

December 2026
Kittitas County, Washington, Washington

Community Wildfire Protection Plan

Prepared for the Kittitas Fire Adapted Communities Coalition
and Kittitas County Conservation District

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Community Wildfire Protection Plan

Prepared for
The Kittitas Fire Adapted Communities Coalition, US Forest Service, Washington State Department of Natural Resources, and the community of Kittitas County.



Prepared by
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In Memory

This plan is respectfully dedicated to the memory of Kittitas County firefighters and the work they have done to help protect the community.

Their unwavering service, leadership, and commitment to the citizens of Kittitas County leave a legacy that will not be forgotten.

Adoption of The Kittitas County Community Wildfire Protection Plan

Under the Healthy Forests Restoration Act, the applicable local government, the local fire department(s), and the state entity responsible for forest management approve the Kittitas County Community Wildfire Protection Plan (CWPP) update. The Kittitas County CWPP was originally completed and signed in December 2006, and two revisions that were completed in April 2009 and September of 2018. As directed by this CWPP, extensive fuels reduction and fire prevention activities have been completed on public and private lands. Recent wildland fires have also impacted the landscape and neighborhoods. Combined, these events have changed the priorities outlined in the previous documents.

This plan is not legally binding, as it does not create or place mandates or requirements on individual jurisdictions. It is intended to serve as a planning tool for fire and land managers and residents to assess risks associated with wildland fire and identify strategies and make recommendations for reducing those risks.

2026 Signatures

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George Geissler, Washington State Forester Washington State Department of Natural Resources	Date
Laura Osiadacz, Chair Kittitas County Board of Commissioners	Date
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ABBREVIATIONS

BLM	U.S. Bureau of Land Management
CEMP	Comprehensive Emergency Management Plan
Cohesive Strategy	National Cohesive Wildland Fire Management Strategy
CWPP	Community Wildfire Protection Plan
DNR	Washington State Department of Natural Resources
DNR LOA	DNR Landowner Assistance Program
FEMA	Federal Emergency Management Agency
FLAME	Federal Land Assistance, Management, and Enhancement
HFI	Healthy Forests Initiative
HFRA	Healthy Forests Restoration Act
HIZ	Home Ignition Zone
HOA	Homeowner association
HUC	Hydrologic Unit Code
IBHS	Insurance Institute for Business & Home Safety
IWUIC	International Wildland Urban Interface Code
KCCD	Kittitas County Conservation District
KCFCA	Kittitas County Fire Chiefs Association
KFACC	Kittitas Fire Adapted Communities Coalition
LE	Landscape Evaluations
MTRL-RP	Manastash Taneum Resilient Land – Restoration Project
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NRCS	Natural Resources Conservation Service
OIC	Office of the Insurance Commissioner
PCL	Potential Control Lines
PNRA	Pacific Northwest Region Wildfire Risk Assessment
PNRS	Pacific Northwest Research Station
POD	Potential Operational Delineations
RAWS	Remote Automated Weather Stations
TNC	The Nature Conservancy
USFS	U.S. Forest Service
WADNR	Wahington State Department of Natural Resources

WAFAC	Washington Fire Adapted Communities Learning Network
WDFW	Washington Department of Fish and Wildlife
WRCD	Washington Resource Conservation and Development Council
WRIA	Water Resource Inventory Area
WUI	Wildland Urban Interface

1 Purpose

Kittitas County, located in central Washington State along the eastern slopes of the Cascade Range, encompasses a diverse mix of forests, shrub-steppe, and grassland ecosystems that have long been shaped by wildfire. The county's communities have experienced the devastating consequences of wildfire firsthand. The 2017 Jolly Mountain Fire consumed more than 21,000 acres in the Teanaway watershed and triggered emergency declarations from both Kittitas County, the City of Roslyn, and Cle Elum, while the 2023 Roza Creek Fire burned nearly 500 acres along the Yakima River. Most recently, August 2024 brought a mulit-fire outbreak driven by dry lightning, and in August of 2025 the Sun Country Fire ignited near Cle Elum along the I-90 corridor, prompting evacuations and statewide firefighting. As development continues to expand into the wildland-urban interface (WUI), the potential for catastrophic loss of life, property, and natural resources demands a coordinated and proactive approach to wildfire risk reduction.

Informed by the hard lessons of past events, and the encouraging success stories, such as fire-hardened homes that survived recent fires after being rebuilt to WUI code following the 2012 Taylor Bridge Fire, this Community Wildfire Protection Plan (CWPP) is intended to help communities assess local hazards and identify strategic investments to strengthen communities, increase resilience of infrastructure and promote adaption to a changing climate and ecosystem services. Assessments and discussions during the planning process help strengthen relationships and build shared understanding among fire protection districts, local and state agencies, Tribes, and land managers. These relationships allow for better alignment and coordination to wildfires or other emergencies. This 2026 CWPP update can also help address funding gaps and needs for risk-mitigation projects in Kittitas County that may require an approved CWPP.



Teanaway River Fire, 2017; Kittitas County Conservation District

1.1 Mission

The overall ***mission*** of the Kittitas County Community Wildfire Protection Plan is ***to increase the community's ability to prepare, respond, and recover from wildland fire***. The CWPP has met its mission and continues to serve as the leading document providing direction and guidance to those seeking to protect the resources of Kittitas County.

Wildland fire is a natural and necessary component of forest ecosystems across the country. Central Washington is no exception. Historically, wildland fires have shaped the forests valued by residents and visitors. Forests and other wildlands in Kittitas County, however, are now significantly altered due to past forest management practices, fire prevention efforts, modern suppression activities, residential development, and a general lack of large-scale fires. These activities have resulted in overgrown forests, some with closed canopies and all with abundant ladder fuels that dramatically increase the chances of large wildland fires that burn intensely and cause catastrophic losses.

Kittitas County has experienced decades of population growth and home building, as can be seen in the demographics section 2.2, which has led to increased residential development into forests and into the WUI. This has in turn led to increased risk of life and property presenting a challenge for fire protection, fire prevention, and law enforcement agencies.

Although reducing the risk of high intensity wildfire is the primary motivation behind this plan, managing the forests and wildlands for hazardous fuels reduction and fire resilience is only a part of the larger picture. Residents and visitors desire healthy, fire-resilient forests and wildlands that provide habitat for wildlife, recreational opportunities, and scenic beauty. By establishing a more fire-adapted community through work on private property and a more fire-resilient landscape, the fire response will be better integrated and successful.

This update outlines the revised priorities, strategies, an evacuation assessment, and an action plan for fuels reduction treatments in the WUI and post fire recovery. This updated CWPP also addresses special areas of concern and makes recommendations for reducing structural vulnerability and creating defensible spaces in communities at risk. With this revision, the Kittitas County CWPP remains a living vehicle for fuels reduction, education, and other projects to decrease overall risks of loss from wildland fire.

1.2 Goals



Our combined focus on preparedness through education by engagement, training, planning, and implementation will provide for the protection of people, structures, infrastructure, livestock, fish and wildlife priority species and habitats, and unique ecosystems that contribute to our way of life and the growth and sustainability of the local and regional economy. It is critical that this process supports the continuation and development of strong partnerships; empowers each person to take responsibility for their role in their community to prepare before, during, and after wildfire; and encourages new approaches to living with fire that protect community values and reduce identified threats and costs.

The goals: to engage Kittitas County residents, communities, businesses, non-profits, and local, tribal, state, and federal governments to empower each other to prepare for wildfire through:

- Community engagement and development awareness of community roles in preparing for wildfire
- Effective administration of wildfire hazard mitigation grant programs that leverage additional resources for implementation
- Hazard risk assessments
- Strategic, efficient, and effective fuels treatments

In 2009, Congress passed the Federal Land Assistance, Management, and Enhancement (FLAME) Act and called for a National Cohesive Wildland Fire Management Strategy (Cohesive Strategy) to address wildland fire related issues across the nation in a collaborative, cohesive manner. This strategy was coordinated by the Wildland Fire Leadership Council (WFLC) which includes federal, state, tribal, and local partners (USFS, 2021) to represent the evolution of national fire policy.

The 2026 update of this CWPP focuses on the alignment with the Cohesive Strategy to support the above-mentioned goals. The Cohesive Strategy outlines 3 core national priorities as necessary to achieving the goals:

- *Resilient landscapes*: Landscapes across all jurisdictions are resilient to fire-related disturbances in accordance with management objectives.
- *Fire-adapted communities:* Human populations and infrastructure can withstand a wildfire without loss of life and property.
- *Wildfire response*: All jurisdictions participate in making and implementing safe, effective, efficient risk-based wildfire management decisions.

Elements of the Cohesive Strategy are already visible in Washington State and in Kittitas County. In May 2017, the Kittitas County Conservation District (KCCD) organized a local workshop to promote the Fire Adapted Communities framework, highlight the Cohesive Strategy, and spark collaboration amongst entities in diverse roles surrounding wildfire issues. The workshop motivated stakeholders to revise their CWPPs and implement fire adapted community actions. One regional strategy under the Fire Adapted Communities umbrella was to expand the Fire Adapted Community learning networks through funding of workshops and peer learning opportunities. The Chumstick Wildfire Stewardship Coalition is a pilot under this program in Leavenworth through the WAFAC. Hidden Valley-Swauk Fire Adapted Community and KCCD secured funding facilitated by WAFAC from federal funding sources like the Fire Learning Network and BLM to help promote Fire Adapted Communities in the Kittitas County area. Through the KFACC group, partners and members continue to meet regularly and move projects forward promoting fire adapted efforts locally including this 2026 CWPP update.

The Washington Fire Adapted Communities (WAFAC) framework (image on following page) outlines the core components required for a community to live more safely with wildfire. It breaks wildfire adaptation into practical, interconnected elements, such as resilient landscapes, prepared residents, effective response, and community planning. By mapping these components to real-world examples, the framework highlights specific programs, partnerships, and on-the-ground actions that Kittitas County could adopt or expand. These examples help the county strengthen its wildfire readiness while ensuring that its efforts remain aligned with the broader Cohesive Strategy principles of resilient landscapes, fire-adapted communities, and safe, effective wildfire response.

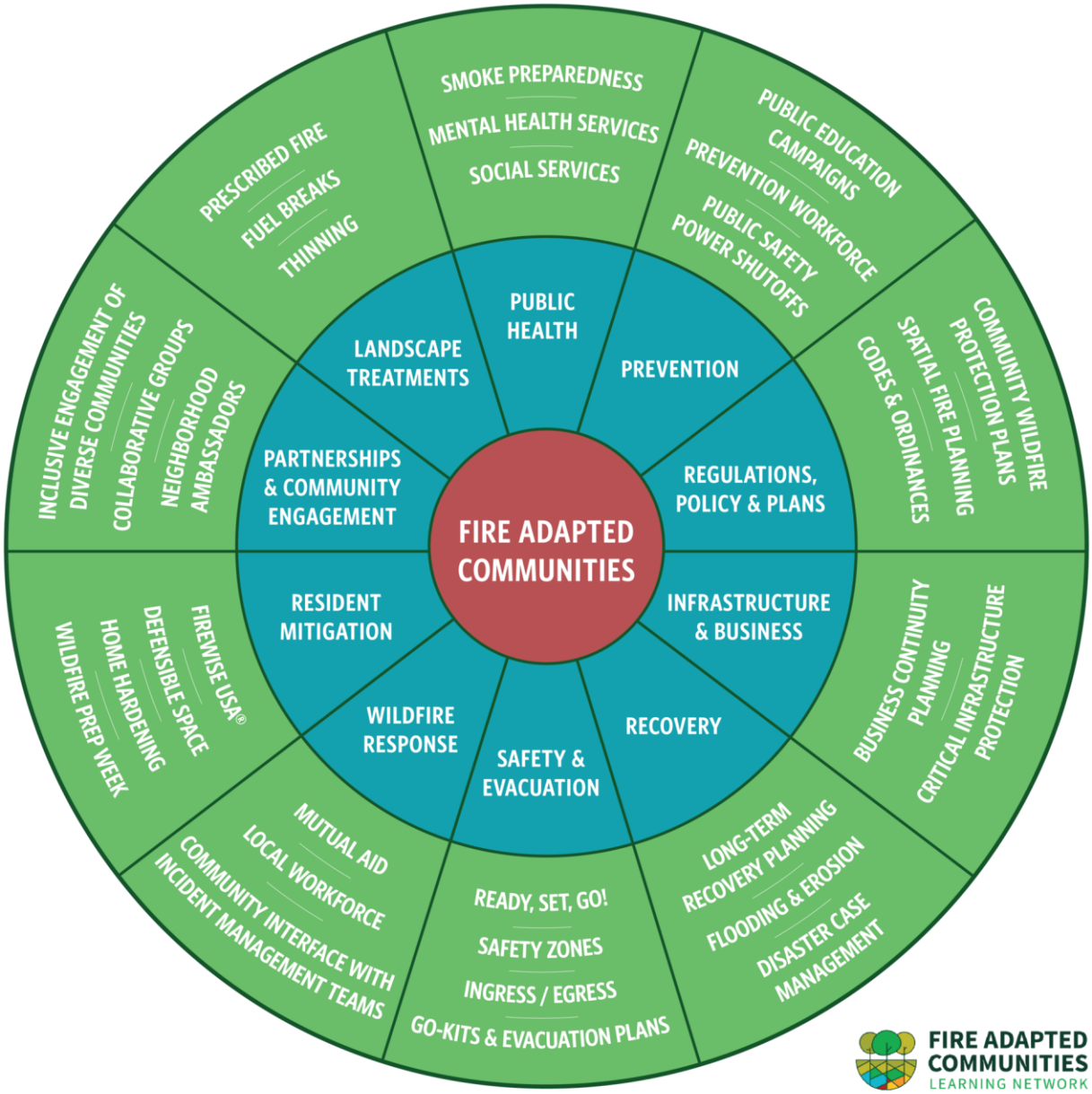


Figure 1: *The Fire Adapted Communities (FAC) framework outlines the core components that help make a community increase their resilience and be better adapted to live with wildfire.*

1.3 Why update the CWPP?

1.3.1 Federal Initiatives and Legislation

The Healthy Forests Initiative (HFI) was established by the federal government in 2002 to improve regulatory processes to ensure more timely decisions, greater efficiency, and better results in reducing the risk of high intensity wildfire. This initiative allowed forest management agencies, for the first time, to expedite the documentation process for reducing hazardous fuels on public lands.


Kittitas County Conservation District

In 2003, the U.S. Congress passed historical bi-partisan legislation, The Healthy Forests Restoration Act (HFRA). This legislation expands the initial effort under the HFI and directs federal agencies to collaborate with communities in developing a CWPP, which includes the identification and prioritization of areas needing hazardous fuels treatment.

The development and implementation of this CWPP gives the communities of Kittitas County the opportunity to participate in determining where federal agencies place their fuels reduction efforts. With a CWPP in place, Kittitas County, Kittitas County Conservation District (KCCD), community groups, and other stakeholder groups can apply for federal grants to treat hazardous fuels and address special concerns to reduce the risk of catastrophic loss due to wildland fire.

This CWPP includes compatibility with Federal Emergency Management Agency (FEMA) requirements for a Hazard Mitigation Plan, while also adhering to the guidelines proposed in the National Fire Plan, and HFRA. This CWPP has been prepared in compliance with:

- The National Fire Plan: A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment 10-Year Comprehensive Strategy Implementation Plan (USDA 2006)
- The Healthy Forests Restoration Act
- The FEMA's Region 10 guidelines for a Local Hazard Mitigation Plan as defined in 44 Code of Federal Regulations parts 201 and 206 and as related to a fire mitigation plan chapter of a Multi-Hazard Mitigation Plan
- National Association of State Foresters – guidance on identification and prioritizing of treatments between communities (2003). The objective of combining these complementary guidelines is to facilitate an integrated wildland fire risk assessment, identify pre-hazard mitigation activities, and prioritize activities and efforts to achieve the protection of people,

structures, the environment, and significant infrastructure in Kittitas County while facilitating new opportunities for pre-disaster mitigation funding and cooperation.

While meeting the needs of local citizens and recognizing the significance wildfire can have to the regional economy, the CWPP uses the best and most appropriate science from all partners as well as local and regional knowledge about wildfire risks and fire behavior. The goals of the planning process include integration with the National Fire Plan, HFRA, Disaster Mitigation Act, and Cohesive Strategy, all of which promote local collaborative processes. Goals for restoring resilient landscapes, improving wildland fire response, and creating fire adapted communities must work within the bounds of local budgets, personnel, and equipment. The efforts and success of the Kittitas County CWPP hinge on the funding and expertise of the local fire management districts and agencies as well as the cooperative efforts of landowners to empower local communities and citizens to pursue and implement projects that protect people, property, and infrastructure from wildland fire without diminishing the private property rights of land/asset owners within Kittitas County.



Kittitas County Conservation District

1.3.2 Kittitas Fire Adapted Communities Coalition

In May 2017, a group of stakeholders convened at the Swauk-Teanaway Grange Hall to discuss the formation of a group later called the Kittitas Fire Adapted Communities Coalition (KFACC). Members of multiple fire districts, Kittitas Valley Fire & Rescue, Washington State Department of Natural Resources (DNR) Southeast Region, USFS – Okanogan Wenatchee National Forest, The Nature Conservancy (TNC), Kittitas County, the Army National Guard, Hidden Valley-Swauk Fire Adapted Community, Kittitas Conservation Trust, Suncadia, Washington Farm Forestry Association (WFFA), Natural Resources Conservation Service (NRCS), KCCD, Kittitas Chapter of Washington Farm Forestry Association, Kittitas County Commissioners, local governments, Suncadia Resort, and private landowners.



Washington State Department of Natural Resources



Kittitas County Conservation District

KFACC has developed a charter, short-term and long-term goals for community wildfire resiliency, and meets monthly to share, learn, and coordinate efforts toward meeting established goals. Goals include updating this CWPP, mapping in GIS accomplishments and priority needs, modeling fire simulations for high-priority neighborhoods as part of CWPP and GIS project, and community outreach that results in greater engagement and participation in risk reduction.

KFACC is being used as a platform for coordination between agencies, stakeholders, and landowners to have a coordinated approach to education and outreach for spreading awareness of wildfires before, during, and after they occur.

1.3.3 The Formation of the Kittitas CWPP Subcommittee

The KFACC created the CWPP subcommittee to develop and complete this plan. The Kittitas County CWPP Subcommittee includes members of the public and representatives from local fire districts, DNR, Kittitas County, USFS, and KFACC. This CWPP was assembled in the true spirit of collaboration, and the following people are acknowledged for their participation and commitment which has resulted in this 2018 Kittitas County CWPP: The Nature Conservancy, Washington Farm Forestry Association, Suncadia, Kittitas County Board of County Commissioners, Kittitas County Public Works, Kittitas County

Community Development Services, Kittitas County Fire Districts #1, 6, 7, 51, City of Cle Elum and City of Roslyn Fire Departments, Kittitas Valley Fire & Rescue, United States Forest Service – Okanogan Wenatchee National Forest, Bureau of Land Management, Washington State Department of Natural Resources – SE Region, Washington Department of Fish and Wildlife, Tapash Sustainable Forest Collaborative, Yakima Training Center – Fire Department, Kittitas Conservation Trust, Kittitas County Conservation District, City of Cle Elum Council and Staff, US Army National Guard and several private landowners representing the areas of Lauderdale Junction, Liberty, Hidden Valley and Buffalo Springs.

Building a collaborative and cooperative environment with the fire department(s), community-based organizations, local government, and the public land management agencies has been the first step in reducing the risk of loss from wildland fire. The CWPP Subcommittee pledges to maintain this cooperation with the public over the long term with the commitment of all the participants involved. The importance of collaboration with neighboring CWPPs is recognized by the Subcommittee and is referenced throughout this CWPP as documentation of collaborative efforts to maximize hazardous fuels reduction efforts in the area. The Subcommittee agrees that the Kittitas County CWPP will be a living document, intended to promote fuels reduction, education, and other projects to decrease overall risks of loss from wildland fire; it is intended to be revisited at least annually to address its purpose.

1.3.4 CWPP Update Process - 2026

Before the 2026 update, the most recent revision of the Kittitas County CWPP was adopted in September 2018. Continued efforts have been made by local, state, and federal agencies to reduce the threat of high intensity wildland fires through landowner education as well as fuels reduction activities on both public and private lands. In addition, private landowners have responded enthusiastically to the defensible space and preparation guidelines and recommendations to reduce hazardous fuels on their own properties.

Although reducing the risk of high intensity wildland fire is the primary motivation behind this plan, managing the wildlands for hazardous fuels reduction and fire resilience is only one part of the larger picture. Residents and visitors desire healthy, fire-resilient wildlands that provide habitat for wildlife, recreational opportunities, economic stimulation, and scenic beauty.

In keeping with the strategy of the original Kittitas County CWPP, the Subcommittee revisited the planning outline in *Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities* (Communities Committee et al. 2004). That document provides an eight-step process for updating a CWPP. Below are eight steps and the achievements of the Subcommittee in taking each of the steps outlined.

- **Step one: Convene the decision makers.**
  The Kittitas County CWPP Subcommittee reconvened in November 2025 to review the work completed within and adjacent to the WUI boundary on public and private lands and to reevaluate the priorities for future fuels reduction treatments.

- **Step two: Involve state and federal agencies.**
  HFRA directed communities to collaborate with local and state government representatives, in consultation with federal agencies and other interested parties in the development of a CWPP. The Subcommittee recognized the importance of this collaboration and involved not only members from the USFS, but DNR and Kittitas County representatives as well. Each agency brought a wealth of information about fuels reduction efforts planned and completed, along with educational information based on current research across the nation.
- **Step three: Engage interested parties.**
  The Subcommittee included representatives from the Communities at Risk, members of local businesses, road districts, homeowner/neighborhood associations, and other organizations and individuals. Collaboration and coordination between agencies, community members, and landowners is the fundamental goal of the Cohesive Strategy to accomplish the 2026 revision of the Kittitas County CWPP.
- **Step four: Establish a community base map.**
  The Subcommittee reviewed the previous maps and boundaries from the 2009 and 2018 CWPPs. The group approved the 2026 CWPP boundary, which now has nineteen rating areas that replaced the previous ten. With the updated base map, the Subcommittee was able to accurately assess risk across nineteen areas, enabling a relative risk calculation that compares wildfire risk throughout Kittitas County.
- **Step five: Develop a community risk assessment.**
  The Subcommittee hired The Ember Alliance (TEA), a non-profit out of Colorado specializing in CWPPs and Risk Assessment, to assess risk throughout the county. The Pacific Northwest Quantitative Wildfire Risk Analysis along with on the ground assessments and evacuation assessments for each of the nineteen Communities Planning Areas.
- **Step six: Establish community hazard reduction priorities and recommendations to reduce structural ignitability.**
  Based on the assessments, TEA produced items in the action plan for each planning area. Recommendations to reduce structural vulnerability based on information in the assessments and local knowledge were also created.
- **Step seven: Develop an action plan and assessment strategy.**
  The Subcommittee and TEA identified an action plan for key projects; roles and responsibilities for carrying out the purpose of the CWPP; potential funding needs; post fire recovery considerations; and the evaluation process for the CWPP itself.
- **Step eight: Finalize the Community Wildfire Protection Plan.**
  A draft of the Kittitas County CWPP was available for public comment for 30 days prior to the final signing and approval of the plan. Interested parties provided comments during this period. The Kittitas County CWPP was mutually accepted and signed by local fire districts through the Kittitas County Fire Chiefs Association, the DNR State Forester, KFACC, and the Kittitas County Board of Commissioners as demonstrated in the Declaration of Agreement.

2 Kittitas County Characteristics

2.1 Overview

Kittitas County is in central Washington and bound by the Cascade Mountains to the west and the Columbia River to the east. **More than 70% of the County is publicly owned.** Approximately two thirds of the public lands are managed by federal agencies including the USFS (Okanogan-Wenatchee National Forest) and the U.S. Army (Yakima Training Center). The remaining one third of publicly owned land is split primarily between DNR and the Washington Department of Fish and Wildlife (WDFW). Private lands are highly influenced by the availability of irrigation water in Kittitas County. Like the rest of the Yakima River watershed, irrigation infrastructure including reservoirs and delivery systems, maintained by the U.S. Bureau of Reclamation, irrigation districts, and companies, provide water to agricultural lands allowing for significant crop production. Additionally, private lands are influenced by significant winds, especially in the Kittitas Valley.

Kittitas County includes portions of three watersheds, which are known as Water Resource Inventory Areas (WRIAs). Most of Kittitas County is within the Upper Yakima (WRIA 39), which drains into the Yakima River, and a small portion of the eastern county is in the Alkali-Squilchuck (WRIA 40), which drains into the Columbia River. Additionally, a small portion of the county is within the Naches (WRIA 38).



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The USFS manages the Okanogan-Wenatchee National Forest, Snoqualmie National Forest, and Alpine Lakes Wilderness (31% of the County). Additionally, the Department of Defense manages 10% of the county as the U.S. Army Yakima Training Center located in the southeast. Only approximately half of this 327,000-acre military installation is in Kittitas County, with the other half in Yakima County. State owned lands (28% of the County) are managed primarily by the WDFW and DNR and include the Teanaway Community Forest, Naneum Ridge State Forest, Colockum Wildlife Area, and LT Murray Wildlife Area. **Privately held land comprises only 28% of the land base in Kittitas County**, which includes a mixture of rural development, agriculture, and commercial forestry (Kittitas County et al. 2013).

Rangelands are areas that are primarily kept in a natural or semi-natural state to facilitate grazing of livestock. These areas are essential for production of livestock but also provide value to many wildlife species by preventing conversion to more intensive land uses. In Kittitas County, there are two types of rangeland practices, forested rangeland and shrub-steppe rangeland. Forested rangeland occurs mostly in the foothills of the Cascade Mountains and is characterized by livestock that graze on vegetation beneath the forest canopy. Grazing in these areas often has the additional benefit of reducing ladder fuels for forest fires. Shrub-steppe rangelands are located on the Columbia Plateau and often overlap with shrub-steppe habitat. Stewardship practices on these rangelands aim to support vegetation growth, maintain healthy soils, and reduce herbaceous fuel loading for wildland fires. These actions help protect ecological functions and values and maintain economic viability.

2.2 Local Economy

As of 2024, the industry sectors with the largest numbers of jobs were government (4,656 jobs), services (2,541 jobs), retail trade (1,831 jobs), and retail trade (1,831 jobs) (WA OFM 2026). Kittitas County continues to have a large percent of total farm employment at 6.1%, well above the national average (The Bureau of Economic Analysis 2022). While agricultural employment in most parts of the United States has been declining, largely because of mechanization and other efficiencies of scale, for most of the last century, Kittitas County remains an exception, supported by a diverse agricultural economy that is strongly crop-driven with crops accounting for 82% of the county's $75.6 million in farm revenue. Irrigation plays a central role in this productivity, with 49,757 irrigated acres sustaining high-value crops, especially forage and hay, which covered 36,161 acres and is an anchor for the county's agricultural (USDA Census of Agriculture 2022).

The county has 738 farms operating across 165,205 acres, ranging from very small operations with minimal sales to large farms generating more than $500,000 annually. Land use is dominated by rangeland and cropland, with 59,201 acres dedicated to crop production (USDA 2022). Despite a decline in the number of farms, the average farm size has increased to 224 acres, reflecting ongoing consolidation. Overall, Kittitas County's agricultural sector remains a significant contributor to the local economy, distinguished by its strong crop output, reliance on irrigation, and a farm structure that supports both small and large producers. According to the U.S. Department of Agriculture's

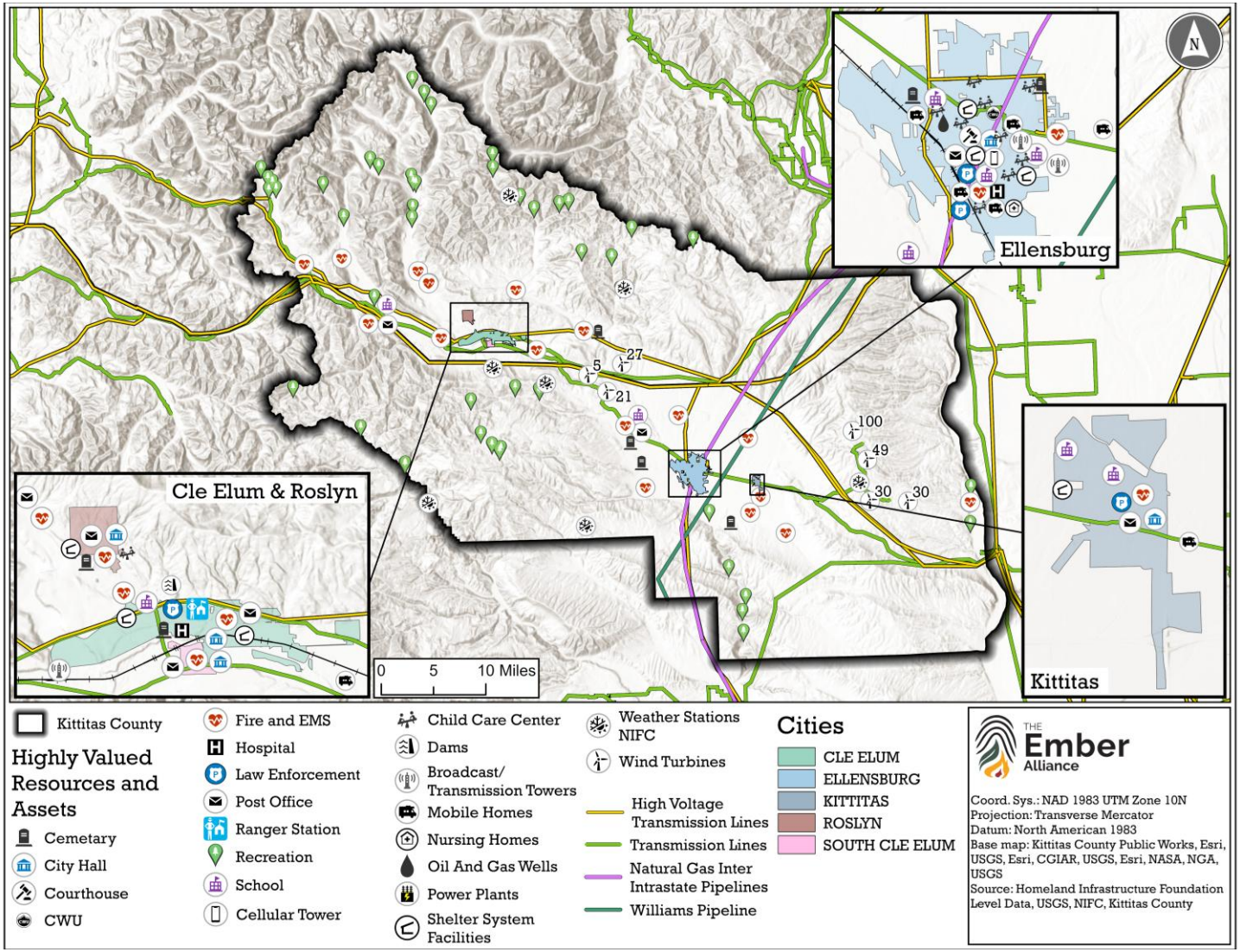
Census of Agriculture (2022), Kittitas County produces approximately $75.6 million in market value from agricultural products statewide.

Resource industries, such as timber, have been a small percentage in comparison to agriculture's strong presence. Timber sectors such as harvesting and manufacturing have all decreased substantially; while mills grew from 6 to 70 jobs, from 1998 to 2024 according to Headwaters Economics (2026). There are 914,469 forested acres in Kittitas County, which is mostly public (80-85%), especially in the western half of the county. 2,600 small forest landowners also account for 58,000 forest acres (UW State Forestland Database 2007) which accounts for roughly 7% of total forestland.

2.3 Critical Infrastructure

Critical facilities and infrastructure, also known as Highly Valued Resources and Assets (HVRAs) are those that are essential to the health and welfare of the population (see Figure 3 below). HVRAs typically include police and fire stations, schools, hospitals, and emergency operations centers, as well as the roads and bridges that provide ingress and egress and allow emergency vehicles access to those in need, and the utilities that provide water, electricity, and communication services to the community. Also included are "Tier II" facilities and railroads, which hold or carry significant amounts of hazardous materials with a potential to impact public health and welfare in a hazard event.

Figure 2
Highly Valued Resources and Assets of Kittitas County



2.4 Terrain/Geomorphology

Three distinct regions are found in the County which include the Cascades, Eastern Cascades Slopes and Foothills, and Columbia Plateau. The Cascade region is in the western portion of the County and is characterized by glaciated valleys and high peaks. The Cascade region is mainly forested and within the Okanogan-Wenatchee National Forest. The Eastern Cascades Slopes and Foothills region comprises most of the central portion of the County and is characterized by open forests, mainly ponderosa pine. The Columbia Plateau region is located to the east of the Eastern Cascades Slopes and Foothills and is characterized as the Yakima River Valley and the Columbia River Valley. Much of the area in the Yakima River Valley has been converted to irrigated agriculture. Shrub-steppe habitat is also prominent within the Columbia Plateau region.

Soils in the mountainous areas in the county are characterized as basalt and glacial deposits. These soils are eroded and deposited in the Yakima River Valley as alluvium. Upland of the Columbia River, basalt forms steep talus slopes with large particle sizes (ranging from sand to boulders). The shoreline of the Columbia River is characterized by natural alluvium and sand dunes, but some areas have been modified by riprap and artificial fill (Kittitas County et al. 2013).



2.5 Demographics

Kittitas County has experienced tremendous growth with approximately 11,355 new residents locating within the county from 2000 - 2016 (Headwaters Economics 2018). The most recent estimate of the Kittitas County population was 48,172 in the July 2024 U.S. Census Bureau estimate, up from the 2020 estimate of 44,337 (U.S. Census Bureau, 2024). Kittitas County has five incorporated communities: Ellensburg, Cle Elum, Kittitas, Roslyn, and South Cle Elum with the remaining populations living within the unincorporated areas of the county (WA OFM 2025).

Age distribution in the county shows fewer children than the state average and a somewhat larger senior population: 16.7% of residents are under 18 (versus 20.8% statewide) while 19.0% are 65 or older (versus 17.3% statewide). Economically, the county reported a 2024 poverty rate of 14.4% alongside a median household income of $73,804, and citizenship rates run high, with roughly 97.4% of residents holding U.S. citizenship, above the 93.2% national average. Households average about 2.3 persons per household, roughly 90% of the statewide and national figures, and the county is fairly rural in character, with a population density of about 20.5 people per square mile (U.S. Census Bureau, 2025).

While Kittitas County remains rural in comparison to its westerly neighbors, increased population and secondary home growth is projected to be significant (Berk Consulting 2016).

Figure 3
Land Ownership Map

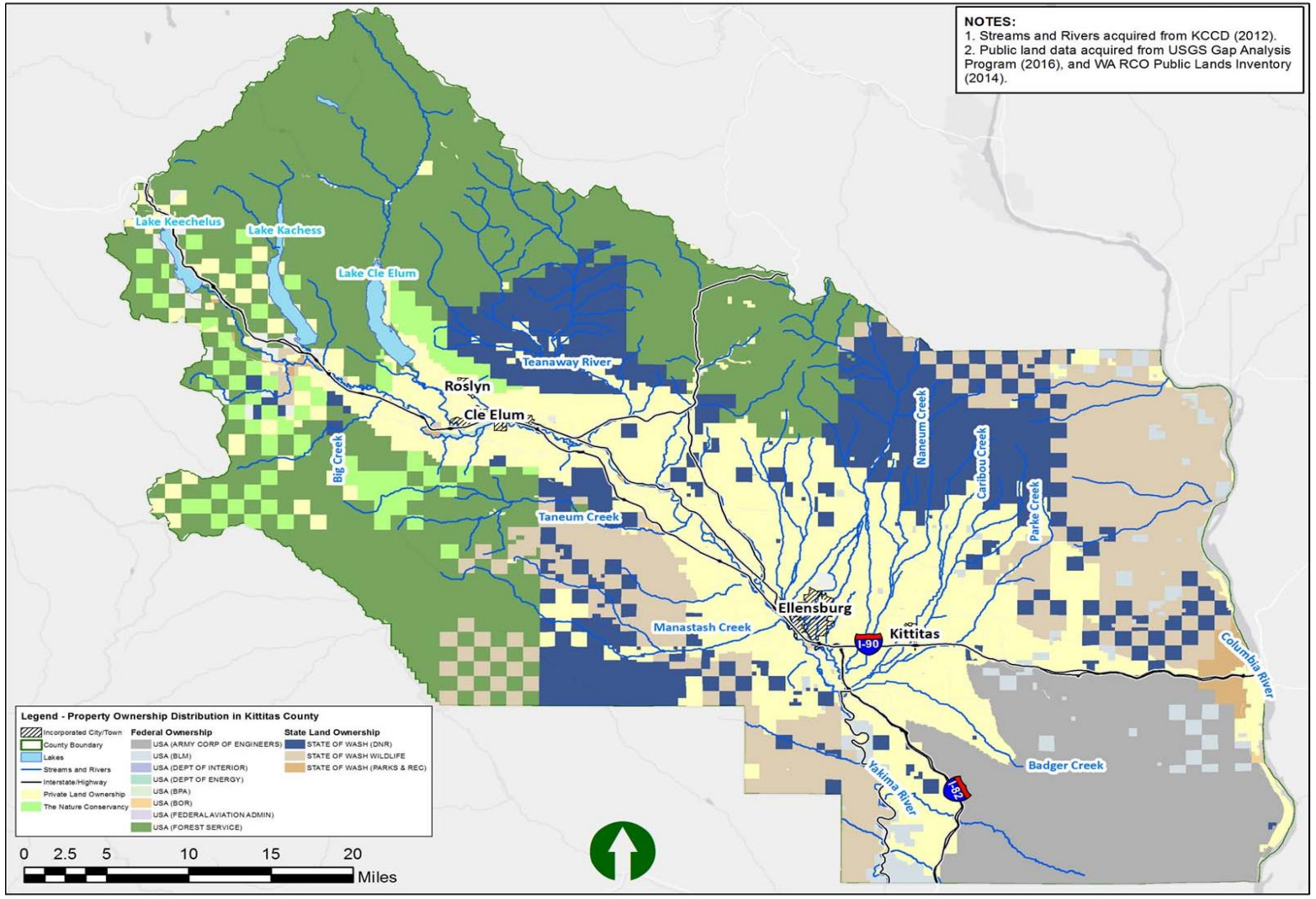


Figure 4

Kittitas County Demographic Information

KITTITAS



County Seat - Ellensburg

	Amount	Rank
Population – 2017	44,730	23
Unincorporated	20,385	24
Incorporated	24,345	22
Land Area in Sq. Mi.	2,297.27	8
Density *Pop./Sq. Mi.*	19.47	27
Assessed Value – 2016		
Total *$ In Thousands*	$5,343,469	21
Per Capita *$/Person*	$119,461	9
Personal Income – 2016		
Total *$ In Thousands*	$1,801,883	22
Per Capita *$/Person*	$40,161	28

Taxable Retail Sales -- See Table LT01

POPULATION AS OF APRIL 1, 2017

Components of Pop. Change 2010 to 2017	
Estimated Births	2,864
Estimated Deaths	1,995
Natural Increase	869
Net Migration	2,946
Total Population Change	3,815
Marriages in 2016	413
Per 1,000 Pop.	9.4
Divorces in 2016	102
Per 1,000 Pop.	2.3

City/Town	Population[&]
Cle Elum	1,875
Ellensburg	19,550
Kittitas	1,500
Roslyn	890
South Cle Elum	530

POPULATION BY NON-HISPANIC RACE AND HISPANIC ORIGIN BY RACE

	Total	White	Black	AIAN	Asian	NHOPI	2 or More
2010 Census Non-Hisp.	37,794	35,278	342	356	795	56	967
2010 Census Hispanic	3,121	2,776	52	84	45	3	161
2017 Est. Non-Hisp.	40,830	37,883	378	396	911	63	1,199
2017 Est. Hispanic	3,900	3,426	65	110	61	5	233

AIAN: American Indian and Alaska Native; NHOPI: Native Hawaiian and Other Pacific Islander

STATE COLLECTED REVENUES DISTRIBUTED TO COUNTY GOVERNMENTS[&]

State Fiscal Year	2014	2015	2016	2017
Criminal Justice	$3,021,970	$3,235,070	$3,557,061	$3,990,887
Federal Revenues	630,556	571,799	561,905	78,109
Forest Excise & Reclassified	67,793	58,882	49,471	32,622
Hotel/Motel Tax	711,378	728,993	857,927	1,021,827
Liquor Excise Tax	10,685	13,118	30,995	38,974
Liquor Profits	75,593	75,368	75,483	76,963
Local Sales & Use Tax/Interest	3,873,931	4,278,567	5,081,811	5,801,759
Miscellaneous	626,123	549,280	654,319	667,490
Motor Vehicle Fund	2,389,422	2,459,933	2,587,160	2,575,452
Natural Resources Transfers	--	166,602	232,321	232,321
PUD Privilege Tax	312,934	246,404	281,243	287,421
Total Revenues Distributed	$11,720,386	$12,384,016	$13,969,697	$14,803,825

REAL ESTATE EXCISE TAX COLLECTIONS - 1% OF SALES

State Fiscal Year 2014:	$5,098,813	State Fiscal Year 2016:	$5,826,593
State Fiscal Year 2015:	$5,315,872	State Fiscal Year 2017:	$6,775,310

COUNTY REVENUES AND EXPENDITURES-CALENDAR YEAR 2016[&]

Revenues		Expenditures	
Property Taxes	$13,181,019	General Govt Services	$11,313,394
Retail Sales & Use	10,349,121	Security of Persons & Property	10,742,362
All Other Taxes	1,126,214	Physical Environment	3,360,912
Licenses & Permits	1,742,780	Transportation	7,716,624
Intergovernmental Revenues	9,615,557	Economic Environment	2,230,348
Charges for Services	9,246,496	Mental & Physical Environment	2,809,772
Fines & Forfeits	1,672,598	Culture & Recreation	1,962,321
Miscellaneous Revenue	2,791,617	Debt Service	864,960
Other Financing Resources	5,562,872	Capital Outlays	4,820,605
Total Revenues	$55,288,275	Total Expenditures	$45,821,297

KITTITAS

AVERAGE MONTHLY EMPLOYMENT AND TOTAL WAGES IN COVERED EMPLOYMENT-CY 2016

Industry	Employers	Av. # of Employees	Percent of Total	Wages Paid	Percent of Total
Agric., Forestry, Fishing & Hunting	122	967	6.7	$31,256,101	5.6
Mining	--	--	--	--	--
Utilities	--	--	--	--	--
Construction	205	927	6.4	$42,430,915	7.6
Manufacturing	43	556	3.9	$20,682,260	3.7
Wholesale/Retail Trade	201	2,282	15.8	$73,217,632	13.0
Transp. & Warehousing	45	180	1.3	$8,264,737	1.5
Information	19	176	1.2	$8,783,649	1.6
Fin., Ins., & Real Estate	88	415	2.9	$23,526,385	4.2
Professional & Tech. Services	73	246	1.7	$11,324,084	2.0
Mgmt of Companies & Enterprises	--	--	--	--	--
Administrative & Waste Services	61	255	1.8	$7,570,890	1.3
Educational Services	22	132	0.9	$4,505,881	0.8
Health Care & Social Assistance	184	1,250	8.7	$37,160,424	6.6
Arts, Entertainment,& Recreation	23	130	0.9	$2,096,732	0.4
Accommodation & Food Services	142	2,612	18.1	$48,607,294	8.7
Other Svcs, except Public Admin.	99	324	2.3	$8,860,953	1.6
Government	65	3,881	27.0	$227,628,980	40.6
Not Elsewhere Classified	10	67	0.5	$5,216,426	0.9
Total	1,402	14,400	100.0	$561,133,343	100.0

PUBLIC ASSISTANCE PROGRAMS IN STATE FISCAL YEAR 2017

Program	Total Grants	Persons Served: Monthly Average	Persons Served: % of County Population	Rank by % of Pop
Basic Food	$6,684,650	4,819	10.774	33
CEAP	495	3	0.007	17
Disability Lifeline	156,098	64	0.143	33
Diversion Cash	34,958	9	0.020	9
MA Cash Assistance	934	3	0.007	28
Refugee Assistance	--	--	--	--
State Supplemental SSI	44,000	92	0.206	38
TANF	$548,269	252	0.563	35

PUBLIC K-12 SCHOOLS

Number of Districts	6	**School Apportionment**	
Avg. Ann. FTE Enroll 2015-16:	5,029	State Fiscal Year 2016:	$44,196,989
Avg. Ann. FTE Enroll 2016-17:	5,103	State Fiscal Year 2017:	$47,724,786

Major Sources of Operating Rev.-FY 2016-17		Sel. Expend. For Instructional Prog.-FY 2016-17	
State	$41,856,212	Basic Education	$29,566,778
Federal	3,679,422	Special Education	5,880,558
Local Tax	12,645,279	Vocational Education	1,816,047
Other Local	1,079,063	Transportation	2,225,074
Other Sources	271,583		
Total	$59,531,559	Total Selected Expenditures	$39,488,458

TRANSPORTATION[&]: REGISTRATIONS FOR CALENDAR YEAR 2016

Total Licensed Drivers:	31,744				
Licensed Vehicles:	Passenger	24,594	Other		14
	Trucks	14,809	Exempt		43
	Recreational	9,290	Total[i]		57,505
	Trailers	8,755	Vanity[i]		533

COUNTY POPULATION BY AGE AND SEX--APRIL 1, 2017

Age	Total	Male	Female	Age	Total	Male	Female
0-4	2,181	1,110	1,072	50-54	2,454	1,241	1,214
5-9	2,252	1,148	1,104	55-59	2,744	1,408	1,336
10-14	2,278	1,171	1,107	60-64	2,734	1,376	1,358
15-19	6,012	2,929	3,083	65-69	2,500	1,251	1,248
20-24	6,343	3,367	2,976	70-74	1,925	978	947
25-29	2,495	1,395	1,100	75-79	1,237	629	608
30-34	1,887	1,031	856	80-84	800	391	409
35-39	1,876	989	887	85+	839	345	494
40-44	1,916	983	933	Total	44,730	22,886	21,844
45-49	2,259	1,146	1,112	Median Age	32.13	31.57	32.81

Note: Data may not add due to rounding. [&]See footnotes page. Footnote symbol meanings differ by section.

