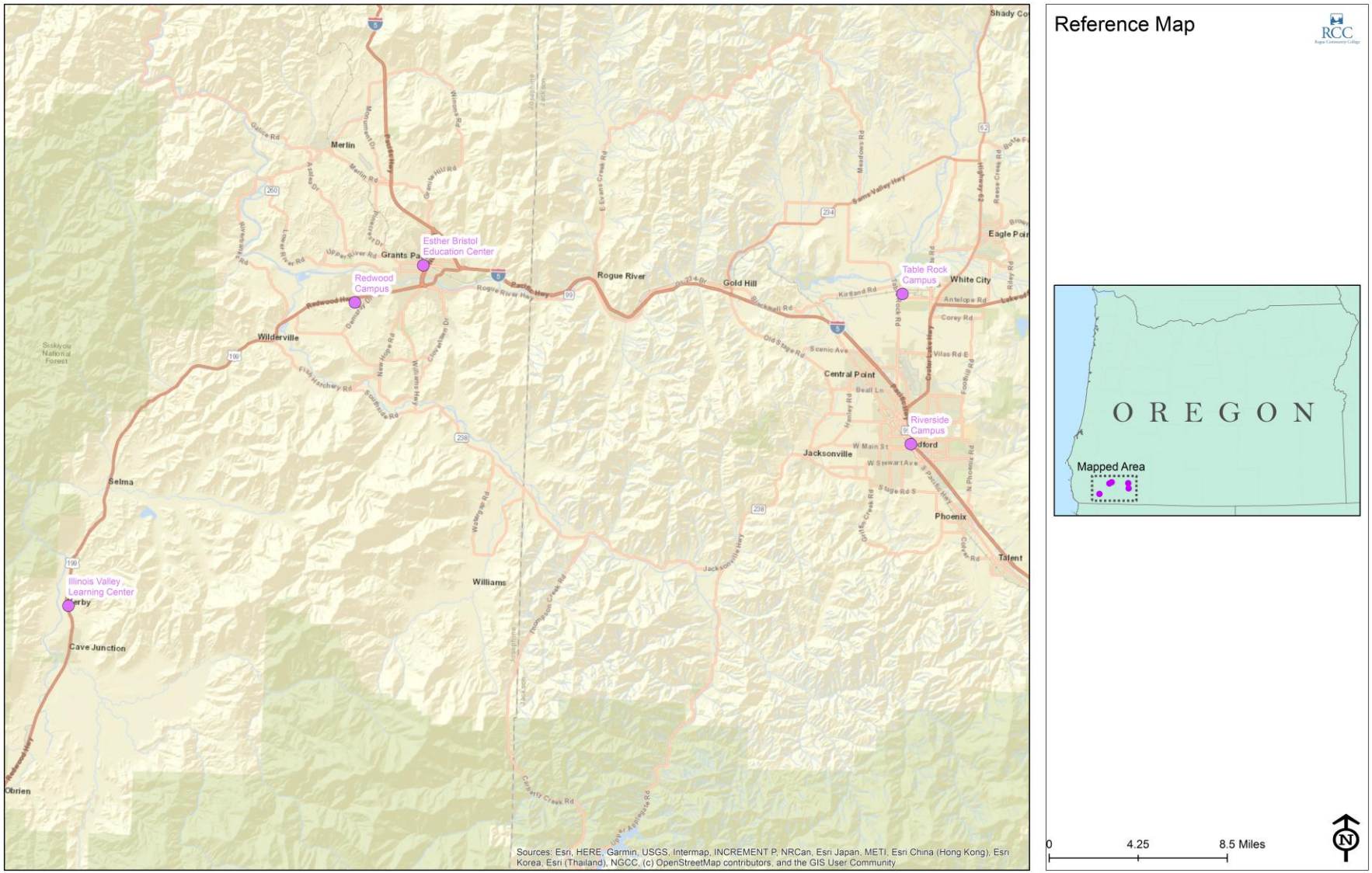
Software and Analysis Tools:

- FEMA HAZUS Multi-Hazard Loss Estimation Software
- ESRI ArcGIS Geographic Information System (GIS) Software; including ArcMap and Spatial Analyst

Data Limitations
Quality and availability of source data improved markedly since the original hazard mitigation plan was developed though many limitations remain. Over time it is expected that hazard related information will continue to improve and will be included in future updates.

Notably, the use of FEMA's HAZUS Loss Estimation software involved analysis of data derived from the U.S. Census Bureau at the Census Block level, and potential flooding impacts were derived from hydrologic analysis at an approximate scale. The resulting maps and information may represent potential impacts that vary significantly from previous disaster occurrences.

Also, National Climatic Data Center information is used extensively as a reporting mechanism for hazard events of various types. It should be noted however that damage descriptions and totals provided by this source is not necessarily a full accounting of local impacts, and further, damage totals for certain hazard events may cover multi-county regions and may or may not accurately reflect direct impacts in the planning area.


Reference Map
RCC
OREGON
Mapped Area
Esther Bristol Education Center
Redwood Campus
Table Rock Campus
Riverside Campus
Illinois Valley Learning Center
Grants Pass
Merlin
Wilderville
Rogue River
Gold Hill
White City
Central Point
Jacksonville
Phoenix
Talent
Eagle Point
Selma
Williams
Cave Junction
Obrien
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
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4.25
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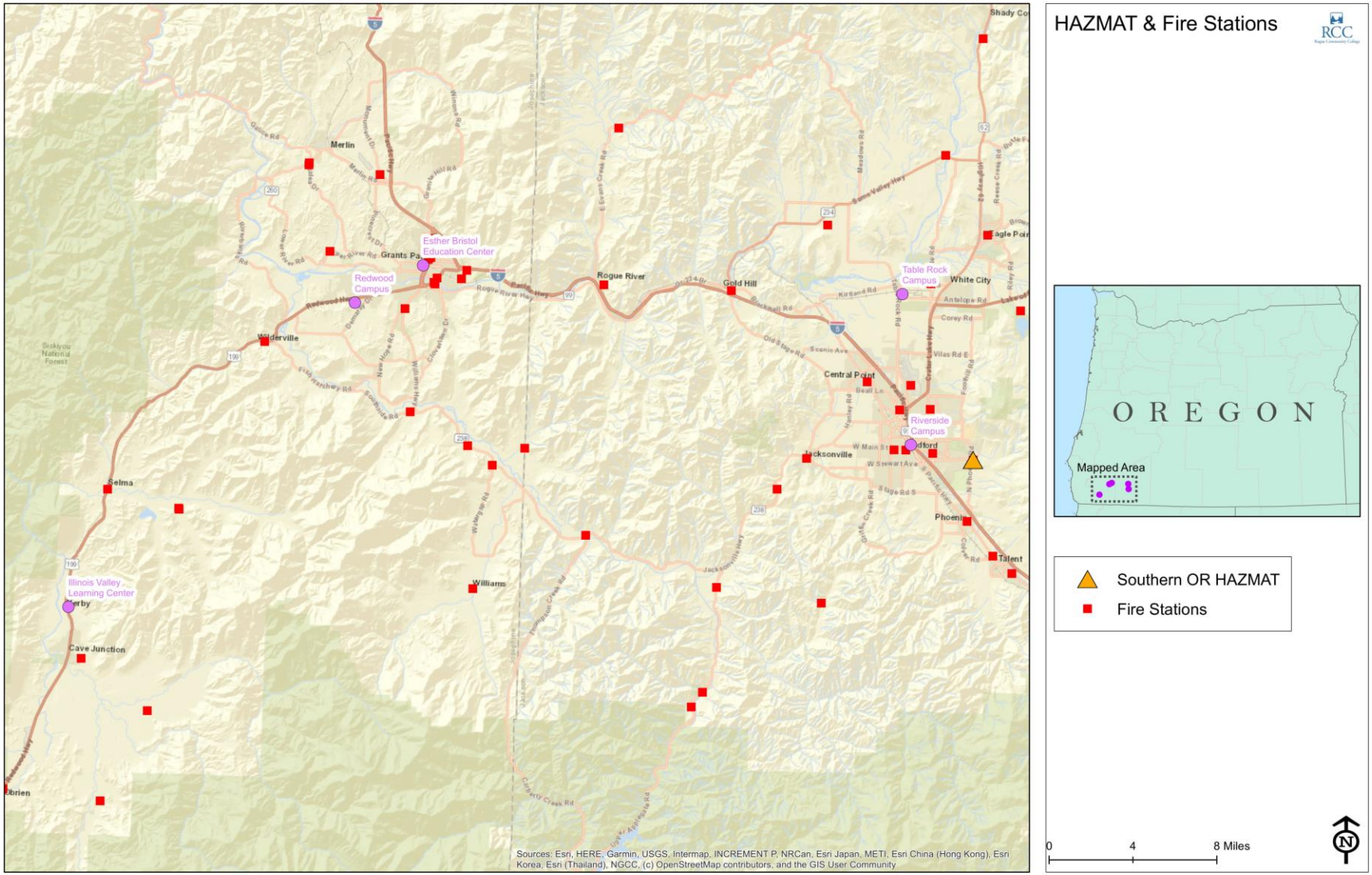
Image 3-2


HAZMAT & Fire Stations
RCC
Esther Bristol Education Center
Redwood Campus
Table Rock Campus
Riverside Campus
Illinois Valley Learning Center
Grants Pass
Rogue River
Gold Hill
White City
Eagle Point
Central Point
Medford
Jacksonville
Phoenix
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Merlin
Wilderville
Selma
Williams
Cave Junction
O'brien
Shady Cove
Siskiyou National Forest
OREGON
Mapped Area
Southern OR HAZMAT
Fire Stations
0
4
8 Miles
N
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Image 3-3

