



CLIMATE PREPAREDNESS

INTRODUCTION

Climate change is occurring and the pace of that change is accelerating. According to the National Oceanic and Atmospheric Administration (NOAA) and other scientific organizations, 2024 was the hottest year on record globally since 1850.¹ The planet's 10 hottest years since 1850 have all occurred since 2015.

Communities near and far are increasingly feeling the impacts—and the costs—of climate change. In 2024, the United States experienced the second highest number of climate and weather-related disasters with losses exceeding \$1 billion each (27 events), second only to 2023 (28 events).² Property damage alone from the January 2025 wildfires in the greater Los Angeles area is currently estimated at \$28 to \$53 billion. Preliminary research shows that climate change increased the likelihood of the Los Angeles wildfire event by 35 percent.³

King County must prepare for and adapt to the impacts of climate change, many of which are becoming increasingly unavoidable. Climate preparedness helps ensure that King County can deliver on its long-standing commitment to protect public health and safety, provide critical infrastructure, support economic prosperity, and safeguard natural and tribal treaty trust resources. Preparing for climate change also makes economic sense. According to the National Institute of Building Sciences, one dollar invested in natural hazards risk reduction (e.g., river flooding, winds, earthquake, and wildfire) can save approximately \$13 in losses.⁴ In that sense, preparing for climate change is inherently part of good government and responsible stewardship of public resources.



The Fall City Floodplain Restoration Project simultaneously improved habitat and strengthened flood protections for nearby farms, homes, and roads in the Snoqualmie Valley. The project is King County's largest-ever floodplain project.

BACKGROUND

Climate change is a growing concern within King County communities and agencies. Since 1900, average annual air temperature in the Puget Sound region has increased 1.3 degrees Fahrenheit (°F).⁵ Heavy rain events are getting heavier,⁶ summers are getting hotter,⁷ snow and ice in the Cascades and Olympic mountains is declining long-term,⁸ sea level is rising,⁹ and ocean chemistry is changing in ways that are harmful to local marine species like shellfish and salmon.¹⁰ These changes are becoming increasingly visible in the form of more extreme weather events, higher King Tides, more poor air quality days from wildfire smoke, and less predictable snow cover for water supply and winter recreation, for example.

Recent events have reinforced concern about climate change and underscore the need to reduce climate risks and increase resilience:

- In June 2021, unprecedented temperatures associated with a major heat wave (the Pacific Northwest Heat Dome) led to 126 heat-related deaths in Washington State, including more than 30 deaths in King County. Temperatures exceeded 100°F for three consecutive days, peaking at 108°F at Sea-Tac Airport, 109°F in Renton, and 118°F in Maple Valley. Initial attribution studies found that the event was “virtually impossible without human-caused climate change.”¹¹
- In September 2022, a fast-moving wildfire threatened the towns of Skykomish, Gold Bar, and Index. The Bolt Creek Fire, which grew 7,600 acres in the first 24 hours and burned for more than six weeks, forced residential evacuations, required frequent closures of Highway 2, damaged forest lands of economic and cultural significance to the Tulalip Tribes, and impacted air quality over large portions of the Puget Sound region for weeks.

- On December 27, 2022, a low-pressure storm converged with the peak of King Tides to cause unprecedented coastal flooding along Puget Sound shorelines, including flooding along the Vashon-Maury Islands shoreline and in the economically disadvantaged neighborhoods of South Park and Georgetown in Seattle.

WHAT IS CLIMATE RESILIENCE?

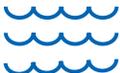
Resilience is the ability of individuals, communities, and social, economic, and environmental systems to withstand and adapt to disruptions while maintaining their core identities, functions, and structures.¹²

Rising greenhouse gas emissions are expected to increase the frequency, intensity, and/or duration of events like the 2021 Heat Dome, 2022 Bolt Creek Fire, and 2022 King Tide flooding, amplifying existing challenges while creating new challenges. Figure 25 shows some of the ways that projected warming may affect the region. King County residents are likely to face a higher risk of heat stress with more days over 90°F, more strain on summer water supplies due to less mountain snow and lower summer streamflows, and increased river and coastal flooding due to heavier rain events and sea level rise, among other changes.

Reducing climate change vulnerability and building resilience is essential. As climate change intensifies, King County must strengthen its capacity to cope with hazards, respond to long-term shifts, and evolve in ways that ensure sustainability and equity. This requires not only adapting to immediate risks—such as extreme heat, flooding, and sea level rise—but also fostering the ability to learn, innovate, and transform in response to an uncertain future.

Figure 25. Projected Impacts of Climate Change in King County ¹³

Projected changes in very hot days, snowpack, peak streamflow, summer streamflow, extreme precipitation, and sea level rise in King County under a high greenhouse gas emissions scenario. Changes are relative to 1980–2009 unless noted otherwise.

King County	2050s (2040–2069)	2080s (2070–2099)	Impacts include
 Very hot days change in days above 90°F	 20 days Range: 10–28 days	 41 days Range: 24–59 days	<ul style="list-style-type: none"> • Increased risk of heat related illness, death • Higher likelihood of wildfire, summer drought • More harmful algal blooms
 April 1 snowpack change in April 1st snow water equivalent	 76% Range: -61 to -86%	 95% Range: -86 to -97%	<ul style="list-style-type: none"> • Less water storage for summer water needs • Longer wildfire season • Winter recreation losses
 Peak streamflow change in one day peak volume	 25% Range: +9 to +48%	 36% Range: +15 to +56%	<ul style="list-style-type: none"> • More river flooding • Increased risks for floodplain communities • Negative effects on salmon populations
 Low summer streamflow change for June–September	 38% Range: -23 to -51%	 48% Range: -34 to -61%	<ul style="list-style-type: none"> • Less water for summer hydropower, irrigation • Negative effects on salmon populations • Impacts on water quality
 Extreme precipitation change in 24 hour, 25-year event	 13% Range: -3 to +24%	 12% Range: +2 to +36%	<ul style="list-style-type: none"> • More urban, local flooding • Increased potential for landslides • Impacts on water quality
Seattle	2050	2100	
 Sea level rise 50% probability of exceedance value and likely range*	 10" Likely range: +7 in. to +1.1 ft	 2.3' Likely range: +1.7 to +3.1 ft	<ul style="list-style-type: none"> • More coastal flooding, inundation • Damage to coastal infrastructure, communities • Changes in coastal habitat

*Change in sea level rise relative to 1991–2009 average.

Sources: *Climate Mapping for a Resilient Washington | Climate Impacts Group; UW Climate Impacts Group Interactive Sea Level Rise Data Visualizations (Miller et al. 2018)*

KEY ISSUES

King County's diverse geography—stretching from Puget Sound's low-lying marine shorelines to the snow-capped crests of the Cascade Mountains—and the people, places, and ecosystems in King County face a range of climate hazards that require tailored, place-based solutions. Key issues and opportunity areas, organized into nine focus areas for the 2025 SCAP, include the following:



Sea Level Rise Preparedness

- Sea level rise poses risks to homes, businesses, and infrastructure on the marine shoreline.
- Loss of critical near-shore habitat for juvenile salmon and other marine species is also a concern.
- Local action on sea level rise is needed to reduce threats to public health and safety, protect shoreline habitats, and reduce economic and environmental impacts.



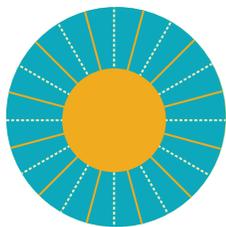
River Flood Management

- More intense heavy rain events and the shift to more winter precipitation falling as rain rather than snow in the mountains increases the potential for flooding and channel migration in King County river systems.
- Reconnecting and restoring river floodplains to naturally store and convey flood waters helps reduce flood risks while enhancing habitat benefits and strengthening climate resilience.
- Working with at-risk floodplain residents on flood risk mitigation is also critical.



Extreme Precipitation and Drought Mitigation

- More intense heavy rain events can worsen drainage problems and lead to more urban flooding, landslides, erosion, combined sewer overflows, and water quality issues.
- The risk of drought increases with climate change, requiring more active management of water resources to meet water needs for people and the environment.
- Expanding the use of multi-benefit approaches like stormwater parks and Green Stormwater Infrastructure will help reduce stormwater flooding and improve water quality when too much water is an issue while water conservation and reuse will help when not enough water is a concern.



Extreme Heat Adaptation

- All climate scenarios point to hotter summers and more extreme heat events in King County. Extreme heat risks are amplified in areas with more heat-absorbing hard surfaces (such as concrete and buildings), less green space, and fewer trees, creating the “heat island effect.”
- Increasing community resilience to extreme heat and adapting the built environment to better handle heat will reduce heat-related illness and help vulnerable populations stay safe in the heat.



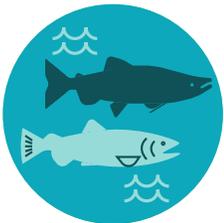
Forest Resilience and Urban Tree Canopy Expansion

- King County's forest lands and urban tree canopy provide numerous economic, ecological, and cultural benefits. Ensuring that forests and urban tree canopy can remain healthy in the face of stressors like disease, drought, heat stress, and invasive species is critical to maintaining and enhancing these benefits.
- Growing a more robust and healthier urban tree canopy is also important, particularly in urban heat islands and in communities with inequitable access to trees and green space.



Wildfire Risk Reduction

- Hotter temperatures, declining snowpack, and drier summers increase the potential for wildfire in King County. Risks to people and infrastructure are greater in areas where development sits adjacent to or within forested areas (the wildland-urban interface).
- Coupled with improving forest resilience, implementing measures that reduce wildfire risk at the household and community level and planning for wildfire response and recovery will help communities stay safe when a wildfire occurs.



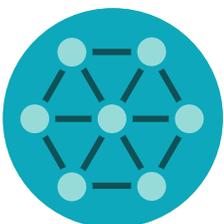
Salmon Recovery and Habitat Connectivity

- Climate change creates significant challenges for salmon and kokanee survival. Key stressors include hotter summer water temperatures, higher winter flood flows, lower summer stream flows, and habitat loss in King County lakes, rivers, and marine shoreline.
- Employing nature-based solutions to protect, connect, and restore habitat will help native salmon populations survive in the face of climate change and ensure that Coast Salish Tribes can maintain their strong spiritual and cultural connections to salmon.



Climate-Ready Capital Projects

- King County invests millions of dollars annually in public infrastructure improvements and delivery of local services, including wastewater conveyance and treatment, public transit, stormwater management, maintenance of roads and bridges, floodplain management, habitat restoration, public health services, management of parks and open spaces, and land use planning.
- Accounting for current and future climate impacts when making those investments is essential to building resilient infrastructure, communities, and ecosystems given the long-lasting nature of those decisions.



Regional Capacity Across Hazards

- Climate change impacts are not bound by jurisdictional lines and affect complex and inter-connected natural, socioeconomic, and regulatory systems, underscoring the importance of working with regional partners on climate preparedness.
- Regional collaboration can leverage limited resources and staff capacity, reduce duplication of effort, facilitate institutional learning, catalyze action at broader regional scales, and ensure that neighboring climate preparedness efforts complement each other.

Central to each of these is the fact that climate change is a risk multiplier for many communities. Existing inequities related to health care, housing, employment, language, and other factors can create disproportionate impacts for people living with low incomes, immigrant and refugee communities, people with disabilities, and Black, Indigenous, and People of Color (BIPOC) communities (i.e., frontline communities). Health

factors (e.g., age, pregnancy) and underlying medical issues such as cardiovascular, respiratory, kidney, cerebrovascular, or mental health conditions can also increase vulnerability to climate impacts. Centering equity in climate preparedness is necessary to ensuring that frontline communities are not disproportionately affected by climate change.



Climate hazards such as wildfire smoke can increase risks for people with asthma, cardiovascular disease, or who are pregnant. Lower income communities are more likely to be disproportionately affected by climate hazards.

STRATEGIES AND TOOLS

The 2025 Strategic Climate Action Plan (SCAP) builds on King County’s commitment to equitable climate preparedness, expanding efforts to address a broader range of climate impacts while continuing work initiated in the 2020 SCAP. As both a local government and a regional service provider, King County has a unique responsibility to ensure that climate action is comprehensive and equitable. The County oversees critical functions—including land use planning, public health, flood and stormwater management, habitat restoration, waste management, transportation, emergency response, housing, and equity initiatives—all of which are increasingly affected by climate change.

This dual role creates both an opportunity and an obligation to take a holistic approach, ensuring that efforts to reduce greenhouse gas emissions and strengthen climate resilience are integrated across sectors and communities.

County Policies and Strategic Plans

King County is working to integrate climate preparedness and equity into its policies and planning framework, ensuring that resilience efforts are data-driven, community-informed, and coordinated across agencies. Foundational policies and plans for advancing climate resilience include:



[King County Clean Water Healthy Habitat Strategic Plan \(2020\).](#)

Identifies a shared vision and set of measurable goals for protecting and restoring the water and land in King County.



[King County 30-Year Forest Plan \(2021\).](#)

Guides efforts to preserve and expand forested areas, which play a critical role in carbon sequestration, watershed health, and climate resilience.



