

Community Wildfire Protection Plan

November 2025



(Photo: Alison Dempsey-Hall)

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Members of the CWPP Core Planning Team are marked with an asterisk (*). This CWPP would not have been possible without their guidance and support throughout the planning process.

CWPP Adoption and Approval

State Forester, Washington Department of Natural Resources

The King County Community Wildfire Protection Plan (CWPP) fulfills the three requirements of the Healthy Forests Restoration Act (HFRA) of 2003 and is agreed to by the key parties below.

The CWPP was collaboratively developed with input from interested parties, key partners, fire districts, and private, county, state, and federal agencies managing land or responsible for wildfire preparedness, response, and recovery efforts in King County. The CWPP identifies areas for strategic fuel reduction and provides recommendations to the public on effective methods of treatment to protect communities and reduce structure ignitability throughout King County.

BuloShaluf	11/17/2025
Brendan McCluskey Director, King County Office of Emergency Management	Date
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Letter from the Executive

November 2025

King County Residents, Visitors, and Partners,

Wildfire is a historically natural phenomenon that has played a role in reshaping and regenerating our King County ecosystems since time immemorial. However, the wildfires can pose significant dangers to the public, to businesses, and to first responders.

While King County and Western Washington have been viewed as having relatively low fire risk, the reality is that we can experience significant wildfires with the right conditions. The challenge created by the low-frequency, high-severity fire probability in Western Washington is that many major wildfires that have impacted the region are out of living memory, making public education and awareness particularly difficult. Meanwhile, wildfire risk is growing in King County. We are experiencing drier summers and a longer fire season as more people move into areas of King County with a higher likelihood of exposure to fire. It takes community-wide effort to help reduce our wildfire risk.

To that end, King County has created its first Community Wildfire Protection Plan (CWPP). The plan has been developed as a comprehensive, locally tailored strategy to reduce wildfire risk and enhance community resilience. The 2025 CWPP is grounded in King County values. The plan identifies areas vulnerable or susceptible to wildfire and outlines actions for individuals, agencies, and government to undertake. The 2025 CWPP was collaboratively created through extensive consultation with first responders, county and local governments, fire departments, land management agencies, tribal governments, community organizations, and residents. This inclusive process ensures that the plan reflects local priorities and values and demonstrates a shared commitment to wildfire risk reduction at all levels.

This plan is intended to be a living document—adaptable to changing conditions, informed by new data, and responsive to community needs. It serves as both a roadmap and a call to action for communities to work together to become a fire-adapted region that protects King County's people, landscapes, and future.

Shannon Braddock

King County Executive

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Introduction to the CWPP

What is a Community Wildfire Protection Plan (CWPP)?

A Community Wildfire Protection Plan (CWPP) is a comprehensive local plan that identifies and prioritizes ways to protect life, property, and the environment from destructive wildfires. The CWPP provides an overview of wildfire in our region and outlines actions that individuals, communities, and local governments should do to help our County adapt to the reality that large wildfires can and do happen here.

CWPPs were established by Congress through the Healthy Forests Restoration Act (HRFA) in 2003. According to the HFRA, all CWPPs are required to be developed collaboratively, identify places to reduce flammable vegetation, and include recommendations for decreasing the risk of structures burning in a wildfire. In Washington, county-level CWPPs must be approved by the State Forester and should reflect the needs and concerns of the local community.

To develop our CWPP, King County assembled a team of local experts, engaged partners, and sought input from the public throughout the planning process. After reviewing best available science, this plan has identified areas within King County that are vulnerable to wildfire and shares recommendations to protect homes and community resources in and around them. Publishing a CWPP is not the culmination of wildfire mitigation efforts; rather, it's a call to action for all of us to play a role in improving our local wildfire resilience.

How is the CWPP relevant to me?

A catastrophic wildfire in King County would affect us all – whether through direct impacts to lives, homes, and property, or through impacts to the economy, air quality, infrastructure, and regional wellbeing – and we all have a responsibility in reducing the risk of wildfire. A fire-adapted community is a resilient community that understands its wildfire risk and takes action to better live with wildfire. King County can only become a fire-adapted community through the cumulative, ongoing actions of individuals, community groups, and local leaders working together on wildfire risk reduction, and this CWPP is one step in this process. It highlights important things we should all understand about our wildfire risk and what we can do about it (see Section 6 for more). We cannot eliminate wildfire, but we can take action to reduce our community's vulnerability and improve our resilience when fires occur.



What is in this plan?

Part 1: CWPP Development (p. 11)

This section describes the goals for the 2025 CWPP planning process, outlines the partners who were engaged to develop the plan, and details community outreach during the planning process. It also explains how the CWPP aligns with other local, state, and federal plans related to wildfires and other hazards.

Part 2: Wildfire in King County (p. 16)

This section explains the basics of wildfire and how they can occur in our ecosystems here on the west side of the Cascades. Topics covered include our local fire history, risk factors that increase wildfire likelihood in King County, and growing concern for wildfire in our region.

Part 3: The Wildland Urban Interface and Beyond (p. 31)

The Wildland Urban Interface is the term for areas where human developments meet and intermix with the wildland forests. Because communities in these areas are more likely to be exposed to wildfire, this is a key area of focus for protection planning. This section defines and describes the Wildland Urban Interface areas in King County.

Part 4: Wildfire Response and Recovery (p. 41)

This section explains how wildfire response is coordinated in King County and for our wider region, and also describes aspects of wildfire recovery that we may experience in a post-wildfire scenario in King County.

Part 5: Wildfire Risk Assessment (p. 52)

Using best available data, this section maps risk of wildfire in King County. It goes into detail on what wildfire risk is and how to understand how to prioritize wildfire preparedness efforts by region of the county.

Part 6: Becoming a Fire-Adapted Community (p. 69)

After accounting for local wildfire norms and patterns, risk mapping, and community input, this section brings it all together to identify ways to work on wildfire risk reduction in King County. This section highlights what individuals and communities can do to prepare for wildfire, what work is already being done, and outlines strategies to expand existing efforts.

Acronyms and Glossary (p. 110)

Check here for definitions of technical terms and acronyms used in the document.

Appendices (p. 115)

The sections above have been kept to the basics; if you want to explore the details behind the data, the Appendix section documents more information behind the CWPP plan.

What everyone in King County should know about wildfire:

We hope you read this whole plan, but if not, here are key messages we don't want you to miss.

Wildfires are a normal, natural component of a healthy ecosystem.

Wildfires have played a role in reshaping and rejuvenating our forests since time immemorial, and there are ecological benefits of periodic fire on the landscape. Sustaining healthy forests and urban tree canopies is also essential, and maintaining local tree cover is NOT incompatible with wildfire risk reduction. Both work in tandem to help us protect the things we value across the region.

Wildfires that threaten lives and homes can and do happen here.

While we don't have big wildfires in King County as often as other parts of Washington, we can experience intense, fast-moving fires anytime conditions are right for things to burn. We have hundreds of thousands of community members who live in areas that could be negatively impacted by a wildfire and its associated hazards. Wildfire season in Western Washington is lengthening, increasing the chances that fires will occur.

We must be realistic about wildfire risk and response limitations to plan accordingly. There are many misconceptions about what kind of support will be available during a wildfire relating to evacuations, alerts, and firefighting. We can't adequately prepare if we don't take the challenges of a wildfire response seriously. This starts with setting realistic expectations and underscoring the responsibility of each individual to be prepared.

Many of the most crucial ways to protect your home and loved ones during a wildfire are things you can do now.

We have the ability to greatly improve our own safety and the safety of our wider communities long before a wildfire. This includes hardening our homes and building defensible space around them, preparing for emergencies with loved ones and neighbors, signing up for alerts, and getting involved in community-level action to protect our region.

A major wildfire in King County will affect all of us. A major wildfire in King County would have an impact well beyond the area burned. This could include impacts to watersheds, critical infrastructure, and transportation routes, as well as the ramifications for public health, the environment, and economy of the wider Puget Sound Region. Wildfire mitigation should matter to us all since it will affect us all. (We can't be effective without you!)

Everyone has an ongoing role to play in making King County a fire-adapted community.

Wildfire risk reduction isn't just one group's responsibility or a "one-and-done" action – it relies on the sustained efforts of the whole community over time. First responders and local officials have a role, as do individual community members. We can actively improve our county's ability to withstand a wildfire without loss of life and property if people across the region do their part together to help King County better live with fire.

How to Navigate the CWPP

This document provides a comprehensive overview of wildfire in King County and what we can do to adapt to it. Use the guide below to direct you to specific sections that may be of interest to you.

Part 2: Wildfire in King County (p. 16) explains basics I want to learn the basics about wildfire and how wildfires typically occur here >> about wildfire in King County. in Western Washington. Part 6: Becoming a Fire-Adapted Community (p. 69) I want to understand how to highlights 14 potential actions individuals can take to protect and prepare their household for wildfire. It protect my home and family >> from wildfire. also outlines work you can do with your neighbors to more effectively protect your whole community. Part 4: Wildfire Response and Recovery (p. 41) I want to know more about describes local and regional firefighting capacity and wildfire response and >> explains several likely challenges for wildfire response recovery in King County. and recovery in King County. Part 1: CWPP Development and Approval (p. 11) I want to know more about >> gives an overview of the CWPP planning process, how this plan was written. including community and partner involvement. Part 5: Wildfire Risk Assessment (p. 52) shows a I want to see a wildfire risk map of wildfire risk, but it also explains what wildfire >> map of King County. risk means and the impacts a wildfire could have in King County. I want to know where the Part 3: The Wildland Urban Interface and Beyond "Wildland Urban Interface" >> (p. 31) explains what the Wildland Urban Interface is is and what it means. and why it matters for wildfire protection planning.

This document will use acronyms and some technical terms relating to fire, forestry, and emergency management that are in **bold**. For an acronym and glossary list, turn to p. 110.

Look for these "learn more" boxes throughout the plan to direct you to external resources that cover subject matter in detail if you'd like to explore the topic further.

Learn more >>

Read "Cascadia Burning: the historic, but not historically unprecedented, 2020 wildfires in the Pacific Northwest, USA" by Reilley et al.

Part 1: CWPP Development and Approval

CWPP Goals

Goal #1: Protect people, property, and critical infrastructure from negative impacts of destructive wildfires.

Goal #2: Reduce the likelihood of highly destructive wildfires in King County.

Goal #3: Empower community members with knowledge, tools, and resources to mitigate their wildfire risks and increase local mitigation capacity.

Goal #4: Increase public understanding of wildfire on the west side of the Cascades and how to effectively adapt to fire locally.

Goal #5: Increase opportunities for collaborative wildfire mitigation work.

Goal #6: Enhance wildfire recovery capabilities to protect life, the built environment, and natural systems.

Collaborative Plan Development

Collaboration is not only a CWPP requirement; it is essential for effectively addressing the risk of wildfire in King County. Wildfires themselves do not respect jurisdictional boundaries and have wideranging impacts. Wildfire prevention, protection, and recovery cross numerous sectors, from forestry and zoning to infrastructure and social services. Effective wildfire risk reduction requires action at every level, from individuals and communities to local and state government agencies. This planning process included efforts to engage a wide variety of partners across King County and wider region.

CWPP Core Planning Team

The CWPP Core Planning Team is a group of subject matter experts that supported the development of the CWPP throughout the planning process. Per HFRA requirements, the team was comprised of local, state, and federal partners, including fire and forestry officials. Members met regularly starting in August 2024 through December 2025 to provide collaborative decision-making planning guidance.

Local Fire Officials

- Eastside Fire & Rescue
- Fall City Fire District 27
- Mountain View Fire & Rescue
- Valley Regional Fire Authority

King County

- Office of Emergency Management
- Department of Natural Resources and Parks (DNRP)
- Executive Climate Office (ECO)
- Fire Marshal
- Rural Forest Commission

Local, State, and Federal Forestry

- King Conservation District
- Washington Department of Natural Resources (DNR)
- United States Forest Service (USFS)

Community in Wildland Urban Interface

City of Duvall

Other

 Washington Department of Transportation

Partner Engagement

Partners from a variety of fields were engaged during the planning process to provide expertise and insight for the CWPP. This includes representatives from the Muckleshoot, Snoqualmie, and Tulalip tribes, local utility providers, social service agencies, partners involved with neighboring counties' CWPPs, and local jurisdiction representatives.

Partners across the region were invited to attend one of three wildfire mitigation workshops to brainstorm mitigation actions for the CWPP; others met with the Wildfire Protection Planner individually and/or reviewed aspects of the draft CWPP prior to publication. Partners include:

- Area Agency on Aging for Seattle and King County
- · City of Bellevue
- City of Bothell
- City of Covington
- City of Duvall
- City of Issaquah
- · City of Kirkland
- City of Maple Valley
- City of Mercer Island
- City of Pacific
- City of Sammamish
- City of Skykomish
- City of Snoqualmie
- Covington Water District
- Eastside Fire & Rescue
- Highline Public School District
- Hopelink Mobility Management
- King Conservation District
- King County Department of Local Services – Permitting, Fire Marshal's Office
- King County Department of Natural Resources and Parks
- King County Fire District 2
- King County Metro Transit
- King County Noxious Weeds Program
- King County Rural Forest Commission
- Middle Fork Coalition
- Money Creek Park Association
- Mountain View Fire & Rescue
- Mountains to Sound Greenway
- Muckleshoot Indian Tribe
- National Oceanic and Atmospheric Administration/National Weather Service

- Pierce County Department of Emergency Management
- Public Health Seattle and King County
- Puget Sound Energy
- Puget Sound Regional Fire Authority
- Redmond Fire
- Regional Alliance for Resilient and Equitable Transportation
- Renton Regional Fire Authority
- Seattle King County Regional Homelessness Authority
- Seattle Public Utilities
- Snohomish County Department of Emergency Management
- Snoqualmie Tribe
- Snoqualmie Valley Mobility Coalition
- South King Fire
- Tanner Electric
- The American Red Cross
- Tulalip Tribe
- University of Washington
- University of Washington Bothell
- Valley Regional Fire Authority
- Vashon Island Fire & Rescue
- Virginia Mason
- Washington Department of Natural Resources
- Washington Resource, Conservation, and Development Council
- Washington State Animal Rescue Team
- Washington State University Extension
- Washington State University Extension Office
- Washington Trails Association

Community Input

King County Office of Emergency Management (OEM) sought input directly from the public at more than two dozen outreach events in communities across King County over the course of CWPP development to talk with members of the public, share information about the CWPP and wildfire risk reduction, and ask for public input via survey. This included highly populous jurisdictions as well as rural areas of unincorporated King County, including:

- Auburn
- Bellevue
- Carnation
- Duvall
- Issaquah
- Maple Valley

- North Bend
- Ravensdale
- Redmond
- Skykomish
- Vashon

The Community Wildfire Protection Planning (CWPP) Survey provided a format for the public to share insights, concerns, and priorities about wildfire risk reduction. The survey was open for public input from May 1 – September 30, 2025, and was available in multiple languages through the translation feature of the Public Input survey platform. It was shared by partners and via social media, word of mouth, physical flyers, and was posted in 11 languages in all King County libraries. The survey resulted in approximately 500 responses which helped influence the CWPP planning process. Results of the survey are included throughout the CWPP where relevant and listed in full in Appendix A.



King County OEM staff share wildfire mitigation information and the CWPP survey at a community outreach event, 2025. (Photo: Barbara Ramey)

Strategic Connections

This CWPP is directly connected or in alignment with many other plans at the local, state, and federal levels. These include the following:

Federal

- Healthy Forests Restoration Act
- National Cohesive Wildland Fire Management Strategy

State

- Wildland Fire Protection Strategic Plan
- 2020 Forest Action Plan

Local

- King County Comprehensive Plan
- King County Wildfire Risk Reduction Strategy
- King County Strategic Climate Action Plan

- King County 30-Year Forest Health Strategy
- King County Regional Hazard Mitigation Plan
- King County Rural Forest Commission Strategic Goals
- King County Disaster Recovery Framework
- Local Hazard Mitigation Plans
- Utility Wildfire Mitigation Plans
- · Firewise USA Site Action Plans

CWPP Planning Process

The CWPP planning process began with the first meeting of the Core Planning Team in August 2024 and work continued steadily through to the plan's completion by the end of 2025.

Figure 1: CWPP Planning Timeline Overview



Process for Updating the CWPP

The CWPP is meant to be a living document that helps guide ongoing wildfire mitigation efforts. In order to reflect changes with wildfire mitigation actions, priorities, and proposed projects, the plan will be reviewed yearly at a minimum. King County OEM will host an annual workshop each year with key agencies involved in the county-level plan or locally annexed CWPPs. The group will review the projects list, discuss successes and lessons learned, strategize project implementation, and determine whether revisions are needed.

The CWPP will go through a full update every 5 years in line with the Regional Hazard Mitigation Plan (RHMP) update schedule. The CWPP may be revised in between scheduled updates as circumstances dictate. Substantive changes to the CWPP will be documented in Appendix B. Triggers for a CWPP update may include, but are not limited to, the occurrence of a wildfire or other major disaster impacting King County, changes to external plans or datasets referenced in the CWPP (such as state-level wildfire hazard mapping), or significant changes in policies relating to wildfire at the local, state, or federal level.

Part 2: Wildfire in King County

Is wildfire good or bad? It's not that simple.

Wildfire is a hazard that has very different consequences depending where and how intensely they burn. On the one hand, wildfire has regenerated and reshaped our forests since time immemorial; a lightning-sparked wildfire burning in the woods is both normal and natural. However, more and more people are moving to areas where wildfires can burn at the same time that our wildfire risk is increasing; when wildfires impact human developments, it can be catastrophic and devastating. Exposure to wildfire smoke is unhealthy, yet prescribed fire has been an important forest management tool for centuries. Occasional wildfire is essential for forest health, but superheated fires can significantly alter the areas where they burn for years.

Wildfire is neither good nor bad: it is a hazard that has a place in our ecosystem and can have significant consequences, and it is on us to plan accordingly. This is why this CWPP emphasizes the importance of becoming a fire-adapted community:

Wildfire is a reality of life in Washington, and it is essential that we learn to live well with wildfire now and into the future.



Wildfire Basics

There are three basic components that need to be present for a fire to start (and continue) burning: oxygen, a heat source, and fuel. This is commonly referred to as "the Fire Triangle."

Oxygen

Oxygen is generally available wherever a wildfire could start, but windy conditions can create an influx of oxygen that increases fire intensity and rate of spread.

Wildfire Ignition Sources

While wildfires can start naturally from heat sources such as lightning strikes, nearly 90% of wildfires in Washington are started by humans according to Washington Department of Natural Resources (DNR). Out of the hundreds of human-caused wildfire ignitions in King County DNR has recorded since 2008, their sources include the following in order of most to least common: ²

- Celebration campfire/bonfire
- Debris burning
- Arson
- Equipment/vehicle

- Power generation
- Fireworks
- Smoking
- Railroad

Wildfire Fuel

Wildfire **fuel** encompasses any material that can burn. While this term is commonly associated with natural vegetation (such as grasses, shrubs, and trees), it also includes flammable man-made structures and objects, including homes and vehicles.

Wildfire Behavior

Once ignited, the way a wildfire burns is influenced by the topography of the area, the fuels present, and the weather. ⁴ This is commonly referred to as the "Wildfire Behavior Triangle."

Topography

Topography, or the shape of the land's surface, is a significant determining factor in how a fire moves across the landscape. The steepness (slope) of a hill impacts the speed with which an area burns; a fire at the bottom of a steep hill pre-heats the fuels above, so fires move much faster uphill than downhill or on flat land. Fire movement also depends on the direction that an area faces (aspect); fires often more quickly burn hillsides



¹ Washington Department of Natural Resources (DNR), "Investigations," October 29, 2025, https://www.dnr.wa.gov/Investigations.

² Washington DNR, "Washington Department of Natural Resource GIS Open Data – DNR Fire Statistics 2008-present," https://data-wadnr.opendata.arcgis.com/.

³ Northwest Fire Science Consortium (NFSC), "What is? Fuel," Accessed October 29, 2025, https://www.nwfirescience.org/sites/default/files/publications/FIREFACTS_FUELS_0.pdf.

⁴ Western Fire Chiefs Association (WFCA), "How Fast Do Wildfires Spread?" November 2, 2022, https://wfca.com/wildfire-articles/how-fast-do-wildfires-spread/

facing south because the increased exposure to sunlight reduces moisture content in the vegetation. Other topographical features like rivers and canyons can either hinder or enhance rapid wildfire spread.⁵

Fuels

The density, moisture level, and chemical makeup of fuels present in an area significantly impact the intensity and speed with which a wildfire burns. The more densely packed fuels are, the more quickly a fire can spread because the radiant heat easily ignites flammable materials close by. The moisture level impacts the readiness of material to burn; live, lush plants have a higher moisture content and are less likely to ignite compared to dry, dead vegetation. During times of drought, our risk of large wildfires increases significantly because it make fuels across the region more susceptible to burning.

Some plants and materials are more flammable than others because of their chemical composition. For example, arborvitae are incredibly flammable because of their oily needles and the low moisture content of their internal branches. Similarly, a home may actually be the most flammable fuel in an area. This is because homes often have an ideal combination of all three factors; a home contains a large amount of burnable material in one



Highly flammable arborvitae line a wooden fence – a poor combination for fire safety.

concentrated area (especially so if there is flammable vegetation within 5 feet of the home), they have a low moisture level, and an unhardened home may be constructed with materials that readily burn. This effect can be seen in the aftermath of many wildfire-sparked urban fires like the 2025 LA Fires, where live trees remain standing in between homes that completely burned to the ground.

Weather

Weather, including humidity, wind, atmospheric stability, and other factors are the most significant determining factors in how (or if) a wildfire will burn in Western Washington. Our usually lush vegetation can be turned into ready-to-burn fuel during extended periods of dry weather. Periods of hot weather can accelerate this drying process. Wind accelerates combustion by infusing a fire with oxygen, allowing it to burn more intensely. It can dry out fuels and increase their flammability, and it can also result in rapid fire spread through the bending of flames which, like steep slopes, preheats fuels. Finally, wind can loft burning materials (**embers**) and transport them miles downwind creating new ignitions. When it comes to wildfire protection planning for communities, preparing homes for the risk of ember spread is a top priority.

⁵NFSC, "What is? Topography," Accessed October 29, 2025, https://nwfirescience.org/sites/default/files/publications/FIREFACTS_Topography.pdf.

Embers and Wildfire Spread

Wildfires can spread in several ways, including by direct flame contact and through radiant heat from a fire that ignites flammable materials nearby. However, the leading cause of home ignitions in a wildfire is flying embers. A wildfire can generate millions of embers, and they have been documented to travel miles ahead of the fire from which they originated, where they land and can then cause additional ignitions.

Reducing a home's susceptibility to embers is the most important step a homeowner can take to protect it from wildfire.

See Part 6: Becoming a Fire-Adapted Community (p. 69) to learn more about hardening your home and building defensible space to protect your home from ember ignitions.



King County's Wildfire Regime

According to DNR, a **wildfire regime** is "the characteristic pattern, frequency, and intensity of wildfires in a particular ecosystem or geographical area over a specific period of time." The local fire regime is essential to understand because it informs us about what kinds of wildfire we may experience.

⁶ Faraz Hedayati *et al*, "WILDLAND FIRE EMBERS and FLAMES: Home Mitigations That Matter." Insurance Institute for Building and Home Safety (IBHS), 2023, https://ibhs1.wpenginepowered.com/wp-content/uploads/Home-Mitigations-that-Matter-FINAL.pdf

⁷ N.P. Lareau, "Plume Dynamics Drive Extreme Long-Range Spotting during California's Dixie Fire." *Journal of Geophysical Research Atmospheres* 130 (2025), 9, https://doi.org/10.1029/2024jd043167.

⁸ Emily Fales & Daniel Donato, "Key Insights for Wildfire Management in Western Washington: Fire Regime and Forest Structure." Forest Stewardship Notes and Landowner News, February 6, 2024,

https://foreststewardshipnotes.wordpress.com/2024/02/06/key-insights-for-wildfire-management-in-western-washington-fire-regime-and-forest-structure/

King County has historically experienced two general types of wildfires in our fire regime, shown in Figure 2. Areas with vegetative fuels King County can experience mixed-severity wildfires with moderate frequency as determined by the fuels, weather, and topography present at the time of ignition. These fires can still be destructive based on where they burn;

Western Washington Wildfire Regimes

Western Washington Wildfire Regimes

Adapted from Spies et al. 2018

Infrequent – high severity

Moderately frequent – mixed severity

Frequent – mixed severity

Very frequent – low severity

however, such fires typically occur either where fire crews are able to contain them with standard wildland firefighting techniques or in uninhabited areas where they are allowed to burn. 9 Low- to moderate-severity fires do not necessarily kill all the vegetation in the areas they impact; it may thoroughly burn the underbrush and smaller trees, or destroy sections of forest, but large-diameter, mature trees may survive. This type of fire is becoming more common as we experience hotter, dryer summers and a lengthening fire season.

The other type of fire we can experience here is an **infrequent, high-severity wind-driven wildfire** (shown in black in Figure 1). ¹⁰ Such fires are rare, but when they occur they can be massive (100,000 to >1,00,000 acres), incredibly difficult to contain, and often burn at a high enough severity that they kill entire sections of forest (what is known as a "**stand-replacing" fire**). These kinds of fires have historically burned hundreds of thousands of acres in a matter of days and are a very real concern here for King County. According to wildfire experts, this type of fire is more of a *wind event* with wildfire in it, which makes them incredibly dangerous and almost impossible to stop until the wind subsides. ¹¹ Based on historical research and contemporary comparisons, three factors need to converge for a major high-severity wildfire to occur in King County:



An east wind event that coincides with a wildfire could push embers directly into the urban areas of King County, a situation which would be dangerous and even life-threatening. This could cause unprecedented destruction to our communities, though such a fire in and of itself is not

⁹ Fales & Donato, 2024.

¹⁰ Thomas A. Spies, et al, ""Old growth, disturbance, forest succession, and management in the area of the Northwest Forest Plan." 2018.

¹¹ Reilley et al, "Cascadia Burning: the historic, but not historically unprecedented, 2020 wildfires in the Pacific Northwest, USA," Ecosphere 13, no 6 (2002).

unprecedented – it is a known feature of our local fire regime. Rapid evacuation is likely the only option for immediately protecting communities in a high-severity, east wind driven fire. ¹² Because major high-severity fires occur infrequently, people in higher-risk areas may not realize just how vulnerable they would be to a destructive, wind-driven wildfire. Lack of awareness can lead to lack of preparedness, low interest in mitigation, and taking inadequate precaution with potential ignition sources – the opposite of actions that are needed to become a fire-adapted community.

Learn more >>

Read "Cascadia Burning: the historic, but not historically unprecedented, 2020 wildfires in the Pacific Northwest, USA" by Reilley *et al*.

Wildfire Snapshot: 2020 Labor Day Fires in Oregon

Because massive, high intensity fires are infrequent in our fire regime, such a fire has not occurred in King County since modern wildfire recordkeeping began in the late 1800s. However, we can learn from other high-intensity fires that have occurred in areas similar to ours such as the 2020 Labor Day Fires in Oregon.

These fires were preceded by dry conditions and spread by a strong east wind event. This combination turned multiple small ignitions into massive fires that burned more than 300,000 acres in 48 hours. Smoke from the fires shrouded the sun and created a nightmarish scenario for residents, first responders, and communities. Though such fires are rare, this is the same type of fire that has historically occurred in Western Washington and will happen again someday.

- 9 lives lost
- **300,000** acres burned in 48 hours
- 840,160 acres burned in total
- 90,000 people ordered to evacuate
- 2 weeks of highly hazardous air quality
- \$250 million dollars in suppression costs
- \$7 billion dollars' worth of property destroyed
- \$5.9 billion dollar estimated economic cost

Smoke rises from the Riverside Fire, OR, in September 2020. (Photo: US Forest Service)

¹² Reilley et al, "Cascadia Burning: the historic, but not historically unprecedented, 2020 wildfires in the Pacific Northwest, USA," Ecosphere 13, no 6 (2002).

Compounding Hazards of Wildfire

In addition to the direct impacts of wildfires, which tend to be geographically contained, wildfires create additional hazards that can put King County residents at risk far beyond areas where wildfire activity is occurring.

Wildfire Smoke

Wildfire smoke is a hazard King County experiences almost every year; as wildfires grow in frequency and severity across the western United States and Canada, our likelihood of experiencing adverse health impacts from smoke exposure increases as well. Wildfire smoke is comprised of a combination of hazardous air pollutants including fine particulate matter, often referred to as PM2.5. PM2.5 is an irritant that affects people's eyes, nose, and throat and is particularly harmful because particles can be small enough to enter a person's lungs and bloodstream when inhaled. PM2.5 from wildfire smoke is also considered to be more harmful than PM2.5 from other sources because it can include other harmful pollutants often present in wildfire smoke, such as heavy metals that can be released from the trees, soil, buildings, and other infrastructure burned during a wildfire. This can cause a range of negative health impacts, including exacerbating preexisting cardiovascular and respiratory conditions. While wildfire smoke at high concentrations is unhealthy and can be dangerous for everyone, some people are at a higher risk of negative impacts even at lower levels of exposure. These include children under 18, pregnant women, people with existing medical conditions including asthma or other respiratory and heart conditions, adults 45 years and older, outdoor workers, and those of lower socio-economic status. 13 Health impacts resulting from wildfire smoke may occur immediately or several days after initial exposure. The negative effects of wildfire smoke are a significant concern for King County residents; smoke was mentioned almost 70 times in CWPP Survey responses.

Learn more >>

Visit King County's Public Health Wildfire Smoke Response webpage.