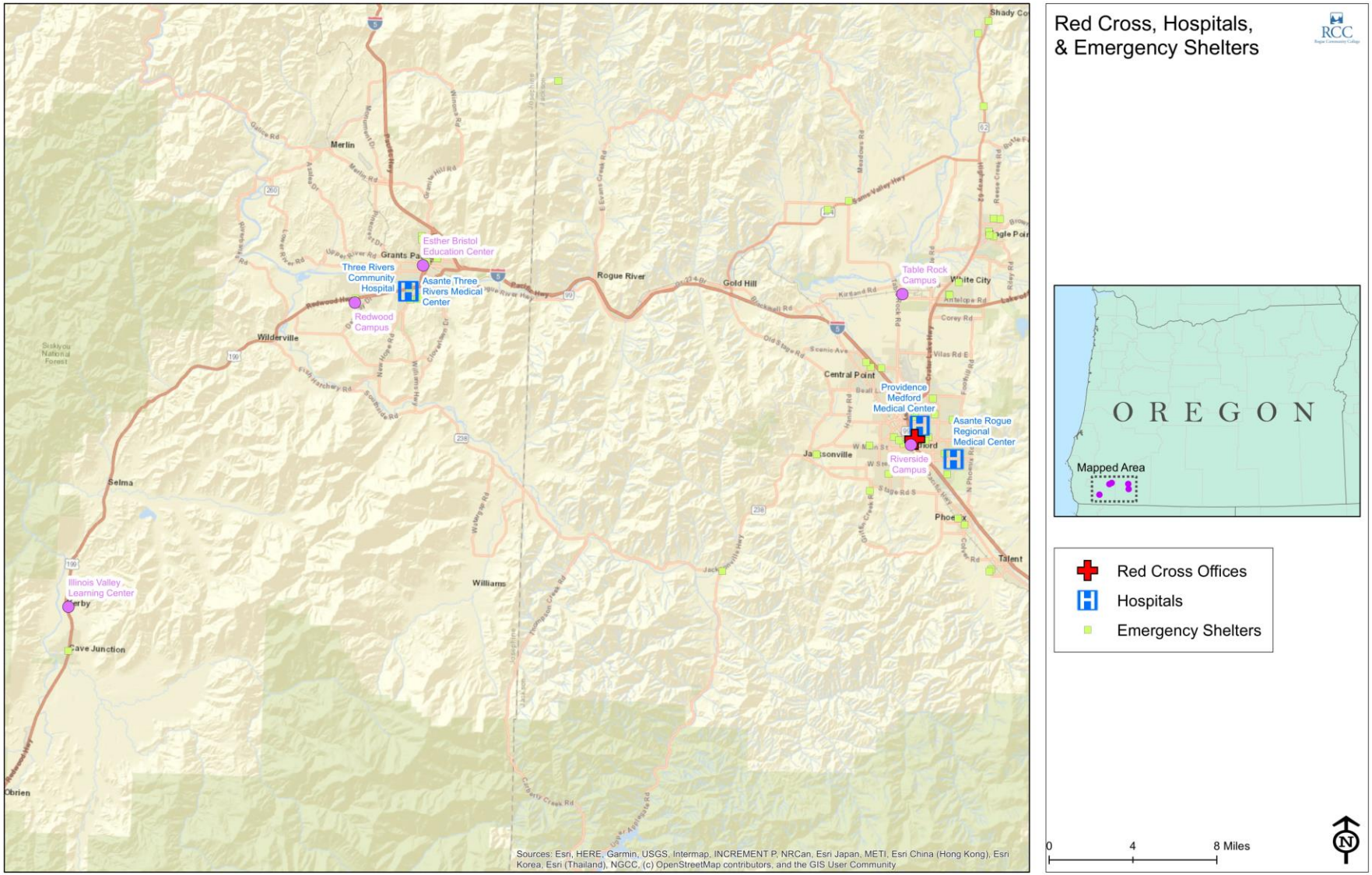

Red Cross, Hospitals,
& Emergency Shelters
RCC
Esther Bristol
Education Center
Three Rivers
Community
Hospital
Asante Three
Rivers Medical
Center
Redwood
Campus
Table Rock
Campus
Providence
Medford
Medical Center
Asante Rogue
Regional
Medical Center
Riverside
Campus
Illinois Valley
Learning Center
Merlin
Grants Pass
Rogue River
Gold Hill
White City
Wilderville
Central Point
Selma
Williams
Talent
Phoenix
Jacksonville
Cave Junction
Obrien
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
OREGON
Mapped Area
Red Cross Offices
Hospitals
Emergency Shelters
0
4
8 Miles
N

Image 3-4

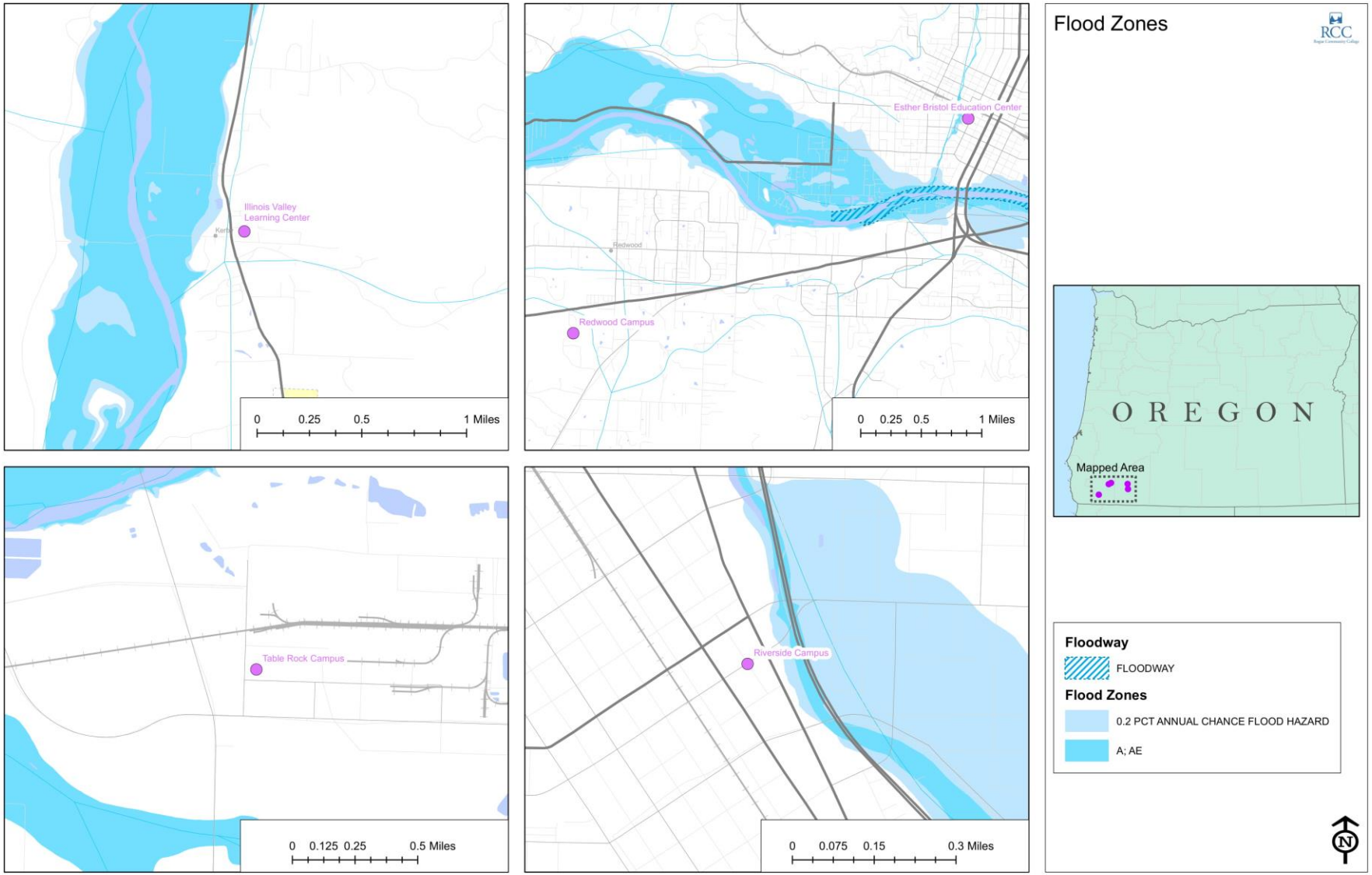

Flood Zones
RCC
Illinois Valley Learning Center
Esther Bristol Education Center
Redwood
Redwood Campus
0 0.25 0.5 1 Miles
0 0.25 0.5 1 Miles
OREGON
Mapped Area
Table Rock Campus
Riverside Campus
0 0.125 0.25 0.5 Miles
0 0.075 0.15 0.3 Miles
Floodway
FLOODWAY
Flood Zones
0.2 PCT ANNUAL CHANCE FLOOD HAZARD
A; AE
N

Image 3-5

3.2 HAZARD PROFILES

44 CFR Requirement §201.6(c) (2) (ii):
The risk assessment shall include a description of the jurisdiction's vulnerability to the hazard described in paragraph (c) (2) (i) of this section. This description shall include an overall summary of each hazard and its impact on the community.

The hazard profiles that follow are those that were deemed relevant to the planning area by the Hazard Mitigation Team. Other hazards were not profiled due to general lack of potential to affect Rogue Community College. Information is presented in the most objective manner possible, with data sources and limitations of available information noted as appropriate.

Each profile includes a general description of the hazard, the geographic area affected, information regarding previous occurrences, and assessments of probability of future occurrence, magnitude and severity, and overall vulnerability to each hazard identified as relevant to the planning area. Hazard profiles are organized alphabetically for ease of reference and order should not infer relative importance.

3.2.1 Earthquake

Hazard Description

An earthquake is a sudden motion or trembling of the earth caused by an abrupt release of stored energy in the rocks beneath the earth's surface. The energy released results in vibrations known as seismic waves that are responsible for the trembling and shaking of the ground during an earthquake. Ground motion is expressed as peak ground acceleration (PGA, peak change in speed of ground surface horizontal motion during an earthquake). PGA is expressed as a percent of gravity or "g".

Earthquakes are typically described in terms of magnitude and intensity. The traditional measurement of amplitude of the seismic wave through the assignment of a single number to quantify the amount of seismic energy released by an earthquake is the Richter scale. The intensity of how strong the shock was felt at a particular location is the Modified Mercalli Intensity (MMI) scale. The scale quantifies the effects of an earthquake on the Earth's surface, humans, objects of nature, and man-made structures. Table 3-6 below is a combined earthquake magnitude and intensity comparison from the United States Geological Survey.

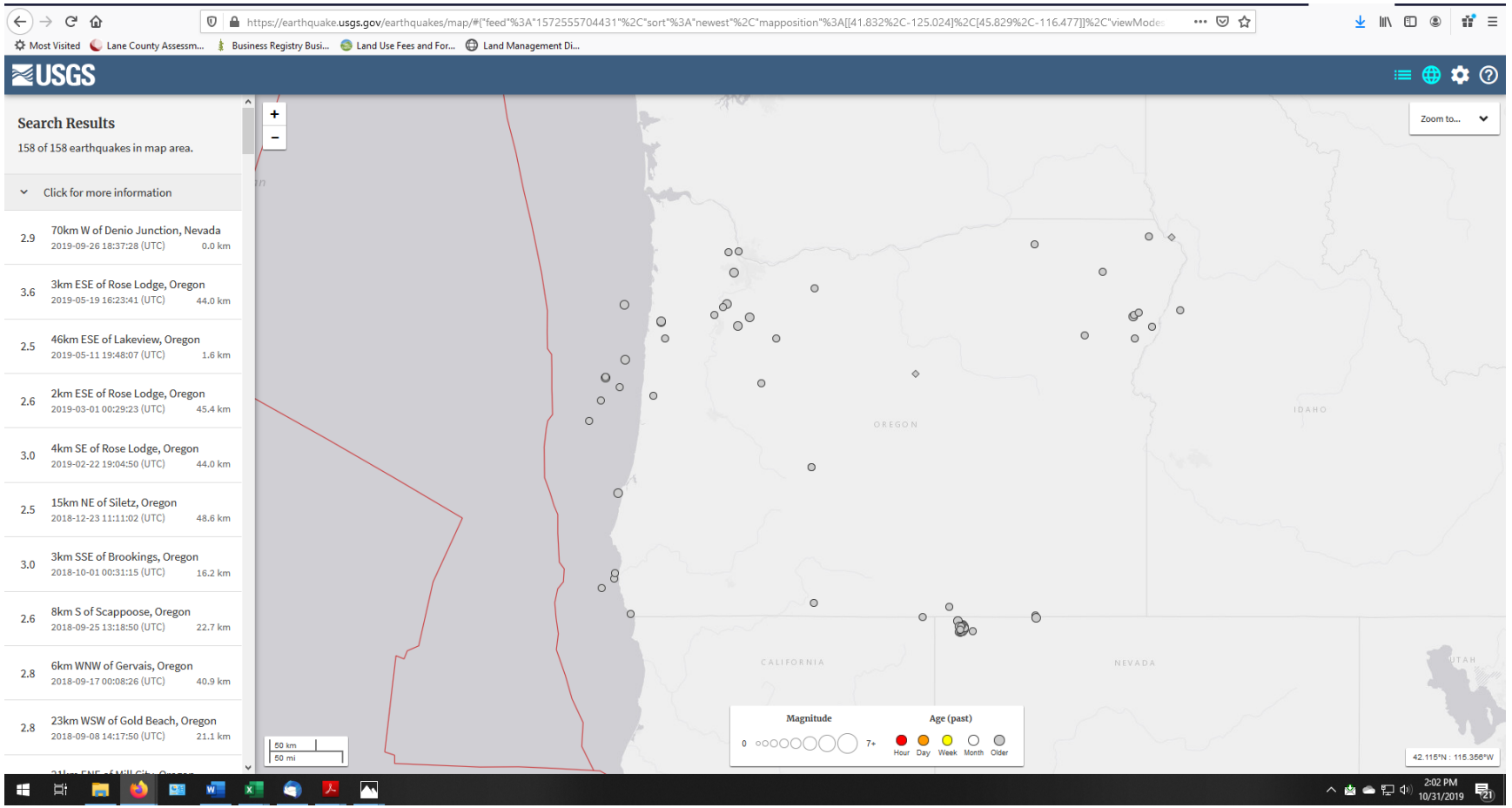
Table 3-2 Earthquake Magnitude / Intensity Comparison