[King County Wildfire Risk Reduction Strategy \(2022\).](#)

Outlines actions to prevent and respond to wildfire risks, particularly in the wildland-urban interface.



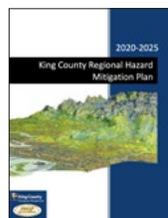
[2024 King County Flood Management Plan \(2024\).](#)

Addresses risks caused by flooding along the county’s rivers and streams, in coastal areas, and in urban areas.



[King County Extreme Heat Mitigation Strategy \(2024\).](#)

Focuses on reducing risks associated with extreme heat events, particularly for vulnerable populations in urban heat islands.



[King County Hazard Mitigation Plan \(2025\).](#)

Assesses natural and human-caused hazards that can impact the King County region and develops strategies to reduce risk and build resilience.

Sustainable & Resilient Frontline Communities (SRFC) Framework.

Ensures that climate preparedness efforts address the disproportionate impacts of climate change on frontline communities.

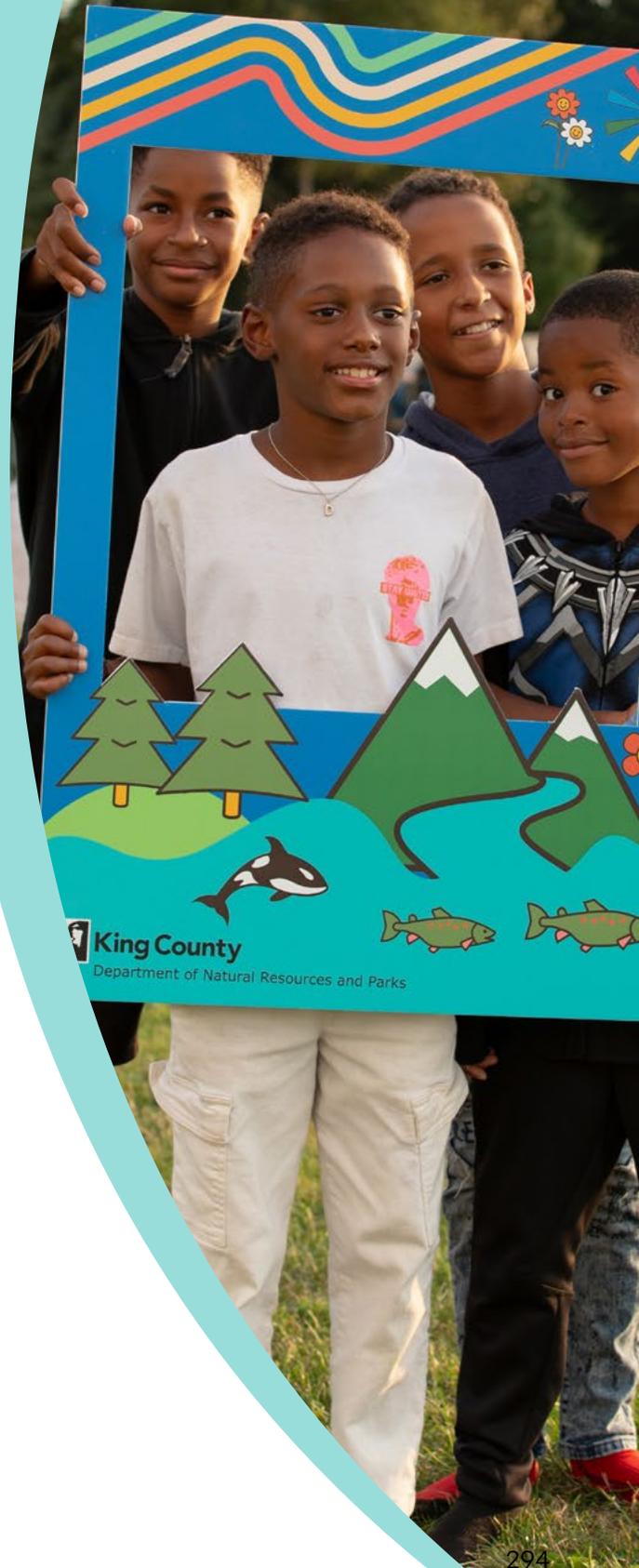
County Programs and Initiatives

King County also advances climate resilience through collaborative initiatives, public engagement, and investments that address wildfire, flooding, landslides, and drought. These efforts focus on expanding partnerships, enhancing public awareness, and improving technical support to better prepare communities for climate impacts:

- **Puget Sound Climate Preparedness Collaborative** – Strengthens regional partnerships to advance climate preparedness and foster cross-jurisdictional coordination across the Puget Sound Basin.
- **Outreach and Education Initiatives** – Expands public engagement, technical assistance, and information-sharing about climate impacts and preparedness. These efforts provide communities with the tools and knowledge needed to mitigate risks, including those related to wildfire, heat, and flooding.

Centering Climate Equity

Finally, King County’s climate preparedness efforts are grounded in its commitment to equity and social justice. A consistent focus on equity in the development and implementation of climate actions ensures that SCAP initiatives actively work to reduce the disproportionate impacts of climate change on BIPOC and low-income communities. This focus aligns with the SRFC framework, particularly in shared areas of work related to community preparedness for extreme weather events, expanding urban tree canopy, and building regional capacity for improving health outcomes. Ensuring continued coordination between climate preparedness actions and the SRFC section will be a key priority for 2025–2030.



SUMMARY

King County is committed to equitably preparing for climate impacts and increasing community resilience in ways that provide benefits today and in the coming decades. The actions in this section build on the County's ongoing work to protect the health, safety, and welfare of all who live and work here by:

- systematically integrating climate preparedness into agency decision making and capital planning;
- increasing agency understanding of climate impacts on infrastructure and operations;
- supporting multi-benefit and community-based climate solutions;
- strengthening health and equity outcomes; and
- building local and regional capacity and partnerships for addressing climate change impacts.

Becoming a more climate resilient King County will require a sustained commitment to climate action, even in the face of limited resources and other challenges. This includes:

- working in partnership with communities—particularly those disproportionately affected by climate change—to develop the information, tools, and changes needed to reduce the harmful effects of climate change and build stronger and more resilient communities;
- leading by example, and in doing so, helping other jurisdictions accelerate their own climate preparedness efforts and contribute to climate resilience more broadly in the Puget Sound region; and
- having the courage to go beyond incremental change to engage in deeper, more transformational change where needed.

Success also requires collective action on the part of King County governments, organizations, and other public and private sector partners. No single agency or program can build a climate resilient King County alone. Collaborative work is needed to ensure that key goals—health, equity, environmental protection and restoration, economic resilience, and reliable provision of critical public services—are met in a changing climate.





SEA LEVEL RISE PREPAREDNESS

Rising sea levels are a direct result of climate change, due primarily to water expansion from warmer ocean temperatures and increased melting of glaciers and ice sheets. Local factors, including changes in land elevation, also affect how much sea level rises in a specific location.

Throughout King County, higher King Tides and storm surge are already impacting shoreline homes, businesses, infrastructure, and habitat. Preparing for and adapting to sea level rise is necessary to minimize the negative economic and environmental impacts of sea level rise, support the natural processes needed to maintain shoreline habitat, and reduce risks to public health and safety.

WHAT'S AT STAKE

Sea level in King County is projected to rise approximately one foot by the 2050s and two to three feet by 2100, relative to water levels in 2000, unless greenhouse gas emissions drastically decrease.¹⁴ Both lower and higher amounts of sea level rise are possible, depending on different GHG emissions scenarios, with up to five feet of sea level rise considered a plausible upper estimate for 2100.

Rising sea levels can permanently flood low-lying areas, cause more frequent coastal flooding in places that rarely experience it today, increase shoreline and bluff erosion, impact habitat, contaminate coastal aquifers, corrode materials exposed to more saltwater, and increase damage to shoreline infrastructure. The severity of these impacts will vary by location depending on how quickly land rises as you move away from the shoreline, exposure to waves, and proximity of infrastructure to the water, for example. Hard armoring of the shoreline (i.e., use of bulkheads and sea walls) is making it difficult to maintain natural processes like erosion (especially from feeder bluffs) that provide the sediment needed for local beaches and shoreline habitat to keep pace with sea level rise.

A BETTER OUTCOME

King County envisions a climate-resilient marine shoreline where people can live and work safely in proximity to the marine shoreline; where risks associated with sea level rise decrease over time; where public and private shoreline infrastructure is built in the right places and designed to account for sea level rise; and where beach and marine shoreline habitats can adapt and move naturally in response to sea level rise, ensuring that tribes can meaningfully exercise treaty rights to harvest species that depend on healthy marine shorelines.



WHAT WE'VE DONE TO GET HERE

- Protected the vital functions of the Georgetown Wet Weather Treatment station in the Duwamish Valley by building the facility for two feet of sea level rise, launched a study looking at the impacts of sea level rise on groundwater in the Valley, and deepened local partnerships to coordinate planning for sea level rise in the lower Duwamish.
- Established areas on Vashon-Maury Island where construction must account for sea level rise.
- Worked with State Parks to redesign Saltwater State Park amenities associated with the McSorley Creek Shoreline and Estuary Restoration project to account for sea level rise.
- Identified sea level rise risks and adaptation actions for King County-owned infrastructure.
- Partnered with the U.S. Geological Survey to model sea level rise impacts on coastal flooding.
- Initiated a coastal hazard vulnerability study for Vashon-Maury Islands to look at risks associated with both sea level rise and shoreline landslides.

WHAT WE WILL DO NEXT

- **Prep 1.** Develop a sea level rise strategy for unincorporated King County
- **Prep 2.** Update King County Shoreline policies and codes to account for sea level rise
- **Prep 3.** Promote multi-benefit approaches for reducing sea level rise impacts on private property
- **Prep 4.** Seek funding to reduce sea level rise and flood risks to on-site wastewater infrastructure
- **Prep 5.** Partner with shoreline jurisdictions to support coordinated planning for sea level rise
- **Prep 6.** Support equitable long-term solutions for sea level rise in the Duwamish Valley



PREP 1. DEVELOP A SEA LEVEL RISE STRATEGY FOR UNINCORPORATED KING COUNTY

Sea level rise will have wide-ranging impacts on public and private shoreline infrastructure and shoreline ecosystems in unincorporated King County. To help guide current and future County work on sea level rise, the County will develop a sea level rise adaptation strategy for managing the impacts of sea level rise on public and private infrastructure and nearshore ecosystems in unincorporated King County, inclusive of unincorporated areas in the lower Duwamish Valley. This includes developing organizational policies and guidelines for managing sea level rise across King County programs and identifying approaches to managing the impacts of sea level rise on shoreline infrastructure and ecosystems.

LEAD AGENCIES:

ECO

PARTNER AGENCIES:

DES-OEM; DLS-Roads, Permitting; DNRP-WLRD, WTD; PHSKC-DO; PSB-RP

EXTERNAL PARTNERS:

Shoreline residents; Washington Sea Grant

EQUITY OBJECTIVES:

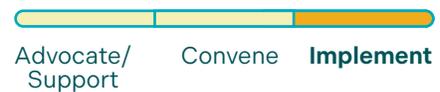
Engagement; reduce disproportionate impacts; relationship building; share benefits

STRATEGIC CONNECTIONS:

2024 King County Flood Management Plan; Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan; King County Shoreline Master Program

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 2. UPDATE KING COUNTY SHORELINE POLICIES AND CODES TO ACCOUNT FOR SEA LEVEL RISE

Incorporating sea level rise into local codes and policies is integral to building long-term climate resilience in King County. The County will address sea level rise code and process improvements including forthcoming Washington Department of Ecology requirements on integrating sea level rise into the 2029 Shoreline Master Program (SMP) update. The County will also address needed code and process improvements for the interrelated topics of shoreline development and redevelopment, shoreline armoring, shoreline septic system requirements, sea level rise mitigation, and coastal flood risk reduction identified via work completed in the 2020 SCAP. Since parts of the County’s SMP are implemented through flood codes and policies, the updates will also address their intersection with potential flood code updates.

LEAD AGENCIES:

DLS-Permitting

PARTNER AGENCIES:

DNRP-WLRD; ECO; PSB-RP

EXTERNAL PARTNERS:

Ecology; WDFW

EQUITY OBJECTIVES:

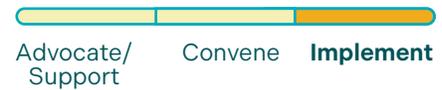
Accessibility; reduce disproportionate impacts

STRATEGIC CONNECTIONS:

2024 King County Flood Management Plan; Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan; King County Shoreline Master Program

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 3. PROMOTE MULTI-BENEFIT APPROACHES FOR REDUCING SEA LEVEL RISE IMPACTS ON PRIVATE PROPERTY

Addressing sea level rise requires a range of tools and resources to support risk reduction measures for private property, particularly for lower income residents. King County will evaluate and promote multi-benefit approaches for adapting private property to sea level rise, with a focus on options that reduce the potential for flood and erosion damage, support shoreline habitat, and improve water quality. Approaches include home elevations and/or moving structures or appurtenances (such as on-site septic sewage systems) back from the shoreline. Where adaptation options are limited, voluntary buyouts may be the safest and most practical way to adapt to sea level rise. Results from the assessment will be used to inform long-term planning for sea level rise in King County.