¹³ US Environmental Protection Agency (EPA), "Why Wildfire Smoke is a Health Concern," August 13, 2019, https://www.epa.gov/wildfire-smoke-course/why-wildfire-smoke-health-concern. Michelle Baruchman, "Seattle air quality among worst in world" Seattle Times (October 2022): https://www.seattletimes.com/seattle-air-quality-among-worst-in-world/

During the Bolt Creek Fire in 2022, the Seattle area experienced some of the worst air quality in the world for multiple days. ¹⁴ University of Washington researchers conducted a health impact assessment of a similar smoke episode in 2020 and found it contributed to an estimated 92 excess deaths. ¹⁵ To address this concern, Public Health - Seattle and King County (PHSKC) developed an indepth Wildfire Health Impacts Mitigation Strategy that was released in spring 2025. The Strategy identifies ways to equitably reduce the negative impacts of wildfire smoke for our communities, especially for our most vulnerable members. Several strategies from this plan are listed in the CWPP as well.

Flash Flooding and Debris Flows

Areas downhill from a wildfire **burn scar** can be vulnerable to flash flooding and debris flows for years following a fire, especially when a high intensity fire has burned in steep areas. When high heat from a severe fire scorches the soil, the overall ability of the hillside to absorb precipitation and hold moisture can be significantly reduced. This, combined with the loss of stabilizing vegetation, means that even just a few minutes of intense rainfall has the potential to dislodge debris and send a torrent of mud, rock, and runoff rapidly downhill. ¹⁶ According to the National Weather Service (NWS), you may be at risk of a flash flood if precipitation is falling and you can look uphill and see a burned area above you. ¹⁷ Both flooding and debris flows are potentially life threating events and can damage downstream infrastructure.

Post-wildfire debris flow risks eventually decrease as new vegetation regrows; the time of highest risk is typically the two years after a wildfire, though the risk can last 5 years or more depending on how fast the area recovers. ¹⁸ Experts from the US Geological Survey (USGS), DNR, and local agencies conduct assessments on burned areas immediately following a wildfire to determine the likelihood of debris flows, and burn scars with this potential are carefully treated to minimize the chance of landslide where possible and monitored for years after the fire. King County OEM and the NWS have placed multiple weather stations in the Bolt Creek Fire burn scar near Grotto and Baring to monitor rainfall levels and will send emergency notifications (such as a Flash Flood Warning) to communities at risk if there is a high likelihood of flash flooding. It should be noted that post-fire debris flow research and forecast development has mostly focused on drier systems, like those in eastern Washington or southern California. Research is ongoing to refine precipitation thresholds that trigger debris flows.

King County Wildfire History

Historical evidence from tree ring analyses, pollen, and charcoal records demonstrate that Western Washington has experienced wildfires off and on throughout our history. This is especially evident over the last 1,000 years, where studies of living trees demonstrate that our region has experienced

¹⁵ Doubleday et al, 2022.

¹⁶ National Weather Service (NWS) Seattle, "Post Fire Burn Scar - Debris Flow & Flash Flooding," NWS, Accessed October 29, 2025, https://www.weather.gov/sew/burnscar.

¹⁷ NWS Seattle, 2025.

¹⁸ Federal Emergency Management Agency (FEMA). "Wildfire Burn Scars Increase the Risk of Flash Flooding and Mudflow," 2024, https://agents.floodsmart.gov/resource-library/en/wildfire-burn-scars-increase-risk-flash-flooding-and-mudflow.

infrequent periods of large fires often corresponding with times of drought. ^{19, 20} Though the way residents of the region have related to fire has changed over time, fires have been a part of life in the Pacific Northwest since time immemorial.

Indigenous Use of Fire

The Coast Salish peoples managed and shaped the landscape throughout history with intentional, low intensity burns that reduced underbrush in local forests to form meadows. This cleared space for food cultivation, reshaped local vegetation patterns, broadened habitat for wildlife, and reduced the risk of major wildfires by decreasing fuel density and promoting growth of fire-resilient plant species. One mid-nineteenth century writer noted that the prairies throughout the Puget Sound region had the "appearance of lands which had been cleared and cultivated for hundreds of years." These cultivated areas used to be a key feature of the Snoqualmie Valley and played both an ecologically and culturally important role. According to the Snoqualmie Tribe's Department of Environmental and Natural Resources (ENR), "The stewardship and connection between prairies and tribes are woven into each of their existences, reflected in their culture and life histories." Fire is still seen as a tool to help manage forest and meadow landscapes for the betterment of natural resources that are used and harvested today.



Today, less than five percent of prairie habitats remain, and many fire-dependent species of plants are at risk.²³ In the Puget Sound region, modern day Coast Salish tribal communities have been actively working to encourage reintroduction of prairie habitats and cultivate culturally significant foods. For example, in 2023, the Snoqualmie Tribe's ENR planted camas bulbs, Garry Oaks, and other native species in the Three Forks Natural Area to support prairie restoration. The Tulalip Tribes have,

 ¹⁹ Miles Hemstrom & Franklin, Jerry, "Fire and other disturbances of the forests in Mount Rainier National Park,"
 Quaternary Research 18, no. 1 (1982): 32-51, https://www.sciencedirect.com/science/article/abs/pii/0033589482900205
 ²⁰ Jan Henderson et al, "Forested plant associations of the Olympic National Forest," (1989),

 $[\]underline{https://www.researchgate.net/publication/44046008_Forested_Plant_Associations_of_the_Olympic_National_Forested_Plant_Associations_of_the_Olympic_Olympic_National_Forested_Plant_Associations_of_the_Olympic_Plant_Associations_of_the_Olympic$

²¹ Robert T. Boyd, 2021, *Indians, Fire, and the Land in the Pacific Northwest*, Oregon State University Press, p. 169. ²² Snoqualmie Tribe Environmental and Natural Resource Department (ENR). "Planting Camas in the Sduk"Albix"

²² Snoqualmie Tribe Environmental and Natural Resource Department (ENR). "Planting Camas in the Sduk"Albix" Baq"Ab." 2024, https://enr.snoqualmietribe.us/plantingcamas/.

²³ Sarah Hamman *et al*, "Fire as a restoration tool in Pacific Northwest prairies and oak woodlands: challenges, successes, and future directions," *Northwest Science* 85, no. 2 (2011): 317-328.

alongside cultivating, been enhancing the huckleberry forestlands for the last decade. Members of the Muckleshoot Indian Tribe continue wild huckleberry harvesting practices handed down through the generations. ²⁴ This return to historical local forest management and cultivation practices may include the use of controlled burning in alignment with traditional and contemporary best practices. Environmental anthropologist Joyce LeCompte emphasizes the importance of burning, writing, "all of the [Coast Salish] tribal members and many of the federal land managers I have spoken with say that fire cleans and invigorates the land in a way that only fire can." ²⁵

The use of fire by indigenous communities to manage the land is known to have had a protective effect on the occurrence and severity of fire. However, while low-intensity burns helped decrease the likelihood of more frequent fires, oral history and modern sampling methods show that large fires have still occurred throughout history in Western Washington.²⁶

Regional Wildfire History, 1800s – 1900s

When settlers began arriving in the area, they brought a drastic shift in the way people in the region interacted with the forests. Homesteaders built wooden homes and loggers commodified the plentiful timber of the Pacific Northwest. Many settlers did not recognize positive impact of fires on the ecosystem diversity, and the establishment of Euro-American crops and permanent settlements was associated with the disregard and prohibition of indigenous forest stewardship practices. Peanwhile, the western expansion of the United States introduced significant new risks of wildfire ignition to the region, most notably the railroads.

Several major wildland and urban fires occurred in Washington around the turn of the century, including the Great Fire of Seattle in 1889, the Yacolt Burn of 1902, and the Tillamook Burn of 1933.

The Great Fire of Seattle was an urban conflagration, not a wildfire. However, lessons from the aftermath remain salient today; after the blaze destroyed 25 blocks of downtown, Seattleites responded by instituting stricter building codes and emphasizing fire-resistant building materials to prevent a similar disaster from occurring again.

The Yacolt Burn started in 1902 and is representative of a high-severity Western Washington wildfire. The series of fires began during dry, windy conditions in southwestern Washington in early September. It scorched a total of 500,000 acres, 238,920 of which burned within 36 hours. It destroyed towns and timber and resulted in 38 fatalities. The Yacolt Burn held the record for the largest recorded wildfire in Washington history until 2014, when it was surpassed by the Carlton Complex Fire. ²⁸ The scale of devastation prompted a response from Washington residents; the state

²⁴ We are Muckleshoot, "Picking Huckleberries with the Muckleshoot Tribe." Sept. 22, 2022. https://www.youtube.com/watch?v=-RErCU7vnzQ.

²⁵ Joyce LeCompte, "Restoration, risk, and the (non) reintroduction of coast Salish fire ecologies in Washington state," *Fire Otherwise: Ethnobiology of burning for a changing world* (2018): 134-135.

²⁶ Peter Morrison & Swanson, Frederick, "Fire History and Pattern in a Cascade Range Landscape," 1990, https://www.fs. usda.gov/pnw/pubs/pnw_gtr254.pdf p. 5.

²⁷ Boyd, 2021, pp. 42, 169.

²⁸ John Caldbick, "Yacolt – Thumbnail History," March 14, 2010, https://www.historylink.org/File/9329

legislature established a state fire warden, and landowners formed the Washington Fire Protection Association to prevent fire on private lands.²⁹

The Tillamook Burn ignited in August 1933 after months of little rain, during a time of high temperatures and low humidity. Embers from the initial fire ignited additional fires that quickly burned more than 240,000 acres in Northwest Oregon. According to a research article by the US Forest Service (USFS), "Without a doubt it was the wind event of August 25th, 1933 that turned this fire into a disaster that would become legend to generations of Oregonians." 30

These and other major fires around this time deeply shaped public opinion and played a formative role for the newly established Forest Service. After the Tillamook Burn, the USFS enacted policies of full wildfire suppression that stood for the majority of the 20th century. ³¹ Many of Washington's iconic fire lookouts were constructed in the early 1920s-30s to help quickly identify and extinguish wildfires.



By the late 1970s, the field of forestry began to acknowledge the ecological benefits of periodic fire on the landscape and started shifting to more thoughtful wildland fire management practices, including the slow reintroduction of controlled burning. By the late 1980s, the USFS wildfire

https://dnr.wa.gov/forest-and-trust-lands/yacolt-burn-state-forest

www.fs.usda.gov/database/feis/pdfs/other/83870_Hoadley_2001.pdf

www.pbs.org/wgbh/americanexperience/features/burn-fighting-wildfires/

This timeline includes wildfires in King County over 100 acres and select dates of relevance to wildfire protection

1889: The Great Fire of Seattle
While not a wildfire by definition, the
June 1 blaze destroyed 100 acres of
Seattle's waterfront business district
and left a lasting impact on local

residents.

1893: Fires from Snoqualmie to Skykomish

On Sept. 1, multiple human-caused fires spread by the wind stretching from Snoqualmie to Stevens Pass.

1902: The Yacolt Burn

On September 8, multiple fires spread into a massive blaze that burned nearly 240,000 acres in less than 3 days in southwestern Washington, killing 38.

1905: US Forest Service established

President Theodore Roosevelt tasked the new US Forest Service with care and management of federally owned forests, naming Gifford Pinchot as its first Chief.

1910: "The Big Blowup" Fires devastate Inland Northwest

During an drought year, hurricane-force winds turned multiple wildfires in Eastern Washington, Idaho, and Montana into infernos that killed 86 people and destroyed 3 million acres of forest in two days.

1916: Washington's first fire lookout constructed

The first fire lookout in Washington was constructed in Mount Rainier National Park, with many to follow.

1922: Cedar Falls Fire

On May 31, a human-caused fire started near Rattlesnake Lake on a windy day and destroyed half of Cedar Falls, a town built to house Seattle City Light's workers.

1933: USFS enacts "10 a.m. Policy"

In response to the Big Blowup and other fires, the USFS issued a policy to fully extinguish all wildfires by 10 a.m. the following morning.

1944: Introducing Smokey Bear

Inspired by a cub rescued from a fire in New Mexico, Smokey became the face of the iconic campaign to reduce the number of human-caused wildfires.

 $^{^{29}}$ DNR, "Yacolt Burn State Forest," WA DNR, 2025,

³⁰ Hoadley, "The Tillamook Burn," US Forest Service,

³¹ "Fighting Wildfires," 2013, PBS.org,

policy allowed natural fires to burn and was more aligned with land and resources management best practices.

However, the impacts of fire suppression had drastically changed both the landscape and the public's perception of wildfire. In many ecosystems in the American West, vegetation that would have otherwise routinely burned in wildfires built up over time, providing excess fuel that would feed wildfires to burn larger and more intensely. Successful suppression of fire also reduced wildfire risk perception, and many communities expanded into naturally wildfire-prone areas with little concern or planning for the inherent risks. While Western Washington's high-severity wildfire risk remained largely constant regardless of wildfire suppression policies, the 20th century had a significant impact on our forests.

According to DNR, about 75% of forest lands are younger than 100 years old in Western Washington. This is indicative of significant disturbance to the forestlands from natural hazards and decades of intensive logging. ³² Poor forest management allowed for more densely spaced forests, species uniformity, and invasive species proliferation. While there have been great strides in recent decades to better steward our forests through resource protection, sustainable harvesting, and evidence-based forestry practices, many areas of unhealthy forest remain across our region. Meanwhile, the Greater Puget Sound Region has been experiencing significant population growth since the mid-1980s that continues to the present. ³³

Learn more >>

- People, Fire, and Forests: A Synthesis of Wildfire Social Science, by Terry C.
 Daniel, Matthew S. Carroll, Cassandra Moseley, and Carol Raish
- Fire Ecology of Pacific Northwest Forests, by James K Agee

1978: USFS fire management policy changes to allow burns

The USFS changed suppression policies to focus on wildfires threatening structures, allowing fires in uninhabited areas to extinguish naturally if possible.

2003: Congress passes the Healthy Forest Restoration Act

This policy, among other things, established CWPPs as a planning tool for wildfire risk reduction.

2017: Quarry Fire

On August 11, a wildfire started 30 miles northwest of North Bend and burned 243 acres.

2017: Sawmill Creek Fire

On September 4, a fire started in the Green River Watershed and burned 1,061 acres.

2020: King County develops first Strategic Climate Action Plan

This plan addresses many climaterelated concerns, including the increasing risk of wildfire.

2020: Fish Fire

On September 8, a fire southeast of Enumclaw burned approximately 150 acres.

2022: King County develops Wildfire Risk Reduction Strategy

This strategic plan identifies 12 recommended actions for reducing wildfire risk in King County.

2022: Murphy Lake Fire

Lightning sparked a fire on August 18 that grew to 170 acres, temporarily closing part of the Pacific Crest Trail.

2022: Bolt Creek Fire

On September 9, a human-caused fire started 1.5 miles north of Skykomish, causing evacuations and road closures. It burned 14,766 acres and worsened regional air quality.

2022: Loch Katrine Fire

F

On October 16, a wildfire burned 2,000 acres during a Red Flag Warning 35 miles east of Seattle.

2025: King County publishes first CWPP

This CWPP is made possible by funding from the FEMA Hazard Mitigation Assistance Program and the hard work and input of many dedicated partners.

³² DNR, "Washington's Forests, Timber Supply, and Forest-Related Industries Overview," 2025, https://dnr.wa.gov/sites/default/files/2025-03/em_fwfeconomiclow1.pdf.

³³ King County, "Demographics," 2020, https://kingcounty.gov/en/dept/executive/governanceleadership/performance-strategy-budget/regionalplanning/demographics.

King County Wildfires, 2000-present

King County has experienced 6 wildfires over 100 acres recorded by DNR since the 1970s, all of which have occurred since the turn of the century: the Quarry Fire (2017), Sawmill Creek Fire (2017), Fish Fire (2020), Murphy Lake Fire (2022), Bolt Creek Fire (2022), and Loch Katrine Fire (2022). ³⁴ The largest of these was the Bolt Creek Fire.

Wildfire Snapshot: 2022 Bolt Creek Fire

The Bolt Creek Fire started on September 9, 2022, 1.5 miles north of the town of Skykomish. It was human-caused and sparked during hazardous fire conditions. It ballooned within hours, threatening approximately 500 homes and prompting evacuation alerts for the towns of Index, Baring, Grotto, and Skykomish. The fire led to multiple extended closures of US Highway 2, and power to homes in the area was shut off for anywhere from 7 to 20 days.

Over the following 52 days, the fire burned 14,766 acres in the steep valleys of Tulalip Tribes forestland, privately-owned industrial timber, and the Mt. Baker-Snoqualmie National Forest in King and Snohomish Counties. It blanketed the region in smoke that caused the worst air quality in the world for several days and served as a wake-up call to the hazards of wildfire for many across the region.³⁵ Once contained, the fire was left to burn until it extinguished naturally by the end of October.







Photos from the 2022 Bolt Creek Fire. (Source: Inciweb)

³⁴ Washington DNR, Washington Large Fires 1973-2023," https://geo.wa.gov/datasets/wadnr::washington-large-fires-1973-2023/about.

³⁵ Melissa Santos, "Why Firefighters Aren't Quickly Extinguishing the Bolt Creek Fire," 2022, https://www.axios.com/local/seattle/2022/10/20/bolt-creek-fire-update-smoke.

Increasing Wildfire Concerns

Lengthening Wildfire Season

Washington's typical wildfire season spans from May to October; in King County, our highest risk is usually in August and September, though it is important to note that wildfires can occur anytime conditions are right for fuels to burn. ³⁶ However, the generally recognized summertime wildfire season has been lengthening in the US over the last several decades and is projected to increase. King County's historical baseline average of days with high fire potential (when fuel moisture levels are below 20th percentile) from 1971-2000 is approximately 50. Climate impact models project the number of days of high fire danger may increase to 56 by 2039 and up to 60 days each year by 2069. ³⁷

It is generally expected that hotter and drier summers, decreasing winter snowpack, and a lengthening fire season will increase the frequency of fires occurring in King County. Researchers estimate that average area burned in the Western Cascades may triple by the 2040s (relative to 1980 to 2006). ³⁸ It is more difficult to model the impacts that a changing climate will have on wind patterns, so while the risk of high-severity, wind-driven wildfires is unclear, the fact remains that the longer our vegetative fuels are dry enough to burn, the greater the odds are that they will encounter an ignition source that could lead to wildfire.

Population Growth

King County is the most populous county in Washington and has experienced significant regional growth in the past several decades. This is salient for wildfire for multiple reasons. First, humans cause the overwhelming majority of wildfires in Washington; as the number of people in our area increases, so does the likelihood of inadvertent wildfire ignitions. Additionally, the more people that move into areas that are naturally vulnerable to wildfire, the more complicated a wildfire response to that area will be. Wildfires are natural hazards that have occurred in our ecosystems for millennia and our forests have evolved and adapted accordingly. Unless we also figure out how to adapt our communities to live with the potential for wildfire, the problem of wildfires devastating communities will continue.

Development and population growth are not inherently bad; however, developing into areas that could experience a wildfire without accounting for or mitigating wildfire risk is ultimately unsustainable. The comparatively lower frequency of wildfire in King County does not mean that we are any less vulnerable to destruction in the right conditions. The good news is, there are so many things communities can do to mitigate their wildfire risk and prepare for wildfire now. Section 6 of this CWPP will cover many recommendations for ways King County can work to become a fire adapted community.

³⁶ Western Fire Chiefs Association, "Washington Fire Season: In-Depth Guide," March 1, 2023, https://wfca.com/wildfire-articles/washington-fire-season-in-depth-guide/

³⁷ University of Washington (UW), "Washington County Climate Projections," 2020, https://data.cig.uw.edu/climatemapping/.

³⁸ Jeremy S. Littell, *et al*, "Forest ecosystems, disturbance, and climatic change in Washington State, USA." Climatic Change 102 (2010), 129-158.

Part 3: The Wildland Urban Interface and Beyond

What is the Wildland Urban Interface (WUI)?

The Wildland Urban Interface, or WUI (pronounced "woo-ee"), is the general term for the areas where human development meets and intermixes with wildland vegetation. For this CWPP, the technical WUI definition will be "the presence of structures or infrastructure in locations where the potential exists for ignition or severe negative impacts from the flames, radiant heat, or embers of a wildland fire." The WUI includes a spectrum of communities, ranging from secluded rural properties in the woods to large urban neighborhoods adjacent to open spaces. The WUI is not a monolithic or static area; it grows as development expands into areas that can burn, and it contains a varied range of urban and forest densities across King County.

The WUI is of particular importance to wildfire protection planning, as the proximity to wildlands means these areas are more likely to be exposed to wildfire than their more urban counterparts. As human development continues to expand the WUI, it is essential that those communities plan for the potential of wildfire and mitigate its risks.

The WUI areas in King County defined by DNR cover approximately 417 square miles (266,908 acres) of King County and span portions of 12 communities and 7 community service areas, listed below:

Jurisdictions

- Auburn
- Bellevue
- Black Diamond
- Carnation
- Duvall
- Enumclaw
- Issaguah
- Kirkland
- Corneties
- Renton
- INGIILOII
- Sammamish

Maple Valley

Newcastle

North Bend

- Skykomish
- Snoqualmie

Woodinville

Community Service Areas

- Bear Creek/Sammamish
- Four Creeks/Tiger Mountain
- Greater Maple Valley/Cedar River
- SE King County
- Snoqualmie Valley/NE King County
- Vashon/Maury Island

Mapping the WUI

TO BE CLEAR: A MAP OF THE WUI IS NOT A WILDFIRE RISK MAP.

A map of the WUI is simply a way to delineate the general areas where human structures and infrastructure are built in areas where a wildfire could occur. Wildfire risk depends on more factors than just proximity to vegetation; a more in-depth explanation of wildfire risk is provided in Part 5.

Statewide WUI Mapping

The International Wildland Urban Interface Code is a set of building standards that apply best practices to mitigate the risk of structures burning in a wildfire. These codes were adopted by the Washington State Legislature, and DNR was tasked with creating a statewide map of the WUI to identify where the codes would apply.³⁹ These efforts resulted in a WUI map first published by DNR in 2019. DNR is currently in the process of creating an updated WUI map which is expected in Fall

³⁹ Washington State Association of Fire Marshals. "Wildland Urban Interface Code," 2025, http://wsafm.com/WUI.

2026. When community members reference "The WUI," they are often thinking of the DNR WUI map. However, because the DNR WUI map was developed primarily for the implementation and enforcement of building codes and may not account for other local concerns, resources, or values, DNR encourages any community developing a CWPP to define the WUI themselves.

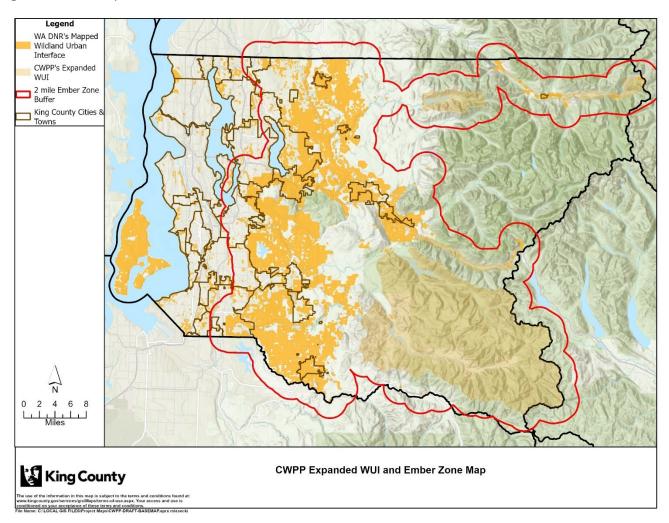
Learn more >>

Explore the Washington DNR StoryMap on the Wildland Urban Interface.

King County CWPP Expanded WUI + Ember Zone

The CWPP Core Planning Team determined the need to expand the WUI map beyond DNR's existing map with a separate WUI planning and prevention map, which will be referred to hereafter as the **CWPP Expanded WUI + Ember Zone**. It includes all the 2019 DNR mapped WUI areas in King County adjacent to the wildlands, critical infrastructure not captured DNR's map, and adds all areas within a 2-mile radius of the DNR WUI and critical infrastructure.

Figure 3: CWPP Expanded WUI + Ember Zone



Why create the CWPP Expanded WUI + Ember Zone?

First, the CWPP Expanded WUI + Ember Zone opens an additional 388 square miles (248,767.5 acres) of the county to potential eligibility for grant funding for strategic fuel management and other projects both further into the wildlands and into our urban areas (referenced in Section 6 of the plan). Second, the wildland areas in King County that are not included in the current iteration of the DNR WUI map contain critical infrastructure which would significantly impact King County if burned by a wildfire. This includes essential transportation routes (public roads, state highways, interstates, and railroads), utility resources (energy transmission and communications lines, towers, and substations), and the sources of drinking water for millions of people across the Puget Sound region.

Third, the 2-mile expansion of the WUI areas was added to account for the significant concern of wildfires that turn into **urban conflagrations** due to spreading embers. When embers from a nearby wildfire ignite structures and start a chain of house-to-house ignitions, it creates overwhelmingly destructive and dangerous urban fire scenarios that traditional structure fire-fighting capacity is not equipped to fight. Recent fires in Los Angeles County, CA (2025), Lahaina, HI (2022), and Superior, CO (2020), serve as stark reminders of the devastation such fires can cause (for more on wildfiresparked urban fires, turn to page 45).

It's important to reiterate – a map of the WUI is **NOT** a wildfire risk map. The CWPP Extended WUI + Ember Zone should not be construed to mean that homes within its bounds are necessarily at risk of experiencing a wildfire. However, the 2-mile expansion is intended to highlight the concern that embers could spread beyond the delineation of the DNR WUI if a wildfire occurred nearby. This distance was selected because embers can typically travel and start spot fires ~1-3 miles away from a wildfire, depending on the conditions. In the most extreme situations, some have been documented as igniting spot fires 5+ miles away, lofted high into the air by convective plumes generated within the fires themselves. ⁴⁰ Though these instances are exceedingly rare, it is essential our community is informed that the chance of embers spreading fires into areas well beyond what we think is "wildfire prone" is not impossible in our Westside wildfire regime.

Population and Demographics

Underlying data for the demographic, housing, and language statistics comes from the <u>American Community Survey (ACS)</u> 2023 5-year estimates. Interpolation and apportionment of this data into the WUI coverage area was done with <u>Esri's GeoEnrichment</u> apportionment method by King County Geographic Information Systems (GIS) experts.

Nearly 345,000 community members currently live within the CWPP Expanded WUI + Ember Zone and represent a diverse range of King County's residents. Of particular importance for wildfire protection planning, 14% of people in this region are aged 65 or older, 5% live at or below the poverty level, and 19% of households include at least one person with a disability. Additionally, 3% of people in the CWPP Expanded WUI + Ember Zone reportedly speak English less than well. These community members may face additional barriers with pre-disaster mitigation and preparedness actions as well

⁴⁰ N.P. Lareau, "Plume Dynamics Drive Extreme Long-Range Spotting during California's Dixie Fire." *Journal of Geophysical Research Atmospheres* 130 (2025), 9, https://doi.org/10.1029/2024jd043167.

as challenges during a wildfire evacuation, so concerted outreach efforts should be made to reach and work with these populations.

Table 1: Population data from the CWPP Expanded WUI + Ember Zone

Variable	Count (and percent if relevant)
Total Population	344,835
Population 65 and older	48,590 (14%)
Population with income at or below the poverty level	17,761(5%)

Table 2: Language characteristics of the CWPP Expanded WUI + Ember Zone

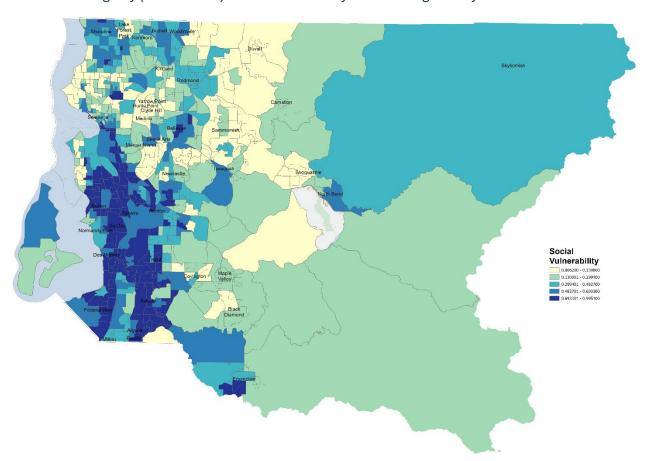
Calculations based off population of 324,478, in accordance with available data used to ascertain language spoken at home within the CWPP Expanded WUI + Ember Zone.

Variable	Count (and percent if relevant)
Speak English only	243,219 (75%)
Speak Spanish	15,352 (5%)
Speak Spanish and have limited English proficiency	2,171
Speak other Indo-European language	23,371 (7%)
Speak other Indo-European language and have limited	1 720
English proficiency	1,728
Speak Asian or Pacific Islander language	37,186 (11%)
Speak Asian or Pacific Islander language and have limited	4,451
English proficiency	4,451
Speak other language	5,349 (2%)
Speak other language and have limited English proficiency	330
Total with limited English proficiency	8,680 (3%)

Table 3: Count of critical facilities within the CWPP Expanded WUI + Ember Zone

Facility Type	Number of Facilities in CWPP Expanded WUI + Ember Zone
Assisted Living Facilities	13
Fire Stations	43
Hospitals or Medical Centers	23
Schools	98
Police Stations	12

Figure 4: Map of the Centers for Disease Control and Prevention and Agency for Toxic Substances and Disease Registry (CDC/ATSDR) Social Vulnerability Index in King County



The CDC/ATSDR Social Vulnerability Index (SVI) is an assessment that looks at socioeconomic status, household characteristics, racial and ethnic minority status, and housing type and transportation access by Census tract to define social vulnerability. This is one helpful tool for identifying areas of the county in which more tailored outreach efforts to reach populations that may need support before, during, or after disasters. However, it is important to note that community members across the region may face barriers to wildfire preparedness and evacuation that may or may not align with Census tract data or these factors. It is essential that wildfire outreach involves and accounts for people facing poverty, language barriers, and mobility or transportation barriers, and that work is conducted in partnership with local communities, trusted partner organizations, and people with lived experience whenever possible to most effectively reach these populations.

