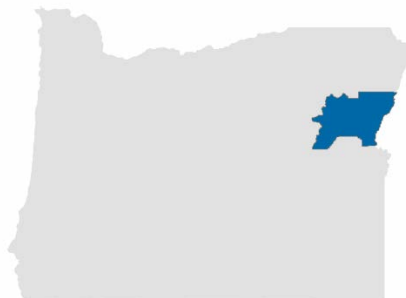


Baker County, Oregon

MULTI-JURISDICTIONAL NATURAL HAZARDS MITIGATION PLAN

■ Baker County



■ City of Baker City
■ City of Halfway



Effective February 9, 2021 through February 8, 2026

The 2020 Baker County Multi-Jurisdictional Natural Hazards Mitigation Plan is a living document that will be reviewed and updated periodically. It will be integrated with existing plans, policies, and programs. The Disaster Mitigation Act of 2000 (DMA2K) and the regulations contained in 44 CFR 201 require that jurisdictions maintain an approved NHMP to receive federal funds for pre- and post- disaster mitigation grants.

Comments, suggestions, corrections, and additions are encouraged to be submitted from all interested parties.

For further information and to provide comments, contact:

Jason Yencopal, Emergency Manager
Baker County Emergency Management
1995 Third Street
Baker City, OR 97814
Phone: (541) 523-8200



Baker County developed this Multi-Jurisdictional Natural Hazards Mitigation Plan through a partnership funded by the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation Grant Program. In 2017, the Department of Land Conservation and Development (DLCD) received a Pre-Disaster Mitigation Grant (PDMC-PL-10-OR-2017-002) from FEMA through the Oregon Office of Emergency Management (OEM) to assist Baker County with the NHMP.

Acknowledgments

Baker County Multi-Jurisdictional Natural Hazards Mitigation Plan Update Steering Committee

Baker County

*Jason Yencopal, Convener, Emergency Manager
Holly Kerns, Planning Director
Nolan Perkins, Baker County Road Department*

Baker County Library District

Ed Adamson, Facilities Manager

Baker County Soil and Water Conservation District

Whitney Collins

City of Baker City

Michelle Owen, Public Works Director

Baker City Fire Department

John Clark, former Fire Chief

Baker Rural Fire Protection District

Sean Lee, Fire Chief

North Powder Fire Department

Colby Thompson, Fire Chief

City of Halfway

Salli Hysell, City Recorder

Baker School District

*Lance Woodward, Superintendent
Christy Settles, Maintenance staff*

Pine Eagle School District

Cammie DeCastro, Superintendent

Greater Bowen Valley Rural Fire Protection District

Chris Galiszewski, Fire Chief

Blue Mountain Translator District

Alex McHaddad, Director

State and Federal Agencies

Oregon Department of Land Conservation and Development

Tamra Mabbott and Marian Lahav

Oregon Department of Geology and Mineral Industries

Matt Williams, Christina Appleby, Jason McClaghry

Oregon Military Department, Office of Emergency Management

Joseph Murray, Christine O'Day, Nicole Hanson

Oregon Department of Forestry

Steve Meyer, Protection Supervisor

Natural Resource Conservation Service

Misty Beals, District Conservationist

Bureau of Land Management

Lori Wood

United States Forest Service

*Steve Hawkins, Deputy Fire Staff
Joel McCraw, Assistant Fire Management Officer*

Project Managers

Oregon Department of Land Conservation and Development

Katherine Daniel and Jason Gately

Baker County

Jason Yencopal

Federal Guidance and Review Team

Federal Emergency Management Agency Region X, Mitigation Division

John Schelling

Desktop Publisher

Oregon Department of Geology and Mineral Industries

Deb Schueller

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FEMA

February 10, 2021

Mr. Bill Harvey
Chair, Baker County Commissioners
1995 3rd Street
Baker City, OR 97814

Dear Mr. Harvey:

On February 9, 2021, the United States Department of Homeland Security's Federal Emergency Management Agency (FEMA) Region 10, approved the Baker County Hazard Mitigation Plan as a multi-jurisdictional local plan as outlined in Code of Federal Regulations Title 44 Part 201. This approval provides the below jurisdictions eligibility to apply for the Robert T. Stafford Disaster Relief and Emergency Assistance Act's, Hazard Mitigation Assistance (HMA) grants projects through February 8, 2026, through your state:

Baker County | City of Halfway

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.