LEAD AGENCIES:

ECO

PARTNER AGENCIES:

DLS-Permitting; DNRP-WLRD; PHSKC-EHS; PSB

EXTERNAL PARTNERS:

Ecology; shoreline residents; WDFW; Washington Sea Grant

EQUITY OBJECTIVES:

Engagement; reduce disproportionate impacts; relationship building

STRATEGIC CONNECTIONS:

2024 King County Flood Management Plan; Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan; King County Shoreline Master Program

EARLY ACTION 

KING COUNTY ROLE:



Advocate/
Support Convene Implement

ACTION TYPE:



Continuing Accelerated **New**

IMPLEMENTATION FEASIBILITY:



Easy Moderate **Hard**

FUNDING NEED:



Within current
capacity **Additional** New

FUNDING DEPENDENCIES:



County **Grant** Other



PREP 4. SEEK FUNDING TO REDUCE SEA LEVEL RISE AND FLOOD RISKS TO ON-SITE WASTEWATER INFRASTRUCTURE

Sea level rise and increased flooding due to precipitation changes represent a risk to on-site wastewater infrastructure in unincorporated King County. Building from and expanding sea level rise work completed in 2025 for Vashon and Maury Island, the County will identify where sea level rise and flooding are most likely to impact on-site sewage systems on Vashon-Maury Island and unincorporated areas in the lower Duwamish Valley adjoining South Park, and where the equity-related needs for addressing those impacts are greatest. King County will then work with partners to secure funding to improve wastewater infrastructure in high-risk areas.

LEAD AGENCIES:

PHSKC-EHS

PARTNER AGENCIES:

DES-OEM; DNRP-WTD

EXTERNAL PARTNERS:

Community-based organizations; other sewer districts as appropriate; Seattle Public Utilities; Vashon Community Council

EQUITY OBJECTIVES:

Alignment and partnership; economic opportunity and workforce diversity; reduce disproportionate impacts; relationship building; share benefits

STRATEGIC CONNECTIONS:

Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan; King County Septic System Maintenance and Side Sewer Repair Rebate Program; King County Shoreline Master Program

EARLY ACTION

KING COUNTY ROLE:



Advocate/Support Convene Implement

ACTION TYPE:



Continuing Accelerated New

IMPLEMENTATION FEASIBILITY:



Easy Moderate Hard

FUNDING NEED:



Within current capacity Additional New

FUNDING DEPENDENCIES:



County Grant Other



PREP 5. PARTNER WITH SHORELINE JURISDICTIONS TO SUPPORT COORDINATED PLANNING FOR SEA LEVEL RISE

Building regional consistency in sea level rise risk management approaches can reduce duplication of effort, provide opportunities to leverage limited resources, and contribute to better action outcomes. King County will work with shoreline jurisdictions to support stronger alignment in planning for sea level rise, inclusive of sea level rise planning needs for the County’s infrastructure located in incorporated areas. This work will support a shared understanding of mapping tools and resources to support local action, how peer communities are planning for sea level rise, and opportunities for building more consistency in shoreline policies and regulations related to sea level rise.

LEAD AGENCIES:

ECO

PARTNER AGENCIES:

DNRP-WLRD, WTD

EXTERNAL PARTNERS:

King County shoreline jurisdictions

EQUITY OBJECTIVES:

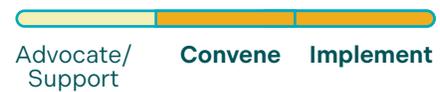
Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 6.

SUPPORT EQUITABLE LONG-TERM SOLUTIONS FOR SEA LEVEL RISE IN THE DUWAMISH VALLEY

Sea level rise presents unique challenges to residents, businesses, and the environment along the Duwamish River. Collaboration and coordination are needed to ensure that individual and collective sea level rise planning efforts in the Duwamish Valley are effective, efficient, equitable, and community-centered. King County will work with partners to support coordinated, long-term equitable solutions to sea level rise and compounding hazards in the Duwamish Valley, including its unincorporated areas. This includes pursuing joint funding opportunities and pilot projects, as appropriate, to implement multi-benefit projects that reduce risks from sea level rise; support community, economic, and environmental resilience; promote salmon recovery; and advance environmental justice.

LEAD AGENCIES:

ECO

PARTNER AGENCIES:

DNRP-WLRD, WTD

EXTERNAL PARTNERS:

City of Seattle–Office of Sustainability and Environment; Duwamish River Community Coalition; Northwest Seaport Alliance; Port of Seattle; Seattle Public Utilities; WRIA 9

EQUITY OBJECTIVES:

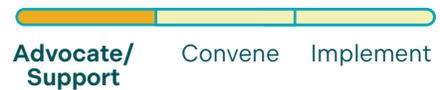
Alignment and partnership; reduce disproportionate impacts; relationship building; share benefits

STRATEGIC CONNECTIONS:

2024 King County Flood Management Plan; Duwamish Valley Resilience District (City of Seattle); King County Comprehensive Plan; King County Shoreline Master Program; WRIA 9 Salmon Recovery Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





RIVER FLOOD MANAGEMENT

King County rivers and floodplains provide important ecological, economic, and cultural benefits to local communities and tribes. Benefits include water quality improvement, flood storage and conveyance, habitat for threatened and endangered salmon, recreation, employment, and local food production. Fully functional floodplains allow the river to inundate and migrate in the areas needed to provide these natural, economic, and cultural benefits.

King County rivers can also pose significant flood and channel migration risks to people living and working in floodplains. River flooding is the County's most frequent and costliest natural disaster, with extreme flooding occurring every two to five years on average.¹⁵ The Snoqualmie River is the most flood-prone watershed in King County.

While flooding and channel migration can produce negative consequences and threaten public safety and property, flooding and channel migration are both natural occurrences. In areas where floodplains and watercourses remain connected or have been reconnected to their floodplains, periodic floods help to create and maintain channel networks, floodplain wetlands, and vital and productive habitats.¹⁶ Preserving, protecting, and enhancing river floodplains in ways that reduce flood risks and benefit habitat can provide win-win solutions for reducing the impacts of climate change on river flooding.

WHAT'S AT STAKE

Climate change increases the potential for river flooding and channel migration. While results will vary by location and by the return frequency of different flood events (e.g., the 1 percent annual chance flood event versus the 10 percent annual chance event), floods in the coming decades are likely to be larger and/or occur more frequently due to the combined effects of wetter winters, more intense heavy rain events, and more winter precipitation falling as rain rather than snow in mountain watersheds. The likelihood of increased flooding is greatest on unregulated rivers like the Snoqualmie but even rivers with dams, like the Green and White rivers, could see increased flooding.

Flooding can threaten livelihoods; damage homes, businesses, and built infrastructure; and disrupt critical services such as transportation, water supply, and agriculture. A recent flood risk assessment in King County estimated that a 1 percent annual chance river flood event could potentially cause county-wide damages equal to or exceeding \$368 million.¹⁷ Low-income communities, renters, people with limited English proficiency, and BIPOC communities face greater challenges in recovery and resilience. Meanwhile, past efforts to reduce flood risk and manage floodplain land uses have harmed and reduced habitat essential to support salmon populations, affecting the ability of tribes to fully exercise their treaty rights.

A BETTER OUTCOME

King County envisions resilient communities and floodplains where flood risks to people and structures are reduced while supporting salmon recovery, agriculture, open space, and other community priorities. Floodplains are connected and restored, increasing their ability to naturally store and convey flood waters, protect water

quality, sustain habitat, and build healthy soils for agriculture. Flood management infrastructure is planned and built to withstand climate change. Floodplain residents have the knowledge, resources, and capacity to protect themselves before and during floods, with equitable access to programs that reduce flood risk and support recovery.

WHAT WE'VE DONE TO GET HERE

- Included climate change as a major strategic priority in the 2024 update of the [King County Flood Management Plan](#).
- Piloted an approach for incorporating climate change into capital planning for flood management projects as part of the Tolt River Levee Level of Service project, with funding from the Flood Control District and grants.
- Moved levees back to allow more space to store flood water and restore floodplain habitat, where feasible, with funding from the Flood Control District, and other local, state, and federal partners.
- Elevated 66 homes and acquired 215 at-risk properties and 600 acres since 2008, with funding from the Flood Control District.
- Partnered with the University of Washington (UW) Climate Impacts Group to initiate an assessment of climate change impacts of flooding on King County rivers, with funding from the Flood Control District.

WHAT WE WILL DO NEXT

- **Prep 7.** Incorporate climate change into flood management projects
- **Prep 8.** Expand residential flood risk mitigation tools countywide to benefit those most vulnerable to flooding
- **Prep 9.** Collaboratively create and implement targeted outreach on flooding, inclusive of climate impacts
- **Prep 10.** Continue to meet or exceed federal flood standards
- **Prep 11.** Evaluate potential changes in flood risks from climate change
- **Prep 12.** Assess the risk posed by climate change on small and medium sized dams in King County



PREP 7. INCORPORATE CLIMATE CHANGE INTO FLOOD MANAGEMENT PROJECTS

Climate change, natural river processes, and population growth will change flood risk, making it important that flood management capital projects be built for and/or are adaptable to future conditions. Prescriptive approaches to designing flood mitigation capital projects may limit the resilience and adaptability of flood risk reduction infrastructure, however. Contingent on funding from the Flood Control District, the Surface Water Management fee, or other sources, King County will continue efforts to develop and implement approaches to incorporating climate resilience into the planning, design, and construction of flood management capital projects. The work will utilize recently updated modeling showing how climate change may affect flooding in King County rivers to inform the design and construction of flood risk reduction projects. Building resilience into flood management infrastructure may include designing capital infrastructure to handle a wider range of future flow projections, purchasing a larger right of way to accommodate adaptive management actions, or designing infrastructure in ways that can be modified over time based on changing flow conditions and predictions.

LEAD AGENCIES:

DNRP-WLRD

PARTNER AGENCIES:

DLS-Roads

EXTERNAL PARTNERS:

King County Flood Control District; UW Climate Impacts Group; WDFW

EQUITY OBJECTIVES:

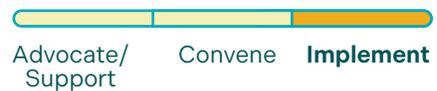
Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

2024 King County Flood Management Plan; King County Comprehensive Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 8. EXPAND RESIDENTIAL FLOOD RISK MITIGATION TOOLS COUNTYWIDE TO BENEFIT THOSE MOST VULNERABLE TO FLOODING

The ability to strategically leverage flood buyouts and home elevations as risk reduction tools for river flooding in King County is limited by several factors, including geographic constraints, funding, upfront costs to homeowners, and homeowner interest. As a result, residential flood risk mitigation programs do not always benefit those who are most vulnerable to flooding.

Contingent on funding from the Flood Control District or other sources, King County will work with partners to expand the use of voluntary residential flood risk reduction and mitigation actions (e.g., voluntary buyouts, home elevations, and other repairs) in ways that benefit more at-risk property owners, including those who have greater financial need within the county. Work on this action includes determining where residential properties are at highest risk of flooding under current and future conditions, identifying and prioritizing residential properties where assistance is

needed, focusing residential flood risk mitigation tools on communities countywide that have documented harm from flooding, and augmenting existing funding sources for residential flood risk mitigation projects via federal grants and leveraging local funding for grant match requirements and/or for properties that are not eligible for federal grants.

Work on this action will support repetitive loss areas in the Sammamish, Skykomish, Green, Cedar, and Snoqualmie River Basins and on Vashon Island. Aspects of this work will also require expanding the use of residential home elevations beyond the Snoqualmie Basin. When practicable, efforts to reduce flood risk to homes and other components of the built environment through this action will be done with consideration for protection of farmland.

LEAD AGENCIES:

DNRP-WLRD

PARTNER AGENCIES:

DES-OEM

EXTERNAL PARTNERS:

FEMA; King County Flood Control District; WEMD

EQUITY OBJECTIVES:

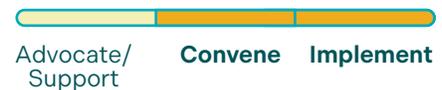
Accessibility; alignment and partnership; reduce disproportionate impacts; share benefits

STRATEGIC CONNECTIONS:

2024 King County Flood Management Plan; Clean Water Healthy Habitat Strategic Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 9. COLLABORATIVELY CREATE AND IMPLEMENT TARGETED OUTREACH ON FLOODING, INCLUSIVE OF CLIMATE IMPACTS

Consistent and coordinated messaging to people in areas at high risk for flooding is critical to supporting their ability to take protective action and to raise awareness of climate impacts on flooding. Contingent on funding from the Flood Control District or other sources, King County will connect with local partners to incorporate information on changing flood risk and ways to reduce that risk into outreach for people living, working, and traveling through river and coastal floodplains. Work on this action includes developing prioritized messages that incorporate climate impacts and actions people can take to reduce risks. Basin and/or hazard specific messaging will be included as applicable.