Table 4: Count of critical facilities within the CWPP Expanded WUI + Ember Zone

Variable	Count (and percent if relevant)
Total households	125,814
Households with 1+ person with a disability	23,515 (19%)
Owner-occupied households	26,988 (21%)
Renter-occupied households	98,826 (79%)
Total occupied housing units	132,150

Single-family housing units	98,400 (74%)
Multi-family housing units	28,621 (22%)
Manufactured/Mobile/RV/Van/etc. housing units	5,129 (4%)

Some of the most important wildfire preparation and mitigation actions (home hardening and building defensible space – described in Part 6 of the CWPP) must be implemented at the individual household level. There are a significant number of renter-occupied households in the area, and renters may be more limited in the types of home hardening or defensible space building projects they can implement on their own. The responsibility for preparing a home lies with the property owner, but renters can play an important role advocating for wildfire-safe best practices. There is a mutual benefit from implementing wildfire mitigation practices, because it helps protect the occupant, property, and neighborhood from wildfire. Structure hardening and building defensible space is equally important around critical facilities, such as the ones listed in Table X. These are a high priority for protection during a wildfire given their critical roles in the wider communities.

The WUI in King County is ever-changing. By 2040, King County's population is projected to grow upwards of 31%, which would include an expansion into the WUI.⁴¹ 23% percent of King County's urban growth areas (116.5 square miles) are designated as WUI according to DNR, so the need for wildfire preparedness will increase along with the region's population numbers.



⁴¹ Puget Sound Regional Council, "Projections for Cities and Other Places," 2025, https://www.psrc.org/ourwork/projections-cities-and-other-places

Natural Features

Geography, Climate, and Weather

The WUI regions in King County include Vashon Island in the Puget Sound, portions of the urban corridors along the foothills, and the river valleys and forests that rise steeply to the peaks of the Cascade Mountains. Though weather conditions vary widely across WUI areas in King County based on the geographic region and altitude, the overall climate of King County is classified as a mild Pacific maritime climate. The winds in our region typically come west to east offshore from the Puget Sound, bringing moist ocean air up the slopes of the Cascades. However, winds occasionally shift to come from the east, which can markedly increase our fire danger. East wind events bring hot, dry air from the east side of the state that dries our fuels and can push any fires from the wildlands westward towards where the majority of King County's population lives. Most of our annual precipitation falls from October-March, and the precipitation the region receives supplies 6 watersheds (shown in Figure X.X) that provide water to millions of people along the Puget Sound below.

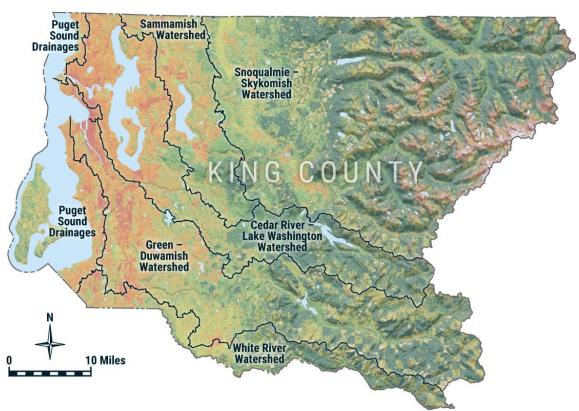
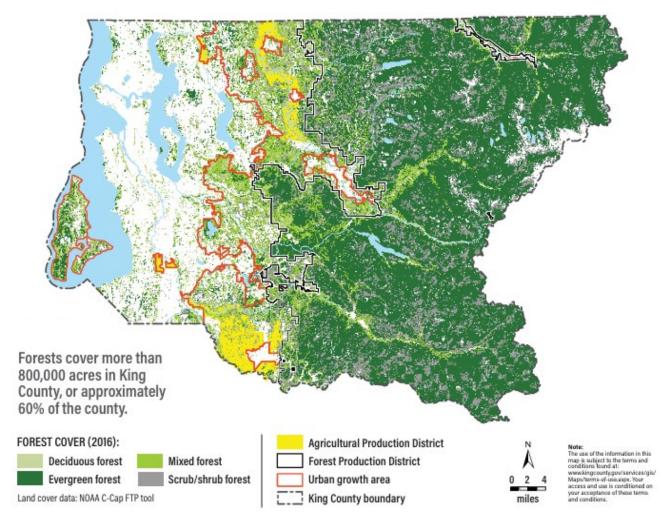


Figure 5: Watersheds in King County

Trees and Vegetation

60% of King County (more than 800,000 acres) is covered in trees. Although nearly 75% of King County forests are comprised of evergreen trees, an additional 20% of the county is covered by mixed forests of both evergreen and deciduous trees, primarily in the urban areas.

Figure 6: Forest Cover in King County



The majority of King County's forests are publicly owned, with federal lands accounting for 34%, state forests covering 13%, 14% owned by city governments, and 3% owned by the County. The remaining forests are owned by large industrial forestry companies and non-industrial private owners; more than 150,000 acres are owned by 14 landowners, King County has nearly 21,000 small forest landowners with less than 5 acres each.

Learn more >>

Read the King County 30-year Forest Plan.

Invasive Species

Several of the invasive species in the area increase King County's susceptibility to wildfire. All plants burn, but not all plants spread fire or burn in the same way. Some, such as the rapidly proliferating Scotch Broom (*Cytisus scoparius*), are a particular concern because the plants themselves are highly flammable due to their resinous chemical composition. This both increases the likelihood of a wildfire occurring and the intensity of the burn. Others pose a wildfire risk because they serve as **ladder fuels**, or materials that can connect a fire on the ground with materials up in the trees and

increase wildfire intensity. Examples of ladder fuels include pervasive invasive common holly (*Ilex aquafolium*) and blackberry (*Rubus armeniacus, Rubus lacinatus*). Still others, such as Common lvy (*Hedera helix*), outcompete materials on which they climb, reducing overall healthiness and weakening a forest's natural resilience to fire.



(L to R) Scotch Broom, common holly, and common ivy. (Photos: King County Noxious Weed Control Program)

Controlling invasive species in our forests, open spaces, and landscaping does not guarantee wildfires will not occur, but healthy forests are notably more resilient and better able to withstand and rebound from the impacts of fire. This is essential both before a wildfire to prevent ignitions of highly flammable plants, and a concerted effort is also needed following a fire to prevent rapid regrowth of weeds as the forest recovers. ⁴² Successful removal of invasive species for native forest restoration has significant ecological benefits well beyond wildfire risk reduction. Invasive species management is a cross-cutting concern in Washington and is addressed in multiple areas.

Learn more >>

Read more about the King County Noxious Weeds Program.

⁴² King County Noxious Weeds Program, "Weeds and Wildfire," September 6, 2023, https://kingcountyweeds.com/2023/09/06/weeds-and-wildfire/.

Part 4: Wildfire Response and Recovery

Firefighting in King County

Across the United States, firefighters keep approximately 98% of all wildfires that start under 100 acres. ⁴³ Local fire departments, along with state and federal firefighters, work tirelessly throughout the year to train, prepare, and fight wildfires. There are hundreds of brush fires and small ignitions that occur in King County every year which are quickly extinguished by local first responders.

Firefighting Capacity in King County

There are multiple firefighting entities that would respond to a wildfire in King County depending on the area impacted. The US Forest Service (USFS) has historically been responsible for firefighting on federally owned land, including the Mt. Baker-Snoqualmie National Forest, which encompasses 33% of King County's forests. The USFS stations deployable teams and resources in various areas across Western Washington; within King County, there are 3 wildland firefighting engines staged at the Snoqualmie Ranger Station in North Bend. During the height of the fire season, depending on federal funding, the engines are typically staffed 7 days a week and staff patrol the forest when not on a fire response.

DNR is Washington's largest on-call fire department and is responsible for wildfire fighting on more than 13 million acres of state and privately-owned land. Within King County, a little over 107,000 acres of forestland is state owned. DNR stages wildfire management resources across Washington to support quick responses, including a 10-person wildfire suppression unit at Station 76 in the Tiger Mountain area and a wildland firefighting truck and crew in the Wilderness Rim area of North Bend.

Seattle Public Utilities (SPU), which owns and maintains land in the Cedar River and South Fork Tolt Watersheds, maintains its own wildland fire crew to protect these critical resources. They provide support to DNR, routinely participate in regional and statewide wildfire responses, and aim to contain all fires within the watersheds to less than 10 acres. 44

⁴⁴ Seattle Public Utilities (SPU), "Wildland Fire Crew," 2021, https://www.seattle.gov/utilities/protecting-our-environment/our-water-sources/wildland-fire-crew



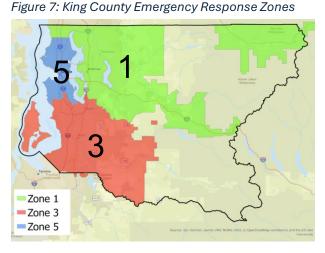
⁴³ Malcom North *et al*, "Reform Forest Fire Management." *Science* 349, no. 6254 (September 17, 2015): 1280-81. https://doi.org/10.1126/science.aab2356.

Local fire departments throughout King County (including municipal fire departments, county fire districts, and local fire authorities) prepare and train for a variety of emergency responses. This includes the quick suppression of potential wildfire ignitions which could occur at any park, vacant lot, or roadway shoulder across the county. For example, at the South King County Fire Training Consortium, all new recruits receive wildland and wildland urban interface firefighting training. In addition, all firefighters receive annual wildland refresher training, and many attend hands-on wildland urban interface training each spring. Fire departments across King County encourage firefighters to pursue additional training to be ready to respond to a wildfire, including deploying to fires across the western United States to build local experience and capacity. An example of this was in January 2025, when multiple King County fire departments sent resources to assist in the LA fires.



King County Wildfire Fighting Coordination

First responders coordinate together each wildfire season to ensure that local firefighters are ready to respond quickly and effectively when a wildfire occurs. The King County Fire Resource Coordinator oversees these efforts. In King County, firefighting is divided up into three zones: Zone 1 (North King County), Zone 3 (South King County, including Vashon Island), and Zone 5 (Seattle). Each of the Zones have a Wildland Firefighting Coordinator and backup coordinator; the county coordinator works closely with the Zones and hosts a weekly meeting with partners during wildfire season. The King County Coordinator communicates regularly with the



Part 4: Wildfire Response and Recovery | p. 43

other county coordinators in the South Puget Sound Region for wildfire fighting, which is made up of King, Pierce, Kitsap, and Mason Counties.

The firefighting process always begins at the local level with a call to 911. which quickly dispatches responders to the reported fire. Typically, this is where things end, as local fire departments can usually manage ignitions without additional assistance. If more support is needed, however, there is a structure already in place to scale the response. Local fire departments all participate in a general system called mutual aid. This is a set of agreements to provide assistance to each other upon request when local capacity is exceeded. If local fire

Figure 8: WA DNR Regions



department requests mutual aid support for wildfire fighting, it will first come from the zone in which the fire is located. If the fire exceeds the capacity of the zone's mutual aid, then the request for assistance goes to the other zones in King County.

If the wildfire is growing fast and either more equipment or staff are needed, the request for support is escalated to the DNR Region, which locally is the South Puget Sound Region. Local fire departments in this region can mobilize and respond under the mutual aid agreements. The region includes Pierce, Kitsap, Mason, and nearly all of King County (except for the US 2 Corridor, which is supported by the Northwest Region).

In the case of a large fast-moving fire, the local fire chief (or their designee) can request a state mobilization of resources that would come from outside the region and statewide to assist with wildfire suppression efforts. If a fire overwhelms the ability of available regional resources, the request can be escalated for even broader support as the incident demands. It takes time to mobilize a large-scale response, which could range from hours to days. While support will be provided as quickly as possible, requests for assistance take time and are likely being coordinated across multiple responses in the Pacific and Inland Northwest.

Mutual aid is a foundational component of wildfire fighting. It benefits local fire departments that send firefighters on deployment because they gain valuable experience without a fire occurring locally. It also provides a structured, predictable framework for receiving assistance when and where it is needed most.

Wildfires vs. Urban Conflagrations

Just as a house built in a rural setting surrounded by trees is at risk of igniting from a forest fire, so are the houses and housing developments built in areas where the forests and developments meet and intermix. While many of the most recent destructive fires in the United States initially started as wildfires, including the 2025 Los Angeles and 2023 Maui Fires, they became something different when they spread into neighborhoods: **urban conflagrations**. It is important to understand that

conflagrations urban distinctive fire type and pose a unique challenge for firefighters, because neither standard structure firefighting nor wildland firefighting techniques are fully equipped to respond when there is rapidly spreading house-to-house ignition during hazardous fire weather within Nor are wildfire communities. prevention techniques enough alone to prevent these fires from occurring; they need neighborhood-level preparedness and prevention as well.



A view of the Altadena neighborhood in the aftermath of the 2025 Eaton Fire. (Photo: Mario Tama/Getty Images)

The techniques of wildland

firefighting are often challenging to implement in neighborhoods where homes are built closely together. Housefire fighting typically requires extensive use of water for suppression, and urban water systems do not have the capacity to extinguish numerous housefires across a broad area simultaneously. Urban conflagrations can overwhelm fire departments because fighting dozens of simultaneous housefires requires a significant number of personnel and equipment; while there are systems in place to scale a response, the speed with which resources are needed may quickly exceed local capacity. Meanwhile, many homes are built with and surrounded by flammable materials, which make them even more challenging to safely defend. A home on fire generates a significant amount of radiant heat, which means that the more houses that ignite, the greater chance additional homes will catch fire and continue the chain of ignitions across the community. The brush, trees, and vegetation in landscaping also contribute to fire spread among the structures as well as the minimal distance between houses we are seeing in so many developments.

Urban conflagrations became a significant issue when urban densities started to increase during the Industrial Revolution. In the US, infamous fires like the Great Fires of Chicago (1871), Seattle (1889), and San Francisco (1906) prompted significant changes that reduced their frequency, from the professionalization of local firefighting to instituting the first fire safety building codes. ⁴⁵ In the 21st Century, urban fires have unfortunately been making a comeback. Of the 200 most damaging fires

⁴⁵ Anna Rose Alexander, "The Problem of Fire in the American City, 1750–Present," Oxford Research Encyclopedia, September 28, 2020, https://doi.org/10.1093/acrefore/9780199329175.013.875.

globally since 1980, nearly half have occurred since 2015. 46 Since 2020, approximately 26,000 structures have been destroyed in 10 wildfire-induced conflagration events. 47

This is due to multiple reasons, including the warming climate and extreme climactic conditions paired with the ongoing expansion of communities in wildfire prone areas. ⁴⁸ Perhaps most importantly, these fires easily cause destruction where homes and communities are not designed or built to withstand wildfire. This means that wildfires that turn into urban fires will continue to occur unless communities effectively adapt to the risks of wildfire. Wildfire-sparked urban conflagrations are not just a wildfire problem that should be relegated to firefighters and foresters to "solve." They are a community issue that must be addressed comprehensively with community changes. (For more on this, see Part 6: Becoming a Fire-Adapted Community).

Recovery

Recovering from a wildfire includes both short-term and long-term efforts for rebuilding and revitalizing an affected communities following a wildfire. Short-term recovery focuses on things like crisis counseling, disaster case management, restoration of lifelines such as water and electric supply, and critical facilities. Long-term recovery includes more permanent changes, such as rebuilding, watershed restoration, and infrastructure improvements to handle higher volume of runoff. There are significant hazards that result from wildfire that impact structures and infrastructure well beyond just what is burned, including impacts to public health, the environment, and the community overall. Wildfire recovery is a long and arduous process that can take years for an affected region. The figure below from the National Disaster Recovery Framework demonstrates that there are different phases of recovery following a disaster and underscores that it can take significantly longer than many may realize.

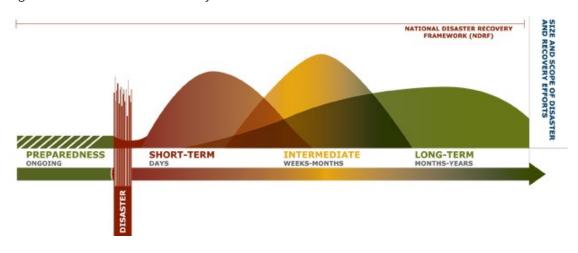


Figure 9: General Disaster Recovery Timeline

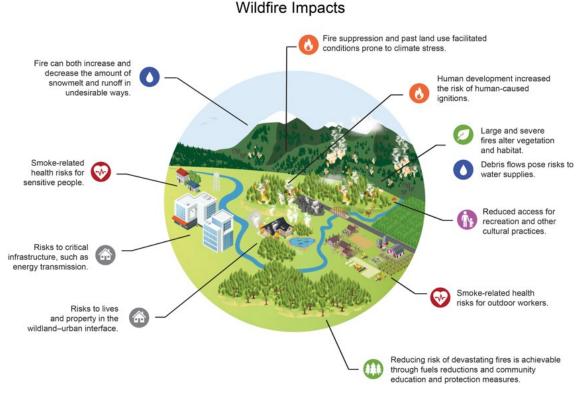
⁴⁶ Calum Cunningham et al, "Climate-Linked Escalation of Societally Disastrous Wildfires." *Science* 390, no. 6768 (October 2, 2025): 53-58. https://doi.org/10.1126/science.adr5127.

⁴⁷ Maria Valdez Haubrich, "Beyond Wildfire Risk: What the Palisades and Eaton Fires Reveal about Conflagration Exposure," October 21, 2025. https://programbusiness.com/news/beyond-wildfire-risk-what-the-palisades-and-eaton-fires-reveal-about-conflagration-exposure/.

⁴⁸ Sara Frueh, "The Growing Challenge of Urban Wildfires," National Academies, 2025, https://www.nationalacademies.org/news/2025/03/the-growing-challenge-of-urban-wildfires.

According to the Federal Emergency Management Agency (FEMA), the best time to prepare for recovery is long before a disaster. Due to the number of destructive wildfires recently, there are unfortunately many communities King County can learn from as they go through their own recovery process. Los Angeles is the most recent area in a long line that has endured a worst-case fire scenario; though King County is different in many ways from LA, we could experience comparable levels of devastation in some of our worst-case fire scenarios, too. We must first understand the impacts of a wildfire on the recovery process to identify ways to prepare.

Figure 10: Overview of Wildfire Impacts



(Graphic: FEMA)

Public Health

In addition to acute exposure to wildfire smoke (described on pp. 23-24), wildfires – especially those occurring in the wildland-urban interface – can have serious impacts on regional public health that are important to address during recovery.

Hazardous Materials Exposure

The ash, structural, industrial, automotive and household debris, along with other materials that remain after a wildfire often contain hazardous toxins, .⁴⁹ Homes, vehicles, and infrastructure often contain hazardous materials that are incredibly unhealthy when burned, including fuels, batteries, cleaning products, heavy metals, and building materials – such as insulation, synthetic polymers,

⁴⁹ Amara Holder, et al, "Hazardous air pollutant emissions estimates from wildfires in the wildland urban interface," *PNAS Nexus* 2, no. 6 (May 31, 2023). https://doi.org/10.1093/pnasnexus/pgad186.

and asphalt roofing.⁵⁰ Not only do these contribute to the hazards of wildfire smoke when burned and released into the air, hazardous substances, such as asbestos, can often be found in the ash and debris and linger in the environment affecting soils and water quality long after a fire and must be carefully identified, handled, and removed. This has been a challenge most recently highlighted in the aftermath of the 2023 Maui Wildfires and the 2024 LA Fires, where communities continue to grapple with the hazards of cleaning up so residents can safely return to burned neighborhoods.

Mental Health

Research from across the world confirms that experiencing a destructive wildfire can take a significant toll on the mental health of survivors and their communities, including increased rates of Post-Traumatic Stress Disorder (PTSD), depression, and anxiety. ⁵¹ A recent study on the 2023 Maui Fires revealed that in the month immediately after the disaster, there was a 97% increase in Maui's suicide and overdose death rates compared to all other months, and a general increase was noted across the region for the same time period. ⁵² While the severity of post-fire mental health impacts can vary based on a number of individual and community-level factors, it is clear that experiencing a destructive wildfire can take significant toll on communities' wellbeing.

The public health impacts of a wildfire take ongoing work to remediate and do not have any quick fixes. Recommendations developed for post-fire recovery in Los Angeles relating to public health include:

- Standardizing soil testing and remediation
- Standardizing water quality sampling, particularly for private wells and small community water systems
- Ensuring worker health and safety during cleanup by developing, translating, and distributing clear guidance on personal protection and safety
- Providing health screening for organized groups of volunteer responders, since volunteer groups may not have the same access to vocational health services as professional first responders and contractors
- Expanding accessible mental health services by partnering with local philanthropic organizations, community-based organizations, places of worship, community clinics, and healthcare providers

Environment

Flooding and Watersheds

Post-fire landslides and debris flows are a significant concern for years following a wildfire. Expert teams assess the risks as soon as possible after a fire and implement stabilization and mitigation efforts. The teams responsible for assessing post-fire risk vary based on the land affected; for USFS land, a Burned Area Emergency Response (BAER) team completes the assessment. For DNR land,

⁵⁰ National Academies, "The Chemistry of Fires at the Wildland-Urban Interface." National Academies Press (US), September 15, 2022, https://www.ncbi.nlm.nih.gov/sites/books/NBK588642/.

⁵¹ Patricia To *et al*, "The Impact of Wildfires on Mental Health: A Scoping Review." *Behavioral Sciences* 11, no. 9 (September 21, 2021): 126. https://doi.org/10.3390/bs11090126.

⁵² Jonathan Purtle et al, "Increases in Suicides and Overdoses During the 2023 Wildfires in Maui, Hawaiʻi." JAMA 334, no. 11 (2025): 1019-1021.

they bring in a Wildfire-Associated Landslide Emergency Response Team (WALERT). These services are generally not available for wildfires that do not impact federally- or state-owned land respectively, though partners will support post-wildfire landslide mitigation in whatever capacity they are able, including through supporting counties to develop their own post-fire recovery readiness plans. Fortunately, King County has many local experts across various departments that are capable of conducting similar assessments. An area where King County can improve local ecological recovery capacity is by assembling our own local BAER-type team in the event of a wildfire impacting lands not owned by the State or Federal governments.

One of the significant concerns with a wildfire in King County is the potential impacts to drinking water supplies for millions of people in the Greater Puget Sound Region. Beyond concerns of fire burning infrastructure, post-fire sediment and runoff into the water sources is something that utility partners are working hard to mitigate. Seattle Public Utilities, which manages approximately 99,000 acres of land in the South Fork Tolt Municipal and Cedar River Watersheds, has dedicated wildfire risk reduction staff members and a wildland firefighting crew that work diligently to protect watersheds from direct and cascading impacts of wildfire. ^{53,54}

Forests and Replanting

King County is prone to experience stand-replacing fires, which are fires that burn at a high enough

intensity to destroy entire stands of forest that then must regrow. While the desolation of a burn scar appears extreme in the first few years after a fire, especially when juxtaposed with our lush, green vegetation, vegetation regrowth happens relatively quickly in Western Washington thanks to the high productivity of our forests. Wildfire burn scars west of the Cascades often exceed regrowth expectations within 3-5 years of the fire depending on the level of burn severity. 55 Concerns about post-fire debris flow diminish as vegetation returns as well. While those who cherish outdoor spaces may worry about the impacts to natural lands, our forests have evolved with fire and have historically always recovered eventually.

There are concerns, however, that our forests' historic ability to adapt to disruption will not keep pace with the changing climate, so the regrowth period may be an opportunity for strategic intervention to boost current and



A sapling regrows in the Bolt Creek Fire burn scar. (Photo: OEM)

⁵³ Seattle Public Utilities (SPU), "South Fork Tolt Watershed Management Plan," 2011, https://www.seattle.gov/documents/Departments/SPU/EnvironmentConservation/SouthForkToltMunicipalWatershedManagementPlan.pdf

⁵⁴ Seattle Public Utilities (SPU), "Cedar River Watershed Management Plan," 2023,

https://www.seattle.gov/documents/Departments/SPU/EnvironmentConservation/WaterSources/CedarRiverMunicipalW ⁵⁵ University of Washington School of Environmental and Forest Sciences, "Post-Fire Recovery Is Faster than Expected in the Forests of the Western Cascades," January 29, 2024. https://sefs.uw.edu/2024/01/post-fire-recovery-is-faster-than-expected-in-the-forests-of-the-western-cascades-sefs-led-study-finds/.

future ecological health and recovery. **Assisted migration** is a climate adaptation strategy where land managers assist the movement of species in response to climate change. ⁵⁶ With careful implementation, assisted migration in the wildfire recovery phase can hasten the natural genetic migration of vegetation species to withstand increasing climactic pressures in the future.

For a wildfire that burns through communities, recovery is an optimal time to rethink landscaping in a way that reduces wildfire risk. There is no such thing as fireproof vegetation, but planting with consideration to defensible space best practices and choosing fire resistant plants over highly flammable species are both important mitigation actions that can make a community more resilient to the impacts of fire in the future.

Read the Oregon State University Extension's publication on <u>fire-resistant plants</u> for home landscapes

Community

There are many intrinsic costs of wildfire; loss of priceless possessions, significant cultural or community spaces, and especially loss of life are costs that cannot be quantified. Whether King County experiences a wildfire in a rural community or a conflagration in an urban-suburban neighborhood, any wildfire that destroys things our community members value will have a significant impact. Though our annual risk is low, there is a potential for a wildfire to occur in King County that could cause catastrophic damage. Disasters can be a time that rallies communities together, but they also can indelibly change communities. Post-wildfire recovery needs to be carefully managed with the affected community centered throughout the process.

King County OEM is developing an all-hazards Disaster Recovery Plan intended to guide our county through the disaster recovery process. Through the King County Strategic Climate Action Planning process, partners identified the need to develop wildfire-specific recovery actions that may be helpful to implement now. This is included later on in the CWPP (Part 6).

Costs of Recovery

Destructive wildfires have significant costs, from those shouldered by affected individuals to the economic repercussions for the wider region. Wildfire suppression alone is incredibly expensive; for example, the Bolt Creek Fire cost more than \$8.7 million dollars to suppress, and this was just one of many large fires that year. Over the course of the 2022 wildfire season, DNR expended \$145.3 million on firefighting across Washington. ⁵⁷ Even when wildfires burn in forested areas away from human structures, they can exact major losses from local industries like timber, agriculture, and tourism that can take years to rebound. When fires burn structures, there are significant costs to those affected and the communities around them, including direct losses of homes and property,

⁵⁶ Handler, Stephen, Carrie Pike, Brad St. Clair, Hannah Abbotts, and Maria Janowiak. n.d. "Assisted Migration (Forests) | USDA Climate Hubs." Www.climatehubs.usda.gov. https://www.climatehubs.usda.gov/hubs/northern-forests/topic/assisted-migration-forests.

⁵⁷Washington DNR, "Emergency Fire Suppression Report for Fiscal Year 2023," 2023, https://app.leg.wa.gov/ReportsToTheLegislature/

costs from workforce disruptions, lost revenue to local businesses, high local expenditures from response and recovery, disruption to structures and social support systems, increases in healthcare expenditures, and long-term impacts on housing markets and insurance. Economists at UCLA estimate that the 2025 LA Fires cost anywhere between \$76 billion and \$131 billion in property losses, a loss of \$297 million in wages for local businesses and employees from the areas burned, and a \$4.6 billion dollar decline in overall county GDP.⁵⁸

Housing

A major challenge of rebuilding after an urban conflagration is housing recovery. Emergency shelters will be activated for evacuees in the immediately aftermath of a fire, but sheltering is a temporary solution. Rebuilding communities and even building temporary housing takes significant time and resources; nationally, an average of 25% of homes are rebuilt within 5 years of a disaster, though this timeline can be accelerated with help from external sources, streamlined debris removal and permitting, and existence of prior plans. Following the devastating 2020 Marshall Fire, homes in Boulder, CO, were rebuilt twice as fast as the national post-disaster average. This can be attributed to multiple things, including federal debris removal assistance and significant local resources, but many of the most important policies that hastened recovery were instituted because Boulder learned from other disasters in the previous decade.⁵⁹

Building Back "Better"

While the decision to rebuild is personal and complex, studies after wildfires show consistent interest from local communities to return and rebuild despite the challenges. One of the challenges for a community is deciding if and how to build back better. The rebuilding process can be an opportunity to enhance resilience of local infrastructure, more thoughtfully design communities, implement mitigation projects identified in local hazard mitigation plans, and address other issues that could support long-term community resilience and climate adaption. This is something that can be addressed somewhat through evidence-based disaster resilience codes and permitting, but the community must be central to conversations that define what building back "better" means.

Another challenge is maintaining community cohesion and the pre-disaster character of an area. In the recovery phase of recent urban conflagrations like LA and Lahaina, local governments instituted moratoriums on outside developers buying up land in the disaster zone to protect local residents. Disaster recovery can be uneven and exacerbate inequality; people with a higher pre-disaster social vulnerability often face additional challenges in the recovery process, so it is essential to weave equity considerations and center the voices of the whole community throughout the process. Just as wildfire adaption should include the whole community, so should the disaster recovery process.

⁵⁸ Zhiyun Li, & Yu, William, "Economic Impact of the Los Angeles Wildfires," UCLA, March 3, 2025, https://www.anderson.ucla.edu/about/centers/ucla-anderson-forecast/economic-impact-los-angeles-wildfires

⁵⁹ Shay Castle, ""Marshall Fire Homes Being Rebuilt Twice as Fast as National Post-Disaster Average." *Boulder Beat,* April 30, 2023. https://boulderbeat.news/2023/04/29/marshall-fire-rebuild/

⁶⁰ Patricia Alexandre *et al*, "Rebuilding and New Housing Development after Wildfire." *International Journal of Wildland Fire* 24, no. 1 (2015): 138. https://doi.org/10.1071/wf13197.