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Source: WA OFM 2017

2.6 Vegetation

2.6.1 Fire Adapted Landscape

Historically Kittitas County has undergone frequent low-intensity fire, like much of the lower and mid-elevation forests, but resulting primarily from over 100 years of successful fire suppression activities, these areas have seen excessive fuel build up, altering the historical fire regime intensity and severity. The 2025 Forest Health Monitoring Report found insect activity and susceptibility to insect and disease outbreaks to be at its highest activity since 2018. The report identified climate conditions and long-term fire suppression as the primary drivers of this trend. It also noted that while treatment rates increased overall from 2017 to 2024, they are likely to decline without continued investments, such as the programmatic actions outlined in this CWPP. It is also important to note that recent years of data do "not include major fire years (2014, 2015) or the prominent outbreaks of bark beetles and defoliators that occurred in the late 2000s" (USFS 2025).

2.6.1.1 Forest Vegetation

Woodland fuels are mostly present in the western half of the county. As you move west the forest transitions from wet deciduous and shade tolerant conifer through dry conifer (ponderosa pine, Douglas-fir) mid-elevation conifer (grand fir, western larch, western hemlock), to high elevation wet conifer (mountain hemlock, pacific silver fir). Wooded areas tend to be on steep terrain intermingled with grass and shrubs providing an abundance of ladder fuels which leads to horizontal and vertical fuel continuity. These factors, combined with arid and windy conditions characteristic of the river valleys in the region, can result in high intensity fires with large flame length and fire brands that may spot long distances. Rates of fire spread tend to be lower than those in the grasslands; however, intensities can escalate dramatically, especially under the effect of slope and wind. Such fires present significant control problems for suppression resources and often result in large wildland fires. Furthermore, exceptionally hot and dry summers, overcrowding, and unprecedented forest insect infestations are causing forested areas to become increasingly susceptible to severe wildfire.

2.6.1.2 Rangeland Vegetation

Sagebrush is found throughout the mid to eastern edge of Kittitas County and is of great concern as ladder fuel intermixed with stands of mixed conifers. Sagebrush is highly susceptible to fire and rarely re-sprouts. Under historic conditions, sagebrush took approximately 20 years to reach pre-burn densities following a wildfire event. Without periodic fire, sagebrush reaches an uncharacteristic old-growth form with increased height, woody stems, and thick accumulations of leaves – all highly flammable with fire behavior that is very similar to crown fires in larger conifers. Changes in fire occurrence along with fire suppression and livestock grazing have contributed to the current condition of sagebrush in the planning area. Introduction of annuals, especially cheatgrass, has increased fuel loads so that fire carries easily, increasing the potential for significant and dangerous fire behavior.



Kittitas County Conservation District

2.6.1.3 Noxious Weeds

Noxious weeds and Cheatgrass are found across the planning area and present yearly challenges for residents, agricultural users, and fire suppression agencies. Cheatgrass, introduced invasive annuals and other noxious weeds typically occur where the ground has been disturbed to create roads, paths, or other plantings. Once established, they return perennially and can reach heights of three feet or more, creating an easily ignitable fuel bed once they dry out during summer months. Fires that occur in this type of fuel spread quickly and can direct fire to other fuels such as trees or structures.

Cheatgrass provides a flammable link in the brush and forests vegetation types. It cures early in the fire season and ignites readily during dry periods because of its very fine structure that responds readily to changes in the atmospheric moisture, tendency to accumulate litter, and invasive nature. Cheatgrass promotes more frequent fires by increasing the biomass and horizontal continuity of fine fuels that persist during the summer lightning season. Its expansion has dramatically changed fire regimes and plant communities over vast areas of western rangelands by creating an environment where fires are easily ignited, spread rapidly, cover large areas, and occur frequently. Fire in these habitats can have severe effects on native species of plants and animals.

Figure 5
Vegetation Cover Map

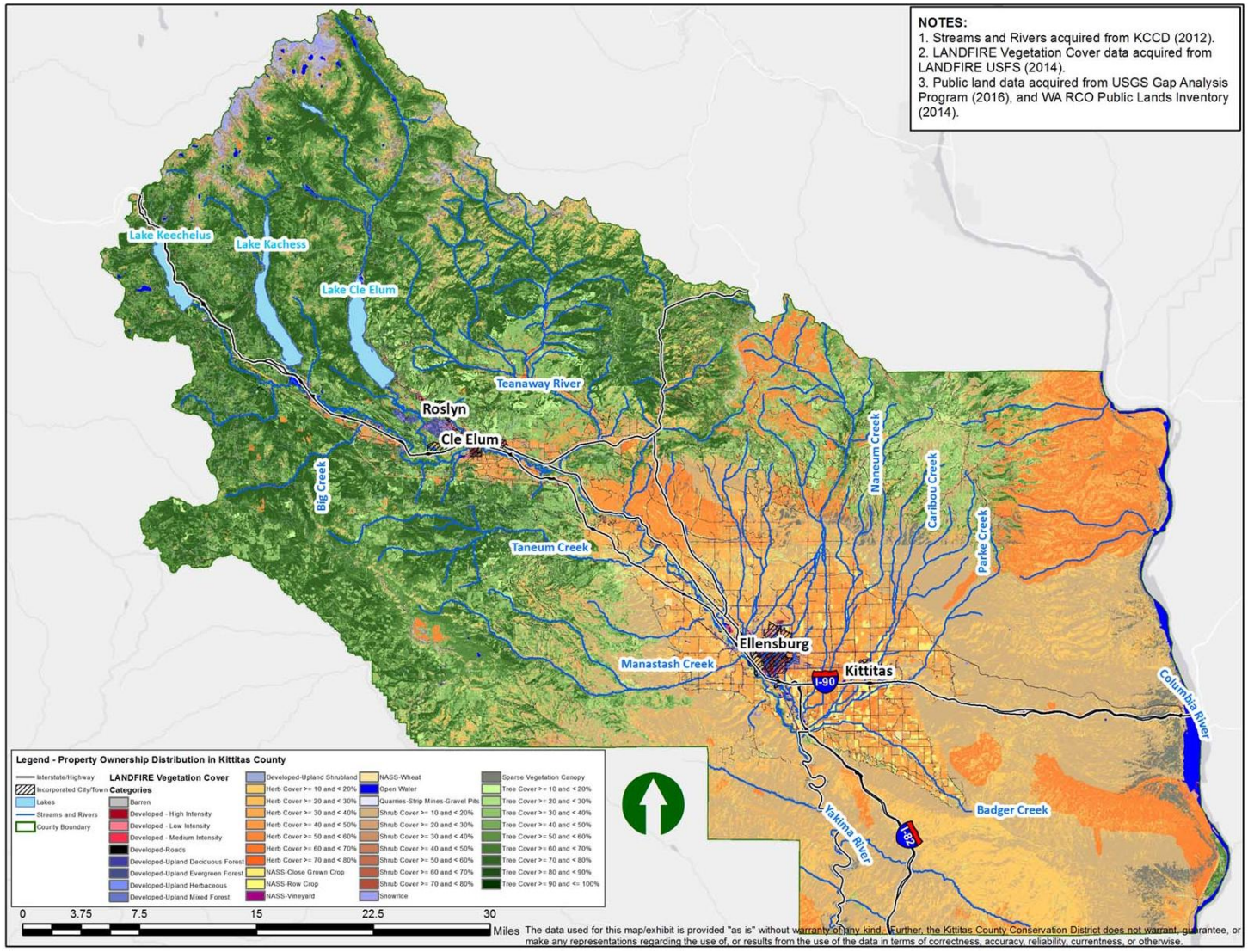
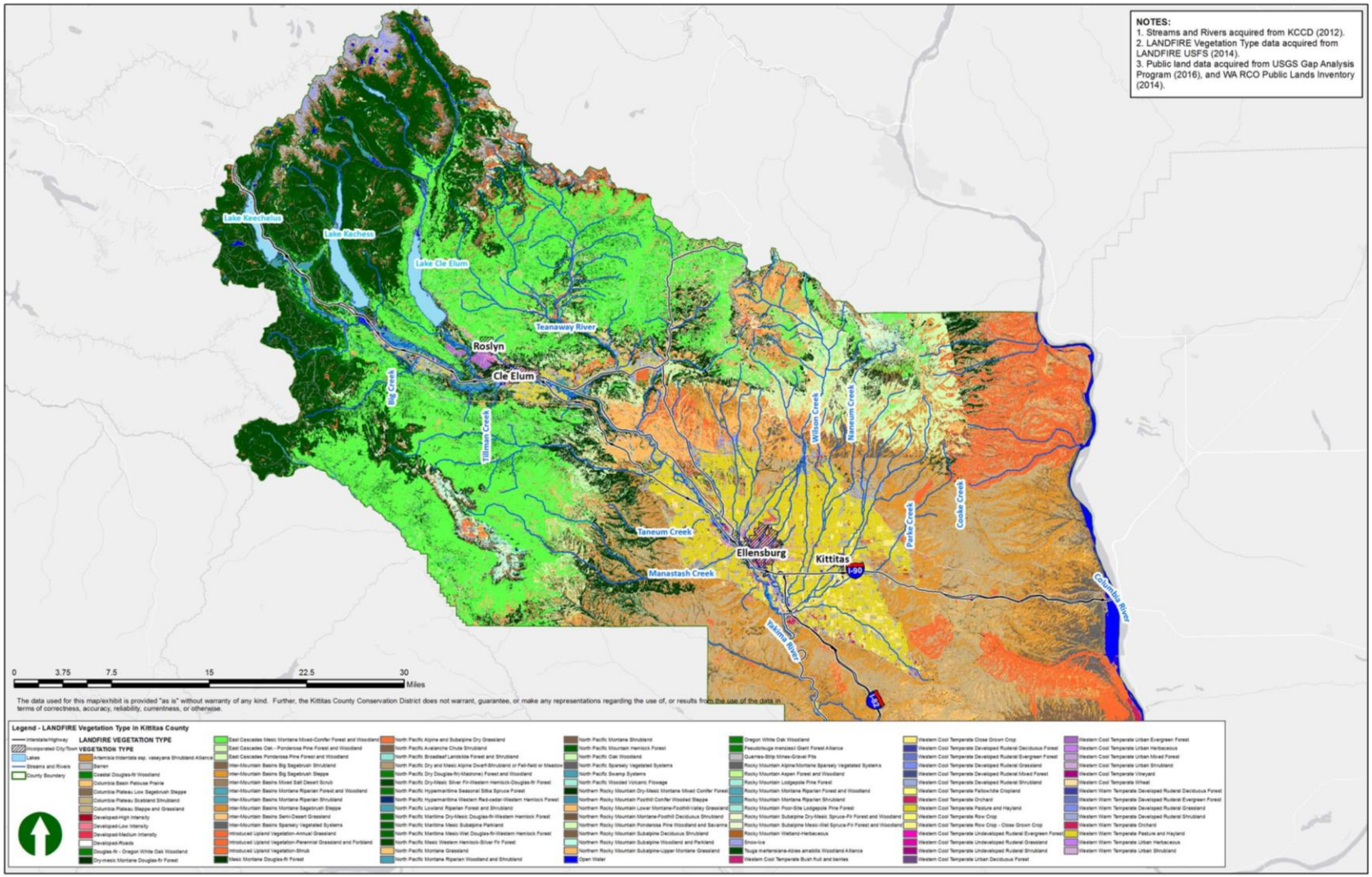


Figure 6

Vegetation Type Map



2.7 Climate and Temperature

As is typical of areas in the lee of large coastal mountain ranges, the Yakima River Basin is generally arid. Precipitation varies with elevation and distance from the Cascades, from 150 inches annually at the Cascade crest to 10 inches at the Columbia River. Disparities in precipitation rates from one area to another affect runoff rates and the character of rivers in different drainages, which influence flooding and land-use potential. Summers in Kittitas County tend to be dry; approximately two-thirds of the county's precipitation occurs between October and April, with much in the form of snow. In the winter, considerable snow often accumulates in higher elevations. In the Kittitas Valley, snow season generally ranges from November through February, with significant variation from one season to the next.



Kittitas County Conservation District

Because of the variation in elevation, temperatures vary greatly in the Yakima River Basin. In the Kittitas Valley, summers tend to be hot, with wide divergent fluctuations, and mild to severe winters. Data are scarce for higher elevations; however, those areas are generally characterized by cool summers and cold winters. For example, in the Subalpine Fir forest zone, which extends from approximately 5,000 feet to the timberline, with mean July temperatures in the range of 55ºF to 65ºF can be expected.

2.7.1 Wind

During the summer, pressure is higher on the western side of the Cascades and lower over the heated basin of eastern Washington, with the pressure difference increasing during the day as temperatures soar over eastern Washington. Air accelerates from high to low pressure and it finds the weakest location called Stampede Gap, where the terrain is only 3,000 to 4,000 feet high. Air accelerates through the gap and spreads out over the Kittitas Valley, with northwest winds on many summer days gusting to 30 to 40 miles per hour (Mass 2009).

The prevailing wind is from the northwest. The daily wind speed averages 8 to 10 miles per hour in the spring and summer, although wind speeds up to 20 to 30 miles per hour are not uncommon in the Kittitas Valley.

2.7.2 Drought

As of April 2026, Kittitas County is in the middle of Washington's fourth consecutive year of drought, which is a record for the state. On April 8, 2026, the Washington State Department of Ecology issued a statewide emergency drought declaration covering all the watersheds in the county due to a low snowpack year and multiple years with little rain. As of late March 2026, the statewide snowpack was at 53% of normal (Washington State Department of Ecology 2026).

Up to date details can be found at Kittitas County Conditions | Drought.gov which has daily data such as agricultural impacts, water supply, heat and air quality warning for public health, dryness rankings, and data sources. Figures come from the U.S. Drought Monitor, a joint effort of the National Drought Mitigation Center, USDA, and NOAA, plus USGS (streamflow), NOAA's Climate Prediction Center (outlooks), USDA NASS (agriculture), and AirNow (air quality).

Data through mid-June 2026, shows that 28,163 people in Kittitas County are affected by drought, with no change since the prior week but a 15.9% increase since the prior month. This represents 68.8% of the county's population, up 9% from the prior month. For dryness rankings: May 2026 was the 58th driest May on record over the past 132 years, 0.17 inches from normal, and the January–May 2026 period ranks as the 33rd driest year-to-date over the past 132 years, 2.52 inches from normal!

Kittitas County relies upon the Yakima Basin surface water. Urban Eberhart, manager of the Kittitas Reclamation District, said that he anticipates a tough year for 2026 similar to 2025, with non-senior irrigation districts receiving only 44% of their normal water allotment (Yakima Herald Republic April 9, 2026). In October of 2025 the Washington State Department of Ecology took the step of curtailing almost all the surface water use in the basin, which particularly hurt the upper county communities of Cle Elum, Ronald, and Roslyn that depend on surface sources (Yakima Herald Republic April 2026).

3 Wildfire in Kittitas County

3.1 Fire History

Between 2005 and 2025, at least 44 fires burned within or partly within Kittitas County, totaling roughly 324,000 acres.

The county's largest recent fires have come from both natural and human ignitions. The Boylston Fire started in the Interstate 90 median east of Kittitas in July 2018 and burned approximately 70,000 acres; its cause was investigated as human but never officially confirmed. The Table Mountain Fire of September 2012 burned 42,481 acres and destroyed five structures after a lightning storm on September 8 ignited multiple fires across the county, several of which merged. The Labor Mountain Fire, ignited by lightning on September 1, 2025, in the Cle Elum Ranger District roughly ten miles north of Cle Elum, burned 42,967 acres. The Jolly Mountain Fire, also lightning-caused, burned 36,808 acres northwest of Cle Elum beginning August 11, 2017; it could not be contained at initial attack due to terrain and firefighter safety concerns and burned into November.

Size is not the measure that matters most to communities. The Taylor Bridge Fire of 2012 burned 23,501 acres, a fraction of Boylston, but destroyed 61 homes and more than 100 outbuildings, the worst structure loss in the county's recent history. It was caused by welding and wire-brushing work on the Taylor Bridge on SR-10 by a WSDOT contractor and resulted in a $59.75 million settlement. The Snag Canyon Fire of 2014, at 12,599 acres, destroyed 22 structures. Jolly Mountain, despite its size, destroyed no structures, but it placed roughly 4,000 residents under evacuation orders, including the entire town of Roslyn, and prompted state and county emergency declarations.

As of September 2026, during the writing of this CWPP, Kittitas County was dealing with intense wildfire activity, most notably the Three Queens Fire near Kachess Lake in the Okanogan-Wenatchee National Forest. Sparked by lightning on July 15, 2026, it grew from about 88 acres in late July to roughly 9,444 acres by early September with 160 personnel assigned (Kittitas County Fire District 7; Inciweb). Two nearby fires that were both caused by lightning, the King Fire (~3,400 acres) and the Goat Fire (~815 acres), were also burning in the Cle Elum Valley area (Inciweb).

This local activity sits within a broader statewide emergency: Governor Bob Ferguson declared a statewide wildfire emergency on August 4, 2026, citing a fourth consecutive year of drought, extreme heat, and strong winds, with over 1,000 fires having burned roughly 425,000 acres statewide — the most since 2021 (Washington Governor's Office). A companion burn ban remains in effect through September 30. On August 31, Ferguson expanded the emergency declaration to include Kittitas County (along with Benton, Columbia, Grant, and Whitman counties), extending eligibility for evacuation and shelter cost coverage, state individual assistance programs, and eviction protections through the end of September (Apple Valley News Now). Given how quickly conditions can change, it's worth checking Kittitas County Fire District 7 or Kittitas Valley Fire & Rescue directly for the latest containment and evacuation updates.

Ignition source is closely tied to corridor and land use. Confirmed and probable lightning ignitions account for at least 23 of the 44 recorded fires, concentrated in the forested and high-country

portions of the county. Confirmed human ignitions cluster along transportation corridors: the Ryegrass Fire of 2017 was started by a hay truck on I-90 near milepost 125, the Sun Country Fire of 2025 by sparks from a trailer with a flat tire on I-90 near South Cle Elum, and the Swauk Creek Fire of 2024 by a vehicle fire on US-97. The Red Bridge Road Fire of July 2025 was confirmed human-caused by DNR investigation and damaged two structures.

Table 1

Kittitas County Recent Fire History

Fire Name	Year	Size (Acres)	Structures Lost	Cause
Lick Creek	2005	734	—	Not Documented
Amabilis	2006	116	—	Not Documented
Crow Creek	2007	83	—	Not Documented
Easton Ridge	2007	401	—	Not Documented
Ellensburg Pass	2007	452	—	Not Documented
Ellensburg Pass (2)	2007	452	—	Not Documented
WDFW Jackson	2008	575	—	Not Documented
MP 124	2011	450	—	Not Documented
Taylor Bridge	2012	23,501	61 homes + 100+ outbuildings	**Human – Equipment**
Trail Creek	2012	24	—	Probable Lightning
Stafford Creek	2012	33	—	Probable Lightning
Diamond Head	2012	1,055	—	Probable Lightning
Gold Creek Springs	2012	31	—	Probable Lightning
Old Blewett Pass	2012	22	—	Probable Lightning
Moon Beam	2012	1	—	Probable Lightning
Jack Creek Pass	2012	7	—	Probable Lightning
French Cabin Creek	2012	42	—	Probable Lightning
Peavine Canyon	2012	19,997	—	Lightning
Table Mountain	2012	42,481	5 structures	Lightning
Little Parke Creek	2012	700	—	Probable Lightning
Christensen	2013	175	—	Not Documented

Fire Name	Year	Size (Acres)	Structures Lost	Cause
Colockum Tarps	2013	80,184	Multiple	Human-Electrical
Cottonwood	2014	8,942	—	Not Documented
South Cle Elum Ridge	2014	887	—	Not Documented
Saddle Mountain	2014	24,917	5 structures	Not Documented
Bighorn	2014	265	—	Not Documented
Snag Canyon	2014	12,599	22 structures	Lightning
Corral	2014	148	—	Not Documented
Mile Post 9	2015	22	—	Not Documented
Gingko	2016	124	—	Not Documented
Rock Creek	2016	1,382	—	Not Documented
130 Vantage	2016	363	—	Not Documented
MP 133	2016	570	—	Not Documented
Hayward Firing Range	2016	167	—	Not Documented
Ryegrass	2017	192	—	Human – Vehicle
Poison Springs	2017	353	—	Not Documented
Jolly Mountain	2017	36,808	—	Lightning
Huit Butte	2017	138	—	Not Documented
Boylston	2018	70,000	5 (non-residential)	Human – Undetermined
Clerf Road	2021	425	1 residence + outbuildings	Under Investigation
Vantage Highway	2022	30,659	4 (1 cabin + 3 outbuildings)	Under Investigation
Swauk Creek	2024	348	—	Human – Vehicle
Red Bridge Road	2025	54	1 structure + 1 outbuilding	Human – Burning & Old Hay Bales Decomposing
Sun Country	2025	70	—	Human – Vehicle
Labor Mountain	2025	42,967	—	Lightning
Three Queens	2026	9,551	—	Lightning

Fires over 10,000 acres highlighted in green.

Compiled from NIFC WFIGS perimeter data, Washington DNR fire investigations, InciWeb, and local news reporting. Cause is documented to a high confidence standard for only ten of the 44 fires; 22 have no identifiable source record, and several 2012 ignitions are attributed to the September 8 lightning storm by inference rather than individual confirmation. Acreages for older fires should be treated as approximate.

Figure 7a
Historical Fires from 1973-2025

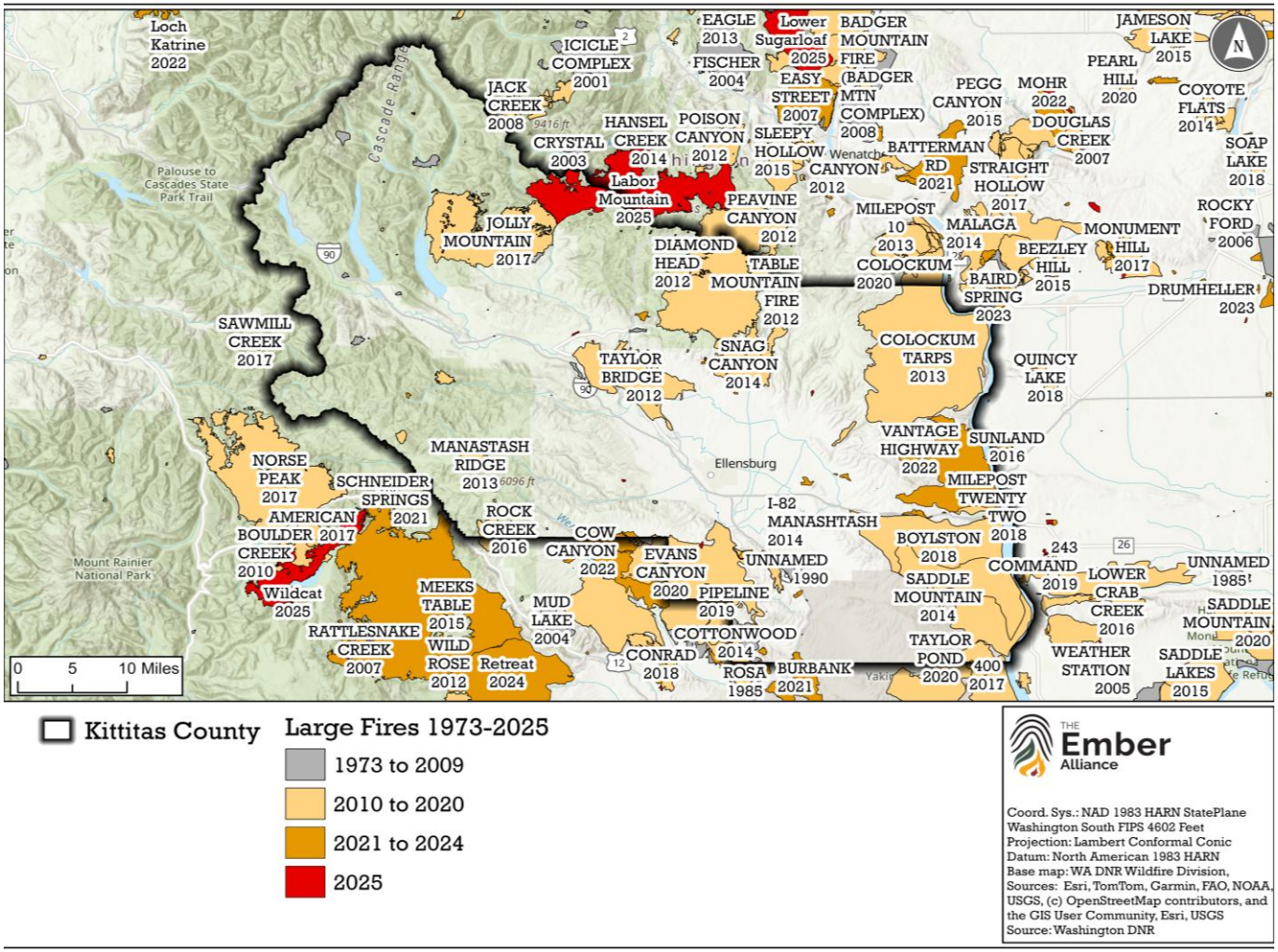
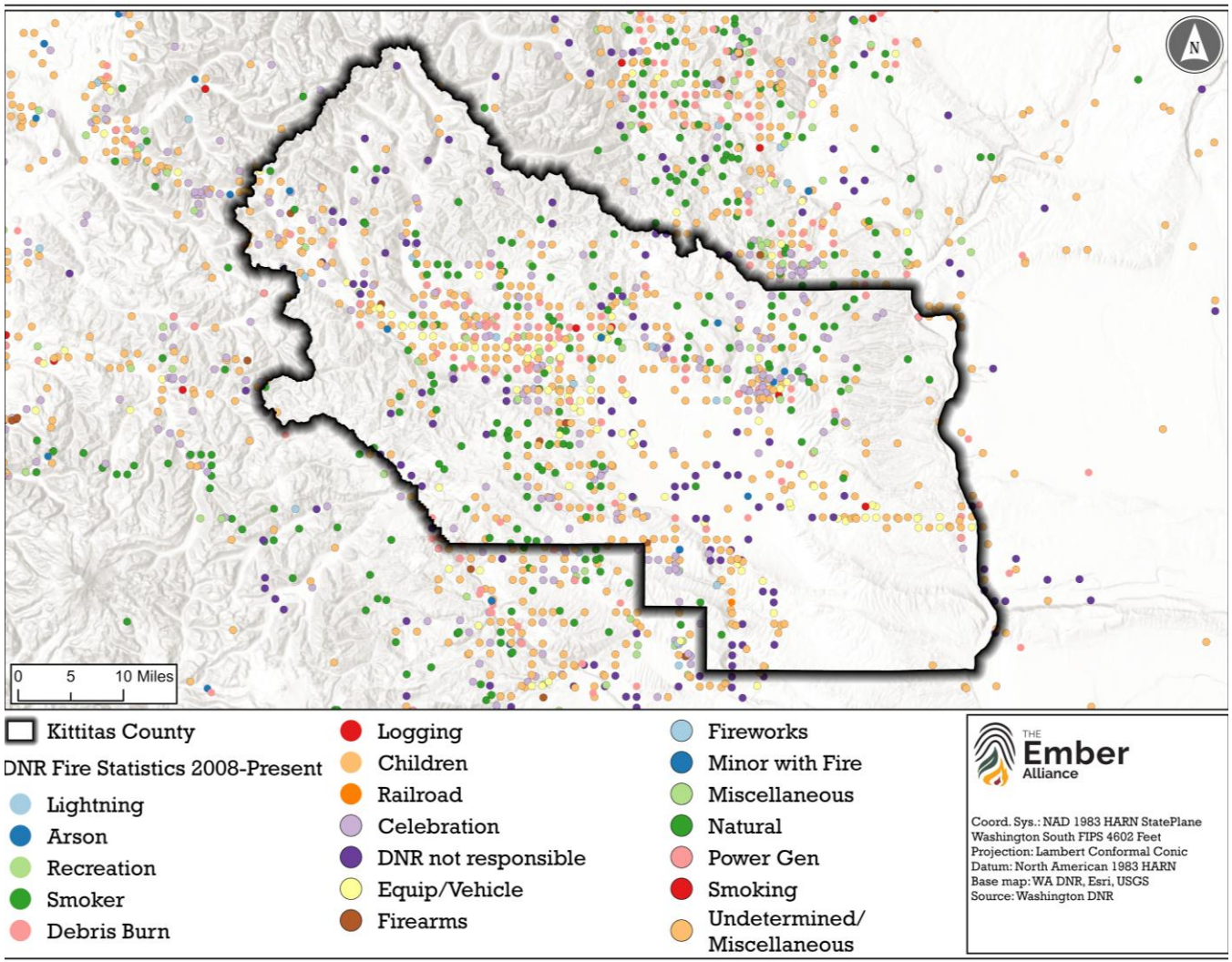


Figure 7b
Wildfire Ignitions in Kittitas County



Historic fire seasons occurred between July and September, with the middle to end of August being the period of the most extreme fire conditions. Cheatgrass matures by July, while most native species it replaces mature in late August. With cheatgrass dominant, wildfires tend to occur earlier in the season, when native perennials are more susceptible to injury by burning. These fires are larger and more uniform, with fewer patches of unburned vegetation remaining within burns. Cheatgrass thrives in grounds that have been disturbed by activities such as recreation or building. There are many areas within Kittitas County that have cheatgrass invading the landscape, in some cases creating ladder fuel adjacent to homes in the WUI. Cheatgrass is not recognized as a noxious weed in Kittitas County; however the flammability of the annual invasive species poses a risk to homes and infrastructure. Other noxious weeds like Scotch Broom and Gorse, although not present in Kittitas County but located in bordering counties, create dense thickets of highly flammable, dry woody material escalating the intensity of wildfire and increasing the risk and damage to nearby properties.

3.1.1 Change in Fire Regimes in Kittitas County

Kittitas County has very diverse forest systems, moisture gradients, and timber types throughout the county including Ponderosa pine, Douglas-fir, silver-fir, western hemlock, mountain hemlock, Englemann spruce, subalpine fir and larch, and whitebark pine. Changes in climate patterns, land management strategies and other factors have contributed to changes in vegetation and forest structure. Fire frequency and severity have responded to these changes. Historical fire regimes ranged from over 900 years to as frequent as every 6 – 10 years or such as in Liberty, Washington.

Generally, the changes in the fire regime trend toward larger, hotter, and more frequent fires in much of the county. Fire suppression, timber management, and the buildup of fuels in

According to Washington DNR's 20-Year Forest Health Strategic Plan for Eastern Washington (August 2025 update), forest health across eastern Washington has been affected by decades of fire exclusion, climate change, recurring drought, invasive species, insect infestation, and disease which contributed to overstocked forests that are more vulnerable to disturbances and have high tree mortality rates. Alongside increased fuel loading, increased severity and duration of wildfires, and reduced resiliency, the risk to communities, watersheds, and natural resources has only increased.

Since 2017, landowners and agency partners have invested in close to one million acres of forest health treatments (WA state DNR 2025). DNR has developed a report, *The Environmental Justice Implementation Plan for Forest Resilience*, in 2023 to report on the impact of forest health on vulnerable communities.

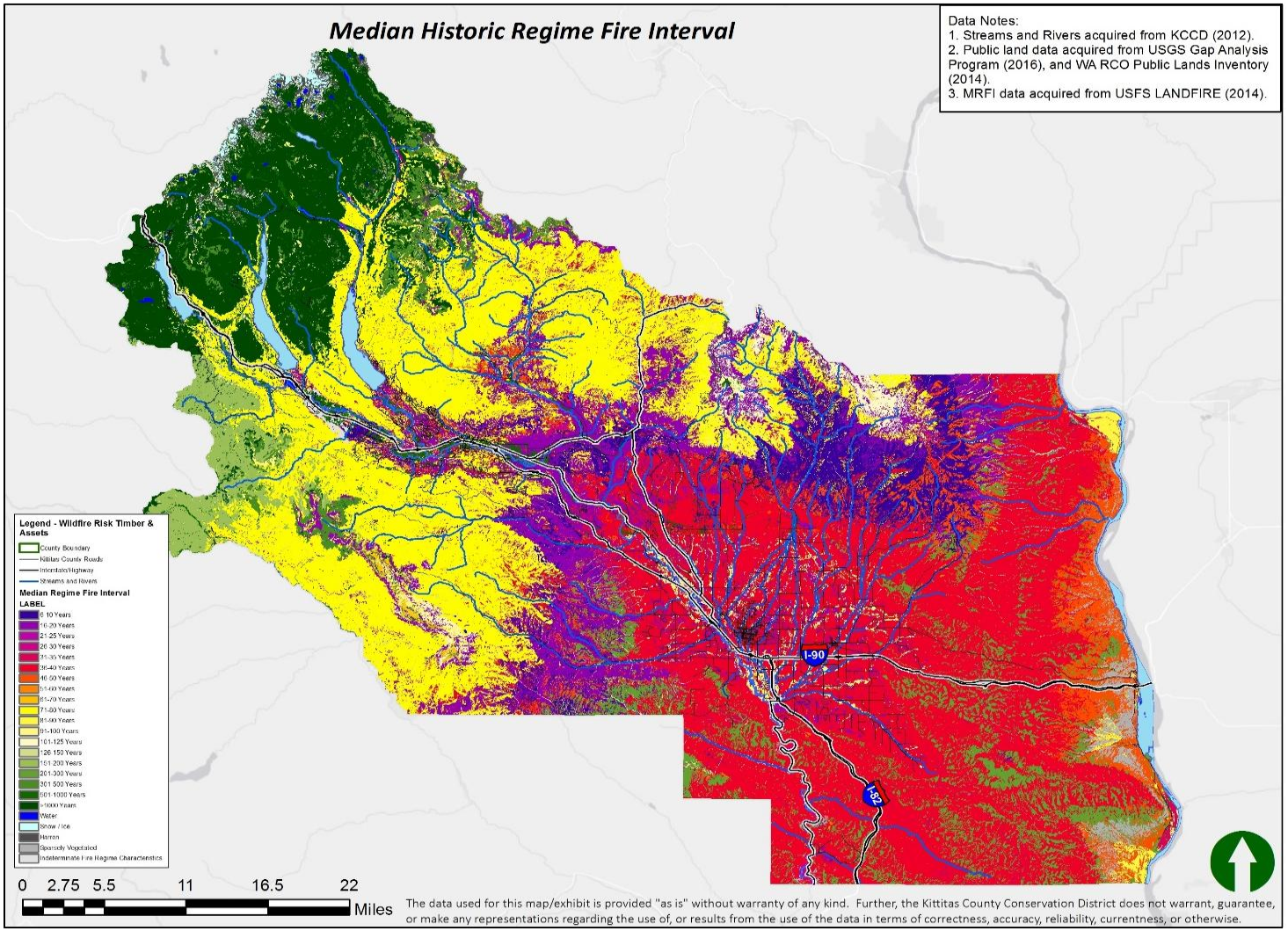
Hundreds of thousands of acres still decline each year, making long-term investment in fuels reduction, community preparedness, and forest restoration, supported by coordinated efforts across governments, tribes, industries, nonprofits, and landowners, essential for continued success.

the forest have had a combined effect that can only be mitigated with a comprehensive strategy, such as the one laid out in Section 5.

High precipitation contributes to a very productive ecosystem and an abundance of potential fuels during wildfire events. Precipitation at this level also results in high fuel moisture content for most of the year so wildland fire is often driven by especially dry conditions and strong wind events that reduce fuel moisture.

2026 has been a stark demonstration of the dry conditions gripping Kittitas County. The Swauk Creek Fire occurred on August 2, 2026 and began by a vehicle fire. The county's largest and most destructive fires this year, however, have been the Three Queens Fire and the Ryegrass Coulee Fires. The Three Queens, started by a lightning strike on July 15, 2026, ignited a fire about six miles from Snoqualmie Pass, near Hibox Lake. About 9,551 acres burned with no structures lost. He Ryegrass Coulee Fires, which broke out near Vantage on July 8, sparked accidentally by a vehicle on Vantage Highway. It grew quickly to about 2900 acres, destroyed two homes on the north end of Vantage, and caused extensive equipment damage to a third property. The fire prompted Level 3 "go now" evacuations for the town and forced a shutdown of Vantage Highway due to downed power lines (DNR Wildfire Dashboard 2026). While Kittitas County managed these incidents, the Spokane Complex fires, which began August 1, destroyed homes and forced tens of thousands of evacuations across the region. Residents can visit the DNR Wildfire Dashboard which is a source for up-to-date information on all fires and resources in Washington.

Figure 8
Median Historic Regime Fire Interval



3.2 Wildland Urban Interface

The Wildland Urban Interface in Kittitas County encompasses large areas of land. Within these areas is an increased risk of wildfire. There is also an increased risk structure to structure ignition or wildfires being inadvertently caused in more densely populated areas. Wildfire risk can be reduced using several different mitigation strategies like vegetation management and code development. Kittitas recently adopted new building and land use development rules to help ensure any new building or development in the WUI is adequately defensible from wildfire and fire resistant to avoid the spread of fire in and from the home.

As Kittitas County population steadily increases in the WUI, risk management will need to include short-term and long-term strategies to increase community resiliency addressing developments, vegetation management and other facets of living in a wildfire prone landscape.



This 2026 Kittitas County CWPP defines the concept of Wildland Urban Interface (WUI) as,

> "Any area where the combination of human development and vegetation have a potential to result in negative impacts from wildfire on the community."

Communities in Kittitas County are faced with Wildland Urban Interface in two contexts that pertain differently to each constituent depending on their land management objectives; the International Wildland Urban Interface Code (IWUIC) as it pertains to future construction development in the Kittitas County and the second distinction as part of the holistic strategy brought forth by the National Cohesive Strategy's three goals: resilient landscapes, fire adapted communities and safe and effective wildfire response.

For the purposes of this 2026 CWPP update, all WUI references pertain to planning-related WUI designations rather than building-code regulatory WUI. The county is expected to establish its updated legal WUI building codes in late 2026.

The information in this CWPP is intended to support local planning, preparedness, and wildfire mitigation efforts, not building or land use code or insurance determinations.

3.2.1 History of Wildland Urban Interface Code in Kittitas County

Kittitas County adopted the IWUIC in January 2013 (resolution no. 2013-013) with amendments located in Kittitas County Code Title 20 and Appendix B: Vegetation Management Plan as a tool to mitigate wildland fire risk as vacant private land is converted to the built environment. IWUIC was adopted shortly after the Taylor Bridge wildfire in 2012 which destroyed over sixty residential homes and cabins. In April 2018, the Kittitas County Board of Commissioners included the adoption of Appendix C of the IWUIC allowing for individual site analysis and removal of certain sprinkler requirements for building requirements.

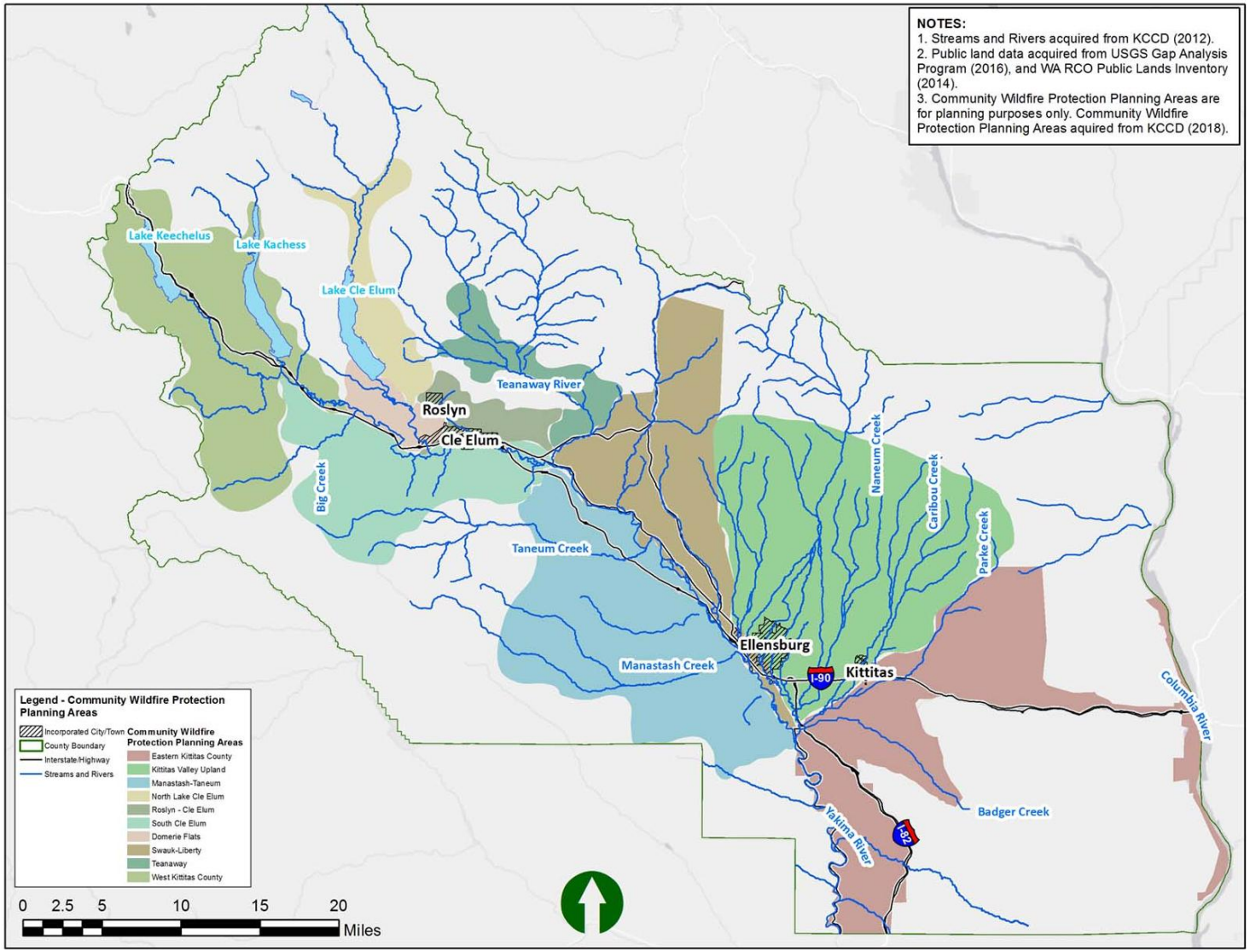
According to the Washington State Office of the Insurance Commissioner as of June 2026, Washington State is preparing to adopt the IBHS-aligned wildfire-resilience standards which were expanded to Washington in April of 2026.