LEAD AGENCIES:

DNRP-WLRD

PARTNER AGENCIES:

DES-OEM; ECO; PHSKC

EXTERNAL PARTNERS:

Flood Control District; floodplain communities

EQUITY OBJECTIVES:

Accessibility; reduce disproportionate impacts

STRATEGIC CONNECTIONS:

2024 King County Flood Management Plan; FEMA Community Rating System membership; King County Comprehensive Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 10. CONTINUE TO MEET OR EXCEED FEDERAL FLOOD STANDARDS

In 2024, the Federal Emergency Management Agency (FEMA) issued new rules to address increased flood risk, make communities more resilient, and help reduce the damage caused by both current and future flooding. As part of this change, FEMA issued an updated Federal Flood Risk Management Standard (FFRMS) requiring that agencies establish local standards to protect FEMA-funded projects from flood risk (effective September 9, 2024). Similarly, effective January 1, 2025, the Department of Housing and Urban Development established their own FFRMS standards to address flood risk for residential properties. However, these requirements were rescinded in 2025.

If needed in the future and contingent on funding from the Flood Control District or other sources, King County will conduct analysis and mapping efforts using FEMA or other federally authorized approaches to establish updated FFRMS flood elevations (“how high”) and floodplains (“how wide”) across the County’s floodplains. The availability and accessibility of public funding for Presidential Disaster Declarations, Federal Housing Administration loans, and FEMA grant funding, among other sources of federal funding, could be dependent on this work. This analysis would identify changes in policy, codes, and standards needed to account for climate change.

LEAD AGENCIES:

DNRP-WLRD

PARTNER AGENCIES:

ECO; DES-OEM; DLS-Permitting

EXTERNAL PARTNERS:

King County Flood Control District

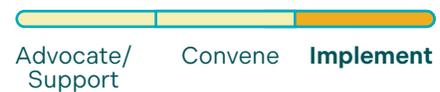
EQUITY OBJECTIVES:

Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

2024 King County Flood Management Plan; King County Comprehensive Plan

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 11. EVALUATE POTENTIAL CHANGES IN FLOOD RISKS FROM CLIMATE CHANGE

Effectively preparing for increased flooding due to climate change requires understanding the risk from projected increases in flood flow frequency and volume. Contingent on funding from the Flood Control District or other sources, King County will evaluate climate change flood risk using projected changes in flood flows for King County rivers. The assessment will examine how projected changes in flood flow volume equate to changes in flood depth and inundation extents, helping King County determine how flood risk may change in communities currently affected by flooding as well as in floodplain adjacent communities who may experience flooding under future climate scenarios. Information from the assessment will be used to inform basin-specific risk assessment and code, policy, and design updates.

LEAD AGENCIES:

DNRP-WLRD

PARTNER AGENCIES:

DLS-Permitting

EXTERNAL PARTNERS:

King County Flood Control District; Seattle Public Utilities; UW Climate Impacts Group; US Army Corps of Engineers

EQUITY OBJECTIVES:

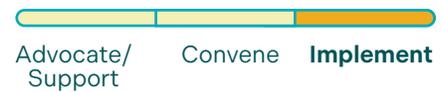
Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

2024 King County Flood Management Plan; King County Comprehensive Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 12. ASSESS THE RISK POSED BY CLIMATE CHANGE ON SMALL AND MEDIUM SIZED DAMS IN KING COUNTY

According to the American Society of Civil Engineers, by 2030, seven out of 10 dams in the United States will be over 50 years old. The high average age means that most dams will not have been built to current standards, increasing risk to downstream areas. Furthermore, at the time of their construction, the dams may have been considered low hazard potential so they may not be able to withstand increasingly frequent and severe weather events or other natural hazards like earthquakes. These risks are compounded in areas with increased development in downstream inundation zones.

King County will pursue opportunities to conduct a climate risk assessment of smaller to medium-sized dams (Class 2 and Class 3) in the County where an increase in impacts to human life and/or economic impacts are a concern. The comparative risk analysis will support hazard mitigation planning in these areas, including risk communication, preparedness, policy development, and infrastructure investment.

LEAD AGENCIES:

DES-OEM

PARTNER AGENCIES:

DNRP-WLRD

EXTERNAL PARTNERS:

County and city councils; regional urban planners

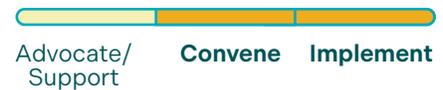
EQUITY OBJECTIVES:

Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

King County Hazard Mitigation Plan

KING COUNTY ROLE:



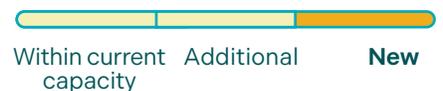
ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





EXTREME PRECIPITATION AND DROUGHT MITIGATION

Hydrologic extremes, like heavy rain or drought, can create challenges for people, the environment, and infrastructure in King County. A major cause of heavy rain in King County is atmospheric rivers—long, narrow bands of moisture in the sky that bring large amounts of rain and snow to the West Coast. While these events are a natural part of the water cycle, strong atmospheric rivers can lead to widespread flooding, landslides, and other damage.

The causes of drought in King County are more varied. The Pacific Northwest region is dependent on winter rains and a robust snowpack to fill reservoirs for drinking water and hydropower, and to provide ample cool water in rivers and streams during our dry

summers. A low snowpack, or one that melts off too quickly because of a warm spring, can make it difficult to meet water needs for people and salmon through summer. Drought can also be intensified by hotter than normal summer temperatures and a delay in the return of fall rains.

Changes in hydrologic extremes affect many issues that King County is actively working on, including flood management, stormwater management, salmon recovery, and recycled water. Actions in this focus area cover stormwater management and recycled water. Actions related to river flooding and salmon recovery are covered in separate focus areas.

WHAT'S AT STAKE

Climate change is expected to lead to more intense heavy rain events and drier summers in King County. While individual model results vary, climate modeling projects that the heaviest two-year, 24-hour rain events in King County will increase 14 percent on average (range 7 to 30 percent) by the 2080s, relative to 1980–2009.¹⁸ Many locations could see increases exceeding 20 percent. This increases the likelihood of urban flooding and combined sewer overflows in locations where stormwater control is absent or unable to keep up with runoff volumes.

Stormwater infrastructure is designed and built to operate for many decades, meaning that the infrastructure built today will still be operating as climate change becomes more pronounced. King County research¹⁹ finds that stormwater management facilities designed for future (2080s) rainfall will need to be 10 percent to over 100 percent larger in volume than those based on 1990s

rainfall, depending on land use, soil infiltration, and facility type. Avoiding overflows in older, more urbanized areas where stormwater and sewage are conveyed in the same pipe (combined sewers) also becomes more difficult with heavier rain events. Understanding and preparing for the range of possible outcomes is critical to ensuring that stormwater systems can meet current and future service loads and mitigate future rainfall projections.

Changes in summer conditions will also have impacts. Climate change is expected to lead to lower snowpack, earlier spring runoff, and hotter summers, reducing the amount of water available instream for summer irrigation and salmon. King County investments in the delivery of recycled water to irrigators in the Sammamish valley are helping to keep more water in streams for salmon during the summer by providing an alternate source of water for growing summer irrigation demands.

¹⁸ Results are for percent change in the maximum amount of water from the 24-hour rain storm that occurs on average once every two years, relative to the average for 1980–2009. Modeling based on a high greenhouse gas emissions scenario (RCP 8.5). See Raymond and Rogers (2022).

A BETTER OUTCOME

King County envisions a future where the impacts of heavier rain events and more intense summer drought are being effectively mitigated. Where stormwater runoff from heavier rain events is controlled using built and nature-based solutions that provide multiple benefits equitably to communities and the environment. Stormwater is cleaner, helping to ensure that groundwater, lakes, and streams are clean, healthy, and accessible. Lives, homes, and properties are protected from stormwater-related flooding and damage, including damage from erosion and landslides. Water bodies that are in or important to predominantly BIPOC communities reach these goals promptly and thoroughly. Additionally, work on recycled water is helping to reduce the impacts of summer drought on water users and salmon.



Roadside rain garden for capturing and treating stormwater from streets and sidewalks.

WHAT WE'VE DONE TO GET HERE

- Opened the [Georgetown Wet Weather Treatment Station](#) (2022), the Wastewater Treatment Division's (WTD) newest combined sewer overflow control project, to treat high stormwater flows from extreme rain events. By January 2024, the treatment station had protected the Duwamish River and Puget Sound from 32 million gallons of polluted stormwater.
- Partnered with the UW Climate Impacts Group to develop hourly rainfall projections for King County through the 2080s. Used those data in preliminary assessments of climate change impacts on stormwater infrastructure, wastewater infrastructure, and combined sewer overflows.
- Via the RainWise rebate program, supported the installation of 379 cisterns and 100 rain gardens on private properties, managing a total of 4,750,000 gallons of stormwater in areas where combined sewer overflows are a concern.
- Integrated climate change into King County's regional stormwater investment priorities.
- Piloted new technologies to help optimize the performance of existing stormwater facilities during heavy rain events.
- Made progress in establishing relationships with farmers related to recycled water and worked with some of the largest irrigators in the Sammamish Valley to expand the use of recycled water, helping to reduce water withdrawals and benefit streamflow in the Valley.

WHAT WE WILL DO NEXT

- **Prep 13.** Develop guidance and standards for climate resilient stormwater infrastructure
- **Prep 14.** Address barriers to using street trees and Green Stormwater Infrastructure to manage extreme precipitation along roadways and on public lands
- **Prep 15.** Advance stormwater parks through a countywide roadmap
- **Prep 16.** Accelerate Green Stormwater Infrastructure and Legacy Facility Retrofits
- **Prep 17.** Increase on-site stormwater system capacity at King County landfills and transfer stations
- **Prep 18.** Expand the use of recycled water
- **Prep 19.** Reduce water use by King County government and develop an operational Drought Response Strategy



PREP 13. DEVELOP GUIDANCE AND STANDARDS FOR CLIMATE RESILIENT STORMWATER INFRASTRUCTURE

More intense heavy rain events can create widespread challenges for managing stormwater runoff and flooding. King County will continue work on developing a standard methodology for climate resilient stormwater facility design (including Green Stormwater Infrastructure, leveraging King County work with the Washington Department of Ecology to update statewide stormwater design software to include updated bias corrected climate change projections. This includes updating hydrologic and hydraulic watershed models that will serve as tools for developing a climate change methodology and guidance for King County stormwater management. Once developed, the County will utilize the results of this work to develop King County stormwater facility design guidance and standards, where appropriate.

LEAD AGENCIES:

DNRP-WLRD

PARTNER AGENCIES:

DLS-Roads

EXTERNAL PARTNERS:

Ecology; local King County jurisdictions; UW Climate Impacts Group

EQUITY OBJECTIVES:

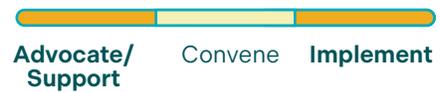
Accountability; share benefits

STRATEGIC CONNECTIONS:

Clean Water Healthy Habitat Strategic Plan; Land Conservation Initiative; Regional Stormwater Action Goals

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 14.

ADDRESS BARRIERS TO USING STREET TREES AND GREEN STORMWATER INFRASTRUCTURE TO MANAGE EXTREME PRECIPITATION ALONG ROADWAYS AND ON PUBLIC LANDS

Green Stormwater Infrastructure (GSI) and street trees provide multiple benefits for environmental and public health. However, initiation and maintenance of these projects often face financial and regulatory barriers. King County will seek opportunities to conduct one or more pilot projects to identify and address regulatory and operational challenges to expanding the use of street trees and multi-benefit GSI projects in road rights-of-way and public lands. Work on this action includes securing funding to implement the pilot project(s) and initiating construction. The pilot project(s) will be associated with one or more King County Roads projects in Skyway and/or North Highline where GSI, including tree planting and preservation, would provide clean water, reduce localized flooding, and provide extreme heat mitigation co-benefits by helping to increase the number of street trees. Insights gained from this work will inform updates to the King County Roads Standards and other policies, standards, and regulations, as needed, that may currently limit the use of street trees and GSI in new or retrofit capital projects. Implementation of this action will prioritize areas in urban, unincorporated King County most lacking in canopy cover.

LEAD AGENCIES:

DLS-Roads; DNRP-Parks, WLRD

EXTERNAL PARTNERS:

Businesses; community groups in Skyway and/or North Highline; King County jurisdictions; non-profit organizations; residents

EQUITY OBJECTIVES:

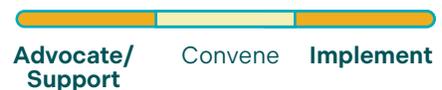
Alignment and partnership; capacity building; engagement; reducing disproportionate impacts; relationship building; share benefits

STRATEGIC CONNECTIONS:

30-Year Forest Plan; Clean Water Healthy Habitat Strategic Plan; DLS Subarea Plans; King County Comprehensive Plan; King County ERSJ Strategic Plan; King County Extreme Heat Mitigation Strategy; Land Conservation Initiative; Regional Stormwater Action Goals

EARLY ACTION 

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 15. ADVANCE STORMWATER PARKS THROUGH A COUNTYWIDE ROADMAP

Stormwater parks provide an opportunity to build significant co-benefits into stormwater management facilities. These co-benefits include adding neighborhood green spaces, reducing urban heat, increasing community amenities, green workforce opportunities, and providing wildlife habitat. King County will lead the development of a preliminary feasibility analysis for accelerating the strategic siting of 30 stormwater parks across King County, in line with the County Executive's regional Stormwater Summit goals. The project will develop a preliminary spatial assessment across King County's geography to support strategic siting and development of stormwater parks designed to help control current and projected changes in stormwater runoff. Initial maps will be pilot tested with the Our Green/Duwamish Coalition in the Green-Duwamish River watershed with the goal of identifying specific multi-benefit project sites for piloting stormwater park development. The County will then use this roadmap for seeking design and construction funding.