PGA (% g)	Magnitude (Richter)	Intensity (MMI) & Label	MMI Description
< 0.17	1.0 – 3.0	I. Instrumental	**I.** Not felt by many people unless in favorable conditions.
0.17 – 1.4	3.0 – 3.9	II. – III. Feeble/Slight	**II.** Felt only by a few persons at rest, especially on building upper floors. **III.** Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motorcars may rock slightly. Vibrations similar to the passing of a truck.
1.4 – 9.2	4.0 – 4.9	IV. – V. Moderate/Rather Strong	**IV.** Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Parked cars rock noticeably. **V.** Felt by nearly everyone: many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
9.2 – 34	5.0 – 5.9	VI – VII Strong/Very Strong	**VI.** Felt by all. Some heavy furniture moved. Damage slight. **VII.** Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built of badly designed structures; some chimneys broken.
18 – 124	6.0 – 6.9	VII – IX Very Strong/ Destructive/Ruinous	**VIII.** Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, and walls. Heavy furniture overturned. **IX.** Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
34 to >124	7.0 and higher	VIII and Higher Destructive/Ruinous/ Disastrous/Very Disastrous/ Catastrophic	**X.** Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent. **XI.** Few if any (masonry) structures remain standing. Bridges destroyed. **XII.** Damage total. Line of sight & level distorted. Objects thrown in the air.

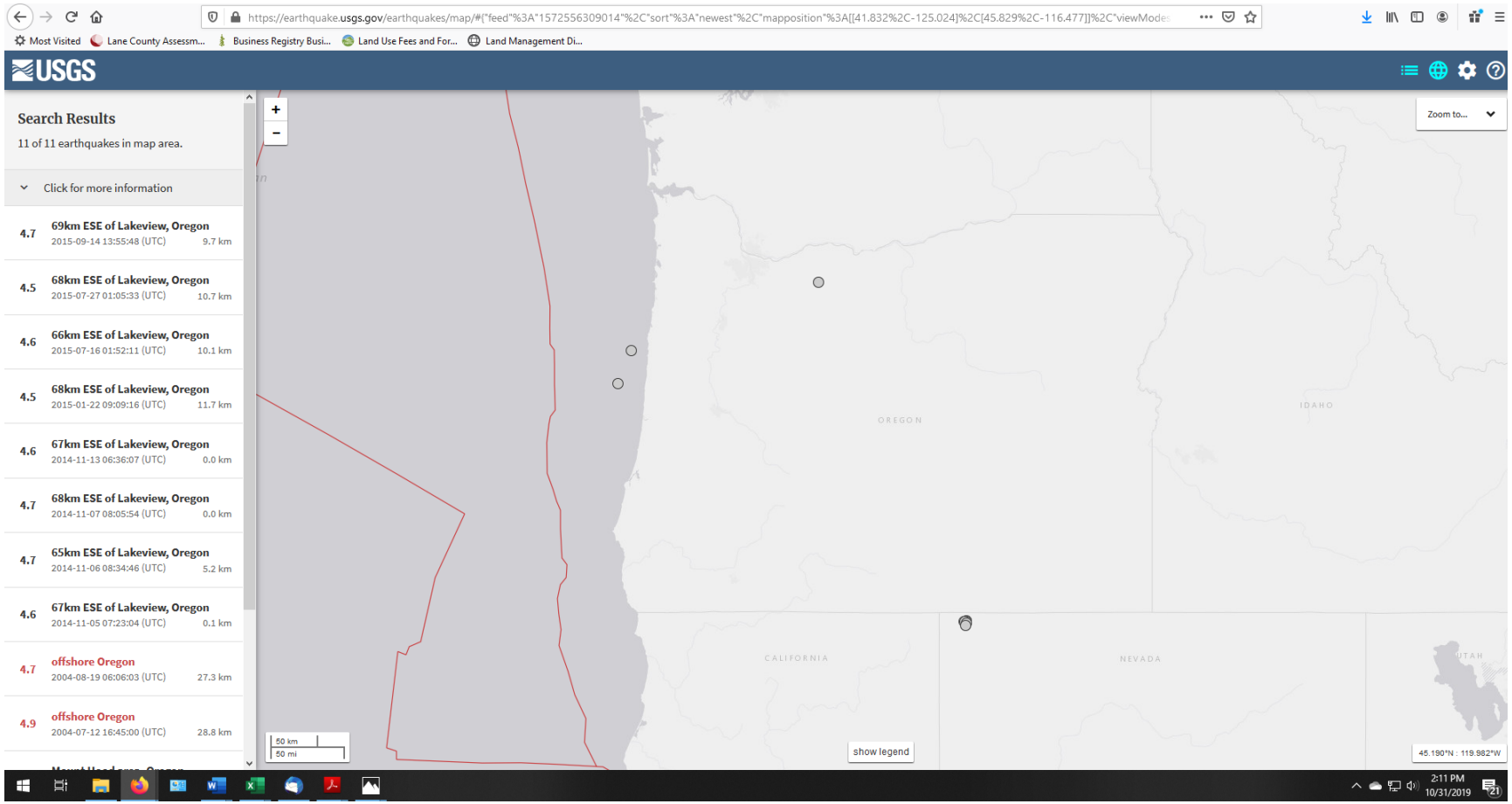
Source: USGS, Earthquake Hazards Program. http://earthquake.usgs.gov

Geographic Location/Previous Occurrences

The following image from USGS shows the location of earthquakes less than 4.5 magnitude in the state of Oregon over the past five (5) years:



The following image from USGS shows the location of earthquakes greater than 4.5 magnitude in the state of Oregon over the past twenty (20) years:



Probability of Future Occurrence

There is a high likelihood of a future occurrence less than 4.5 magnitude in any given year in the state of Oregon. It is less likely that an earthquake greater than that will occur, but it is well documented that a Cascadia Fault related earthquake event of a larger magnitude will happen sooner or later.

Magnitude/Severity/Extent

Liquefaction: A process by which water-saturated sediment temporarily loses strength and acts as a fluid, like when you wiggle your toes in the wet sand near the water at the beach. This effect can be caused by earthquake shaking (https://www.usgs.gov/faqs/what-liquefaction) . Figure 3.6 maps liquefaction susceptibility.

Peak Ground Acceleration: The magnitude of an earthquake is measured in the amplitude of the seismic wave and is expressed in the Richter scale; intensity is expressed as peak ground acceleration (PGA) relative to the earth's gravity or "g" and is a measure of how strong the shock was felt at a particular location, expressed in Modified Mercalli Intensity (MMI) scale. Figure 3.7 maps peak ground acceleration.

Peak Ground Velocity: peak ground velocity is the greatest speed of shaking recorded at particular point during an earthquake (https://www.ebiconsulting.com/resources_news/magnitude-peak-ground-velocity-peak-ground-acceleration/). Figure 3.8 maps peak ground velocity.

Earthquake Overall Vulnerability

Most of the structures on the Rogue Community College campuses are single story, which should limit some of the vulnerability. Nevertheless, even single-story structures will be damaged and can cause harm to students and faculty. Campus buildings in downtown Medford and downtown Grants Pass are multi-story and are especially vulnerable to earthquake damage. Action items for these structures are included in the mitigation action section below and are ranked highly by the team as earthquake mitigation projects.

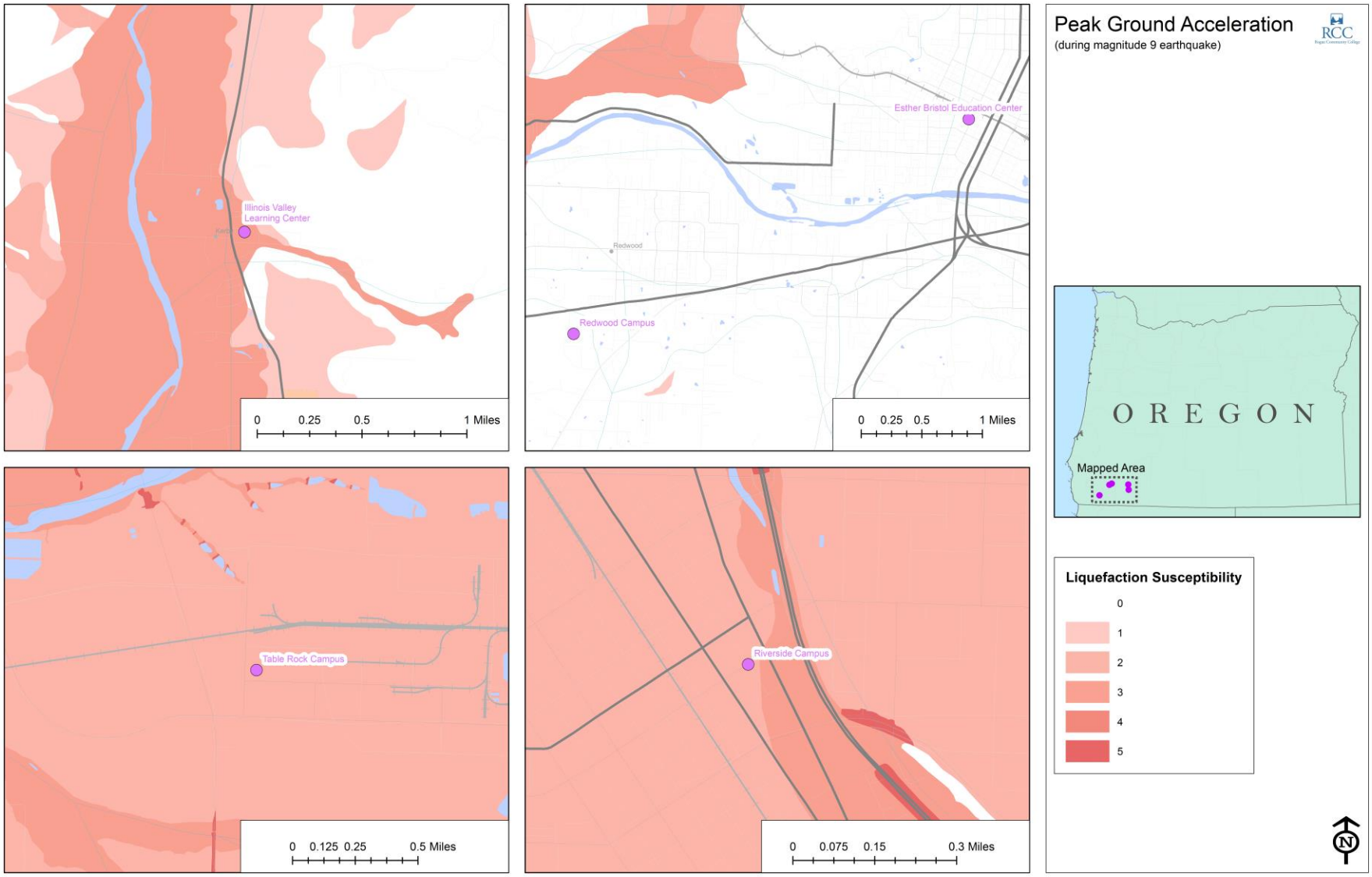

Peak Ground Acceleration
(during magnitude 9 earthquake)
RCC
Illinois Valley Learning Center
Esther Bristol Education Center
Redwood
Redwood Campus
0 0.25 0.5 1 Miles
0 0.25 0.5 1 Miles
OREGON
Mapped Area
Table Rock Campus
Riverside Campus
0 0.125 0.25 0.5 Miles
0 0.075 0.15 0.3 Miles
Liquefaction Susceptibility
0
1
2
3
4
5
N