The IWUIC answers "what's legally required to build here," while IBHS standards answer the question, "what actually increases resistance to fire from spreading between homes?" A robust community wildfire plan, such as the Kittitas County 2026 CWPP, references both as tools in fire adaptation to residential mitigation.

According to the Headwaters Economic WUI snapshot report (2018), Kittitas County was in the 85th and 89th percentile of existing WUI risk (amount of forested land where homes have already been built next to public lands), and future WUI risk (the area of undeveloped, forested private land bordering fire-prone public lands) in the West (there are a total of 413 western counties and the higher the percentile (100th percentile being the highest) the higher the risk) in 2010. Kittitas County is in the 44th percentile in Washington State when ranked by existing risk and 69th percentile for future potential risk, according to 2010 data. While the spread of homes and/or construction into previously forested areas is not the only contributor to the rising cost of fighting fires, it is an important factor ,and one that is expected to rise with continued development. A warming climate will exacerbate the costs even further, continuing the established risk rankings.

The WUI map in this update (Figure 9) shows the Planning WUI boundary carried forward from the 2018 Kittitas County CWPP. Until a new boundary is adopted, it serves as the reference for prioritizing fuels reduction, defensible space outreach and other mitigation projects, and for showing where communities are eligible for funding programs tied to the WUI. In 2026 the Washington Department of Natural Resources (DNR) will release new wildfire hazard and risk maps, which draw on updated data on fuels, fire behavior and where homes and infrastructure are. KFACC and community partners need time to review the new DNR maps and then the Planning WUI will be updated based on the DNR 2026 maps and the revised map will be added to the CWPP as an amendment. Until then, the 2018 Planning WUI will stay in effect, so that planning and grant eligibility continue without interruption.

Figure 9
Wildland Urban Interface (WUI) Map



3.3 Risk Assessment Evaluation Tools

Wildfire risk is a measure of both the probability and the consequences of uncertain future wildfire events. For any location within Kittitas County, wildfire risk depends on the chance of a fire occurring there, the likely intensity of that fire, and the vulnerability of something of value at that location. This is commonly described as a risk triangle whose sides are likelihood, intensity, and susceptibility. These three factors, and the resulting wildfire risk, vary considerably across the county. This section describes the tools available to assess that risk in Kittitas County and provides spatial context for where different management and mitigation strategies will be most effective.

By understanding the components that contribute to wildfire risk and engaging in a coordinated planning effort, the county can influence each side of the risk triangle. Prevention measures that reduce human-caused ignitions can lower the likelihood of fire occurrence, particularly in areas of concentrated human activity. Vegetation treatments that reduce fuel loading can lower the intensity of fires that do occur. Efforts to reduce the flammability of building materials and to establish defensible space around structures can reduce the susceptibility of homes and other assets to wildfire.

3.3.1 Landscape Risk Assessments

The risk analysis used in this plan combines landscape-scale and local-scale assessments. The landscape-scale component draws on the *Pacific Northwest Quantitative Wildfire Risk Assessment: Methods and Results* (Gilbertson-Day, Scott, Vogler, and Brough; Pyrologix LLC, August 27, 2018), prepared for the U.S. Forest Service. The purpose of the USFS Pacific Northwest Region Wildfire Risk Assessment (PNRA) is to provide foundational information about wildfire hazard and risk to Highly Valued Resources and Assets (HVRA) across Oregon and Washington. This information supports wildfire response, regional fuel management planning, and revisions to land and resource management plans.

The PNRA analysis area is the states of Oregon and Washington, extended to include the full extent of the 17 Region 6 National Forests. Simulated fires were started within a surrounding Fire Occurrence Area covering roughly 118 million acres, divided into 23 sub-areas to account for regional variation in fire weather and historical occurrence. Kittitas County falls within this analysis area; the Okanogan-Wenatchee National Forest, which covers a large share of the county's western and northern uplands, is one of the 17 forests assessed.

The PNRA used the large fire simulator **FSim** to quantify wildfire hazard at a 120-meter pixel resolution, later downscaled to 30 meters for the effects analysis. FSim is a comprehensive fire occurrence, growth, behavior, and suppression simulation system that uses locally relevant fuel, weather, topography, and historical fire occurrence information to produce spatially resolved

estimates of the contemporary likelihood and intensity of wildfire. Its fuelscape was built from LANDFIRE 2014 30-meter data, edited at a regional review workshop and updated to reflect 2015–2017 fire disturbances. Historical wildfire occurrence was drawn from the Short (2017) Fire Occurrence Database spanning 1992–2015, with a large fire defined as one exceeding 247.1 acres.

The PNRA resolves the following components spatially across the region:

- Likelihood of a fire burning
- Intensity of a fire if one should occur
- Exposure of assets and resources based on their locations
- Susceptibility of those assets and resources to wildfire

These outputs identify hazardous combinations of fuel and topography, which aids in prioritizing fuel treatments such as prescribed fire and mechanical thinning. The risk data can also support fire operations during an incident by identifying which assets and resources are most susceptible, informing the prioritization and positioning of firefighting resources.

The PNRA has important limitations for county-level planning. It was designed as a regional product summarized at the National Forest and Ranger District scale, and its HVRA set is regional in focus — no county-specific assets, evacuation networks, or structure-level exposure data are represented. It is also a static hazard product: FSim simulates thousands of stochastic fire seasons to derive long-run burn probability, but it does not model the growth or spread of any particular incident in real time. Landscape assessments of this kind are therefore useful for planning and long-term risk reduction, but additional local tools are needed to prepare response strategies and to distribute resources during an active wildfire.

3.3.2 Combining Landscape Risk and Model Simulation

Working at more than one scale of analysis yields more than either scale alone. The regional PNRA establishes the hazard context — how likely fire is and how intensely it is expected to burn — across the whole county, at a resolution that captures fuel and terrain but that summarizes to National Forest and Ranger District boundaries. The local assessment developed for this plan takes those hazard surfaces, along with local road, building, and network data, and resolves them to the 19 community planning areas used throughout this document. The regional product describes the landscape; the plan units describe the communities within it.

The raw model outputs are raster, or pixel-based, datasets that divide the landscape into evenly sized square cells. FSim produced burn probability and flame-length probability at 120 meters (394 feet) on one side, downscaled to 30 meters (98 feet) for the effects analysis. The fire behavior, fire type, and wildfire exposure surfaces used in the local assessment are 30-meter products.

Pixel-level output is difficult to interpret directly and difficult to act on. Fuel treatments, evacuation planning, and fire district coordination all happen at the scale of communities, not cells. Model outputs are therefore summarized in the 19 community planning areas described in this plan. These units vary widely in size, from 532 acres to just over 122,000 acres, and they follow community, jurisdictional, potential control lines, and response boundaries rather than uniform geographic ones. Summarizing them is not a smoothing exercise: a plan unit average is a statement about that community's aggregate condition, operational fire geographic considerations, and in the largest units, it necessarily spans a range of internal conditions.

For each plan unit, acreage-weighted mean values were calculated for flame length, fire behavior class, and conditional burn probability, and area-based percentages were calculated for radiant heat and embercast exposure. Roadway survivability was calculated as a share of road mileage within the unit. Each measure was then classified into five relative risk classes and combined with the field-assessed scores collected during plan unit assessments to produce the relative risk scores presented below.



Snag Canyon Wildfire, 2014; Kittitas County Conservation District

3.3.2.1 Likelihood

The model output that best represents wildfire likelihood in Kittitas County is the conditional burn probability derived from the FSim modeling completed for the PNRA. It represents an annual burn

probability that accounts for the full range of modeled weather scenarios, providing a long-term perspective on the relative likelihood of fire at any location in the county in a given year.

To produce a map of relative likelihood, the burn probability surface was summarized to each of the 19 community planning areas. The source raster is classified into four probability bins; for each plan unit, the acreage falling in each bin was multiplied by that bin's midpoint probability and divided by the unit's total acreage, yielding an acreage-weighted mean burn probability. Those means were then classified into five relative classes using quintile breaks calculated across the 19 units. The classes are relative to the distribution within Kittitas County only, so they describe how each plan unit compares to the rest of the county rather than to any external standard.

Weighted-mean burn probability ranges from 0.0036 in South Vantage-Auvil Corridor to 0.061 in Roslyn Ridge Foothills, with quintile breaks at 0.0209, 0.0477, 0.0532, and 0.0579. The highest-likelihood units — Roslyn Ridge Foothills, Swauk Liberty Corridor, Teanaway, and Manastash-Taneum — are concentrated in the forested western and northern portions of the county, where the great majority of the land area falls in the highest probability bin. The lowest values occur in Kittitas Valley, South Vantage-Auvil Corridor, and the Yakima River Canyon I-82 corridor, where agricultural and shrub-steppe cover dominates.

3.3.2.2 Susceptibility and Risk

Susceptibility — the vulnerability of a specific asset to wildfire of a given intensity — is the hardest of the three sides of the risk triangle to map, and the one the regional assessment addresses least well for county purposes. The PNRA developed response functions estimating the change in value of natural resources and built assets across six flame-length classes, but those functions were built to set land and resource management priorities on National Forest lands. The People and Property response function assigns negative effects to housing at every intensity level, differentiated only by housing density class. It does not distinguish between structures by construction type, defensible space, or condition, and it carries no information about access, egress, or suppression capacity. It is a regional weighting scheme, not a community susceptibility assessment.

This plan therefore develops susceptibility directly, at two scales.

At the community scale, each of the 19 plan units was assessed across four categories: fire risk, suppression capacity, evacuation, and home ignition zone condition. Field-assessed items were collected on the ground and include hydrant and draft-site availability, road and driveway width, grade, surface, and turnarounds, signage legibility, presence of hazardous materials, number of egress routes, lane counts, presence of livestock requiring multi-trip evacuation, and structure characteristics including roofing, siding, decking, fencing, and vegetation within the first thirty feet. These were combined with modeled measures derived from spatial and network analysis: the share of road mileage classified as non-survivable for evacuation, the proportion of unit area exposed to

radiant heat, mean wildfire exposure level, and the proportion of homes exposed to short-range embercast.

Field-assessed and modeled scores are reported as separate subtotals rather than merged into a single undifferentiated number, because on-the-ground observation and model output have different data lineages and different uncertainties. Together they produce a combined relative risk score for each plan unit, presented in the tables that follow.

At the parcel scale, assessment of individual structures — building materials, defensible space, and fuel loading on the property — provides susceptibility information at a resolution this plan does not attempt. Parcel-level assessment remains the responsibility of individual landowners, supported by the fire districts and by the defensible space and home hardening guidance in this plan. Community-scale ratings identify where that work matters most; they do not substitute for it.

With likelihood, intensity, and susceptibility all mapped, wildfire risk can be expressed as a relative score comparing plan units against one another. The scores in this plan are explicitly relative: they rank the 19 planning areas against each other within Kittitas County, and they are not calibrated to any external or absolute risk standard. A unit scoring in the lowest class is not low-risk in absolute terms — much of Kittitas County carries substantial wildfire hazard — but rather carries less relative risk than the other units assessed here. These rankings support prioritization of mitigation work, allocation of limited resources, and coordination among the fire districts, conservation districts, utilities/PSE, transportation/WSDOT, and land management agencies operating in the county.

3.3.3 Improve Risk Assessment Information

High quality, current risk assessment information is critical to the success of this planning effort. Data used in the risk assessment must have adequate quality and resolution to support accurate modeling. Fuel conditions in Kittitas County are changing in two directions that the modeled layers do not capture. In the forested western and northern portions of the county, within the Okanogan and Wenatchee National Forests, insect activity and susceptibility to insect and disease outbreaks are at their highest levels since 2018, with climate conditions and long term fire suppression identified as the primary drivers; the overstocked stands and elevated tree mortality that follow add standing dead and down woody fuel (USFS 2025). In the shrub-steppe and rangeland of the central and eastern county, cheatgrass and other introduced annual grasses continue to occupy ground disturbed by roads, development, recreation, and recent fire, replacing native perennials with a fine, horizontally continuous fuel bed that cures by July and carries fire earlier in the season. The county's own fire record is the clearest evidence of change: Boylston in 2018, Vantage Highway in 2022, and Ryegrass Coulee in 2026 all burned the same grass and shrub dominated corridors along I-90 and Vantage Highway and repeat fire at those return intervals converts shrub cover to annual grass rather than restoring it. None of these post-2017 footprints or their resulting vegetation are reflected

in the fuelscape used here. Assessing wildfire risk also requires detailed, accurate information on development patterns in the WUI, changes in fire suppression resources and methods, and the effects of recent fires. The following steps should be taken to improve risk assessment analysis and information.

1. **Update the modeled hazard layers to reflect post-2018 fire history and current fuel conditions.** The FSim outputs used in this plan rest on a fuelscape built from LANDFIRE 2014 data updated through the 2017 fire season. Recent fire footprints have altered fuel loading, canopy structure, and fire behavior potential across substantial portions of the county, and none are reflected in the modeled surfaces. Updated hazard layers should incorporate current LANDFIRE data and documented fire perimeters, with acreages and boundaries verified against Washington DNR fire statistics and the WFIGS perimeter dataset rather than incident reporting.
2. **Compile parcel-level assessment data to complete the risk assessment, improve first responder information, and support public engagement.** This plan assesses susceptibility at the community planning area scale, which identifies where mitigation matters most but cannot describe conditions at an individual property. Parcel-level data on building materials, defensible space, and on-site fuel loading would supply the missing resolution, and would give fire districts pre-incident information about structures they may be defending. It would also give residents a concrete starting point for mitigation on their own land.
3. **Integrate agricultural infrastructure and practices into future assessments.** Kittitas County's agricultural economy depends on the Kittitas Reclamation District and other irrigation districts for the water conveyance infrastructure that sustains production in the Kittitas Valley. Canals, laterals, pump stations, and their associated corridors function simultaneously as assets at risk, as fuel breaks, and in some cases as water sources for suppression. Agricultural land also produces seasonal fuel conditions — standing crops, post-harvest residue, roadside and ditch-bank vegetation — that shift substantially over the course of a fire season. Neither the infrastructure nor the seasonal fuel dynamics are represented in the modeled layers used here, and both should be characterized in a future update in coordination with the irrigation districts.

3.3.4 Risk Assessment Summary

Kittitas County's wildfire exposure is a question of timing rather than of if a fire will occur. The Jolly Mountain Fire demonstrated that in 2017: ignited by a lightning strike on August 11 in the Okanogan-Wenatchee National Forest northwest of Cle Elum, it could not be contained at initial attack due to terrain and firefighter safety concerns and burned until November 2 at 36,808 acres. At its peak roughly 4,000 residents were under evacuation orders, including the entire town of Roslyn — nearly 1,000 residences at Level 3 and approximately 1,200 at Level 2. The county and the City of

Ellensburg both declared states of emergency, and the county activated its Emergency Operations Center.

The county has burned repeatedly in the years since. The Evans Canyon Fire crossed into Kittitas County from Yakima County in late summer 2020 at roughly 69,900 acres. The Currier Canyon Fire burned north of Ellensburg in October 2024. In 2025, the Red Bridge Fire east of Cle Elum and the Lambert Road Fire in the Teanaway each prompted Level 3 evacuations. In July 2026 the Ryegrass Coulee Fire forced a full Level 3 evacuation of Vantage and destroyed at least one home, while the Three Queens Fire burned in steep terrain near Little Lake Kachess.

This plan responds to that record with a risk assessment developed for Kittitas County. Regional data supplied the fire behavior baseline. Each of the 19 community planning areas was then scored on conditions assessed on the ground and on modeled measures derived from spatial and network analysis of county road, structure, and response data, producing relative risk rankings specific to Kittitas County rather than read directly from a regional product. Those results are presented below.

The regional hazard layers underlying portions of that analysis remain a limitation. Burn probability, flame length, and crown fire type come from the 2023 update to the Pacific Northwest Quantitative Wildfire Risk Assessment, whose fuelscape reflects the landscape as of 2022. Fires since that date are not represented: Currier Canyon in 2024, Red Bridge and Lambert Road in 2025, and Ryegrass Coulee and Three Queens in 2026. Updating those surfaces requires new fuels mapping and re-analysis, which is identified as a priority action in this plan rather than a prerequisite to adopting it.

3.4 Community Planning Areas Relative Risks

The Kittitas County CWPP is multi-jurisdictional and addresses all lands and all ownership within the boundaries of the plan area.

HFI and HFRA define a "community at risk" from wildland fire by the following parameters:

- A group of homes and other structures with basic infrastructure and services (such as utilities and collectively maintained transportation routes) in or adjacent to federal land
- Has conditions conducive to large-scale wildland fire
- Faces a significant threat to highly valued resources and assets because of wildland fire

As noted, the KFACC CWPP subcommittee approved the existing boundaries of the Communities at Risk to identify these nineteen Community Planning Areas at Risk seen on the following page.

In all nineteen identified sub-regions, the 1.5-mile WUI boundary follows the CWPP planning area boundary. For the purposes of this CWPP, the WUI boundary and the CWPP planning area describe a similar geographic region; the planning boundaries are more general, however, and include private property that may be isolated from the WUI boundary itself. The Kittitas County WUI boundary encompasses approximately 682,551 acres, or 1,067 square miles.

Figure 10

Community Planning Areas at Risk in the WUI

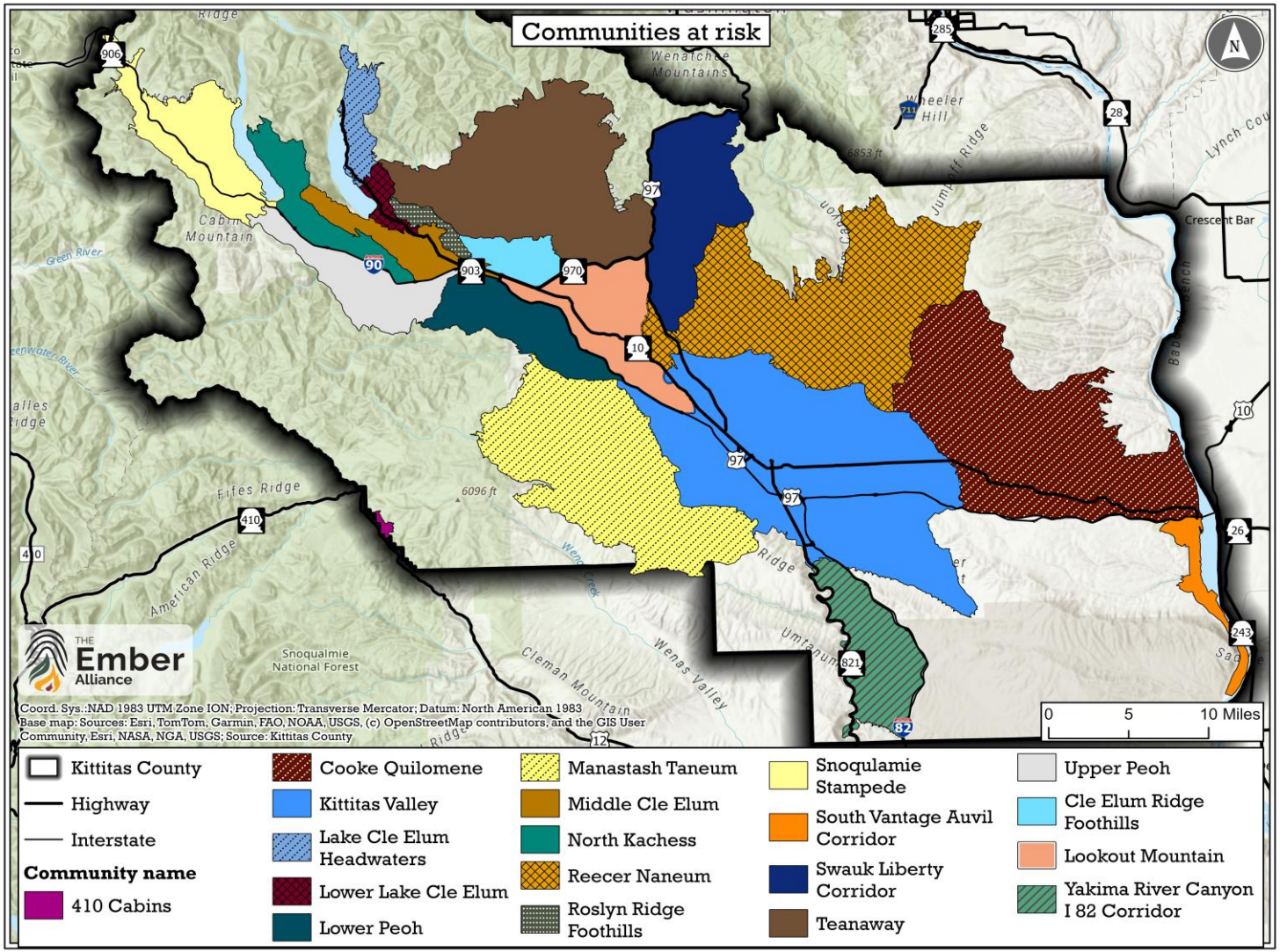


Table 2

Community Planning Area Fire Coverage

Community Planning Area Name	Acres	Plan Unit	Fire District Coverage
Lake Cle Elum Headwaters	9,284.81	1	USFS, Washington Department of Fish and Wildlife, Kittitas Fire District No. 6 (Ronald), Kittitas Fire District No. 7 (Cle Elum)
Lower Lake Cle Elum	4,163.78	2	City or Municipality, USFS, Kittitas Fire District No. 6 (Ronald), Kittitas Fire District No. 7 (Cle Elum)
Roslyn Ridge Foothills	3,675.60	3	Kittitas Fire District No. 6 (Ronald), Kittitas Fire District No. 7 (Cle Elum), DNR
Manastash-Taneum	76,778.24	4	USFS, Washington Department of Fish and Wildlife, DNR, Kittitas Fire District 1 (Rural Thorp), Kittitas Valley Fire and Rescue (Fire District 2)
Cle Elum Ridge Foothills	9,369.33	5	DNR, City or Municipality, City of Cle Elum 51-1, Kittitas Fire District No. 7 (Cle Elum)
Teanaway	72,971.47	6	USFS, Washington Department of Fish and Wildlife, Kittitas Fire District No. 6 (Ronald), Kittitas Fire District No. 7 (Cle Elum), DNR
Swauk Liberty Corridor	37,053.10	7	BLM, USFS, Kittitas Fire District No. 7 (Cle Elum), Kittitas Fire District No. 1 (Rural Thorp), Kittitas Valley Fire and Rescue (Fire District 2), DNR
Lookout Mountain	27,117.74	8	City or Municipality, BLM, Washington Department of Fish and Wildlife, State Parks and Recreation Commission, Kittitas Fire District No. 7 (Cle Elum), Kittitas Fire District No. 1 (Rural Thorp), Kittitas Valley Fire and Rescue (Fire District 2), DNR
Reecer Naneum	91,041.83	9	DNR, City or Municipality, BLM, USFS, Washington Department of Fish and Wildlife, Kittitas Fire District No. 7 (Cle Elum), Kittitas Fire District No. 1 (Rural Thorp), Kittitas Valley Fire and Rescue (Fire District 2)
Cooke Quilomene	95,086.58	10	DNR, County, BLM, Washington Fish and Wildlife, State Parks and Recreation Commission, Kittitas Fire District No. 4 (Vantage), Kittitas Valley Fire and Rescue (Fire District 2)

Community Planning Area Name	Acres	Plan Unit	Fire District Coverage
Kittitas Valley	122,192.60	11	City or Municipality, County, State University, BLM, US Bureau of Reclamation, US Department of Defense, Washington Fish and Wildlife, State Parks and Recreation Commission, Kittitas Fire District No. 1 (Rural Thorp), Kittitas Valley Fire and Rescue (Fire District 2), Snoqualmie Pass Fire and Rescue, Fire District No. 3 (Easton), DNR, USFS, TNC
South Vantage Auvil Corridor	7,051.57	12	Army Corps of Engineers, County, BLM, Department of Defense, State Parks and Recreation Commission, DNR, Kittitas Fire District No. 4 (Vantage)
Yakima River Canyon I 82 Corridor	26,106.69	13	BLM, Department of Defense, Washington Fish and Wildlife, DNR, Kittitas Valley Fire and Rescue (Fire District 2)
Lower Peoh	22,635.99	14	City or Municipality, BLM, USFS, Washington Fish and Wildlife, State Parks and Recreation Commission, DNR, City of Cle Elum 51-1, Kittitas Fire District No. 1 (Rural Thorp), Kittitas Fire District No. 7 (Cle Elum)
Upper Peoh	20,733.59	15	City or Municipality, BLM, USFS, Washington Fish and Wildlife, State Parks and Recreation Commission, Kittitas Fire District No. 7 (Cle Elum), City of Cle Elum 51-1, Kittitas Fire District No. 3 (Easton), DNR
Snoqualmie Stampede	28,724.95	16	USFS, Washington Department of Fish and Wildlife, State Parks and Recreation Commission, DNR, Kittitas Fire District No. 3 (Easton), Snoqualmie Pass Fire and Rescue
North Kachess	15,483.69	17	USFS, DNR, Washington Fish and Wildlife, State Parks and Recreation Commission, Kittitas Fire District No. 3 (Easton), Kittitas Fire District No. 7 (Cle Elum), City of Cle Elum 51-1
Middle Cle Elum	12,546.59	18	City or Municipality, County, USFS, DNR, Kittitas Fire District No. 3 (Easton), Kittitas Fire District No. 6 (Ronald), Kittitas Fire District No. 7 (Cle Elum), City of Cle Elum 51-1, City of Roslyn 57-1
410 Cabins	532.42	19	USFS

Figure 11
Overall Relative Risk for Kittitas County

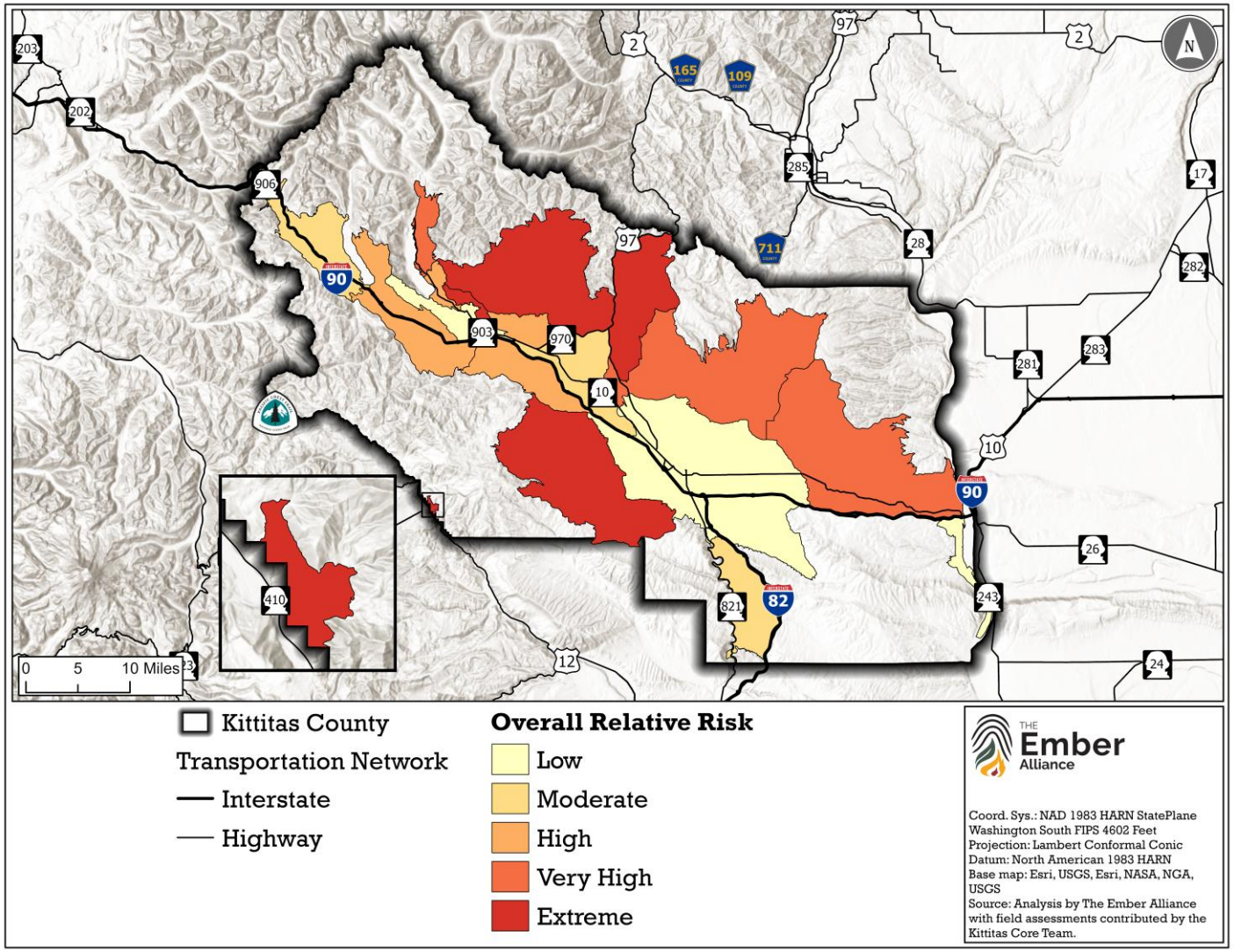
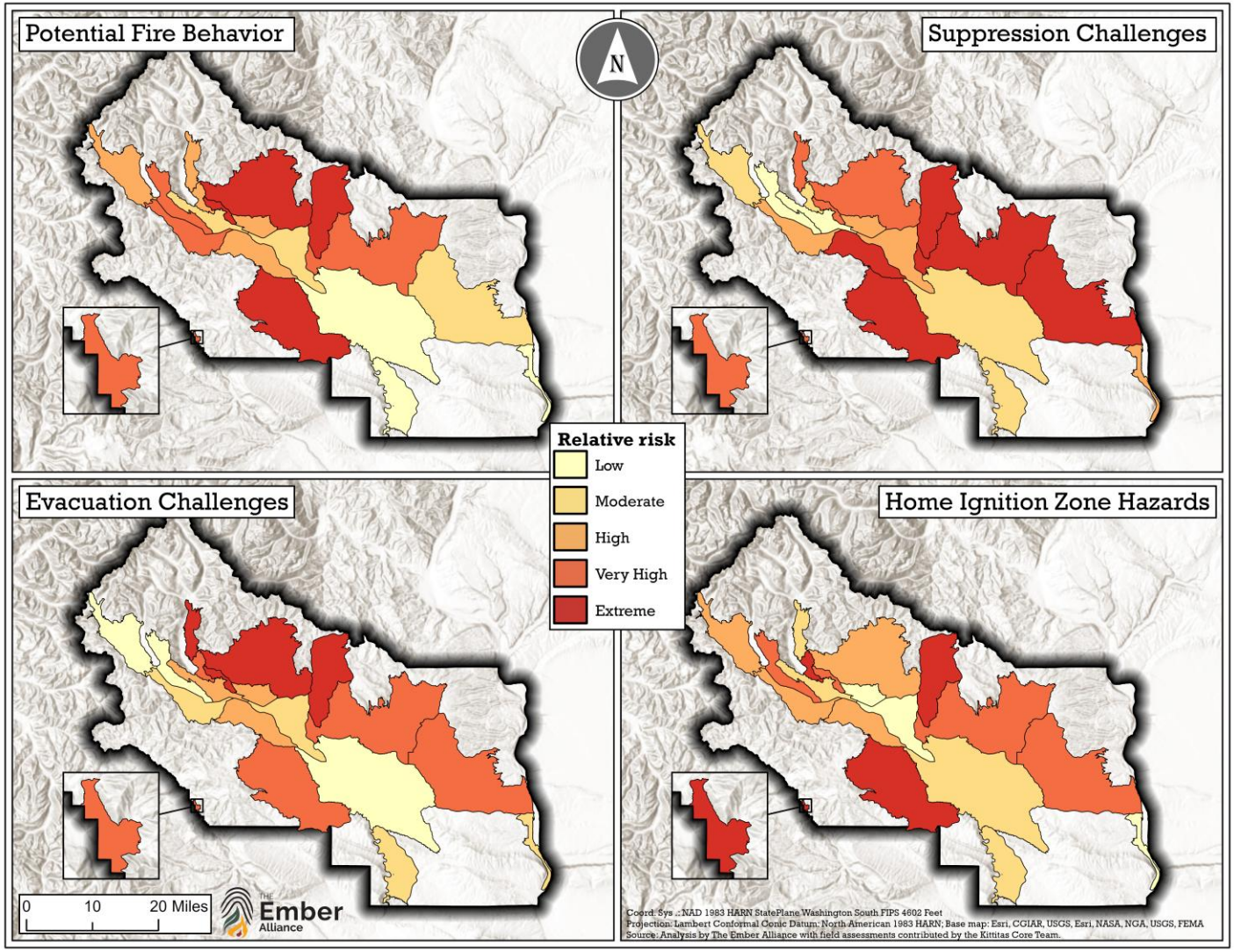


Figure 12
Relative Risk Categories for Kittitas County



3.4.1 Risk Rating Approach

An important part of the county's 2026 CWPP was assessing relative risk among plan units to help prioritize hazard mitigation and develop priority plan unit-specific recommendations. Plan units receiving a "high" relative rating have risk factors that are lower than risk factors in plan units with an "extreme" rating, but they are still areas with wildfire hazards. Relative risk was assessed in four categories: potential fire behavior, fire suppression challenges (e.g., limited hydrant availability and engine access), evacuation challenges, and home ignition zone hazards.

This assessment was based on predictions of fire behavior, radiant heat and ember cast exposure, roadway survivability, relative evacuation times, and local knowledge from the CWPP Advisory Committee and other fire and fuel professionals in the county about evacuation hazards, suppression challenges, and hazards in the home ignition zone. The Ember Alliance developed a rating scale specifically for the county based on the range of values observed across the community (Table 3). This relative risk assessment is not intended or suitable for comparing Kittitas County to other areas in Washington or the United States.

Table 3

Relative Risk Rating Values for Kittitas County

Hazard category	Max. points possible	Percent weight for overall risk	Low	Moderate	High	Very High	Extreme
A. Fire behavior	38	18.5%	<20	20-26	27-29	30-32	≥33
B. Fire suppression challenges	50	24.4%	<23	23-28	29-34	35-36	≥37
C. Evacuation hazards	45	22%	<23	23-25	26-29	30-35	≥36
D. Home ignition zone hazards	72	35.1%	<43	43-44	45-48	49-51	≥52
Overall risk	205	100%	<109	109-122	123-142	143-154	≥155

Lake Cle Elum Headwaters

There are two primary fire districts within the Lake Cle Elum Headwaters boundary: Kittitas County Fire Protection District No. 6, covering Lake Cle Elum, Ronald, and the headwaters region, and Kittitas County Fire Protection District No. 7, which covers a larger surrounding area of Cle Elum, Roslyn, Teanaway, and Salmon La Sac while also providing mutual aid and overlapping response capacity. There is also USFS and Washington Department of Fish and Wildlife land in this plan area. Lake Cle Elum sits to the west of this plan area, and the unit resides in the northern part of Kittitas County with primarily moist-mixed dense conifer forests.



Figure 13. *The image to the right is taken from Figure 10: Community Planning Areas at Risk in the WUI. Lake Cle Elum Headwaters is the plan unit shaped in light blue with black dots.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Lake Cle Elum Headwaters Overall relative risk: Very High	High	Moderate	Very High	Extreme
	Specific challenges / hazards: • High potential, steep north-facing slopes and terrain and heavy fuels. • Rural, lack of water infrastructure (hydrants and natural water sources) • One-way in and one-way out (Salmon La Sac) and limited communication infrastructure; Effectively a single primary route out of the unit. • Popular and high recreation destination; risk of road congestion from recreation users. • Morgan Creek, newer communities, that adhere to IWUIC code standards with sprinkled NFPA 13D interior sprinkler systems and Class A roof coverings. Mixed defensible space adherence and structures mid-slope. • 4% of the burnable area could experience high-severity crown fire under extreme conditions. • Modeled flame lengths; average 23 feet — crowning and spotting are likely and direct attack is not viable. • 56% of total road length has potentially non-survivable conditions. • 83% of the unit is exposed to radiant heat from burning vegetation. • Area has experienced post-fire impacts from post-fire debris flows (incurred damages on private property to structures and road infrastructure) and community exists on alluvial fans identified by WALERT and Washington Geological Survey.			

Lower Lake Cle Elum

Lower Lake Cle Elum community planning area is about 4,100 acres in size, and Kittitas County Fire Protection District No. 6, covering Lake Cle Elum, Ronald, and the headwaters region, and Kittitas County Fire Protection District No. 7, which covers a larger surrounding area of Cle Elum, Roslyn, Teanaway, and Salmon La Sac, are the two fire districts that cover this plan area. These stations also provide mutual aid and overlapping response capacity to the surrounding areas. There is also USFS land in this plan area. Lake Cle Elum sits to the west of this plan unit, and it borders four other plan units.

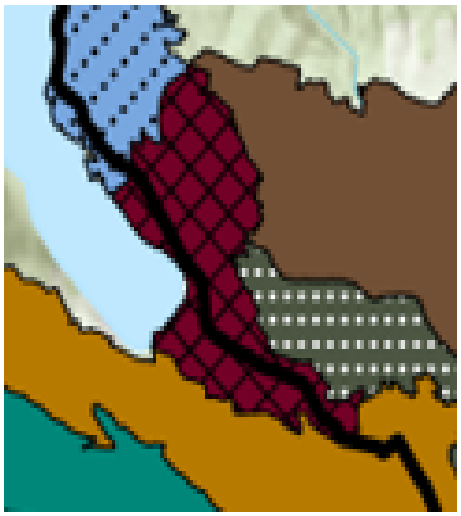


Figure 14. *The image to the right is taken from Figure 10: Community Planning Areas at Risk in the WUI. Lower Lake Cle Elum is the maroon plan unit shape with black cross-hatching.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Lower Lake Cle Elum Overall relative risk: High	High	Extreme	Moderate	Very High
	Specific challenges / hazards: • Heavy timber and conifer fuels, with flat topography and higher structure and built density. • Utility infrastructure: currently are in process of removing overhead lines and burying powerlines. Remaining overhead utilities are in process of being replaced by metal, noncombustible infrastructure. Paved roads in Ronald, some driveways are gravel but mostly in this smaller planning area it is mostly paved access roads and addresses that are well marked. • One-way in and one-way out; limited road infrastructure for evacuation and high potential for congestion during emergencies from mix of users (recreation and transient users, primary and secondary residences). • Built structures majority consist of metal due to snow load requirements; with mixed construction (siding and other build characteristics). Small, dense lots with overlapping HIZ and propane and other hazards known to be within defensible space. Federal and state agencies have prioritized and implemented fuels reduction across this area; as it is a high-priority watershed identified in the 20-Year Eastern Washington Forest Health Strategic Plan. • Ecological, aquatic, and cultural values (e.g., tribal interests) are present in this area. • 2% of the burnable area could experience high-severity crown fire under extreme conditions. • Modeled flame lengths average 37 feet — control efforts at the head of the fire are likely to fail. • 80% of total road length has potentially non-survivable conditions. • Effectively a single primary route out of the unit. • 92% of the unit is exposed to radiant heat from burning vegetation.			

Roslyn Ridge Foothills

Roslyn Ridge Foothills community planning area is about 3, 600 acres in size. There are two fire districts in the Roslyn Ridge Foothills plan area: Kittitas County Fire Protection District No. 6, covering Lake Cle Elum, Ronald, and the headwaters region, and Kittitas County Fire Protection District No. 7, which covers a larger surrounding area of Cle Elum, Roslyn, Teanaway, and Salmon La Sac. In addition to fire district coverage, there is some USFS land within this boundary. Roslyn Ridge Foothills sits just southeast of Lake Cle Elum along the 903 corridor and to the northeast of I-90.



Figure 15. *The image to the right is taken from Figure 10: Community Planning Areas at Risk in the WUI. Roslyn Ridge Foothills is a gray plan unit shaped with white dots.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Roslyn Ridge Foothills Overall relative risk: Extreme	Extreme	Very High	Very High	Extreme
	Specific challenges / hazards: • Mostly foothills/forested area surrounding Roslyn and Ronald. Limited structures, heavy fuels. Area has been a focal point for prescribed fire, mastication, forest restoration and wildland fire risk reduction. • Limited public infrastructure (water (few hydrants and drafting areas) and roads (e.g., gravel, two-track)). • Evacuation concerns recreational users, and connectivity between popular public land via main ridge road. Limited turn arounds and mix of residential developments. • Limited defensible space conformance but higher presence of metal roof construction due to snow load and/or IWUIC adoption. Mixed construction (siding material, decks, etc). • High transmission opportunity between HIZ to neighboring properties. • Federal and state agencies have prioritized and implemented fuels reduction across this area; as it is a high-priority watershed identified in the 20-Year Eastern Washington Forest Health Strategic Plan • 77% of the burnable area could support passive crown fire under extreme conditions. • Modeled flame lengths average 43 feet — control efforts at the head of the fire are likely to fail. • 95% of total road length has potentially non-survivable conditions. • Effectively a single primary route out of the unit. • 99% of the unit is exposed to radiant heat from burning vegetation.			

Manastash-Taneum

The Manastash-Taneum community planning area is one of the larger WUI community planning areas, spanning over 68,000 acres. The Rural Thorp (District 1) and Kittitas Valley Fire and Rescue (District 2) Kittitas fire districts cover the response in this area. USFS, Washington Department of Fish and Wildlife, and DNR have land within the boundaries of this sub region as well. This planning area sits to the southwest of Kittitas County, south of the 10 and northeast of the Wenas and Selah communities.

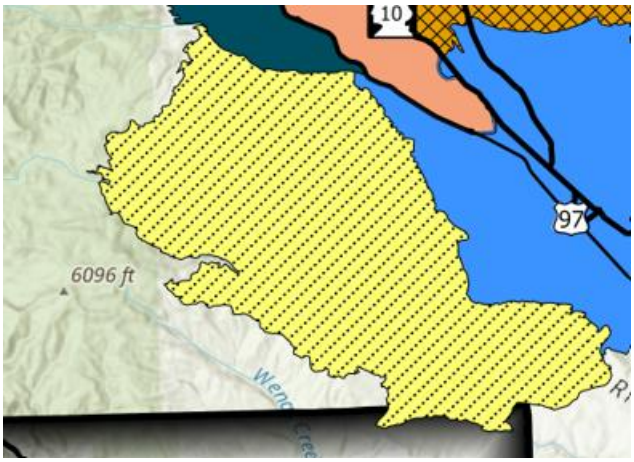


Figure 16. *The image above is taken from Figure 10: Community Planning Areas at Risk in the WUI. Manastash-Taneum is the yellow plan unit shaped with black dots.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Manastash-Taneum Overall relative risk: Extreme	Extreme	Extreme	Extreme	Very High
Specific challenges / hazards: • Transition between fuel types like dry mixed conifer (ponderosa pine dominant) to higher elevation mixed conifer species and annual and perennial grasses with a high rate of spread. • Heavy motorized recreation use throughout the planning unit. • Limited public infrastructure and primarily one-way in; one-way out roads. • Topography includes steep box canyons, south facing slopes, and other challenging topographical features during fire suppression efforts. • Rural residential density with limited defensible space. • Federal and state agencies have prioritized and implemented fuels reduction across this area; as it is a high-priority watershed identified in the 20-Year Eastern Washington Forest Health Strategic Plan • Ecological, aquatic and cultural values (e.g., tribal interests) at risk are present in this area. • 2% of the burnable area could experience high-severity crown fire under extreme conditions. • Modeled flame lengths average 19 feet — crowning and spotting are likely and direct attack is not viable. • 51% of total road length has potentially non-survivable conditions. • Effectively a single primary route out of the unit. • 55% of the unit is exposed to radiant heat from burning vegetation.				

Cle Elum Ridge Foothills

The Cle Elum Ridge Foothills WUI community planning area spans 9,300 acres. City of Cle Elum Volunteer Fire Department and Kittitas County Fire District No. 7 are the fire resources that are responsible for the coverage in this area. Teanaway Community Forest managed by the WA DNR and state managed trust land is on the northern boundary of this community planning area. This highway borders Highway 903 to the north.