Part 5: Wildfire Risk Assessment

Purpose of the Risk Assessment

One of the essential components of a CWPP is the risk assessment, which uses best available data to outline places with a potential for loss in the event of a wildfire. A risk map cannot say whether a fire will or will not occur in a certain area; its purpose is to enhance understanding of which geographical areas have a higher potential vulnerability to the hazard of wildfire and where the impacts of a wildfire occurring may be most acute. The risk map can then provide insight for prioritizing wildfire mitigation and preparedness work.

About the Dataset

After consulting with local researchers and subject matter experts at Washington DNR, the 2023 Pacific Northwest Quantitative Wildfire Risk Assessment Framework (PNW-QWRA) was selected as the dataset for conducting this CWPP risk assessment. The PNW-QWRA was developed specifically to help understand the wildfire risk facing the western Cascades and utilized best available wildfire modeling to produce hazard analytics for Oregon and Washington. The PNW-QWRA model accounted for fire behavior across local topography, vegetation, and development patterns, and the results were validated by wildland fire professionals from across the Pacific Northwest, including representatives from the USFS, Department of Interior, Oregon Department of Forestry, Washington DNR, Oregon State University, and more.



Highly Valued Resources and Assets at Risk

The PNW-QWRA quantifies the risk to highly valued resources and assets (HVRAs) across communities. When asked how community members would rank the importance of protecting things from the impacts of a wildfire, King County CWPP survey respondents indicated the following:

Table 5: CWPP Survey Question 5 Responses

How would you rank the importance of protecting the things listed below from the impacts of a wildfire in King County?		2	3	4	5 (high)
Human lives	1%	1%	2%	3%	93%
First responders and firefighters	0%	1%	2%	6%	91%
Drinking water/watersheds	1%	3%	10%	30%	57%
Critical infrastructure (power lines, transportation routes, cell/radio towers, etc.)	1%	2%	14%	33%	49%
Pets and livestock	3%	8%	20%	29%	40%
Wildlife/endangered species	3%	8%	21%	30%	38%
Natural environments (forests, grasslands, open spaces)	5%	7%	23%	29%	35%
Community assets (parks, schools, community spaces)	2%	9%	26%	30%	34%
Access to outdoor recreation activities	12%	17%	33%	22%	16%

As a result, the PNW-QWRA analysis included in this CWPP will focus on three categories of HVRAs: People and Property, Drinking Water, and Infrastructure. ⁶¹ These are defined as:

Table 6: PNW-QWRA HVRAs

2023 PNW-QWRA Descriptions of HVRAs					
People and	Residential and non-residential structures and associated property				
Property	infrastructure				
Drinking Water	Modeled post-wildfire sediment impacts to watersheds directly				
	contributing to drinking water				
Infrastructure	Critical energy, communication, and transportation infrastructure, including electric transmission lines and substations, railroads, roads, communication sites and cell towers. Also includes risks to essential community facilities including hospitals, EMS stations, fire stations, colleges and universities, local law enforcement, schools, childcare centers, solid waste facilities, nursing homes, public health departments, urgent care facilities, wastewater treatment sites, EPA emergency response facilities, public transit centers, and state government buildings				

The PNW-QWRA is the same dataset that DNR is using for its statewide wildfire hazard analysis, so this CWPP's risk maps should be generally aligned with future DNR mapping. ⁶² As the PNW-QWRA dataset and DNR maps are periodically updated, the CWPP risk assessment will be as well.

Learn more >>

Visit Washington DNR's Wildfire Hazard and Risk Mapping webpage

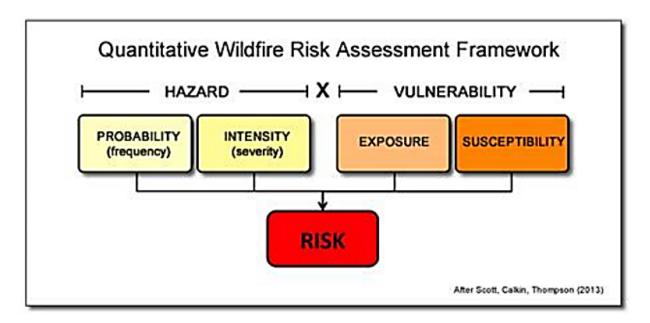
Components of Wildfire Risk

Wildfire risk is determined by a combination of four factors: the **probability** of a fire occurring, the **intensity** of a fire in a given location, the **exposure** of structures to areas where fire could occur, and the **susceptibility** of those structures to burning. It is important to understand the different components of risk because it reveals what we can and cannot control about wildfire.

⁶¹Andy McEvoy *et al*, "2023 PNW Quantitative Wildfire Risk Assessment Methods," 2023. https://oe.oregonexplorer.info/externalcontent/wildfire/PNW_QWRA_2023Methods.pdf

⁶² https://dnr.wa.gov/sites/default/files/2025-03/rp_fire_advisory_committee_qwra_111722.pdf

Figure 11: QWRA Components of Wildfire Risk



Probability

Probability is the likelihood of a wildfire occurring. In King County, we know that the probability of wildfires happening at any given time can vary. For example, it is much more likely for a wildfire to start during dry, windy conditions in the summertime than when it has been raining for weeks on end.

Individuals' behavior can also increase or decrease the likelihood of a wildfire occurring. For example, our wildfire risk generally increases on the Fourth of July because fireworks use increases the potential for ignitions. Wildfire safety measures like burn bans and fireworks restrictions are meant to protect our communities; the probability of a wildfire occurring, and therefore our wildfire risk, decreases if community members heed these restrictions.

Intensity

Intensity refers to the expected severity of a fire if it were to occur in any given location based on the fuels (like grasses, trees, and manmade structures) available there to burn. For example, if a wildfire started in a dry open space that is overgrown with flammable invasive species, it would burn much hotter and faster there than in a wetland. In the fire sector, this is commonly calculated by assessing the vegetation present in an area and estimating the flame length if a fire were to occur.

We can reduce wildfire intensity, which contributes to the lowering of overall risk, by modifying available fuels. This can be done through things like building ignition-resistant homes, using wildfire-informed land use planning practices, and by implementing strategic fuel management practices (like trimming trees and clearing brush) around things we want to protect.

Exposure

Exposure is the proximity of things we do not want to burn to areas where wildfire can occur. This means that any community located where a wildfire could happen would be exposed to that wildfire.

We create this aspect of risk when we build structures and infrastructure in areas where wildfire can happen. We can avoid increasing this aspect of risk through wildfire-informed land use planning, but for communities that already exist in the WUI, exposure is largely unchangeable.

Susceptibility

Susceptibility refers to the readiness of a home or a community to burn if they are exposed to a wildfire. For the county-level risk assessment map, the PNW-QWRA dataset assumes any structure exposed to a wildfire will experience damage based on the wildfire intensity rating for that area. This is because the dataset does not parse out the difference in conditions of individual structures. However, reducing susceptibility to burning is a one of the most important ways that people in the WUI and beyond can reduce their risk of destruction from a wildfire – and ultimately decrease the risk to their wider community.

Extensive research has shown that making certain changes to a structure, such as reducing flammable materials on and immediately surrounding the building, make a significant difference in a home's ability to survive a wildfire (for more information on this, go to page 76). The more homes in an area that reduce their susceptibility to wildfire, the better chance the whole neighborhood has of making it through the fire.

Learn more >>

Visit the USFS Wildfire Risk to Communities webpage "Understanding Risk"

The Challenge of Understanding Wildfire Risk for Western Washington

Many existing wildfire risk maps do not clearly convey the overall threat of wildfire to Western Washington (including maps by FEMA and the USFS) because these maps calculate overall risk according to the *annual probability* of wildfires occurring. It is a known and expected feature of Western Washington's predominantly low frequency, high severity fire regime that we do not experience major wildfires every year or even every decade. The lengthy time intervals between large, high severity wildfires in Western Washington (200+ years) makes assessing risk largely based on the annual probability of a wildfire occurring unsuitable for our region, as we know our annual wildfire probability is much lower compared to places with higher frequency fire patterns like Eastern Washington.

However, a low annual probability of wildfire does <u>not</u> mean that the overall risk and impact of a high-severity fire in King County is any less important to plan for and mitigate. Wildfire can occur in Western Washington with the potential to be devastating to our communities in the right conditions.

Learn more >>

Read <u>"Hazards of risk: Identifying plausible community wildfire disasters in low-frequency fire regimes"</u> by Andy McEvoy, Becky K. Kerns, John B. Kim

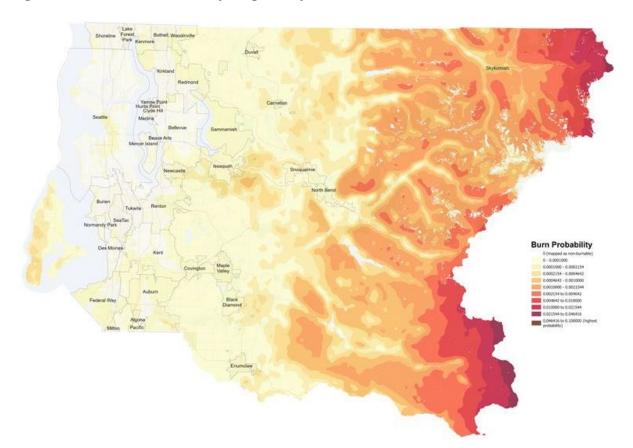


Figure 12: Annual Burn Probability, King County

The figure above demonstrates the annual burn probability in King County. As already explained, probability is only one aspect of wildfire risk. Wildfire probability, especially in the context of Western Washington, does not accurately convey our true risk of a low-frequency disaster. Researchers who study Western Washington's wildfire risk sometimes equate our risk of experiencing a high-severity wildfire to other hazards that our community is vulnerable to, such as earthquakes and tsunamis. ⁶³ Annual probability does not take away from the fact that highly destructive hazards can and will someday occur here.

One of the reasons the PNW-QWRA map was selected for the King County CWPP is because we can add or remove annual probability as a factor. This allows us to assess our overall wildfire impacts without the potential impacts of a lower annual probability. Some of the following risk maps demonstrate the expected fire impacts based on which HVRAs are present and the expected flame length assuming a fire were to occur in any given location.

⁶³ https://esajournals.onlinelibrary.wiley.com/doi/10.1002/ecs2.4070

Expected Wildfire Impacts Across King County

The map below demonstrates projected impacts to people and property, infrastructure, and drinking water if a wildfire was to occur in any given location in King County. This is calculated by considering the HVRAs relating to people, property, infrastructure, and drinking water present (definitions on pp. 53-54) and expected flame lengths for local topography and fuels, as well as annual wildfire probability. To see expected impacts without accounting for annual probability, see Appendix D.

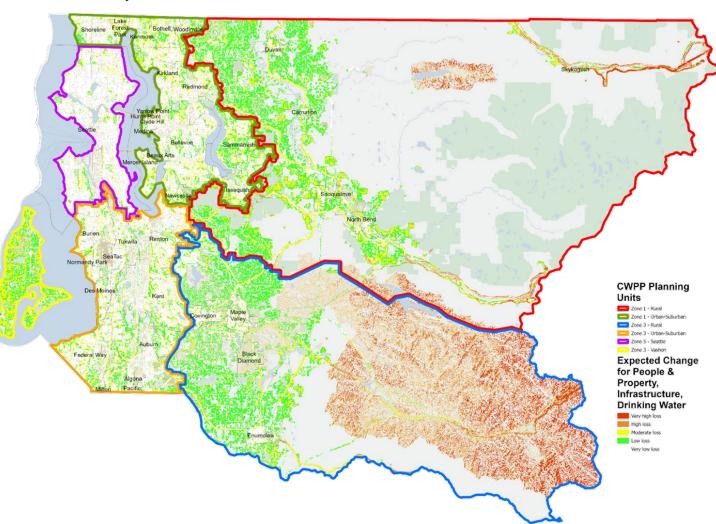


Figure 13: Expected Impacts to People, Property, Infrastructure, and Drinking Water if a wildfire were to occur at any location

People and property, infrastructure, and drinking water are all components of the WUI definition used in this CWPP and were the highest priorities to protect as identified by both the CWPP Core Team and CWPP survey responses from the community.

The map of King County is broken into smaller CWPP Planning Units to focus priorities and concerns by region. These areas were selected first by looking at King County's Regional Emergency

Coordination Zones, which is how wildland firefighting coordination is divided in King County (as explained on pp. 43-44). The Zones are broken into three regions – North King County, South King County, and Seattle. The zones were further divided to align with the general current outlines of the DNR WUI map and jurisdiction boundaries, with the eastern portions of the zones within the WUI and beyond labeled as "Rural" and the western portions of the zones as "Urban-Suburban." Vashon was moved into its own planning area due to the geographic separation from the rest of Zone 3.

The labels of "rural" and "urban-suburban" do not perfectly describe all the communities in each category, but these distinctions are intended to acknowledge the overall regional differences in urban density and align with general action recommendations in Section 6 of the CWPP.

CWPP Planning Areas

Zone 1 - Rural:

Unincorporated areas around I-90 and north to border with Snohomish County and incorporated cities of North Bend, Snoqualmie, Carnation, Duvall, Skykomish, and small parts of incorporated Issaquah and Redmond

Zone 1 - Urban/Suburban:

Incorporated cities of Shoreline, Lake Forest Park, Kenmore, Bothell, Kirkland, Woodinville, Redmond, Bellevue, Sammamish, Mercer Island, Beaux Arts, Newcastle, Issaquah, Medina, Clyde Hill, Hunts Point, Yarrow Point

Zone 3 - Rural:

Unincorporated areas in South King County and incorporated cities of Covington, Maple Valley, Black Diamond, and Enumclaw

Zone 3 - Urban/Suburban:

Incorporated Federal Way, Auburn, Kent, Des Moines, SeaTac, Normandy Park, Burien, Tukwila, Renton, and several unincorporated urban areas

Zone 3 - Vashon:

Unincorporated areas on Vashon and Maury Island

Zone 5 - Seattle:

City of Seattle

By breaking the county into smaller regions, we can better prioritize mitigation actions and recommendations to where they are most essential to implement. The table below shows anticipated impacts of a wildfire with and without factoring in annual probability of wildfire compared across King County. Note: this plan is a county-level plan and is comparing across major sections of

the county. The circumstances on the ground may vary widely across these large geographic areas; community and local level planning will better capture the nuance beyond a regional assessment.

The purpose of this table is to compare PNW-QWRA data across King County CWPP Planning Areas, not an official delineation of an area's overall risk. The following calculations were conducted by King County GIS experts that analyzed the areas assessed to have different levels of loss according to the 2023 PNW-QWRA risk assessment. These impacts were determined by assessing local fuels data, specific HVRAs present (definitions on p. 54), and projected fire behavior if a fire were to occur at any location in King County. These are models, not predictions, and should not be read as defined projections of future fire impacts. However, this can be useful for understanding where to prioritize wildfire mitigation work to protect HVRAs.

The tables show calculations with and without annual wildfire probability. Wildfire probability in our low-frequency wildfire regime is a challenging metric, so being able to understand impacts with and without it can be informative of how to prepare for rare but possible large wildfires (explained further on pp. 20-22).

Table 7: Comparison of acreage projected to experience Very High + High Loss if impacted by a wildfire at any location across King County CWPP Planning Areas – **accounting for annual burn probability**

C	CWPP Planning Area	# of acres where People and Property are present and could experience Very High + High Loss	# of acres where Drinking Water resources are present and could experience Very High + High Loss	# of acres where Infrastructure is present and could experience Very High + High Loss
	Zone 1 – Rural	5,150 acres	5,350 acres	2,141 acres
	Zone 1 – Urban/Suburban	1,416 acres	0 acres	0 acres
	Zone 3 – Rural	1,517 acres	48,226 acres	1,317 acres
	Zone 3 – Urban/Suburban	519 acres	0 acres	0 acres
	Zone 3 – Vashon	2,087 acres	18 acres	2 acres
	Zone 5 – Seattle	121 acres	0 acres	0 acres

Table 8: Comparison of acreage projected to experience Very High + High Loss if impacted by a wildfire at any location across King County CWPP Planning Areas – **NOT accounting for annual burn probability**

CWPP Planning Area	# of acres where People and Property are present and could experience Very High + High Loss	# of acres where Drinking Water resources are present and could experience Very High + High Loss	# of acres where Infrastructure is present and could experience Very High + High Loss
Zone 1 – Rural	26,415 acres	6,968 acres	8,241 acres
Zone 1 – Urban/Suburban	19,161 acres	0 acres	1,838 acres
Zone 3 – Rural	20,831 acres	60,900 acres	4,467 acres
Zone 3 – Urban/Suburban	14,968 acres	0 acres	2,791 acres
Zone 3 – Vashon	5,799 acres	115 acres	213 acres
Zone 5 – Seattle	3,824 acres	0 acres	482 acres

Tables 7 and 8 above tell us a few things about how to prepare for wildfire given King County's wildfire regime (covered on pp. 20-22). There are two predominant types of fire; the mixed-severity fires that occur more frequently and will increase as the climate changes and our population grows, and the rare but very destructive high-severity, wind-driven wildfire.

The calculations and comparisons above do not have the ability to predict how a fire would necessarily impact a community, especially since factors like wind play a significant difference in fire behavior and severity in Western Washington. However, they can serve as a proxy measure of how to understand and how to think about both types of fire. The expected impacts calculated with consideration of annual probability more closely map to the mixed-severity fires we can experience here. As this type of fire is most common, these comparisons are helpful for prioritizing projects for wildfire risk reduction. However, communities should also keep in mind the calculated impacts without accounting for annual probability, which better correlate to out-of-the-ordinary fire occurrences that are not accurately captured in annual probability calculations. The bottom line is that we need to be preparing to reduce the consequences of wildfire regardless of probability; communities likely to be impacted by wildfire especially should take action to reduce individual and community-level risk as well as prepare for evacuation, response, and recovery.

Wildfire Impacts by Planning Area

Zone 1 – Rural

Unincorporated areas around I-90 and north to the border with Snohomish County and incorporated cities of North Bend, Snoqualmie, Carnation, Duvall, Skykomish, and small parts of incorporated Issaquah and Redmond

Table 9: Acreage projected to experience Very High + High Loss if impacted by a wildfire at any location across Zone 1 – Rural Planning Area

Impacts to Zone 1 - Rural	# of acres where People and Property are present and could experience Very High + High Loss	# of acres where Drinking Water resources are present and could experience Very High + High Loss	# of acres where Infrastructure is present and could experience Very High + High Loss
Accounting for annual burn probability	5,150 acres	5,350 acres	2,141 acres
Without accounting for annual burn probability	26,415 acres	6,968 acres	8,241 acres

For maps of the expected impacts of wildfire on people, property, drinking water, and infrastructure in Zone 1 – Rural with and without accounting for annual probability, turn to Appendix D.

The Zone 1 – Rural CWPP Planning Area has the highest projected losses to people, property, and infrastructure if a wildfire were to occur compared to the other CWPP Planning Areas, according to an analysis of the 2023 PNW-QWRA data. This assessment analyzed local fuels data, specific HVRAs present (definitions on p. 54), and projected fire behavior if a fire were to occur at any location in King County. These are models, not predictions, and should not be read as defined projections of future fire impacts. However, this can be useful for understanding where to prioritize wildfire mitigation work around certain HVRAs.

4 of King County's 6 most recent large wildfires have occurred within the bounds of Zone 1 – Rural: the 2017 Quarry Fire and the Murphy Lake, Loch Katrine, and Bolt Creek Fires in 2022. The Bolt Creek Fire was the largest recent wildfire in King County; it burned more than 14,600 acres, threatened more than 500 structures, and prompted evacuations for residents of Skykomish, Baring, Grotto, and other communities along the US-2 corridor into Snohomish County. The fire burned for 52 days until it naturally extinguished, and the impacts of the fire are still evident today. Though the Bolt Creek burn scar has shown significant regrowth, the NWS, DNR, and King County OEM continue to monitor the area for post-wildfire debris flows.

Zone – 1 Rural should be prioritized for all wildfire risk reduction efforts, including evacuation planning, wildfire risk reduction outreach, and implementing wildfire mitigation measures like home hardening, building defensible space, and community-level mitigation work. As the region that

encompasses the majority of King County's wildlands, this is also where strategic fuels reduction projects across public and private lands will likely be most advantageous.

A wildfire impacting watersheds and infrastructure in Zone 1 – Rural would have impacts on King County as a whole. Zone 1 – Rural contains significant local infrastructure, including railroads, major highways, rivers, and utility transmission lines. The repeated closures of US-2, Railroad shutdowns, and power shutdowns during the Bolt Creek Fire demonstrated the disruption that wildfires can cause when local infrastructure is impacted. Zone 1 – Rural has the second highest projected impacts to drinking water according to the PNW-QWRA data in comparison with the other CWPP Planning areas. A wildfire that impacted the Snoqualmie-Skykomish Watershed or the area around the South Fork Tolt Dam could impact drinking water to millions of people in the Greater Puget Sound Region. The Tolt River Watershed is managed by a mix private, federal, and Tribal entities, and SPU owns and actively manages 8,400 acres. SPU staffs an active and highly trained wildfire suppression crew that protects the watershed and monitors conditions throughout the summer.

Zone 1 – Urban-Suburban

Incorporated cities of Shoreline, Lake Forest Park, Kenmore, Bothell, Kirkland, Woodinville, Redmond, Bellevue, Sammamish, Mercer Island, Beaux Arts, Newcastle, Issaquah, Medina, Clyde Hill, Hunts Point, Yarrow Point

Table 10: Acreage projected to experience Very High + High Loss if impacted by a wildfire at any location across Zone 1 – Urban-Suburban Planning Area

Impacts to Zone 1 – Urban-Suburban	# of acres where People and Property are present and could experience Very High + High Loss	# of acres where Drinking Water resources are present and could experience Very High + High Loss	# of acres where Infrastructure is present and could experience Very High + High Loss
Accounting for annual burn probability	1,416 acres	0 acres	0 acres
Without accounting for annual burn probability	19,161 acres	0 acres	1,838 acres

For maps of the expected impacts of wildfire on people, property, drinking water, and infrastructure in Zone 1 – Urban Suburban with and without accounting for annual probability, turn to Appendix D.

Portions of this zone are mapped as WUI according to DNR and even more of the zone lies within the CWPP Extended WUI + 2-mile Ember Zone. The highest concern for this Zone is a wildfire occurring in the Zone 1 – Rural area during an east wind event that could turn into a major, fast-moving fire. Such a fire could send embers into neighborhoods where impacts could be significant, as demonstrated by the increase in projected losses when burn probability is not accounted for in Figure X, according to an analysis of the 2023 PNW-QWRA data. This assessment analyzed local fuels data,

⁶⁴https://www.seattle.gov/utilities/your-services/water/water-system/dam-safety/tolt-dam

specific HVRAs present (defined on p. 54), and projected fire behavior if a fire were to occur at any location in King County. These are models, not predictions, and should not be read as defined projections of future fire impacts. However, this can be useful for understanding where to prioritize wildfire mitigation work around certain HVRAs.

As a zone that encompasses a variety of neighborhood types and densities, including thoroughly urban areas with little wildfire risk to the west, local and community level mitigation and disaster preparedness will be especially important. Evacuation preparedness is also important, starting at the households and neighborhood levels. Another consideration for this zone will be planning for the impacts of a wildfire nearby that will have indirect effects on the area, such as impacts to air and water quality, potential power shutoffs, traffic impacts from road closures, and more.

Zone 3 – Rural

Unincorporated areas in South King County and incorporated cities of Covington, Maple Valley, Black Diamond, and Enumclaw

Table 11: Acreage projected to experience Very High + High Loss if impacted by a wildfire at any location across Zone 3 – Rural Planning Area

Impacts to Zone 3 – Rural	# of acres where People and Property are present and could experience Very High + High Loss	# of acres where Drinking Water resources are present and could experience Very High + High Loss	# of acres where Infrastructure is present and could experience Very High + High Loss
Accounting for annual burn probability	1,517 acres	48,226 acres	1,317 acres
Without accounting for annual burn probability	20,831 acres	60,900 acres	4,467 acres

For maps of the expected impacts of wildfire on people, property, drinking water, and infrastructure in Zone 3 – Rural with and without accounting for annual probability, turn to Appendix D.

Wildfire Concern

If a wildfire were to occur at any location in the Zone 3 – Rural CWPP Planning Area, it would experience the highest loss to drinking water resources and assets compared to all other planning areas in King County. It would experience the third highest acreage of expected very high or high loss to people and property if a wildfire were to occur based on annual probability, and second highest projected loss without accounting for annual probability in comparison with other planning areas in King County. Additionally, this zone is projected to experience the second highest projected loss to infrastructure, according to an analysis of the 2023 PNW-QWRA data. This assessment analyzed local fuels data, specific HVRAs present (defined on p. 54), and projected fire behavior if a fire were to occur at any location in King County. These are models, not predictions, and should not be read as defined projections of future fire impacts. However, this can be useful for understanding where to prioritize wildfire mitigation work around certain HVRAs.

2 of King County's most recent wildfires over 100 acres occurred within the bounds of Zone 3 – Rural: the 2017 Fish Fire and Sawmill Creek Fire. Several other significant fires have occurred in the region close to Zone 3 - Rural, including the 2017 Norse Peak Fire, which burned 52,000 acres just across the border in Pierce County. ⁶⁵ Zone 3 – Rural should be prioritized for evacuation planning, wildfire risk reduction outreach, and for implementing wildfire mitigation measures like home hardening, building defensible space, and community-level mitigation work. As the region that encompasses the majority of King County's wildlands, this is also where strategic fuels reduction projects across public and private lands will be most effective.

A significant portion of the Zone 3 – Rural planning area is the Cedar River watershed, which covers 90,638 acres and supplies drinking water to over a million people in the Greater Seattle Area. A wildfire impacting this Zone would have the most significant impacts to the drinking water supply to rest of King County, so Zone 3 – Rural should be most highly prioritized for strategic fuel management projects to protect the watersheds. Fortunately, SPU actively manages its land within the watershed, maintains its own wildland firefighting crew, and is already implementing strategic wildfire fuels mitigation projects to reduce the likelihood of wildfire impacting water safety and quality. Similarly to Zone 1 – Rural, major infrastructure also traverses this zone that would cause regional impacts if affected by a wildfire, making this an area to prioritize for potential fuels management projects as well.

Zone 3 - Urban-Suburban

Incorporated Federal Way, Auburn, Kent, Des Moines, SeaTac, Normandy Park, Burien, Tukwila, Renton, and several unincorporated urban areas

Table 12: Acreage projected to experience Very High + High Loss if impacted by a wildfire at any location across Zone 3 – Rural Planning Area

Impacts to Zone 3 – Urban-Suburban	# of acres where People and Property are present and could experience Very High + High Loss	# of acres where Drinking Water resources are present and could experience Very High + High Loss	# of acres where Infrastructure is present and could experience Very High + High Loss		
Accounting for annual burn probability	519 acres	0 acres	0 acres		
Without accounting for annual burn probability	14,968 acres	0 acres	2,791 acres		
For maps of the expected impacts	For maps of the expected impacts of wildfire on people, property, drinking water, and infrastructure in Zone 3 –				

For maps of the expected impacts of wildfire on people, property, drinking water, and infrastructure in Zone 3 – Urban-Suburban with and without accounting for annual probability, turn to Appendix D.

⁶⁵ https://geo.wa.gov/datasets/wadnr::washington-large-fires-1973-2023/explore?location=47.016873%2C-122.047400%2C8.99

Zone 3 – Urban-Suburban covers a range of neighborhood types, from wooded WUI communities to industrial and primarily urban areas of King County. For communities in and near the DNR WUI and CWPP Extended WUI + Ember Zone areas, mitigation that reduces individual home and community-level susceptibility to ember ignitions is most important. While the annual risk of impact from wildfire is low, there would be significant impacts if a rare, east wind-driven fire started in Zone 3 – Rural and sent embers into the Urban-Suburban area. The 2020 Sumner Grade Fire, which occurred just south of Zone 3 – Urban-Suburban in Pierce County, is an example of a type of fire that could have just as easily impacted this zone. The Sumner Grade Fire sparked during windy conditions and spread rapidly, destroying four homes and forcing hundreds to evacuate. As a zone that encompasses a variety of neighborhood types and densities, local and community level mitigation and disaster preparedness will be especially important. Community outreach and support is especially important because Zone 3 – Urban-Suburban has a higher social vulnerability (According to figure X) compared with other CWPP Planning Areas. Pre-planning with neighborhood jurisdictions around evacuation is also an important step.

Another consideration for this zone will be planning for the impacts of a wildfire nearby that will have indirect effects on the area, such as impacts to air and water quality, potential power shutoffs, traffic impacts from road closures, and more.

Zone 3 - Vashon

Unincorporated areas on Vashon and Maury Island

Vashon with and without accounting for annual probability, turn to Appendix D.

Table 13: Acreage projected to experience Very High + High Loss if impacted by a wildfire at any location across Zone 3 – Vashon Planning Area

Impacts to Zone 3 – Vashon	# of acres where People and Property are present and could experience Very High + High Loss	# of acres where Drinking Water resources are present and could experience Very High + High Loss	# of acres where Infrastructure is present and could experience Very High + High Loss
Accounting for annual burn probability	2,087 acres	18 acres	2 acres
Without accounting for annual burn probability	5,799 acres	115 acres	213 acres
For maps of the expected impacts	of wildfire on people, prope	erty, drinking water, and infi	rastructure in Zone 3 –

According to the PNW-QWRA data, Vashon could expect the second highest amount of loss if a wildfire were to occur at any given location compared to other Planning Areas of King County according to an analysis of the 2023 PNW-QWRA data. This assessment analyzed local fuels data, specific HVRAs present (defined on p. 54), and projected fire behavior if a fire were to occur at any location in King County. These are models, not predictions, and should not be read as defined

projections of future fire impacts. However, this can be useful for understanding where to prioritize wildfire mitigation work around certain HVRAs.