Figure 3-6

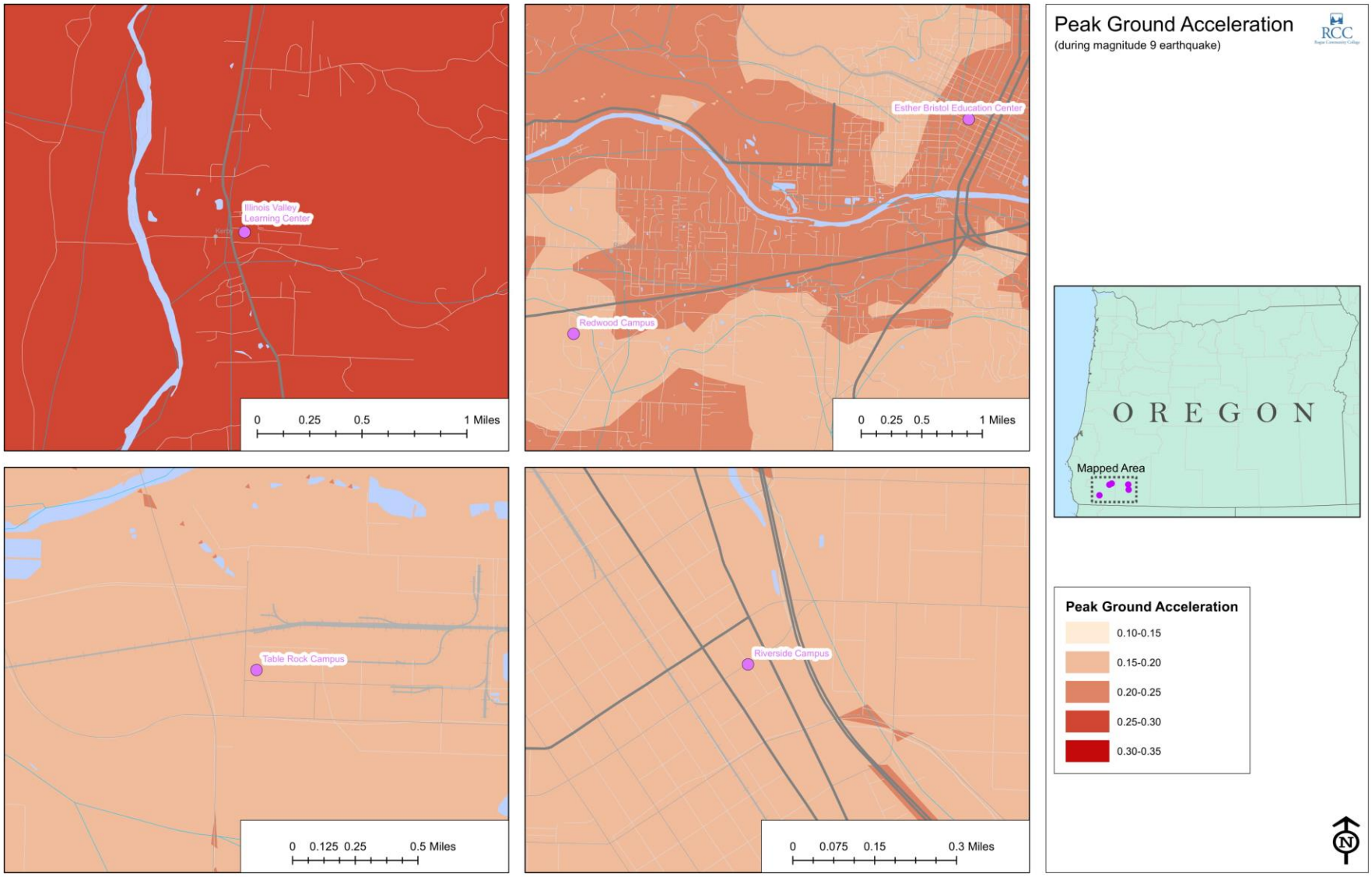

Peak Ground Acceleration
(during magnitude 9 earthquake)
RCC
Illinois Valley Learning Center
Esther Bristol Education Center
Redwood Campus
Table Rock Campus
Riverside Campus
0 0.25 0.5 1 Miles
0 0.25 0.5 1 Miles
0 0.125 0.25 0.5 Miles
0 0.075 0.15 0.3 Miles
OREGON
Mapped Area
Peak Ground Acceleration
0.10-0.15
0.15-0.20
0.20-0.25
0.25-0.30
0.30-0.35
N

Figure 3-7

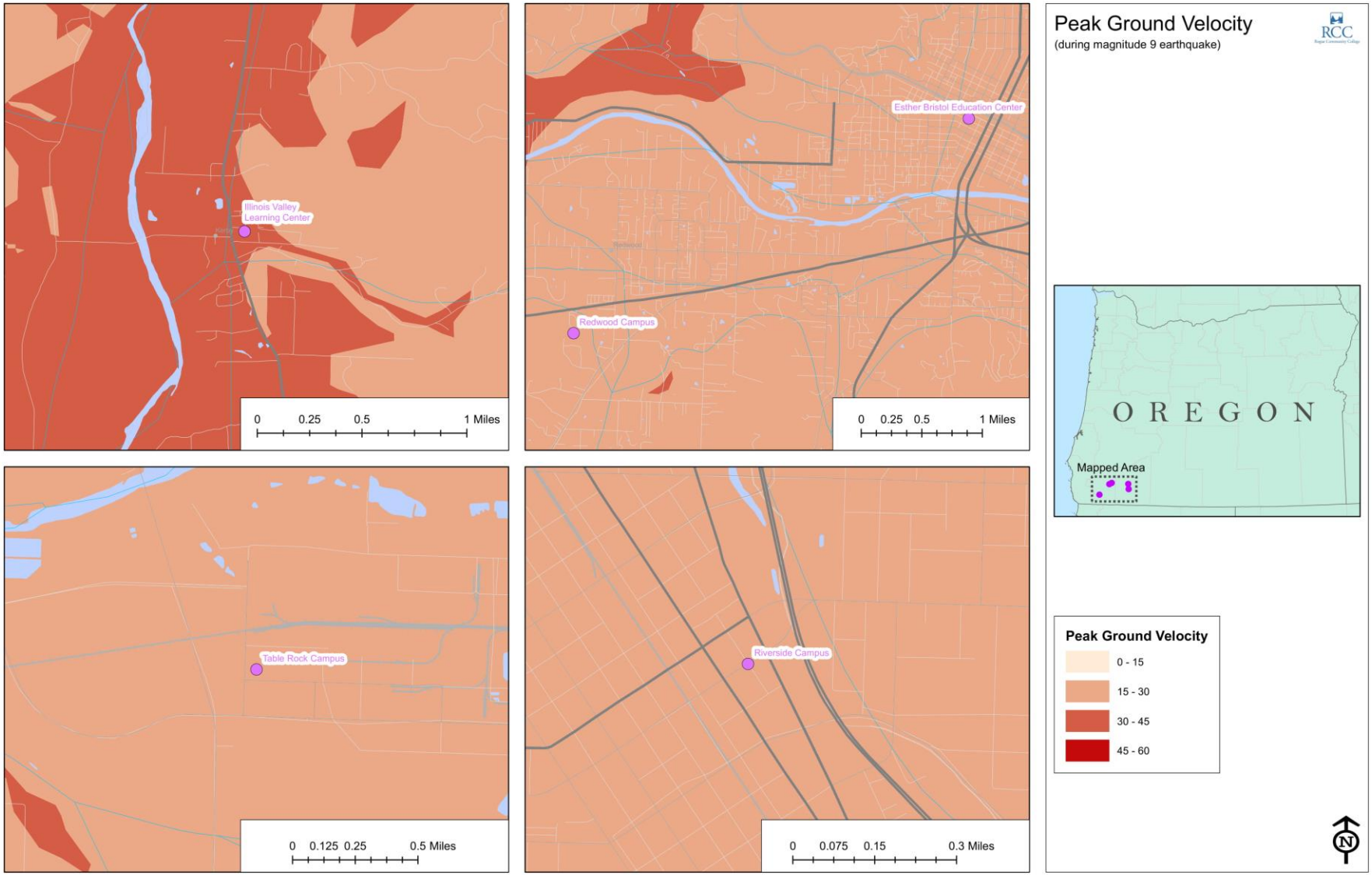

Peak Ground Velocity
(during magnitude 9 earthquake)
RCC
Illinois Valley Learning Center
Esther Bristol Education Center
Redwood Campus
Table Rock Campus
Riverside Campus
0 0.25 0.5 1 Miles
0 0.25 0.5 1 Miles
0 0.125 0.25 0.5 Miles
0 0.075 0.15 0.3 Miles
OREGON
Mapped Area
Peak Ground Velocity
0 - 15
15 - 30
30 - 45
45 - 60
N

Figure 3-8

3.2.2 Wildfire

Hazard Description

A wildfire is an uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures. Wildfires often begin unnoticed, spread quickly, and are usually signaled by dense smoke that fills the area for miles around. Wildfires are caused through human acts such as arson or careless accidents, or through natural occurrences such as lightning. Wildfire danger is exacerbated by dry weather conditions and excessive heat.

The urban-wildland interface is an area in which development meets wildland vegetation. Both vegetation and the built environment provide fuel for fires. Table 3-19 below lists fire danger rating classifications as defined by the U.S. Forest Service.