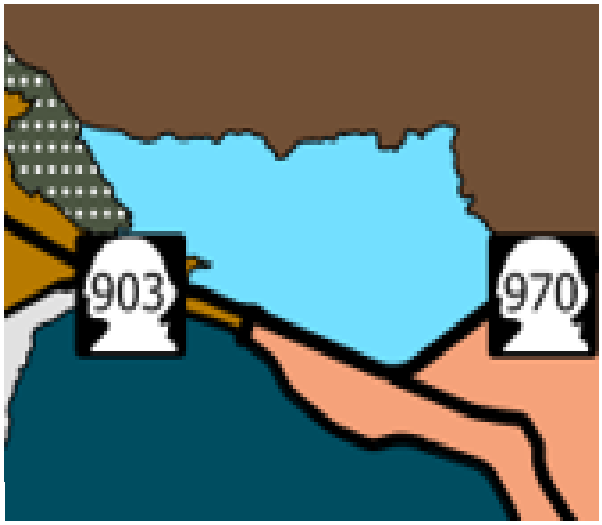


Figure 17. *The image to the right is taken from Figure 10: Community Planning Areas at Risk in the WUI. Cle Elum Ridge Foothills is the plan unit shape in light blue.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Cle Elum Ridge Foothills Overall relative risk: High	High	Low	High	High
	Specific challenges / hazards: • Majority of homes are located mid-slope, surrounded by trees. Heavy fuels with powerlines running throughout as well as the high voltage transmission lines. • Some newer neighborhoods have hydrants and wide access roads, but majority has no hydrant and draft sites are very limited. Tenders and drop tanks are always needed for fires. • Mostly Class A composite or metal roof due to snow or constructed after IWUIC adoption. Mix of wood/metal/fiber cement siding. Most 0-5 foot zones have work that needs to be done, same with adjacent defensible space. Most have wood piles, sheds, or propane within 30 feet of home. • 33% of the burnable area could support passive crown fire under extreme conditions. • Modeled flame lengths average 14 feet — too intense for direct attack by hand crews. • 40% of total road length has potentially non-survivable conditions. • 46% of the unit is exposed to radiant heat from burning vegetation. • 15% of structures are exposed to embers from burning vegetation. • Little or no hydrated water supply; suppression depends on tenders and drafting.			

Teanaway

The Teanaway community planning area is one of the larger plan areas, just over 50,000 acres. Kittitas Fire District No 6, which covers the headwaters region, and Kittitas Fire District No. 7, which covers surrounding Cle Elum, Roslyn, and Salmon La Sac as well, are the two resources that respond to calls in this plan area alongside mutual aid agreements. There is also USFS, DNR, and Washington Department of Fish and Wildlife land included within the boundaries. Teanaway plan unit sits to the north/northwest of Kittitas County. The southeast border of the plan unit directly borders the north side of Highway 970 and 97.

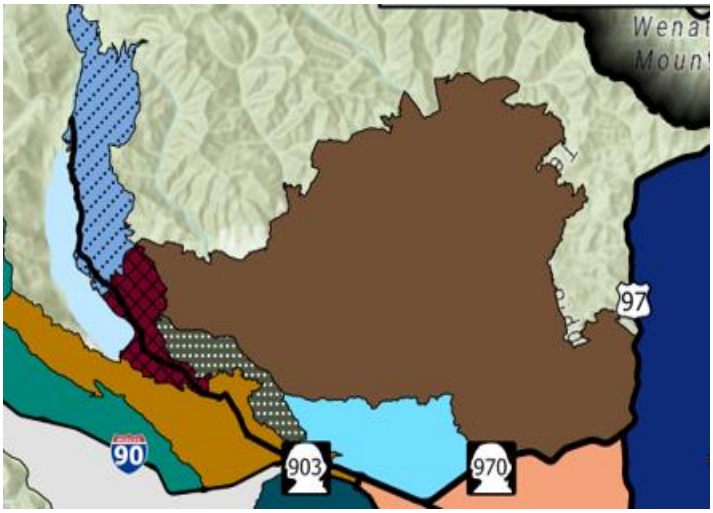


Figure 18. *The image to the right is taken from Figure 10: Community Planning Areas at Risk in the WUI. Teanaway is the plan unit shaped in brown.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Teanaway Overall relative risk: Extreme	Extreme	High	Very High	Extreme
Specific challenges / hazards: • Powerlines run adjacent to Teanaway road. • Irrigated fields subject to drought and water availability, upslope dry conifer mixed pine forests. • Minimal defensible space in most areas except for the Teanaway Valley where it's farmland. • Heavy motorized recreation use throughout the planning unit. • Aquatic, ecological and cultural values (e.g., tribal interests) at risk are present in this area. • 5% of the burnable area could experience high-severity crown fire under extreme conditions. • Modeled flame lengths, average 27 feet — control efforts at the head of the fire are likely to fail. • 57% of total road length has potentially non-survivable conditions. • Effectively a single primary route out of the unit. • 76% of the unit is exposed to radiant heat from burning vegetation. • 31% of structures are exposed to embers from burning vegetation.				

Swauk Liberty Corridor

Swauk Liberty Corridor is a community planning area that is around 39,000 acres. There are three Kittitas Fire Districts that cover parts of this area: Kittitas Valley Fire and Rescue (Fire District 2), Rural Thorp (Kittitas Fire District 1), and Cle Elum (Kittitas Fire District 7). The USFS, BLM, and DNR have land interspersed within the plan unit boundaries as well, making this a cross-jurisdictional area, like many of the other planning areas in the county. It sits to the north of Kittitas County and directly abuts Highway 97 to the west.

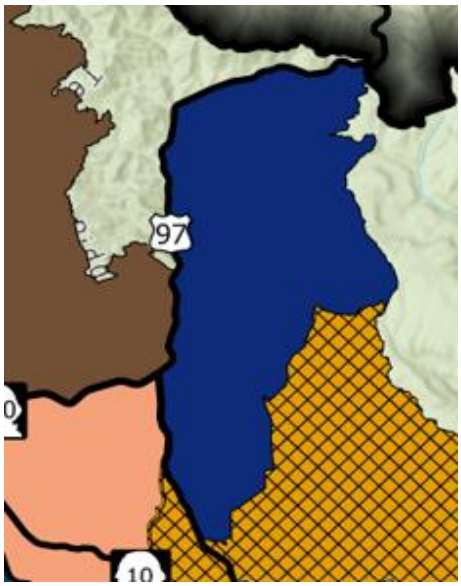


Figure 19. *The image to the right is taken from Figure 10: Community Planning Areas at Risk in the WUI. Swauk Liberty Corridor is the plan unit shaped in dark blue.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Swauk Liberty Corridor Overall relative risk: Extreme	Extreme	Extreme	Extreme	Extreme
	Specific challenges / hazards: • High potential, heavy fuels, steep rough terrain. • Swauk and First Creek run parallel to highway but limited drafting sites; important aquatic and terrestrial habitats. • Heavy motorized recreation use throughout the planning unit. • Blewett Pass, which is part of Highway 97, is one way each direction. Heavy fuels and no survivable roadways in majority of this area. • Mixed conifer stands near homes. Varies between old hunting and recreation cabins, a lot of metal roofs, but older cabins and overgrown parcels. • 4% of the burnable area could experience high-severity crown fire under extreme conditions. • Modeled flame lengths, average 27 feet — control efforts at the head of the fire are likely to fail. • 57% of total road length has potentially non-survivable conditions. • Effectively a single primary route out of the unit. • 80% of the unit is exposed to radiant heat from burning vegetation			

Lookout Mountain

Lookout Mountain plan unit is over 27,000 acres in size and has multiple jurisdictions of land within it. BLM, State Parks and Recreation Commission, and Washington Department of Fish and Wildlife all have land that sits within the boundaries of this plan unit. The fire district coverage is split amongst three districts: Kittitas Fire District 7 (Cle Elum), Kittitas Fire District 1 (Rural Thorp), and Kittitas Valley Fire and Rescue (District 2). The plan area is centrally located in the county, with Highway 10 running through the center of the plan area and Highway 970 bordering the north edge.

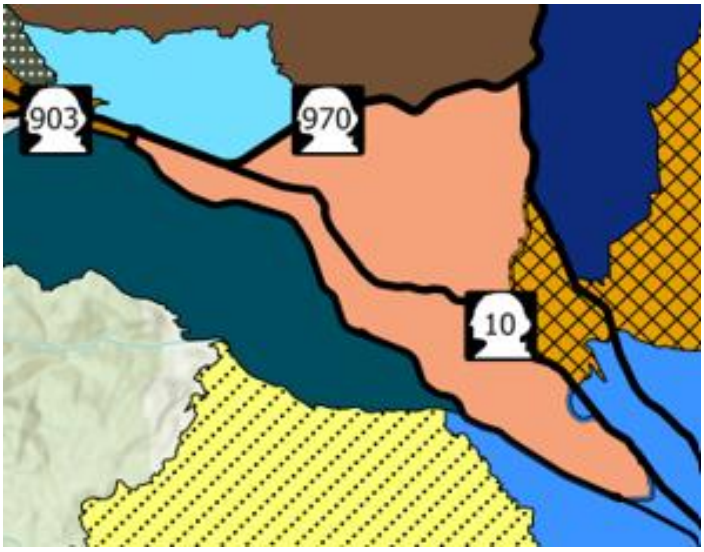


Figure 20. *The image above is taken from Figure 10: Community Planning Areas at Risk in the WUI. Lookout Mountain is the plan unit shaped in light pink.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Lookout Mountain Overall relative risk: Moderate	Moderate	Low	High	Moderate
	Specific challenges / hazards: • Higher residential density is in the community of Thorp, but many homes are present in the intermixed with various fuel types (dry mixed conifer) and rangeland, sagebrush fuels. Properties are rural in nature with farms, livestock, animals, and outbuildings that support agriculture and propane tanks. Reflective address signs are mostly present. • Irrigation infrastructure has a high presence in this area (KRD, Cascade Irrigation District). Various drafting site opportunities due to irrigation infrastructure. • Heavy transportation corridor that provides key connectivity between eastern Washington and western Washington from I-90 and Hwy 10 that bisects the planning unit. Traffic congestion is a major concern not only for travelers using this transportation corridor, but the road infrastructure for first responders, residences and communities that would be utilizing the same transportation corridors during emergencies. • Most homes have work to do in 0-5, majority have propane tanks within 30 feet and/or woodsheds. • 1% of the burnable area could experience high-severity crown fire under extreme conditions. • Modeled flame lengths average 8 feet — too intense for direct attack by hand crews. • 10% of total road length has potentially non-survivable conditions. • 28% of the unit is exposed to radiant heat from burning vegetation. • 23% of structures are exposed to embers from burning vegetation.			

Reecer Naneum

Reecer Naneum covers approximately 88,904 square miles. And falls within Kittitas Fire District No. 1 (Rural Thorp) and Kittitas Valley Fire & Rescue (formerly Kittitas County Fire District #2), whose overall service area covers approximately 88,904 square miles for fire suppression and 1,200 square miles for Emergency Medical Services (EMS). This area is northeast of Ellensburg in Kittitas County and is a part of the Yakima River watershed. Much of the lower area of this unit is private agricultural and residential land.



***Figure 21**. The image above is taken from Figure 10: Community Planning Areas at Risk in the WUI. Reecer Naneum is the plan unit shape in orange-brown with black cross-hatching.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Reecer Naneum Overall relative risk: Very High	Very High	Very High	Extreme	Very High
Specific challenges / hazards: • Higher potential, more frequent fire return intervals, light flashy fuel mixed with heavy fuels. Intermix of land uses like agriculture, rangeland grazing, and residential uses interspersed. Heavy motorized recreation use through out the planning unit. Planning unit is significant for state lands ownership, Judy's Tamarack Forest (ecological values), cultural and aquatic values (Naneum). • Residential structures are placed mostly on mid-slope and ridgetops. • County road infrastructure transitions to state and federal road management with various levels of maintenance. • Utility infrastructure primarily overhead near structures and roads. High Transmission Voltage lines and buried natural gas pipelines present in this planning units. • Home Ignition Zone needs more work overall in this area. • 1% of the burnable area could experience high-severity crown fire under extreme conditions. • Modeled flame lengths average 16 feet — crowning and spotting are likely and direct attack is not viable. • 36% of total road length has potentially non-survivable conditions. • Effectively a single primary route out of the unit. • 44% of the unit is exposed to radiant heat from burning vegetation.				

Cooke-Quilomene

East of the Yakima Valley, near the Columbia River, the Cooke-Quilomene plan unit encompasses the Murray Wildlife Area, the Arthur Coffin Game reserve, and the adjacent Colockum Wildlife Area is a documented mix of WDFW, DNR, and BLM land. 95,032 acers in these areas are served by DNR, County, BLM, Washington Fish and Wildlife, State Parks and Recreation Commission, Kittitas Fire District No. 4 (Vantage), Kittitas Valley Fire and Rescue (Fire District 2).



Figure 22. *The image above is taken from Figure 10: Community Planning Areas at Risk in the WUI. Cooke-Quilomene is the plan unit shaped in brown with white dots.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Cooke-Quilomene Overall relative risk: Very High	Moderate	Very High	Extreme	Very High
	Specific challenges / hazards: • Modeled flame lengths average 7 feet — generally within the range of direct attack. • 15% of total road length has potentially non-survivable conditions: Effectively a single primary route out of the unit. • 25% of the unit is exposed to radiant heat from burning vegetation. • 14% of structures are exposed to embers from burning vegetation. • Utility infrastructure is primarily overhead near structures and roads. High Transmission Voltage lines, wind farms (Wild Horse Wind Facility, and XXX name), and buried natural gas pipelines present in this planning units. • Dry mixed ponderosa pine in the higher elevations that transition to dominant sagebrush shrub steppe: Near Vantage, light flashy fuels and wind alignment. Annual fire occurrences cause impacts to I-90 (visibility, congestion, closures), recreational impacts and/or housing. • Planning unit has high significance of cultural values to nearby tribes, while land ownership is mostly private, foods, hunting and other values have remained of cultural importance. • Planning unit is very popular for motorized recreation and hunting. • Historical large fire occurrence in the area (Colockum Tarps 2013) • Limited road infrastructure and conditions, evacuation orders are not easily performed. • Limited cell phone connectivity, however, communications infrastructure (e.g., Whiskey) is present for emergency operations. • Planning unit is rural residential with various construction designs (homesteading) to recreational cabins.			

Kittitas Valley

Kittitas Valley is served primarily by Kittitas Fire District No. 1 (Rural Thorp), Kittitas Valley Fire and Rescue (Fire District 2), Snoqualmie Pass Fire and Rescue, Fire District No. 3 (Easton). This areas also spans roughly 1,200 square miles for Emergency Medical Services (EMS). The area is predominantly a mix of private agricultural and residential land (particularly in the irrigated valley floor around Ellensburg and Kittitas) with some public land, state trust land managed by Washington DNR, along with federal holdings (USFS, BLM), concentrated in the surrounding foothills and higher terrain that spans approximately 122,646 acres.

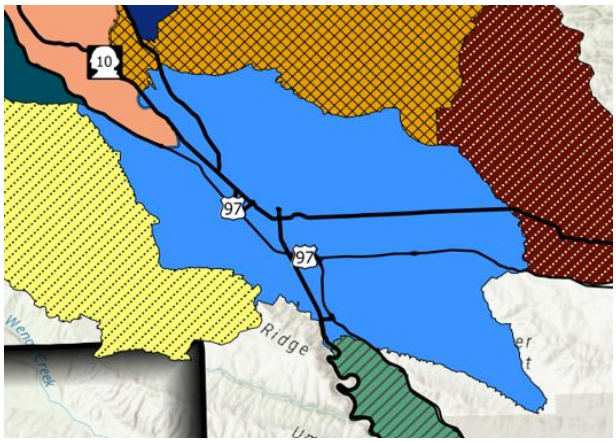


***Figure 23**. The image above is taken from Figure 10: Community Planning Areas at Risk in the WUI. Kittitas Valley is the plan unit shaped in light blue.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Kittitas Valley Overall relative risk: Low	Low	Moderate	Moderate	Low
	Specific challenges / hazards: • Various utility and public infrastructure on the valley floor. • Modeled flame lengths average 4 feet — generally within the range of direct attack. • 1% of the unit is exposed to radiant heat from burning vegetation. • Highest presence of public infrastructure (e.g., hydrants) however outside of immediate community areas, reliance on irrigation for drafting water sources. • Highest presence of public infrastructure (e.g., hydrants) however outside of immediate community areas, reliance on irrigation for drafting water sources. • Multiple egress options available during evacuations. • Property damages and loss has occurred in smaller residential densities (1-5 residential homes) between pasture and residential structures in this planning unit. • HIZ's are more urban and suburban residential in nature with privacy screening overlapping HIZ zones and smaller lot sizes. • Heavy livestock and agricultural values and considerations for wildfire varying from rangeland grazing to commercial agricultural cultivation (e.g, timothy hay, and other agricultural products).			

South Vantage Auvil Corridor

The South Vantage/Auvil Corridor planning area spans 6,959 acres in the far southeast corner of Kittitas County, along the Columbia River. Land within this area is a patchwork of public and private ownership, including holdings managed by the Army Corps of Engineers, Kittitas County, the Bureau of Land Management (BLM), the Department of Defense, the Washington State Parks and Recreation Commission, and the Washington Department of Natural Resources (DNR). Fire protection for the planning area is provided by Kittitas County Fire District No. 4 (Vantage).

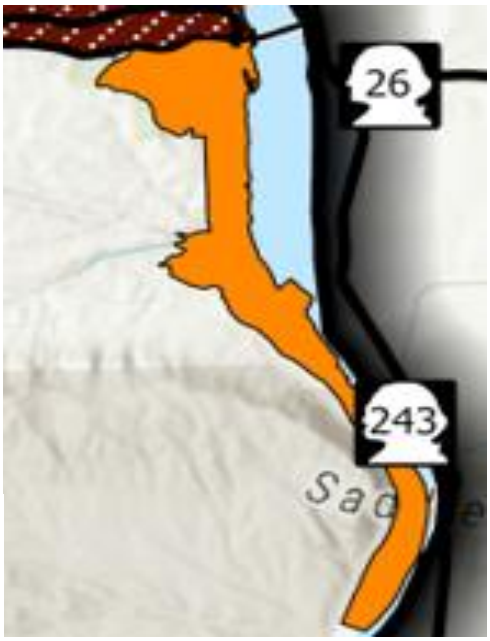


Figure 24. *The image to the right is taken from Figure 10: Community Planning Areas at Risk in the WUI. South Vantage Auvil Corridor is the plan unit shaped in orange.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
South Vantage Auvil Corridor Overall relative risk: Low	Low	Low	High	Moderate
	Specific challenges / hazards: • Light flashy fuels, wind alignment, sage brush. Annual fire occurrences cause impacts to I-90 (visibility, congestion, closures), recreational impacts and/or housing. • One way in; one way out egress. Longer response times due to limited fire suppression resources. • Commercial, agricultural, and recreation values at risk. • Evacuation considerations may consider shelter-in place due to seasonal populations (farm workers and/or recreational users) high potential rate of spread and wind-driven fire behavior. • Privacy and wind breaks like poplars used for shade and wind breaks, however, can compromise HIZ zones, and increase potential of ember cast. Additional HIZ considerations and mitigations for this area due to construction type (residential characteristics) • Modeled flame lengths average 5 feet — generally within the range of direct attack. • 8% of total road length has potentially non-survivable conditions. • 11% of the unit is exposed to radiant heat from burning vegetation. • 6% of structures are exposed to embers from burning vegetation. • Livestock present that would require multiple trips to evacuate.			

Yakima River Canyon I-82 Corridor

The Yakima River Canyon I-82 Corridor is served by BLM, Department of Defense, Washington Fish and Wildlife, DNR, Kittitas Valley Fire and Rescue (Fire District 2) for fire protection. This 27-mile canyon is carved by the Yakima River and is surrounded by desert hills and basalt cliffs in Kittitas County. WDFW, DNR, BLM, and U.S. Army Corps of Engineers), fire protection in unincorporated areas of fire districts are present.



Figure 25. *The image above is taken from Figure 10: Community Planning Areas at Risk in the WUI. Yakima River Canyon I-82 Corridor is the plan unit shape in mint green with gray stripes.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Yakima River Canyon I-82 Corridor Overall relative risk: Moderate	Low	Moderate	Moderate	Moderate
	Specific challenges / hazards: • Light flashy fuels, wind alignment, sage brush. Annual fire occurrences cause impacts to I-82 (visibility, congestion, closures), recreational impacts and/or housing. • Residential structures are often mid-slope, ridge tops. • This planning unit is a popular river recreation site connecting multiple public land ownerships (BLM among others) and irrigation infrastructure (Roza Irrigation Dam). • Commercial, agricultural, and recreation values at risk. • Evacuation considerations may consider shelter-in place due to seasonal populations (farm workers and/or recreational users) high potential rate of spread and wind-driven fire behavior. • Highway 871 and Interstate I-82 is a primary north-south transportation corridor in Central Washington. Yakima canyon I-82 is the primary route, one lane each direction. Medium capacity. • Residential mitigation may include hardening and removal of rangeland and sagebrush fuels. • Modeled flame lengths average 5 feet — generally within the range of direct attack. • 8% of total road length has potentially non-survivable conditions. • Effectively a single primary route out of the unit. • 21% of the unit is exposed to radiant heat from burning vegetation. • 2% of structures are exposed to embers from burning vegetation.			

Lower Peoh

The Lower Peoh plan covers 22,432 acres of land and is served by City or Municipality (depending on the area), BLM, USFS, Washington Fish and Wildlife, State Parks and Recreation Commission, DNR, City of Cle Elum 51-1, Kittitas Fire District No. 1 (Rural Thorp), Kittitas Fire District No. 7 (Cle Elum) for fire protection.

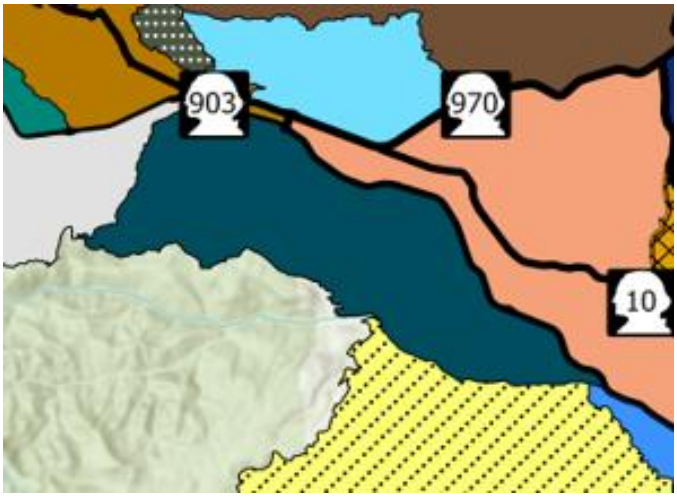


***Figure 26**. The image above is taken from Figure 10: Community Planning Areas at Risk in the WUI. Lower Peoh is the plan unit shaped in steel blue.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Lower Peoh Overall relative risk: High	High	High	Extreme	High
	Specific challenges / hazards: • Sky Meadows community is one of more populated and higher at-risk community in planning unit. • Limited water infrastructure with very water sources (hydrants, standpipes). • Sky Meadows is a historical development initially built in the mid 1960's as a mid-slope recreation community. Most original cabins are built to construction standards prior to IWUIC code. Newer construction is occurring in this area and are more in compliance to IWUIC construction standards. Smaller lot sizes could benefit from improving defensible space and HIZ zones. • Limited egress mid-slope on the community, however, some public road infrastructure exists on top of ridgetops into the Taneum planning unit. Very few hydrants/Standpipes outside the City of Cle Elum. • 6% of the burnable area could experience high-severity crown fire under extreme conditions. • Modeled flame lengths average 22 feet — crowning and spotting, are likely and direct attack is not viable. • 38% of total road length has potentially non-survivable conditions. • 66% of the unit is exposed to radiant heat from burning vegetation. • 46% of structures are exposed to embers from burning vegetation.			

Upper Peoh

Located in Upper Kittitas County, the Upper Peoh planning area is mostly rural with residential parcels. There are three districts in this boundary, Kittitas Fire District No. 7 (Cle Elum), City of Cle Elum 51-1, and Kittitas Fire District No. 3 (Easton). The DNR, BLM, USFS, Washington Fish and Wildlife, State Parks and Recreation Commission all play a part in the land ownership for this planning area.

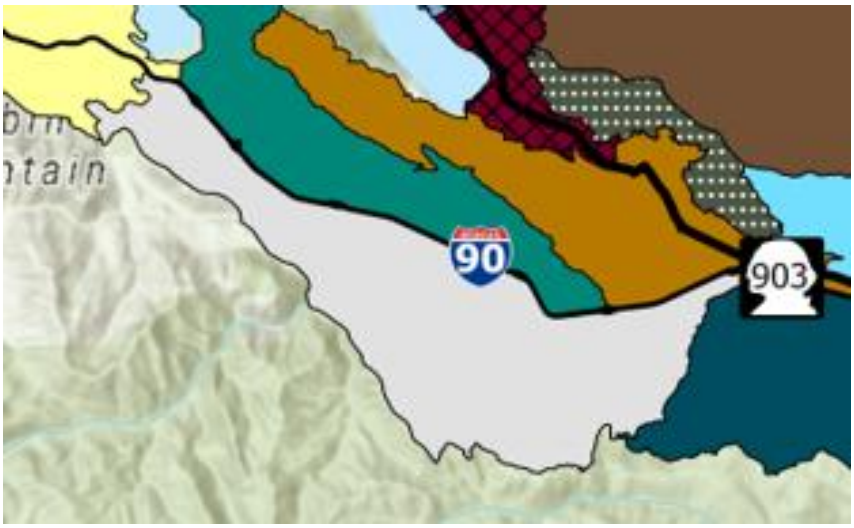


Figure 27. *The image above is taken from Figure 10: Community Planning Areas at Risk in the WUI. Upper Peoh is the plan unit shaped in light gray.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Upper Peoh Overall relative risk: High	Very High	High	High	Moderate
	Specific challenges / hazards: • Limited public infrastructure like water drafting site, however, KRD infrastructure present and of major concern for this area. • Traffic congestion is common in this area due to Interstate 90 impacts from various causes (traffic accidents, weather, infrastructure damages). Limited east-west connectivity between Snoqualmie Pass and Cle Elum which impact emergency response and egress options. • Due to heavy fuels, improvement to HIZ to residential properties would be beneficial. • Populated residential structures in heavy moist mixed conifer fuels mid-slope surrounding Easton to Elk Heights due to north facing aspect (moister microclimate). • 13% of the burnable area could experience high-severity crown fire under extreme conditions. • Modeled flame lengths average 34 feet — control efforts at the head of the fire are likely to fail. • 57% of total road length has potentially non-survivable conditions. • 82% of the unit is exposed to radiant heat from burning vegetation. • 62% of structures are exposed to embers from burning vegetation.			

Snoqualmie Stampede

In far western Kittitas County, at the top of the Cascades along I-906, the Snoqualmie Stampede planning area is served by Kittitas Fire District No. 3 (Easton) and Snoqualmie Pass Fire and Rescue.

Land ownership in this area is typically overseen by USFS (Okanogan-Wenatchee National Forest) and Washington DNR, with private land concentrated in the Snoqualmie Pass itself (condos/chalets).



Figure 28. *The image to the right is taken from Figure 10: Community Planning Areas at Risk in the WUI. Snoqualmie Stampede is the plan unit shaped in light yellow.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Snoqualmie Stampede Overall relative risk: Moderate	High	High	Moderate	Low
	Specific challenges / hazards: • Heavy fuels, and towards the top of Snoqualmie pass in the cascades. Low frequency, high severity fire regime • Heavy cold, dense, moist mixed conifer forests and fuels, and towards the top of Snoqualmie pass in the cascades. • Changing climate conditions (snowpack levels) can impact fire behavior and increase risk of high severity fire and impacts to public recreation infrastructure (Pacific Crest Trail) and headwaters of the Upper Yakima River Basin with downstream impacts to irrigation infrastructure that surpasses Kittitas County. • Limited public infrastructure (hydrants) and other communities along Lake Kachess, limited access to drafting sites (Kachess Campground). • Traffic congestion and limited connectivity between Snoqualmie pass to Cle Elum, have a high potential of disrupting traffic flow including emergencies and normal usage. Weekend traffic can be congested. • Residential construction require metal roof designs due to the heavy snow load and small lot sizes have limited crown spacing between trees. Residential construction often have limbs and branches overhanging the structures. • 5% of the burnable area could experience high-severity crown fire under extreme conditions. • Modeled flame lengths average 26 feet — control efforts at the head of the fire are likely to fail. • 46% of total road length has potentially non-survivable conditions. • 75% of the unit is exposed to radiant heat from burning vegetation. • 42% of structures are exposed to embers from burning vegetation.			

North Kachess

North Kachess is served by Fire District Kittitas Fire District No. 3 (Easton), Kittitas Fire District No. 7 (Cle Elum), and the City of Cle Elum 51-1 (Snoqualmie Pass Fire & Rescue FD #51) in the western part of Kittitas County along I-90. Formed in the early 1980s, much of this area is a property-tax-funded district run by an elected Board of Fire Commissioners. It serves roughly 15,528 acres with heavy transient traffic (up to 40,000 vehicles/day on I-90). The district itself owns very little land (about 1/3 acre, just the fire station parcel), with most land in its service area being USFS, DNR, Washington Fish and Wildlife, State Parks and Recreation Commission.

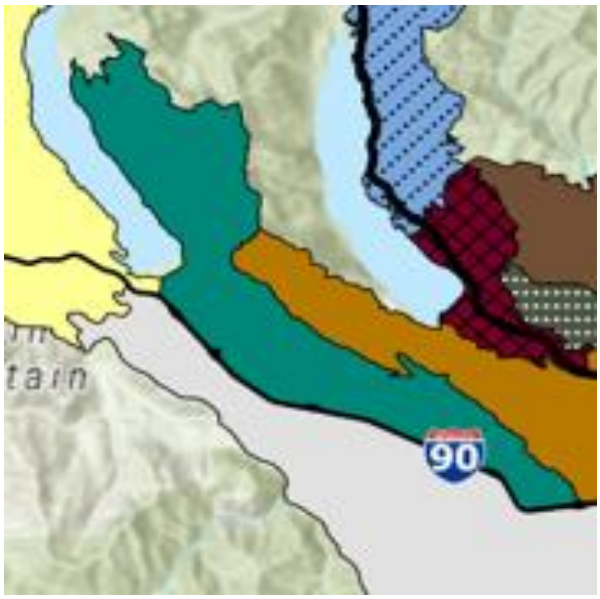


Figure 29. *The image above is taken from Figure 10: Community Planning Areas at Risk in the WUI. North Kachess is the plan unit shaped in green.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
North Kachess Overall relative risk: High	Very High	Very High	Low	Low
	Specific challenges / hazards: • Heavy fuels and many homes located mid-slope, but Easton and surrounding areas in the lower lands near I-90 have less timber surrounding them. • Public and Utility infrastructure run this stretch including High Transmission Voltage Lines, other utility lines, and have been impacted by winter ice and winter storms. • Traffic congestion and limited connectivity between Snoqualmie pass to Cle Elum, have a high potential of disrupting traffic flow including emergencies and normal usage. • Drafting water sources like Lavendar Lake, KRD Canal and Lake Easton are present. • Heavy aquatic and ecological infrastructure and values at risk are present in this area. • Many homes have metal roofing due to higher snow load, but the home ignition zone needs work. • 10% of the burnable area could experience high-severity crown fire under extreme conditions. • Modeled flame lengths average 38 feet — control efforts at the head of the fire are likely to fail. • 67% of total road length has potentially non-survivable conditions. • 89% of the unit is exposed to radiant heat from burning vegetation. • 50% of structures are exposed to embers from burning vegetation.			

Middle Cle Elum

Middle Cle Elum refers to a middle section of Lake Cle Elum and falls in the overlap zone between FD #7 and FD #6 territory. Covering roughly 12,479 acres the area is served by Kittitas County, USFS, DNR, Kittitas Fire District No. 6 (Ronald), Kittitas Fire District No. 7 (Cle Elum), City of Cle Elum 51-1, City of Roslyn 57-1, Kittitas Fire District No. 3 (Easton), Kittitas Fire District No. 6 (Ronald), and Kittitas Fire District No. 7 (Cle Elum).



***Figure 30**. The image above is taken from Figure 10: Community Planning Areas at Risk in the WUI. Middle Cle Elum is the plan unit shaped in orange-brown.*

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
Middle Cle Elum Overall relative risk: Low	Moderate	Moderate	Low	High

Specific challenges / hazards:

- Traffic congestion and limited connectivity between Snoqualmie pass to Cle Elum, have a high potential of disrupting traffic flow including emergencies and normal usage. Weekend traffic can be congested.
- Domerie Watershed is Roslyn's primary source of surface drinking water and is at major risk from fire due to fire severity and sedimentation.
- High presence of transportation, utility, and community infrastructure.
- One of the more populated areas in Upper Kittitas County, with high residential structure exposure, and higher densities of structures that have connected defensible space between properties.6% of the burnable area could experience high-severity crown fire under extreme conditions.
- Modeled flame lengths average 26 feet — control efforts at the head of the fire are likely to fail.
- 41% of total road length has potentially non-survivable conditions.
- 69% of the unit is exposed to radiant heat from burning vegetation.
- 17% of structures are exposed to embers from burning vegetation.
- Very well hydrated between Cle Elum, Roslyn, and Suncadia. Mostly paved roads and almost all have the blue reflective signs.
- Limited egress options depending on fire behavior and one-way in and one-way out scenarios.
- Wildfire risk transmission from wildland to WUI by ember cast is a is a key concern for this planning unit, and potential for urban conflagration.
- Popular recreation destination since Suncadia Master Planned Resort provides high end recreational opportunities (golfing, restaurants, winery) in addition to Tumble Creek Master Planned Resort that is a gated private community with limited access recreational opportunities and living.

410 Cabins

This small parcel of Kittitas County has a coverage of 432 acres with the only fire protection coming from the US Forest Service.

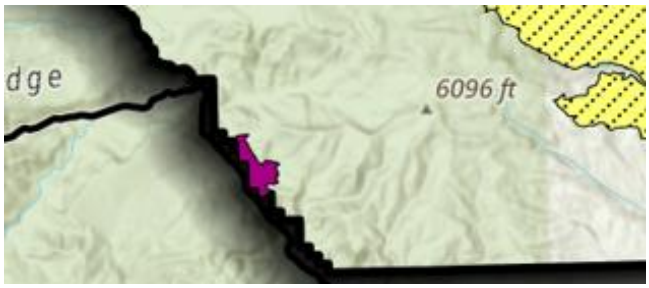


***Figure 31**. The image above is taken from Figure 9: Community Planning Areas at Risk in the WUI. 410 Cabins is the plan unit shaped purple.*

While some structures may be in this planning area, not all structures can be reflected in the modeling due to certain limitations in data tracking/reporting. When the CWPP Core Team gets more data for this area in the future, the CWPP will be amended. While this planning unit is on the border of Kittitas County, it is important to recognize fire does not know land ownership and collaboration between federal and state agencies is a critical component of fuels reduction. USFS Naches Ranger District recognizes the risk to these cabins while it is accessed thru Yakima County, delineating this planning unit as an area at risk advances fuels reduction prioritized and implemented by the USFS Naches Ranger District.

Name of Area	Potential fire behavior	Potential structure exposure	Wildland fire suppression challenges	Evacuation challenges
410 Cabins Overall relative risk: Extreme	Very High	Extreme	Very High	Very High
	Specific challenges / hazards: • Recreational cabins that was or were USFS leased cabins. These cabins have limited fire suppression and response times are longer duration. • Primary egress to these areas are one way in one way out scenarios that are heavily timbered, mid-slope and susceptible to traffic congestion to travel to this planning unit. • Low capabilities, very long distance from fire units. • High difficulty- 410 highway is the road out and surrounded by heavy timber. • Needs a lot of work. • 3% of the burnable area could experience high-severity crown fire under extreme conditions. • Modeled flame lengths average 37 feet — control efforts at the head of the fire are likely to fail. • 85% of total road length has potentially non-survivable conditions. • Effectively a single primary route out of the unit. • 98% of the unit is exposed to radiant heat from burning vegetation.			

4 Resilient Landscapes and Treatment Work

4.1 Restoring and Maintaining Resilient Landscapes in Kittitas County

Through fire suppression and human development, the changing climate, the terrestrial ecosystem, and the role of wildland fire have been significantly altered over time. Restoring landscapes to a resilient state and promoting fire's natural role in ecosystems where appropriate must be an integral part of increasing the county's resilience to wildfire and becoming fire adapted.

To achieve this, an ecosystem-based approach to fire management that incorporates prescribed fire, mechanical thinning, and other vegetation management practices in overall land management planning objectives is important in achieving desired fire effects and mitigating undesirable fire effects on the ecosystem and the built environment. Finally, post wildfire recovery is an important component in resiliency to ensure that any negative fire effects that impact the ecosystem and the community can be addressed to minimize their impact. With the diverse ownership of land, restorative land management will require a collaborative effort among multiple stakeholders.

4.1.1 Ecology/Ecosystem-Based Fire Management

Restoration and maintenance strategies should align with the Cohesive Strategy, as outlined below, and integrate the following goals:

- Where allowed and feasible, manage wildfire for resource objectives and ecological purposes to restore and maintain fire-adapted ecosystems and achieve fire-resilient landscapes, including the importance of the high-intensity fire regime component.
- Restore forest processes that are currently under-represented in the landscape, compared to historical conditions, including low- and mixed-severity fire regimes.
- Maintain and promote the growth of specific large tree species, which are also under-represented, across the landscape while controlling/eradicating invasive and noxious weeds.

4.1.2 Forest Collaboratives

The Tapash Sustainable Forest Collaborative formed in 2007 from a memorandum of understanding formalizing a partnership of public, tribal and non-profit land managers. Collaborative team members worked together across 2.3 million acres along the eastern crest of the Central Cascades primarily across Yakima and Kittitas counties with goals rooted in the National Cohesive Strategy, to create resilient landscapes and reduce catastrophic wildfire. Tapash led efforts like cooperative landscape-scale evaluations, land transfers from private to public ownership, aquatic and terrestrial restoration projects in the Teanaway, Manastash-Tanuem, Oak Creek and Ahtanum watersheds. While the Tapash Collaborative is no longer active, forest partnerships like these are important and continue to exist in various platforms, engaging in cross-boundary planning efforts and implementation. The conclusion of the Tapash Collaborative leaves an open opportunity for Kittitas County stakeholders to explore or establish a new forest collaborative framework in the future.

4.2 Past and Current Land Accomplishments



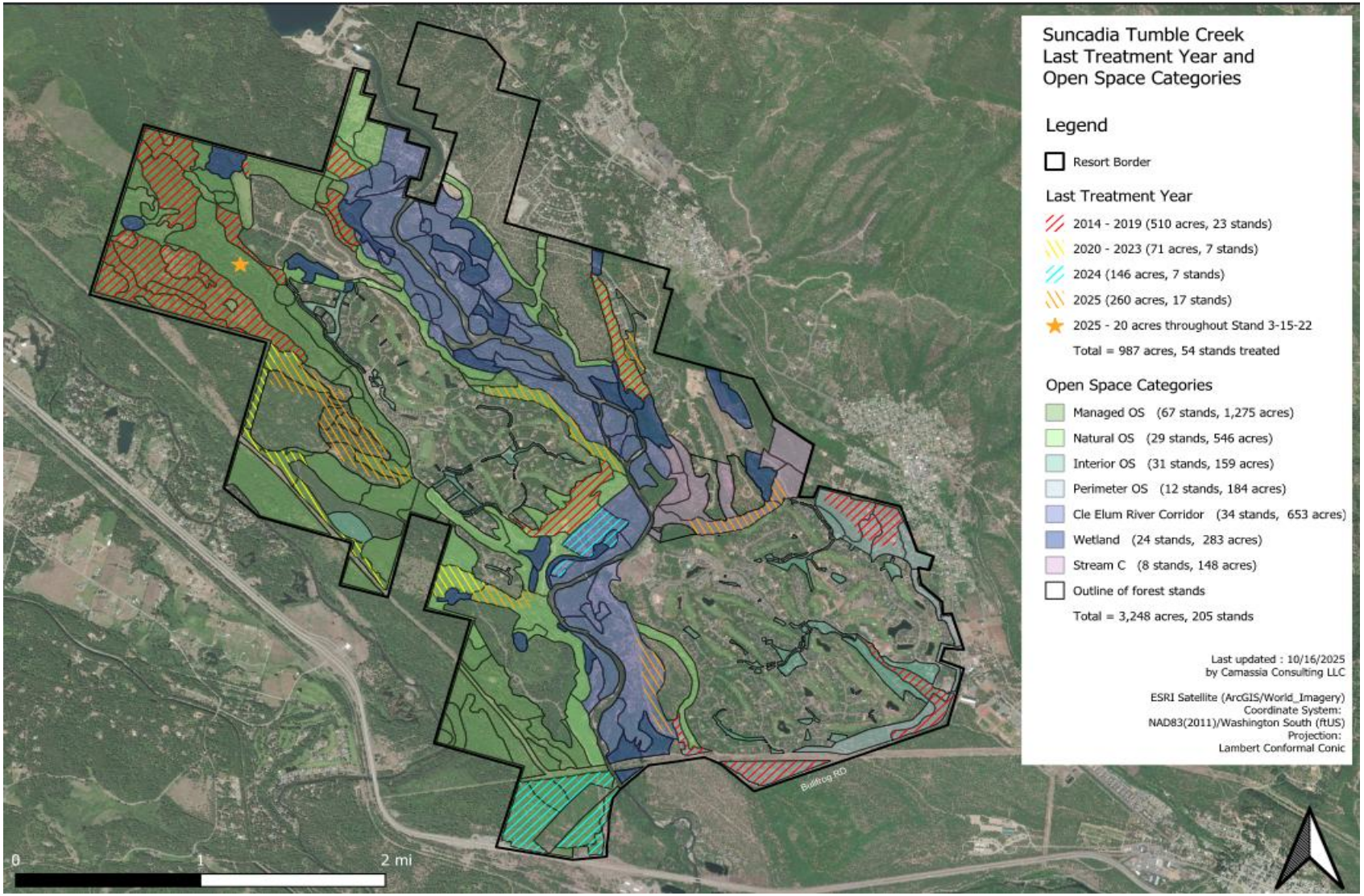
4.2.1 Past Private Land Accomplishments and Challenges

Since 2009, collaborators and partners have recognized the growing frequency of wildfires in the state and county and have taken action to mitigate wildfire risk through educational resources, financial incentives, and fuels reduction programs for private landowners. Private land's reduction in fuels has been steadily increased due to frequency of wildfire and residential development. The result of past treatments has been fairly minimal when compared to the scale and pace of treatments that need to occur on the landscape to effectively minimize risk to private property. Looking to the future, advancing private land treatments that offer more effective benefits to communities by reducing risk to residential, economic, and recreational areas will be prioritized in the landscape.

Many treatments have been carried out but never formally recorded. Areas where treatments are documented have a distinct advantage: they allow past efforts to be aggregated into a clearer, landscape-scale picture of change over time. One example is the unincorporated community and resort of Suncadia, which spans approximately 6,300 acres in the Cascade Mountains between Roslyn and Cle Elum. The map below shows all treatments conducted there by Eastside Forestry between 2015 and 2025.

Figure 32

Treatments in Suncadia from 2015-2025



4.2.2 Kittitas County Conservation District



KCCD has engaged private landowners in Lower and Upper Kittitas County through voluntary incentive based programs since the 1940s. In 2008, the KCCD was asked by the Kittitas County Board of Commissioners to facilitate the initial CWPP. After the adoption of the CWPP in April 2009, KCCD continued to work with private landowners participating in fuels reduction programs with funding from DNR, FEMA and other public sources. During that time, the KCCD has served as the first point of contact for almost all Firewise Communities. Since 2015, KCCD has worked with over 26 Firewise Communities (see Section 6.2) and helped facilitate recognition status of approximately ten new communities and with 350 landowners who participated in the Roving Chipper program resulting in treatment of 81 acres in 2016 to 2017 alone.