The island contains sufficient vegetative fuels, making wildfire preparedness and mitigation very important in this area. Given the unique geographic constraints, consistent concerns for Vashon Island include ignition prevention, wildfire mitigation, and evacuation. According to Vashon Island Fire & Rescue, it would be impossible to evacuate the whole island quickly. The most important evacuation preparedness efforts must be undertaken at the neighborhood level, and may need to encompass plans to evacuate to non-flammable areas of the island like beaches or parking areas. ⁶⁶ This makes Vashon a high priority for emergency preparedness at all levels and should be prioritized for support of multiple mitigation strategies listed later in the CWPP.

Zone 5 - Seattle



City of Seattle

Table 14: Acreage projected to experience Very High + High Loss if impacted by a wildfire at any location across Zone 5 – Seattle

Impacts to Zone 5 – Seattle	# of acres where People and Property are present and could experience Very High + High Loss	# of acres where Drinking Water resources are present and could experience Very High + High Loss	# of acres where Infrastructure is present and could experience Very High + High Loss
Accounting for annual burn probability	121 acres	0 acres	0 acres
Without accounting for annual burn probability	3,824 acres	0 acres	482 acres
For maps of the expected impacts	of wildfire on people, prope	erty, drinking water, and infi	rastructure in Zone 5 –

For maps of the expected impacts of wildfire on people, property, drinking water, and infrastructure in Zone 5 – Seattle with and without accounting for annual probability, turn to Appendix D.

The overall risk of impacts from wildfire in the Seattle Zone with and without accounting for annual wildfire probability is lowest of all the Planning Areas. However, there are many smaller areas across Seattle with sufficient vegetative fuel for brushfires, which can and do occur every year. As the most populous city in the state, Seattle has no shortage of ignition sources. For example, a September 2025 brushfire that sparked on the side of I-5 spread rapidly uphill, damaged four houses, and sent two community members to the hospital while firefighters quickly extinguished the blaze. ⁶⁷ Smaller-scale fires are possible and home mitigation best practices can still protect homes in this zone,

⁶⁶ https://vifr.org/wildland-fire-safety/

⁶⁷ David Cuerpo, "3-Alarm brushfire injures two and damages four homes in the Beacon Hill neighborhood," Seattle Fire Department, September 14, 2025, https://fireline.seattle.gov/2025/09/14/3-alarm-brushfire-injures-two-and-damages-four-homes-in-the-beacon-hill-neighborhood/.

though wildfire mitigation in this zone is the lowest priority of all the CWPP planning units. All-hazards disaster preparedness and ignition prevention should be top actions for individuals to consider.

The most likely wildfire impacts for Seattle to experience are wildfire smoke exposure and repercussions of the cascading impacts of a wildfire elsewhere in the county. This includes the potential for receiving evacuees from the WUI areas, impacts to infrastructure and drinking water in the wildlands, and long-term impacts to housing demand if populations are displaced.

Part 6: Becoming a Fire-Adapted Community

This chapter provides many recommendations for ways King County can mitigate wildfire risk, improve our preparedness, and boost our ability to respond and recover well from a wildfire. It also highlights the work already underway across the county to improve our wildfire resilience.

Recommendations for Individuals

Table 15: Recommendation Individual Fire Adaptation Actions

Individual Fire Adaptation Actions	All King County residents	Urban-Suburban WUI residents	Rural WUI residents
Build an emergency kit	Х	Х	Х
Make an evacuation plan	Х	Х	Х
Prepare for power outages	Х	Х	Х
Have multiple ways to get emergency information	Х	Х	Х
Stay hazard aware	Х	Х	Х
Know and help your neighbors	Х	Х	Х
Wildfire ignition prevention	Х	X	Х
Harden your home		X	Χ
Create defensible space		X	X
Get a wildfire home assessment		X	Х
Support community-scale mitigation		Х	(X)
Ensure first responder home access		(X)	Х
Identify temporary areas of refuge		(X)	(X)
Write a forest stewardship plan for your property			(X)
X: Consider taking this action		<u>. </u>	

⁽X): This may not be relevant to everyone; consider taking this action if it applies to you

Build an Emergency Kit

Wildfire is just one of many hazards that could impact King County residents with little warning. King County OEM recommends all residents pack a go-bag of essential items for each household member, including pets, to ensure you have what you need most if an emergency occurs.



Start with the basics (i.e. water, non-perishable food, first aid and hygiene items, medications, essential documents, flashlight and extra batteries, blanket, and cash) that can fit in a backpack or other portable container. Add to and update your go-bag as you are able. Tailor the supplies in your kit to the needs of members of your household.

Learn more >>

Download the Get Ready King County Workbook on disaster preparedness.

Make an Evacuation Plan

While many people expect to be told exactly where to go in an emergency, this may not be the case in the beginning of a rapidly evolving disaster. Ultimately the one who will know the best ways to evacuate where you live is you, so take time now to think through multiple routes and modes of transportation you and members of your household (as well as pets and livestock) could take to get out of the area in an emergency. Talk through these options with all members of your household and practice your evacuation plan. If you are a person with limited access to transportation or mobility challenges, build and engage with your local support network. Work with your caregivers, loved ones, neighbors, and local fire department to develop multiple evacuation contingency plans.

Wildfire evacuations can take much longer than people think, especially if your key egress routes get backed up on a normal day. Evacuating may also take longer if you are evacuating with young children, older adults, people with disabilities, household pets, and/or livestock. Keep in mind that you do not have to wait for an evacuation notification to leave; if you feel unsafe or need more time, you can always evacuate early. If you receive a "Go Now" evacuation notification, follow the instructions and leave immediately; this is not the time to pack, it's time to get your household members and leave.

Ready, Set, GO! Evacuation Messaging

To communicate evacuation levels with the public, King County uses "Ready, Set, Go!" evacuation messaging. This uses easy-to-understand language to communicate evacuation levels rather than relying on a numeric system (i.e., saying "Go!" is much clearer than saying "Level 3 evacuation"). This is the same messaging KCOEM would use for any hazard resulting in an evacuation, not just wildfire, and these alerts are sent out via Alert King County and other alerting tools.

Level 1: Get Ready - This alert is issued when there is a hazard near an area that could prompt an evacuation. This is the time for people to grab their go-bags, check on their neighbors, and monitor local media for any updates.



Once the household is ready to evacuate at a moment's notice, this is a good time to rapidly clear the five feet around your home of all flammable materials if you have not done so already. This can include (but is not limited to) the following:

- Move wooden deck furniture and flammable doormats inside
- Close and move trash/recycling bins away from the home
- Rake away any leaves, mulch, or pine needles that could ignite close to your home
- Open wooden fence gates attached to the home

Level 2: Get Set - This alert is issued when the hazard is close enough to an area that an evacuation notice may be issued at any moment. This is when people should be ready to go with their cars loaded. This is also a good time to leave, especially if you are evacuating young children, elderly folks, people with disabilities, pets, and/or livestock. Community members never should wait to get the notifications to evacuate an area if they feel unsafe.

Level 3: GO! - This alert is issued when there is immediate danger and people receiving the alert should **leave immediately**.

While the Ready, Set, Go! progression is ideal, a wind-driven wildfire can move quickly; there is a possibility that the first evacuation alert sent is the "Level 3: GO!" message. This is why community members should be prepared to evacuate at any time.

Before an Evacuation

- Pick a meeting location in a safe area for members of your household.
- Identify multiple evacuation routes out of your home/community.
- Practice your different evacuation routes with members of your household.
- Make a plan for pet/livestock evacuation.
- Identify an out-of-area friend or relative to be a point of contact during an emergency. It is often easier to call/text one person.
- Talk to your neighbors about your evacuation plan(s).
- Know the "Six P's" and have a plan to quickly gather them all for an evacuation:
 - People and pets
 - Papers and important documents
 - o **P**rescriptions, eyeglasses, etc.
 - o **P**ictures and Irreplaceable items
 - Personal computer, phone, hard drives
 - Plastic (credit/debit cards) and cash
- Have a go-bag packed and ready during wildfire season, especially on days with red flag warnings.

During an Evacuation

- Prepare your home to leave if you have time:
 - Close all windows, vents and doors, and remove lightweight curtains.
 - o Shut off your gas utilities (if you have them).
 - Turn on your home lights.
 - Lock your doors.
- Leave as quickly as possible after receiving an evacuation notice. Leave sooner if you think you will need more time to evacuate.
- Yield to emergency vehicles and follow directions of law enforcement officers and emergency responders.
- Leave with as few vehicles as necessary to reduce congestion and evacuation times across the community.

- Drive safely and with headlights on. Maintain a safe and steady pace. Do not stop to take pictures.
- Do not leave your vehicle unless there is no other option. If you must abandon your car, do not block the roadway.
- Do not reenter the evacuation area until you are officially informed it is safe.

Learn more >>

Read more information and access planning resources for <u>Wildfire Evacuation</u> from the US Fire Administration.

Prepare for Power Outages

The utility transmission lines which traverse King County could experience power loss from multiple hazards, including wildfire. Local service providers have policies in place for Public Safety Power Shutoffs (PSPS), which is when they proactively shut off power during high-risk fire weather conditions to reduce the chance of wildfire. Utilities aim to notify customers of a pending PSPS up to two days in advance, depending on the weather forecast. Unplanned outages can also occur, so an important aspect of all-hazard disaster preparedness is having supplies and plans in place for your household in case of a power outage. This is especially true if you rely on electricity to power medical devices, such as:

- Dialysis equipment
- Ventilators
- Infant apnea monitors
- Feeding or infusion pumps
- Suction machines

- Oxygen concentrators
- Ventricular assist devices
- Continuous Positive Airway Pressure (CPAP) machines

If you have critical medical equipment at home that relies on electricity, contact your utility provider to ensure they are aware; they cannot guarantee you will not lose power, but you will receive advanced outreach leading up to a PSPS. Work with your medical team, caregivers, and support network to create a backup plan in the event of a power outage.

Have multiple ways to get emergency information

Sign up for ALERT King County

ALERT King County is King County's official emergency notification system that will be used to send emergency evacuation information.

Go to kingcounty.gov/alert to sign up.



Find additional trustworthy information sources

Emergency notification systems do not always work perfectly, so it is important to have multiple ways to receive emergency information from trustworthy sources. There are many ways to get this information, such as:

- King County OEM Emergency News Blog (<u>kcemergency.com</u>)
- Local fire/law enforcement/National Weather Service (NWS) social media accounts*
- Local TV news stations
- Local radio stations

*Social media can be a great way to connect with friends and neighbors, but it is not always a reliable source of information – especially during the chaos of a rapidly evolving emergency. Be cautious in what information you believe and amplify on social media and place a higher weight of trust in messaging from official local response agency accounts.

Have a NOAA Weather Radio

Weather radios are one of the most reliable ways to stay aware of hazards even during power outages and when other services are unavailable. The NWS and local emergency managers use the National Oceanic and Atmospheric Administration (NOAA) Weather Radio network to broadcast warnings and emergency information for all types of hazards. NOAA weather radios are portable, affordable, and easy to purchase, and many models feature accessible communication tools such as strobe lights and bed shakers for the deaf and hard of hearing.

Stay Hazard-Aware

Everyone has a responsibility to stay aware of hazards that may affect their personal safety. Wildfire is a known hazard we are susceptible to in King County; although the precise timing of such events is unpredictable, the high-risk conditions that increase their likelihood can be anticipated. The National Weather Service continually monitors local humidity, wind, lighting potential, and atmospheric stability that contribute to fire risk and will issue watches and warnings for times of high fire danger (refer back to Part 2 for more on factors that influence King County's fire danger). If you live, work, recreate, or travel in areas where wildfires could occur, you should know the NWS alerts relating to wildfire and stay situationally aware.

A **Fire Weather Watch** is issued when there is a potential for critical fire weather conditions to develop.

A **Red Flag Warning** is issued when critical fire weather conditions are either imminent or occurring, and any fires that develop during this time will likely spread quickly. *

A **Particularly Dangerous Situation (PDS) Red Flag Warning** is issued during rare and exceedingly dangerous conditions. A PDS Red Flag Warning indicates imminent and extreme fire danger and should be taken incredibly seriously.**

*The Bolt Creek Fire of 2022 started and spread during a forecast Red Flag Warning.

** A PDS Red Flag Warning was in effect for Los Angeles County when the Palisades and Eaton Fires ignited in January 2025.

Know and help your neighbors

Knowing your neighbors and building a community support network is beneficial for so many reasons beyond wildfire preparedness, but it is especially important in times of crisis. There are exponentially

more community members than first responders on call in an area at any given time; in a disaster, you and your neighbors may be the only ones available to help each other.

In the CWPP Survey, respondents consistently expressed concern for vulnerable populations and people that may struggle with evacuations, and for good reason. There are far too many heartbreaking stories from recent wildfires and urban conflagrations where people with mobility challenges or other barriers could not evacuate on their own in time. First responders will do their best to respond to calls for assistance, but calling 9-1-1 should not be your evacuation plan. First responders need community members to look out for each other while they respond to as many of the most urgent calls as they can.

Do you have mobility-limited neighbors that may need help evacuating? Is there someone nearby who could evacuate your pet if a disaster strikes while you are at work? Do you have a neighbor who may not be signed up for emergency alerts? Get to know your neighbors now and find out ways you can help each other stay safe in emergencies.

Wildfire ignition prevention

Nearly 90% of wildfires in Washington are human caused, and King County is the most populous county in the state. While wildfires can spark naturally, people can drastically reduce the number of wildfires we experience in Washington each year if we all do our part to prevent ignitions. It is the responsibility of everyone in King County to do their part to prevent wildfires. Remember:

- Never throw cigarettes on anything that could ignite.
- Do not park hot vehicles, trailers, fuel-powered lawn equipment on grass.
- Do not use fireworks, firearms, or other potential ignition sources illegally or irresponsibly.
- Never leave a campfire unattended and put out campfires completely.
- Don't drag trailer chains on the ground, which could cause sparks.
- Obey burn bans. Report illegal burning.



Burn bans are issued by local authorities to protect our communities when fire danger is high or air quality is particularly hazardous. Information about King County burn bans can be found here:



Check current ban status and read about King County Fire Safety Burn Bans.

Fireworks Bans

Concerns around firework use in King County came up frequently in the CWPP survey. Local rules that restrict use of certain types of fireworks are adopted for safety and to reduce the likelihood of fire, so they should be followed. Regulations and fines are an important way to limit firework usage,



but lasting change will require a community-level cultural shift away from permissive norms around illegal firework use, which will require change at the individual, neighborhood, and community levels.

Harden your home

A home's fate in a wildfire can often be determined by what actions a homeowner took long before it started. When firefighters are trained to fight wildfires that impact structures, they are taught to only do so for structures that are defensible. If you want your home to be protected during a wildfire, it is your responsibility to protect it now.

The following recommendations are based on the standards established by the Insurance Institute for Building and Home Safety (IBHS) and share broad consensus and support from researchers and firefighting professionals. IBHS conducts scientific research on home safety best practices and investigates in the aftermath of wildfires and urban conflagrations to assess what factors led to a home's survival or destruction. The findings below have been repeatedly validated by both scientific research and post-wildfire assessments. The recommendations below for home hardening are the most effective strategy to protect your home from the number one cause of home ignitions during a wildfire, windblown embers.

Learn more >>

Read the latest ember mitigation and post-fire research from IBHS.

Roof and Gutters

Your roof is the most vulnerable part of your home because this is where the greatest number of windblown embers will fall and possibly ignite your home during a wildfire. Homes with wood shake or shingle roofs are at high risk of being destroyed in a wildfire.

- Inspect and remove flammable tree debris from your roof and gutters regularly.
- Repair or replace damaged roofs so there are no gaps in roof covering where embers could accumulate and ignite any underlying flammable material.
- Replace plastic/vinyl gutters and downspouts with metal ones.
- Replace wood shake or shingle roofs with a Class A fire-rated roof, using materials such as composition asphalt shingles, metal, or tile.

Vents

Vents and other openings intended to permit ventilation on homes create potential openings where flying embers could penetrate inside the home and ignite a fire within the home.

- Cover all home ventilation openings (except dryer and plumbing vents) with 1/8-inch corrosion-resistant metal wire mesh screens or install ember-resistant vents.
- Avoid storing combustible items near attic or crawl space vents.
- Inspect vent screens regularly to ensure they are in good condition with no tears, large openings, or fine flammable material clogging them.

Exterior Wall Covering Clearance

Heat from a wildfire can cause windows to break before the home ignites, allowing embers to enter and start fires inside. Single-paned and large windows are particularly at risk.

- Install dual or multi-paned windows with at least one pane being tempered glass (the interior pane is recommended)
- Where exterior walls tend to be most vulnerable to igniting is at their base, where fine flammable material can accumulate and where windblown embers will collect during a wildfire.
- Ensure there is a minimum of 6 vertical inches of noncombustible material around the base
 of the home, measured from the ground up and from any attached horizontal surfaces, such
 as decks.

Decks

Decks made of flammable materials and attached to homes are structures especially vulnerable to ignition during a wildfire if not hardened.

- Remove anything combustible from underneath decks and deck stairs.
- Remove all vegetation including grass and weeds from under decks combustible items from underneath deck and deck stairs.
- Limit combustible items kept on top of deck, especially large rugs and combustible furniture.
- Remove all vegetation debris accumulations from deck surfaces regularly.
- Retrofit existing attached decks by installing metal flashing between ledger board, joists, and extending flashing 6 inches above ledger board to protect combustible siding material where deck attaches to home.
- Retrofit existing attached decks by replacing combustible deck boards nearest to the home with noncombustible material.

Fences and gates

Combustible fences and gates, like those made of wood, that attach to a home can act as a wick and carry fire directly to a home during a wildfire.

- Remove combustible fencing and gates within 5 feet of the home
- Replace combustible fencing and gates within 5 feet of the home with noncombustible material such as aluminum, chain link, or iron.
- Further reduce vulnerabilities posed by fences by removing or replacing combustible fencing on your property that's within 30 feet of your home, buildings or neighboring homes.

Detached Structures and Garages

Other structures on the property that are detached from the home but within 30 feet, like sheds, garages, or gazebos, can also pose a significant risk to the home itself if these structures are not hardened to resist ignition from wildfire embers.

- Where possible relocate existing detached structures further than 30 feet from home, neighboring homes and other structures.
- When possible, place or build any new detached structures further than 30 feet from home, neighboring homes and other structures.
- Install weather stripping to eliminate gaps around garage doors.

Build defensible space

Research has shown that it's most critical to reduce flammable materials in the immediate area surrounding a home. While many times community members look to the nearby forests as the place to start for reducing flammable fuels, it's most important to start with your home and work your way outward. It is in this area immediately adjacent to the home where wildfire embers or a surface fire could cause fuels to ignite which could then ignite the home itself from radiant heat or direct flame contact. Therefore, eliminating as much combustible fuel as possible from this area is most important for increasing a home's chance of surviving a fire.

The Immediate Zone (0-5 feet)

The Immediate Zone extends from zero to five feet from exterior walls and any building attachments such as decks, stairs, etc.

- Remove all vegetation within 5 feet of exterior walls and from the outer edge of building attachments where feasible.
- Remove all combustible groundcover materials, such as woodchips, within 5 feet of exterior walls and from the outer edge of building attachments where feasible.
- Use hardscaping like gravel, pavers, concrete, and other noncombustible mulch materials in the immediate zone.
- Remove all combustible human-made items from the immediate zone, including firewood, wood planters, storage containers, lumber, etc.
- Annually remove any flammable vegetation that grows back or flammable debris that accumulates in the immediate zone (such as dead leaves and pine needles).
- Consult a local wildfire mitigation specialist on how to manage trees growing within zone or when nearby tree branches reach within 10 feet of exterior of home or its attachments.

The Intermediate Zone (5-30 feet)

After hardening the home and establishing a fuel-free Immediate Zone (0-5 feet) around it, you should work on improving the intermediate zone around your home. In the intermediate zone, the goal is to slow fire spread and reduce flame intensity near the home. The Intermediate Zone extends five to 30 feet from exterior walls and any building attachments such as decks, stairs, etc.

• Remove from intermediate zone, or relocate further than 30 feet from home, all human-made combustible structures such as storage sheds, play structures, gazebos, firewood piles, etc.

- If human-made structures within the intermediate zone cannot be removed or relocated beyond 30 feet from home, harden these structures and establish an immediate zone defensible space around them as described in previous section.
- Remove highly flammable woody vegetation, woody debris, noxious weeds, and dead vegetation from the intermediate zone.
- Prune trees growing in the intermediate zone so branches don't reach within 10 feet of home or home attachments where feasible.
- Create a separation between trees, shrubs, and other vegetation within the intermediate zone by pruning tree and shrub limbs to create at least 6 feet of clearance between lowest tree branches and ground or shrubs beneath trees.
- Where intermediate zone is covered in grass lawn, keep it well maintained by regularly mowing grass to a height of four inches or less.
- Consult a local wildfire mitigation specialist on how best to manage any trees growing on your property within the intermediate zone.

The Extended Zone (30-100+ feet)

The extended zone is the least important area for establishing effective defensible space around your home. If a home hasn't yet been hardened and its immediate zone and intermediate zone have not yet been improved, then improving the extended zone will achieve little to no improved protection of the home. The extended zone can also frequently extend beyond a homeowner's property boundary or into natural areas where special protections for trees and native vegetation are in place. Most often it's best to consult a wildfire mitigation specialist to identify what, if any, wildfire mitigation practices will be effective and appropriate in the extended zone.

- Complete the recommended home hardening, immediate zone, and intermediate zone fuels reduction practices first.
- Request a consultation or assessment from a local wildfire mitigation specialist of your home ignition zone.
- Along driveway leading to homesite, for each lane of travel, prune bordering trees and shrubs
 to create a 12-foot wide by 14-foot-high space over the surface of the driveway that is free of
 any branches.
- Remove any noxious weeds and invasive species growing in the extended zone.
- If your property is more than an acre in size and covered mostly in forest, consider developing a forest stewardship plan for your property with the help of local natural resources agency staff (more on p. 81).

Get a wildfire home assessment

If you have specific questions about how to harden your home and build defensible space on your property, consider requesting a Wildfire Home Assessment. Several programs are available in King County where a local specialist will schedule a visit to your home to provide recommendations on how to improve your home's wildfire safety through implementing specific home hardening and defensible space recommendations. Assessments may be available through your local fire district; if not, you can request a home assessment through the Wildfire Mitigation Program at King Conservation District (KCD). What's more, receiving a home assessment



Cat Robinson of Eastside Fire & Rescue shares information with a homeowner during a wildfire home assessment.

(Photo: Franque Thompson)

from your fire district or KCD may make you eligible to apply for KCD's mitigation cost-share program that could help offset the costs of implementing some of the wildfire risk reduction recommendations.

Learn more >>

Visit the KCD Wildfire Mitigation Program webpage.

Support community-scale mitigation

While individual risk reduction actions are important, protecting a community takes community-level solutions. This is especially important in areas where homes are built closely together. To become a fire-adapted community, we need people across a geographic area to work together on shared risk reduction priorities. However, community-level mitigation work can be challenging to implement. When CWPP Survey responders were asked what obstacles keep them from taking action to protect their homes from burning in a wildfire, the top answer (selected by 39% of respondents) was "neighboring properties I have no control over." An additional 14% reported that they are renters and are limited in what they can control, and another 10% indicated that restrictions from either a homeowner's association, property manager, or local regulations are keeping them from mitigating their homes. To improve King County's ability to withstand a wildfire, we need community members to care enough to get involved in wildfire risk reduction work and keep it going. Beginning the conversation with your homeowner's association, apartment complex landlord, or a few nearby neighbors is a good place to start. To learn more about important community-level mitigation actions to consider, see p. 82.

Ensure safe first responder home access

First responders need to be able to safely access your home if there is any chance of them protecting it. This is especially important if you live in a rural or isolated area and first responders could encounter difficulties finding and/or driving large fire apparatus to your home. Keep in mind – wildland firefighters from across the region can be deployed to fight a fire, so they may not have the same local knowledge as your community's fire department. Make it easy for them to get to your home if needed: maintain an accessible driveway with a drivable width of at least 12 feet, and limb trees to allow at least 14 feet of vertical clearance. Keep tall grass, brush, and trees, pruned back at least 10 feet on either side of your driveway or access road right-of-way. Ensure your address sign is reflective and easily visible from the road.

If you have any private bridges on your property, they also need at least 12 feet of drivable surface width. Firefighters will not drive apparatus (which can weigh upwards of 50,000-60,000 pounds) across a bridge without knowing the weight capacity. If you do not know the bridge's vehicle weight limit, consult with an engineer and post the bridge capacity at both entrances. Making it safe for emergency vehicles to reach your home will help you in non-wildfire emergencies, too.

Create a forest stewardship plan

If you own an acre or more of forested land, creating a forest stewardship plan can be a great way to improve the health of your forest, meet your ownership objectives, and reduce your wildfire risk all at the same time. A forester or forestry expert can provide insight into ways to maintain a healthy forest and provide evidence-based recommendations for strategic wildfire fuel reduction tailored to your property and your objectives. A completed forest stewardship plan may also qualify you for certain tax incentive programs and permitting exemptions. You can write your own forest stewardship plan or receive support and technical assistance from DNR, King Conservation District, King County DNRP, WSU Extension, or a consulting forester.

Learn more >>

Explore Forest Stewardship Resources from the WSU Extension.

Identify temporary areas of refuge

You should <u>always</u> plan to evacuate early and quickly in the event of a wildfire in accordance with local first responder directives and emergency notifications from ALERT King County. However, if you live in a geographically isolated area with limited egress options, you should also consider what you would do and where you would go if you were unable to get out of the area. Sheltering in place is <u>not</u> recommended for wildfires unless all other means of ingress-egress are blocked or otherwise physically impassable. This is an act of last resort and should not be taken lightly.

A safe zone allows for a separation between you and fire of at minimum four times the maximum flame height and is maintained on all sides; they should not be located downwind of a fire and on terrain that favors rapid fire spread. This advice is not an endorsement of sheltering-in-place, only an explanation of a worst-case situation. If you are afforded the opportunity to evacuate, you should always take it. If you want to learn more about pre-wildfire mitigation and how to identify a safe area of refuge as you can if you are unable to evacuate, visit https://escape.nist.gov/evacuation4

Recommendations for Neighborhoods and Communities in the WUI

Community wildfire adaption takes community-level efforts; individual work is important, but the best protection from wildfire occurs when neighbors and wider communities act together to reduce wildfire risk and improve local resilience to the impacts of wildfire. This can be achieved in numerous ways by combining all the recommendations in Part 6 of the CWPP.

Linking Defensible Space

There are many neighborhoods in and near WUI areas in King County where homes are less than 30 feet apart from each other. Recommendations for defensible space (explained on p. 78) are based on scientific



KCD staff member walks with a homeowner in the WUI. (Photo: KCD)

research and assessments following major fires; however, maintaining defensible space to the recommended distances around individual homes may be impossible in densely spaced neighborhoods. When this is the case, the best solution is for neighbors to link defensible space efforts across multiple houses to protect them all. This involves neighbors working together to maintain their properties in a way that look out for each other's homes, not just their own; this could include things like neighbors sharing the cost to replace a wooden fence between properties, reducing flammable material within 5-30 feet of a neighbor's home, and more. While several CWPP Survey respondents mentioned that it would be nice if neighbors could be compelled to do this, there are no current enforcement mechanisms to require neighbors to link defensible space efforts, save for possible homeowners' association regulations. To link defensible space, neighbors will need to find ways to engage with each other and work together to build community momentum in this area.

Firewise USA and Neighborhood Wildfire Councils

The Firewise USA program can be a great way for community members to organize for wildfire risk reduction. The Firewise USA program guides interested communities through the process of forming a committee, developing a community action plan, and can even provide small grants to subsidize neighborhood-level risk reduction projects. Communities are required to invest annually in wildfire risk reduction work, which provides structure for neighbors looking to keep momentum on wildfire mitigation going over time.

There are currently 6 Firewise USA sites-recognized communities in King County:

- Trilogy at Redmond Ridge (Redmond) since 2016
- Stillwater North (Duvall) since 2011
- Tolt Triangle Fire Council (Carnation) since 2005
- Mirrormont (Issaquah) since 2015

- Shadow Lake (Renton) since 2017
- Northeast Hobart (Maple Valley) since 2013

Having a program through which communities can be recognized for their work can be a good way to maintain ongoing engagement from your neighbors, but communities do not need to go through a formal program to implement wildfire risk reduction practices. Forming community wildfire councils is another popular way of getting people who are passionate about protecting their communities together, or simply adopting wildfire mitigation best practices (such as IBHS Wildfire Prepared Homes and Communities recommendations) into homeowners' association regulations.

Learn more >>

Read about becoming a Firewise USA Site through Washington DNR.

Support Community Wildfire Risk Reduction Policies and Initiatives

Local fire districts and jurisdictions may want to prioritize certain wildfire risk reduction projects but need significant community support – including funding – to implement them. This may include instituting new wildfire safety policies and ordinances, hosting community wildfire education or mitigation events, funding projects like evacuation studies and exercises, and more. Getting involved, advocating for wildfire safety, and supporting your local fire department can help move your community forward in adapting to wildfire.

In the CWPP Survey, respondents were asked what they would be willing to do to support wildfire risk reduction in their communities. For context, 46% respondents indicated they were "concerned" or "highly concerned" about wildfire impacting their immediate communities (see Appendix A). Their responses were as follows:

Table 16: CWPP Survey Question 15 Responses

Which would you be willing to participate in to support wildfire risk reduction in your community? <i>(choose all that apply)</i>	
Advocate for wildfire safety policies and ordinances	51%
Volunteer time and labor for wildfire risk reduction activities	30%
Volunteer time to raise wildfire awareness	25%
I would not be willing to participate in any work to support wildfire risk reduction in my community.	19%
Contribute to a wildfire risk reduction fund	18%
Other	8%

Ongoing Wildfire Risk Reduction Work in King County

Utility Wildfire Mitigation

To reduce wildfire risk, utilities invest in projects that reduce power outages and make the grid more resilient to extreme weather and wildfires. This includes routinely trimming trees and vegetation near

power lines, inspecting equipment in high-risk areas prior to wildfire season, installing covered conductors on overhead power lines (sometimes called "tree wire") and relocating power lines underground.