Table 3-3 U.S. Forest Service, Fire Danger Adjective Class Rating

Danger Rating	Basic Description	Detailed Description
Low	fires not easily started	Fuels do not ignite readily from small firebrands. Fires in open grassland may burn freely a few hours after rain, but wood fires spread slowly by smoldering and burn in irregular fingers. Low danger of spotting.
Moderate	fires start easily and spread at a moderate rate	Fires can start from most accidental causes. Fires in open cured grassland will burn briskly and spread rapidly on windy days. Forest fires will spread at slow to moderate speed. The average fire is of moderate intensity, although heavy concentrations of fuel may burn hot. Short distance spotting may occur. Fires are not likely to become serious and control is relatively easy.
High	fires start easily and spread at a rapid rate	All fine dead fuels ignite readily and fires start easily from most causes. Unattended brush and campfires are likely to escape. Fires spread rapidly and short-distance spotting is common. High intensity burning may develop on slopes or in concentrations of fuel. Fires may become serious and their control difficult, unless they are hit hard and fast while small.
Very High	fires start very easily and spread at a very fast rate	Fires start easily from all causes and immediately after ignition, spread rapidly and increase quickly in intensity. Spot fires are a constant danger. Fires burning in light fuels may quickly develop high-intensity characteristics - such as long-distance spotting - and fire whirlwinds, when they burn into heavier fuels. Direct attack at the head of such fires is rarely possible after they have been burning more than a few minutes.
Extreme	fire situation is explosive and can result in extensive property damage	Fires start quickly, spread furiously and burn intensely. All fires are potentially serious. Development into high-intensity burning will usually be faster and occur from smaller fires than in the Very High Danger class (4). Direct attack is rarely possible and may be dangerous, except immediately after ignition. Fires that develop headway in heavy slash or in conifer stands may be unmanageable while the extreme burning condition lasts. Under these conditions, the only effective and safe control action is on the flanks, until the weather changes or the fuel supply lessens.

Source: U.S. Forest Service, Wildland Fire Assessment System http://www.wfas.net/

Geographic Location

The risk of wildfire and damage from wildfire is highest in the urban-wildland interface. The urban-wildland interface is generally described as an area where development meets dense forest. Fires burning in this fuel type under drought conditions are extremely hard to contain, require concentrated firefighting resources, and threaten all homes and facilities in its vicinity.

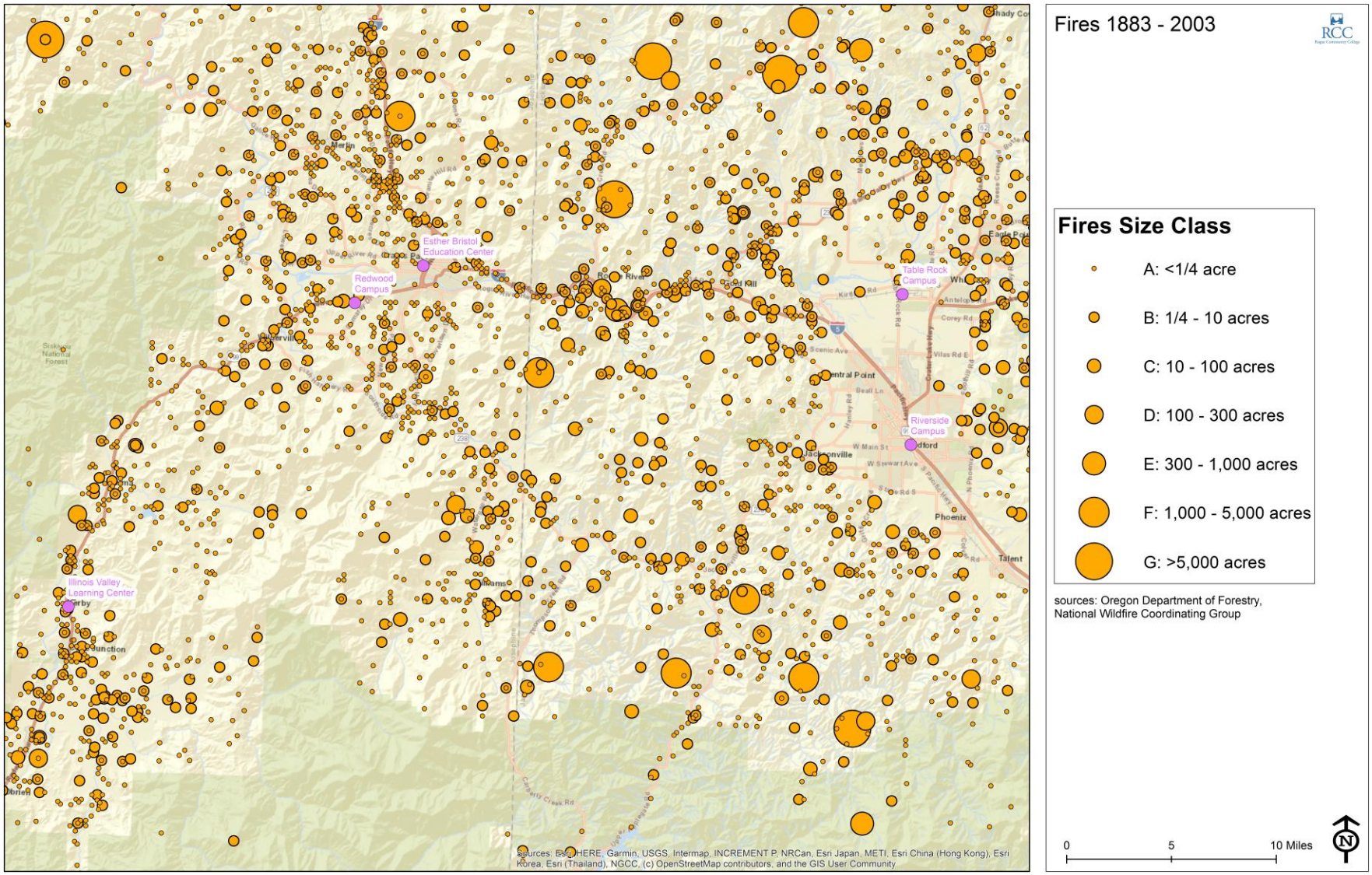

Fires 1883 - 2003
RCC
Fires Size Class
A: <1/4 acre
B: 1/4 - 10 acres
C: 10 - 100 acres
D: 100 - 300 acres
E: 300 - 1,000 acres
F: 1,000 - 5,000 acres
G: >5,000 acres
sources: Oregon Department of Forestry, National Wildfire Coordinating Group
0
5
10 Miles
N
Esther Bristol Education Center
Redwood Campus
Table Rock Campus
Riverside Campus
Illinois Valley Learning Center
Central Point
Phoenix
Talent
Merlin
Grants Pass
Jacksonville
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Figure 3.9

Previous Occurrences

Figure 3-9 above shows historic fire events from 1883-2003.

Following is an excerpt from the Rogue Community College Firewise Community Assessment from March 2016:

> There have been 8 reported wildfires in the area since 2002, all were human caused. The most significant wildfire event occurred on Campus View Drive in 2002. One structure and one outbuilding were lost. Embers were the ignition source for additional fires which consumed 19 acres. The fuel sources that were consumed in the fire have since grown back. Although some fuels reduction work has been completed on some of these properties, there remains a significant amount of thick dense manzanita and other wildfire fuels on the properties along Campus View Drive which increases the risk of a major wildfire.

Probability of Future Occurrence

Wildfire danger can vary greatly season to season and is exacerbated by dry weather conditions. Based on patterns of previous occurrences, with many fires occurring in a typical year, probability of future occurrence is **High**.

A common method for rating wildfire probability over short timeframes is the Keetch-Byram Drought Index (KBDI). This index predicts the likelihood of wildfire based on soil moisture and other conditions related to drought. KBDI classes range from 0 (no drought) to 800 (extreme drought) and is based on the soil capacity in 8 inches (200 mm) of water. The depth of soil required to hold 8 inches of moisture varies. A prolonged drought (high KBDI) influences fire intensity largely because fuels have lower moisture content. Table 3-4 describes conditions associated with the various KBDI classifications.

Table 3-4 Keetch-Byram Drought Index Classifications

KBDI Class	Description of Conditions
0 – 200 Low Fire Danger	Soil and fuel moisture is high. Most fuels will not readily ignite or burn. However, with sufficient sunlight and wind, cured grasses and some light surface fuels will burn in spots and patches.
200 – 400 Moderate Fire Danger	Fires more readily burn and will carry across an area with no "gaps". Heavier fuels will still not readily ignite and burn. Also, expect smoldering and the resulting smoke to carry into and possibly through the night.
400 - 600 High Fire Danger	Fire intensity begins to significantly increase. Fires will readily burn in all directions exposing mineral soils in some locations. Larger fuels may burn or smolder for several days creating possible smoke and control problems
600 – 800 Extreme Fire Danger	Surface litter and most of organic layer is consumed. 1000 hour fuels contribute to intensity. Stumps will burn to the end of roots underground. Any dead snag will ignite. Spotting from snags is a major problem if close to line. Expect dead limbs on trees to ignite from sparks. Expect extreme intensity on all fires which makes control efforts difficult. With winds above 10 miles per hour, spotting is the rule. Expect increased need for resources for fire suppression. Direct initial attack is almost impossible. Only rapid response time to wildfire with complete mop-up and patrol will prevent a major fire situation from developing.

Source:

Magnitude/Severity/Extent

The extent of wildfire impacts in Rogue Community College is considered **Level 3 - Critical** by the HMT. Temporary shutdown of facilities could potentially occur. Economic and structural losses are the most common impacts. In terms of extents, the portions of the planning area

most at-risk from wildfires would be the urban-wildland interface adjacent to the Redwood campus.

Wildfire Overall Vulnerability
Overall vulnerability to wildfire is considered **Moderate to High**, based on subjective assessments, the Firewise Community Assessment, the fire hazard rating from the National Wildfire Coordinating Group as shown on Image 3-10 below and other resources developed by the College relating to wildfire (such as the Pyrologics report).