Approved mitigation plans may be eligible for points under the National Flood Insurance Program's Community Rating System (CRS). For additional information regarding the CRS, please visit: www.fema.gov/national-flood-insurance-program-community-rating-system or contact your local floodplain manager.

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 Meyers, Director
Mitigation Division

cc: Amie Bashant, Oregon Office of Emergency Management

Enclosure

EG:vl



FEMA

March 5, 2021

The Honorable Bill Harvey
Chair, Baker County Commissioners
1995 3rd St
Baker City, OR 97814

Dear Commissioner Harvey:

On February 9, 2021, the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) Region 10, approved the Baker County Natural Hazards Mitigation Plan as a multi-jurisdictional local plan as outlined in Code of Federal Regulations Title 44 Part 201. This approval provides the below jurisdictions eligibility to apply for the Robert T. Stafford Disaster Relief and Emergency Assistance Act's, Hazard Mitigation Assistance grants through February 8, 2026, through your state.

Baker City

The updated list of approved jurisdictions includes the City of Baker that recently adopted the Addendum to the Baker County Multi-Jurisdictional Natural Hazards Mitigation Plan. 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- 378-291, who coordinates and administers these efforts for local entities.

Sincerely,

for

Kristen Meyers, Director
Mitigation Division

cc: Amie Bashant, Oregon Office of Emergency Management

Enclosure

EG:vl

BAKER COUNTY MULTI-JURISDICTIONAL NATURAL HAZARDS MITIGATION PLAN

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SECTION 1: INTRODUCTION

This section provides a general introduction to natural hazard mitigation planning in Baker County. This section contains a general discussion about what natural hazard planning is, including a discussion of how the plan addresses the federal requirements contained in 44 Code of Federal Regulations (CFR) 201.6(b) and how the plan fits within the Oregon planning policy framework. There is a description of the process for updating the natural hazard mitigation plan and a brief summary of the physical, economic and social features of Baker County that relate to hazard mitigation planning. The section concludes with a general description of how the plan is organized.

Natural Hazard Mitigation Planning

What is Natural Hazard Mitigation?

The Federal Emergency Management Agency (FEMA) defines mitigation as “. . . the effort to reduce loss of life and property by lessening the impact of disasters . . . through risk analysis, which results in information that provides a foundation for mitigation activities that reduce risk.”¹ Said another way, natural hazard mitigation is a method of permanently reducing or alleviating the losses of life, property, and injuries resulting from natural hazards through long and short-term strategies. Example strategies include projects, such as seismic retrofits to critical facilities and flood mitigation projects; and education and outreach to targeted audiences, such as the elderly. Natural hazard mitigation is the responsibility of the “Whole Community” – individuals and families; private businesses and industries; non-profit groups; schools and academia; media outlets; faith based and community organizations; and federal, state, and local governments.²

Completing mitigation actions detailed in this plan will benefit Baker County in a number of ways including reduced loss of life, property, essential services, critical facilities and economic hardship when natural hazards occur; reduced short-term and long-term recovery and reconstruction costs following natural hazard events; increased cooperation and communication within the community through the planning process; and increased potential for state and federal funding for recovery and reconstruction projects.

Why Develop an NHMP?

It is impossible to predict exactly when natural hazard events will occur, or the extent to which they will affect community assets. However, with careful planning and collaboration among public agencies, private sector organizations, and citizens within the community, it is possible to minimize the losses that can result from natural hazards.

The dramatic increase in the costs associated with natural disasters over the past decades fostered interest in identifying and implementing effective means of reducing vulnerability. Baker County was one of the four counties the *2014 Northeast Oregon Multi-jurisdictional Natural Hazard Mitigation Plan*

¹ FEMA, What is Mitigation? <http://www.fema.gov/what-mitigation>, accessed January 17, 2020,

² FEMA, *Whole Community*, <https://www.fema.gov/whole-community>, accessed January 17, 2020.

(2014 NHMP) included. The Baker County elected officials, citizens and other stakeholders, along with the City of Baker City, and the City of Halfway worked together to update that plan. This 2020 Baker County Natural Hazards Mitigation Plan (2020 NHMP) aims to continue the purpose of that plan, that is to reduce future loss of life and damage to property resulting from natural hazards.