LEAD AGENCIES:

DNRP-WLRD

PARTNER AGENCIES:

DNRP-DO, Parks

EXTERNAL PARTNERS:

King County cities; non-governmental organization partners (e.g., The Nature Conservancy, Stewardship Partners); the Puget Sound Regional Council; the South-Central Local Integrating Organization; Our Green/Duwamish

EQUITY OBJECTIVES:

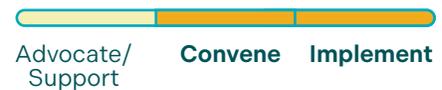
Alignment and partnership; economic opportunity and workforce diversity; engagement; reduce disproportionate impacts; relationship building; share benefits

STRATEGIC CONNECTIONS:

Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan; King County Extreme Heat Mitigation Strategy; Land Conservation Initiative; Regional Stormwater Action Goals; Salmon Recovery Plans

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 16. ACCELERATE GREEN STORMWATER INFRASTRUCTURE AND LEGACY FACILITY RETROFITS

Green Stormwater Infrastructure (GSI) benefits overburdened, urbanized communities lacking in existing infrastructure, like Skyway and White Center, by both improving water quality and providing flow control for stormwater runoff. King County will develop a work plan and define implementation pathways to achieve the Regional Stormwater Action Goal of providing flow control to 5,000 acres across King County within 30 years. Work for 2025–2030 will include identifying priority areas for GSI and detention pond retrofits, estimating the total cost of full implementation, identifying a pathway of coordination and funding strategies to achieve full implementation, and starting construction on priority projects such as the White Center Regional Stormwater Park, Cemetery Pond, and Sunrise Elementary retrofits.

LEAD AGENCIES:

DNRP-WLRD

PARTNER AGENCIES:

DLS-Permitting, Roads; DNRP-Parks

EXTERNAL PARTNERS:

Duwamish Tribal Services; Skyway Coalition; Our Green/Duwamish

EQUITY OBJECTIVES:

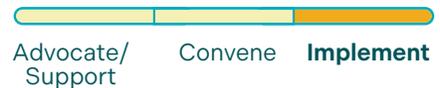
Reduce disproportionate impacts; share benefits

STRATEGIC CONNECTIONS:

Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan; Our Green/Duwamish; Regional Stormwater Action Goals; Skyway Stormwater Management Action Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 17. INCREASE ON-SITE STORMWATER SYSTEM CAPACITY AT KING COUNTY LANDFILLS AND TRANSFER STATIONS

Heavy rainfall can overwhelm leachate and contaminated stormwater storage and conveyance systems at landfills and transfer stations. To help adapt to projected increases in heavy rain and reduce the likelihood of system overflows, King County will implement smart controls to monitor and manage leachate and contaminated stormwater at the Cedar Hills Regional Landfill and relevant closed landfills, creating greater resilience to the impacts of extreme precipitation. Work on this action includes installing sensors that monitor reservoir levels and incorporate weather forecasts to allow real-time monitoring and support storage optimization.

King County will also assess current designs for stormwater conveyance and storage at Cedar Hills, closed landfills, and transfer stations, and implement approaches that reduce runoff from extreme precipitation events. This includes retrofitting or updating designs to account for current and projected increases in stormwater volume. Steps taken as part of this work will help reduce stormwater runoff, reduce peak flows and pollutant loads downstream, and reduce the risk of erosion and flooding at or near the landfills.

LEAD AGENCIES:

DNRP-SWD

PARTNER AGENCIES:

DLS-Permitting; PHSKC-DO

EXTERNAL PARTNERS:

Ecology; local jurisdiction stormwater utilities

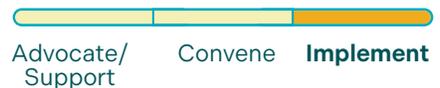
EQUITY OBJECTIVES:

Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

Solid Waste Climate Change Vulnerability Assessment

KING COUNTY ROLE:



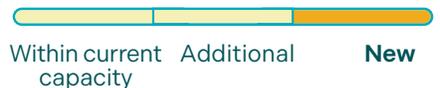
ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 18. EXPAND THE USE OF RECYCLED WATER

Climate change is placing added stress on summer streamflows and increasing irrigation water demand in agricultural areas like the Sammamish Valley. To help reduce water withdrawals and benefit summer streamflow in the Sammamish Valley, King County will continue efforts to ensure reliable delivery and expand the use of recycled water from the Brightwater Treatment Center in the Sammamish Valley. The County will also continue to work with stakeholders to explore opportunities in other areas across the county where there is an interest in using recycled water.

LEAD AGENCIES:

DNRP-WTD

PARTNER AGENCIES:

DNRP-WLRD

EXTERNAL PARTNERS:

City of Renton; farmers in the Sammamish Agriculture Production District; Washington Water Trust

EQUITY OBJECTIVES:

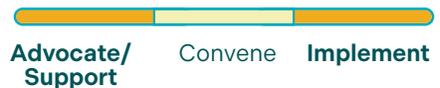
Relationship building

STRATEGIC CONNECTIONS:

Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan; Regional Wastewater Services Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 19.

REDUCE WATER USE BY KING COUNTY GOVERNMENT AND DEVELOP AN OPERATIONAL DROUGHT RESPONSE STRATEGY

Water is a valuable resource, critical for wellbeing of people, fish, and ecosystems. As our region’s summers become hotter and drier due to climate change, the importance of efficient water use increases. King County government is a major water consumer, using water for a variety of functions in its office buildings and restrooms, to irrigate playfields and parks, and to clean and support processes at solid waste, transit, and wastewater facilities. This water usage and associated wastewater treatment costs total several million dollars per year across County agencies. Energy and associated GHG emissions to heat and pump potable water, and to pump and treat wastewater, are also significant.

Since the 2020 SCAP, County agencies have taken steps to better manage and reduce County government water usage. This includes initial baselining of water usage data; implementing projects to reduce water usage, such as limited installation of low flow toilets; planting more drought tolerant landscaping; and adding water-related credits and actions into the County’s green building program and scorecard. King County will further progress on this work by (1) completing a water usage inventory for all major water uses; (2) continuing to implement water usage reduction strategies; and (3) completing an operational Drought Response Strategy by 2027 focused on water use efficiency and actions County agencies can take during periods of drought when local water utilities ask customers to take water conservation steps. Collectively, these actions will save resources and contribute to a more drought resilient King County.

LEAD AGENCIES:

ECO; DNRP-DO

PARTNER AGENCIES:

DAJD; DES-FMD; DLS; DNRP-Parks, WLRD, WTD; Metro-GM

EXTERNAL PARTNERS:

Local water utilities

EQUITY OBJECTIVES:

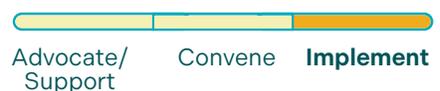
Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

Building Energy and Green Building Focus Area; Clean Water Healthy Habitat Strategic Plan; Salmon Recovery Plans

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:

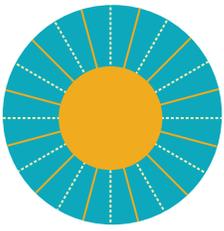


FUNDING NEED:



FUNDING DEPENDENCIES:





EXTREME HEAT ADAPTATION

Concern about higher summer temperatures and the potential for more extreme heat events has grown as the impacts of climate change become more evident. This concern was heightened with the June 2021 Pacific Northwest Heat Dome, an event made 150 times more likely because of climate change.²⁰ The 2021 Heat Dome currently stands as the single most deadly climate disaster event in Washington State with more than 125 reported heat-related deaths statewide, including 34 deaths in King County.

Though heat affects everyone, not everyone is impacted equally. Factors influencing vulnerability to heat include where a person lives or works, access to housing, occupation, income, age, degree of social isolation, and prevalence of pre-existing medical conditions. Spatial analysis of King County shows that local heat islands (Figure 26) tend to have a higher proportion of people living with low incomes, seniors living alone, people with limited English proficiency, and cardiovascular disease. These hotter areas also have fewer trees and more paved surface relative to cooler areas of the county, increasing exposure for people who are most at risk. For additional SCAP actions related to urban forest canopy, see the Forest Resilience and Urban Tree Canopy Focus Area.

WHAT'S AT STAKE

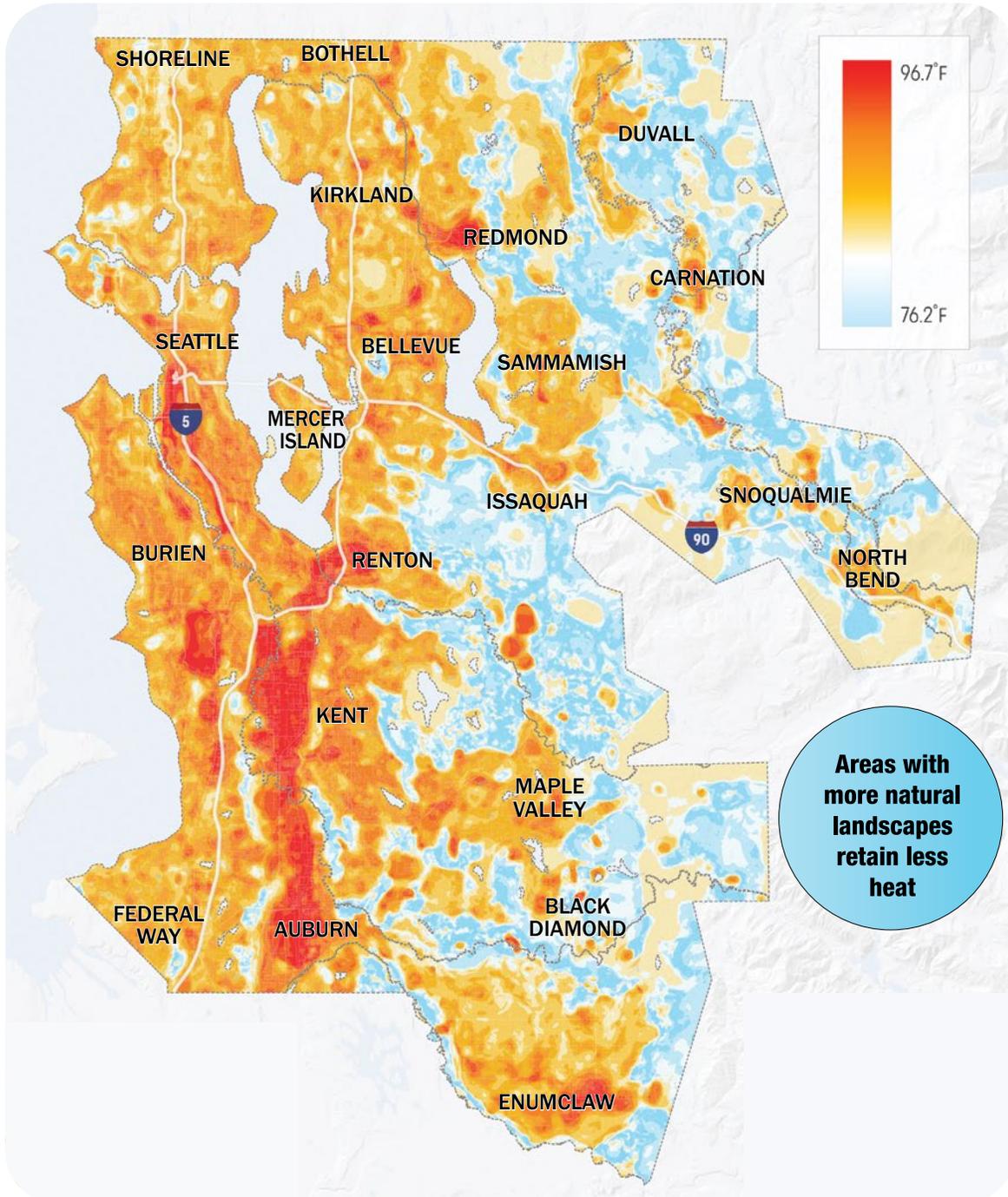
All climate projections show a continuing trend of rising summer temperatures, underscoring the need to be better prepared for extreme heat events as they exist today and with climate change. Average summer maximum temperatures in King County are projected to be about 3.7°F warmer by the 2030s and 10.5°F warmer by the 2080s compared to the 1980–2009 historical average.²¹ Nighttime temperatures also increase, limiting the potential for homes to cool and people to recover after hot days. Additionally, the likelihood of more frequent and hotter daytime heat waves increases.