Wildfire Mitigation Plans

In 2023, the Washington State Legislature passed a law requiring all electric utilities that operate in the state to create wildfire mitigation plans by October 2024. Each of the utilities that operate in King County have done so and are proactively engaged in various wildfire risk reduction actions. This includes instituting critical fire weather operating procedures (like Public Safety Power Shutoff protocols), grid hardening, public outreach and education, and collaborating with local and regional partners. If you'd like to learn more about what each utility is doing to reduce wildfire risk, their plans are linked below.

Learn more >>

Read about utility wildfire mitigation legislation and requirements.

Powerline Safety During High-Risk Fire Weather

During high-risk fire weather, utilities may use settings that make power lines more sensitive to potential hazards, such as a tree in the line, and shut off power faster to prevent sparks. Then crews can inspect the power lines and remove hazards or make repairs before turning power back on. These settings help prevent fires but can result in more unplanned power outages.

A **Public Safety Power Shutoff (PSPS)** is a proactive measure taken by utilities to prevent wildfires by shutting off power during high-risk fire weather. Utility partners aim to notify customers two days in advance of an expected PSPS, though the amount of warning given is dependent on weather conditions. For more on how to prepare for a PSPS, see p. 73.

Wildfire Mitigation Working Group

Since 2020, partners across King County involved in wildfire mitigation work have been meeting every other month to share wildfire updates, best practices, resources, and coordinate efforts. Attendees include representatives from King Conservation District, King County Department of Natural Resources and Parks, King County Office of Emergency Management, local utility partners, fire departments, DNR, and local jurisdictions. This group has assisted with the development of new wildfire outreach materials for King County, helped expand local capacity to conduct wildfire home assessments, applied for grant funding together, and has provided insight and subject matter expertise on a variety of local wildfire-related plans and initiatives. This group will serve as a key group for implementation of the CWPP and is thoroughly committed to coordinating across disciplines and jurisdictions on wildfire risk reduction.

Community Mitigation Work

Communities across King County are engaged in wildfire risk reduction, including at least 5 communities recognized with good standing in the Firewise USA program. Additional communities across King County are actively working to reduce wildfire risk through homeowners' association regulations, community advocacy, and more.

Wildfire Home Assessments and Cost-Share Program

Homeowners and neighborhoods in King County can request wildfire assessments from trained professionals through multiple avenues in King County. These are great ways to receive tailored recommendations for home hardening and creating defensible space. Wildfire home assessments are voluntary and must be requested by the property owner; there is no enforcement or regulatory action connected with these assessments. These programs are currently available through the following agencies:

Table 17: Current Wildfire Home Assessment Programs in King County

Agency	Services available to:
Bellevue Fire Department	Residents of Beaux Arts, Bellevue, Clyde Hill, Hunts Point,
	Medina, Newcastle, and Yarrow Point
Eastside Fire and Rescue	Residents of Issaquah, North Bend, Sammamish, the
	Snoqualmie Tribe, Fire Districts 10 outside of Duvall city limits,
	38, and outside of Woodinville city limits
Valley Regional Fire Authority	Residents of Algona, Auburn, and Pacific
Vashon Island Fire and Rescue	Residents on Vashon-Maury Island
King Conservation District	Residents in King County within DNR WUI areas

Multiple fire districts in King County beyond the ones listed above are interested in launching new home assessment programs or expanding existing program capacity. However, these take significant time, effort, and most importantly, funding. If you live in a fire district in the WUI and do not have a local home assessment program, advocate for additional funding for your local fire authority to be able to provide this service. In the meantime, anyone in the King County DNR WUI areas can receive a home assessment from King Conservation District.

Community members who have a wildfire home assessment completed by a trained professional may qualify for the <u>Wildfire Mitigation Cost-Share Program through King Conservation District</u> to help implement assessment recommendations. KCD offers wildfire mitigation project planning assistance and cost-share funding that can reimburse up to 75% of the project cost (subject to project cost approval).

Community Outreach

Multiple partners in King County conduct regular public outreach on wildfire risk reduction. Fire departments across the WUI areas in King County regularly share wildfire safety information at public events, at fire stations, and in other local venues. For example, the Cities of North Bend, Carnation, and Issaquah recently partnered with Eastside Fire & Rescue to host screenings of Living with Wildfire, an educational film on wildfire risk in Western Washington, and a discussion panel that were attended by several hundred community members. Similarly, Puget Sound Fire partnered with the City of Maple Valley in May to host a WUI Roundtable discussion event during Wildfire Awareness Month to provide information to the community. Similar wildfire risk reduction outreach events are hosted across the county by local fire departments, in rural WUI communities (such as Ravensdale/Fire District 47, in July 2025) and in populous areas (such as Bellevue in June 2025). PlOs

across local fire departments communicate regularly and align messaging and outreach efforts to focus on wildfire awareness at the beginning of wildfire season each summer.

King County OEM has developed new wildfire outreach materials on building defensible space, ignition prevention, and awareness-raising for the Ready, Set, Go evacuation messaging campaign that have been shared widely with partners and the public. These include translating the Ready, Set, Go materials into 10 languages and sharing translations with regional partners. the King County OEM public information officer (PIO) actively coordinates with at least 10 counties and 1 tribal nation in Western Washington to align messaging and share outreach materials relating to Ready, Set, Go. King County DNRP frequently provides education to small forest landowners on how to integrate wildfire risk reduction into their forest management objectives, and DNRP, OEM, and the Executive Climate Office are currently partnering on the development of additional, comprehensive wildfire outreach materials to share with the public.

King Conservation District has implemented strategic outreach efforts, including recently focusing on home assessments in the Skykomish area in Summer 2025. KCD also developed new wildfire mitigation materials that are shared with community members. The American Red Cross has expanded their local community safety outreach efforts to include wildfire preparedness, and in 2025 piloted a door-to-door outreach project in the Wilderness Rim neighborhood to spread the word on evacuation preparedness, home hardening, and building defensible space. Based on the success of this event, it is likely that they will continue and expand these efforts in the future.

Another important ongoing community outreach initiative in King County is the **Equity in Injury Prevention (EQUIP)** program, which is a partnership between the UW Medicine Regional Burn Center, King County Regional Homelessness Authority, Harborview Injury Prevention and Research Center, and community outreach specialists who are working together to promote burn injury and fire prevention among people experiencing homelessness. This is especially important because it addresses the daily risks and hazards that are prevalent while living unhoused, including heating and cooking with unsafe equipment, exposure to extreme weather, living in highly flammable environments, and a high prevalence of violence and assault, all compounded by limited access to passive and active fire and injury prevention. EQUIP consists of consumer-tested prevention education, fire extinguishing and warming equipment, and community-driven distribution strategies. EQUIP is being piloted across Seattle to evaluate the program's acceptability, effectiveness, and sustainability with the goal of expanding implementation across King County.

Forest Stewardship and Cross-Boundary Fuels Management

While landscape-scale fuels treatments are not an effective strategy in Western Washington due to our highly productive ecosystem and fire regime, fuels reduction is still a helpful tool when implemented strategically around values we want to protect. Such work can include thinning and pruning, invasive species removal, and creating **shaded fuel breaks**, where the trees in an area are thinned and pruned to reduce fire potential but the area retains the benefits of the tree canopy.

In King County, the following areas were identified through the CWPP planning process as high priority within the CWPP Extended WUI + Ember Zones for implementing sustainable, collaborative, and strategic fuels management projects:

- State- and county-owned properties directly abutting neighborhoods (examples including Firewise USA Sites and communities like Wilderness Rim, Tiger Mountain/Upper Preston, etc.)
- State- and county-owned properties proximal to infrastructure, including utility transmission lines and watersheds, prioritizing CWPP Planning Area Zone 1 and 3 – Rural and Zone 3-Vashon.
- Roadways that could serve as important evacuation routes in the Zone 1 and 3 Rural communities and Zone 3 Vashon (examples including DOT critical lifeline routes, 203, Issaquah-Hobart Road, Cedar Falls Road, Mt. Si Road, SE Middle Fork Road, Reinig Road, HWY 18, sections of HWY 169, 410, Enumclaw SE, US 2, SE 436 between Auburn and Enumclaw, Vashon HWY SW, Cemetery Road, and dock routes on Vashon)

There are existing strategic fuels management projects occurring in King County. Examples includes a community wildfire mitigation project King Conservation District implemented with the Firewise USA Site Trilogy Ridge in Redmond in late 2023; it consisted of creating a fuel break in the community-owned parcel of land that was adjacent to a row of residential houses in the community. Similarly, local utility partners have been doing significant work on fuels management around critical infrastructure. Seattle Public Utilities (SPU) has created shaded fuel breaks around the Landsberg Dam and has additional work planned to expand the protection around water resources, and SPU and Seattle City Light (SCL) partnered to assess hazard trees conducted in the Cedar Falls Watershed with mitigation planned for 2026. Other utility partners have been implementing grid-hardening projects in higher risk areas of King County, such as PSE's recent work in Vashon and Skykomish. The CWPP aims to support and expand upon existing efforts to protect community values in a sustainable manner.

Preparedness Activities

King County OEM and local emergency managers work year-round to plan for the many hazards that can affect our communities, including wildfire. This includes writing Hazard Mitigation Plans, Comprehensive Emergency Management Plans, conducting community outreach efforts, hosting and attending trainings, participating in the CWPP planning process, and more. Some communities, such as the Cities of Sammamish and Issaquah, have completed evacuation studies to inform evacuation preparedness and planning efforts.

In the wake of recent fire disasters, including the Maui and LA fires, King County OEM and partners have assessed lessons learned with emergency alerting and modified policies and practices accordingly. Two King County representatives deployed to Maui to assist in the disaster recovery process through an emergency management incident response assistance program, and wildfirespecific recovery planning has been identified as a priority in the King County Strategic Climate Action Plan.

Proposed Mitigation Actions

This section includes lists of actions or projects that will help improve King County's wildfire readiness. However, it is critical to note that as a non-regulatory document, project and action recommendations in the CWPP are not guaranteed to be implemented, nor is funding necessarily allocated for their implementation. Funding for projects is subject to local discretion.

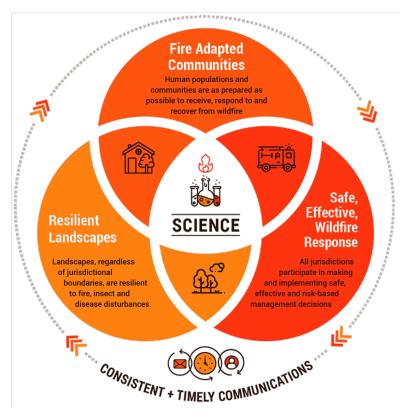
Recommendations are put forward to provide guidance and suggestions on actions that will mitigate wildland fire risk and should be implemented whenever possible. By listing projects in the CWPP, we improve our ability to apply for grant funding (when available) for project implementation.

How were the actions developed?

These action ideas were developed through the input of more than 80 local partner agencies and organizations, consultation with wildfire experts, reviewing the CWPP Survey results, and connecting with existing plans addressing aspects of wildfire. They were then narrowed and prioritized by the CWPP Core Planning Team.

Strategic Connections

Wildfire risk reduction is a high priority locally, regionally, and nationally. At the federal level, there is a push across the United States to align these efforts, which is defined in the National Cohesive Wildland Fire Management Strategy. The Cohesive Strategy outlines three broad categories for improving our national ability to live with the realities of wildfire: resilient landscapes, fire-adapted communities, and safe, effective, risk-based wildfire response. The Washington State Forest Plan and this CWPP have been written intentionally to align with the National Cohesive Strategy, and the mitigation strategies below each address one or more of these categories.



Many recommendations to improve King County's wildfire readiness and resilience have already been identified through strategic planning efforts in existing local plans. This CWPP does not seek to duplicate existing efforts but rather to support, reinforce, and expand upon existing work already underway in King County. A list of county plans with mitigation actions tied to wildfire risk reduction are listed in Appendix E. These plans include:

King County 30-Year Forest Plan (2021)

This plan was developed to outline a shared county-wide vision for forest cover and health and outline strategies for achieving that vision over the next 30 years. It was written to help ensure that county-wide forests continue to play a role in mitigating impacts of climate change, and to also guide King County and partners towards strategies that allow us to meet multiple goals as we expand and enhance forest cover.

King County Wildfire Risk Reduction Strategy (2022)

The King County Wildfire Risk Reduction Strategy identifies 12 recommended actions that expand and accelerate wildfire risk reduction efforts in King County. The strategy's approach and actions are intended to help address wildfire risk as it exists today and with climate change, helping to reduce overall risk and increase community and ecosystem resilience to wildfire.

King County Rural Forest Commission Strategic Priorities (2022)

The Rural Forest Commission advises King County Council and the King County Executive on policies, programs and regulations affecting rural forests and to advise on ways to conserve forestland and retain working forests in King County. This report was developed to advise the King County government on important actions needed to ensure healthy and resilient forests into the future.

Public Health - Seattle and King County Wildfire Smoke Health Impacts Mitigation Strategy (2025)

Public Health - Seattle and King County developed this strategy to outline potential actions that can help residents and visitors cope and adapt to the increasing occurrence of regional wildfire smoke episodes in a manner that minimizes the risk to individuals' health, while addressing health inequities that place some communities and populations at greater risk. It provides strategic decision-making support that identifies ways to reduce exposure to wildfire smoke and identifies ways to make King County a more smoke-ready community.

King County Strategic Climate Action Plan (2025)

The Strategic Climate Action Plan (SCAP) serves as King County's five-year roadmap to address climate change and underscores the county's critical leadership role in ensuring communities across the region benefit from stronger, more unified climate policies and investments. The SCAP outlines multiple priorities and specific actions that improve the lives of King County residents. This collaboratively developed plan ensures that climate action is embedded in transportation, housing, food systems, infrastructure, and economic development for the benefit of all residents, especially those most affected by climate change.

King County Regional Hazard Mitigation Plan (2025)

This plan assesses natural and human-caused hazards that can impact our region and develops strategies to reduce risk and build resilience. Nearly 50 planning partners, including school districts, water districts, and cities, participated in the process and developed annexes.

This approved CWPP is incorporated into the King County Regional Hazard Mitigation Plan (RHMP). Action or mitigation plans for communities that are drafted after this plan is adopted will be considered a part of this plan, regardless of their adoption date and will be incorporated into this plan at the next scheduled update. Any CWPP projects that receive funding for implementation will complete the RHMP Mitigation Action Template (in Appendix F) to further align with the plan.

CWPP Mitigation Action Priorities

In addition to previously identified strategic actions for wildfire risk reduction in other King County Plans (listed in Appendix E), the following are the highest priority actions to pursue for implementation, if funding and capacity are available, over the next 5 years to help King County better adapt to and mitigate the threats of wildfire.

Table 18: CWPP Mitigation Action Priorities

ID#	Strategy	Details
	Resilient Landscapes (RL)	
RL-1	Identify and treat areas where strategic fuel reduction will improve unhealthy forest conditions and improve wildfire safety near roadways, communities, and	Support and expand existing fuel management work along roads in King County, including DOT critical lifeline routes, 203, Issaquah-Hobart Road, Cedar Falls Road, Mt. Si Road, SE Middle Fork Road, Reinig Road, HWY 18, sections of HWY 169, 410, Enumclaw SE, US 2, SE 436 between Auburn and Enumclaw, Vashon HWY SW, Cemetery Road, and dock routes on Vashon.
	infrastructure in WUI areas	Conduct roadway hazard safety assessments accounting for wildfire modeling on critical routes to inform current and future fuels management prioritization.
		Incorporate fuels reduction practices into King County Parks' forest stewardship projects where projects are planned in WUI areas near communities or critical infrastructure and pursue partnerships with adjacent landowners to implement fuels reduction practices across ownership boundaries where mutually beneficial.
		Enhance collaboration between forested land ownerships (King County, DNR, USFS forest, private/non-profit landholders) and neighboring counties on forest management planning. Prioritize fuels management projects for Firewise USA Sites and/or where DNR and County lands directly abut neighborhoods (such as Wilderness Rim, Tiger Mountain, etc.). Work with partners to identify key barriers to fuels management requests.
		Support invasive species removal in alignment with Noxious Weeds Removal Program
RL-2	Work collaboratively on shared wildfire risk reduction priorities with jurisdictions and partners	Identify and establish inter-organizational bodies that will be a venue for collaborative work on wildfire risk reduction priorities (e.g. King County Wildfire Mitigation Working Group, a CWPP implementation committee, a WUI Code Working Group, etc.) Support the development of CWPP Annexes at local fire department/jurisdiction level Support local tribal partners as needed with implementation of prescribed/cultural burning
		Identify and implement collaborative wildfire risk reduction projects between local government agencies, utility

		providers, neighboring counties, regional forest landowners, and/or tribal nations	
		Support advocacy with insurance agencies and State Office of Insurance Commissioner to account for/incentivize wildfire mitigation work in WUI areas	
RL-3	Promote species and structural diversity within King County	Increase capacity to incorporate into King County Parks' forest management plans wildfire mitigation and resilience practices	
	forests to improve wildfire resilience	Increase capacity to incorporate into King County DNRP forestry, restoration, and vegetation management projects wildfire mitigation and resilience practices	
		Increase capacity of forest stewardship plan writing support	
	Increase technical and financial support for small forest landowners, rural residents, and	Identify areas of King County with the highest exposure and vulnerability to wildfire hazards, then develop local capacity to provide wildfire technical and financial assistance in these areas Provide enhanced technical and financial support to small	
	communities for wildfire risk reduction	forest landowners adjacent to active forest stewardship and wildfire resilience projects occurring on public forestland	
RL-4	work	Encourage key partners to identify and collaboratively address policy barriers to implement wildfire mitigation best practices at county and city levels	
		Identify community partners/organizations who can assist people with barriers to completing mitigation projects on private property	
		Support Firewise USA-recognized communities (or similar community groups) with identification and implementation of strategic fuels reduction	
RL-5	Develop post-fire response plans to support forest	Develop and train a local Burned Area Emergency Response (BAER) team that can respond to local wildfires that impact non-federal lands within King County.	
	recovery and reduce near-term wildfire impacts on natural resources	Develop and increase local capacity to deploy resources to mitigate post-wildfire near term impacts to natural resources.	
	Safe and Effective Response (SER)		
SER-1	Expand wildland firefighting response and evacuation capacity within King County	Support procurement of resources and training to support and enhance safe and effective response capacity across all regions of King County	
SER-2	Expand wildfire- specific emergency management	Enhance emergency management preparedness through supporting community wildfire response and evacuation planning, tabletop exercises and drills, and training	

	preparedness and planning efforts	Pursue funding for Evacuation and Temporary Refuge Areas Studies Increase mapping and identification of sites containing
		hazardous materials located in the WUI
SER-3	Identify wildfire- specific community recovery needs and actions to	Assemble and work with key partners to identify lessons learned from previous wildfires and what can be applied now
	preemptively plan for and implement	Develop plans to implement post-wildfire community recovery best practices as feasible pre-disaster
	Fir	e Adapted Community (FAC)
	Pursue funding to implement and expand targeted wildfire risk reduction outreach to	Develop user-friendly King County wildfire risk reduction website with explorable map of wildfire risk and planning data Enhance and expand existing staffing and capacity for
FAC-1	communities	wildfire outreach in high-risk areas of the county Develop new materials and fund translations of existing materials for wildfire risk reduction and "Ready, Set, Go!" evacuation messaging
		Pursue funding for research on effective messaging, community input gathering, and tailored outreach strategies Expand outreach efforts to populations especially vulnerable to wildfire, such as older adults, people with limited mobility, and unhoused community members
FAC-2	Standardize and promote best management	Develop Wildfire Action Plan booklet to share wildfire best practices with communities and regional partners
	practices for wildfire mitigation	Meet annually with wildfire mitigation partners to discuss and align outreach messaging
FAC-3	Expand capacity and coordination for countywide wildfire home assessment programs	Increase staffing to support home assessment programs and strategic outreach across King County Expand King County cost-share program capacity and home mitigation materials available, and develop additional criteria to guide prioritized provision of services for home hardening
		and building defensible space in the immediate and intermediate zones around homes in the WUI. Annually host S-215 WUI Fire Operations Training and/or Assessing Structural Ignition Prevention (ASIP) Training in King County open to all fire departments and wildfire
		mitigation professionals Establish a countywide platform for tracking wildfire home and community risk assessments
FAC-4	Advance wildfire risk reduction through effective policies, plans, and codes	Provide regular trainings on land use planning for wildfire and send local land use planners, fire marshals, building officials, and municipal jurisdiction code writers who work in the WUI to these trainings

		Create a guide for local jurisdictions on developing and implementing effective codes, policies, and plans to reduce wildfire risk based on wildfire mitigation best practices
		Adopt WUI code per state requirements/timeline; develop working group of local and regional experts to facilitate the smooth adoption of WUI codes in King County
FAC-5	Establish a wildfire adapted community coalition	Support wildfire adapted community coalition formation at local/jurisdictional level; prioritize this action for high-risk areas of Zone 1-Rural and Zone 3-Rural areas (such as, the greater Skykomish area (Fire District 50) or the Kangley-Palmer area (Fire District 47))



Landscapes, regardless of jurisdictional boundaries, are resilient to fire, insect, disease, invasive species and climate change disturbances, in accordance with management objectives. ⁶⁸

The natural beauty of the western Cascades is one of the reasons so many are drawn to call this area home, and enhancing our forests' health aligns with many local priorities beyond wildfire, including salmon habitat protection, outdoor recreation access, cultural preservation, and more. Maintaining healthy, resilient, and thriving forests are less likely to be devastated by wildfire and is one of the three pillars of the National Cohesive Wildland Fire Management Strategy. ⁶⁹

In the National Cohesive Strategy, King County is listed as "very low" on the national priority list for broad-scale fuels management. According to Washington DNR, "Landscape-scale fuels treatments are not likely to reduce wind-driven fire behavior in western Washington, although treatments may be warranted near communities, infrastructure, and vulnerable habitats." Our productive forests grow back incredibly quickly, so smaller and more targeted fuel treatments will be most efficacious near communities, critical infrastructure, and roadways.

Table 19: CWPP Mitigation Action Priorities for Building Resilient Landscapes

#	CWPP Strategies for Resilient Landscapes
RL-1	Identify and treat areas where strategic fuel reduction will improve unhealthy forest conditions and improve wildfire safety near roadways, communities, and infrastructure in WUI areas.
RL-2	Work collaboratively on shared wildfire risk reduction priorities with jurisdictions and partners.
RL-3	Promote species and structural diversity within King County forests to improve wildfire resilience.
RL-4	Increase technical and financial support for small forest landowners, rural residents, and communities for wildfire risk reduction work.
RL-5	Develop post-fire response plans to support forest recovery and reduce near-term wildfire impacts on natural resources.

⁶⁸ https://www.nafsr.org/docs/2023/050123%20Cohesive%20Strategy%20Addendum.pdf p. 3

⁶⁹ https://www.fs.usda.gov/managing-land/fire/resilient-landscapes

⁷⁰ https://csl.noaa.gov/projects/firex/2014-National-Cohesive-Wildland-Fire-Management-Strategy.pdf

⁷¹ https://www.dnr.wa.gov/publications/rp_workofwildfire_0624.pdf

RL-1. Identify and treat areas where strategic fuel reduction will improve unhealthy forest conditions and improve wildfire safety near roadways, communities, and infrastructure in WUI areas.

Vision: Fuels reduction projects are implemented in strategic locations across King County to protect communities and community values.

Description:

Fuels management work in strategic locations close to community values is an important way to improve wildfire resilience. The following actions will help King County collaboratively identify strategic fuel reduction work alongside partners.

Hazard(s) Mitigated:

Wildfire

Funding:

Additional funding needed

Implementation Plan/Actions:

- Support and expand existing fuel management work along roads in King County, including DOT critical lifeline routes and roads such as Route 203, Issaquah-Hobart Road, Cedar Falls Road, Mt. Si Road, SE Middle Fork Road, Reinig Road, HWY 18, sections of HWY 169, SR 410, Enumclaw SE, US 2, SE 436 between Auburn and Enumclaw, Vashon HWY SW, Cemetery Road, and dock routes on Vashon.
- Conduct roadway hazard safety assessments accounting for wildfire modeling on critical routes to inform current and future fuels management prioritization.
- Incorporate fuels reduction practices into King County Parks' forest stewardship projects
 where projects are planned in WUI areas near communities or critical infrastructure and
 pursue partnerships with adjacent landowners to implement fuels reduction practices across
 ownership boundaries where mutually beneficial.
- Enhance collaboration between forested land ownerships (King County, DNR, USFS forest, private/non-profit landholders) and neighboring counties on forest management planning.
 Prioritize fuels management projects for Firewise USA Sites and/or where DNR and County lands directly abut neighborhoods (such as Wilderness Rim, Tiger Mountain, etc.). Work with partners to identify key barriers to fuels management requests.
- Support invasive species removal in alignment with Noxious Weeds Removal Program.
- Evaluate updated DNR WUI map when available to identify additional high-priority projects.

Implementation Partners:

Partners involved in this action may include:

- WSDOT
- DNR
- King County DLS-Roads
- King County OEM
- King County DNRP
- Local Jurisdictions
- Private landowners

Performance Measures:

Specific performance measures will be defined in project scoping. Examples may include:

- # Roadway assessment(s) completed
- # of fuels reduction projects completed

Qualitative feedback from partners

- King County 2025 Strategic Climate Action Plan (Prep 12, Prep 14)
- King County Wildfire Risk Reduction Strategy (Action 6)

RL-2. Work collaboratively on shared wildfire risk reduction priorities with jurisdictions and partners.

Vision: Partners across King County collaborate regularly on shared wildfire risk reduction goals that improve regional wildfire resiliency.

Description:

Much of the work of adapting King County to wildfire requires the engagement of multiple partners across sectors. Individual agencies implementing projects is important, but collaborative implementation of wildfire risk reduction projects will enhance resilience at a much higher scale. The focus of this strategy is to identify various arenas in which partners can work together to reduce our regional wildfire risk.

Hazard(s) Mitigated:

Wildfire

Funding:

Additional funding needed

Implementation Plan/Actions:

- Identify and establish inter-organizational bodies that will be a venue for collaborative work on wildfire risk reduction priorities (e.g. King County Wildfire Mitigation Working Group, a CWPP implementation committee, a WUI Code Working Group, etc.)
- Support the development of CWPP Annexes at local fire department/jurisdiction level
- Support local tribal partners as needed with implementation of prescribed/cultural burning
- Identify and implement collaborative wildfire risk reduction projects between local government agencies, utility providers, neighboring counties, regional forest landowners, and/or tribal nations
- Support advocacy with insurance sector to account for/incentivize wildfire mitigation work in WUI areas

Implementation Partners:

Partners involved in this action may include:

- King County DNRP
- Local Tribal Nations
- Local Fire Services
- DNR
- USFS MBS National Forest
- Private Forestland Owners

Conservation Agencies and Organizations (WSU-Extension, King Conservation District, etc.)

Performance Measures:

Specific performance measures will be defined in project scoping. Examples may include:

- # of local CWPP annexes completed
- # of cross-boundary/sector projects identified and/or underway

Qualitative feedback from partners

- King County 2025 Strategic Climate Action Plan (PREP 28, 31, 33)
- King County Wildfire Risk Reduction Strategy (Action 12)
- King County 2022 Rural Forest Commission Strategic Priorities (Objective 3.2)
- King County 2024 Comp Plan (R-737, R-741)

RL-3. Promote species and structural diversity within King County forests to improve wildfire resilience.

Vision: King County forests are ecologically healthy and feature a variety of forest types across the landscape.

Description:

Forest landowners across King County manage their land for a variety of objectives, whether for logging, conservation, recreation, or a combination of purposes. Expanding awareness and capacity of wildfire resilient land management practices will not only enhance our regional wildfire resilience but can have additional benefits to wildlife, riparian environments, and other forestry objectives.

Hazard(s) Mitigated:

Wildfire

Funding:

Additional funding needed

Implementation Plan/Actions:

- Increase capacity to incorporate into King County Parks' forest management plans wildfire mitigation and resilience practices
- Increase capacity to incorporate into King County DNRP forestry, restoration, and vegetation management projects wildfire mitigation and resilience practices
- Increase capacity of forest stewardship plan writing support

Implementation Partners:

Partners involved in this action may include: Forest landowners and managers, including:

- King County DNRP
- Local Fire Services
- DNR
- USFS MBS National Forest
- Private Non-industrial Forestland Owners
- Conservation Agencies and Organizations (WSU-Extension, King Conservation District, etc.)

Performance Measures:

Specific performance measures will be defined in project scoping. Examples may include:

- # of forest management plans which incorporate wildfire mitigation and resilience practices
- # of projects or # acres treated by projects implementing wildfire mitigation and resilience practices
- Qualitative feedback from partners

- King County Wildfire Risk Reduction Strategy (Action 1)
- King County 2022 Rural Forest Commission Strategic Priorities (Objectives 2.1, 2.2, 3.3)
- King County 30-Year Forest Plan (Strategies 1-2, 1-3, 1-4, 2-1)
- King County 2025 Strategic Climate Action Plan (GHG 16, 17, 53; PREP 9, 10, 14, 24, 25, 27, 33)
- WA DNR 2020 Forest Action Plan (Landscape Resilience Priority Actions for Western WA 3, 4, 5 and Working Lands Goal 1)
- USDA Strategic Plan 2022-2026 (Goals 1.1, 1.2, 1.3)

RL-4. Increase technical and financial support for small forest landowners, rural residents, and communities for wildfire risk reduction work.