In addition to Baker County’s interest in establishing a comprehensive community-level natural hazard mitigation strategy, the Disaster Mitigation Act of 2000 (DMA2K) and the regulations contained in 44 CFR 201 require that jurisdictions maintain an approved NHMP in order to receive federal funds for mitigation projects.

Local and federal approval of this plan ensures that the county and listed cities will remain eligible for pre- and post-disaster mitigation project grants.

What Federal Requirements Does This Plan Address?

The Disaster Mitigation Act of 2000 (DMA2K) a key piece of federal legislation addressing mitigation planning. It reinforces the importance of mitigation planning and emphasizes planning for natural hazards before they occur. As such, this Act established the Pre-Disaster Mitigation (PDM) grant program and requirements for the national post-disaster Hazard Mitigation Grant Program (HMGP).

Section 322 of the Act specifically addresses mitigation planning at the state and local levels. State and local jurisdictions must have approved mitigation plans in place in order to qualify to receive post-disaster HMGP funds. Mitigation plans must demonstrate that proposed mitigation measures are based on a sound planning process that accounts for the risk to the individual and their capabilities. Chapter 44 Code of Federal Regulations (CFR), section 201.6, also requires a local government to have an approved mitigation plan in order to receive HMGP project grants.³

Development of the 2014 NHMP update was pursued in compliance with subsections from 44 CFR 201.6 guidelines. These four subsections address plan requirements, the planning process, plan content, and plan review.

Subsection (a) provides an outline of the overall plan requirements, including an overview of general plan components, exceptions to requirements, and multi-jurisdictional participation.

Subsection (b) outlines the requirements of the planning process, with particular focus on public involvement in the update process, as well as the role of local agencies, organizations and other relevant entities in the development process, as well as standards for adequate levels of review and incorporation of existing plans and policies.

Subsection (c) outlines requirements concerning the plan update’s content, including an overview of necessary components for the update’s planning process, risk assessment, mitigation strategy, plan maintenance, and overall process documentation.

³Code of Federal Regulations. Chapter 44. Section 201.6, subsection (a). 2010

Subsection (d) outlines the steps and agencies required for proper review of the plan before finished plans are adopted by their respective communities.⁴

The resulting *2020 NHMP* must be submitted to Oregon’s Office of Emergency Management (OEM) for initial plan review, and then it is submitted to FEMA for review and federal approval. Once FEMA provides the Approval Pending Adoption letter, Baker County and each of the jurisdictions and special districts must formally adopt the *2020 NHMP*. Once the local jurisdictions and special districts have provided resolutions showing the adoption of the *2020 NHMP*, FEMA will send an approval letter with the dates of the *2020 NHMP* approval. The approval period is for five years.

Additionally, the Emergency Management Performance Grant (EMPG), which helps fund local emergency management programs, also requires a FEMA-approved NHMP.

What is the Policy Framework for Natural Hazards Planning in Oregon?

Planning for natural hazards is an integral element of Oregon’s statewide land use planning program, which began in 1973. All Oregon cities and counties have comprehensive plans and implementing ordinances that are required to comply with the statewide planning goals. The challenge faced by state and local governments is to keep this network of local plans coordinated in response to the changing conditions and needs of Oregon communities.

Statewide land use planning Goal 7: Areas Subject to Natural Hazards calls for local plans to include inventories, policies and ordinances to guide development in or away from hazard areas. Goal 7, along with other land use planning goals, has helped to reduce losses from natural hazards. Through risk identification and the recommendation of risk-reduction actions, this plan aligns with the goals of the jurisdiction’s Comprehensive Plan, and helps each jurisdiction meet the requirements of statewide land use planning Goal 7.

The primary responsibility for the development and implementation of risk reduction strategies and policies lies with local jurisdictions. However, resources exist at the state and federal levels. Some of the key agencies in this area include Oregon Military Department – Office of Emergency Management (OEM), Oregon Building Codes Division (BCD), Oregon Department of Forestry (ODF), Oregon Department of Geology and Mineral Industries (DOGAMI), and the Department of Land Conservation and Development (DLCD).

How was the Update to the NHMP Developed?