Increasing temperatures and an aging population will add to heat-related health risk in western Washington. Local studies show that hospital admissions, emergency medical service calls, and risk of death in King County increase on hotter days (defined as 97°F with humidity).^{22, 23} By 2050, heat-attributable deaths in the Puget Sound lowlands (which includes western King County) under both a low and high greenhouse gas emissions scenario could increase 87–178 percent.²⁴ Adults over age 60—a growing demographic—are particularly at risk. The number of King County residents over age 65 is projected to double from approximately 305,000 in 2020 to 617,000 in 2050, increasing from 13.4 to 21.4 percent of the projected population.²⁵

Figure 26. King County heat islands

Differences in land use, land cover, and geography will cause temperatures to vary over relatively small scales. Areas in red and orange on the map indicate areas with hotter surface temperatures relative to areas in blue. The hotter areas are referred to as heat islands.

EVENING STUDY RESULTS



Source: King County (2020)

A BETTER OUTCOME

King County envisions a future where the harmful effects of extreme heat on people and places are equitably reduced. This will be achieved by effectively preparing for and responding to heat events, expanding the use of built and nature-based solutions that reduce extreme heat impacts, and strengthening the resilience of communities most affected. King County communities will

be safe and healthy both indoors and outdoors during extreme heat events through increased access to cooling for vulnerable residents, heat-resilient infrastructure and community design, accessible and equitably distributed green spaces, increased heat safety awareness, and support for community-led heat preparedness efforts.

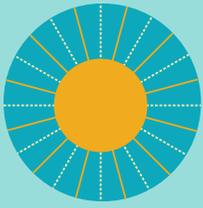
WHAT WE'VE DONE TO GET HERE

- [Mapped](#) areas in King County with elevated surface temperatures (known as “heat islands”) (2020). Mapping results have been used to support decisions related to placement of King County Metro bus shelter installations and property acquisitions in urban areas by the King County Land Conservation Initiative.
- Created the [King County Extreme Heat Mitigation Strategy](#) (2024) in partnership with local governments, community partners, and frontline communities.
- Updated operational plans and increased technical capacity for heat response by King County agencies.
- Developed multilingual heat education and communications to share with community partners.

WHAT WE'LL DO NEXT

Implement the King County Extreme Heat Mitigation strategy, inclusive of the following:

- **Prep 20.** Expand access to cooling locations for communities
- **Prep 21.** Facilitate and support community-led strategies and initiatives to address extreme heat
- **Prep 22.** Reduce heat impacts through effective building and development codes and policies
- **Prep 23.** Integrate tree planting into ongoing efforts to adapt bus stops for extreme heat



PREP 20. EXPAND ACCESS TO COOLING LOCATIONS FOR COMMUNITIES

Community-based organizations with local facilities are uniquely positioned to provide cooling locations that are culturally compatible and attuned to the needs of their high-risk community members. King County will work with community partners and local jurisdictions to identify opportunities and support the development of cooling locations at community-trusted facilities. Support provided can range from identifying potential locations and site hosts, assisting facilities with obtaining cooling-related resources and upgrades, training community-based organization staff to operate cooling locations, and connecting community facility staff to Resilience Hub resources if interested.

LEAD AGENCIES:

ECO

PARTNER AGENCIES:

DCHS; DES-OEM; PHSKC-DO

EXTERNAL PARTNERS:

Community-based organizations; King County Regional Homelessness Authority; local jurisdictions

EQUITY OBJECTIVES:

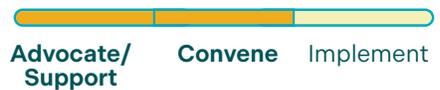
Alignment and partnership; capacity building; engagement; reduce disproportionate impacts; relationship building; share benefits

STRATEGIC CONNECTIONS:

Energize Program; King County Comprehensive Plan; King County Extreme Heat Mitigation Strategy

EARLY ACTION

KING COUNTY ROLE:



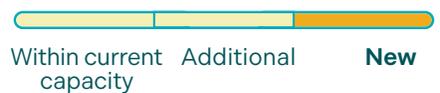
ACTION TYPE:



IMPLEMENTATION FEASIBILITY:

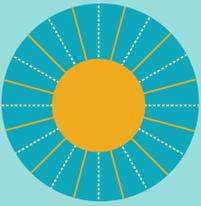


FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 21. FACILITATE AND SUPPORT COMMUNITY- LED STRATEGIES AND INITIATIVES TO ADDRESS EXTREME HEAT

Community-based organizations and service providers who work with heat-sensitive communities are best positioned to identify and develop additional strategies that directly address community needs and priorities. King County will work with local service providers, community-based organizations, and other relevant partners to integrate extreme heat response into existing programming that serves vulnerable groups and to develop funding streams for community-led heat resilience projects. This includes supporting the funding and distribution of cool kits for people who are unhoused; building out a network of service providers that can support vulnerable groups with heat safety messaging and item distribution during extreme heat events; developing a new grant program or modifying existing funding offerings to financially support community-led heat solutions; and as part of work included in the Sustainable and Resilient Frontline Communities Section, creating and distributing multilingual and culturally-relevant heat safety information with community members.

LEAD AGENCIES:

ECO

PARTNER AGENCIES:

DCHS; PHSKC-DO

EXTERNAL PARTNERS:

Community-based organizations; King County Regional Homelessness Authority; local jurisdictions; local service providers

EQUITY OBJECTIVES:

Accountability; alignment and partnership; capacity building; engagement; reduce disproportionate impacts; relationship building; share benefits

STRATEGIC CONNECTIONS:

Energize Program; King County Comprehensive Plan; King County Extreme Heat Mitigation Strategy

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:

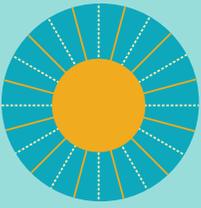


FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 22. REDUCE HEAT IMPACTS THROUGH EFFECTIVE BUILDING AND DEVELOPMENT CODES AND POLICIES

Housing conditions play a significant role in preparing communities for the impacts of climate change and in protecting the health of individuals during severe weather events such as extreme heat. One of the primary tools for standardizing how new or existing buildings are designed, built, or altered is building codes. Developing codes that improve thermal comfort or increase heating and cooling efficiencies help ensure access to safer and more energy efficient buildings over time. Building codes can also help reduce the heat island effect by reducing overall thermal loading on buildings.

King County will convene subject matter experts through the Regional Code Collaboration to adapt the New Buildings Institute’s Heat Code Overlay to the County and to develop additional guidance as needed to integrate heat resilience into building and energy codes. After development of the model codes, the County will work with relevant partners to advocate for adoption of these codes at the Washington State Building Code Council. For codes not adopted at the state level, the County will work with local jurisdictions to integrate these requirements into local codes as well as incorporate them into initiatives such as financial incentives and building scorecards.

LEAD AGENCIES:

ECO

PARTNER AGENCIES:

DLS-Permitting; DNRP-SWD

EXTERNAL PARTNERS:

Affordable housing developers; local jurisdictions; Regional Code Collaboration; State Building Code Council; supportive business industry partners

EQUITY OBJECTIVES:

Alignment and partnership; economic opportunity and workforce diversity; reduce disproportionate impacts; share benefits

STRATEGIC CONNECTIONS:

Energize Program; King County Comprehensive Plan; King County Extreme Heat Mitigation Strategy

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:

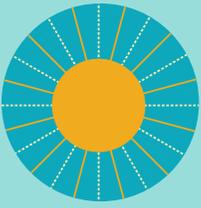


FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 23. INTEGRATE TREE PLANTING INTO ONGOING EFFORTS TO ADAPT BUS STOPS FOR EXTREME HEAT

Many King County bus stops lack cover from the weather. During heat waves, this can create additional challenges for riders with underlying health conditions or limited mobility. The County will expand its efforts to increase rider protection from extreme weather to include tree plantings near bus stops in low tree canopy cover areas. Since 2021, King County’s Bus Stop Improvements program has been constructing at least 10 percent of new weather-related improvements in areas that experience extreme heat. The program will expand on this action by introducing tree planting at bus stops in areas with low tree canopy cover. The County will coordinate closely with local jurisdictions to ensure that new trees comply with local right-of-way requirements and that the trees will be adequately supported during the establishment period. To start, the program will plant new trees within at least one bus stop each calendar year with the goal of expanding as barriers to this work are identified and addressed.

LEAD AGENCIES:

Metro–Mobility

PARTNER AGENCIES:

DLS–Roads

EXTERNAL PARTNERS:

Partner jurisdictions

EQUITY OBJECTIVES:

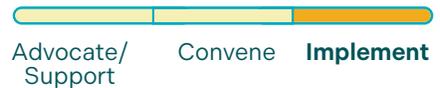
Accessibility; alignment and partnership; reduce disproportionate impacts; share benefits

STRATEGIC CONNECTIONS:

Metro Connects; Metro Mobility Framework

EARLY ACTION

KING COUNTY ROLE:



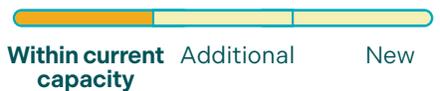
ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:



OTHER SCAP ACTIONS BENEFITING HEAT RESILIENCE

In addition to the actions in this Focus Area, many actions in the Climate Preparedness section and other sections of the 2025 SCAP will help to reduce the impacts of extreme heat on people and places in King County. For example, community resilience during extreme heat events will be strengthened by actions to:

- Co-develop multilingual and culturally competent heat safety and preparedness trainings (SRFC 18: Co-create community climate hazards and resilience training),
- Increase access to energy affordability programs for income-qualified residents (SRFC 35: Establish a “one stop shop” for utilities affordability programs),
- Expand heat pump installation programs to include more facility types and geographic areas (GHG 29: Directly facilitate retrofits of housing and community assets of frontline communities to reduce emissions and provide access to cooling),
- Develop building codes and policies that help to reduce heat impacts (GHG 33: Develop regional green building codes), and
- Support heat safety programs in schools (SRFC 8: Advance climate resilience in K–12 schools).

The 2025 SCAP also supports nature-based solutions that can cool or prevent heat islands and help residents stay cool. This includes actions that will:

- Accelerate the rate of protection of forests, parks, and natural lands (GHG 53: Protect remaining high conservation value lands),
- Increase access to green space by creating multi-benefit stormwater parks (Prep 15: Advance stormwater parks through a countywide roadmap), and
- Bolster healthy urban tree canopy coverage (Prep 29: Expand urban tree canopy and partnerships across jurisdictions).

These actions collectively work together to reduce heat risk and adapt our built environment to better handle heat.





FOREST RESILIENCE AND URBAN TREE CANOPY EXPANSION

King County's extensive forest lands, totaling more than 800,000 acres countywide, and urban tree canopy provide a wide range of economic, ecological, and cultural benefits. These forests and urban tree canopy regulate water quantity and quality, improve air quality, improve mental health, support recreational opportunities, and cool urban heat islands. County forests also provide renewable timber resources and have the capacity to sequester and store carbon, an ecosystem service critical to reducing climate change. For additional SCAP forest actions related to carbon sequestration, see the Forests and Agriculture Focus Area in the Reducing GHG Emissions section.

Retaining and expanding tree canopy and ensuring equitable access to green space has become increasingly important and challenging as development intensifies in the King County region. Equally important is ensuring that forests and urban tree canopy can remain healthy in the face of stressors like disease, drought, heat stress, and invasive species. Forest health treatments such as selective thinning, replanting to include a diversity of species, and removal of invasive species may be needed to restore forest health. Actions needed to help grow a more robust and healthier urban tree canopy include routine tree maintenance (e.g., pruning and trimming), proper siting and site conditions for planting, invasive weeds control, and adequate watering for new trees.

WHAT'S AT STAKE

King County Parks has approximately 27,000 acres of forests that provide many regional benefits but also pose a significant management challenge given growing environmental stressors from climate change, drought, urban development, and increased fire risk. Prior to County ownership, most of the forests now managed by King County regenerated from clearcut harvests, leading to excessively dense or sparse stands, low species diversity, and/or minimal understory vegetation. These site conditions, if left unaddressed, leave County forests susceptible to insects, diseases, and extreme weather such as heat, drought, and windstorms.

Urban tree canopies are also facing increasingly challenging conditions. Between 1992 and 2016, forest cover in cities in King County declined from 23 percent to 18 percent (a loss of more than 10,000 acres) and from 37 percent to 29 percent in urban unincorporated areas (a loss of approximately 2,000 acres) as the area of developed land increased.²⁶ High mortality rates among newly planted trees in urban environments are common due to hotter summer temperatures, poor planting conditions, and challenges with proper tree care as young trees are getting established. Established trees are also seeing increased stress and damage from heat, drought, insects, and disease.

A BETTER OUTCOME

King County envisions forests and green spaces that are protected, widespread, equitably distributed, healthy, and connected in ways that sustain habitat, clean air, cool waters and air temperatures, and natural streamflow. The county's urban tree canopy is thriving and inequities in tree cover and green space, especially in urban heat islands and low-canopy neighborhoods, are eliminated. Investments in pursuit of this outcome are paired with strategies and policies to prevent displacing low-income residents.



Restoring King County forests to create a broader range of tree species, sizes, and ages helps County forests be more resilient to the impacts of climate change. Planting more trees near streams also keeps streams cooler in summer, supporting salmon recovery.