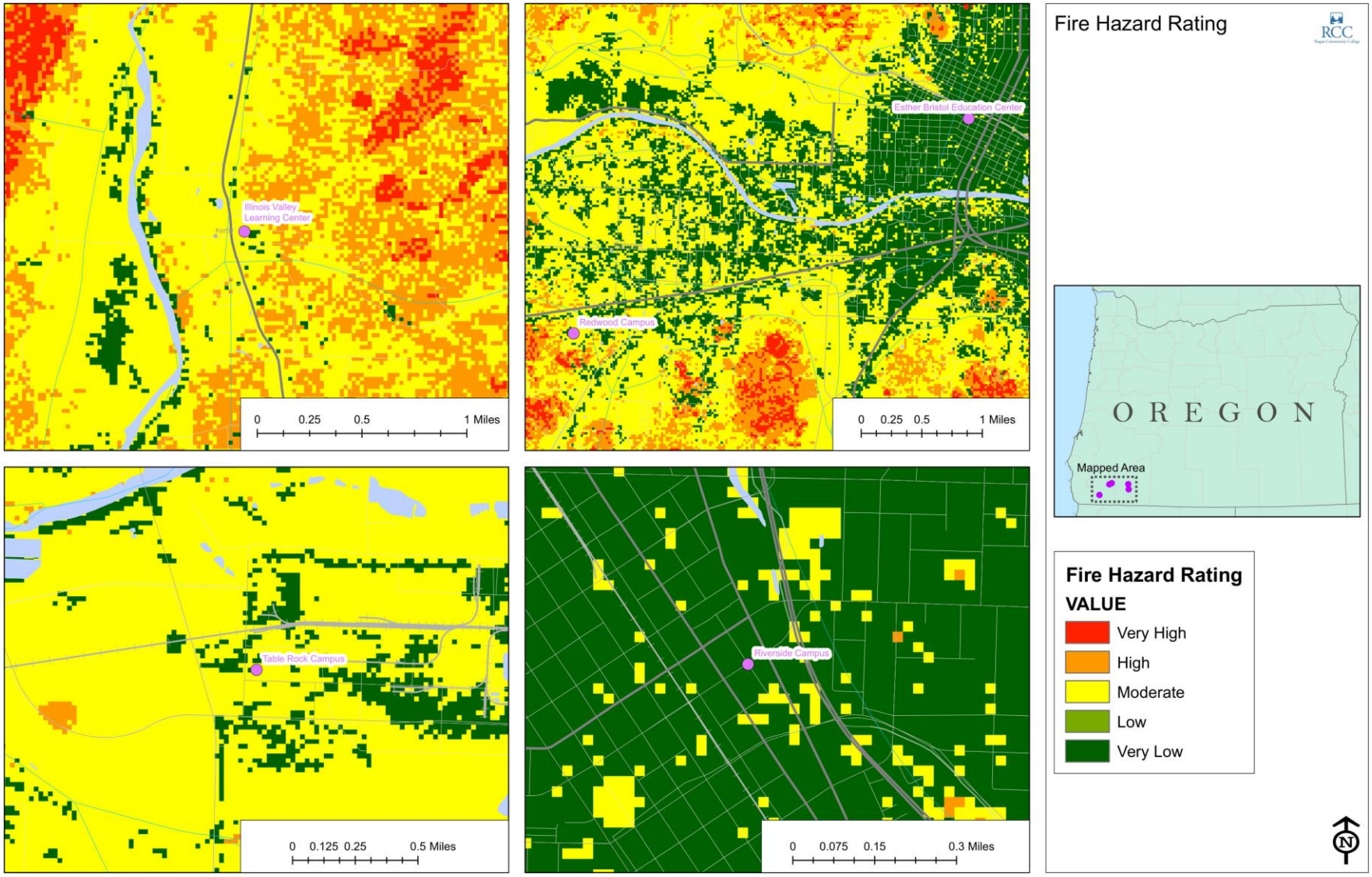

Fire Hazard Rating
RCC
Illinois Valley Learning Center
0 0.25 0.5 1 Miles
Esther Bristol Education Center
Redwood Campus
0 0.25 0.5 1 Miles
OREGON
Mapped Area
Table Rock Campus
0 0.125 0.25 0.5 Miles
Riverside Campus
0 0.075 0.15 0.3 Miles
Fire Hazard Rating
VALUE
Very High
High
Moderate
Low
Very Low
N

Image 3-10

3.3 VULNERABILITY ASSESSMENT

44 CFR Requirement §201.6(c) (2) (ii): *The risk assessment **shall** include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c) (2) (i) of this section. This description **shall** include an overall summary of each hazard and its impact on the community.*

Overall vulnerability to each hazard was based on assessments of previous and potential occurrences regarding the scale of geographic area affected, future probability, and severity of impact considering a worst case scenario. Factors including risk exposure of special needs populations, medical special needs populations, the location of critical facilities, and key infrastructure were also considered.

Based on these factors and the definitions established in Subsection 3.1.1 (listed below in the table notes), Table 3-5 below shows the Hazard Mitigation Team's assessment of overall vulnerability to each of the identified hazards and categories of primary impacts (classified as public safety, property, infrastructure, and/or economy).

Table 3-5 Overall Vulnerability and Impact by Hazard Type

HAZARD TYPE	VULNERABILITY	PRIMARY IMPACT CATEGORIES
Earthquake	Moderate	Public Safety, Economy, Structures, Infrastructure
Wildfire	Moderate to High	Public Safety, Property, Infrastructure, Economy

Source: Rogue Community College Hazard Mitigation Team

Overall vulnerability classifications are defined as follows:
High— Moderate/high probability of future occurrence and potentially critical severity.
Moderate— Moderate/high probability of future occurrence and limited potential severity.
Low— Low/moderate probability of future occurrence and negligible/limited potential severity

Table 3-6 summarizes the probability of occurrence and magnitude and severity assessments from the individual hazard profiles detailed above.

Table 3-6 Probability of Occurrence and Magnitude/Severity by Hazard Type

HAZARD TYPE	PROBABILITY OF OCCURRENCE	POTENTIAL MAGNITUDE/SEVERITY/EXTENT
Earthquake	Low	Level 3- Critical
Wildfire	Medium	Level 3- Critical

Source: Rogue Community College Hazard Mitigation Team

Probability of Occurrence classifications are defined as follows:
High - Greater than 50 percent probability of occurrence in a given year
Medium - 10 to 50 percent probability of occurrence in a given year
Low – Less than 10 percent probability of occurrence in a given year

Magnitude and Severity classifications are defined as follows:
Level 4-Catastrophic—Severe property damage on a regional or metropolitan scale; shutdown of critical facilities, utilities and infrastructure for extended periods; and/or multiple injuries and fatalities
Level 3-Critical—Severe property damage on a neighborhood scale; temporary shutdown of critical facilities, utilities and infrastructure; and/or injuries or fatalities
Level 2-Limited—Isolated occurrences of moderate to severe property damage; brief shutdown of critical facilities, utilities and infrastructure; potential injuries
Level 1-Negligible— Isolated occurrences of minor property damage; minor disruption of critical facilities, utilities and infrastructure; potential minor injuries

3.3.1 Critical Facilities and Infrastructure

44 CFR Requirement §201.6(c)(2)(ii)(A): *The plan **should** describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard area …*

Critical facilities can be defined as facilities that provide vital operational, protection, maintenance or care services to vulnerable populations and the greater community.

Table 3-7 Inventory of Critical Facilities, Rogue Community College

Gymnasium
Coat's Hall
RWC Water Tank 110,000 gal
RWC Water Tank 90,000 gal
RWC FO Building Facilities Operations
RWC Pumphouse Facilities
RWC Pumphouse Fire Booster
Kitchen/Cafe

Source: Hazard Mitigation Team

3.3.2 Potential Dollar Loss

44 CFR Requirement §201.6(c) (2) (ii) (B): *The plan **should** describe vulnerability in terms of an estimate of the potential dollar losses to vulnerable structures identified in paragraph (c) (2) (ii) (A) of this section and a description of the methodology used to prepare the estimate ….*

An important component of RCC's hazard mitigation strategy is to estimate potential economic losses as a way of targeting high priority projects or activities. In this analysis, estimates of potential economic losses are expressed in dollar terms and based on the best available data.

From that foundation, potential loss projections are calculated under what is considered the 'most likely worst-case scenario', for each hazard type. This subjective approach estimates losses resulting from the most severe event occurrence possible within roughly a 0-99 percent probability parameter (less than one percent of major occurrences would exceed the estimated severity). This definition was developed to exclude farfetched, though theoretically possible, estimates that exceed rational analysis for mitigation purposes.

As a basis for developing potential dollar loss estimates for the various hazards, structure inventory and value data from HAZUS was used.

Using these methods and input data, potential dollar loss is estimated for each profiled hazard, starting with flooding below, then hurricane, followed by the remainder of the hazard types.

Potential Dollar Loss, Earthquake

The Hazard Mitigation Team developed estimates for property losses and commercial activity losses based on data from previous occurrences and general evaluation of potential impact. These estimates are developed according to approximations of 'most likely worst-case scenarios' for each hazard and are subjective and hypothetical. For the purpose of this analysis, it is assumed that less than one percent of major disaster occurrences would or could exceed these scenarios. This definition was developed to exclude farfetched, though theoretically possible, estimates that exceed rational analysis for mitigation purposes.

Total Replacement Value (TRV, including both structures and contents) was estimated by multiplying total structure value (all types, residential, commercial, etc.) by 1.5. These calculations create only one possible scenario; the results may differ from local data sources and should be reviewed carefully and used with discretion. The total replacement value was multiplied by the estimated percentage of TRV that could possibly be lost in a worst-case scenario per hazard.

Annual Economic Activity (AEA) was estimated by adding total annual wages to annual retail sales. This value was multiplied by the estimated percentage of AEA that could be lost in a worst-case scenario per hazard.

The tables on the following page outline the results of these methodologies, potential dollar losses to structures and personal property (Table 3-7), followed by estimated negative economic impacts to commercial activity for industrial, commercial, and wage-earner sectors (Table 3-8). Table 3-9 provides the sum totals of potential dollar loss per disaster type, by adding potential losses to structures and contents to potential economic losses.

Table 3-7 Estimated Potential Dollar Loss (PDL) by Disaster Type, Structures and Contents; Rogue Community College

Total Structure and Contents Replacement Value (TRV)	Earthquake PDL (-5% TRV)	Wildfire PDL (-2.5% TRV)
$103,193,115	$5,159,656	$2,579,828

Source: 2019 RCC Insurance Statement; Hazard Mitigation Team (estimated losses)

Table 3-8 Estimated Potential Dollar Loss (PDL) by Disaster Type, Commercial Activity; Rogue Community College

Annual Economic Activity (AEA)	Earthquake PDL (-3% AEA)	Wildfire PDL (-3% AEA)
$36,569,821	$1,097,095	$1,097,095

Source: RCC 2018 data; Hazard Mitigation Team (estimated losses for two week shutdown)

Table 3-9 Estimated Potential Dollar Loss (PDL) by Disaster Type, Total; Rogue Community College

Total Assets at Risk (TAR)	Earthquake PDL (Total)	Wildfire PDL (Total)
$139,762,936	$6,256,751	$3,676,923

Source: See above tables.

3.3.3 Vulnerable Structures

All structures in Rogue Community College can be considered vulnerable to some degree to impacts from earthquakes and wildfire.

Vulnerable Structures (Existing)
Table 3-10 gives an approximation of total structures vulnerable to hazard impact by type. These estimates reflect a combination of vulnerability based on location as well as structural vulnerability. Similar to potential dollar loss, these vulnerable structure estimates are premised on a 'most likely worst case scenario', a subjective approach that estimates losses resulting from the most severe event occurrence possible within roughly a 0-99 percent probability parameter. This definition was developed to exclude farfetched, though theoretically possible, estimates that exceed rational analysis for mitigation purposes.

Differentiation of impact across the various development types (residential, commercial, industrial, etc.) was not developed, but rather is reported as a static value for estimated loss based on total number of structures within each category.

Table 3-10 Estimated Total Structures Vulnerable to Hazard by Type

Hazard	Total Structures	Percent Structures Potentially Impacted	Number of Structures Potentially Impacted
Earthquake	59	100.0%	59
Wildfire	59	25.0%	15

Source: RCC

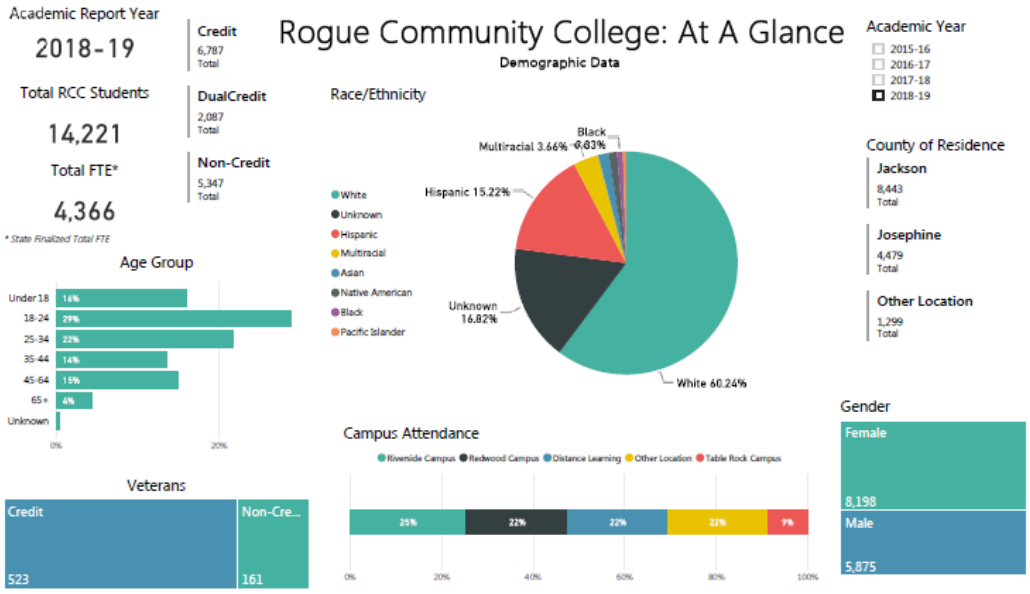
44 CFR Requirement §201.6(c) (2) (ii) (C): *The plan **should** describe vulnerability in terms of providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.*

All structures are existing or have been remodeled. Any future development will be addressed during plan updates and included here.