The 2020 Baker County Natural Hazard Mitigation Plan Steering Committees with the collaboration of DLCD staff updated the *Northeast Oregon Multi-Jurisdictional Natural Hazards Mitigation Plan* dated February 2014 (*2014 NHMP*) that was approved by FEMA on June 5, 2014 and was valid through June 4, 2019. Both the City of Baker City and the City of Halfway are the subjects of Addenda to the 2014 NHMP. The City of Baker City adopted their addendum to the plan on May 13, 2014. The City of Halfway adopted their addendum to the plan on May 8, 2014. The now expired *2014 NHMP* covered four counties (Baker, Grant, Union and Wallowa Counties), whereas the current plan focuses exclusively

⁴ *ibid*, subsection (c). 2010

on Baker County. Plan holders for this update include Baker County, the City of Baker City, and the City of Halfway.

A steering committee representative of the whole community was formed by the project managers. The 2020 Baker County NHMP Steering Committee included Baker County officials and officials from the City of Baker City and the City of Halfway, the Baker County Library District and the Blue Mountain Translator District. Other stakeholders who participated included representatives of the Baker School District, the Pine Eagle School District, the Baker Soil and Water Conservation District, Power Valley Water Control District, Powder Basin Watershed Council, Baker Rural Fire Protection District, North Powder Fire, the Greater Bowen Valley Rural Fire Protection District. Representatives from the Oregon Department of Transportation, Oregon Forestry Department, the US Forest Service and the Natural Resource Conservation Service also participated during Steering Committee meetings. Invitations to attend and updates on progress were sent to representatives of all the cities in Baker County, all the Fire Districts. Representatives from all cities within the county and non for profit organizations were invited to attend. Sign in sheets for meetings and meeting agendas are included in Appendix B.

The 2020 Baker County NHMP Steering Committee formally convened on four occasions (May 21, 2019; July 16, 2019; September 10, 2019, and May 19, 2020) with the project manager, a DLCDC Natural Hazard Planner, in person and via conference call to discuss and revise the plan. Two additional opportunities for participation in the process were provided by FEMA during the Risk MAP process (webinars July 31-August 22, 2019 and the Discovery meeting on September 12, 2019) for a total of six public meetings. In addition, the DLCDC Natural Hazard Planner spoke on the phone and emailed the Emergency Manager and convener of the Steering Committee regularly throughout the process. During the development of the plan, the individual filling the role of project manager for DLCDC changed, but the project management functions of administration, plan drafting and organization continued to be fulfilled. Steering committee members contributed data, maps and time doing outreach and advocacy for the plan and in collaboration with the DLCDC planner they reviewed and updated the community profile, risk assessment, action items and implementation plan.

An open public involvement process is essential to the development of an effective plan. The planning process included opportunities for the public, neighboring communities, local and regional agencies, as well as, private and non-profit entities to comment on the plan during development demonstrating the use of a comprehensive approach to reducing the effects of natural disasters.

The Emergency Manager encouraged participation in the update process by making direct contact with constituents and city staff during the course of his work throughout the county. This early direct contact was followed up by posting flyers, updates and meeting dates on the county's Emergency Management webpage. Word of mouth is a prevalent method of "getting the word out" in Baker County. The daily work of the Emergency Manager to engage with the communities of Baker County and to promote the process of public engagement to update the plan were invaluable, if less easily documented. Further details of the public engagement process are available in Volume III, Appendix B: Planning Process.

The following plans were consulted during the preparation of the *2020 NHMP*, are referenced throughout the plan and are also integrated into the mitigation actions contained in Volume I: Basic Plan, Section 3 and referenced in Volume III: Appendix C: Mitigation Action Worksheets.

Baker County Comprehensive Land Use Plan, 1978

Baker County Land Use Ordinance, 1983 as revised, including Flood Plain Overlay

Baker County Community Wildfire Protection Plan, revised 2015. This plan is currently being updated.

Baker County Emergency Operations Plan, 2015

Baker County Transportation System Plan, 1999

Baker City Comprehensive Plan, amended 2016

City of Baker City Water System Master Plan

City of Baker City Code Chapter 151, Floodplain development code

City of Halfway Comprehensive Plan, 1979

City of Halfway Zoning Ordinance, 1992 as amended

City of Halfway Water System Master Plan, 2007

City of Halfway Waste Water System Facility Plan, 2013

The *2020 NHMP* will be maintained and implemented by an Implementation Committee to be comprised of representatives of each of the plan holding jurisdictions (Baker County, City of Baker City and the City of Halfway) along with representatives of the public and other stakeholders. This committee will be convened by the Emergency Manager and will meet at least twice annually to review progress on the mitigation action items. The entire plan will be updated prior to its expiration in five years from the effective date. Details of the plan implementation strategy are the subject of Section 4 of this document.