4.2.3 Washington Department of Natural Resources (DNR)

DNR Landowner Assistance Program (DNR LOA) has provided technical and financial assistance to many private landowners throughout Kittitas County since the early 2000s. KCCD and DNR LOA have also developed a partnership and adapted the private lands Fuels Reduction programs and delegated different tasks to one another, finding better ways to leverage money and increase the program efficiency, pace, and scale of private land fuels reduction.

DNR hosts the Forest Health Treatment Tracker that maps the forest health treatments across Washington, including more than 32 planned, completed, or in-progress on private lands in Kittitas County. Small scale projects are listed alongside USFS projects. The treatment tracker is updated regularly as new information is reported by landowners and land managers across all ownerships.

There is also a spring chipping program that has been ongoing for several years serving approximately 150-180 landowners/year with funding from the Washington Conservation Commission and KCCD local funds.

4.2.4 Natural Resources Conservation Service

The NRCS Environmental Quality Incentives Program provides financial and technical assistance to agricultural producers and non-industrial private forest landowners to address natural resource concerns and deliver environmental benefits such as improved water, forest health and air quality, conserved ground and surface water, reduced soil erosion and sedimentation, or improved or created wildlife habitat. From 2015 to 2018 NRCS completed 100 acres of pre-commercial thinning treatments by non-industrial private landowners.

4.2.5 U.S. Forest Service

While there are many challenges for the USFS to actively manage the landscape, advancements have been made in the NEPA process to increase scale and pace of treatments. By using cross boundary treatments, state and TNC planning, and coordinating treatments, USFS can use the NEPA process to have a larger impact on landscape. In 2019 the USDA and USFS helped to modernized NEPA regulations by adopting new categorical exclusions to streamline environmental review. NEPA shapes which forest treatments, wildfire-resilience projects, and land-management actions the USFS can implement, and therefore it strongly influences the pace, scale, and type of work that occurs on the ground. The result has been larger, more coordinated treatment zones and more prescribed fires in the county helping to reduce fuel loads (USFS 2025).



5 Promoting a Fire Adapted Kittitas County

Kittitas County, HOAs/POAs, tribal nations, federal and state partners, non-government organizations, Firewise® Communities, and residents share a common objective: to be Wildfire Prepared. This means taking proactive steps to prevent wildfires and the loss of property, while protecting lives, habitat, and environmental landscapes. Its goal is for communities and managed landscapes to live safely alongside fire without catastrophic losses. This objective builds on the Fire Adapted Communities (FAC) concept that many of these partners have embraced for the past decade, which the National Wildfire Coordinating Group (NWCG) defines as "a human community consisting of informed and prepared citizens collaboratively planning and taking action to safely coexist with wildland fire." Committees like KFACC are critical to this work, serving as a point for collaboration and partnership to reduce wildfire risk and help advance preparedness from the ground up.

A CWPP sets the stage for fire adaptation, identifying priorities, roles, and actions among the geographical area. The next step is on-the-ground action and continuing the ongoing and strong commitment to risk mitigation at all levels of the community, from individuals and neighborhoods to Kittitas County, land managers, and other partners. This section of the CWPP includes recommendations and resources for mitigating wildfire risk and enhancing emergency preparedness while also identifying proven strategies to implement effective mitigation for on the ground action to reduce vegetation and ground fuels. Kittitas County, KFACC, public land managers, and wildfire professionals have an important role to play in implementing the recommendations in this CWPP, and they have made commitments to take on-the-ground action.

Individual homeowners, neighborhoods, and communities also play a vital role in addressing shared wildfire risk. Mitigation work by residents can spur mitigation by their neighbors (Brenkert-Smith et al., 2013). The cumulative impact of linked defensible space across private properties can improve the likelihood of home survival and protect firefighters during wildfire events (Jolley, 2018; Knapp et al., 2021).

Fire adapted communities have been focusing on preventing, preparing for, and protecting lives and properties during wildfire events and ensuring a full recovery. A fire adapted community considers all aspects of its built environment, including homes, businesses, infrastructure, main streets, critical facilities, cultural sites, hospitals, and more.



The Community Wildfire Ambassador (CWA) approach is a program launched in 2024 "to engage residents in locally led wildfire mitigation and risk reduction practices. " created by Washington Resource Conservation and Development(WRCD) and the Washington State Department of Natural Resources (DNR).

There are many pathways to becoming fire adapted, such as through education, mitigation, policies, and regulations that use different mechanisms and tools based on what makes sense for the neighborhood, community and county scales. Fire adapted communities may implement established national programs, such as Firewise Communities/USA (Section 5.2) and Ready, Set, Go! (Section 5.5), IBHS Wildfire Prepared Home

(WFPH)develop a CWPP, enhance local capacity, conduct fuel reduction and forest management activities, and use codes and ordinances to regulate development in fire-prone areas.

The more actions a community takes, the more fire adapted it becomes. However, because communities have limited resources, strategic identification of actions is necessary to best leverage fire adaptation at the local level. Promoting a fire adapted Kittitas County also requires alignment with activities for restoring resilient landscapes and improving wildfire response.

5.1 Recommendations for Kittitas County Residents

5.1.1 Mitigate the Home Ignition Zone (HIZ)

During catastrophic wildfires, property loss happens mostly due to conditions in the home ignition zone (HIZ). The home ignition zone includes your home and other structures (e.g., sheds and garages) and the area within 100 feet of each structure. Firefighter intervention, adequate defensible space, and home hardening measures are common factors for homes that stand strong during major wildfires (IIBHS, 2019). Understanding home mitigation and how to accomplish it is part of the Institute for Business and Home Safety (IBHS) research for citizens. Many videos and resources can be found at their Residential home page.

It is important for residents to work together as a community to mitigate shared wildfire risks in the HIZ. Structure-to-structure ignition is a major concern in high-density WUI neighborhoods and can cause substantial property loss. Neighbors can increase their homes' chances of survival during a wildfire if they work together to reduce hazards in their overlapping defensible space. If you are a home- or property-owner with long- or short-term renters, the responsibility to mitigate the HIZ is yours and recommendations in this section apply to you.

Defensible space is the area around a building where vegetation, debris, and other types of combustible fuels have been treated, cleared, or reduced to slow the spread of fire and reduce exposure to radiant heat and direct flame. It is encouraged that residents develop defensible space so their homes can stand strong during a wildfire without relying upon limited firefighter resources.

Home hardening is the practice of making a home less likely to ignite from the radiant heat or direct contact with flames or embers. It is important to remember that embers can ignite homes even when the flaming front of a wildfire is far away. Home hardening involves reducing this risk by changing building materials, installation techniques, and structural characteristics of a home. Home hardening measures are particularly important for homes in the WUI. Contact the Kittitas County Conservation District or your local fire district for a home hazard assessment.

Kittitas County has a "Wildland Urban Interface" or WUI Code which is set of building codes for all unincorporated areas of the county to reduce structure risk from wildfires. Residents can learn more about building new homes or retrofitting current homes through KFACC and about all building codes at the Kittitas County Community Development Services website. Specific WUI Code details can be found in Chapter 20.10 of the Kittitas County Code.

As a resident, homeowner, landowner, or business owner in Kittitas County, spending even just 1 day each year preparing your family and your home for wildfire emergencies make the community safer for everyone.

Defensible space creates a buffer between your home and grass, trees, and shrubs that could ignite during a wildland fire. Defensible space is divided into three zones around a home or other structure, and recommended practices vary among zones. NFPA Firewise USA® and the IBHS WFPH Technical Standards define the immediate zone as 0 to 5 feet from the home, the intermediate zone as 5 to 30 feet from the home, and the extended zone as 30 to 100 feet from the home as (homeowner property boundaries and land ownership allow) in the figure below:



Figure 33. *Home ignition zones should focus on the immediate, intermediate, and extended zone recommendations. Using ignition-resistant building materials and removing burnable fuel around primary structures, outbuildings, and campers/RVs is crucial for increasing your home's chance of standing strong during a wildfire and creating safe conditions for wildland firefighters. Check out the IBHS interactive home for an example of these distances. Source: National Fire Protection Association (NFPA) and https://wildfireprepared.org/wildfire-prepared-home-base-vs-plus/ .*

How IWUI codes and IBHS codes function together in this 2026 Kittitas CWPP:

- **IWUI codes** set the minimum construction and defensible space standards everyone in a fire-hazard zone must meet.
- **IBHS designation** a whole home hardening strategy — it targets wildfire-relevant components like roofing, eaves, siding, windows, and landscaping — and increasingly ties to real financial incentives

(insurers pricing policies against it, possible premium discounts and improves insurance eligibility for and to continue insurance renewals and helps to improve insurance risk profile). Insurance Institute for Business & Home Safety

- **Local governments, like Washington, are adopting, and use, IBHS as a template for stronger local rules.** Paradise, CA enacted regulations similar to IBHS's home-hardening standards into municipal code after the 2018 Camp Fire and even ran an incentive program reimbursing residents for the WFPH program fee. ScienceDirect
- Some communities, like Kittitas County, pursue **both**: meeting codes for permitting, then pursuing WFPN/WFPH designation for insurance and resilience benefits beyond what code requires.

Bottom line: WUI code answers "what's legally required to build here," while IBHS standards answer "what actually stops fire from spreading between homes, and what will insurers require you to do." This 2026 Kittitas County CWPP is robust and references both.

5.1.1.1 Defensible Space

Low Flammability Landscaping

It is important to think about the flammability of plants used for landscaping around your homes. See Fire-resistant Plants for Home Landscapes for information about low-flammability plants for use in the Pacific Northwest and Kittitas County specifically. Many low-flammability plants are beneficial for pollinators and require less watering. Tall grasses that dry out, such as pampas grass, jubata grass, and ryegrass, and highly flammable shrubs like Himalayan blackberries and juniper are also fire hazards that should not be used as landscaping around your home. The Kittitas County Noxious Weed Control Board also recommends that homeowners avoid invasive species in their landscaping, such as yellow toadflax (Linaria vulgaris) and others which can be found on the 2026 Kittitas County Noxious Weed List.



Figure 34. *Fire-Resistant Plants for Eastern Washington and Fire-resistant landscaping are guides that serve as step-by-step tools to help homeowners select the right plants for the right places to significantly help reduce wildfire risks for the Pacific Northwest. The Immediate Zone can be aesthetically pleasing and more drought tolerant, requiring less watering when the right plants are chosen. Limbed and thinned trees in the Intermediate Zone (as seen in the background of this photo) can create beautiful, open conditions that allow understory vegetation to flourish under higher light conditions and provide habitat for wildlife. Photo credit: Washington State University Master Gardener Program.*

Linked Defensible Space

The home ignition zone of individual homes can overlap that of their neighbors, so wildfire hazards on one property can threaten adjacent properties. Structures that are on fire can emit significant radiant heat and embers and endanger homes that are too close with overgrown and unmanaged vegetation. Ground fuels and small trees can increase the probability of a fire between homes and emit significant radiant heat and ember ignition and endanger other homes. Nearly all structures in Kittitas County share an extended home ignition zone with at least one neighboring structure.

Neighbors can increase their homes' chances of survival during wildfire if they work together to create linked defensible space. Linked defensible space also creates safer conditions and better tactical opportunities for wildland firefighters. Defensible space projects that span ownership boundaries are better candidates for grant funding due to their strategic value.

How can you help inspire your neighbors to act? Start by creating defensible space and hardening your own home. Then try the ideas below:

- ✓ Invite your neighbors over for a friendly conversation about the risk assessment in this CWPP. Review resources about defensible space together, discuss each other's concerns and values, and develop joint solutions to address shared risk.
- ✓ Volunteer with your local Fire Department in Kittitas County to help educate your community about the benefits of defensible space and home hardening.
- ✓ Help organize walking tours in your neighborhood to visit the property of residents with exemplary defensible space. Witnessing the type of work that can be done and seeing that a mitigated property can still be aesthetically pleasing, can encourage others to follow suit.

Mosaic Landscapes

Varied fuel types are known to be more beneficial for a holistic ecosystem (provide more habitats for wildlife and increase food chain options) and help to slow the spread of fire, and heterogeneous landscapes (landscapes with multiple fuel types and trees of different sizes and ages) are more typical of historical forest conditions (Duncan et al., 2015). Creating a mosaic landscape in neighborhoods can help slow fire spread by changing the fuel types as it moves across a hill or valley (**Error! Reference source not found.**). A mosaic landscape can be created in many ways. For example, a neighborhood could have a few acres of old-growth conifer trees next to a couple acres of forests dominated by deciduous trees (e.g., red alder, bigleaf maple, and aspen), and a few acres of young conifer trees by a large grassy meadow. This can be arranged in many ways for aesthetic and tactical purposes and will resemble a patchwork quilt or mosaic art.

The homes in these patches still need to have adequate defensible space, but this would create a more diverse landscape where fire may move slower as it transitions between forest types and unforested locations like shrublands or meadows. Slower fire movement means firefighters have time to defend more homes in the neighborhood. It also creates a diversity of biomes that both residents and wildlife enjoy.

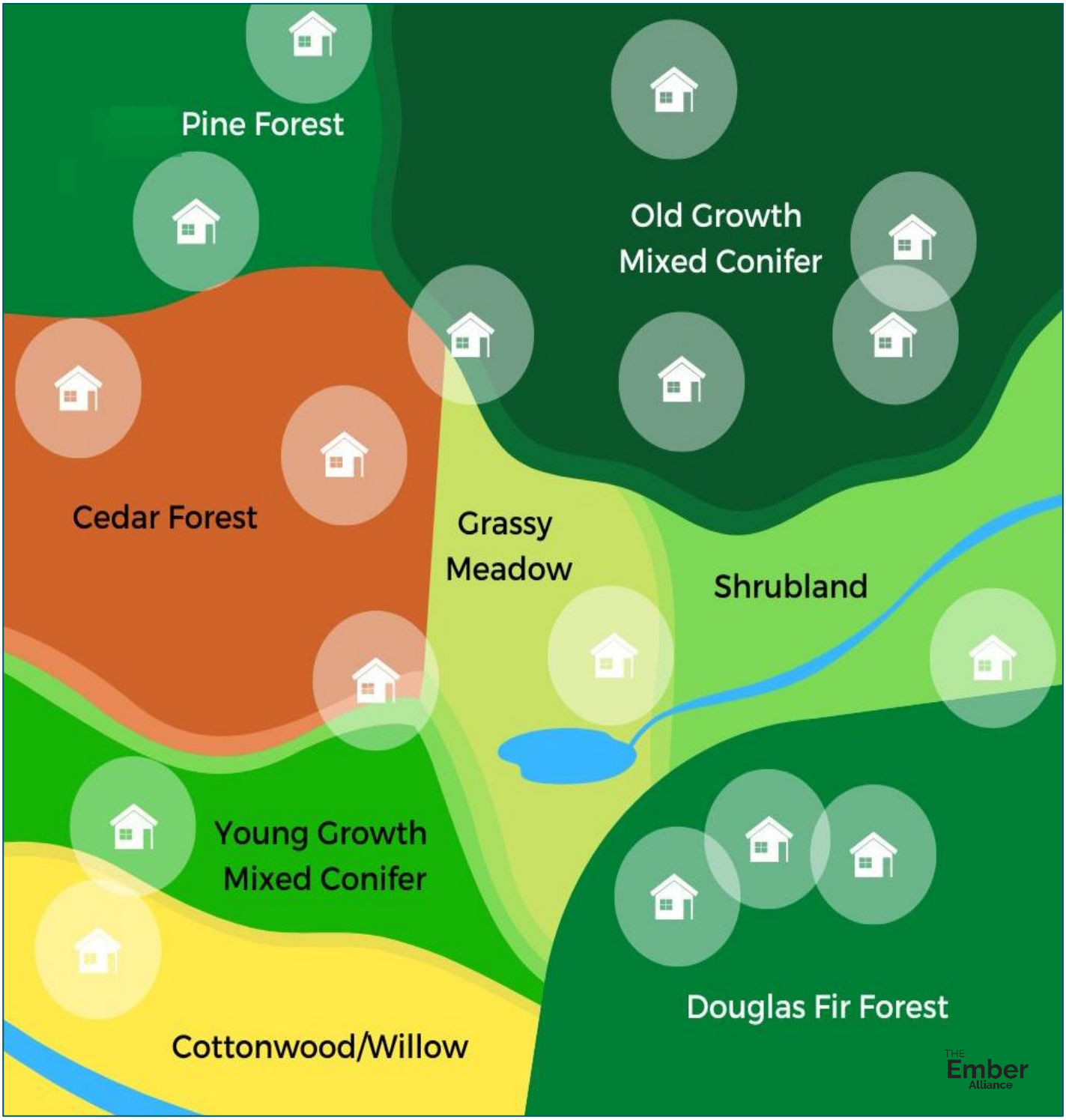


Figure 35. *Example of a mosaic landscape in a neighborhood. Each home has defensible space around it, and the landscape is varied throughout, providing tactical opportunities for firefighters working to defend homes. Source: The Ember Alliance.*

5.1.1.2 Home Hardening

Many homes and structures in Kittitas County are at risk of long-range embers, and about 16.3% are at risk of abundant short-range embers and/or radiant heat from burning vegetation under severe fire weather conditions according to analysis from TEA. Home and structure ignition risk is likely higher than that estimated by this analysis; parts of Kittitas County with a high density of structures have increased risk for structure-to-structure ignition from radiant heat and embers (Figure 38). The more structures that are close together, the easier it is for embers to spread thus increasing the risk. Reducing the ability of embers to penetrate and ignite your home is recommended for everyone in Kittitas County.



Figure 36. *The IBHS Wildfire Prepared website has many interactive homes to find out specifics about what residents in Kittitas County can do to help harden their homes. Source: Wildfire Prepared (IBHS). The IBHS WFPH Technical Standards and How to Prepare My Home Checklist are additional tools for residents to consider when hardening their homes.*

Figure 37
Home Ignition Zone Overlap within Kittitas County Homes

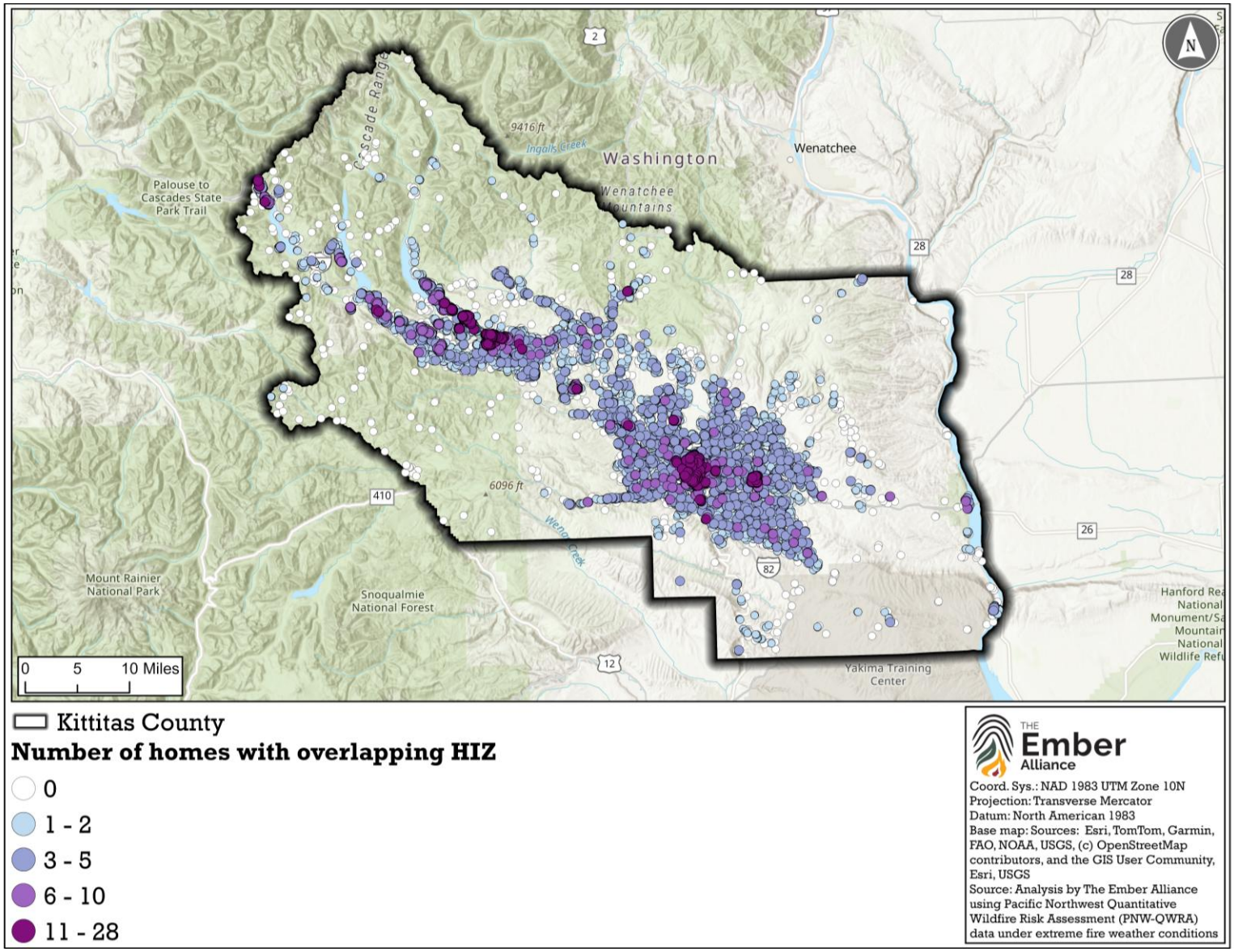


Figure 38
Structures within Short-Range Ember Cast Distance of Other Structures in Kittitas County

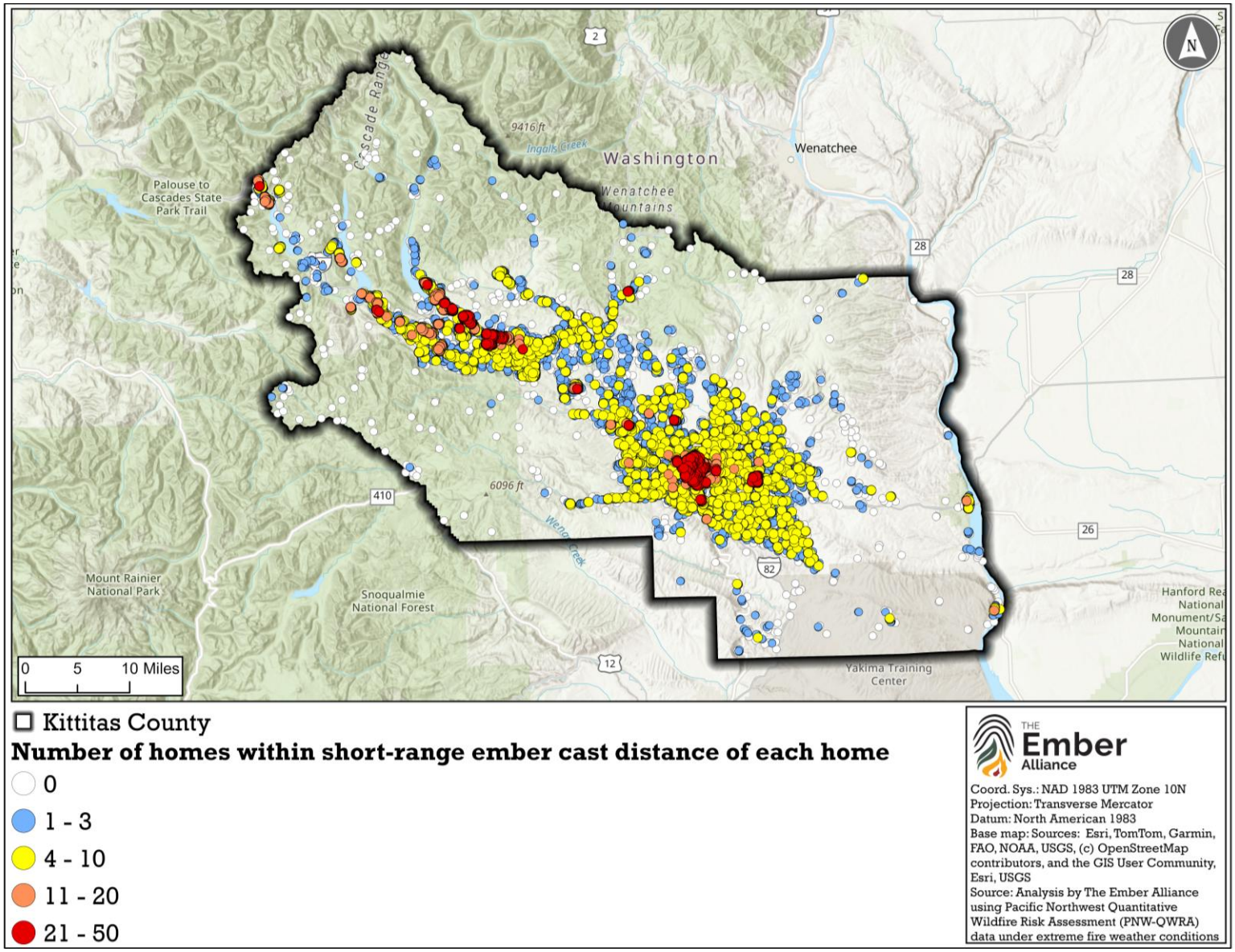


Table 4

Home ignition zone recommendations based on the NFPA and KFACC recommendations. Specific measures will depend on the placement and condition of your property.

Immediate Zone: 0 to 5 feet from your home – the noncombustible zone.
Goal: Prevent flames from coming into direct contact with your home.
• Create a noncombustible border 5 feet around your home. Remove all vegetation and replace flammable wood chips or mulch with alternatives like dirt, stone, flagstone, concrete, or gravel. Research shows that the worst materials to use in the immediate zone are shredded rubber, pine needles, and shredded western red cedar due to their high flammability. • Relocate firewood, propane tanks, and other combustible materials to the extended zone. • Remove branches that hang over your roof and drop needles onto your roof and remove all fuels within 10 feet of the chimney. • Remove combustible materials (dry vegetation, wooden picnic tables, juniper shrubs, etc.) from underneath, on top of, or within 5 feet of decks, overhangs, windows, and doors. • Annually remove dead or dry leaves, pine needles, and dead plants within 5 feet of your home and off your deck, roof, and gutters. Raking material farther than 5 feet from structures will not significantly reduce the likelihood of ignition. • Do not use space under decks for storage.

Intermediate Zone: 5 to 30 feet from your home – the lean, clean, and green zone.
Goal: Slow the movement of flames approaching your home and lower the fire intensity.
• Relocate wood piles and propane tanks to the extended zone. • Irrigate and mow grasses to 4 inches tall or less. If you are unable to irrigate, replace dry grasses with Fire-resistant Plants for Home Landscapes for Kittitas County that are more drought tolerant and less flammable. • Move any accumulated surface fuels such as logs, branches, slash, and mulch to at least 100 feet from the home. • Remove highly combustible vegetation (such as Himalayan blackberries, junipers, pampas grass, jubata grass, and ryegrass) because they are highly flammable and tend to hold a layer of flammable material beneath them. Landscape with Fire-resistant Plants for Home Landscapes. • Consider the retention of deciduous trees like red alder, bigleaf maple, or aspen trees. Some deciduous species have high fuel moisture, no low branches, and smooth bark, making them less likely to ignite than conifer trees. An exception is myrtle, which has volatile compounds in its leaves that make it more flammable. • Remove ladder fuels under remaining trees. This is any vegetation that can bring fire from the ground up into taller fuels. • Remove limbs so branches do not hang below 10 feet above the ground (at least 6 feet if 10 feet is not feasible). See below for a depiction of how to measure limb height.

- Keep spacing between shrubs at least 2-3 times their height.
- Remove stressed, diseased, dead, or dying trees and shrubs. This reduces the amount of vegetation available to burn and improves forest health.
- Keep shrubs at least 10 feet* away from the edge of tree branches.

Extended Zone: 30 to 100 feet from your home

If you live on a slope, this zone should be larger due to the greater potential for extreme fire behavior.

Goal: Slow movement of flames, move fire to the ground, and reduce ember production.

- For large properties with many trees, consult with a qualified forester to develop a plan to manage your property to achieve fuel reduction and other goals, such as creating wildlife habitat.
- Store firewood and propane tanks at least 30 feet away and uphill from your home and away from flammable vegetation. Store even farther away if your home is on a slope.
- Move campers/RVs, boats, detached garages, storage buildings, barns, and other large structures at least 50 feet away from your home.
- Mow or trim grasses to a maximum height of 6 inches. Grasses can be taller in the extended zone than the intermediate zone because of the greater distance from your home, but shorter grass is always better for reducing potential flame lengths and therefore radiant heat exposure.
- Favor the retention of deciduous trees like red alder, bigleaf maple, or aspen. Some deciduous species have high fuel moisture, no low branches, and smooth bark, making them less likely to ignite than conifer trees.
- Remove limbs so branches do not hang below 6 feet above the ground, ideally not below 10 feet above the ground.
- Remove shrubs and saplings that can serve as ladder fuels to help increase spacing*.
- Remove heavy accumulations of dead trees, branches, and piles of fallen leaves, needles, twigs, pinecones, and small branches. Thin trees to increase spacing and remove ladder fuels to reduce the likelihood of torching, crown fires, and ember production.

**Spacing recommendations are a general guideline and should be increased for properties on steeper slopes. Reach out to your local fire protection district, Kittitas County Conservation District, KFACC, or other forestry professionals to develop a plan for mitigating wildfire risk on your property.*

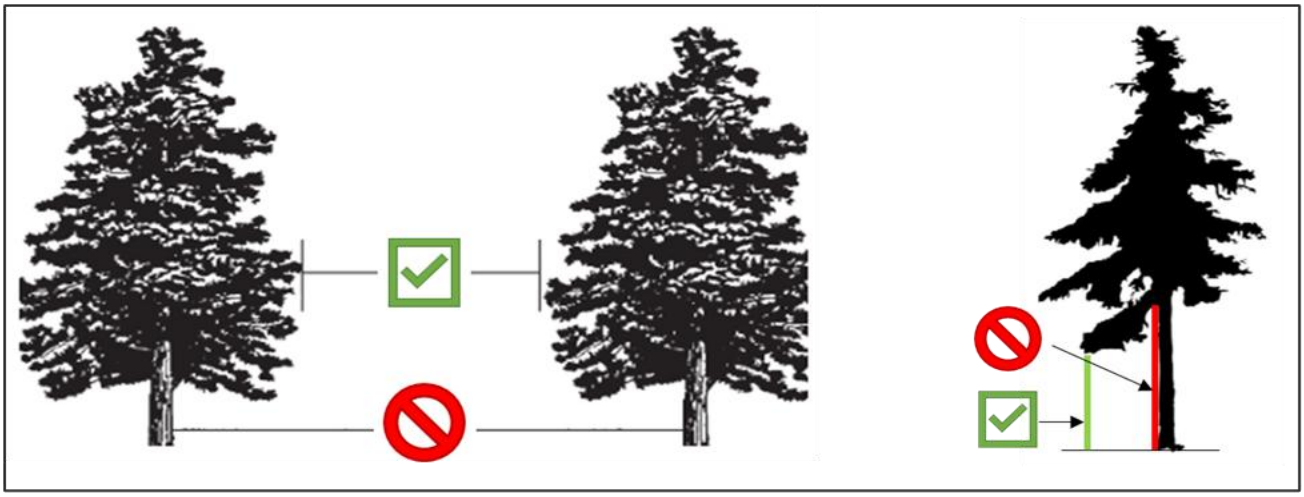


Figure 39. *Spacing between tree crowns is measured from the edge of tree crown to tree crown, NOT from tree stem to tree stem (left). Height of limbs above the ground is measured from the ground to the lowest point of the limb, NOT from where the limb attaches to the tree (right). Source: The Ember Alliance.*

Roofs, siding, decks, windows, vents, gutters are particularly vulnerable to embers from wildfire, and actions that prevent embers from penetrating your home can offer additional benefits such as reduced maintenance costs, greater durability, and increased energy efficiency:

- **Roofs** should be made of noncombustible materials such as composite, metal, or tile, which tend to be more durable against wind, snow, and hail as well as wildfire.

- **Siding and decking** should be made of ignition-resistant or noncombustible materials, which is particularly effective when homes also have a 5-foot noncombustible border of dirt, stone, or gravel around them. Non-wood siding, such as cement board and stucco, and decking are often more durable and require less routine maintenance than traditional wood.

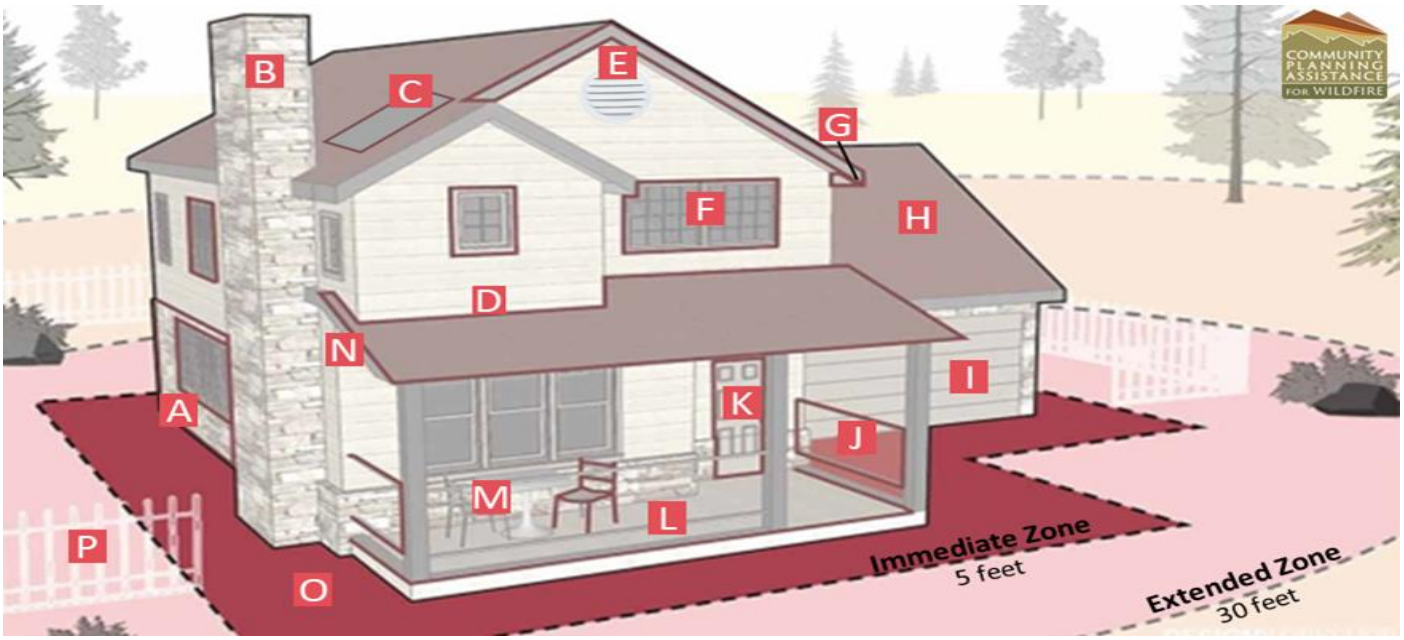
- **Gutters** should be made of noncombustible materials such as metal or tile and need to be cleared of debris.

- **Multi-pane windows** have greater resistance to radiant heat and provide better insulation and energy efficiency for your home. Windows often fail before a home ignites, providing a direct path for flames and airborne embers to enter a home. Tempered glass is three to four times more resistant to heat exposures than typical annealed glass (Oregon Building Codes Division, n.d.).

- **Enclosed eaves and vent screens** reduce the penetration of wind-borne embers into structures and can deter pests and critters from nesting in your home's vents and eaves (Hakes et al., 2017; Syphard and Keeley, 2019).

- **Fences** should be made of noncombustible materials and kept at least 8 feet away from the home (at least 20 feet away for double combustible fences). Fences can serve as pathways for wildfire to travel between vegetation and structures and from structure to structure (Maranghides et al., 2022). Wooden fences attached to homes served as one of the leading causes of home loss.

There are many low-cost actions you can start with to harden your home. Keep home-hardening practices in mind and use ignition-resistant materials if you replace a hail-damaged roof or remodel your home. New construction and replacement construction that require a building permit must comply with the current adopted building codes of Kittitas County.



Low-cost actions:

B. Cover chimneys and stovepipe outlets with 3/8th to ½ inch corrosion-resistant metal mesh.

C. Minimize debris accumulation under and next to solar panels.

E. Cover vent openings with 1/16th to 1/8th inch corrosion-resistant metal mesh. Install dryer vents with metal flappers and keep closed unless in use.

G. Clear debris from roof and gutters regularly.

I. Install metal flashing around and under garage doors that goes up at least 6 inches inside and outside the door.

J. Use noncombustible lattice, trellis, or other decorative features.

K. Install weather stripping around and under doors.

L. Remove combustible materials from underneath, on top of, or within 5 feet of deck.

M. Use noncombustible patio furniture.

N. Cover all eaves with screened vents.

O. Establish and maintain a 5-foot noncombustible buffer around the home.

Actions to plan and save for:

A. Use noncombustible or ignition-resistant siding and trim (e.g., stucco, fiber cement, fire-retardant treated wood) at least 2 feet up around the base of your home.

C. Use multipaned glass for skylights, not materials that can melt (e.g., plexiglass), and use metal flashing.

D. Install a 6-inch vertical noncombustible surface on all gables above roofs.

F. Install multi-pane windows with at least one tempered-glass pane and metal mesh screens. Use noncombustible materials for window frames.

G. Install noncombustible gutters, gutter covers, and downspouts.

H. Install ignition-resistant or noncombustible roofs (composite, metal, or tile).

I. Install 1-hour fire rated garage doors.

K. Install 1-hour fire rated front and back doors.

L. Use ignition-resistant or noncombustible decking. Enclose crawl spaces.

N. Use noncombustible eaves.

P. Replace wooden fences with noncombustible materials and keep at least 8 feet away from the home (at least 20 feet away for double combustible fences).

Figure 40. *A home can never be made fireproof, but home hardening practices decrease the chance that flames, radiant heat, and embers will ignite your home. Infographic by Community Planning Assistance for Wildfire with modifications from The Ember Alliance to include information from CALFIRE 2019 and Maranghides et al. 2022.*

Recommendations for Residents in Manufactured Homes

According to Fire Safe Marin, "embers are the most common cause of ignition for both site built and manufactured homes". Manufactured homes and neighborhoods may have important structural or organizational considerations that affect wildfire and evacuation safety and preparedness. According to an analysis of home loss from the 2018 Camp Fire in California, researchers found that manufactured homes were far more likely to be destroyed (Troy et al., 2022). Specific steps for hardening manufactured homes and the areas around them can be found below.

Recommendations for Manufactured Home Neighborhoods:(Julia B. Goolsby et al., 2024)

- Develop wildfire risk information sharing campaigns through the partnership of fire and rescue professionals and local community groups.
- Consider communicating about wildfire risk via preferred channels: videos, reports, e-newsletter and/or mailed newsletter.
- Wildfire risk information may be more effective if communicated in both Spanish and English.
- Consider financial barriers when designing programs to encourage risk mitigation.
- When promoting wildfire risk mitigation, focus on characteristics residents can change, such as:
    - Removing combustible items near the home.
    - Ensuring skirting around the bottom of manufactured homes is properly fitted to prevent embers and flames from entering below the home.
    - Maintaining or replacing wooden decks with less flammable material.
- In wildfire outreach, focus on evacuation preparedness, including evacuation planning, signing up for evacuation notifications, identifying safe evacuation routes and destinations, and packing a "go bag."
- Hold neighborhood-wide practice evacuations.
- Avoid siting new developments in areas of high risk when possible and consider installing homes on a permanent concrete foundation.
- Consider evacuation and emergency response in the design of driveways, roads and other infrastructure. Ensure roads are wide enough for emergency vehicles and evacuees, require a secondary access, ensure adequate water supply for fire response, and use consistent, noncombustible, reflective address and street signs.
- Provide information about wildfire risk, where to find real-time warning information, safety zones, and evacuation routes.
- Include fire departments, emergency managers, public works staff, and public health officials in planning and development review processes. Ensure mobile home residents are included in community-wide projects to decrease wildfire risk.

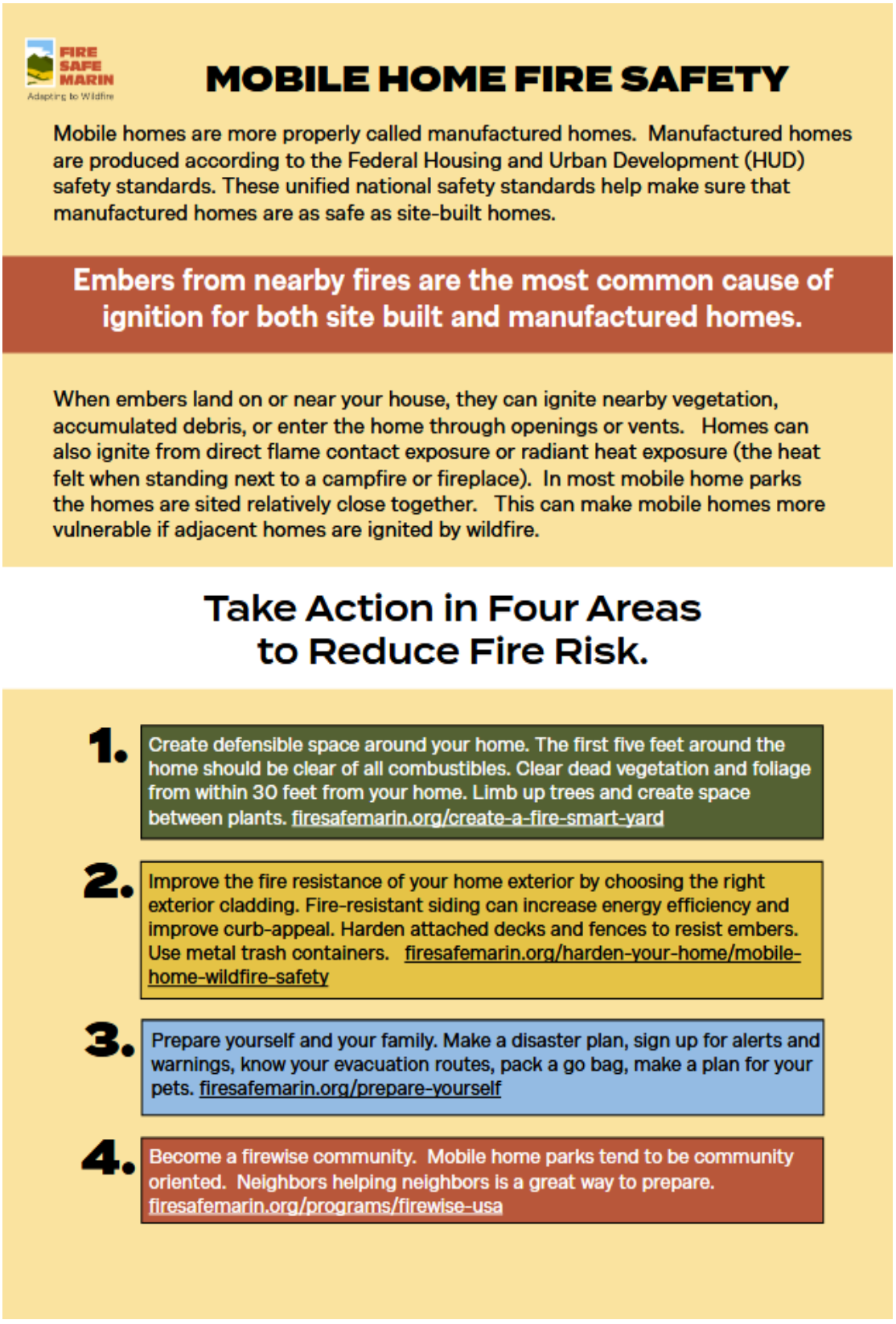


Figure 41. *Fire Safe Marin provides recommendations for manufactured homeowners. Source: Fire Safe Marin.*



Figure 42. *Community Planning and Assistance for Wildfire (CPAW) identifies strategies tailored to manufactured home wildfire resilience. Source: [Headwaters Economics / Community Planning Assistance for Wildfire]*

5.2 Fire Adapted Communities in Kittitas County

The Hidden Valley – Swauk neighborhood was heavily impacted by the Taylor Bridge wildfire in 2012. After that experience, many residents convened and acted on their own properties and area. Since that time, the Hidden Valley – Swauk Fire Adapted Community has completed $6,000 in fire adapted work. In 2016 through 2017, the Hidden Valley – Swauk Fire Adapted Community has participated in cost-share funding for 20 acres of fuels reduction treatment, residents removed 60 yards of vegetation, and six residents used the Roving Chipper Program for chipping. Hidden Valley-Swauk residents spent 239 hours of labor in the following perimeters: 0- to 5-foot Home Ignition Zone (HIZ), 5- to 30-foot HIZ, and 30- to 100-foot HIZ equaling $6,867.83 of in-kind contributions. Additional efforts included a newsletter to Kittitas County residents regarding living in the Kittitas County WUI and development support for an educational video regarding the Jolly Mountain Fire, and wildfire community meetings and local workshops to help engage people and residents to be prepared for emergencies and evacuation. Using Hidden Valley – Swauk as a framework, efforts have been taken to educate and connect other neighborhoods and provide educational resources for individuals and homeowner association (HOA) communities. Through education, Fire Adapted Communities realize that living with wildfire is an ongoing process, not an event, and continually work in their areas to manage vegetation, improve response for first responders, and be ready to evacuate at any time.