Vision: Small forest landowners across King County implement wildfire risk reduction projects that serve to protect their properties, values, and wider communities.

Description:

King County has approximately 21,000 small forest landowners with less than 5 acres of land. If these community members are equipped to mitigate wildfire risk on their properties, this will have a significant protective effect across the wider region in areas that likely have a higher likelihood of exposure to wildfire. Similarly, if communities in the WUI have support for neighborhood-level mitigation, it could make a significance in our community wildfire resilience.

Hazard(s) Mitigated:

Wildfire

Funding:

Additional funding needed

Implementation Plan/Actions:

- Identify areas of King County with highest exposure and vulnerability to wildfire hazards; develop local capacity to provide wildfire technical and financial assistance in these areas.
- Provide enhanced technical and financial support to small forest landowners adjacent to active forest stewardship and wildfire resilience projects occurring on public forestland.
- Encourage key partners to identify and collaboratively address policy barriers to implement wildfire mitigation best practices at county and city levels.
- Identify community partners/organizations who can assist people with barriers to completing mitigation projects on private property.
- Support Firewise USA site-recognized communities (or similar community groups) with identification and implementation of strategic fuels reduction.

Implementation Partners:

- King County DNRP
- Local Fire Services
- DNR
- USFS MBS National Forest
- Private Non-industrial Forestland
 Owners Conservation Agencies and
 Organizations (WSU-Extension, King
 Conservation District, etc.)

Performance Measures:

Specific performance measures will be defined in project scoping. Examples may include:

- # of small forest landowners in identified highest priority areas that received support.
- Amount of financial support provided to small forest landowners in identified highest priority areas

Amount of local wildfire technical and financial assistance capacity newly developed

- King County Wildfire Risk Reduction Strategy (Action 3)
- King County 2022 Rural Forest Commission Strategic Priorities (Objectives 3.1)
- King County 30-Year Forest Plan (Strategies 1-3, 2-1)
- King County 2025 Strategic Climate Action Plan (PREP 10, 12, 13, 14, 30, 31)
- WA DNR 2020 Forest Action Plan (Wildfire Goal 2 and Priority Action 4 for Western WA)
- USDA Strategic Plan 2022-2026 (Goals 1.1, 1.3)

RL-5. Develop post-fire response plans to support forest recovery and reduce near-term wildfire impacts on natural resources.

Vision: King County has the capacity to quickly respond to and mitigate potential cascading impacts of wildfire on recently burned areas within the county.

Description:

Wildfire's impacts on natural resources vary based on the severity of the fire, and local ecosystems will eventually recover over time. However, fires can have significant repercussions to communities proximal to the burned areas that can be mitigated, such as post-fire debris flows. Within King County, there are many experts who can assist with mitigating post-fire impacts. By planning ahead on how to respond to fires within King County, including identifying possible avenues for climate adaption in the regrowth process, we can improve our ability to quickly recover our natural resources after a wildfire.

Hazard(s) Mitigated:

Wildfire, Flooding

Funding:

Additional funding needed

Implementation Plan/Actions:

- Develop and train a local Burned Area Emergency Response (BAER) team that can respond to local wildfires that impact non-federal lands within King County.
- Develop and increase local capacity to deploy resources to mitigate post-wildfire near term impacts to natural resources.

Implementation Partners:

- King County DNRP
- King County OEM
- King County DLS
- WA DNR
- USFS

Performance Measures:

Specific performance measures will be defined in project scoping. Examples may include:

- Formation of BAER team
- Creation of post-wildfire natural resource recovery plan
- Procurement of recovery resources

- King County Wildfire Risk Reduction Strategy (Action 2)
- King County 2022 Rural Forest Commission Strategic Priorities (Objectives 3.2, 3.4)
- King County 30-Year Forest Plan (Strategies 1-3)
- King County 2025 Strategic Climate Action Plan (PREP 35)
- WA DNR 2020 Forest Action Plan (Wildfire Goals 4.0, 4.3)
- USDA Strategic Plan 2022-2026 (Goals 1.1, 1.3)



All jurisdictions participate in making and implementing safe, effective, efficient risk-based wildfire management decisions.⁷²

King County's unique characteristics necessitate an urgent response to wildfire. While some fires are limited by available fuel, the dense vegetation of Western Washington presents a nearly unlimited fuel environment in which a fire can grow and spread rapidly. The propensity of the area to experience large wind-driven fires, combined with a densely populated WUI region, means that a safe and effective response to wildfire is essential to protect life, property, and other community values at risk.

Local wildland firefighting is a critical component of a wildfire response. However, a safe and effective wildfire response goes beyond firefighting; it includes actions by emergency managers, law enforcement, local elected officials, social service organizations, and community members too. While some details of a response cannot be fully planned for, there is work that can be done now to enhance the safety of communities based on what we know about our local wildfire risks.

Table 20: CWPP Mitigation Action Priorities for Enhancing Safe and Effective Response

# CWPP Strategies for Enhancing Safe and Effective Response	
SER-1	Expand wildland firefighting response and evacuation capacity within King County.
SER-2	Expand wildfire-specific emergency management preparedness and planning efforts.
SER-3	Identify wildfire-specific community recovery needs and actions to preemptively plan
	for and implement.

⁷² https://www.nafsr.org/docs/2023/050123%20Cohesive%20Strategy%20Addendum.pdf p. 3

SER-1. Expand wildland firefighting response and evacuation capacity within King County.

Vision: First responder agencies and organizations have the resources to support effective local and regional wildfire response and evacuation.

Description:

By including this mitigation action in the CWPP, we expand our capacity to apply for funding for specific resource and equipment needs and trainings for local first responders. Resources may also include equipment, training, and supplies identified by partners to support the facilitation of a wildfire evacuation.

Hazard(s) Mitigated:

Wildfire

Funding:

Additional funding needed

Implementation Plan/Actions:

• Support procurement of resources and training to support and enhance safe and effective response capacity across all regions of King County, including firefighting and evacuation.

Implementation Partners:

- King County DLS Roads
- King County OEM
- King County Sherrif's Office
- Local Fire Departments
- Local Police Departments
- Local jurisdictions
- Forest landowners
- Utility partners

Performance Measures:

Specific performance measures will be defined in project scoping. Examples may include:

 # of resources requested/procured # of attendees at trainings

- King County Wildfire Risk Reduction Strategy (Action 3, 9, 12)
- King County 2022 Rural Forest Commission Strategic Priorities (Objective 3.1, 3.4)
- King County 2024 Comp Plan (R-737, R-738, R-741)

SER-2. Expand wildfire-specific emergency management preparedness and planning efforts.

Vision: Emergency managers across King County are trained and ready for wildfire response with plans in place that are regularly exercised.

Description:

Emergency managers play an essential role in a wildfire response through sending emergency alerts, managing resource requests, and coordinating the overall response. Specific efforts like evacuation studies and planning, drills and exercises, and training will help maintain local capacity to manage a wildfire response.

Hazard(s) Mitigated:

Wildfire

Funding:

Additional funding needed

Implementation Plan/Actions:

- Enhance emergency management preparedness through supporting community wildfire response and evacuation planning, tabletop exercises and drills, and training.
- Pursue funding for Evacuation and Temporary Refuge Areas Studies.
- Increase mapping and identification of sites containing hazardous materials located in the WUI.

Implementation Partners:

- King County OEM
- King County LEPC
- Public Health Seattle and King County
- Jurisdiction Emergency Managers
- King County ECO

Performance Measures:

Specific performance measures will be defined in project scoping. Examples may include:

- # of wildfire-focused exercises
- # of evacuation studies completed
- Number of training participants

- King County Wildfire Risk Reduction Strategy (Action 1)
- King County 2022 Rural Forest Commission Strategic Priorities (Objectives 2.1, 2.2, 3.3)
- King County 30-Year Forest Plan (Strategies 1-2, 1-3, 1-4, 2-1)

SER-3. Identify wildfire-specific community recovery needs and actions to preemptively plan for and implement.

Vision: King County has taken lessons learned from other wildfires and urban conflagrations and has taken steps to support a smoother recovery process for affected communities.

Description:

King County's fire regime paints a concerning picture; we are susceptible to highly destructive wildfires, but their infrequency means we lack opportunities to learn from our previous efforts. However, there are things we can learn from other disasters as urban conflagrations continue to happen with concerning regularity. By bringing together partners to assess ways King County can prepare for a wildfire recovery, we hope to minimize avoidable challenges for our communities in future fire disasters.

Hazard(s) Mitigated:

Wildfire

Funding:

Additional funding needed

Implementation Plan/Actions:

- Assemble and work with key partners to review lessons learned and recommendations from
 previous wildfires, such as the 2025 Blue Ribbon Commission on Climate Action and Fire-Safe
 Recovery, and identify what can be applied now in King County.
- Develop plans to implement post-wildfire community recovery best practices as feasible predisaster.

Implementation Partners:

- King County OEM
- King County ECO
- King County DNRP
- Jurisdiction Emergency Managers

Performance Measures:

Specific performance measures will be defined in project scoping. Examples may include:

- Formation of Wildfire Recovery Working Group
- # new policies/policy changes
- Qualitative feedback from partners

- King County Strategic Climate Action Plan (Prep. 34)
- King County Wildfire Risk Reduction Strategy (Actions 4, 5)



Human populations and infrastructure can withstand a wildfire without loss of life or property. 73

Community wildfire risk reduction must begin within, and be sustained by, the community. Whether that is in rural, unincorporated King County or the densely populated areas along the I-90 corridor, there are things that can be done now to improve King County's ability to prevent and reduce loss during a wildfire. The following actions provide possible avenues to expand upon existing efforts to help King County become a more fire-adapted community in addition to the many listed in Part6 of the CWPP and throughout the plan.

Table 20: CWPP Mitigation Action Priorities for Becoming a Fire-Adapted Community

# (# CWPP Strategies for Becoming a Fire-Adapted Community	
FAC-1	Pursue funding to implement and expand targeted wildfire risk reduction outreach to	
.,,,	communities.	
FAC-2	Standardize and promote best management practices for wildfire mitigation.	
FAC-3	Expand capacity and coordination for countywide wildfire home assessment programs.	
FAC-4	Advance wildfire risk reduction through effective policies, plans, and codes.	
FAC-5	Establish a wildfire adapted community coalition.	

⁷³ https://www.nafsr.org/docs/2023/050123%20Cohesive%20Strategy%20Addendum.pdf p. 3

FAC-1. Pursue funding to implement and expand targeted wildfire risk reduction outreach to communities.

Vision: Partners in King County have resources, material, and staffing to effectively get information to community members that informs them of their wildfire risk, what they can do to reduce it, and how to sufficiently prepare for a wildfire evacuation.

Description:

In order for a community to be fire-adapted, the community needs to understand its wildfire risk and how to prepare accordingly. This is especially important for populations who may be at a higher level of vulnerability to negative impacts of a wildfire. This could include community members in higher-risk areas, those that would face challenges and barriers evacuating, or those that may struggle to access emergency information. Additional work is needed to expand on existing efforts to more strategically deliver wildfire risk reduction outreach across the county to those who need it most.

Hazard(s) Mitigated:

Wildfire

Funding:

Additional funding needed

Implementation Plan/Actions:

- Develop user-friendly King County wildfire risk reduction website with explorable map of wildfire risk and planning data.
- Enhance and expand existing staffing and capacity for wildfire outreach in high-risk areas of the county.
- Develop new materials and fund translations of existing materials for wildfire risk reduction and "Ready, Set, Go!" evacuation messaging.
- Pursue funding for research on effective messaging, community input gathering, and tailored outreach strategies.
- Expand outreach efforts to populations especially vulnerable to wildfire, such as older adults, people with limited mobility, and unhoused community members.

Implementation Partners:

- King County OEM
- King County DNRP
- Wildfire Mitigation Working Group
- Local Fire Departments
- Academic researchers
- Social service organizations
- Individual community advocates

Performance Measures:

Specific performance measures will be defined in project scoping. Examples may include:

- Explorable map created
- # of wildfire outreach events
- # of translations of Ready, Set, Go materials
- Creation of outreach materials for specific populations

Strategic Connections:

• King County 2025 Regional Hazard Mitigation Plan (20.7.5, 20.7.13)

FAC-2. Standardize and promote best management practices for wildfire mitigation.

Vision: Partners across King County and Western Washington collaboratively share consistent messaging relating to wildfire mitigation in alignment with scientifically established best practices.

Description:

Partners in King County that actively engage in wildfire mitigation education report that community members often misunderstand what mitigation actions are most beneficial to implement in Western Washington. By bringing partners together to standardize and promote best management practices, we can help ensure consistency in messaging across the region that promotes evidence-based practices to protect homes and communities.

Hazard(s) Mitigated:

Wildfire

Funding:

Additional funding needed

Implementation Plan/Actions:

- Develop Wildfire Action Plan booklet to share wildfire best practices with communities and regional partners.
- Meet annually with wildfire mitigation partners to discuss and align outreach messaging.

Implementation Partners:

- King County OEM
- King County DNRP
- King County ECO
- Wildfire Mitigation Working Group
- Local Fire Departments
- Academic researchers

Performance Measures:

Specific performance measures will be defined in project scoping. Examples may include:

- Booklet finalized and published
- # Standardization materials shared
- Qualitative feedback from partners

- King County 2025 Strategic Climate Action Plan (Prep 33)
- King County Wildfire Risk Reduction Strategy (Action 6)

FAC-3. Expand capacity and coordination for countywide wildfire home assessment programs.

Vision: Community members across King County can access wildfire home assessments and mitigation cost-share funding to build defensible space and harden their homes.

Description:

Wildfire home assessment programs have been incredibly successful and highly sought after in King County. As wildfire risk awareness grows, we want to ensure that the region's capacity to provide these services is able to keep pace with demand in a coordinated and collaborative manner.

Hazard(s) Mitigated:

Wildfire

Funding:

Additional funding needed

Implementation Plan/Actions:

- Increase staffing to support home assessment programs and strategic outreach across King County.
- Expand King County cost-share program capacity and home mitigation materials available, and develop additional criteria to guide prioritized provision of services for home hardening and building defensible space in the immediate and intermediate zones around homes in the WUI.
- Annually host S-215 WUI Fire Operations Training and/or Assessing Structural Ignition Prevention (ASIP) Training in King County open to all fire departments and wildfire mitigation professionals.
- Establish a countywide platform for tracking wildfire home and community risk assessments.

Implementation Partners:

- King County OEM
- King County DNRP
- Wildfire Mitigation Working Group
- Local Fire Departments

Performance Measures:

Specific performance measures will be defined in project scoping. Examples may include:

- # of home assessments requested
- # of home assessments completed
- # of mitigation cost-share applications
- # of mitigation cost-share projects funded/implemented

- King County 2024 Comp Plan (R-736, R-737, Action 6)
- King County 2025 Regional Hazard Mitigation Plan (20.7.25)

FAC-4. Advance wildfire risk reduction through effective policies, plans, and codes.

Vision: Evidence-based wildfire adaption best practices are built into King County's building codes, plans, and policies for the protection of our communities.

Description:

Implementing wildfire safety measures is one of the most cost-effective ways to protect communities. However, any changes to codes, policies, and plans must be implemented thoughtfully and carefully. This strategy aims to bring partners together to ensure the process for improving community wildfire adaption is streamlined, collaborative, and cohesive.

Hazard(s) Mitigated:

Wildfire

Funding:

Additional funding needed

Implementation Plan/Actions:

- Provide regular trainings on land use planning for wildfire and send local land use planners, fire marshals, building officials, and municipal jurisdiction code writers who work in the WUI to these trainings.
- Create a guide for local jurisdictions on developing and implementing effective codes, policies, and plans to reduce wildfire risk based on wildfire mitigation best practices.
- Adopt WUI code per state requirements/timeline; develop working group of local and regional experts to facilitate the smooth adoption of WUI codes in King County.

Implementation Partners:

- King County OEM
- King County DNRP
- King County DLS
- Wildfire Mitigation Working Group
- Local Fire Departments

Performance Measures:

Specific performance measures will be defined in project scoping. Examples may include:

- # of trainings provided/# of attendees
- Guide published
- Qualitative feedback from partners
- WUI code adopted

- King County Wildfire Risk Reduction Strategy (Action 5)
- King County 2022 Rural Forest Commission Strategic Priorities (Objectives 1.6, 3.2)
- King County 30-Year Forest Plan (Strategies 1-3, 2-1)
- King County 2024 Comp Plan (R-314, R-732, R-736, R-737, R-738, R-740, E-223)
- King County 2025 Strategic Climate Action Plan (PREP 30, 31, 33)
- WA DNR 2020 Forest Action Plan (Wildfire Goals 1 and 2)

FAC-5. Establish a wildfire adapted community coalition.

Vision: King County community members take the lead on helping their communities adapt to wildfire.

Description:

The most effective wildfire adaption work requires community buy-in and engagement over the long term. Establishing wildfire adapted community coalition(s) will help provide a structure and forum for active community members to lead their peers in protecting their neighborhoods. This should be prioritized in highest risk areas first, including Fire Districts 50 and 47.

Hazard(s) Mitigated:

Wildfire

Funding:

Additional funding needed

Implementation Plan/Actions:

• Support wildfire adapted community coalition formation at local/jurisdictional level; prioritize this action for high-risk areas of Zone 1-Rural and Zone 3-Rural areas (such as the greater Skykomish area (Fire District 50) or the Kangley-Palmer area (Fire District 47)).

Implementation Partners:

- King County OEM
- King County DNRP
- Wildfire Mitigation Working Group
- Local Fire Departments
- Local Community Groups (HOAs, civic organizations, etc.)

Performance Measures:

Specific performance measures will be defined in project scoping. Examples may include:

- Coalition(s) formed
- # of members
- # of meetings

Strategic Connections:

- King County 2025 Strategic Climate Action Plan (Prep 32)
- King County 2024 Comp Plan (R-739)

Acronyms

BAER: Burned Area Emergency Response team

CDC/ATSDR: Centers for Disease Control/Agency for Toxic Substances and Disease Registry

CWPP: Community Wildfire Protection Plan

DLS: Department of Local Services, King County

DNR: Washington State Department of Natural Resources

DNRP: Department of Natural Resources and Parks, King County

ECO: Executive Climate Office, King County

ENR: Environmental and Natural Resource Department

FEMA: Federal Emergency Management Agency

HFRA: Healthy Forests Restoration Act

HVRA: Highly Valued Resources and Assets

IBHS: Insurance Institute for Business & Home Safety

KCD: King Conservation District

NOAA: National Oceanic and Atmospheric Administration

NWS: National Weather Service

OEM: Office of Emergency Management, King County

PDS: Particularly Dangerous Situation

PHSKC: Public Health – Seattle and King County

PNW-QWRA: Pacific Northwest Quantitative Wildfire Risk Assessment dataset

PSE: Puget Sound Energy

PSPS: Public Safety Power Shutoff

PTSD: Post-Traumatic Stress Disorder

RHMP: Regional Hazard Mitigation Plan

SPU: Seattle Public Utilities

USFS: United States Forest Service

USGS: United States Geological Survey

WALERT: Wildfire Associated Landslide Emergency Response Team

WUI: Wildland Urban Interface

Glossary

- **Assisted Migration:** A climate adaptation strategy where land managers assist the movement of species in response to climate change.
- **Burn Scar:** The geographic area touched by a particular fire (sometimes referred to as a "fire footprint").
- **Community Wildfire Protection Plan (CWPP):** A collaborative, community-driven plan that outlines local priorities for wildfire risk mitigation. CWPPs were established in 2003 by Congress with the passage of the Healthy Forests Restoration Act.
- **CWPP Extended WUI + Ember Zone:** An area outlined for the King County CWPP that includes all the 2019 DNR mapped WUI areas in King County adjacent to the wildlands, critical infrastructure not captured DNR's map, and adds all areas within a 2-mile radius of the DNR WUI and critical infrastructure.
- **Defensible Space:** An area around a structure or home where combustibles have been removed or altered to reduce wildfire risk and increase the potential for firefighters to be able to defend a home during a wildfire.
- **Ember:** flaming or glowing fuel particles that can be carried naturally by wind, convection currents, or by gravity into unburned fuels and cause new ignitions.
- **Exposure:** The spatial coincidence of wildfire likelihood and intensity with communities. Any community that is located where there is a chance wildfire could occur is exposed to wildfire.
- **Extended Zone**: The space that extends 30-100+ feet from exterior walls and any building attachments such as decks, stairs, etc. Of the three zones surrounding a home, this is the lowest priority for wildfire mitigation.
- Fire Adapted Community: a human community consisting of informed and prepared citizens collaboratively planning and taking action to safely coexist with wildland fire.
- **Fire Regime**: The characteristic pattern, frequency, and intensity of wildfires in a particular ecosystem or geographical area over a specific period of time. It encompasses various factors such as the frequency of fires, the size of fires, the severity of burns, and the types of vegetation affected. Fire regimes are influenced by natural factors like climate, topography, and vegetation, as well as human activities.
- **Fire Regime:** The pattern (type, frequency, intensity, size, seasonality, severity, cause of ignition) of wildland fire in a particular area or ecosystem over time.
- **Fire Weather Watch:** an advisory issued by the National Weather Service when there is a potential for critical fire weather conditions to develop.
- Fire Weather: Weather conditions which influence fire ignition, behavior, and suppression

- **Forest Action Plan:** Every state has a forest action plan. A state's Forest Action Plan includes indepth analysis of forest conditions and trends and outlines strategies to conserve, protect, and enhance its forests and trees over the long run.
- Forest Management or Stewardship Plan: Outlines the landowners' objectives for their forest, describes the current forest condition, and outlines a plan of action to achieve their management goals.

Fuel: All combustible materials, including but not limited to vegetation and structures

Hardening: Modifying a site or structure to increase wildfire resistance.

Hazard reduction: Coordinated activities and methods directed to reduce or eliminate conditions that can cause damage, loss, or harm from real or potential hazards.

Hazard: Any real or potential condition that can cause damage, loss, or harm to people, infrastructure, equipment, natural resources, or property.

Highly Valued Resources and Assets:

- **Home Assessment:** Evaluation of a dwelling and it's immediate surrounding to determine its potential to escape damage by an approaching wildland fire. Includes the fuels and vegetation in the yard and adjacent to the structure, roof environment, decking and siding materials, prevailing winds, topography, fire history, etc., with the intent of mitigating fire hazards and risks.
- **Immediate Zone:** The space that extends from zero to five feet from exterior walls of a home and any building attachments such as decks, stairs, etc. Of the three zones surrounding a home, this is the highest priority for wildfire mitigation.
- **Intensity:** The measure of the energy expected from a wildfire, often expressed in terms of flame length.
- **Intermediate Zone**: The space that extends five to 30 feet from exterior walls and any building attachments such as decks, stairs, etc.
- **Ladder Fuels:** Fuels which provide vertical continuity between strata, thereby allowing fire to carry from surface fuels into the crowns of trees or shrubs with relative ease.
- **Mitigation Actions:** Actions that are implemented to reduce or eliminate (mitigate) risks to persons, property or natural resources. These can be undertaken before, during, and after a wildfire.
- **Mitigation:** Modifying the environment or human behavior to reduce potential adverse impacts from a natural hazard.
- **Mutual Aid:** a set of agreements between agencies to provide assistance to each other upon request when local capacity is exceeded.
- Particularly Dangerous Situation (PDS) Red Flag Warning: an urgent warning issued by the National Weather Service during rare and exceedingly dangerous conditions. A PDS Red Flag Warning indicates imminent and extreme fire danger and should be taken incredibly seriously.

- **PM2.5:** Airborne particles 2.5 micrometers or smaller in size, one of the most important air pollutants of health concern in Washington.
- **Preparedness:** A continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response.
- **Prevention:** Activities directed at reducing the incidence of human caused fires through public education, rules, regulations and law enforcement community actions.

Probability: A measure of the chance of event occurrence.

Probability: The annual probability of wildfire burning in a specific location.

- **Recovery:** Encompasses both short-term and long-term efforts for the rebuilding and revitalization of affected communities. Short-term recovery focuses on crisis counseling and restoration of lifelines such as water and electric supply, and critical facilities. Long-term recovery includes more permanent rebuilding.
- **Red Flag Warning:** a warning issued by the National Weather Service when critical fire weather conditions are either imminent or occurring, and any fires that develop during this time will likely spread quickly.

Resilience: The ability to recover from undesirable outcomes, both individually and organizationally.

- **Response:** Activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes during an incident.
- **Risk:** A chance of suffering harm or loss from a wildfire based on the combination of likelihood and intensity (together called "hazard") and exposure and susceptibility (together called "vulnerability").
- **Stand-Replacing Fire:** Fire which kills all or most of the living overstory trees in a forest and initiates forest succession or regrowth.

Susceptibility: The propensity of a home or community to be damaged if a wildfire occurs.

- **Topography:** The shape of the land; it can include descriptions of elevation with the height above sea level; slope, the steepness of the land; aspect, the direction a slope faces (e.g., the south side of a canyon will have a north-facing slope); features, such as canyons, valleys, rivers, etc.
- **Urban Conflagration**: When a fire burns out of control in an urban setting (i.e. through a neighborhood).
- **Wildfire Behavior Triangle:** The factors that influence how a wildfire burns and moves across an area, including weather, topography, and fuels.

- **Wildfire**: An unplanned, unwanted fire burning in a natural area, including forests, grasslands, prairie, or brush. Wildfires can start from natural causes, such as lightning, but are most frequently caused by humans, either accidentally or intentionally.
- **Wildland Fire**: Any non-structure fire that occurs in vegetation or natural fuels. Includes wildfires and prescribed fires.
- **Wildland Urban Interface (WUI):** the presence of structures or infrastructure in locations where the potential exists for ignition or severe negative impacts from the flames, radiant heat, or embers of a wildland fire.

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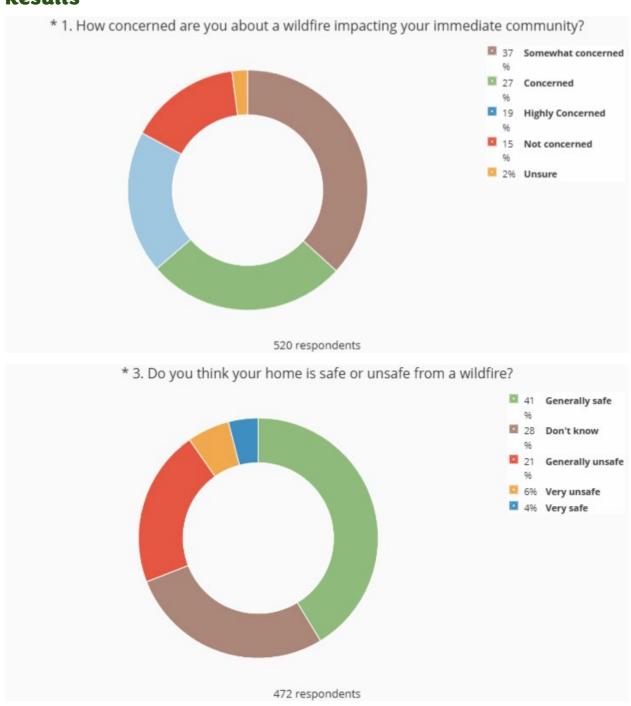
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Appendices

Appendix A: Community Wildfire Protection Planning Survey Results

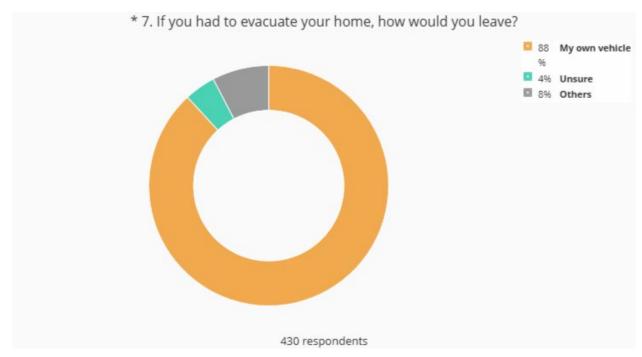


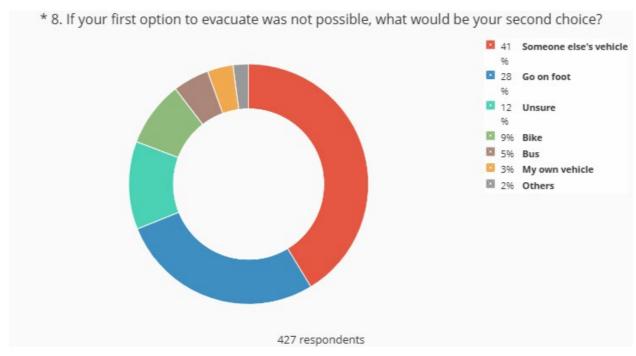
* 5. How would you rank the importance of protecting the things listed below from the impacts of a wildfire in King County?

	1 (low)	2	3	4	5 (high)
Human lives	1% 1 (low)	1%	2% 3	3% 4	93% 5 (high)
First responders & firefighters	1 (low)	1% 2	2% 3	6% 4	91% 5 (high)
Drinking water/watersheds	1% 1 (low)	3% 2	10%	30% 4	57% 5 (high)
Critical infrastructure (power lines, transportation routes, cell/radio towers, etc.)	1% 1 (low)	2% 2	14%	33% 4	49% 5 (high)
Wildlife/endangered species	3% 1 (low)	8% 2	21% 3	30% 4	38% 5 (high)
Natural environments (forests, grasslands, open spaces)	5% 1 (low)	7% 2	23%	29% 4	35% 5 (high)
Access to outdoor recreation activities (trail systems, fishing, etc.)	12% 1 (low)	17% 2	33%	22% 4	16% 5 (high)
Pets and livestock	3% 1 (low)	8% 2	20%	29% 4	40% 5 (high)
Community assets (parks, schools, community spaces, etc.)	2% 1 (low)	9% 2	26% 3	30% 4	34% 5 (high)
444 responses					

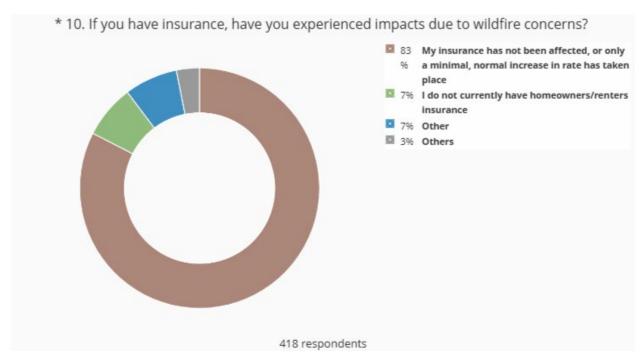
* 6. How prepared are you to evacuate if your home was at risk of a wildfire (check all that apply)?