Profile of Baker County

A brief profile of Baker County physical geography, population demographics, economic environment and infrastructure facilities are provided here as an introduction. Greater detail on these topics can be found in Appendix A: Community Profile of this plan and other plans referenced herein.

Baker County is steeped in the traditions of the Oregon Trail and the settlement of the western United States. By 1811, explorers, trappers and hardy mountain men explored the mountains, hills and valleys looking for furs, game and gold. The first wagon trains along the Oregon Trail started in 1843 and passed through the area that would become Baker County on their long trek to the Willamette Valley.

Baker County is located in the northeastern portion of the state and is bordered by Wallowa, Union Counties to the north, Grant County to the west, Malheur County to the south and the State of Idaho to the east. Baker County spans 3,089 square miles (1,976,960 acres), making Baker County larger than Rhode Island or Delaware. Federal agencies manage approximately 51.5% of the land in Baker County, comprising a total of 1,016,511 acres. Approximately 33% of the County is managed by the US Forest Service (USFS), 18.5% is managed by the Bureau of Land Management (BLM), and an additional 10,067

acres or 0.5% of Baker County, is managed by the State of Oregon. The remaining 48% of the land in the county, approximately 950,382 acres, is privately owned.⁵

The geography of Baker County consists of a portion of Blue Mountain range and the southern portion of the Wallowa Mountains with the Powder River valley in the middle. Baker County lies primarily within the Snake River basin. The County is contained primarily within the Brownlee Reservoir, Burnt River, and Powder River HUC 412 watersheds with portions within the Imnaha River, Upper Grande Ronde River, Upper Malheur River, and Willow Creek H UC 4 watersheds.⁶

The Powder River is a tributary of the Snake River and is more than 150 miles in length. It lies almost entirely in Baker County but also extends to a portion of Union County. The watershed drains 1,750 square miles of northeastern Oregon.

Baker County lies within Oregon Climate Services designated Climate Division 8 – Northeast Oregon. This Division is characterized by a semi-arid, low precipitation climate with warm summers and cool winters. Temperatures can reach as low as -39° F and as high 104° F. There is over a 40 degree temperature swing between the mean temperature in January (25.7) and July (66.5). Further details on thirty year average monthly temperatures throughout the year are available in Volume III: Baker City Addendum in the *2014 NHMP*, so they will not be repeated here.

Precipitation varies by elevation in Baker County. The locations on the valley floor receive less than 20 inches of precipitation per year, particularly those surrounded by high mountains which may receive less than 10 inches. The higher elevation locations receive higher annual precipitation totals, generally in the form of snowfall. The precipitation for the region is evenly distributed throughout the seasons. Further details on annual precipitation in Baker County can be found in Volume III: Baker City Addendum in the *2014 NHMP*, so they will not be repeated here.

Agriculture and forest production are the predominant land uses in Baker County. According to Baker County Assessor's records, there are approximately 146,386 irrigated acres and 1,129,662 non-irrigated acres that are, or could be, used for agricultural production. Of those acres, 377 irrigated acres and 399,097 non-irrigated acres are publicly owned. There are an additional 673,681 acres of timber, 628,681 acres of which are publicly managed.⁷

By the early 1860's, mining was a familiar activity in the Blue Mountains of Eastern Oregon. Gold discoveries in areas such as Griffin Gulch and Blue Canyon prompted an influx of eager miners and shop keepers to this area. While gold was a lucrative commodity, many mines such as the Iron Dyke mine near Homestead and the Mother Lode mine near Keating, produced significant amounts of copper, gold and silver as well as lead and zinc as minor by-products of the industry.⁸

Mining continues to be an important resource in Baker County. According to the Northwest Mining Association, the State of Oregon is home to over 300 medium to large-scale mining operations. Approximately 20 operations in Baker County are large enough that they are administered by the Oregon Department of Geology and Mineral Industries (DOGAMI). Currently, there are over 1,200

⁵ Baker County, Oregon Natural Resources Plan

⁶ Baker County, Oregon Natural Resources Plan

⁷ Ibid

⁸ Ibid

mining claims filed in Baker County on U.S. Forest Service (USFS) and Bureau of Land Management (BLM) managed lands, and these claims are owned by both local and out of area miners. In addition, there are many patented mining properties and other lands that are mineral in character where small-scale mining takes place.⁹