5.3 Firewise USA Recognized Communities

NFPA® FIREWISE USA™
Residents reducing wildfire risks

The Firewise Communities USA program is a national recognition program which highlights communities that have chosen to complete and maintain defensible space; ensure adequate access, water, and signage; promote ongoing fire prevention education; and build or retro-fit structures with non-combustible building materials such as siding, decks, and roofing. Adequate water availability and access are also required. **Firewise USA Recognized Communities is used as a tool to raise the level of landowner awareness in their neighborhood.** Firewise Communities USA now recognizes 25 communities in the Kittitas County CWPP area (Table 6).



The Firewise Communities program recognizes communities who have demonstrated their commitment to wildfire preparedness and have fostered collaboration between neighbors, increased awareness, and their communities' ability to respond to wildfire.

Table 5
Firewise USA Past & Current Recognized Communities in Kittitas County *(Bold = Current as of 2026)

***Information obtained at NFPA Firewise USA Sites**

Name	Area
Banti Creek	Cle Elum
Buffalo Springs	Cle Elum
Goat Peak Ranch HOA	Cle Elum
Green Canyon	Ellensburg
Hidden Valley Terrace	Cle Elum
Hidden Valley Vistas–Hidden Valley Meadows	Cle Elum
Hyak	Snoqualmie Pass
Kachess Ridge	Easton
Kachess Village	Easton
Lannigan Meadows HOA	**Cle Elum**
Lauderdale Ridge HOA	**Cle Elum**
Morgan Creek	**Ronald**
Pine Loch Sun	**Ronald**
Ski Tur Valley	Snoqualmie Pass
Sky Meadows Ranch	**Cle Elum**
Summerside Maintenance Association	**Cle Elum**
Sun Country	**Cle Elum**
Suncadia	**Cle Elum**
Sunlight Waters	**Cle Elum**
Swauk Pines	**Cle Elum**
Teanaway Terrace	**Cle Elum**
Vistas at Cle Elum	**Cle Elum**
Wagon Wheel	**Teanaway**
Wildwood	Roslyn
Tillman Creek	**Cle Elum**
Upper Manastash Canyon	Ellensburg
Liberty Mountain Development	Liberty

5.4 Increasing Wildfire Response throughout Kittitas County

The multiple agencies responsible for fire suppression have developed an excellent network of interagency support and cooperation. Generally, suppression resources have been able to respond to wildland fire occurrences with adequate resources using this system. However, some concern is expressed over the ability of this system to sustain itself in the face of climate change and the current trend of decreasing volunteer capacity, aging firefighters, and decreasing budgets.

In addition to fire suppression resources available within the fire protection districts, seasonal wildland firefighters are available through USFS, DNR, and BLM. These resources are trained and equipped to fight wildland fire only; unlike the fire protection district resources, they are not trained or equipped to fight a structure fire. The USFS, DNR, and BLM also offer access to national incident and area command teams and resources, when required.

The Closest Forces Concept

When an unwanted wildland fire (wildfire) is discovered in Kittitas County, a fire response crew from a local fire response jurisdiction, a USFS ranger district, BLM and/or DNR fire unit may respond, depending on its location. Local Dispatch KITTCOM and the Northwest Interagency Coordination Center use the "closest forces" concept in wildland fire dispatch.

This allows for the closest suppression resource to be sent, regardless of boundaries or jurisdictional responsibilities. This arrangement is particularly helpful at either end of the federally recognized fire season (typically mid-June through mid-September). When wildfires start early, as they did in 2000 (the first wildfire occurred on March 15), federal fire crews are not yet employed so it is the community-based firefighter who is often first on scene.

Through pre-established mutual aid agreements, fire suppression resources in Kittitas County are authorized to leave their jurisdictional boundaries to aid a requesting agency partner. In addition, Washington statute allows these resources to assist throughout the state when needed/possible.

Mutual aid agreements are also used between most Kittitas County agencies sharing boundaries. These agreements are triggered by verbal request, typically at the time of first dispatch.



Jolly Mountain Wildfire 2017, Inciweb

5.5 Emergency Preparedness/Evacuation

Emergency evacuation procedures are the responsibility of the Kittitas County Sheriff's Office. During a wildfire, the Incident Commander (in coordination and with the approval of the agencies having jurisdiction) will recommend evacuation. Routes and locations of shelters/centers depend on fire location and numbers of affected individuals, and so must be made on a case-by-case basis at the time of the incident. Kittitas County completed an evacuation assessment as part of this 2026 CWPP.

5.5.1 Evacuation Planning and Capacity

There is a high likelihood of evacuation congestion and long evacuation times during a wildfire. Some neighborhoods have only one ingress/egress route, and some have roads that are narrow, winding, or difficult to navigate, especially through heavy smoke from a wildfire. Evacuation times for individual residents in Kittitas County could exceed several hours due to the high density of homes and limited number of egress routes.

Many roads throughout the county are narrow and lined with dense vegetation that could create non-survivable conditions during wildfires. Under extreme fire weather conditions, 34% of roadways in Kittitas County could experience non-survivable conditions (figure after assessment). **Mitigation actions along sections of road with high risk for non-survivable conditions during a wildfire can increase the chances of survival for residents stranded in their vehicles and decrease the chance that roadways become impassable due to flames.**

Survivable Roadways	***Potentially Non-Survivable Roadways***
	
	

Figure 43. *Examples of roads that have been well mitigated by removing tall trees and saplings, removing limbs on the remaining trees, and keeping grass mowed (left images). Not all roadways will be as "clean" as the photos above; some may have trees along the sides and are still considered survivable. Other roads could experience potentially non-survivable conditions because they are lined by thick forests that have an abundance of ladder fuels and/or surface fuels such as downed logs and branches (right images). Photo credit: Savannah Davies of Kittitas County Fire District #7*

Figure 44

Potential Roadway Survivability in Kittitas County

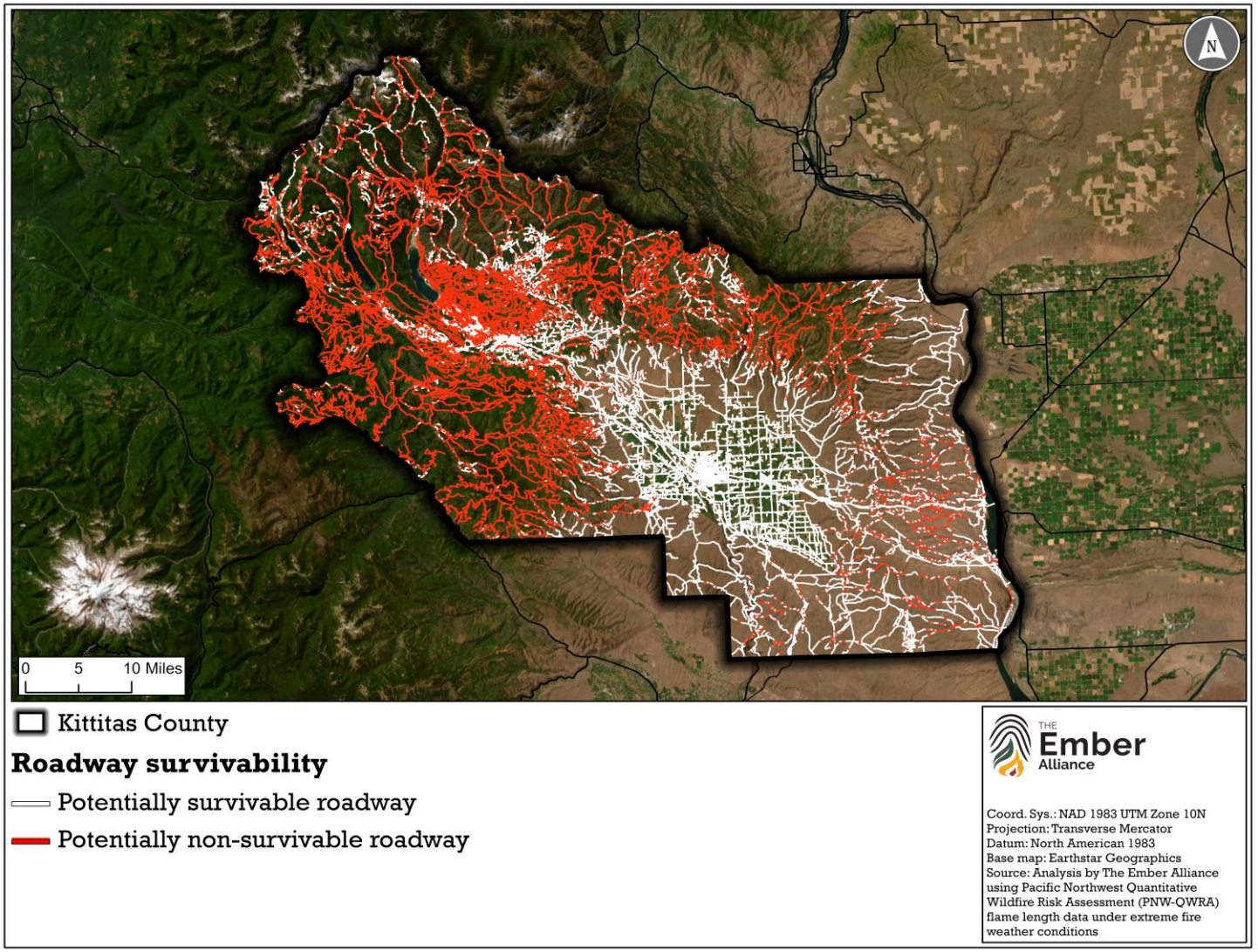
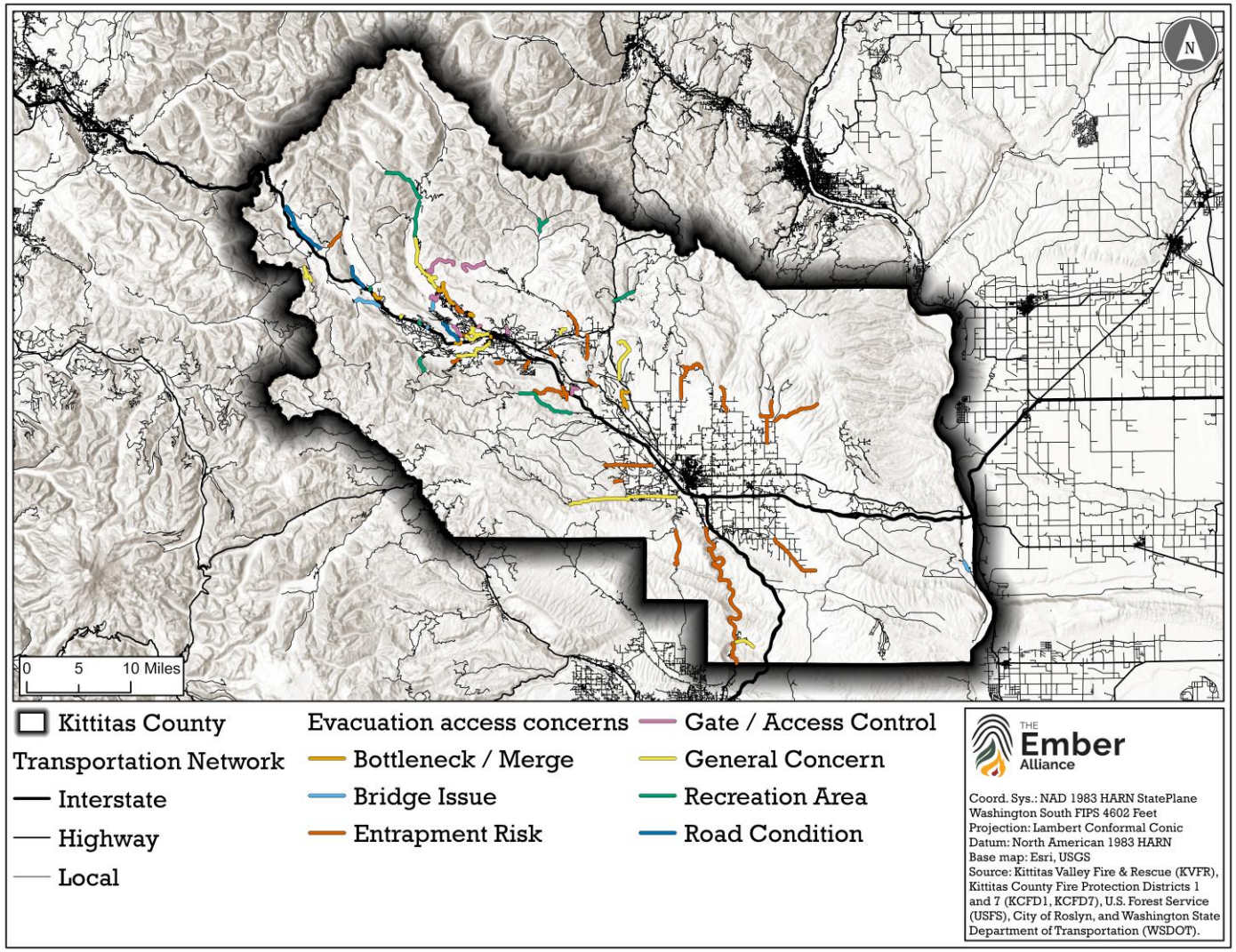


Figure 45
Areas of evacuation concern map



Consideration should also be directed at barriers that may impede rapid evacuation. For example, downed power lines could pose a significant barrier to safe evacuation if the wires remain live. Communities could initiate conversations with local utility districts to assess new power lines could be buried underground and existing ones relocated. To further complicate efforts, evacuation coordination across multiple jurisdictions often slows planning and implementation.

5.5.2 Evacuation Preparedness

Evacuation can weigh heavily on the minds of residents in Kittitas County. The death of 86 people in Paradise, California during the 2018 Camp Fire, many of whom were stranded on roadways during evacuation, underscores the importance of evacuation preparedness and fuel mitigation along evacuation routes. Roads lined closely with dense, tall vegetation can create flame lengths and heat that are dangerous to evacuees. Roads that may be unpassable during a wildfire event are referred to as potentially non-survivable in this CWPP. Officials start evacuations early to get residents out of danger before roads may become potentially non-survivable, or if an upcoming emergency is anticipated.

Everbridge is the reverse 911 system used by Kittitas County and is the official site where residents can register their cell phones and email addresses to be sure that notifications reach them during an emergency. Visit the Kittitas County Alerts sign-up page to learn about evacuation planning—a simple and crucial action that can save lives.

Reliable technology to provide warnings and information about evacuations can help residents feel confident in their ability to evacuate during a wildfire. Kittitas County Emergency Management Communications uses Everbridge to communicate evacuation orders to residents. Kittitas County should actively extend awareness about Kittitas County Alerts sign-up page to citizens, businesses, and Tribes that are unaware of the program.

There is a high likelihood of evacuation congestion and long evacuation times during a wildfire in some parts of the community. Some neighborhoods have only one ingress/egress route, and some have roads that are narrow, winding, or difficult to navigate, especially through heavy smoke from a wildfire.

During fire season, it is important to keep enough gas in your vehicle so that you can safely evacuate from your home or place of employment. If there were an emergency, you might not have time to fuel up, or pumps might be shut off for safety reasons.

Residents with livestock trailers or large camper vehicles should plan to leave during voluntary evacuation notices to allow time for their preparations and create more space on the roads for other residents during a mandatory evacuation. It is important to have a plan for where to take animal/livestock to reduce some of the chaos and uncertainty created by wildfire evacuations. FEMA provides tips for protecting livestock during a disaster. In Kittitas County, residents can contact the Kittitas County Sheriff's Office for free evacuation and disaster preparedness materials or visit www.ready.gov for publications related to disaster readiness. For more information contact Kittitas County Emergency Management by email at kcsoem@co.kittitas.wa.us or they can call the Sheriff's Office at 509-962-7525 and ask to speak to an Emergency Management Specialist.

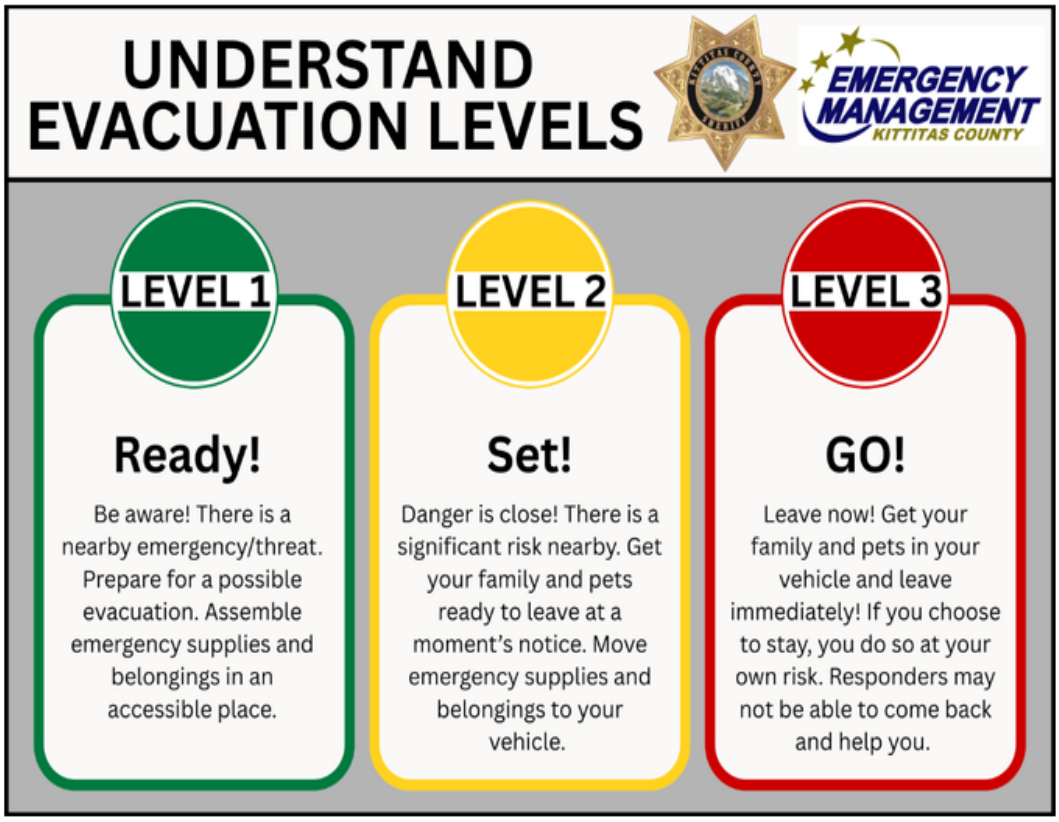
Evacuation preparedness is the responsibility of each resident in kittitas County. The best way to get out quickly and safely during an evacuation is to be prepared. Visit the Kittitas County Alerts sign-up page to learn about evacuation planning, a simple and crucial action that can save lives.

Prepare a go-bag and survival basics and have a family emergency plan **before** the threat of wildfire is in your area. Some residents have family members or neighbors with physical limitations who might struggle to evacuate in a timely manner. Develop specific emergency plans that address these unique needs and vulnerabilities **before** an emergency occurs. Parents should also work with their neighbors to develop a plan for how to evacuate children that might be home alone. During emergency evacuation levels in Kittitas County that extend beyond a single incident response and affect residential areas for extended periods of time. Residents can go to the Kittitas County Sherrif's page for Emergency Management to search for their address to check if their residence is within an evacuation level and find multiple resources available for residents to help with evacuation preparedness.

Recommendations to aid in evacuation preparedness:

- Conduct tree removal, cut low limbs, and mow grass along roadways to increase the likelihood of survivable conditions during a wildfire. Prioritize the roads with the most traffic and congestion. See **Section 6** for recommended approaches to reduce wildfire risk along roadways.
- Coordinate with the Kittitas County Emergency Management by email at kcsoem@co.kittitas.wa.us or call the Sheriff's Office at 509-962-7525 and ask to speak to an Emergency Management Specialist to conduct evacuation drills to practice safe and effective evacuation for the entire County.
- Coordinate with Kittitas County Emergency Management to increase participation in Everbridge sign-up and use across Kittitas County. This should ideally be 100% participation for the entire county.
- Make sure warnings and alerts can be understood by all residents, including those with English as a second language and with hearing impairments.
- Educate residents about warning systems, protocols for evacuation orders, and evacuation etiquette prior to the need to evacuate the community. Communicate the importance of following evacuation orders; **failing to leave the community in a timely manner during a wildfire emergency can put first responders at risk.**
- Encourage residents to leave with only one vehicle per household to reduce congestion.
- Encourage all households to develop family evacuation plans and to pack go-bags that are at the ready. Ready, Set, Go! is a helpful resource to help with evacuation planning.
- Encourage residents to work with their neighbors to develop a plan for helping each other with evacuation if a resident is not at home, school-aged children or pets might be home alone, or residents have mobility impairments and need special assistance.
- Encourage residents to evacuate whenever they feel unsafe, even before receiving mandatory evacuation orders. This means having a family emergency plan in place and go-bags prepacked.
- Encourage residents to download the *WATCHDUTY* app for their phones which can provide notifications about new wildfires that may be in their areas.

5.5.3 Ready, Set, Go! Program



Ready, Set, Go! is a helpful resource to help with evacuation planning and is used by Kittitas County Emergency Management.

The Ready, Set, Go! Program seeks to develop and improve the dialogue between fire departments and the residents they serve. The program helps the fire service teach individuals who live in high-risk wildland fire areas, and the WUI, how to best prepare themselves and their properties against wildland fire threats. The program's tenets help residents be Ready with preparedness understanding, be Set with situational awareness when fire threatens, and to Go early when necessary. The Ready, Set, Go! Program works in complementary and collaborative fashion with the Fire Adapted Communities Coalition and existing wildland fire public education efforts (e.g., Firewise) and amplifies their message to individuals about emergency preparedness and evacuation. Ready, Set, Go! provides educational and outreach materials to limited English speakers, standardizing the message and ensuring that information is accurate across languages. Washington State Emergency Management Division provides additional resources for educational outreach to limited English speakers.

5.5.4 *Limited English Speaker Communication Plan*


Taylor Bridge Wildfire Community Meeting, August 2012; Kittitas County Conservation District

Non-English speakers have been underserved in this area, and the goal is to identify the best communication method to share emergency messages with at-risk groups before and during a disaster. The Kittitas County Sherriff's department translates evacuation and communication messages into Spanish on Facebook, but more proactive messages can be done through KFACC. In an emergency, messages must inform, educate, and mobilize people to follow public health directives. Messages can be delivered through television, radio, newspaper, bill inserts, flyers, word-of-mouth, social and community networks, and other channels. As outreach continues, KFACC plans to develop help facilitate messages for emergency preparedness plan to non-English speakers that would benefit their preferred messaging platform.

5.5.5 *Pre-Suppression Plans – Preparing Communities Before the Incident*

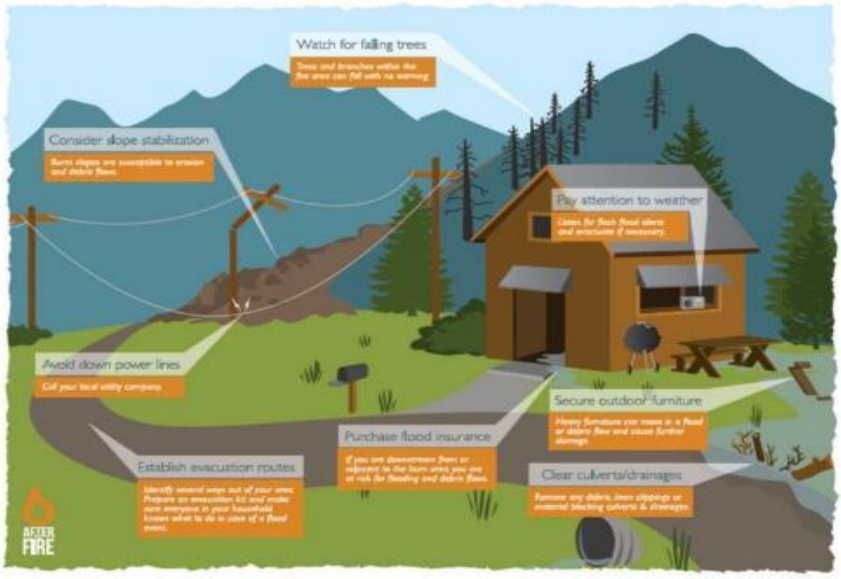
A Pre-Suppression Plan is an intelligence packet that assists incident commanders, operations section chiefs, structural protection specialists, division supervisors, group supervisors, taskforce leaders, and strike team leaders in formulating a plan based on current conditions, forecasted weather conditions, and available resources. The main objectives of the plan is to have a well thought out strategy based on the conditions and deployment of resources before the fire occurs, because a wildfire will start, regardless of the level of planning preparation. It should not be thought of as a cookbook of what *must be done*, but what *could be done*. Wildland firefighting and structural protection/defense requires judgment based on many years of actual firefighting experience, and must be responsive to actual, on the ground conditions. No amount of classroom training or simulations can prepare an individual for the leadership required during large, fast-moving fires, but preparing the available information in ways that can facilitate that leadership is key to effective wildfire response.

Pre-suppression plans include maps of resource placements, but these placements should not be thought of as static, as resources must remain mobile and available to go where needed. Resources may be deployed to prepare structures, construct hand lines, or conduct a burn out operation. Once the flaming front engages the edge of the city or structure fires begin to occur and firefighters are actively engaged in firefighting, additional resources will likely need to be pulled from other areas to assist.

5.6 Post Fire Impacts and Response

Several post-fire impacts can result from either wildfire or prescribed fire occurrence. Prescribed fire planning goals and objectives are typically driven by desired ecosystem, or hazard reduction outcomes. These goals and objectives should be clearly stated in the prescribed fire plan and a monitoring program should be in place to measure the post-fire effects.

Wildfire events can result in significant post-fire impacts—both positive and negative. Risk assessments can provide guidance in anticipating post-wildfire impacts mitigating these impacts before a fire occurs and increasing recovery efficiency. The development of a post-wildfire recovery plan, based on the anticipated impacts, can help the communities affected become more resilient to wildfire. A Washington post-wildfire recovery resource, afterthefirewa.org, was started 2021 by the DNR and provides multiple resources homeowners and forest landowners to help with debris cleanup and financial and technical assistance.



5.7 Long Term Recovery

Integrating post-fire response and long-term recovery strategies before wildfire occurs is imperative to limiting the scope of damage across the landscape whether it is ecological, social, or infrastructure. While it is not feasible to be able to respond and put every wildfire out at Initial Attack, limiting the impact of the post-fire impact will benefit

The Jolly Mountain Fire

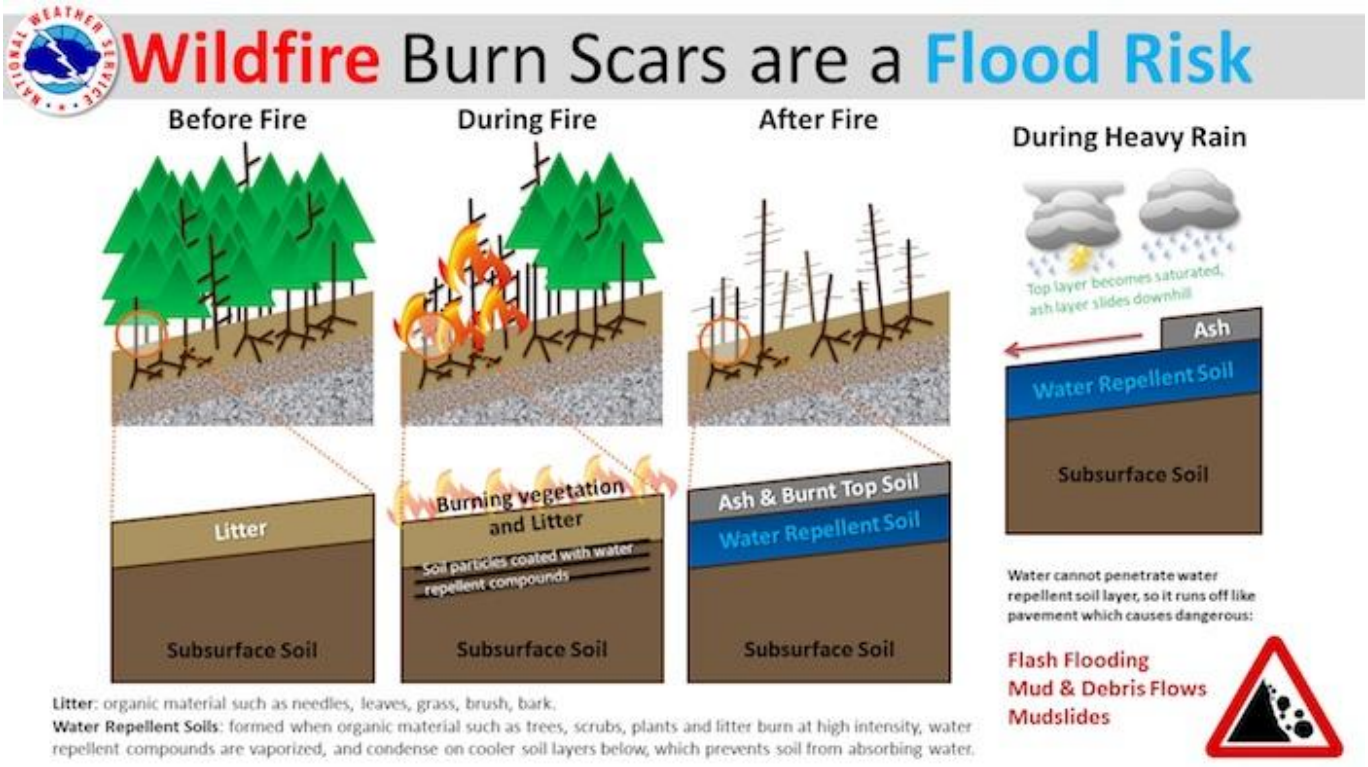
In August 2017, Jolly Mountain wildfire started by a lightning strike. The wildfire burned over more than 36,000 acres was transferred to a Type 4 command and the Central Washington Burned Area Emergency Response team was deployed to conduct analysis on the values at risk (assets and resources).

While the burned area occurred on mostly state and federal land, the identified values at risk, especially threats to property and human life and safety, were not confined to within the burned perimeter and extended to the Hidden Valley priority areas. Risk of private property spanning the North Cle Elum ridge to the Middle Fork Teanaway River have been identified as Major- High Possible risk. Increased flows, ash, sediment, and debris from burned slopes upslope of recreation residences may cause damage to drinking water and its delivery system and pose a risk of water contamination. Accordingly, these critical values have been identified as Moderate, Very High Very Likely.

Jolly Mountain is an example of a significant wildfire that did not burn structures, yet the community still faced extreme risk. Wildfires know no bounds, and as partners we must provide incentives to improve participation and implement more aggressive approaches to decrease risks before a fire and after a fire.



the economy, residents, and landscape alike. Lessons learned from previous wildfires continue to be difficult obstacles to overcome since there has not been a permanent solution and changes will need to be made at the statewide policy level. Continual engagement and discussion of long-term recovery is integral to change policy and effectively put in place recommended strategies and actions to mitigate the impacts of long-term recovery, since post-fire impacts range from a multitude of natural resource risks and concerns, including post-fire to flood and debris flow scenarios.



Recovery is something that starts before a wildfire starts and continues long after a wildfire. Both the WRCD CWPP Post-Fire-Recovery Planning Tool and the WA DNR Post-Fire Recovery Readiness Guide describe it as a continuous process that runs through pre-disaster planning, mitigation, response, rebuilding and long-term resilience. They also find that how well a community recovers depends mostly on the planning systems, coordination structures and partnerships it builds before a fire. Under the Washington Emergency Management Act (RCW 38.52) and WAC 118, local governments and tribes are responsible for coordinating disaster recovery. The state's Washington Restoration Framework (WRF) supports locally led recovery but does not direct it. Washington encourages jurisdictions to build recovery preparedness into the plans they already have, including CWPPs, Hazard Mitigation Plans and comprehensive plans. This 2026 CWPP helps to coordinate recovery as well as mitigation. Linking the two increases the value of mitigation investments, makes clear who does what, and makes Kittitas County more competitive for state and federal recovery funding.

The WA DNR Post-Fire Readiness Guide notes that even if nothing else is done to prepare for recovery, identifying key partners and discussing readiness with them in advance will go a long way, and stresses the value of avoiding "meeting someone for the first time during a fire" (p. 16).

This CWPP also recognizes and plans for recovery that often, must proceed without federal help. The Readiness Guide recommends that county emergency management set up an ESF-14 (Long-Term Community Recovery & Mitigation) function that can be activated during response to lead initial damage assessments and information sharing. It also recommends naming a Local Disaster Recovery Manager early. Putting the Community Wildfire Protection Plan into Action

The effective implementation of this plan is based on three key elements: stakeholder engagement, strategic management, and monitoring and evaluation.

5.8 Stakeholder Engagement

Each stakeholder in the CWPP shares a role, whether it be agency, landowner, or nongovernmental organization, affiliated. The success of this CWPP requires the participation of all stakeholders to engage in understanding their role and taking appropriate actions.

5.8.1 Residents and Homeowners

Kittitas County Fire Districts cannot always protect everyone from wildfire, especially if homeowners haven't taken responsibility for ensuring firefighters can safely work in the area. By creating a defensible space around individual homes and communities, reducing hazardous fuels in the surrounding area, and ensuring that access routes will support fire apparatus, homeowners can greatly increase the likelihood that their property will survive a wildland fire event. It is imperative that homeowners work with their neighbors and communities to increase safety and reduce risk for the greater protection of all.

5.8.2 Fire and Emergency Responders

There are several resource and capability enhancements identified by the fire and emergency responders in Kittitas County that are related to response and treatment of defensible space, egress/ingress, capacity, equipment, and planning efforts (see Section 5.1). Implementation of response action items will rely on either the isolated efforts of the rural fire districts or a concerted effort by Kittitas County or KFACC to achieve equitable enhancements across all districts. Given historic trends, individual departments competing against neighboring departments for



Taylor Bridge Wildfire, 2012; Washington State Department of Natural Resources Flickr

grant monies and equipment will not achieve countywide equity.

5.8.3 Civic and Community Leaders

Wildfire mitigation efforts must be supported by a set of policies and regulations, where appropriate, as well as guidelines at the county and community levels that maintain a solid foundation for safety and consistency. They must also be supported by the public infrastructure, economy, and value system. Critical infrastructure refers to the communications, transportation, power lines, and water supply that service a region or a surrounding area. All these components are important to central Washington and to Kittitas County specifically. These networks are, by definition, a part of the WUI in the protection of people, structures, infrastructure, and unique ecosystems. Without supporting infrastructure, a community's highly valued resources and assets may be protected, but the economy and way of life are lost.

5.8.4 Forest and Land Managers

There are many land management issues associated with wildfire that can have lasting effects on natural resources as well as communities and local economy. In addition to the immediate responsibility of wildfire suppression, land managers at all levels; local, state, Tribal, and Federal, must also be aware of and plan for the long-term impacts and implications of wildland fire on the landscape. Undeveloped private and public lands serve many purposes and are highly valued for their ability to provide habitat for animals, recreational and hunting opportunities, timber resources, etc. Wildfire affects each of these values in different ways some of which are very direct such as the loss of timber assets, but some are subtle and take place over long periods of time such as the loss of native seed sources due to repeated burning. Increasing cohesiveness of land management across boundary jurisdictions will reduce risk and increase efficiency.

Table 6 shares roles that community members at local, state, and federal levels play in Kittitas County's wildfire resilience and risk reduction.



Tapash Field Trip 2015, Tapash Sustainable Forest Collaborative

Table 6
Kittitas County Wildfire Resilience and Risk Reduction Roles

Stakeholder Group	Overview of Roles
City, County, and Local Partners	
Elected Officials	• Board of County Commissioners has jurisdiction and power to represent the county and has care of the county property, management, and business concerns. • Kittitas County Sheriff is an elected position that has responsibility of the enforcement of state and county laws and statutes. • The Ellensburg, Cle Elum, and Roslyn city councils and mayors are elected to represent citizens of those areas.
Kittitas County Community and Planning Services	• Responsible for developing and administering plans and regulations, including zoning and subdivision, growth policy, regional plans, and land use code enforcement • Responsible for fire life safety in Kittitas County administered through the Kittitas County Fire Marshal's office
Fire Departments and Fire Districts	• Responsible for community response and protection services for areas across Kittitas County
Kittitas County Fire Chiefs Association	• Nonprofit association with members from city, county, rural, state, and federal agencies including fire departments and districts, Kittitas County Emergency Management, DNR, USFS, and other Fire District organizations • Coordinates fire prevention and response activities
Kittitas County Emergency Management	• Coordinates emergency response components in the geographical area of Kittitas County
Kittitas County Health Department	• Responsible for air quality monitoring
Kittitas County residents, landowners, and community councils	• Responsible for personal property and engaging in community projects • Community councils participate in planning process by facilitating communication between communities and local government. • Includes private landowners such as citizens and entities with large landholdings (e.g., TNC)
Nongovernmental Stakeholders	• Includes stakeholders from Central Washington Homebuilders Association, realtors, and other industry professionals • Volunteer organizations , local chapters of Chamber of Commerce, utilities, university partners, and other businesses
Kittitas County Conservation District	• Lead and participate in collaborative efforts with all stakeholders to create and maintain resilient working landscapes through voluntary incentive-based measures. • Seek and secure local, state and federal grant funds for education, technical and financial assistance programs to implement priorities outlined in the CWPP.

Stakeholder Group	Overview of Roles
Kittitas County Fire Adapted Communities Coalition	• Includes federal, state, and local stakeholders committed to improving landscape and community resiliency for all who live, work, and play in Kittitas County
State Partners	
DNR	• Provides direct work, technical assistance, and funding to private landowners with forested property. Provides technical assistance, planning and coordination support and funding for prescribed fire, post-fire recovery, and all-lands forest health and aquatic restoration activities. • Work to seek and secure federal and state funds that are passed down to local governments (like KCCD and the Fire Protection Districts).
WDFW	• State agency that is a landowner/land manager in Kittitas County • Co-manager of the Teanaway Community Forest, a high recreational area in Kittitas County that is culturally and ecologically sensitive
Washington Department of Ecology	• State agency that monitors and reports air quality conditions and establishes burn ban regulations and burn permits
WAFAC	• Network of practitioners that provides communities with resources to develop innovative solutions, work with local partners, engage with other member communities, and increase local capacity to work and live better with wildfire
Washington Resource Conservation and Development Council	• Non-profit organization that provides resources for facilitation, planning, coordination, and implementation of natural resource conservation and community development initiatives such as the WAFAC, Yakima Basin Clean Water Partnership, and Yakima Tributary Habitat & Access Program • Fiscal sponsor for the Washington Prescribed Fire Council, KFACC, and the South Central Washington Coordinated Weed Management Area
The Nature Conservancy	• Forest manager of the Central Cascades Forest • Restoration Project among many other local and statewide landscape and community resiliency projects
Federal and Tribe Partners	
USFS	• Manages Okanogan Wenatchee National Forest and Mount Baker Snoqualmie National Forest • Local support and resources also include Cle Elum Ranger District
Yakama Nation	• Maintains a culturally sensitive site inventory for lands on and off the reservation and in Kittitas County has a significant role in fish habitat restoration and cultural value
BLM	• Manages public lands out of the Wenatchee Field Office
U.S. Fish and Wildlife Service	• Administers environmental stewardship programs and services to guide conservation, development and management of fish and wildlife resources • Issues permits under various wildlife laws and treaties

Stakeholder Group	Overview of Roles
U.S. Army Yakima Training Center	• Manages Yakima Training Center that stretches between the most southern and eastern portion of Kittitas County

5.9 Project Action Plan


Jolly Mountain Wildfire, 2017; Inciweb

Implementing this CWPP depends on identifying and carrying out project action items that reduce the number of unplanned human-caused ignitions and the negative impacts of wildland fire in Kittitas County. This section identifies and prioritizes mitigation actions, including treatments the county can implement to pursue its fire management goals.

Members of the KFACC CWPP committee organized the strategic action plan into three main categories, which correspond to the three emphasis areas of the Cohesive Strategy: (1) fire-adapted communities, (2) fire-resilient landscapes, and (3) response. Consistent with the Cohesive Strategy and the intent of the CWPP, two additional categories were added: (4) risk assessment and (5) post-fire risk reduction. Natural vegetation and habitat restoration activities are incorporated into fuels reduction projects.

Recommendations are organized by category and listed in order of priority. Projects that address human safety take precedence over projects that protect homes. No home is worth a life.

Education and outreach are critical components of this plan. They aim to give residents and visitors the knowledge they need to better understand fire-related issues. Another priority of the 2026 CWPP is creating and maintaining fire-resilient landscapes, both immediately around homes and across the broader area.

The Project Action Plan (Table 7) brings together the actions identified throughout this CWPP. Actions are grouped by type, with each type named in the green heading at the top of its table. For each action, the table lists its name, project goal, proposed lead(s), and priority level as set by the CWPP Core Team. Many actions are interrelated, but each appears only once.

Kittitas County includes many land management agencies and thousands of private landowners, thus adoption schedules and levels of implementation will vary across ownerships. The county's primary land managers (the USFS, the State of Washington, and TNC) participated in this planning process and contributed to the plan's development. Where available, their land treatment schedules were considered so that their planning efforts align with those of Kittitas County. Risk assessments and the resulting recommendations reflect 2026 conditions.

Kittitas County encourages building disaster resistance into normal day-to-day operations. When planning activities are carried out through existing programs and resources, the cost of mitigation is often a small portion of a project's overall implementation cost.

Finally, the CWPP subcommittee does not intend to limit funding to projects identified as high priority. A project that is a high priority for a specific community may not rank as high at the county level, yet it may be exactly what that community needs to prevent a disastrous outcome. A functional mitigation program, at both the county and community levels, needs the flexibility to fund a diverse range of projects based on applicable criteria.