Population/Enrolment Trends

The image on the next page shows current student demographics for RCC.

Student Demographics



3.3.4 Existing Planning Mechanisms-Capabilities Assessment

An integral component of the mitigation strategy is the incorporation of this plan's objectives into existing and future planning mechanisms. The Hazard Mitigation Team is comprised of personnel with oversight into the development, update, and day-to-day implementation of these planning mechanisms, and will help to ensure the incorporation of this plan into updates of existing plans and ordinances and ones that are developed and adopted in the future. A detailed discussion of the process for incorporating this hazard mitigation plan into other planning mechanisms is presented in Chapter 5 (Plan Maintenance), Section 5.3.

Table 3-11 lists planning mechanisms and regulatory tools applicable to the planning area.

Table 3-11 Planning Mechanism Checklist, Rogue Community College

Regulatory Tool (orders, ordinances, codes, plans)	**Comments**
Strategic Plan	Yes
Firewise Community Assessment	Yes
Building Code/Fire Code	Yes
Capital improvements plan	Yes
Economic development plan	Yes
Local emergency operations plan (EOP)	Yes

CHAPTER 4. MITIGATION STRATEGY

44 CFR Requirement 201.6(c) (3):
The plan shall include a mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools.

The mitigation strategy creates a planning framework to reduce the impact of future hazard events. The structure of this mitigation strategy is intentionally straightforward:

- Establish a set of agreed upon goals and objectives.
- Identify problems.
- Implement feasible activities that support the goals and solve identified problems.

This chapter begins by defining the goals established early in the planning process, outlined in ***Section 4.1 (Local Hazard Mitigation Goals)***. ***Section 4.2 (Action Item Identification and Prioritization)*** describes the process through which mitigation actions were decided upon and ranked by relative priority.

Section 4.3 (Mitigation Action Items) lists mitigation activities to be pursued by the College.

4.1 LOCAL HAZARD MITIGATION GOALS AND OBJECTIVES

44 CFR Requirement §201.6(c) (3) (i): *The hazard mitigation strategy **shall** include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.*

The overarching goal of the Rogue Community College Hazard Mitigation Plan is to promote sound public policy designed to protect the health, safety and welfare of its faculty, staff, students and assets.

These goals are in close correspondence with the goals of the State of Oregon Natural Hazard Mitigation Plan listed below in Figure 4-1 and 4-2.

Figure 4-1 Goals from the State of Oregon Natural Hazard Mitigation Plan (2015)

1. Protect life and reduce injuries resulting from natural hazards.
2. Minimize public and private property damages and the disruption of essential infrastructure and services from natural hazards.
3. Increase the resilience of local, regional, and statewide economies.
4. Minimize the impact of natural hazards while protecting, restoring, and sustaining environmental processes.
5. Enhance and maintain state capability to implement a comprehensive statewide hazard loss reduction strategy.
6. Document and evaluate Oregon's progress in achieving hazard mitigation.
7. The public, private sector, and government agencies to mitigate against the effects of natural hazards through information and education.
8. Eliminate development within mapped hazardous areas where the risks to people and property cannot be mitigated.
9. Minimize damage to historic and cultural resources.
10. Increase communication, collaboration, and coordination among agencies at all levels of government and the private sector to mitigate natural hazards.
11. Integrate local NHMPs with comprehensive plans and implementing measures.

Pursuant to the above stated goals, the Hazard Mitigation Team developed mitigation action items (measurable activities targeted at mitigating disaster events) for each hazard assigned a 'Moderate' or 'High' overall vulnerability ranking. Mitigation action items, implementation strategies, and methods for identification and prioritization are described in the following sections.

4.2 ACTION ITEM IDENTIFICATION AND PRIORITIZATION

44 CFR Requirement §201.6(c) (3) (ii)
The mitigation strategy shall include a section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

This Hazard Mitigation Plan provides a list of proposed mitigation actions that will assist the College to reduce potential losses. The remainder of this chapter describes the mitigation strategy developed by the HMT to implement action items in support of the above stated goals. It is expected that with sound and thorough implementation of these action items, significant reductions in future losses to faculty/staff/students and assets will result.

4.2.1 Action Item Identification

During the meetings and discussions conducted during the development of the plan, numerous suggestions were presented by the attendees creating an initial 'wish list' for mitigation activities. The Hazard Mitigation Team considered this broad range of potential mitigation activities in relation to their particular area of interest or expertise. Action items considered included those from the previous iteration of this plan that have not yet been implemented. Other action items from the previous version of this plan were removed from consideration due to completion, absence of funding sources, or lack of viability.

The mitigation action items are reported below in Sections 4.3, starting with high priority action items. At least two actions are listed for each of the profiled hazard types. The outline for each action item includes the following information:

- Hazard(s) addressed — Hazard types mitigated by project.
- Priority ranking — Ranking relative to other action items of the same hazard type based on aggregated prioritization scores. Equivalent prioritization scores received same
  (equal) priority ranking.
- Estimated cost — Estimated expense to carry an action item through to completion.
- Implementation schedule — Estimated period to complete action item.
- Coordinating agencies — Departments and agencies involved in action item implementation.
- Potential funding sources — Potential grant funding sources. Hazard Mitigation Grant Program (HMGP); Pre-Disaster Mitigation Program (PDM).
- Reason for action — Brief description of expected benefits and rationale for project.

4.2.2 Action Item Prioritization Criteria and Process

In general, the Hazard Mitigation Team emphasized the cost effectiveness, technical feasibility, and environmental soundness of each action item to determine its relative priority. More specifically, the HMT considered the predicted social impacts of mitigation project implementation, its technical feasibility, administrative barriers, political or legal considerations, economic impacts, and environmental soundness. These criteria, organized under the STAPLE-E acronym, are listed below, followed by the method for benefit-cost review:

STAPLE-E Criteria

- **S**ocial Effects
- **T**echnical Feasibility
- **A**dministrative Barriers/Considerations
- **P**olitical Considerations

- **L**egal Ramifications
- **E**conomic Impacts
- **E**nvironmental Soundness

Cost-Effectiveness/Benefit-Cost Ratio

An overall evaluation of an action item's expected benefits versus costs was also considered during action item identification and prioritization. Items with estimated benefits that outweighed expected costs (>1:1 BCR) were generally given favorable consideration over those action items with negative benefit-cost ratios (<1:1 BCR), which were omitted from consideration.

Prioritization Process

From the list of hazard mitigation ideas established in the planning process, each member of the Hazard Mitigation Team was asked to prioritize at least two action items for each identified hazard and for multiple hazards based on their assessments of the STAPLE-E criteria, benefit-cost review, and other quantitative and qualitative factors. The following criteria were used by the HMC to evaluate the relative priority of each action item:

- High: Meets five (or more) of the seven STAPLE-E criteria and ≥1:1 BCR
- Medium: Meets three or four of the seven STAPLE-E criteria and ≥1:1 BCR

The results of the action item prioritization process were aggregated to capture the consensus of the HMT, with numeric equivalents established for the high, medium, and low factors as follows: High = 3; Medium = 2; Low = 1. These results were summed and averaged, with the higher numeric equivalents given a higher relative priority ranking.

Ultimately, the numeric equivalent rankings were reported to the HMT and used as a basis for mitigation project discussions in the latter planning meetings. The order mitigation projects are listed in the section that follows (Section 4.3) can be used to imply general priority for the first five actions. However, all projects listed have been vetted by the HMT and are all considered valuable methods for reducing future disaster impacts to Rogue Community College.

4.3 HAZARD MITIGATION ACTION ITEMS

The following action items are identified as the highest mitigation priorities for Rogue Community College:

1. __Expand Firefighting Infrastructure (Expansion/Maintenance/Access)

Hazards Addressed	Wildfire
Priority	High
Estimated Cost:	>1:1 BCR
Implementation Schedule	1-5 years
Coordinating Agency	RCC, Fire Depts. in Josephine Co., City of Grants Pass Fire
Potential Funding Sources	HMGP, PDM, Firewise

2. __Expand Firefighting Infrastructure (Hydrants and Water Lines)

Hazards Addressed	Wildfire
Priority	High
Estimated Cost:	>1:1 BCR
Implementation Schedule	Ongoing (included in Strategic Plan)
Coordinating Agency	RCC
Potential Funding Sources	HMGP, PDM

3. __Seismic Inspection ("A" Building Downtown Medford; Downtown Grants Pass Building; Automotive Building)

Hazards Addressed	Earthquake
Priority	High
Estimated Cost:	>1:1 BCR
Implementation Schedule	1-3 years
Coordinating Agency	RCC

Potential Funding Sources	HMGP, PDM

4. __Maintain 100’ Fuel Break around Redwood Campus

Hazards Addressed	Wildfire
Priority	High
Estimated Cost:	>1:1 BCR
Implementation Schedule	Ongoing
Coordinating Agency	RCC
Potential Funding Sources	HMGP, PDM

5. __Thinning/Undergrowth Clearing (fuel reduction) within the forested areas of the Redwood Campus_

Hazards Addressed	Wildfire
Priority	High
Estimated Cost:	>1:1 BCR
Implementation Schedule	Ongoing
Coordinating Agency	RCC
Potential Funding Sources	HMGP, PDM

6. __Retrofit of Sanitary Sewer Lines, Communications, and Electric owned by RCC on the Redwood Campus

Hazards Addressed	Earthquake
Priority	High
Estimated Cost:	variable
Implementation Schedule	>1:1 BCR
Coordinating Agency	RCC
Potential Funding Sources	HMGP, PDM

7. __ Retrofit (“A” Building Downtown Medford; Esther Bristol Education Center; Automotive Building at RWC, RVC G) dependent on Seismic Inspection

Hazards Addressed	Earthquake
Priority	High
Estimated Cost:	>1:1 BCR
Implementation Schedule	1-3 years
Coordinating Agency	RCC
Potential Funding Sources	HMGP, PDM

CHAPTER 5. PLAN MAINTENANCE

5.1 ADOPTION

44 CFR Requirement §201.6(c) (5):
*The local hazard mitigation plan **shall** include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council).*

44 CFR Requirement §201.6(c) (5):
*For multi-Jurisdiction plans, each jurisdiction requesting approval of the plan **must** document that it has been formally adopted.*

As stated in **Chapter 1. Prerequisites**, upon provisional approval of this plan document by OEM and the Federal Emergency Management Agency, the governing body for Rogue Community College will formally adopt the plan. Following local adoption, a copy of the adoption instrument will be included in Appendix A of this document.