After the end of World War II, mining labor and material costs increased, few mines were reactivated and the price of gold remained fixed for more than 40 years. The result was a rapid decrease in the mining industry. As the large mining operations began to close, logging and agriculture continued to thrive in the County. Baker Livestock Auction brought people from all over Eastern Oregon to market their livestock and the retail businesses were strong and vital.¹⁰

Forest policy changed in the 1980's and 90's and the forest product industries began to disappear. The loss of the forest products industry and the jobs in the woods were devastating to the local economy. In addition, the livestock auction closed in 1985, which dealt another blow to the County. Though the natural resource industries had been dealt a tremendous blow, the County moved forward. Agriculture remained the mainstay of the economy, but a focus on tourism helped to stabilize the impact of the loss of mining and lumber.¹¹

Wilderness and Areas of Critical Environmental Concern: A total of 76,310 federally managed acres in the County are restricted under these special programs, totaling approximately 8% of the public land and approximately 3.8% of the total land in Baker County. Specifically, the U.S. Forest Service administers two Wilderness Areas totaling over 37,650 acres in Baker County. The Monument Rock Wilderness Area covers approximately 18,650 acres, while the Eagle Cap Wilderness Area covers approximately 19,000 acres.¹²

The Bureau of Land Management does not currently manage any Wilderness Areas in Baker County, but does manage 14,846 acres designated as a Wilderness Study Area. The Bureau of Land Management is also responsible for managing 23,817 acres of Areas of Critical Environmental Concern (ACEC) in Baker County.¹³

The population of Baker County is 15,984 according to the U.S. Census 2018 American Community Survey, this represents a decrease from 2010 when the population of Baker County was 16,150 people. The county's largest city and the county seat is the City of Baker City with just under 10,000 residents followed by the cities of Huntington and Haines with just over 400 residents each. Many of the residents in the county reside north of Baker City in the farmland along the Powder River, outside of Richland, also along the Powder River near the confluence with the Snake River and outside of Halfway along Pine Creek. (Figure 1)

The demographic composition and economic environment of Baker County has been well covered in the *2014 NHMP*, so this plan refers you to the detailed demographic data in that plan¹⁴. This report will

⁹ Ibid

¹⁰ Ibid

¹¹ Ibid

¹² Ibid

¹³ Ibid

¹⁴ *2014 Northeast Oregon Multi-Jurisdictional Natural Hazard Mitigation Plan*, OPDR.

highlight aspects of the profile of Baker County residents that pertain to the mitigation of natural hazards here and provide a bit more depth in Appendix A – Community Profile.

The demographic composition of the county remains largely unchanged. The population is aging and the vulnerabilities that accompany aging remain notable in this plan. Similarly in some cities in Baker County the proportion of the population living below the poverty line continues to be greater than the average for the State of Oregon, so the needs of this group of residents should continue to be a demographic group that this plan addresses.

The principal routes through the county are Interstate 84, US Highways 26 and 30, and State Highways 7 and 86. 1-84 runs northwest to southeast, bisecting the county. Haines and Huntington access Baker City via US 30 and 1-84. Halfway and Richland access Baker City by the east-west running State Highway 86. Sumpter accesses Baker City by east-west running State Highway 7. Unity lies along the east-west running US Highway 26. Baker County Road Department maintains over 950 miles of road of which about 192 miles are paved, 512 are gravel, and 250 are dirt/unimproved. Baker County Road Department also maintains 88 bridges of various sizes.

Baker County is served by a general aviation airport run by the City of Baker City located approximately 3 miles north of Baker City. It has three asphalt runways that handled 16,200 aircraft operations in the 12 months ending 9/15/2019. Thirty-eight aircraft were based at the airport of which 32 were single-engine aircraft, 3 were multi-engine aircraft, and 3 were helicopters.¹⁵

¹⁵ FAA Data and Statistics; <https://adip.faa.gov/agis/public/#/airportData/BKE>, consulted September 2020