45% I'm signed up for Alert King County	194~
1 have not yet prepared for an evacuation	188~
32% I have a go-kit ready for myself/my household	136~
29% I know the Ready, Set, Go! evacuation protocols	124~
25% I have made evacuation plan(s)	109~
7% I have practiced my evacuation plan(s)	29~
4% Other	16~
429 Respondents	









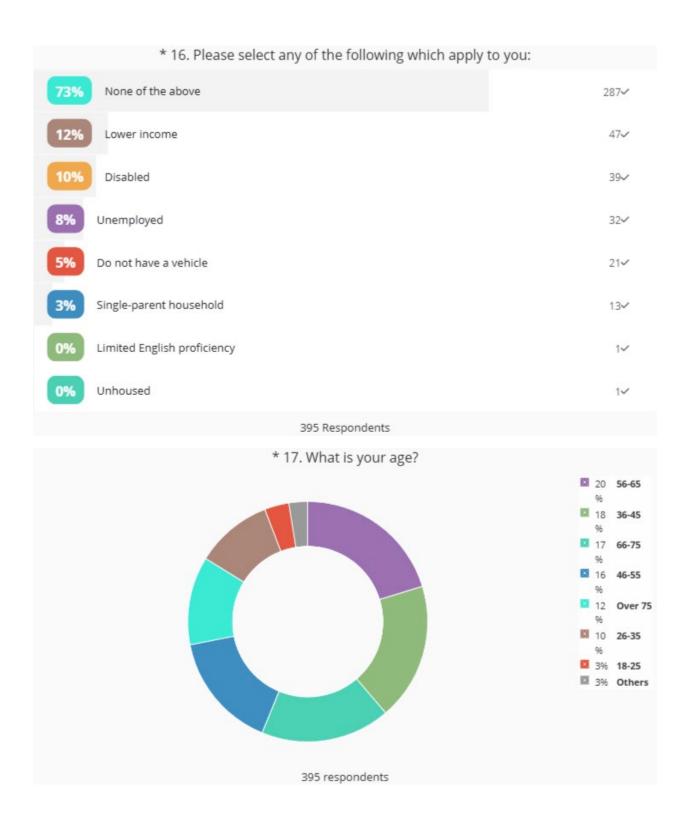
* 11. What actions do you take to protect your home from burning in a wildfire? (select all that apply)

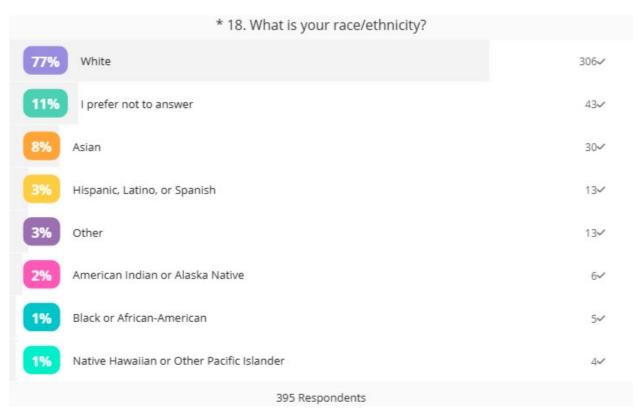
65%	Clean debris from my roof and gutters regularly.	273~
41%	Check for and repair gaps or holes in the house siding.	173~
41%	Maintain my wood deck or have noncombustible deck surface material.	172~
39%	Maintain a 5+ foot noncombustible zone (free of weeds, pine needles etc) around the house.	161~
21%	Maintain a noncombustible zone around all outbuildings.	88~
21%	None of the above	88~
10%	Other	42~
	417 Respondents	

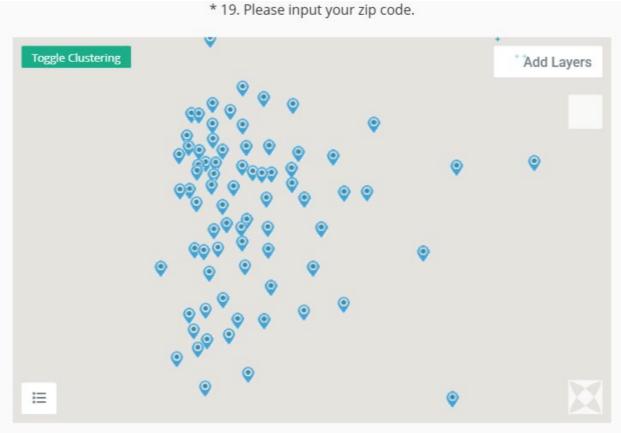
* 12. What obstacles prevent you from taking action to protect your home from burning in a wildfire? (choose all that apply)

wildille: (choose all that apply)	
39% Neighboring properties that I have no control over	160~
29% Money	121~
27% Time	113~
27% I don't have enough knowledge on what to do	113~
None; I am able to take action to keep my home safe from a wildfire	75~
14% I rent my home and am limited in what I can change	59~
12% Don't feel I need to	48~
10% Not physically able to do mitigation work around my home	43~
10% Aesthetic concerns	43~
Restrictions from homeowner's association, property manager, or local regulations	40~
I have other concerns/priorities that are higher than protecting my home from wildfire	38✓
6% Other	25~
2% I can't find the help I need	8~
413 Respondents	

* 13. Which of the following would encourage you to take action to reduce the v your property?	wildfire risk on
Specific information about what I should do to reduce risk of wildfire on my property	239~
Access to inexpensive/easy means of disposing vegetation from mitigation work	134~
29% Financial assistance	120~
Help doing the work (e.g., building 5+ ft. noncombustible zone around my home, cleaning leaves/pine needles from my roof/gutters, etc.)	118~
26% A list of recommended contractors that could be hired to do the work	109~
18% None of the above	75~
8% Other	33~
412 Respondents	
15. Which would you be willing to participate in to support wildfire risk reduc community? (choose all that apply)	tion in your
51% Advocate for wildfire safety policies and ordinances.	194~
30% Volunteer time and labor for wildfire risk reduction activities.	115~
25% Volunteer time to raise wildfire awareness.	93~
19% I would not be willing to participate in any work to support wildfire risk reduction in my community.	73~
18% Contribute to a wildfire risk reduction fund.	68~
Act as a community leader/project manager to support wildfire risk reduction projects.	61~
8% Other	30~
378 Respondents	







Appendix B: Record of CWPP Revisions

The following is a record of substantive changes made to the CWPP.

Change Number	Location of Change	Date of Change	Individual Making Change	Description of Change

Appendix C: PNW-QWRA Risk Assessment Calculations across CWPP Planning Areas

The following calculations were conducted by King County GIS experts that analyzed the areas assessed to have different levels of loss according to the 2023 PNW-QWRA risk assessment. These impacts were determined by assessing local fuels data, specific Highly Valued Resources and Assets (HVRAs) present (defined on pp. 55-56), and projected fire behavior if a fire were to occur at any location in King County. These are models, not predictions, and should not be read as defined projections of future fire impacts. However, this can be useful for understanding where to prioritize wildfire mitigation work around certain HVRAs.

Expected Impacts to PEOPLE, PROPERTY, INFRASTRUCTURE, and DRINKING WATER in King County accounting for Annual Wildfire Probability							
	Very high	High loss	Moderate	Low loss	Very low		
CWPP Planning Area	loss	(in acres)	loss	(in acres)	loss		
	(in acres)		(in acres)		(in acres)		
King County	27,502	37,491	86,596	14,1618	27,1678		
Zone 1 - Urban-Suburban	0	177	13037	12,280	60,036		
Zone 1 - Rural	4,148	7,785	23,106	52,148	39,652		
Zone 3 - Urban-Suburban	0	42	11,122	11,448	66,478		
Zone 3 - Rural	23,294	29,184	29,510	54,876	61,460		
Zone 5 - Seattle	0	94	3,047	1,839	40,167		
Zone 3 - Vashon	2	186	6,647	8,891	3,476		

The data are further divided into whether or not the calculations account for annual wildfire probability. Wildfire probability in our low-frequency wildfire regime is a challenging metric, so being able to understand impacts with and without it can be informative of how to prepare for rare but possible large wildfires (explained further on p. 57).

Expected Impacts to PEOPLE AND PROPERTY in King County					Accounting for Annual Wildfire Probability		
CWPP Planning Area	Very high loss	High loss	Mod	derate loss	Low loss		
CWPP Plaining Area	(in acres)	(in acres)	(in a	cres)	(in acres)		
Zone 1 - Urban-Suburban	8	1,408	12,0)23	71,304		
Zone 1 - Rural	72	5,078	27,6	610	65,438		
Zone 3 - Urban-Suburban	0	519	9,46	64	76,725		
Zone 3 - Rural	1	1,515	17,6	607	69,172		
Zone 5 - Seattle	0	121	2,79)7	41,995		
Zone 3 - Vashon	4	2,083	9,11	8	7,824		

Expected Impacts to PEO	NOT accounting for Annual Wildfire Probability				
CWPP Planning Area	Very high loss High loss Mod				Low loss
GWPP Flamming Area	(in acres)	(in acres)	(in a	icres)	(in acres)
Zone 1 - Urban-Suburban	12,102	7,059	4,619		60,962
Zone 1 - Rural	6,952	19,462	28,6	14	43,170
Zone 3 - Urban-Suburban	9,124	5,844	4,87	75	66,866
Zone 3 - Rural	4,766	16,065	23,945		43,520
Zone 5 - Seattle	2,923	901	746		40,342
Zone 3 - Vashon	1,339	4,459	6,77	7	6,452

Expected Impacts to INF	Accountin Wildfire Pr	g for Annual obability		
CWPP Planning Area	Very high loss	High loss	Moderate loss	Low loss
CWPP Plaining Area	(in acres)	(in acres)	(in acres)	(in acres)
Zone 1 - Urban-Suburban	0	0	84	20,948
Zone 1 - Rural	682	1,459	4,447	24,656
Zone 3 - Urban-Suburban	0	0	9	26,556
Zone 3 - Rural	606	711	3,172	26,484
Zone 5 - Seattle	0	0	0	11,891
Zone 3 - Vashon	0	2	101	937

Expected Impacts to INFI	NOT accounting for Annual Wildfire Probability						
Very high loss High loss Mod			Moderate loss		Low loss		
CWPP Planning Area	(in acres)	(in acres)	(in a	cres)	(in acres)		
Zone 1 - Urban-Suburban	1,020	818	497		270		
Zone 1 - Rural	3,710	4,531	2,86	62	2,248		
Zone 3 - Urban-Suburban	776	2,014	610		524		
Zone 3 - Rural	1,905	2,563	4,948		1,992		
Zone 5 - Seattle	284	198	204		204		109
Zone 3 - Vashon	189	23	353		138		

Expected Impacts to DRI	Accounting for Annual Wildfire Probability					
CWPP Planning Area	Very high loss	High loss	Mod	lerate loss	Low loss	
GWPP Planning Alea	(in acres)	(in acres)	(in a	cres)	(in acres)	
Zone 1 - Urban-Suburban	0	0	0		6	
Zone 1 - Rural	2,343	3,008	1,67	8	2,001	
Zone 3 - Urban-Suburban	0	0	0		2	
Zone 3 - Rural	25,171	23,056	15,1	22	12,501	
Zone 5 - Seattle	0	0	0		0	
Zone 3 - Vashon	0	18	68	68 251		

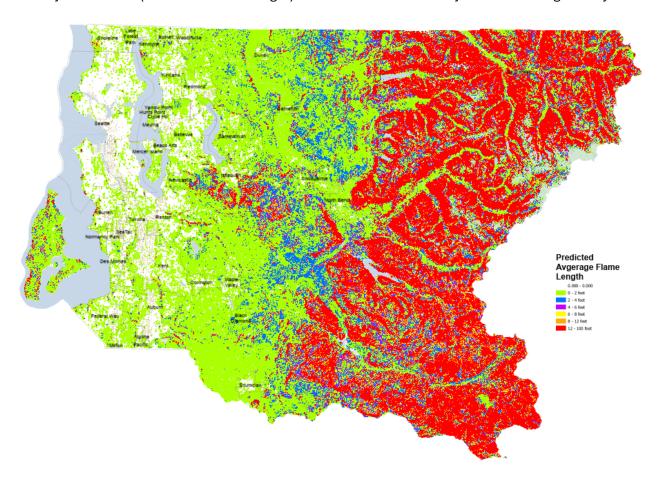
Expected Impacts to DRINKING WATER in King County Wildfire Probability					•
CWDD Blanning Area	Very high loss	High loss	Mod	derate loss	Low loss
CWPP Planning Area	(in acres)	(in acres)	(in a	icres)	(in acres)
Zone 1 - Urban-Suburban	0	0	1		10
Zone 1 - Rural	5,335	1,632	1,005		1,085
Zone 3 - Urban-Suburban	0	0	0		10
Zone 3 - Rural	44,627	16,274	8,435		7,568
Zone 5 - Seattle	0	0	0		0
Zone 3 - Vashon	77	38	93		133

Appendix D: Wildfire Mapping

The maps below pull data from the PNW-QWRA. A strategy identified in the CWPP is to seek funding for an interactive map so community members can explore the data individually. In the meantime, these maps have been shared for those curious about impacts of wildfire beyond what are shared in the main body of the CWPP.

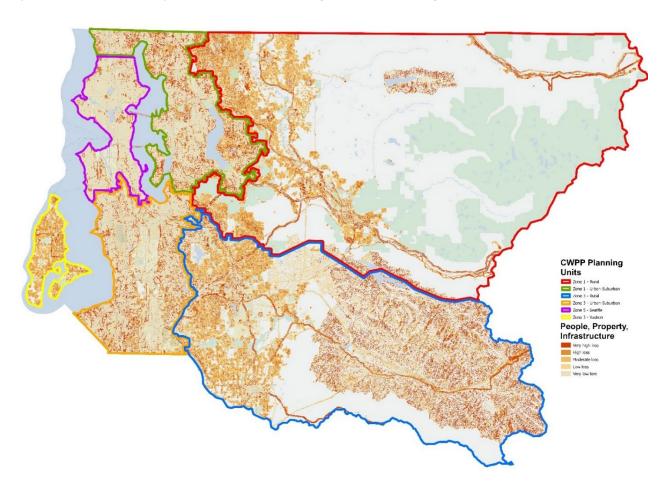
Map 1: Predicted Average Flame Length Across King County

This map uses PNW-QWRA data to analyze predicted fire behavior and local fuels data to model the intensity of a wildfire (estimated flame length) if one were to occur at any location in King County.



Map 2: Expected Impacts to People, Property, Infrastructure, and Drinking Water Across King County WITHOUT Burn Probability

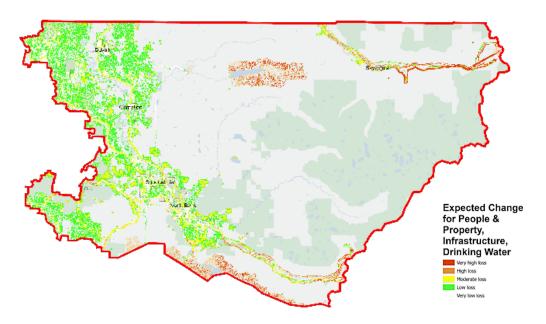
The map below uses PNW-QWRA data to demonstrate projected impacts to people and property, infrastructure, and drinking water if a wildfire was to occur in any given location in King County **without** accounting for annual burn probability. This is calculated by considering the Highly Valued Resources and Assets relating to people, property, infrastructure, and drinking water present (definitions on p. 55-56) and expected flame lengths for local topography and fuels.



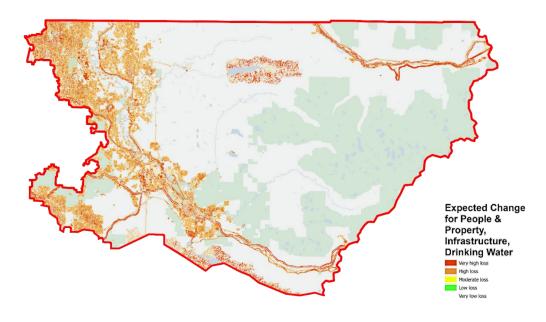
Map 3: Expected Impacts of Wildfire on People, Property, Infrastructure, and Drinking Water in Zone 1 – Rural

The maps below use PNW-QWRA data to demonstrate projected impacts to people and property, infrastructure, and drinking water if a wildfire was to occur in any given location in Zone 1 – Rural with and without accounting for annual wildfire probability. This is calculated by considering the Highly Valued Resources and Assets relating to people, property, infrastructure, and drinking water present (definitions on p. 55-56) and expected flame lengths for local topography and fuels.





Map 3B15: Impacts to People, Property, Infrastructure, and Drinking Water – WITHOUT Accounting for Annual Probability

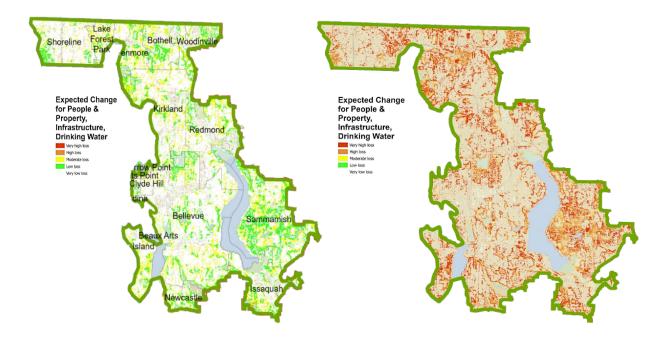


Map 4: Expected Impacts of Wildfire on People, Property, Infrastructure, and Drinking Water in Zone 1 – Urban/Suburban

The maps below use PNW-QWRA data to demonstrate projected impacts to people and property, infrastructure, and drinking water if a wildfire was to occur in any given location in Zone 1 – Urban/Suburban with and without accounting for annual wildfire probability. This is calculated by considering the Highly Valued Resources and Assets relating to people, property, infrastructure, and drinking water present (see p. 55-56) and expected flame lengths for local topography and fuels.

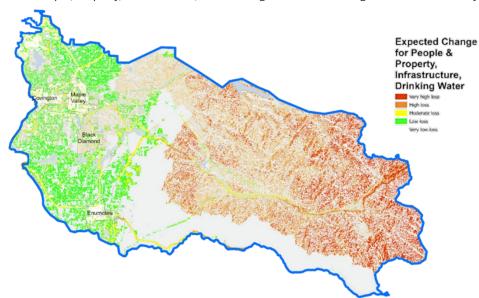
Map 4A16: Impacts to People, Property, Infrastructure, and Drinking Water - Accounting for Annual Probability

Map 4B17: Impacts to People, Property, Infrastructure, and Drinking Water – WITHOUT Accounting for Annual Probability



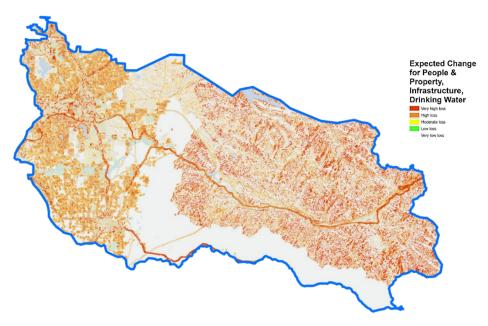
Map 5: Expected Impacts of Wildfire on People, Property, Infrastructure, and Drinking Water in Zone 3 – Rural

The maps below use PNW-QWRA data to demonstrate projected impacts to people and property, infrastructure, and drinking water if a wildfire was to occur in any given location in Zone 3 – Rural with and without accounting for annual wildfire probability. This is calculated by considering the Highly Valued Resources and Assets relating to people, property, infrastructure, and drinking water present (definitions on p. 55-56) and expected flame lengths for local topography and fuels.



Map 5A18: Impacts to People, Property, Infrastructure, and Drinking Water - Accounting for Annual Probability



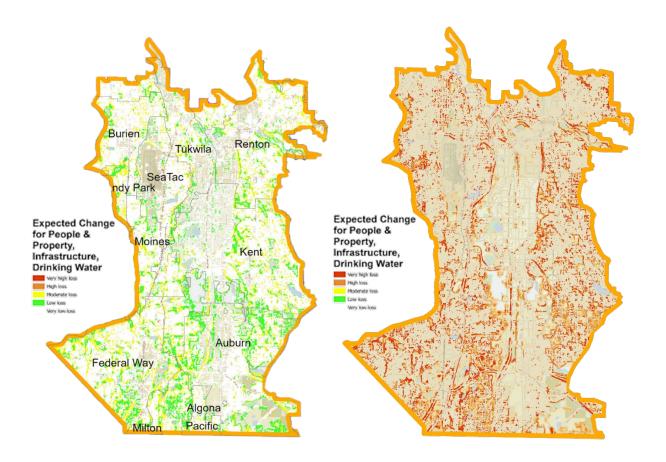


Map 6: Expected Impacts of Wildfire on People, Property, Infrastructure, and Drinking Water in Zone 3 – Urban/Suburban

The maps below use PNW-QWRA data to demonstrate projected impacts to people and property, infrastructure, and drinking water if a wildfire was to occur in any given location in Zone 1 – Urban/Suburban with and without accounting for annual wildfire probability. This is calculated by considering the Highly Valued Resources and Assets relating to people, property, infrastructure, and drinking water present (see p. 55-56) and expected flame lengths for local topography and fuels.

Map 4A20: Impacts to People, Property, Infrastructure, and Drinking Water - Accounting for Annual Probability

Map 6B21: Impacts to People, Property, Infrastructure, and Drinking Water – WITHOUT Accounting for Annual Probability



Map 7: Expected Impacts of Wildfire on People, Property, Infrastructure, and Drinking Water in Zone 3 – Vashon

The maps below use PNW-QWRA data to demonstrate projected impacts to people and property, infrastructure, and drinking water if a wildfire was to occur in any given location in Zone 3 – Vashon with and without accounting for annual wildfire probability. This is calculated by considering the Highly Valued Resources and Assets relating to people, property, infrastructure, and drinking water present (definitions on p. X) and expected flame lengths for local topography and fuels.

Map 7A22: Impacts to People, Property, Infrastructure, and Drinking Water - Accounting for Annual Probability

Map 7B23: Impacts to People, Property, Infrastructure, and Drinking Water – WITHOUT Accounting for Annual Probability

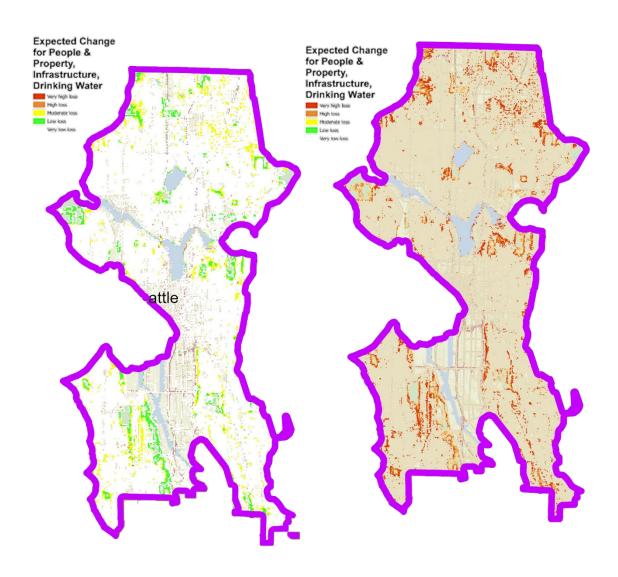


Map 8: Expected Impacts of Wildfire on People, Property, Infrastructure, and Drinking Water in Zone 5 – Seattle

The maps below use PNW-QWRA data to demonstrate projected impacts to people and property, infrastructure, and drinking water if a wildfire was to occur in any given location in Zone 5 – Seattle with and without accounting for annual wildfire probability. This is calculated by considering the Highly Valued Resources and Assets relating to people, property, infrastructure, and drinking water present (definitions on p. X) and expected flame lengths for local topography and fuels.

Map 8A24: Impacts to People, Property, Infrastructure, and Drinking Water - Accounting for Annual Probability

Map 8B25: Impacts to People, Property, Infrastructure, and Drinking Water – WITHOUT Accounting for Annual Probability



Appendix E: Mitigation Actions Tied to CWPP

The table below lists mitigation strategies and strategic priorities from other King County plans that tie directly into the goals of the CWPP. This CWPP does not aim to recreate the wheel but seeks to support and expand upon the existing work done across the county on wildfire hazard mitigation. Rather than relist all of these strategies in the plan above,

		National Cohesive Strategy Alignment			
Plan ID	Strategy	Resilient Landscapes	Safe and Effective Response	Fire Adapted Community	
2022 King County Wildfire	Promote species and structural diversity within King County forests to improve wildfire resilience.	Х			
Risk Reduction Strategy	Develop post-fire response plans to support forest recovery and reduce near-term wildfire impacts on natural resources.	Х			
	Increase technical and financial support for small forest landowners for wildfire risk reduction.	Х	Х		
	Develop community wildfire preparedness, response, and recovery plans.		Х		
	Advance wildfire risk reduction through effective policies, plans, and codes.		Х		
	Create King County-specific wildfire mitigation best management practices and expand household-level wildfire mitigation assistance.		Х		
	Increase monitoring and control of invasive species that increase wildfire risk in the wildland-urban interface.		Х		
	Implement the "Ready, Set, Go!" public education evacuation program in the wildland-urban interface.		X	Х	
	Implement countywide training standards for all levels of wildfire response.			Х	
	Establish partnerships and agreements to ensure timely and cost-effective access to wildfire firefighting resources.		Х		
	Implement a coordinated approach to public education and outreach on wildfire risk reduction in King County.	Х	X	х	
	Enhance and expand opportunities for shared learning and coordination related to wildfire risk reduction.	Х	Х	Х	

30-Year	Improve the preparedness of			
Forest Plan	communities near forests for potential			V
	increase in fire risk caused by climate			Х
	change.			
	Increase the area of healthy and resilient	V		
	forestland.	X		
	Maintain urban trees and improve urban	V		
	forest health.	X		
	Protect, increase, and improve the extent			
	and forest health in the headwaters of			
	salmon streams to improve ecological	X		
	function and protect water quality and			
	quantity.			
2025	Create a Wildfire Management Plan for		Х	
Strategic	landfills and transfer stations.		Χ	
Climate	Develop Community Wildfire Protection	V		V
Action Plan	Plans.	Х		Х
	Establish a wildfire adapted community			Х
	coalition.			^
	Plan for post-wildfire community			V
	recovery.			Х
	Prepare and plan for post-wildfire			
	recovery on King County-owned	X		
	forestland.			
	Standardize and promote best			
	management practices for wildfire	X		X
	mitigation.			
	Work collaboratively on shared wildfire			
	risk reduction priorities with other			X
	jurisdictions and partners.			
2024 King	Co-create [wildfire smoke] educational			
County	materials with trusted community			X
Wildfire	messengers in multi-media formats.			
Smoke	Increase language accessibility of			Х
Health	[wildfire smoke] risk communications.			
Impacts	Support distribution of portable air			
Mitigation	cleaners, indoor air quality sensors, and		Х	
Plan	weatherization resources to frontline		Α	
	communities and low-income residents.			
King County	Develop a comprehensive approach to	X		
Rural Forest	rural wildfire planning.	^		
Commission	Expand delivery of community and	X		
Strategic	landowner wildfire risk management.			
Priorities	Improve King County capacity for wildfire		Х	
	response and training.			
	Reduce risk to public forestland from park			Х
	visitors.			

King County Regional	Expanding Roadway Access to Isolated Communities in Unincorporated King		X	Х
Hazard	County.			
Mitigation Plan	Identify and Create County-Wide Resilience Hubs.		Х	Х
	King Conservation District Wildfire Mitigation Program.	Х		Х
	King County Community Wildfire Protection Plan.			Х
	Mount Si Road Undergrounding Project.			Х
	Plan for Post-Wildfire Community Recovery.		Х	х
	Standardize and Promote Best Management Practices for Wildfire Mitigation.	X		Х
	Expanding Public Awareness of "Make It Through" Website			Х
	Climate Change and Health Adaptation Strategy	Х		Х
	Risk Reduction Through Equitable Language Access.		Х	х
	Increase Alert King County Registrations.		Х	X
	Integration of Hazard Mitigation into County Plans	Х		Х
	KC Zone Program.			Х
	Improving Emergency Management Public Outreach.		Х	Х

Appendix F: CWPP/RHMP Project Template

The template below will be completed during the scoping process for any CWPP project pursuing funding to align with the King County Regional Hazard Mitigation Plan.

Action:				
Lead Points of Contact (Title)	Who else of benefits fro	ints of Contact (Title) utside your jurisdiction m the strategy or will help the strategy?	Funding Sources and Estimated Costs	Urgency/Priority
Strategy Vision/O	bjective Long-t	erm objective and vision fo	or the strategy	
		program/proposed progran		Ohiactivas
2-Year Objectives		5-Year Objectives	Long-Term	Objectives

Implementation Plan/Actions Th	l is can provide a timeline. indicate i	partners, discuss
implementation stages, etc. Use tl		
the long term.		
Performance Measures		