Table 7
Project Action Plan

Landscape Treatments – Actions focused on changing fuels, vegetation, forest/range conditions, and landscape-scale wildfire behavior			
Project Name	**Project Goal**	**Leads**	**Priority**
USFS NEPA Review – Manastash-Taneum, Upper Swauk, & Lower Cle Elum Fuel Break	Coordinate and reevaluate non-federal lands activities and best management practices informed by the Manastash-Taneum NEPA review, including alignment of treatment recommendations across ownerships. Continue to review USFS signed decisions that might align with cross-boundary opportunities which address hazardous fuels and wildfire risk reduction	USFS, KFACC	High
Landscape Fuels Reduction & Strategic Fuel Breaks	Implement and maintain landscape-scale fuels reduction across private and public lands, including private-land fuels reduction, shaded fuel break corridors, strategic fuel breaks around communities, and maintenance of completed treatments. Use catchment planning to coordinate treatment priorities and locations.	KFACC, DNR SE Region, KCCD, TNC, USFS	High
Landscape Treatment Training & Capacity Building	Increase training, technical assistance, and capacity-building opportunities for partners and landowners to plan, implement, and maintain landscape treatment actions.	TNC, KFACC, DNR SE Region, USFS	Medium
Prescribed Fire Advancement	Continue to implement, advance, and maintain prescribed fire across the landscape; expand training opportunities, consider development of prescribed burn associations, and support maintenance treatments that sustain completed work.	Washington State Prescribed Fire Council, DNR, USFS, KFACC, Landowners, TNC, Cascadia CD, TREX	High

Public Health – Actions addressing the health and human impacts of wildfire and smoke.			
Project Name	**Project Goal**	**Leads**	**Priority**
Countywide Smoke Ready Communities	Establish a coordinated countywide Smoke Ready Community initiative to reduce smoke exposure and build resilience.	KFACC, KCPHD	Medium
Expand Air Filter Access	Establish equitable programs to distribute HEPA air cleaners and DIY box-filter information and materials to vulnerable populations.	KFACC, KCPHD, DNR	High
Establish Clean Air Centers	Identify, prepare, and maintain public buildings with verified filtration and activation protocols to serve residents during prolonged smoke events.	KFACC, KCPHD	High
Smoke Preparedness Plans for Schools & Childcare	Develop smoke preparedness plans for K-12 schools and childcare providers covering AQI thresholds, HVAC optimization, portable HEPA filtration, activity cancellation/relocation, shelter-in-place, and continuity of education.	KFACC, KCPHD	High
Wildfire Smoke Business Resilience	Develop a practical toolkit helping businesses prepare for smoke events through cleaner indoor air strategies, continuity planning, employee communications, and voluntary Smoke Ready Business recognition.	KFACC, KCPHD	Medium
Annual Smoke Preparedness Campaigns	Provide recurring seasonal outreach on AQI, HEPA filtration, cleaner indoor air, and protection of vulnerable populations before wildfire season.	KFACC, KCPHD	High

Prevention – Actions intended to prevent or reduce wildfire ignition or prevent wildfire impacts before they occur.			
Project Name	**Project Goal**	**Leads**	**Priority**
Transportation Corridor Vehicle Fire Risk Reduction	Contain vehicle fires from spreading along Interstates and State Highways in Kittitas County.	DNR SE Region, Fire Districts and Departments, BLM, YTC, Private Landowners, KCCD, WSDOT	High
Fuels Reduction Contractor Capacity	Encourage and cultivate fuels reduction contractors familiar with Firewise principles, wildlife-friendly fuels reduction, and forest health best management practices.	KFACC	Low
Fire Education & Prevention Outreach	Continue supporting fire education that helps residents, landowners, and communities understand wildfire prevention, preparedness, and safe actions.	KFACC, DNR, USFS	Medium
Utility Wildfire Mitigation & Power Shutoff Coordination	Align wildfire prevention efforts with PSE's Utility Wildfire Mitigation Plan and support coordinated planning and public preparedness for utility-initiated power shutoffs.	KFACC, PSE	Medium

Regulations, Policy & Plans – Actions involving codes, land-use decisions, planning, policy, and formal agreements.			
Project Name	**Project Goal**	**Leads**	**Priority**
Wildfire Risk, Land Use & Code Strategy	Maintain an annual risk review and use updated wildfire hazard/WUI information to guide land-use planning, zoning, open-space conservation, development regulations, and code enforcement. Collaborate with partners to develop and consistently apply stronger requirements for future development and vegetation management that transfer wildfire risk away from residents, responders, and communities.	Fire Marshal, Fire Districts, Kittitas County, KFACC, Public Works	High
County Burn Ban Regulations	Identify and support adoption of county burn-ban regulations that mirror DNR regulations for agricultural and structural prescribed fires.	Kittitas County, Fire Marshal, Fire Districts, KFACC, DNR	Medium
Suncadia Prescribed Burning Guidelines	Encourage an amendment to Suncadia guidelines/master plan to allow appropriate pile burning within the resort and support collaboration between county commissioners and Suncadia.	KFACC, Kittitas County, Suncadia	Medium
PODs/PCLs Ground Truthing & Modification Requests	Establish an annual or biannual process to ground-truth PODs/PCLs and submit modification requests when local conditions or knowledge indicate updates are needed.	WA DNR	Medium
Wildfire Risk Data & Planning Updates	Maintain and update county wildfire risk information and planning products as new data, development, and wildfire seasons change conditions.	USFS, County, KFACC	High

Recovery & Post-Fire Response – Occur after wildfire to stabilize communities, ecosystems, and watersheds & support long-term recovery.			
Project Name	**Project Goal**	**Leads**	**Priority**
Post-Fire Recovery Activities	Implement coordinated post-fire recovery activities, including structure damage assessments, insurance assistance, debris cleanup, and long-term recovery efforts.	KFACC	Medium to High
BAER Local Engagement & Capacity Building	Build local capacity to engage with and inform state and federal BAER assessments, ensuring local knowledge, priorities, and needs shape post-fire recovery outcomes across all land ownerships.	DNR, KFACC	High
Post-Fire Coordinated Education & Outreach	Use incident meetings during response to provide post-fire education and recovery information to landowners, residents, businesses, and farmers/ranchers.	KFACC	High
Water Quality & Watershed Protection – Assessment	Rapidly assess watershed conditions after wildfire to identify values at risk and inform coordinated response across all land ownerships.	KFACC	High
Water Quality & Watershed Protection – Restoration	Coordinate water quality and watershed protection using an all-hands-all-lands approach to restore burned watersheds and safeguard potable water sources and wildlife habitat.	KFACC, KCPHD (Environmental Health)	High
Recovery Coordination Framework	Establish a standing countywide recovery coordination structure that formalizes roles, responsibilities, communication pathways, and training for post-fire recovery across all land ownerships before a fire event.	KFACC, WA DNR, Washington State Conservation Commission, KCEM	Medium to High

Immediate Recovery Services & Case Management	Prepare for direct and immediate post-disaster needs by aligning with the Disaster Assistance Center plan and establishing systems for disaster case management, donation management, volunteer management, and expense tracking.	KFACC, KCEM	High
Secondary Recovery Resources	Identify secondary recovery resources and gaps, including mental health services, alternative resources, and shelter locations for uses other than overnight sleeping.	KFACC, KCEM	Medium

Safety & Evacuation – Actions focused on residents being able to prepare, evacuate, and remain safe during wildfire.			
Project Name	**Project Goal**	**Leads**	**Priority**
Neighborhood Emergency Preparedness Planning	Develop neighborhood plans that integrate county Natural Hazards, CWPP, and CEMP planning and build economic, ecological, and social resilience. Provide planning templates, support community preparedness events, and empower neighborhoods to request education seminars.	KCEM, KFACC, Local Response, Neighborhoods, Communities	High
Community Evacuation Planning & Support	Enhance evacuation zone planning and support communities in developing and maintaining evacuation plans, templates, and preparedness materials.	DNR, Kittitas County Fire District 7, University of Idaho, KFACC	High
Emergency Address & Signage	Improve response by implementing addressing and pre-positioning seasonal emergency signage and messaging at a neighborhood level; promote Ready, Set, Go! resources.	Communities, KFACC, Local Response, Kittitas County Public Works	High

Resident Mitigation – Actions where individual property owners, neighborhoods, & residents take direct mitigation action.			
Project Name	**Project Goal**	**Leads**	**Priority**
Expanded Roving Chipper & Debris Reduction	Strengthen and expand the roving chipper program to support Firewise communities and landowners with chipping and other debris-removal activities, including use of flame-cap kilns where appropriate.	KFACC, KCEDP, Fire Districts, KCCD	High
City Permit Process for Wildfire Preparedness	Develop and encourage a permit process within city limits that supports IBHS standards and wildfire preparedness practices for residential mitigation.	Cities, Fire Districts, KFACC	Medium
Neighborhood Assessments & Action Plans	Continue providing neighborhood assessments and mitigation action plans to HOAs and communities, with a focus on resident-level risk reduction and implementation.	KFACC, KCCD	Medium
Wildfire Response – Actions that improve fire department, responder, incident management, & suppression capacity.			
Project Name	**Project Goal**	**Leads**	**Priority**
Neighborhood Pre-Suppression Action Plans	Improve response by planning wildfire suppression tactics, first-responder coordination, and community safety/preparedness. Develop templates that communities can personalize, support preparedness events and education seminars, and outline PODs/PCLs for Incident Management Teams and local response.	KFACC, Kittitas County Fire District No. 7, Kittitas County Fire Marshal, DNR	High
Enhance Safe & Effective Local Response	Standardize equipment and wildland/WUI training across local fire districts; develop a common operating framework for coordinated response; and cultivate volunteer recruitment and retention.	Local Fire Districts, DNR, USFS, Washington Prescribed Fire Council	High
Wildland Fire Response Agreements – Maintenance	Maintain, review, and update existing wildland fire response agreements between the county, local fire districts, and state/federal agencies.	Kittitas County Emergency Management, Local Fire Districts, DNR	Medium

Risk Assessment Data Collection & Management	Compile and share parcel-level assessment data through a centralized platform to support county risk assessment and wildfire response, reduce redundant data collection, and provide consistent, current information to responders and fire-adapted practitioners.	Local Fire Districts & Departments, DNR, KFACC, KCCD, Blue Pines Fuel, Communities	High
Partnerships & Community Engagement – Actions centered on collaboration, education, outreach, networks, & community capacity.			
Project Name	**Project Goal**	**Leads**	**Priority**
Responder–Land Manager Information Sharing	Strengthen partnerships between responders and land managers through shared information, assessment data, mapping, and other tools that improve communication and coordinated wildfire preparedness and response.	Fire Districts, County, KFACC, DNR, Land Managers	High
Communities Helping Communities	Develop a learning exchange program that engages communities statewide, empowers local action, and shares lessons learned. Leverage Community Wildfire Ambassadors and the WSU Forestry Coach Course to support local "sparkplugs" and two-way knowledge exchange.	WAFAC, KFACC, WA DNR, WSU Forestry Extension	Medium
Individual Risk Assessment Data Engagement	Encourage public engagement by providing assessment data to individuals and compile partner assessment data into an accessible location for first responders and fire-adapted practitioners.	Fire Districts, County, KFACC	Medium
Prescribed Fire Education & Coalitions	Coordinate prescribed fire education and outreach through the Washington Prescribed Fire Council and other agencies; support private landowners with resources to coordinate prescribed fire operations; and include pre-fire community meetings and presentations with partners.	Washington State Prescribed Fire Council, DNR, USFS, KFACC, Landowners	Medium
Community Education & Engagement	Coordinate and maintain education and engagement with HOAs, neighborhoods, and communities, including wildfire preparedness information, resources, and partner programs.	KFACC, DNR SE Region, WSU Forestry Extension, Kittitas County partners	Medium

Youth Education & Outreach	Coordinate with existing educational programs to integrate fire-adapted concepts and wildfire education.	KFACC, DNR SE Region	Medium
KFACC Continuation & Sustainability	Continue to support KFACC and establish long-term sustainability strategies to maintain the capacity to coordinate and facilitate the coalition.	Washington Resource Conservation & Development Council, KCCD, TNC	High
Community Outreach & Engagement Coordination	Develop and maintain a coordinated outreach and engagement approach that shares current wildfire and forest-health resources and connects residents with KFACC and partner programs across multiple platforms and venues.	Kittitas County Community Development Services, KFACC, Washington Farm Forestry Association Volunteers, WSU Forestry Extension	Medium
Infrastructure & Business – Actions protecting or strengthening infrastructure, economic systems, & businesses.			
Project Name	**Project Goal**	**Leads**	**Priority**
Small Wood Markets	Encourage economic infrastructure for small-diameter woody debris markets, including biochar and flame-cap kilns.	TNC, KFACC, CWU, KCEDP	Medium
Rangeland & Agriculture in a Fire Landscape	Encourage agricultural practices that benefit forest and range conditions, discourage development of open-space land, identify agricultural infrastructure for protection and proactive treatments, and provide education to agricultural partners.	KFACC, Washington State Farm Bureau, Kittitas Reclamation District, Bureau of Reclamation, Washington Cattlemen's Association, Local Fire Districts, WSU Extension	High

5.10 Monitoring and Evaluation of the 2026 CWPP

The components of risk and the preparedness of the county's resources are not static. It will be necessary to regularly adjust for changes in the components of risk, population density changes, infrastructure modifications, and other factors.

The CWPP as a Living Document

CWPPs are a guide and a plan for action. They should be revisited and reviewed annually, at minimum, by Kittitas County and the CWPP Subcommittee. Regular meetings of the CWPP Subcommittee can include reviewing progress on priority actions, celebrating treatments, outreach events, new partnerships, and collecting implementation ideas for the next update.

The KFACC, working through the CWPP Subcommittee, will ensure the continued maintenance of the CWPP. The steering committee recommends that the Kittitas County CWPP be reviewed at least annually at special meetings of the KFACC, open to the public and involving all municipalities /jurisdictions, where action items, priorities, budgets, and modifications can be made or confirmed.

The Washington DNR suggests CWPPs be updated on a regular basis. Re-evaluation of this plan should be made on the 5th anniversary of its acceptance, and every 5-year period following, in keeping with the Disaster Mitigation Act of 2000. CWPPs greater than 10 years old are outdated and can exclude communities from successfully applying for competitive funding opportunities under programs like the Healthy Forest Restoration Act (HFRA), the National Cohesive Wildland Fire Management Strategy, and the Community Wildfire Defense Grant (CWDG) program (Washington Department of Natural Resources, 2025) to ensure a comprehensive approach.

Amendments and updates to the plan should be documented and attached to the CWPP. Annual Review of the Kittitas County CWPP is located on the Project Ready Action Table and the scheduled review of the CWPP will be in Winter of 2031.

The process for suggesting annual amendments to the KFACC board will be as follows:

- A Neighborhood Ambassador Program is a starting point for CWPP review that will be a community-based initiative which empowers residents to act as liaisons between their neighborhoods and organizations. Volunteers will be recruited and trained to represent their communities in outreach efforts and provide feedback to city agencies, nonprofits, and other organizations in Kittitas County responsible for the CWPP actions over the next 5 years. More information can be found at the Washington Fire Adapted Communities Learning Network.
- **Annual check-in and minor updates:** Each year, the CWPP Implementation Committee convenes a review meeting with KFACC, local fire districts, and Kittitas County staff to document completed projects, note any new hazards or demographic/landscape changes, and adjust the priority action list accordingly; minor edits (e.g., updated maps, project status,

contact information) are incorporated directly into the plan with Core Team sign-off, without requiring full DNR/State Forester re-approval.

- **Formal amendment for substantive changes:** If the annual review identifies significant changes — new risk areas, major shifts in priorities, or updates affecting the plan's overall scope — a formal amendment is drafted, circulated to the Local Fire Defense Board and key partners for comment, finalized with Core Team signatures, submitted to Washington DNR for State Forester approval, and then brought to the Kittitas County Board of Commissioners for adoption as an official plan amendment.

The suggested review process for every 5 years involves:

- Hosting collaborative meetings with partners that have a vested interest — including KFACC, local fire districts, the Kittitas County Conservation District, and Washington Department of Natural Resources — while documenting completed projects and demographic/landscape changes to update wildfire risk reduction priorities and maps.
- Distributing drafts to the Local Fire Defense Board and key partners for review and input before finalizing with Core Team signatures and submitting to Washington DNR for State Forester approval.
- Submitting to the Kittitas County Board of Commissioners and State Forester for final adoption.



8 Glossary

20-foot wind speed: The rate of sustained wind over a 10-minute period at 20 feet above the dominant vegetation. The wind adjustment factor to convert surface winds to 20-foot wind speeds depends on the type and density of surface fuels slowing down windspeeds closer to the ground (NWCG, 2021).

Active crown fire: Fire in which a solid flame develops in the crowns of trees and advances from tree crown to tree crown independently of surface fire spread (NWCG, 2018b).

Basal area: Cross sectional area of a tree measured at breast height (4.5 feet above the ground). Used as a method of measuring the density of a forest stand in units such as ft^2/acre (USFS, 2021).

Broadcast prescribed burning (aka, prescribed burn, controlled burn): A wildland fire originating from a planned ignition in accordance with applicable laws, policies, and regulations to meet specific objectives (NWCG, 2018b).

Canopy fuels: The stratum of fuels containing the crowns of the tallest vegetation (living or dead), usually above 20 feet (NWCG, 2018b).

Canopy height: The average height of the top of the vegetated canopy (NWCG, 2019).

Canopy: The more or less continuous cover of branches and foliage formed collectively by adjacent tree crowns (USFS, 2021).

Canyon: A long, deep, very steep-sided topographic feature primarily cut into bedrock and often with a perennial stream at the bottom (NRCS, 2017).

Chain: Chains are commonly used in forestry and fire management as a measure of distance. 1 chain is equivalent to 66 feet. Chains were used for measurements in the initial public land survey of the U.S. in the mid-1800s (NWCG, 2018b).

Chute: A steep V-shaped drainage that is not as deep as a canyon but is steeper than a draw. Normal upslope air flow is funneled through a chute and increases in speed, causing upslope preheating from convective heat, thereby exacerbating fire behavior (NWCG, 2008).

Community Wildfire Protection Plan (CWPP): A plan developed in the collaborative framework established by the Wildland Fire Leadership Council and agreed to by state, Tribal, and local governments, local fire departments, other partners, and federal land management agencies in the vicinity of the planning area. CWPPs identify and prioritize areas for hazardous fuel reduction treatments, recommend the types and methods of treatment on Federal and non-Federal land that will protect one or more at-risk communities and essential infrastructure, and recommend measures to reduce structural ignitability throughout the at-risk community. A CWPP may address issues such as wildfire response, hazard mitigation, community preparedness, and structure protection (NWCG, 2018b).

Convection: A type of heat transfer that occurs when a fluid, such as air or a liquid, is heated and travels away from the source, carrying heat along with it. Air around and above a wildfire expands as it is heated, causing it to become less dense and rise into a hot convection column. Cooler air flows in to replace the rising gases, and in some cases, this inflow of air creates local winds that further fan the flames. Hot convective gases move up slope and dry out fuels ahead of the flaming front, lowering their ignition temperature and increasing their susceptibility to ignition and fire spread. Homes located at the top of a slope can become preheated by convective heat transfer. Convection columns from wildfires carry sparks and embers aloft (NWCG, 2018b).

Crown (aka, tree crown): Upper part of a tree, including the branches and foliage (USFS, 2021).

Cultural burning: The intentional application of fire to the land by an Indigenous person or cultural group (e.g., family unit, Tribe, clan/moiety, or society) to achieve cultural goals or objectives and based in Tribal or Traditional Indigenous law. It integrates holistic knowledge of place to guide the timing and implementation of burning activities. The reasons for cultural burning can be quite extensive, such as maintenance of travel corridors, wildlife habitat improvement, attracting wildlife to a place, water stewardship, pest control, stewardship of cultural plants, conservation, and spiritual, religious, or community ceremony (Clark et al., 2024).

Defensible space: The area around a building where vegetation, debris, and other types of combustible fuels have been treated, cleared, or reduced to slow the spread of fire and reduce exposure to radiant heat and direct flame. It is encouraged that residents develop defensible space so that during a wildfire their home can stand alone without relying upon limited firefighter resources due to the great reduction in hazards they have undertaken.

Direct attack: Any treatment applied directly to burning fuel such as wetting, smothering, or chemically quenching the fire or by physically separating the burning from unburned fuel (NWCG, 2018b).

Draws: Topographic features created by a small, natural watercourse cutting into unconsolidated materials. Draws generally have a broader floor and more gently sloping sides than a ravine or gulch (NRCS, 2017).

Ecological restoration: The process of assisting the recovery of an ecosystem that has been damaged, degraded, or destroyed (SER, 2004).

Ember: Small, hot, and carbonaceous particles. The term "firebrand" is also used to connote a small, hot, and carbonaceous particle that is airborne and carried for some distance in an airstream (Johnston, 2018).

Ember cast: The process of embers/firebrands/flaming sparks being transported downwind beyond the main fire and starting new spot fires and/or igniting structures. Short-range ember cast is when embers are carried by surface winds and long-range ember cast is when embers are carried high into the convection column and fall out downwind beyond the main fire. The number of embers reaching an area decreases exponentially with distance traveled, and the likelihood of structure ignition

increases with the number of embers landing on receptive fuels (Caton et al., 2016). The distance used to differentiate between short-range and long-range ember cast varies among sources. NWCG (2018b) classifies short-range ember cast as embers that travel less than 0.25 miles and long-range ember cast as embers that travel more than 0.25 miles, whereas Beverly et al., (2010) use a threshold of 0.06 miles. The Beverly et al., (2010) definition is used in this CWPP.

Fire adapted community (FAC): A human community consisting of informed and prepared citizens collaboratively planning and taking action to safely coexist with wildland fire (NWCG, 2018b). There is not a checklist or one silver bullet to become a FAC; there are many strategic actions and tools that should be used together to reduce shared risk. Risk mitigation is the responsibility of everyone who lives and works in the community—residents, community groups, fire protection districts, agency partners, non-governmental organizations, etc. Fire adaptation is an ongoing process of collaborative action to identify risk, mitigate it, and maintain the work overtime.

Fire behavior: The way a fire reacts to the influences of fuel, weather, and topography. Characteristics of fire behavior include rate of spread, fire intensity, fire severity, and fire behavior category (NWCG, 2018b).

Fire history: A general term referring to the historic fire occurrence in a specific geographic area (NWCG, 2018b).

Fire intensity (aka, fireline intensity): (1) The product of the available heat of combustion per unit of ground and the rate of spread of the fire, interpreted as the heat released per unit of time for each unit length of fire edge, or (2) the rate of heat release per unit time per unit length of fire front (NWCG, 2018b).

Fire regime: Description of the patterns of fire occurrences, frequency, size, and severity in a specific geographic area or ecosystem. A fire regime is a generalization based on fire histories at individual sites. Fire regimes can often be described as cycles because some parts of the histories usually get repeated, and the repetitions can be counted and measured, such as fire return interval (NWCG, 2018b).

Fire severity. Degree to which a site has been altered or disrupted by fire; loosely, a product of fire intensity and residence time (NWCG, 2018b). Fire severity is determined by visually inspecting or measuring the effects that wildfire has on soil, plants, fuel, and watersheds. Fire severity is often classified as low-severity (less than 20% of overstory trees killed) and high severity (more than 70% of overstory trees kills). Moderate-severity or intermediate fire severity falls between these two extremes (Agee, 1996). Specific cutoffs for fire severity classifications differ among researchers. For example, Sheriff et al. (2014) define high-severity fires as those killing more than 80% of overstory trees.

Fire weather conditions: Weather conditions that influence fire ignition, behavior, and suppression, for example, wind speed, wind direction, temperature, relative humidity, and fuel moisture (NWCG, 2018b).

Firebreak: A natural or constructed barrier where all vegetation and organic matter have been removed down to bare mineral soil. Firebreaks are used to stop or slow wildfires or to provide a control line from which to work (Bennett et al., 2010; NWCG, 2018b).

Fireline: (1) The part of a containment or control line that is scraped, or dug, to mineral soil or (2) the area within or adjacent to the perimeter of an uncontrolled wildfire of any size in which action is being taken to control fire (NWCG, 2018b).

Flame length: The distance between the flame tip and the midpoint of the flame depth at the base of the flame (generally the ground surface). Flame length is measured on an angle when the flames are tilted due to effects of wind and slope. Flame length is an indicator of fire intensity (NWCG, 2018b).

FlamMap: A fire analysis desktop application that can simulate potential fire behavior and spread under constant environmental conditions (weather and fuel moisture) (Finney, 2006). FlamMap is one of the most common models used by land managers to assist with fuel treatment prioritization, and it is often used by fire behavior analysts during wildfire incidents.

Fuel model: A stylized set of fuel bed characteristics used as input for a variety of wildfire modeling applications to predict fire behavior (Scott and Burgan, 2005).

Fuel reduction: Manipulation, combustion, or removal of fuels to reduce the likelihood of ignition and/or to lessen potential damage from wildfires and resistance to control (NWCG, 2018b).

Fuelbreak: A natural or manmade change in fuel characteristics which affects fire behavior so that fires burning into them can be more readily controlled. Fuelbreaks differ from firebreaks due to the continued presence of vegetation and organic soil. Trees in shaded fuelbreaks are thinned and pruned to reduce the fire potential but enough trees are retained to make a less favorable microclimate for surface fires (NWCG, 2018b).

Fuels mitigation / management: The act or practice of controlling flammability and reducing resistance to control of wildland fuels through mechanical, chemical, biological, or manual means, or by fire, in support of land management objectives (NWCG, 2018b).

Fuels: Any combustible material, most notably vegetation in the context of wildfires, but also including petroleum-based products, homes, and other man-made materials that might combust during a wildfire in the wildland-urban interface. Wildland fuels are described as 1-, 10-, 100-, and 1000-hour fuels. One-hour fuels are dead vegetation less than 0.25 inch in diameter (e.g., dead grass), ten-hour fuels are dead vegetation 0.25 inch to 1 inch in diameter (e.g., leaf litter and pine needles), one hundred-hour fuels are dead vegetation 1 inch to 3 inches in diameter (e.g., fine branches), and one thousand-hour fuels are dead vegetation 3 inches to 8 inches in diameter (e.g., large branches). Fuels with larger diameters have a smaller surface area to volume ratio and take more time to dry out or become wetter as relative humidity in the air changes (NWCG, 2018b).

Handcrews: A number of individuals that have been organized and trained and are supervised principally for operational assignments on an incident (NWCG, 2018b).

Handline: Fireline constructed with hand tools (NWCG, 2018b).

Hazards: Any real or potential condition that can cause injury, illness, or death of personnel, or damage to, or loss of equipment or property (NWCG, 2018b).

Home hardening: Steps taken to improve the chance of a home and other structures withstanding ignition by radiant and convective heat and direct contact with flames or embers. Home hardening involves reducing structure ignitability by changing building materials, installation techniques, and structural characteristics of a home (California Fire Safe Council, 2020). A home can never be made fireproof, but home hardening practices in conjunction with creating defensible space increases the chance that a home will stand strong during a wildfire.

Home ignition zone (HIZ): The characteristics of a home and its immediate surroundings within 100 feet of structures. Conditions in the HIZ principally determine home ignition potential from radiant heat, convective heat, and ember cast (NWCG, 2018b).

Ignition-resistant building materials: Materials that resist ignition or sustained flaming combustion. Materials designated ignition-resistant have passed a standard test that evaluates flame spread on the material (Quarles, 2019; Quarles and Pohl, 2018).

Incident Response Pocket Guide (IRPG): Document that establishes standards for wildland fire incident response. The guide provides critical information on operational engagement, risk management, all hazard response, and aviation management. It provides a collection of best practices that have evolved over time within the wildland fire service (NWCG, 2018a).

Indirect attack A method of suppression in which the control line is located some considerable distance away from the fire's active edge. Generally done in the case of a fast-spreading or high-intensity fire and to utilize natural or constructed firebreaks or fuelbreaks and favorable breaks in the topography. The intervening fuel is usually backfired; but occasionally the main fire is allowed to burn to the line, depending on conditions (NWCG, 2018b).

Insurance Services Office (ISO) rating: ISO ratings are provided to fire departments and insurance companies to reflect how prepared a community is for fires in terms of local fire department capacity, water supply, and other factors (see more information online at https://www.isomitigation.com/ppc/fsrs/).

Ladder fuels: Fuels that provide vertical continuity between strata, thereby allowing fire to carry from surface fuels into the crowns of trees with relative ease. Ladder fuels help initiate torching and crowning and assure the continuation of crowning. Ladder fuels can include small trees, brush, and lower limbs of large trees (NWCG, 2018b).

LANDFIRE: A national program spearheaded by the U.S. Department of the Interior and the U.S. Department of Agriculture to provide spatial products characterizing vegetation, fuels, fire regimes, and disturbances across the entire United States. LANDFIRE products serve as standardized inputs for fire behavior modeling. More information about the program is available online at https://www.landfire.gov/.

Lop-and-scatter: Cutting (lopping) branches, tops, and unwanted boles into shorter lengths and spreading that debris evenly over the ground such that resultant logging debris will lie close to the ground (NWCG, 2018b).

Mastication: A slash management technique that involves using a machine to grind, chop, or shred vegetation into small pieces that then become surface fuel (Jain et al., 2018).

Mitigation actions: Actions that are implemented to reduce or eliminate (mitigate) risks to persons, property, or natural resources. These actions can be undertaken before and during a wildfire. Actions before a fire include fuel treatments, vegetation modification in the home ignition zone, and structural changes to increase the chance a structure will stand strong during a wildfire (aka, home hardening). Mitigation actions during a wildfire include mechanical and physical tasks, specific fire applications, and limited suppression actions, such as constructing firelines and creating "black lines" through the use of controlled burnouts to limit fire spread and behavior (NWCG, 2018b).

Mosaic landscape: A heterogeneous area composed of different communities or a cluster of different ecosystems that are similar in function and origin in the landscape. It consists of 'patches' arranged in a 'matrix', where the patches are the different ecosystems and the matrix is how they are arranged over the land (Hansson et al., 1995).

National Wildfire Coordinating Group (NWCG): An operational group established in 1976 through a Memorandum of Understanding between the U.S. Department of Agriculture and Department of the Interior to coordinate programs of the participating agencies to avoid wasteful duplication and to provide a means of constructively working together. NWCG provides a formalized system and agreed upon standards of training, equipment, aircraft, suppression priorities, and other operational areas. More information about NWCG is available online at https://www.nwcg.gov/.

Noncombustible building materials: Material of which no part will ignite or burn when subjected to fire or heat, even after exposure to moisture or the effects of age. Materials designated noncombustible have passed a standard test (Quarles, 2019; Quarles and Pohl, 2018).

Non-survivable road: Portions of roads adjacent to areas with predicted flame lengths greater than 8 feet under severe fire weather conditions. Potentially non-survivable flame lengths start at 8 feet according to the Haul Chart, which is a standard tool used by firefighters to relate flame lengths to tactical decisions (NWCG, 2019). Drivers stopped or trapped on these roadways would have a lower chance of surviving radiant heat from fires of this intensity. Non-survivable conditions are more common along roads that are lined with thick forests, particularly with trees that have limbs all the way to the ground and/or abundant saplings and seedlings.

Overstory: Layer of foliage in a forest canopy, particularly tall, mature trees that rise above the shorter immature understory trees (USFS, 2021).

Passive crown fire: Fire that arises when surface fire ignites the crowns of trees or groups of trees (aka, torching). Torching trees reinforce the rate of spread, but passive crown fires travel along with surface fires (NWCG, 2018b).

Pile burning: Piling slash resulting from logging or fuel management activities into manageable piles that are subsequently burned during safe and approved burning conditions (NWCG, 2018b).

Potential operational delineations (PODs): PODs are topographic areas bounded by features suitable for fire control (e.g., ridgetops and roads) that can be used for proactive wildfire decision making and tactical operations during wildfire events. PODs can serve as management units for proactive ecological restoration and wildfire risk mitigation, as well as for cross-boundary and collaborative land and fire management planning (Thompson et al., 2022).

Radiation: A method of heat transfer by short-wavelength energy through air (aka, infrared radiation). Surfaces that absorb radiant heat warm up and radiate additional short-wavelength energy themselves. Radiant heat is what you feel when sitting in front of a fireplace. Radiant heat preheats and dries fuels adjacent to the fire, which initiates combustion by lowering the fuel's ignition temperature. The amount of radiant heat received by fuels increases as the fire front approaches. Radiant heat is a major concern for the safety of wildland firefighters and can ignite homes without direct flame contact (NWCG, 2018b).

Rate of spread: The relative activity of a fire in extending its horizontal dimensions. It is expressed as rate of increase of the total perimeter of the fire, as rate of forward spread of the fire front, or as rate of increase in area, depending on the intended use of the information. Rate of spread is usually expressed in chains or acres per hour for a specific period in the fire's history (NWCG, 2018b).

Ravine: Topographic feature created by streams cutting into unconsolidated materials. They are narrow, steep-sided, and commonly V-shaped. Ravines are steeper than draws (NRCS, 2017).

Remote Automatic Weather Stations (RAWS): A weather station that transmits weather observations via satellite to the Wildland Fire Management Information system (NWCG, 2018b).

Risk: (1) The chance of fires starting as determined by the presence and activity of causative agents (e.g., lightning), (2) a chance of suffering harm or loss, or (3) a causative agent (NWCG, 2018b).

Roadside fuel treatment: A natural or manmade change in fuel characteristics along a roadway which affects fire behavior so that fires burning into them can be more readily controlled, survivable conditions with shorter flame lengths are more likely during a wildfire, and firefighter access is enhanced (NWCG, 2018b).

Saddle: A low point on a ridge or interfluve, generally a divide or pass between the heads of streams flowing in opposite directions. The presence of a saddle funnels airflow and increases wind speed, thereby exacerbating fire behavior (NRCS, 2017).

Safety zones: An area cleared of flammable materials used by firefighters for escape in the event the line is outflanked or spot fires outside the control line render the line unsafe. In firing operations, crews progress so as to maintain a safety zone close at hand, allowing the fuels inside the control line to be consumed before going ahead. Safety zones may also be constructed as integral parts of fuelbreaks; they are greatly enlarged areas which can be used with relative safety by firefighters without the use of a fire shelter (NWCG, 2018b).

Shaded fuelbreak: Fuel treatments in timbered areas where the trees on the break are thinned and pruned to reduce fire potential, yet enough trees are retained to make a less favorable microclimate for surface fires (NWCG, 2018b).

Slash: Debris resulting from natural events such as wind, fire, or snow breakage or from human activities such as road construction, logging, pruning, thinning, or brush cutting. Slash includes logs, bark, branches, stumps, treetops, and broken understory trees or brush (NWCG, 2018b).

Smoldering combustion: The combined processes of dehydration, pyrolysis, solid oxidation, and scattered flaming combustion and glowing combustion, which occur after the flaming combustion phase of a fire; often characterized by large amounts of smoke consisting mainly of tars (NWCG, 2018b).

Spot fire: Fire ignited outside the perimeter of the main fire by an ember (NWCG, 2018b). Spot fires are particularly concerning because they can form a new flaming front, move in unanticipated directions, trap firefighters between two fires, and require additional firefighting resources to control.

Spotting: Behavior of a fire producing sparks or embers that are carried by the wind and start new fires beyond the zone of direct ignition by the main fire (NWCG, 2018b).

Stand: An area of forest that possesses sufficient uniformity in species composition, age, size, structural configuration, and spatial arrangement to be distinguishable from adjacent areas (USFS, 2021).

Structure protection: The protection of homes or other structures from an active wildland fire (NWCG, 2018b).

Structure triage: The process of inspecting and classifying structures according to their defensibility or non-defensibility, based on fire behavior, location, construction, and adjacent fuels. Structure triage involves a rapid assessment of a dwelling and its immediate surroundings to determine its potential to escape damage by an approaching wildland fire. Triage factors include the fuels and vegetation in the yard and adjacent to the structure, roof environment, decking and siding materials, prevailing winds, topography, etc. (NWCG, 2018b). There are four categories used during structure triage: (1) defensible – prep and hold, (2) defensible – stand alone, (3) non-defensible – prep and leave, and (4) non-defensible – rescue drive-by. The most important feature differentiating defensible and non-defensible structures is the presence of an adequate safety zone for firefighters (NWCG 2018a). Firefighters conduct structure triage and identify defensible homes during wildfire incidents. Categorization of homes is not pre-determined; triage decisions depend on fire behavior and wind speed due to their influence on the size of safety zones needed to keep firefighters safer.

Suppression: The work and activity used to extinguish or limit wildland fire spread (NWCG, 2018b).

Surface fire: Fire that burns fuels on the ground, which include dead branches, leaves, and low vegetation (NWCG, 2018b).

Surface fuels: Fuels lying on or near the ground, consisting of leaf and needle litter, dead branch material, downed logs, bark, tree cones, and low stature living plants (NWCG, 2018b).

Task book: A document listing the performance requirements (competencies and behaviors) for a position in a format that allows for the evaluation of individual (trainee) performance to determine if an individual is qualified in the position. Successful performance of tasks, as observed and recorded by a qualified evaluator, will result in a recommendation to the trainee's home unit that the individual be certified in the position (NWCG, 2018b).

Torching: The burning of the foliage of a single tree or a small group of trees from the bottom up. Torching is the type of fire behavior that occurs during passive crown fires and can initiate active crown fires if tree canopies are close to each other (NWCG, 2018b).

Values at risk: Aspects of a community or natural area considered valuable by an individual or community that could be negatively impacted by a wildfire or wildfire operations. These values can vary by community and include diverse characteristics such as homes, specific structures, water supply, power grids, natural and cultural resources, community infrastructure, and other economic, environmental, and social values (NWCG, 2018b).

Watershed (aka, drainage basin or catchment): An area of land where all precipitation falling in that area drains to the same location in a creek, stream, or river. Smaller watersheds come together to create basins that drain into bays and oceans (NOAA, 2021).

Wildfire-resistant building materials: A general term used to describe a material and design feature that can reduce the vulnerability of a building to ignition from wind-blown embers or other wildfire exposures (Quarles, 2019; Quarles and Pohl, 2018).

Wildland-urban interface (WUI): Any area where the built environment meets wildfire-prone areas—places where wildland fire can move between natural vegetation and the built environment and result in negative impacts on the community (Mowry and Johnston, 2018). ***Note: For the purposes of this 2026 CWPP update, all WUI references pertain to planning-related WUI designations rather than building-code regulatory WUI. The county is expected to establish its updated legal WUI building codes in late 2026.**

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Appendix A
CWPP Local Planning Integration

Local Planning Integration

During development of this CWPP, several planning and management documents were reviewed to avoid conflicting goals and objectives. Existing programs and policies were reviewed to identify those that may weaken or enhance the mitigation objectives outlined in this document. The following sections identify and briefly describe some of the existing Kittitas County planning documents and ordinances considered during development of this CWPP.

2025 Kittitas County Multi-Jurisdictional Hazards Mitigation Plan

As a requirement to receive certain types of federal non-emergency disaster assistance, including funding for hazard mitigation projects, Kittitas County and the cities and towns of Ellensburg, Cle Elum, Roslyn, and South Cle Elum are required to develop and maintain an up-to-date local hazard mitigation plan. The jointly developed Kittitas County Multi-Jurisdictional Hazards Mitigation Plan was approved by FEMA in 2011 and contains multiple short and long-term action items that directly or indirectly support the goals and guiding principles of the CWPP.

Kittitas County Comprehensive Emergency Management Plan (CEMP)

The Kittitas County Comprehensive Emergency Management Plan (CEMP) provides a framework from which mitigation efforts occur in response to large scale incidents or a combination of incidents in Kittitas County. The CEMP describes functions and activities necessary to implement the four phases of Emergency Management: mitigation, preparedness, response, and recovery. The plan uses Emergency Support Functions, which identify primary and support agencies responsibilities and activities that County and local jurisdictions may need in order to implement all-hazard mitigation. It provides policies, information, recommendations, and guidance to assist responsible officials making operational decisions. Emergency Support Functions are Transportation; Emergency Communications; Public Works & Engineering; Fire Protection; Information Analysis & Planning; Mass Care; Resource Management; Health & Medical Services; Search & Rescue; Hazardous Materials; Food & Water; Energy & Utilities; Military Support; Recovery & Restoration; Law Enforcement; and Damage Assessment. CEMP updates will include support of initiatives and action items outlined in the Kittitas County CWPP. Kittitas County updated its Comprehensive Emergency Management Plan in November 2024, and it's posted on the Sheriff's Office Emergency Management page.

2018 Kittitas County Community Wildfire Protection Plan

The 2009 version of the Kittitas County CWPP was used as the basis for the 2018 CWPP Update. Likewise, the 2018 update was used as a template for the 2026 update. The background information, risk evaluation, fire behavior, and action items were integrated and updated for 2026. The updated CWPP incorporates new data, mapping, and analysis tools, as well as a restructuring of the document

to help group similar data to support ideas and action items. A section on drought was added due to the extreme drought conditions being experienced in 2026.

Kittitas County Zoning Ordinance

This ordinance does not identify hazard areas in great detail although there are a few zoning districts that prohibit new residences within the floodplain. (Flood Control Zone District and Floodplain Development https://www.co.kittitas.wa.us/public-works/flood/default.aspx) . Comprehensive Growth Plan makes reference in a memo to inclusion of wildfire in community growth planning : https://www.co.kittitas.wa.us/uploads/documents/cds/comp-plan/2026/2026-003-ordinance.pdf).

Critical Areas Ordinance

This ordinance identifies protected and sensitive areas. Protected areas are fish and wildlife habitat conservation areas, aquifer recharge areas, and wetlands. Hazardous areas are frequently flooded areas, geologically hazardous areas, erosion hazard areas, landslide hazard areas, mine hazard areas, seismic hazard areas, and volcanic hazard areas.

Designated Forestland and Open Space

The Designated Forestland and Open Space/Open Space Plans could be affected by some fuel reduction practices. The effects are more beneficial than hazardous if handled appropriately. Designated Forestland requires the sustenance of healthy commercial-grade timber. Fuels reduction has been shown to increase timber health. Open Space/Open Space requires the sustenance of priority resources other than timber. Landowners must ensure that fire-safety practices do not damage priority resources that keep them in a program where they receive a property tax reduction.

Kittitas County Shoreline Management

Shoreline Management outlines allowed/prohibited uses within specific shoreline zoning designations. Non-forestry related mitigation actions would be looked at individually, anticipating that these actions will either be allowed or allowed by permit. Most identified action items would have no effect on the shoreline areas such as road signs, evacuation plan, public education, fire-safe building materials, etc. The shoreline ordinance is currently being revised and will conform to all existing regulations and plans. Upon approval of the Kittitas County All Hazard Mitigation and CWPPs, the revised shoreline plan will acknowledge and support their adoption.

PSE's Wildfire Mitigation & Response Plan

Puget Sound Energy's utility-specific plan for grid hardening (pole/wire replacement, insulated "tree wire," undergrounding), vegetation management along power corridors, and operational safeguards such as Enhanced Powerline Settings and Public Safety Power Shutoffs during high-fire-risk weather.

Kittitas County is explicitly named as a targeted area receiving grid-strengthening investment and prevention work

WA's 20-Year Forest Health Strategic Plan

A Washington DNR-led, multi-agency (33+ organizations) effort that was launched in 2017 to restore forest health across ~2.7 million at-risk acres in central and eastern Washington, targeting 1.25 million treated acres over 20 years via thinning and prescribed fire. Kittitas County falls within this eastern/central Washington focus area.

Central Washington Initiative

A U.S. Forest Service fuel-reduction effort (Okanogan-Wenatchee National Forest) covering 2.45 million acres across four counties, funded at $102.6 million over three fiscal years to treat 124,000 acres via thinning and prescribed burns. Kittitas County was specifically prioritized due to high-risk fire sheds (Cle Elum and American River) following ~160,000 combined acres burned in 2017–2018.

National Cohesive Wildland Fire Management Strategy

A federal framework finalized in 2014 under the same three national goals (resilient landscapes, fire-adapted communities, safe/effective response), addressing fuels management, protecting values at risk, human-caused ignitions, and response effectiveness nationwide.

Appendix B
Smoke Impacts in Kittitas County

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Why is smoke a concern in Kittitas County?

Smoke is a serious secondary hazard of wildfire, and many communities in fire-adapted ecosystems are historically and repeatedly exposed to unhealthy air quality from local and distant wildfires. These communities may also experience lower smoke exposures from critically important, prescribed burning, disposal of vegetative waste and organics from annual property clean-up, thinning and other activities related to home-hardening against wildfire, and potentially woodstove use and agricultural burning. The health impacts of smoke on respiratory and cardiovascular systems are well documented, with newer research revealing smoke may contribute to neurological diseases such as dementia and Alzheimers, poor pregnancy outcomes, and skin and kidney disease.

While establishing who will be impacted at what exact dose and duration is very challenging, the EPA's extensive Integrated Scientific Assessment of thousands of epidemiological and toxicology studies forms the basis for the thresholds of "safe" exposure expressed in the Air Quality Index (AQI), and recommends actions to take as air quality degrades. Smoke is also a signal and messenger that fire is nearby, and communities and individuals who have suffered loss or trauma from wildfire may respond with hypervigilance, anxiety, and other detriments to their wellbeing. **T*eaching communities to live safely and healthfully with fire also must include strategies for preparing for and mitigating the impacts of smoke.***

Smoke is an unavoidable consequence of living in and managing fire-adapted landscapes, and wildfire smoke can also travel hundreds of miles from other states or Canada. In some cases, carefully planned prescribed fire or pile burning may produce short-term smoke exposure while substantially reducing the risk of future high-intensity wildfires and prolonged regional smoke events. ***Consequently, Kittitas County should strive not to eliminate all smoke, but rather to reduce avoidable emissions where practical and to support land management strategies that minimize long-term smoke impacts while improving ecosystem and community resilience***.