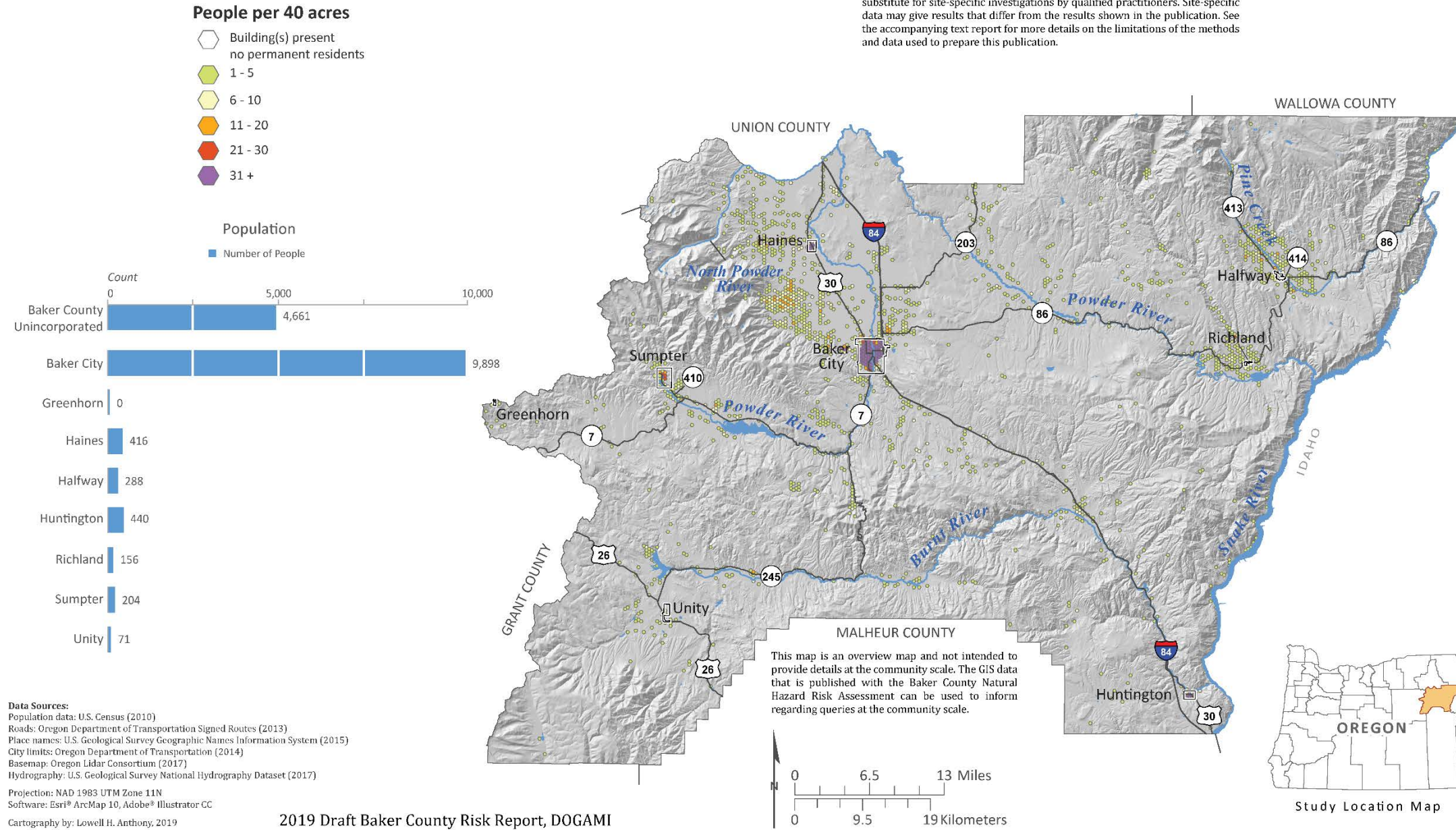
Figure 1. Population Density of Baker County



Population Density Map of Baker County, Oregon

PLATE 2

Disclaimer: This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information. This publication cannot substitute for site-specific investigations by qualified practitioners. Site-specific data may give results that differ from the results shown in the publication. See the accompanying text report for more details on the limitations of the methods and data used to prepare this publication.



Source: Natural Hazard Risk Report for Baker County, Oregon (2019)

How is the Plan Organized?