5.2 IMPLEMENTATION, MONITORING, EVALUATION, AND UPDATE

***Requirement §201.6(c) (4) (i):** The plan maintenance process **shall** include a section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.*

Implementation
Rogue Community College is committed to implementing this Hazard Mitigation Plan through execution of the action items listed herein, and is committed to utilizing this plan to access mitigation grant funds to assist the implementation of action items set forth in Chapter 4 (Mitigation Strategy). Implementation of high benefit/low cost action items will be encouraged in parallel with high priority action items that require grant funding to implement. Opportunities to partner and share costs with affiliated agencies and neighboring jurisdictions for multi-objective projects are encouraged.

Monitoring
The Hazard Mitigation Team (HMT) will monitor the actions items in the Plan Update in the intervening years between plan update cycles. The RCC Office of Risk Management will be responsible for convening annual meetings with the HMT in order to present an overall progress report on action item status on an as-needed basis.

Evaluating
The RCC Office of Risk Management will be responsible for convening annual meetings of the HMT, as needed. The annual meetings will involve the gathering of hazard related data from the previous year and discussion of progress made toward action item implementation.

The HMT will evaluate the plan to assess if significant changes have occurred in the premises upon which the plan was developed such as the following:

- changes in data sources and/or methodology used to determine vulnerabilities and loss estimates, in terms of quality and availability

- changes in federal or state plans that could affect the continued implementation of any of the mitigation actions
- the identification of new hazards requiring new mitigation actions
- changes in community perception relative to specific hazards

In addition to these functions, the HMT agrees to work to educate and involve the public in hazard mitigation activities and to oversee the incorporation of this plan into future planning and public policy documents as these are updated or developed. The incorporation of this plan into other planning instruments will serve as an additional metric for success. This plan will ultimately be evaluated based on implementation of action items, the incorporation of mitigation principles into future public policy, improved public safety, and the overall reduction of losses for Rogue Community College.

Updating
The RCC Office of Risk Management will be responsible for re-convening the Hazard Mitigation Team at the end of year number 4 to ensure that the plan is updated and re-approved prior to its expiration at the end of year number 5.

5.3 INCORPORATION INTO EXISTING AND FUTURE PLANNING DOCUMENTS

Requirement §201.6(c) (4) (ii): *The plan **shall** include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.*

Mitigation is most successful when it is codified and incorporated into the functions and priorities of government, planning, and future development. Incorporating mitigation strategies into other planning documents is an effective way to leverage the support of affiliated agencies and departments while ensuring mutually supportive goals and policies.

Accordingly, the goals and mitigation strategies of this Hazard Mitigation Plan will be incorporated into other planning documents as they are updated or are developed. Examples of other planning documents include (but are not limited to) the RCC Strategic Plan and the RCC Firewise Community Assessment.

Development of future plans or update of existing plans should include a review of this Hazard Mitigation Plan for consideration and incorporation of pertinent elements. To ensure the incorporation of goals and actionable items of this plan, Hazard Mitigation Team members may be invited to sit on future plan development or existing plan update committees, and this Hazard Mitigation Plan will be cited as a technical reference and data source for these planning processes. The Hazard Mitigation Team is comprised of personnel with oversight into the development, update, and day-to-day implementation of these planning mechanisms, and will help to ensure the incorporation of this plan into updates of existing plans and ordinances and ones that are developed and adopted in the future.

5.4 CONTINUED PUBLIC INVOLVEMENT

Requirement §201.6(c) (4) (iii): *The plan maintenance process **shall** include a discussion on how the community will continue public participation in the plan maintenance process.*

Throughout current and future planning cycles, city and county residents will be canvassed to solicit local information, continuing Rogue Community College's dedication to involving the public directly in annual review and cyclical updates of this Hazard Mitigation Plan. In addition to the annual monitoring and evaluation meetings of the HMT, meetings will be scheduled as deemed necessary by the Rogue Community College Office of Risk Management to provide a forum for which the public can express its concerns, opinions, or ideas about the plan and/or it's implementation. The HMT will publicize meetings under standard public notice procedures and through local media outlets.

Attendance at the HMT meetings is just the first level of public involvement planned for the local planning process. Members of the committee were encouraged to not only invite members of the public and local experts to future meetings, but also to carry on a dialogue outside of the formal meetings to develop a more comprehensive picture of the needs and concerns of county residents related to natural hazards and mitigation planning.

Many of the effects of natural hazards can be lessened by simply educating members of the public on actions they can take to minimize danger to themselves and their possessions. It is anticipated that these strategies will help develop ownership by the public in the plan, and that future iterations of the plan will include strategies that are developed via high levels of public participation.

APPENDICES

APPENDIX A. ADOPTION DOCUMENTS

At the Rogue Community College Board of Education public meeting on April 20, 2021, the Board adopted this plan as written. Below is an excerpt from the minutes of that meeting:

Agenda Item 8.G.

G. Adopt RCC Hazard Mitigation Plan (Second Reading)

Pat Ashley moved, seconded by Roger Stokes, that the Board adopt item 8.G, as presented.

The motion unanimously carried.

APPENDIX B. PUBLIC MEETING ANNOUNCEMENTS

Public Meeting Announcement

Grants Pass Daily Courier (08/09 & 08/09 2019)

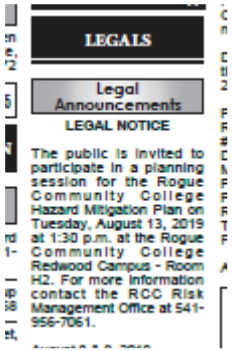
LEGAL NOTICE

PUBLIC MEETING

The public is invited to participate in a planning session for the Rogue Community College Hazard Mitigation Plan on Tuesday, August 13, 2019 at 1:30 p.m. at the Rogue Community College Redwood Campus – Room H2. For more information contact the RCC Risk Management Office at 541-956-7061.

No. 00436351 - August 8 and 9, 2019

Medford Mail Tribune (08/08 & 08/09 2019)



LEGALS

Legal Announcements

LEGAL NOTICE

The public is invited to participate in a planning session for the Rogue Community College Hazard Mitigation Plan on Tuesday, August 13, 2019 at 1:30 p.m. at the Rogue Community College Redwood Campus - Room H2. For more information contact the RCC Risk Management Office at 541-956-7061.

APPENDIX C. HMT MEETINGS: SIGN-IN SHEETS

HAZMIT TEAM MEETING ATTENDEE SIGN-IN SHEET

Project: Rogue CC Hazmit Plan	**Meeting Date:**	June 21, 2019
Facilitator: Jed Truett, Principal Planner	**Meeting Place/Room:**	3345 Redwood Hwy Grants Pass Oregon Building H Room H2

Name	Address (optional)	Phone (optional)	E-Mail (optional)
Jed Truett; Metro Planning, Inc.	846 A Street Springfield 97477	541-302-9830	jed@metroplanning.com
Wendy Jones RCC	3345 Redwood Hwy	541-450-4545	wjones@roguecc.edu
Laura Roe	"	541-956-7383	laroe@roguecc.edu
Charlie Phenix	807 NE 6th ST. GP 97526	541-450-3785	CHARLES.PHENIX@RuralMetroFire.com
Tim Stacy	101 NW A St GP 97526	541-450-6205	tstacy@grantspassoregon.gov
Al Sheldon	3345 Redwood Hwy	541-956-7440	asheldon@roguecc.edu
Jeanne Lee	3345 Redwood Hwy	541-956-7333	jlee@roguecc.edu
RICHARD PELLERIN	MEDFORD CAMPUS	541-326-8539	RPELLERIN@ROGUECC.EDU
Sean Taggart	3345 Redwood Hwy	541-956-7061	staggart@roguecc.edu

HAZMIT TEAM MEETING ATTENDEE SIGN-IN SHEET

Project: Rogue CC Hazmit Plan		**Meeting Date:**	July 9, 2019
Facilitator: Jed Truett, Principal Planner		**Meeting Place/Room:**	3345 Redwood Hwy Grants Pass Oregon Building H Room H2

Name	Address (optional)	Phone (optional)	E-Mail (optional)
Jed Truett; Metro Planning, Inc.	846 A Street Springfield 97477	541-302-9830	jed@metroplanning.com
JOHN MILES		541-415-6128	JMILES@ROGUECC.EDU
CHARLIE Phenix		541-450-3785	charles.phenix@rvdmetrofire.com
Jeanne Lee		541-956-7333	
Grant Lagosso		541-218-2424	
Joshua Ogi		(541) 956-7034	
Courtney Rasmussen			crasmussen@rogueccedu
Al Sheldon		541 956 7440	asheldon@rogueccedu
Mike McClure		541 956-7237	mmcclure@rogueccedu
Sean Taggart		541-956-7061	staggart@rogueccedu

HAZMIT TEAM MEETING ATTENDEE SIGN-IN SHEET

Project: Rogue CC Hazmit Plan	**Meeting Date:**	August 13, 2019
Facilitator: Jed Truett, Principal Planner	**Meeting Place/Room:**	3345 Redwood Hwy Grants Pass Oregon Building H Room H2

Name	Address (optional)	Phone (optional)	E-Mail (optional)
Jed Truett; Metro Planning, Inc.	846 A Street Springfield 97477	541-302-9830	jed@metroplanning.com
Wendy Jones	RCC	on file	on file
Tim Stacy	101 NW "A" Street, GP 97526		Tstacy@grantspassoregon.gov
Laura Roe	RWC	RWC	lroe@roguecc.edu
Mike McClure	RWC	on file	on file
Greg McKown	"	"	"
John Miles	RWC	541-415-6128	JMiles@RogueCC.EDU
Jeanne Lee	RWC	541-956-7333	jlee@roguecc.edu
Joshua Ogle	———	———	———

APPENDIX D: STATE OF OREGON ESTABLISHED ELIGIBILITY CRITERIA AND RANKING SYSTEM FOR MULTI-HAZARD MITIGATION MEASURES

U.S. Department of Homeland Security
FEMA Region 10
130 228th Street, SW
Bothell, WA 98021-8627

FEMA

June 14, 2021

The Honorable Shawn Hogan
Board Chair, Rogue Community College Board of Education
Rogue Community College - Redwood Campus
3345 Redwood Highway,
Grants Pass, OR 97527

Dear Chair Hogan:

On June 14, 2021, the United States Department of Homeland Security's Federal Emergency Management Agency (FEMA) Region 10, approved the Rogue Community College Hazards Mitigation Plan as a local plan as outlined in Code of Federal Regulations Title 44 Part 201. This approval provides the jurisdiction eligibility to apply for the Robert T. Stafford Disaster Relief and Emergency Assistance Act's, Hazard Mitigation Assistance grants projects through June 13, 2026, through your state.

FEMA individually evaluates all application requests for funding according to the specific eligibility requirements of the applicable program. Though a specific mitigation activity or project identified in the plan may meet the eligibility requirements, it may not automatically receive approval for FEMA funding under any of the aforementioned programs.

Over the next five years, we encourage your communities to follow the plan's schedule for monitoring and updating, and to develop further mitigation actions. To continue eligibility, jurisdictions must review, revise as appropriate, and resubmit the plan within five years of the original approval date.

If you have questions regarding your plan's approval or FEMA's mitigation grant programs, please contact Joseph Murray, Planner with Oregon Office of Emergency Management, at 503-378-2911, who locally coordinates and administers these efforts.

Sincerely,

KRISTEN C MEYERS

Digitally signed by KRISTEN C MEYERS
Date: 2021.06.15 07:04:53 -07'00'

Kristen Meyers, Director
Mitigation Division

cc: Amie Bashant, Oregon Office of Emergency Management

Enclosure

EG:vl