There are two overarching goals of this chapter. **First**, is to augment community wildfire risk assessment and mitigation planning to include air quality and smoke stakeholders, including community members, local public health, social and health service organizations and providers, county, state, tribal, and federal agency representatives. Meaningful discussions to identify how smoke preparedness and response can be integrated into priorities for local fire protection, wildfire prevention and mitigation efforts, and forest management practices creates greater wildfire resiliency. Greater networking among organizations and individuals working in fire and air quality can build community resiliency and capacity.

Second, this chapter describes the hazards of smoke in Kittitas county and identifies specific actions to improve community resilience to smoke. A "smoke ready community" is prepared for smoke from any source – both wildfire and prescribed fire – and understands the valuable role that forest treatments play in restoring forest health and protecting public safety.

Smoke Hazard Characterization

Chemical composition and characteristics of smoke

Smoke emissions from fires can significantly impact an area and the airsheds that surround it. Smoke from large wildfires can also travel hundreds of miles to impact the health of communities far away from its source. Smoke is a complex mixture of gases and fine particles, including particulate matter 2.5 microns in diameter or smaller (PM2.5), water vapor, carbon dioxide and monoxide, ozone, PAHs, nitrogen oxides, and other chemicals. PM2.5 is typically the component of greatest concern for health impacts as it is small enough to bypass many of the body's natural defenses to air pollutants in the respiratory system, lodge deep in the lungs, move into the bloodstream, and initiate a cascade of inflammatory reactions. Short- and long- term exposures to PM 2.5 can harm human health, contributing to and exacerbating cardiovascular and respiratory disease, causing low birth weight, premature births, and other issues (EPA 2024).

Large-scale influences on smoke travel include latitude, altitude, prevailing hemispheric wind patterns, and mountain barriers. Topography and vegetation cover also affect air movement patterns on a smaller scale. Major river drainages are subject to temperature inversions, which trap smoke and affect dispersion, causing local air quality problems. This occurs most often during the summer and fall months and can potentially affect many communities in Kittitas County.

Wintertime inversions are less frequent but can trap smoke from home heating, winter silvicultural burning, and pollution from other sources.

Kittitas County Air Quality Monitoring Network

Kittitas County has continuously monitored fine particulate matter ($PM_{2.5}$) since 2004 to support regulatory compliance with federal and state ambient air quality standards and to track long-term air quality trends. The county's primary monitoring station is the Ellensburg – Ruby Street site, an EPA-compliant regulatory monitor operated by the Washington State Department of Ecology's Central Regional Office. This regulatory-grade monitor is supplemented by four lower-cost neighborhood sensors that are part of the Washington State Department of Ecology's SensWA network.

Additional low-cost air quality sensors, including PurpleAir monitors, are also deployed throughout the county by community members and organizations. While these community-hosted sensors may be influenced by sensor siting, maintenance, and local environmental conditions, they can provide valuable real-time information about neighborhood-scale smoke conditions and increase public awareness during wildfire smoke events.

Wildfire smoke concentrations can vary substantially over short distances because of local topography, wind patterns, atmospheric inversions, and smoke pooling. As a result, measurements from a single regulatory monitor may not fully capture conditions experienced across the county. A

distributed network of sensors provides greater spatial coverage and helps identify localized smoke impacts that may affect individual neighborhoods or communities differently.

To improve detection of localized smoke patterns, including microclimates and smoke pooling within the Ellensburg basin, the Washington State Department of Ecology and local partners have expanded the SensWA network over the past decade. The Hal Holmes Center in downtown Ellensburg served as an early monitoring location from 2016 to 2019 before core tracking transitioned to the Discovery Hall sensor on the Central Washington University campus in 2019. The network expanded with the addition of the N. Cora Street sensor in 2020 to characterize west-side conditions and the Mountain View Avenue sensor in 2021 to monitor the southern portion of the Ellensburg basin.

To improve coverage in the upper county, a fifth SensWA community sensor was installed in Cle Elum in late 2023. This monitor provides real-time $PM_{2.5}$ measurements along the Interstate 90 corridor and captures smoke conditions that may differ substantially from those observed in the lower Ellensburg basin.

Together, the regulatory monitor and distributed sensor network provide residents, emergency managers, and public health officials with near-real-time information to characterize local air quality conditions, identify localized smoke impacts, and support protective actions during wildfire smoke events.

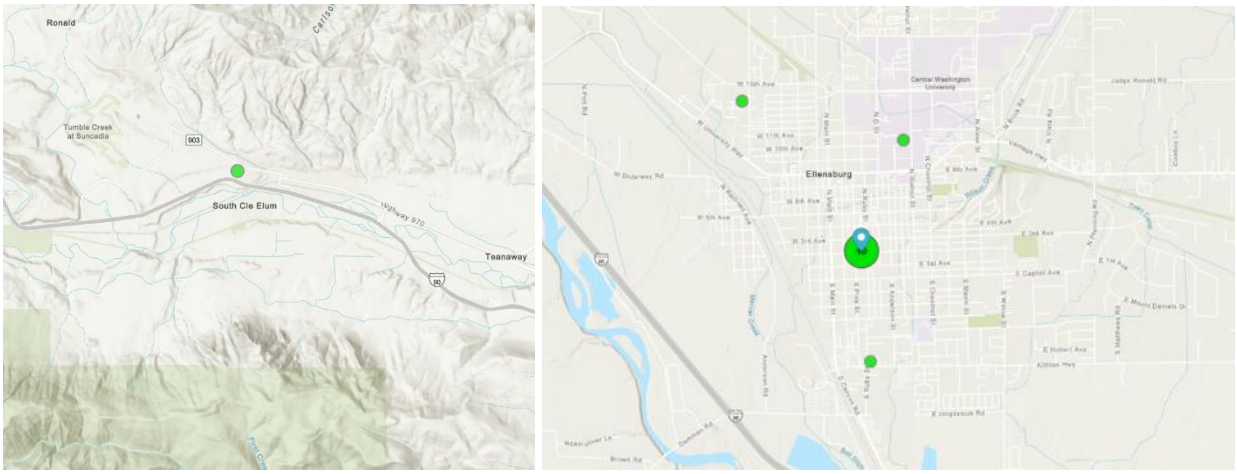


Figure 1. SensWA and regulatory monitor locations in Kittitas County.

Kittitas County PM2.5 Historical Data

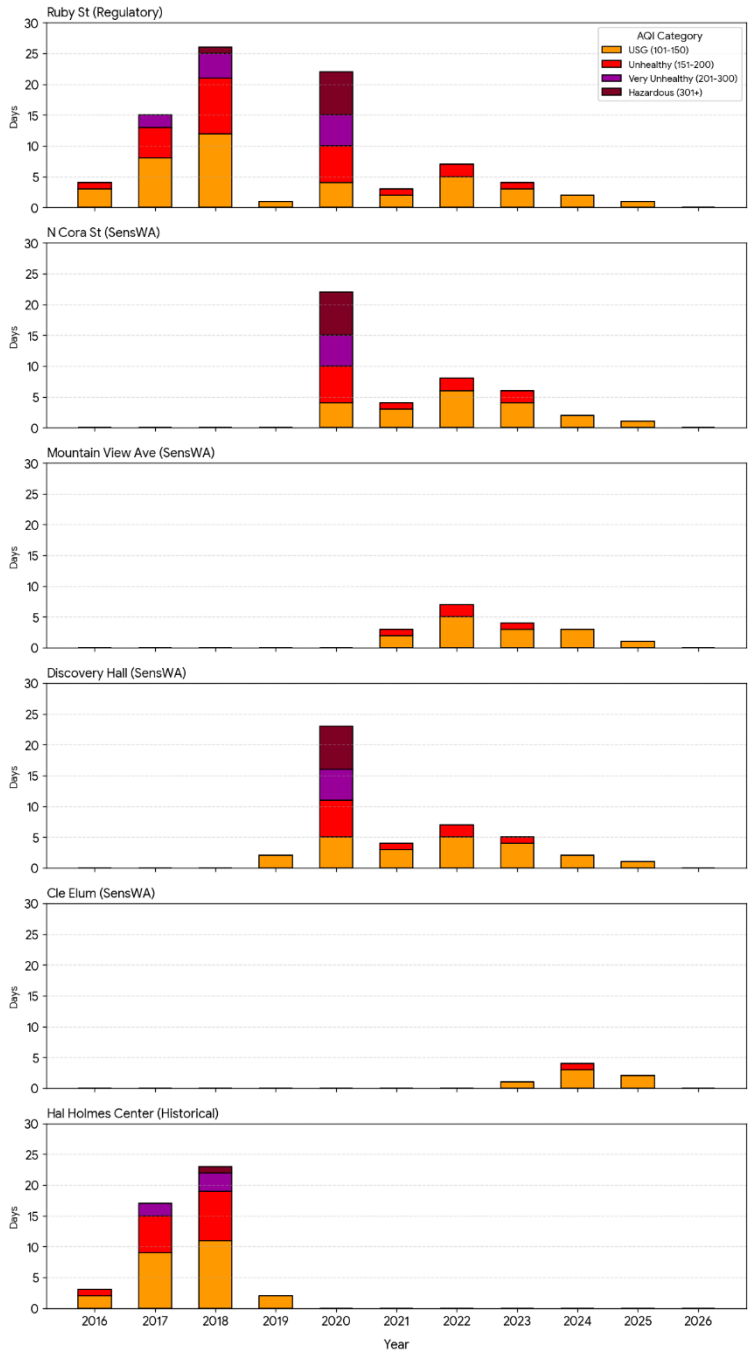


Figure 2. Annual number of days from 2016-June 15, 2026 in the Unhealthy for Sensitive Groups, Unhealthy, Very Unhealthy, or Hazardous air quality category at each of the Ecology-managed PM2.5 monitors in Kittitas County.

Figure 2 demonstrates that air quality is highly variable from year to year.

- **2017–2018 (Severe Wildfire Smoke):** These years represented unprecedented historic spikes in PM2.5 for the county. In 2017, regional smoke from the nearby Sutherland Canyon and Spartan Fires was frequently trapped inside the valley floor. At the time, emergency shelters such as the Putnam Centennial Center in Cle Elum required intensive indoor air filtration due to outdoor air deteriorating rapidly. In 2018, smoke from overlapping regional blazes and Canadian wildfires blanketed Cle Elum and Ellensburg, driving several continuous weeks of air quality into the "Unhealthy" and "Very Unhealthy" categories.
- **2019 (Mild Summers & Winter Inversions):** Wildfire activity was notably quiet across the Pacific Northwest in 2019. The minor USG (Unhealthy for Sensitive Groups) days recorded by Ruby St and Discovery Hall were driven primarily by winter air stagnation events, where cold seasonal valley inversions trapped localized home woodstove smoke close to the city floor.
- **2020 (Smoke event from distant fires):** This stands out as the worst overall air quality event on record for Kittitas County. In September 2020, severe regional windstorms kicked off a massive wildfire episode across Washington and Oregon. Smoke from Evans Canyon, Cold Springs and Pearl Hill fires from Washington sent smoke to Kittitas but the heaviest concentrations after Sept 10th were caused by long-range transport of smoke from the Labor Day fires from Oregon. All PM2.5 monitors (Ruby St, Discovery Hall, and the newly deployed N Cora St) read in the "Hazardous" AQI category for over a week.
- **2021–2026 (Moderate):** Moderate summers and possibly proactive forest management resulted in fewer extreme wildfire incursions, though brief late-summer blazes like the 2025 Wildcat Fire continued to cause short-term regional smoke pooling. The steady baseline of moderate-to-USG days during these years mostly mirrors localized winter smoke from home-heating. The introduction of the Cle Elum sensor in late 2023 provided the first continuous look at how upper-county smoke levels settle along the Cascades compared to lower-valley basins during these intervals.

Kittitas County Is Vulnerable to Future Wildfire Smoke

Several characteristics of Kittitas County make it especially susceptible to wildfire smoke impacts and suggest that smoke exposure may increase as the climate changes.

- **East-slope climate:** Kittitas County lies east of the Cascade Range, where warm, dry summers and fire-prone vegetation contribute to elevated wildfire risk.
- **Declining snowpack and earlier snowmelt:** Climate projections for Washington indicate that warming temperatures will reduce mountain snowpack and accelerate spring snowmelt, leading to longer periods of dry vegetation and an extended wildfire season.

- **Extensive fire-prone landscapes:** The county contains large areas of forest, shrub-steppe, and rangeland that are vulnerable to wildfire ignition and spread under increasingly hot and dry conditions.
- **Complex topography and valley inversions:** The Ellensburg basin and surrounding valleys can experience atmospheric inversions and smoke pooling, resulting in localized areas of poor air quality even when nearby locations experience cleaner conditions.
- **Exposure to both local and regional smoke:** Air quality in Kittitas County can be affected by smoke from local wildfires as well as large fires elsewhere in Washington and throughout the Pacific Northwest. Under certain weather patterns, transported smoke may persist for days and contribute substantially to local PM2.5 concentrations.
- **Growing evidence of climate-driven smoke increases:** Scientific studies indicate that climate change is already contributing to increases in wildfire activity and smoke exposure across the western United States, trends that are expected to continue in the coming decades.

These factors underscore the importance of continued investment in wildfire prevention, air quality monitoring, public communication, indoor air quality improvements, and community smoke preparedness to reduce health risks associated with future wildfire smoke events.

Economic Impacts of Wildfire Smoke

Wildfire smoke is not only a public health concern but also an economic resilience issue for Kittitas County. In addition to affecting the health and well-being of residents, prolonged smoke events can disrupt businesses, reduce worker productivity, increase health care utilization, and affect sectors that rely on outdoor activities or a healthy environment. As climate change is expected to increase wildfire risk and the frequency and duration of smoke events across Washington, these economic impacts may become increasingly important considerations for community planning and resilience.

Given Kittitas County's strong reliance on outdoor recreation, tourism, agriculture, and other outdoor industries, prolonged wildfire smoke events have the potential to affect both resident quality of life and the local economy. As a gateway to the Cascade Mountains and home to destinations such as Cle Elum, Roslyn, Suncadia, and numerous public lands, the county attracts visitors seeking outdoor experiences that may be curtailed during periods of poor air quality. Smoke can discourage travel, reduce participation in recreational activities, delay construction and agricultural operations, and increase operating costs associated with worker protection, indoor air filtration, and public health messaging.

Wildfire smoke also places additional demands on schools and childcare providers, health care providers, local governments, and emergency management agencies. Schools and daycares may modify or cancel outdoor activities or close altogether which can cascade to employees needing to miss work to care for their children. Employers may need to adjust work schedules or implement respiratory protection measures, and public agencies may incur costs associated with air quality monitoring, public communication, operation of cleaner air spaces, and emergency response.

Although county-specific estimates of the economic costs of wildfire smoke are not currently available, studies from other western communities have documented measurable impacts on tourism, labor productivity, and health care utilization during significant smoke events. These findings suggest that reducing smoke exposure through preparedness planning and investments in community resilience may also provide important economic benefits.

Table 1. Potential Economic Impacts of Wildfire Smoke in Kittitas County

Economic Sector	Potential Impacts of Wildfire Smoke
Tourism and Outdoor Recreation	Reduced visitation to parks and public lands; cancellation of outdoor events; decreased spending at hotels, restaurants, retail businesses, and recreation providers; negative effects on community festivals and sporting events.
Agriculture	Reduced outdoor worker productivity; altered work schedules; increased occupational health protections; potential delays to planting

Economic Sector	Potential Impacts of Wildfire Smoke
	or harvest activities; impacts to livestock operations and specialty crops.
Construction and Outdoor Labor	Work slowdowns or temporary suspensions during severe smoke events; increased need for respiratory protection, rest breaks, and administrative controls; potential project delays and increased costs.
Transportation and Utilities	Reduced visibility; increased worker exposure; operational disruptions and additional safety precautions during maintenance and emergency response activities.
Education	Cancellation or relocation of outdoor classes, summer camps and daycares, athletics, and extracurricular activities; increased demand for indoor air filtration; potential impacts on student health and attendance.
Health Care	Increased emergency department visits, hospitalizations, outpatient visits, medication use, and associated health care costs related to smoke exposure.
Local Government and Emergency Management	Increased expenditures for public communication, air quality monitoring, operation of cleaner air spaces, emergency response, and public health outreach.
Businesses and Employers	Reduced employee productivity, increased absenteeism, business interruptions, and costs associated with protecting workers and improving indoor air quality.

Recognizing these potential economic impacts reinforces the importance of proactive smoke preparedness, investments in clean indoor air, effective public communication, and coordinated planning to reduce both health risks and economic disruption during future wildfire smoke events.

Health Impacts of Smoke

Particulate matter

Fine particulate matter, commonly known as PM2.5, refers to airborne particles with a diameter of 2.5 micrometers or smaller—about 30 times smaller than the width of a human hair. These microscopic particles are produced by sources such as wildfire smoke, vehicle exhaust, wood burning, industrial processes, and some natural events. Because they are so small, PM2.5 particles can remain suspended in the air for long periods and travel hundreds of miles from their source. They can bypass the body's natural defenses, penetrate deep into the lungs, and even enter the bloodstream, where they contribute to a range of adverse health effects including respiratory irritation, cardiovascular disease, and premature mortality. For these reasons, PM2.5 is considered one of the most significant air pollutants affecting public health and is the primary pollutant used to assess the health impacts of wildfire smoke.

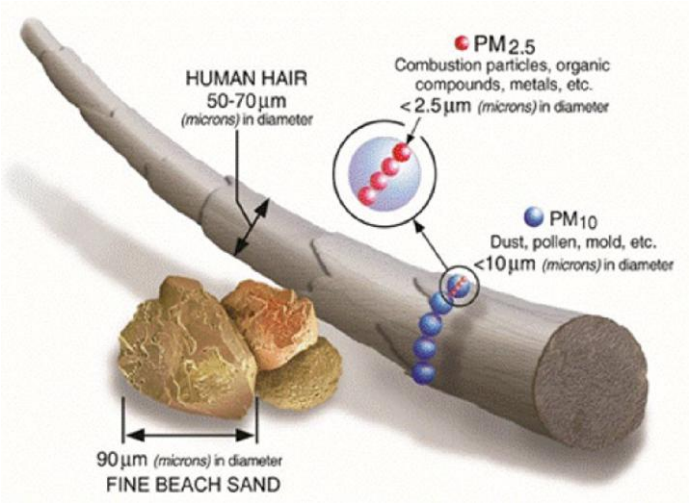


Figure 3 - US Environmental Protection Agency's (EPA) illustration of fine, inhalable particulate matter (PM2.5), the air pollutant of greatest concern to public health from wildfire smoke, as it can enter the lungs and bloodstream.

(1) Why Wildfire Smoke is a Health Concern, EPA, August 4, 2025

Acute and Chronic Health Effects

Wildfire smoke is made up of a complex mixture of gases and fine particles produced when vegetation and other organic and synthetic materials burn, with particulate matter being the primary pollutant of concern. These microscopic particles can irritate the mucus membranes of the body, penetrate deep into the lungs, and be absorbed into the cardiovascular system of the body, causing a range of health problems, from burning eyes and a runny nose to aggravating chronic heart conditions, respiratory illness, many cancers, lung, heart and neurological diseases, and mortality.

Short-term exposure over a few days can result in:

- Irritation of the eyes and respiratory tract, including increased phlegm production
- Respiratory symptoms or coughing
- Wheezing and difficulty breathing
- Respiratory effects such as bronchitis and increased susceptibility to infection
- Reduced lung function
- Increased risk of asthma exacerbation and aggravation of other lung diseases
- Increased risk of emergency room visits and hospital admissions
- Cardiovascular effects such as heart failure and heart attack
- Stroke
- Increased risk of premature death

The strongest information on continuous exposures over multiple days or a few weeks is available from studies of wildland firefighters. Those studies indicated that continuous occupational wildland fire smoke exposure may have a cumulative effect on lung function. (2) Additional epidemiological and toxicological data suggest that chronic exposures may contribute to lung and other cancers, development of respiratory and cardiac disease, reduced birth weight and premature birth, neurological disease and others.

Another area of active research is the impact of wildfire smoke exposure on mental health and wellbeing, with evidence for direct impacts on neurological function through neuroinflammation, cerebrovascular strain, and cognitive impairment, including attention and memory and overall cognitive performance. Psychological impacts such as anxiety, hypervigilance, depression, insomnia and post-traumatic stress disorder symptoms are also frequently reported. A large U.S. epidemiologic study also reported an association between wildfire smoke exposure and suicide risk, particularly in rural communities, although the evidence remains limited and further research is needed to establish causality.

(2) Health Effects Attributed to Wildfire Smoke, EPA, January 30, 2025.; Molitor et al., 2023.

Who is most vulnerable to smoke?

When smoke levels are high, even healthy people may have symptoms or health problems. However, some people are at greater risk even at lower concentrations. The EPA has noted ways that the length and severity of exposure to wildfire smoke and the sensitivity of specific life stages and populations can lead to different health outcomes. Listed below are the rationale and potential

health effects for each population at greater risk, each as described by the EPA.
(3) Which Populations Experience Greater Risks of Adverse Health Effects Resulting From Wildfire Smoke Exposure, EPA, January 30, 2025.

Table 2. Populations Potentially at Increased Risk from Wildfire Smoke Exposure in Kittitas County

Smoke-Sensitive Population	Kittitas County Estimate	Approximate Number of Residents	Potential Relevance During Wildfire Smoke Events
Adults with asthma	10.5% of adults	≈ 4,200 adults*	Increased risk of asthma exacerbations, emergency department visits, and hospitalization due to wildfire smoke exposure.
Children (<18 years)	16.7% of residents	≈ 8,000 children	Developing lungs and higher breathing rates make children particularly susceptible to PM2.5 exposure.
Older adults (≥65 years)	19.0% of residents	≈ 9,200 adults	Increased risk of cardiovascular and respiratory complications from wildfire smoke exposure.
Residents with disabilities (<65 years)	12.4% of residents under age 65	≈ 5,000 people*	May have increased challenges avoiding smoke exposure, evacuating, or accessing protective resources during emergencies.
Residents without health insurance (<65 years)	7.7% of residents under age 65	≈ 3,100 people*	May experience barriers to preventive care or treatment for smoke-related illness.
Residents living in poverty	12.9% of residents	≈ 6,200 people	May have limited access to air conditioning, HEPA filtration, transportation, or alternative housing during smoke events.
Adults with hypertension	27.2% of adults	≈ 10,900 adults*	Cardiovascular disease risk factor associated with increased susceptibility to wildfire smoke and PM2.5 exposure.
Outdoor workers	Agriculture, forestry, construction, recreation, transportation, and utility sectors represent major county industries	3,700-4,000 workers	Prolonged occupational exposure may increase cumulative smoke dose during wildfire events.
People experiencing homelessness	Local Point-in-Time count available	Is there latest local PIT estimate	May have limited ability to avoid smoke exposure or access filtered indoor environments.

Smoke-Sensitive Population	Kittitas County Estimate	Approximate Number of Residents	Potential Relevance During Wildfire Smoke Events
Pregnant people	County-specific estimate not readily available	500-600 pregnancies/year	Wildfire smoke exposure has been associated with adverse maternal and fetal health outcomes in epidemiologic studies.

*Approximate counts for adult-specific indicators were estimated by applying the reported prevalence to the estimated adult population of Kittitas County and are intended for planning purposes.

Smoke Regulation, Monitoring and Forecasting

The Clean Air Act and Air Quality Index

The primary means of protecting and enhancing air quality in the United States is through the implementation of National Ambient Air Quality Standards (NAAQS), administered by the Environmental Protection Agency (EPA). These standards address six pollutants known to harm human health, including ozone, carbon monoxide, particulate matter, sulfur dioxide, lead, and nitrogen oxides (EPA 2024).

The Clean Air Act, passed in 1963, is the primary legal authority governing air resource management. The Clean Air Act provides the principal framework for national, state, and local efforts to protect air quality. Under the Clean Air Act, the EPA's OAQPS (Office for Air Quality Planning and Standards) is responsible for setting standards, NAAQS, for pollutants that are considered harmful to people and the environment. OAQPS is also responsible for ensuring these air quality standards are met or attained (in cooperation with state, Tribal, and local governments) through national standards and strategies to control pollutant emissions from automobiles, factories, and other sources (Louks 2001).

The Air Quality Index (AQI) is a standardized tool developed by the U.S. Environmental Protection Agency (EPA) to communicate how current air quality may affect public health. Rather than reporting pollutant concentrations directly, the AQI converts measurements of pollutants such as fine particulate matter (PM2.5) into a numerical scale ranging from 0 to 500 and assigns a corresponding color category to simplify interpretation. Higher AQI values indicate poorer air quality and a greater likelihood of adverse health effects. During wildfire smoke events, PM2.5 is typically the pollutant that drives the AQI in Kittitas County.

The AQI provides a consistent framework for public health messaging and individual decision-making during smoke events. Residents can use AQI values to determine when to reduce or avoid outdoor activities, remain indoors with filtered air, relocate to cleaner air spaces, or take other actions to minimize smoke exposure. Emergency managers, schools, employers, and public health agencies also rely on AQI forecasts and real-time measurements to guide protective actions and communicate risk to the public.

Table 4 summarizes the EPA AQI categories and recommended protective actions relevant to wildfire smoke.

Color	AQI	Category	Health Concern & Recommended Actions
Green	**0–50**	**Good**	Air quality is satisfactory and poses little or no health risk. Everyone can enjoy normal outdoor activities.
Yellow	**51–100**	**Moderate**	Air quality is generally acceptable. People who are unusually sensitive to air pollution should monitor for symptoms and consider reducing prolonged or heavy outdoor exertion if affected. Most people can continue normal activities.

Orange	**101–150**	**Unhealthy for Sensitive Groups**	Children, older adults, pregnant people, people with heart or lung disease, and outdoor workers should reduce prolonged or heavy outdoor activity and take more frequent breaks. Consider moving activities indoors if symptoms occur.
Red	**151–200**	**Unhealthy**	Everyone should limit prolonged or strenuous outdoor activity. Sensitive groups should avoid strenuous outdoor exertion, remain indoors in cleaner air when possible, and wear a well-fitted N95 respirator if outdoor exposure is unavoidable.
Purple	**201–300**	**Very Unhealthy**	Everyone is at increased risk of health effects. Avoid outdoor activities whenever possible. Stay indoors in clean, filtered air. If you must be outdoors, wear a well-fitted N95 respirator.
Maroon	**301–500**	**Hazardous**	Everyone should remain indoors in a clean air space and avoid all outdoor physical activity. Follow public health guidance and consider relocating to an area with cleaner air if hazardous conditions persist.

5.11 Summary of wildfire smoke hazard characterization in Kittitas County

Several key findings should inform future planning and community resilience efforts in Kittitas County.

1. **Wildfire smoke is a recurring hazard.** Historical air quality monitoring demonstrates that Kittitas County experiences periodic episodes of unhealthy to hazardous air quality from both local and regional wildfires, making smoke an anticipated and recurring risk.
2. **Local geography increases smoke vulnerability.** The county's east-slope climate, extensive fire-prone landscapes, and basin topography can promote atmospheric inversions and smoke pooling, resulting in localized areas of poor air quality that may persist for days.
3. **Future smoke impacts are expected to increase.** Climate change is projected to lengthen wildfire seasons and increase the frequency and severity of wildfire smoke events, reinforcing the need for long-term smoke preparedness and resilience planning.
4. **Many residents are particularly susceptible to smoke exposure.** Children, older adults, people with asthma or cardiovascular disease, pregnant individuals, outdoor workers, and other sensitive populations may experience disproportionate health impacts and should be prioritized in preparedness and response planning.
5. **Wildfire smoke affects both public health and the local economy.** In addition to increasing respiratory and cardiovascular illness, smoke can disrupt tourism, outdoor recreation, agriculture, construction, education, and other sectors that are important to Kittitas County.

6. **Kittitas County has strong existing assets on which to build.** The county benefits from a long-standing regulatory air monitoring station, an expanding network of SensWA and low-cost community sensors, experienced public health and emergency management partners, and active wildfire resilience collaborations. These capabilities provide a strong foundation for advancing a comprehensive Smoke Ready Community approach.

Collectively, these findings demonstrate that wildfire smoke is both a current and growing hazard for Kittitas County while highlighting significant opportunities to strengthen preparedness through coordinated planning, public education, improved indoor air quality, targeted protection of vulnerable populations, and continued collaboration among public health, emergency management, fire agencies, and community partners.

Smoke Risk Mitigation

Overview

Wildfire smoke is episodic, rapidly changeable, difficult to forecast, and can travel hundreds of miles. It is often the result of large-scale, out of control wildfires that may only subside with favorable weather conditions. Similarly, unfavorable local weather conditions often influence how long smoke lasts and how severe it is. Mitigation of health and economic impacts thus need to focus on proactive planning, i.e. smoke readiness, coordinated communication and education, and adaptive measures to enable equitable reduction of smoke exposure and risk.

Several local and state partners in Kittitas County have longstanding experience addressing smoke and air quality. These local partners have also received support from the Washington Department of Ecology to prevent non-attainment, specifically, funding and resources to help reduce PM2.5 pollution in order to meet the National Ambient Air Quality Standard. A 2014 Department of Ecology Air Quality report for Kittitas County provides an extensive assessment of air quality issues over a decade ago; its recommendations for mitigation are still relevant today.

Kittitas County Public Health has tracked air quality for over a decade; two stellar guides from the Region 7 Healthcare Alliance (comprised of health stakeholders from Chelan, Douglas, Grant, Okanogan and Kittitas Counties) offer concrete guidance on who is most vulnerable to smoke and specify actions for the public health districts and emergency responders to take with partners at different times of year and at different AQI thresholds. These plans are the R7 Healthcare Alliance Wildfire Smoke Response Plan and the R7 Wildfire and Smoke Vulnerability Assessment. Kittitas County Public Health leads many of the smoke risk mitigation activities described in this section, and the Response Plan offers highly prescriptive detail that will not be repeated here. Rather, the gap analysis and recommendations for actionable priorities within the context of this CWPP acknowledge and are consistent with guidance in those existing plans and their current state of implementation.

Smoke tracking and forecasting

Tracking and anticipating smoke activity during wildfire season is essential but challenging. Smoke levels depend on how new or severe a fire is, the fire location, what fuels are burning, and the wind speed, direction and atmospheric height of the smoke plume all make it difficult to determine the direction and amount of smoke an area will experience. Several organizations/agencies are responsible for parts of smoke and air quality forecasting and monitoring. For Kittitas County these include:

- Washington State Department of Ecology Central Region Air Program (ECY CRO) is responsible for official air quality forecasts and alerts. They manage local monitoring equipment and data, and lead interagency coordination on air quality forecasts and alerts.
- Environmental Protection Agency (EPA) coordinates with the state and local officials on monitoring and has developed and maintains the Air Quality Index (AQI) used to describe the impacts associated with differing levels of pollutants. Many federal, state, and local agencies

use EPA resources to maintain situational awareness of smoke conditions, notably the AirNow.gov website.

- National Weather Service (NWS) is responsible for coordinating weather forecasts with state/local agencies when wildfire smoke may impact the region. The NWS also operates multiple weather models with the capability to simulate smoke dispersion that are often used by other agencies in the forecast process. In addition, state/local clean air agencies may request that an Air Quality Alert (AQA) be disseminated via the NWS dissemination system. The requesting agencies are responsible for determining the alert message and other details.
- Washington Department of Natural Resources Smoke Team (DNR) is a specialized group of meteorologists and air resource specialists dedicated to monitoring air quality, interpreting weather data, and managing the impacts of prescribed and wildfire smoke on communities.

Additionally, the Interagency Wildland Fire Air Quality Response Program monitors and models smoke conditions across the United States and will deploy Air Resource Advisors to large smoke events to assist with understanding and predicting smoke impacts to the public and fire personnel.

During a wildfire smoke event, NWS, ECY and local clean air agencies (i.e. ECY CRO for Kittitas County) will participate in a coordination call led by ECY to determine if an AQA is needed, and if so, the details of the message. At the end of the call, ECY will share the final requested AQA with the NWS. NWS will disseminate the message via NWS pathways. Local clean air agencies will typically also share messaging through websites, distribution lists, and on social media.

Public Education and Outreach

What the public needs to know to prepare for and respond to smoke

The Kittitas County Public Health Department follows guidance in the R7 Healthcare Alliance Smoke Response Plan that describes pre-season preparedness and smoke response outreach. This includes best practices for connecting with vulnerable populations to teach how to access local air quality data and connect numbers to corresponding health behaviors, what health protective behaviors to take including masking, staying indoors and creating clean indoor air. It is consistent with guidance from the WA Department of Health and the EPA on the following risk reduction strategies:

- Stay indoors.
- Reduce physical activity.
- Reduce indoor air pollution sources.
- Use air conditioners and filters.
- Use room air cleaners.
- Use respiratory protection when going outside.
- Seek clean air shelters and cleaner air spaces outside the home or workplace if needed.

Creating and Maintaining Clean Indoor Air

Improving indoor air quality is one of the most effective strategies for reducing exposure to wildfire smoke. During smoke events, residents should reduce the infiltration of outdoor air by keeping windows and doors closed whenever temperatures can be maintained safely and by using air filtration to remove PM2.5 that enters indoor spaces.

Multiple approaches can substantially improve indoor air quality. Portable high-efficiency particulate air (HEPA) cleaners can effectively reduce indoor PM2.5 concentrations when appropriately sized for the room and operated continuously during smoke events. Lower-cost alternatives, such as do-it-yourself (DIY) filter fan systems constructed with a box fan and high-quality furnace filters (ideally MERV-13), have also been shown to provide meaningful reductions in indoor smoke particles when assembled and used safely. Improving the building envelope through weatherization measures—including sealing air leaks, improving insulation, and upgrading windows and doors—can further reduce smoke infiltration while improving energy efficiency and occupant comfort.

Heating, ventilation, and air conditioning (HVAC) systems can also play an important role in maintaining cleaner indoor air. When wildfire smoke is present, central HVAC systems should be operated in recirculation mode whenever possible to minimize the introduction of smoky outdoor air while continuously filtering indoor air through the system. Upgrading to filters with higher efficiency ratings (such as MERV-13 or higher), where compatible with the HVAC equipment and manufacturer's recommendations, can substantially improve removal of fine particles from indoor air. Regular filter inspection and replacement are particularly important during prolonged smoke events, as filters may load more quickly under heavy smoke conditions.

Equitable access to clean indoor air is an important public health consideration. Not all residents have access to air conditioning, central HVAC systems, portable air cleaners, or the financial resources needed to purchase and operate filtration equipment. Older housing stock, rental properties, low-income households, individuals experiencing homelessness, and residents with underlying health conditions may face disproportionate barriers to reducing smoke exposure. Expanding access to portable HEPA air cleaners, supporting weatherization and energy-efficiency assistance programs, promoting low-cost DIY filtration options, and providing culturally and linguistically appropriate public education can help reduce these disparities.

During periods of prolonged or severe smoke, cleaner air centers provide an additional layer of community protection. These facilities—such as libraries, community centers, schools, or other public buildings equipped with effective filtration and ventilation systems—can offer temporary refuge for residents who cannot maintain clean indoor air at home. Identifying, maintaining, and communicating the availability of cleaner air spaces before wildfire season can improve community resilience and help protect populations at greatest risk of smoke-related health effects.

As wildfire smoke becomes an increasingly common hazard in Kittitas County, expanding equitable access to clean indoor air through a combination of building improvements, filtration technologies, public facilities, and targeted assistance programs represents one of the most effective strategies for reducing smoke-related health impacts and strengthening community resilience.

Recommendations for Smoke Risk Mitigation

The following implementation actions are intended to guide Kittitas County toward becoming a Smoke Ready Community by strengthening monitoring, preparedness, public health protection, resilient infrastructure, and cross-sector partnerships. Identifying these actions in the CWPP may also improve eligibility and competitiveness for future grant funding by demonstrating locally identified priorities for wildfire smoke mitigation and resilience.

As previously stated, wildfire smoke cannot be eliminated, but active forest management, including the use of prescribed fire, can hopefully recover a more wildfire resilient landscape that results in lower intensity fires and less wildfire smoke in the future. A smoke ready community is one that provides information and resources so that everyone can live safety with smoke – whatever the source. Comprehensive outreach that includes the causes of extreme wildfire, strategies for restoring healthy forests AND tools to stay safe in any type of smoke should not only reduce the health burden of smoke but also increase the acceptability of prescribed fire. Investments that reduce smoke from residential burning, wood heating, and vegetation disposal will reduce PM2.5, providing immediate public health benefits while complementing broader wildfire mitigation efforts. The following recommendations promote smoke readiness as a crucial component of wildfire resiliency.

Recommended actions to promote smoke readiness

Action	Description	Lead	Supporting Partners	Timeframe	Potential Funding
Expand alternatives to residential pile burning	Develop cost-share programs for chipping, hauling, biomass utilization and community chipper days as alternatives to open burning from defensible space and home hardening. Prioritize high-risk neighborhoods and reduce unnecessary smoke while supporting fuels reduction.		Kittitas County Conservation District; KFACC; KCPHD; Fire Districts; WA DNR; Ecology	Near-term	CWDG; DNR; USDA; Ecology
Expand woodstove replacement and clean heating incentive programs	Increase incentives to replace uncertified woodstoves with EPA-certified stoves or heat pumps, coordinated with weatherization and energy efficiency programs and targeted to low-income households.		Ecology; Commerce; Utilities; Community Action	Near-term	Ecology; Utility rebates
Promote best practices for prescribed fire communication and smoke preparedness	Coordinate advance notifications and standardized messaging explaining prescribed fire, expected smoke, protective actions, and long-term benefits.		WA DNR; USFS; KCPHD; KFACC; Fire Districts	Near-term	CWDG; State forestry
Support biomass utilization and innovative fuels disposal options	Develop partnerships for beneficial use of woody biomass from fuels treatments to reduce reliance on open burning.		Kittitas Conservation District; DNR; USFS; Industry; KFACC	Long-term	USDA; CWDG

Promote smoke-conscious vegetation management practices	Provide education encouraging alternatives to burning, favorable dispersion conditions, and compliance with smoke management guidance.	KCPHD	Ecology; Conservation District; KFACC	Near-term	CWDG; Ecology

Action	Description	Lead	Supporting Partners	Timeframe	Potential Funding	Stakeholder Priority
PLANNING AND GOVERNANCE						
Develop Countywide Smoke Ready Community Program	Establish a coordinated countywide Smoke Ready Community initiative integrating public health, emergency management, fire agencies, schools, healthcare, local governments, tribes, businesses, and community organizations. Develop shared goals, annual work plans, performance metrics, and mechanisms for coordinated implementation and grant development.		KCPHD; Emergency Management; KFACC; Ecology; DOH; local jurisdictions; tribes	Near-term	CWDG; FEMA; CDC	
Publish annual State of the Air report	Produce an annual report summarizing AQI trends, PM2.5 levels, notable smoke events, historical comparisons, preparedness metrics, implementation progress, and recommendations. Present to County Commissioners, cities and legislators to support planning and funding.		KCPHD; Ecology; CWU; Emergency Management	Annual	CWDG; CDC; Ecology	
Conduct community smoke	Implement recurring surveys measuring AQI knowledge, risk perception, protective actions, willingness to adopt interventions,		KCPHD; CWU; KFACC; DOH	Near-term	CWDG; CDC	

preparedness survey	barriers, and program effectiveness. Repeat every 3–5 years.					
COMMUNITY PROTECTION AND PUBLIC HEALTH						
Expand portable HEPA distribution	Create equitable programs distributing HEPA air cleaners to vulnerable households including older adults, low-income residents and people with chronic disease through healthcare and community partners. Develop model that is sustainable, rather than susceptible to annual funding availability.		KCPHD; Clinics; nonprofits; DOH	Near-term	CWDG; EJ grants	
Promote DIY filtration	Offer workshops and materials for box filter fan construction and operation and provide kits where feasible.		KCPHD; Libraries; schools; nonprofits	Near-term	CWDG	
Establish and Evaluate Impact of Cleaner Air Centers	Identify and maintain public buildings with verified filtration and activation protocols to serve residents during prolonged smoke events. Track use and impact on populations.		EM; Libraries; schools; cities; KCPHD	Near-term	FEMA; CWDG	
Conduct annual preparedness campaigns	Provide recurring seasonal outreach on AQI, HEPA filtration, cleaner indoor air, and protecting vulnerable populations.		KCPHD; KFACC; healthcare; Ecology	Annual	CDC; CWDG	

Develop Smoke Preparedness Plans for Schools and Childcare Facilities	Develop smoke preparedness plans for K–12 schools and childcare providers that provide training and outreach on AQI thresholds, building controls such as HVAC optimization and portable HEPA filtration, indoor and outdoor air quality monitoring cancellation or relocation of outdoor		KCPHD,School Districts; ESD 105; Childcare Providers; DOH	Near-term	CDC/DOH grants; FEMA; local funds	

	activities, shelter-in-place procedures, family communications, and continuity of education during prolonged smoke events. Include staff training and annual plan review.					
Create Wildfire Smoke Business Resilience Toolkit	Develop a practical toolkit that helps businesses prepare for smoke events through cleaner indoor air strategies, business continuity planning, employee communication templates, customer messaging, portable filtration guidance, and voluntary Smoke Ready Business recognition to encourage preparedness and reduce economic disruption.		Chamber of commerce; KCPHD; Economic Development; Tourism	Near-term	EDA; local grants; private sponsors	
Integrate Smoke into Emergency Management Planning and Exercises	Update emergency operations plans and conduct recurring tabletop and functional exercises that include prolonged wildfire smoke scenarios, cleaner air center activation, vulnerable population support, interagency coordination, public messaging, and resource allocation under extended degraded air quality conditions.		EM; KCPHD; Fire; EMS; Cities; Schools; Healthcare	Near-term and Ongoing	FEMA; Emergency Management Performance Grants	

Action	Description	Lead	Supporting Partners	Timeframe	Potential Funding	Stakeholder Priority
BUILDINGS AND INFRASTRUCTURE						
Improve indoor air quality in public buildings	Upgrade HVAC filtration, optimize recirculation, commission systems, and improve indoor air quality resilience in schools, libraries, government buildings, shelters, and other public facilities. Prioritize buildings serving vulnerable populations and evaluate MERV-13 compatibility where feasible.		Facility owners; School Districts; Local Govts; KCPHD	Long-term	Commerce; Capital Budgets; CWDG	
Expand weatherization and home air sealing assistance	Increase access to weatherization, insulation, air sealing, and efficiency upgrades that reduce smoke infiltration while improving comfort and energy performance, prioritizing low-income households.		Weatherization providers; Commerce; Community Action; KCPHD	Long-term	WAP; Commerce; Utilities	
Promote smoke-resilient building standards and code updates	Evaluate code updates encouraging recirculating HVAC, high-efficiency filtration, and cooling in new construction and major renovations; encourage retrofit incentives and reference CALGreen concepts.		Community Development; Building Code Council; Commerce; KCPHD	Long-term	Commerce; FEMA; CWDG	

MONITORING, COMMUNICATION, AND EDUCATION						
Develop coordinated smoke communication strategy	Prepare multilingual preseason communication plans on AQI, smoke forecasts, protective actions, cleaner air resources, and available assistance using multiple platforms.		KCPHD; Emergency Management; Ecology; Media	Near-term	CDC; CWDG	
Strengthen smoke forecasting and public awareness	Promote use of SensWA, AirNow and trusted resources while educating residents on AQI interpretation and protective actions.		Ecology; KCPHD; Emergency Management	Near-term	Agency resources; CWDG	
Expand access to low-cost indoor air quality monitoring and training	Increase access to PM2.5 sensors for homes and institutions with training on placement, interpretation, HEPA filtration, DIY filtration, HVAC optimization and building sealing; consider lending libraries.		KCPHD; Ecology; CWU; Schools; Libraries	Near-term	CWDG; EPA; CDC	
Establish the Kittitas Clean Air Ambassadors Program	Create a volunteer community-science network deploying indoor and outdoor PurpleAir-type sensors in neighborhoods and facilities serving vulnerable populations. Train ambassadors on installation, interpretation, and smoke mitigation; use data to supplement SensWA and regulatory monitoring and improve public awareness.		KCPHD, Ecology; CWU; KFACC; Libraries; Schools	Near-term	CWDG; EPA; Foundations	

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