WHAT WE'VE DONE TO GET HERE

- Developed the [King County 30-Year Forest Plan \(2021\)](#), a shared countywide vision for rural and urban forest cover and forest health. Includes priorities, goals, and strategies related to climate change and urban tree canopy.
- Committed to preparing 1,000 acres of forest (about 500,000 trees) to be more resilient in a changing climate with warmer, drier summers.
- Increased the amount of funding available for land conservation through a voter-approved reset to the Conservation Futures Tax levy (2022).
- Created the Urban Forestry Forum (2022) and hired an Urban Forestry Program Manager (2023) to foster collaboration on countywide urban forestry objectives.
- Incorporated forest resilience and urban tree canopy priorities into countywide strategies on wildfire risk reduction (2022) and extreme heat (2024).

WHAT WE WILL DO NEXT

- **Prep 24.** Develop an outcome-based forest management framework for King County-owned forestland
- **Prep 25.** Accelerate forest restoration on King County-owned lands
- **Prep 26.** Increase local supply of climate-adapted seedlings for forest restoration
- **Prep 27.** Support implementation of forest management best practices by private forest landowners
- **Prep 28.** Explore opportunities to strengthen connections between King County forest stewardship and Indigenous and tribal values, knowledge, and practices
- **Prep 29.** Expand urban tree canopy and partnerships across jurisdictions



PREP 24. DEVELOP AN OUTCOME-BASED FOREST MANAGEMENT FRAMEWORK FOR KING COUNTY-OWNED FORESTLAND

Forest management is critical for maintaining healthy natural ecosystems, supporting biodiversity, and providing public health benefits. King County will develop a forest management framework for its forested property and benchmarks for success based on achieving healthy, climate-resilient forests. This framework will document current health, establish desired future conditions, and identify a timeline for achieving restoration benchmarks. The framework will also incorporate long-term monitoring and maintenance and adaptive management plans.

LEAD AGENCIES:

DNRP-Parks; WLRD

EXTERNAL PARTNERS:

WDFW; WDNR

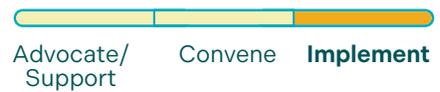
EQUITY OBJECTIVES:

Share benefits

STRATEGIC CONNECTIONS:

30-Year Forest Plan; Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan; Open Space Plan

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 25. ACCELERATE FOREST RESTORATION ON KING COUNTY-OWNED LANDS

Well-maintained forest land supports healthy communities, pollution mitigation, and resilient natural ecosystems. King County will improve forest resilience and carbon sequestration potential on County-owned forestland by continuing to accelerate proactive stewardship and restoration efforts. Forest management actions will be identified, designed, and implemented to improve ecological conditions and climate resilience, with examples including selectively thinning overcrowded areas; planting native and climate-tolerant tree seedlings; performing ongoing maintenance based on site-specific conditions (e.g., vegetation management); and monitoring results to inform next steps.

LEAD AGENCIES:

DNRP-Parks

EXTERNAL PARTNERS:

Consultants; forestry contractors; regional seedling nurseries; WDNR

EQUITY OBJECTIVES:

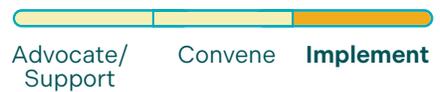
Share benefits

STRATEGIC CONNECTIONS:

30-Year Forest Plan; Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan; Land Conservation Initiative

EARLY ACTION

KING COUNTY ROLE:



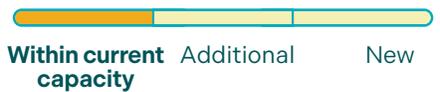
ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 26. INCREASE LOCAL SUPPLY OF CLIMATE-ADAPTED SEEDLINGS FOR FOREST RESTORATION

Choosing the right tree species to thrive in a changing climate is an increasingly important consideration. King County will develop best practices and seek to expand seedling resources for climate-resilient restoration throughout King County and the region. This includes completing the initial phase of climate-adapted seedling trials, integrating findings into agency planting strategies, and ensuring study findings are distributed to forestland managers. The County will also develop a climate-adapted planting policy to guide large-scale planting and restoration projects, address assisted migration, and maintain a list of acceptable plant species to be used in mitigation and restoration projects. Finally, the County will work with partners to identify options for increasing the availability of climate-resilient tree seedlings. This may include expanding the County’s nursery and/or creative partnership with local agencies, partners, and private nurseries.

LEAD AGENCIES:

DNRP–Parks, WLRD

EXTERNAL PARTNERS:

Local seedling nurseries; WDNR

EQUITY OBJECTIVES:

Share benefits

STRATEGIC CONNECTIONS:

30-Year Forest Plan; Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 27. SUPPORT IMPLEMENTATION OF FOREST MANAGEMENT BEST PRACTICES BY PRIVATE FOREST LANDOWNERS

While King County has been successful in ensuring that private forest landowner plans include actions that enhance forest resilience, property owners often face technical and financial barriers to implementing recommendations in those plans. In collaboration with partners, the County will support small private forest landowners with enhanced levels of education, technical support, and financial assistance to ensure they can implement best management practices for forest health improvement, wildfire risk reduction, and climate resilience. This includes best management practices that will help prevent wildfire ignition and spread on their forested properties.

LEAD AGENCIES:

DNRP-WLRD

EXTERNAL PARTNERS:

KCD; USDA Natural Resources Conservation Service; U.S. Forest Service; WDNR; WSU Extension

EQUITY OBJECTIVES:

Relationship building

STRATEGIC CONNECTIONS:

30-Year Forest Plan; King County Community Wildfire Protection Plan; King County Comprehensive Plan; King County Wildfire Risk Reduction Strategy

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 28. EXPLORE OPPORTUNITIES TO STRENGTHEN CONNECTIONS BETWEEN KING COUNTY FOREST STEWARDSHIP AND INDIGENOUS AND TRIBAL VALUES, KNOWLEDGE, AND PRACTICES

Tribal communities have served as stewards of local land since time immemorial. King County will seek opportunities to work with area tribes to explore if and how the County's climate and forest stewardship goals and objectives may overlap with tribal values, knowledge, and practices. Where alignment or opportunities for alignment exists, King County will seek ways to collaboratively implement forest practices that honor tribal knowledge and support tribal values and practices. Examples could include improving forest conditions that support the ability of tribes to exercise treaty rights and cultural practices; creating broader public understanding of pre-settlement forest conditions and stewardship by the Coast Salish peoples; and identifying culturally-relevant plants and trees for restoration efforts.

LEAD AGENCIES:

DNRP-Parks, WLRD

EXTERNAL PARTNERS:

Area tribes

EQUITY OBJECTIVES:

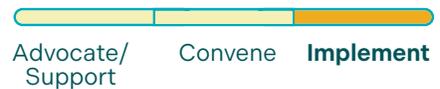
Alignment and partnership; engagement; relationship building; share benefits

STRATEGIC CONNECTIONS:

30-Year Forest Plan; King County ERSJ Strategic Plan; King County Comprehensive Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 29. EXPAND URBAN TREE CANOPY AND PARTNERSHIPS ACROSS JURISDICTIONS

Establishing robust and healthy urban forests that yield long-term benefits requires maintaining and expanding tree canopy, particularly in areas over pavement and in low-canopy neighborhoods where it's most needed. While many communities have had success with tree planting programs, survival for newly planted trees and proper tree care are ongoing challenges, particularly in urban environments. Development pressures and barriers to proper tree maintenance on public and private property are further compounding tree loss in urban areas.

King County will enhance tree canopy and forest health on public and private lands in urbanized areas and identify approaches that can leverage existing resources to achieve this goal. Specific actions include developing and implementing approaches to support tree retention, planting, and maintenance on private property; improving site conditions and early care for planting; supporting local efforts to identify, track, and achieve tree canopy goals; setting tree canopy goals for urban unincorporated areas and rural towns; developing and promoting a Tree Code Toolkit designed to assist cities crafting or revising tree regulations; updating the County's tree regulations for urban unincorporated areas and rural towns; and increasing investments in noxious weed management in urban areas.

King County was awarded a grant from the WA DNR, contingent on federal funding, to engage communities in planning and implementation activities to maintain and increase tree canopy in urban unincorporated King County. Activities include a data-driven canopy cover assessment, community engagement with the King County Open Space Equity Cabinet, Climate Equity Community Taskforce (CECTF), and other local community-based organizations, and implementation of three pilot projects to enhance local tree canopy. Insights from this work will guide further development and expansion of the King County Urban Forestry Program, consideration of site-specific tree canopy coverage targets for urban unincorporated areas, and work to address urban tree canopy inequities.

As part of this work, King County will continue to support the Urban Forestry Forum, created in 2022, to further foster collaboration on county-wide urban forestry objectives.

LEAD AGENCIES:

DNRP-Parks, WLRD

PARTNER AGENCIES:

ECO

EXTERNAL PARTNERS:

CBOs, CECTF; Local jurisdictions; K4C; KCD; King County Open Space Equity Cabinet; King County residents; Nongovernmental organizations; Urban Forestry Forum; WDNR

EQUITY OBJECTIVES:

Alignment and partnership; engagement; reduce disproportionate impacts; relationship building; share benefits

STRATEGIC CONNECTIONS:

Clean Water Healthy Habitat Strategic Plan; King County 30-Year Forest Plan; King County Comprehensive Plan; King County Extreme Heat Mitigation Strategy; Land Conservation Initiative

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





WILDFIRE RISK REDUCTION

Large wildfires across the Pacific Northwest, along with rising concerns about local climate change impacts, have increased awareness that King County communities need to be better prepared for wildfire. This need was reinforced in fall 2022 when King County experienced two wildfires within a matter of weeks—the Bolt Creek fire near Skykomish (14,766 acres) and the Loch Katrine fire near North Bend (2,000 acres).

Climate change increases the potential for fires like the Bolt Creek and Loch Katrine fires. Much larger fires are also possible. While each fire is unique in its location, behavior, and impacts, these fires—along with wildland-urban interface fires in other regions, such as the January 2025 fires in Los Angeles—offer valuable insights into how King County can better prepare for growing wildfire risks.

WHAT'S AT STAKE

Higher seasonal temperatures, lower mountain snowpack, and drier summers result in drier fuels (e.g., grasses, shrubs, trees) and a longer fire season, increasing the potential for wildfire. Research shows that area burned by wildfire in Western Washington could increase by +150 to +1,000 percent by the 2080s (relative to 1971–2000) under a high greenhouse gas emissions scenario.²⁷ As conditions become more favorable for wildfire in Western Washington, the odds that a smaller fire becomes a large fire that cannot be quickly contained increases, particularly if a fire occurs in late summer (when conditions are typically driest) with strong winds from Eastern Washington.

Population growth in King County and development in the wildland-urban interface also increase wildfire potential and risk. The county's wildland-urban interface, mapped by the Washington Department of Natural Resources in 2021, is home to more than 350,000 residents and over 2,000 commercial and industrial buildings (Figure 27). As population grows, the likelihood of more ignitions from human causes grows—about 85 percent of wildfires in Washington are started by people.²⁸ Fire suppression efforts may also become more complicated with increased development in the wildland-urban interface.



A BETTER OUTCOME

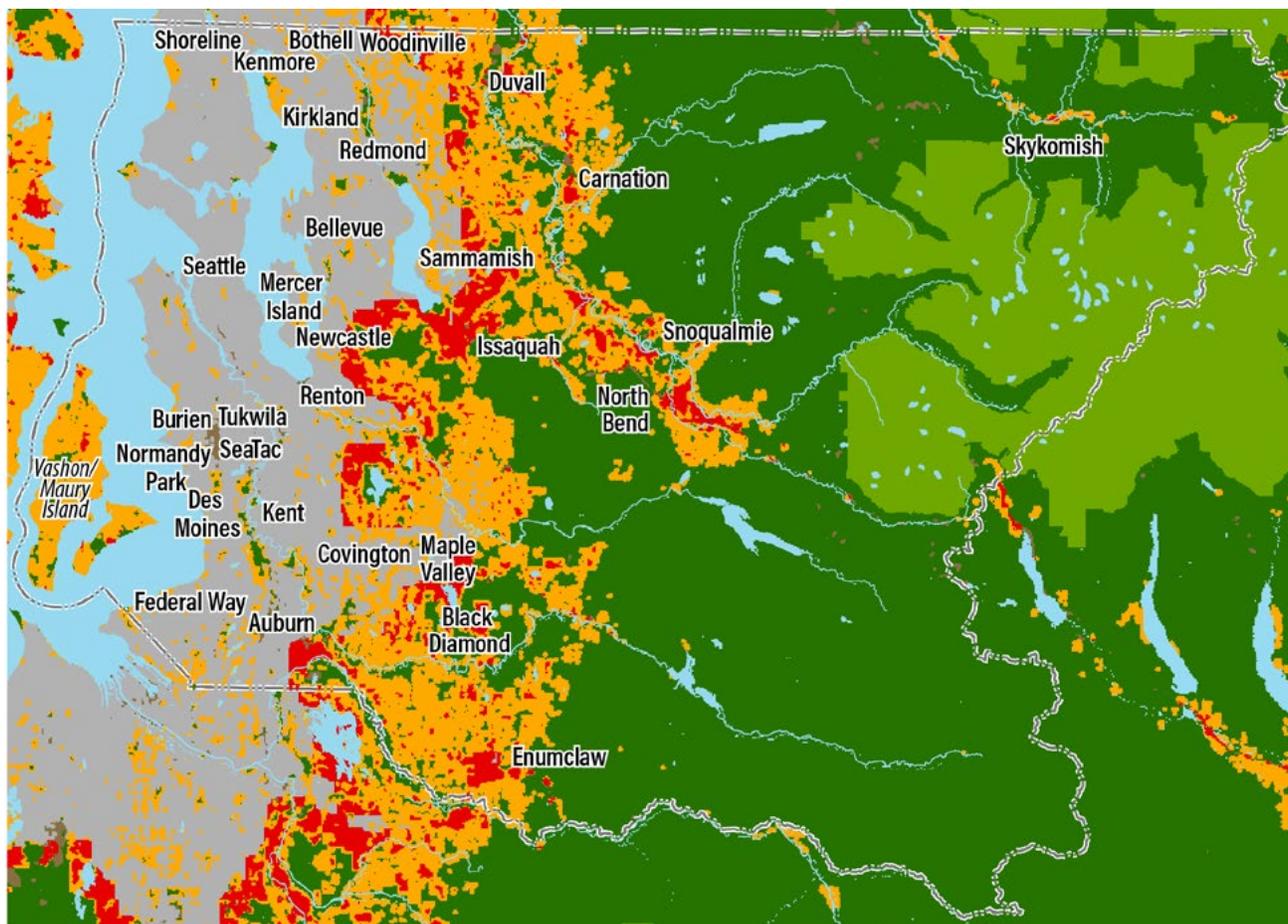
King County envisions a future where forests are managed to increase wildfire resilience in ways that are appropriate to Western Washington's ecology. Risks to residents, neighborhoods, and communities in the wildland-urban interface are lower due to collaboration and proactive investments in wildfire mitigation, preparedness, response, and recovery. Residents have equitable access to information, programs, and resources to reduce risk and stay safe in the event of a fire. First responders have the capacity and resources needed to respond quickly, effectively, and safely to wildfires.