Each volume of the mitigation plan provides specific information and resources to assist readers in understanding the hazard-specific issues facing county and city residents, businesses, and the environment. Combined, the sections work in synergy to create a mitigation plan that furthers the community's mission to reduce or eliminate long-term risk to people and their property from hazards and their effects. This plan structure enables stakeholders to use the section(s) of interest to them.

Volume I: Basic Plan

Section 1: Introduction

The Introduction briefly describes the reasons for updating the *2014 NHMP*, the methodology used to update that plan, a brief introduction to the features of the community that impact hazard risk assessment and mitigation actions, and a description of how the plan is organized.

Section 2: Risk Assessment

Section 2 provides the factual basis for the mitigation strategies contained in Section 3. This section includes a brief description of community sensitivities and vulnerabilities and an overview of the hazards addressed in this plan. The Risk Assessment allows readers to gain an understanding of the nature and extent of each of the natural hazards Baker County is subject to. The vulnerability of each of the jurisdictions within Baker County is assessed using the FEMA approved Oregon Emergency Management Methodology. This methodology assesses risk and vulnerability while catalyzing awareness and discussion about the county's history of natural hazard events.

Section 3: Mitigation Strategy

This section documents the plan vision, mission, goals, and actions and also describes the components that guide implementation of the identified mitigation strategies. Actions are based on community vulnerability and resilience factors and the hazard assessments in Section 2 and the Hazard Annexes (Volume II).

Section 4: Plan Implementation and Maintenance

This section provides information on the implementation and maintenance of the plan. It describes the process for prioritizing projects, and includes a suggested list of tasks for updating the plan to be completed at the semi-annual and five-year review meetings.

Volume II: Hazard Annexes

The Risk Assessment chapter provides substantial detail on the features of the natural hazards addressed in this plan. These annexes are meant to supplement that information. In particular the Landslide Annex draws from the recent Landslide Guide produced by DLCD and DOGAMI to provide a better understanding of the potential for this hazard to result in damage to people or property in Baker County. There is a focus on information that was not available in the *2014 NHMP*.

The hazard specific annexes included with this plan are the following:

Drought,	Severe Weather (Winter Storms
Wildfire,	and Windstorms),
Flood,	Earthquake, and
Landslide,	Volcanic Events

Volume III: Mitigation Resources

The resource appendices are designed to provide the users of the 2020 NHMP with additional information to assist them in understanding the contents of the mitigation plan, and provide them with resources to assist with plan implementation.

Appendix A: Community Profile

The community profile describes the participating counties and cities from a number of perspectives in order to help define and understand the vulnerabilities of Baker County residents as well as the community's resilience to natural hazard events. The information in this section represents a snapshot in time of the current vulnerability and resilience factors in the county when the plan was updated. Vulnerability factors can be defined as those community assets and characteristics that may be impacted by natural hazards, (e.g., special populations, economic factors, and historic and cultural resources). Community resilience factors can be defined as the community's ability to manage risk and adapt to hazard event impacts (e.g., governmental structure, agency missions and directives, and plans, policies, and programs). This section also provides information on the jurisdictions' participation in the National Flood Insurance Program (NFIP).

Appendix B: Planning and Public Process

This appendix includes documentation of all the countywide public processes utilized to develop the plan. It includes invitation lists, agendas, sign-in sheets, and summaries of Steering Committee meetings as well as any other public involvement methods.

Appendix C: Action Item Forms

This appendix contains the detailed action item forms for each of the high priority short term mitigation strategies identified in this plan. These forms are intended to serve as project briefs that can be expanded into grant applications.

Appendix D: Future Climate Projection Report – Oregon Climate Change Research Institute

This appendix contains the report prepared by the Oregon Climate Change Research Institute that evaluates the likely changes to climate in Baker County in the coming decades.

Appendix E: Economic Analysis of Natural Hazard Mitigation Projects

This appendix describes a method of prioritizing natural hazard mitigation projects and benefit/cost analysis in natural hazards mitigation. The Oregon Partnership for Disaster Resilience developed this appendix. It has been reviewed and accepted by the Federal Emergency Management Agency (FEMA) as a means of documenting how the prioritization of actions shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

Appendix F: Grant Programs and Resources

This appendix lists state and federal resources and programs by hazard.

Appendix G: Natural Hazard Risk Report for Baker County, Oregon

This appendix contains the 2019 report prepared by the Department of Geology and Mineral Industries (DOGAMI) analyzing risk of geologic hazards, flooding and wildfire for Baker County.