Figure 27. King County Wildland-Urban Interface

The color-coded map categories are based on the proportion of vegetation cover to structures in an area. Interface areas are those in which development and structures are bordered by wildlands on at least one side. Intermix areas are defined as a development or structure that is surrounded on two or more sides by wildlands.

Note: The Wildland-Urban Interface Map is not a map of wildfire risk. The WUI map classifications do not account for critical infrastructure, evacuation constraints, or other factors that determine if an area has a higher wildfire risk relative to other areas.



King County Wildland-Urban Interface (WUI)

- Long-term Non-Buildable Areas
- WUI - Interface
- WUI - Intermix
- Non-Vegetated Inhabited
- Non-Vegetated Uninhabited
- Vegetated Uninhabited



220720_12694m_WUIRisk_Map.ai
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 Department of Natural Resources (DNR), Wildfire Division, Forest Health Division

The use of the information in this map is subject to the terms and conditions found at: www.kingcounty.gov/services/gis/Maps/terms-of-use.aspx. Your access and use is conditioned on your acceptance of these terms and conditions.

Source: Washington State Department of Natural Resources (2019)

WHAT WE'VE DONE TO GET HERE

- Worked with regional partners to develop the [King County Wildfire Risk Reduction Strategy](#) (2022), a first-ever strategic framework for cross-jurisdictional and cross-organizational work on wildfire risk reduction in King County.
- Launched the [“Ready, Set, Go!” wildfire evacuation messaging campaign](#) (2023) in collaboration with nine counties, including Snohomish, Pierce, and Thurston counties.
- Increased technical assistance to landowners and ensured that stewardship plans address wildfire risk.
- Initiated development of countywide Community Wildfire Protection Plan (2024) in collaboration with King County wildland-urban interface communities, first responders, and wildfire risk reduction experts.

WHAT WE'LL DO NEXT

Implement the Wildfire Risk Reduction Strategy, inclusive of the following:

- **Prep 30.** Develop Community Wildfire Protection Plans
- **Prep 31.** Work collaboratively on shared wildfire risk reduction priorities
- **Prep 32.** Establish a wildfire adapted community coalition
- **Prep 33.** Standardize and promote best management practices for wildfire mitigation
- **Prep 34.** Plan for post-wildfire community recovery
- **Prep 35.** Prepare and plan for post-wildfire recovery on King County-owned forestland
- **Prep 36.** Create a wildfire management plan for landfills and transfer stations



PREP 30. DEVELOP COMMUNITY WILDFIRE PROTECTION PLANS

Community-scale wildfire risk assessments provide critical information that can be used by planning officials, hazard mitigation managers, land managers, and response agencies to support risk-based planning and decision making. King County will develop its first countywide Community Wildfire Protection Plan (CWPP) and work with multiple jurisdictions and partners across King County to create localized wildfire hazard maps and action plans that can be integrated into the County CWPP, making those jurisdictions eligible for a range of wildfire mitigation funding opportunities. Additionally, King County government and partners will implement a strategic outreach effort to raise awareness of wildfire risk reduction, develop plan templates and guidance for use by local communities, and assist partners with implementing action items listed in the King County CWPP.

LEAD AGENCIES:

DES-OEM

PARTNER AGENCIES:

ECO; DLS-DO; DNRP-WLRD

EXTERNAL PARTNERS:

KCD; local fire districts; state/federal natural resource agencies; tribes; utilities; wildland-urban interface communities

EQUITY OBJECTIVES:

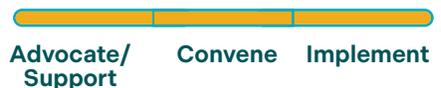
Accessibility; engagement; reduce disproportionate impacts; share benefits

STRATEGIC CONNECTIONS:

King County Comprehensive Plan; King County Hazard Mitigation Plan; King County Wildfire Risk Reduction Strategy

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 31.

WORK COLLABORATIVELY ON SHARED WILDFIRE RISK REDUCTION PRIORITIES WITH OTHER JURISDICTIONS AND PARTNERS

Wildfire risk reduction work is growing in complexity as agencies and organizations in the public and private sector become more engaged in the work. King County will seek and support opportunities to increase local wildfire mitigation capacity through coordination, collaboration, and partnership on issues related to: increasing wildfire preparedness, response, and recovery coordination with adjoining counties; updating and aligning wildland-urban interface code and policy updates across county jurisdictions; engaging with power utilities on wildfire risk reduction including actions to reduce wildfire ignition risk; supporting ongoing work with utilities and other partners to assess alternatives to current electricity distribution systems and technologies; implementing wildfire mitigation projects in high wildfire risk areas; and providing support to the King County Wildfire Mitigation Working Group.

LEAD AGENCIES:

DES-OEM; DNRP-WLRD; ECO

PARTNER AGENCIES:

DLS-Permitting

EXTERNAL PARTNERS:

KCD; local fire districts; state/federal natural resource agencies; tribes; utilities; wildland-urban interface communities

EQUITY OBJECTIVES:

Accessibility; reduce disproportionate impacts

STRATEGIC CONNECTIONS:

King County Community Wildfire Protection Plan; King County Comprehensive Plan; King County Hazard Mitigation Plan; King County Wildfire Risk Reduction Strategy

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





King County and local jurisdictions are working together to prepare for and reduce wildfire risks.



PREP 32. ESTABLISH A WILDFIRE ADAPTED COMMUNITY COALITION

Building effective local partnerships is key to developing sustained local capacity for implementing and maintaining wildfire mitigation practices. King County will pilot the development of a wildfire adapted community coalition in a higher wildfire risk area as a way of growing community capacity for wildfire mitigation and empowering communities to co-create solutions to their local wildfire challenges. The coalition will create a collaborative and cooperative space to share information, coordinate actions and work, and co-plan how best to adapt to and mitigate local wildfire threats. The coalition will be community-led and could include representatives from local communities, local fire services, community-based organizations, local government, local businesses, public land management agencies, and other stakeholders.

LEAD AGENCIES:

DNRP-WLRD

PARTNER AGENCIES:

ECO

EXTERNAL PARTNERS:

Community residents and leaders; KCD; local fire districts; state/federal natural resource agencies; Washington Resource Conservation & Development Council

EQUITY OBJECTIVES:

Relationship building

STRATEGIC CONNECTIONS:

King County Community Wildfire Protection Plan; King County Comprehensive Plan; King County Wildfire Risk Reduction Strategy

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 33. STANDARDIZE AND PROMOTE BEST MANAGEMENT PRACTICES FOR WILDFIRE MITIGATION

According to the [Federal Insurance and Mitigation Administration](#), every one dollar spent on effective mitigation practices in the wildland-urban interface saves four dollars on future disaster losses. King County will work with partners to develop a set of standardized wildfire mitigation best management practices for improving protection of homes, other built infrastructure, and routes that could be used for evacuation. This set of standardized wildfire mitigation practices will be distributed for use by King County fire departments, local governments, natural resource management agencies, and community organizations. The County will also work with current and future wildfire mitigation or technical assistance service providers and programs operating in King County to incorporate these standardized wildfire mitigation best management practices into their services and operations.

LEAD AGENCIES:

DNRP-WLRD

PARTNER AGENCIES:

ECO; DLS; DNRP-Parks

EXTERNAL PARTNERS:

Eastside Fire & Rescue; KCD; National Fire Protection Association; UW; state/federal natural resource agencies; WSU Extension; utilities

EQUITY OBJECTIVES:

Accountability; share benefits

STRATEGIC CONNECTIONS:

King County Community Wildfire Protection Plan; King County Comprehensive Plan; King County Wildfire Risk Reduction Strategy

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 34. PLAN FOR POST-WILDFIRE COMMUNITY RECOVERY

Recovering from a wildfire, especially one that burns homes and structures, is complicated. King County will convene partners and create a wildfire-specific annex to the King County Disaster Recovery Plan that outlines basic actions to take following a wildfire disaster impacting homes, public facilities, and infrastructure. The Disaster Recovery Plan identifies key agencies, their roles and responsibilities during the recovery phase, and short-term and long-term recovery goals and objectives. The plan will address federal programs such as Federal Emergency Management Agency public assistance and individual assistance, Small Business Administration loans, and housing recovery programs through the U.S. Department of Housing and Urban Development. The wildfire-specific annex will be updated with the Disaster Recovery Plan every five years or following any major disaster.

LEAD AGENCIES:

DES-OEM

PARTNER AGENCIES:

ECO; DLS-Permitting, Roads; DNRP-SWD, WLRD; PHSKC-DO; PSB-RP

EXTERNAL PARTNERS:

FEMA; King County jurisdictions; U.S. Small Business Administration; WEMD

EQUITY OBJECTIVES:

Alignment and partnership; reduce disproportionate impacts

STRATEGIC CONNECTIONS:

King County Community Wildfire Protection Plan; King County Comprehensive Plan; King County Hazard Mitigation Plan; King County Wildfire Risk Reduction Strategy; Public Health-Seattle & King County Wildfire Smoke Response Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 35. PREPARE AND PLAN FOR POST-WILDFIRE RECOVERY ON KING COUNTY-OWNED FORESTLAND

Wildfire is a natural process that can result in long-term ecological benefits. However, near-term impacts can include soil erosion and landslides, increased sedimentation and reduced water quality in nearby streams, spread of invasive plants, and slow return of carbon-sequestering forests. These impacts require immediate work to ensure the long-term recovery of areas burned by wildfire. King County will work with partners to identify and plan for wildfire mitigation and recovery practices that limit the negative, near-term impacts of wildfire on County-owned forestland. Key tasks include identifying higher risk County-owned forestland, identifying and integrating mitigation practices into County operations and projects, and developing wildfire recovery plan templates. Post-fire response plans will be developed and updated as needed to reflecting changing conditions.

LEAD AGENCIES:

DNRP-Parks, WLRD

EXTERNAL PARTNERS:

Seattle Public Utilities; U.S. Forest Service; U.S. Geological Survey; WDNR

EQUITY OBJECTIVES:

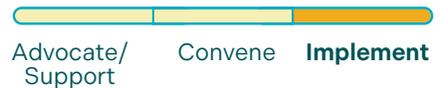
Accessibility; alignment and partnership

STRATEGIC CONNECTIONS:

King County Comprehensive Plan; King County Wildfire Risk Reduction Strategy

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 36. CREATE A WILDFIRE MANAGEMENT PLAN FOR LANDFILLS AND TRANSFER STATIONS

Wildfire poses a notable risk to King County landfills and solid waste transfer stations. Potential impacts include damage to essential systems such as landfill cover systems, landfill gas and leachate management systems, and water systems. Wildfire can also limit operations or damage facilities. King County will develop and implement site-specific risk reduction plans to reduce wildfire risks for the Cedar Hills Regional landfill, closed landfills, and transfer stations. Anticipated actions include assessing site access for wildland fire trucks and air drops, assessing current on-site water supplies, securing additional water supply or storage as needed, implementing vegetation management strategies (e.g., fire breaks), purchasing and storing materials identified in the wildfire management plan on-site, installing weather stations to monitor humidity and wind, installing monitoring cameras to support early fire detection and suppression, selecting drought tolerant and fire-resistant vegetation species, and locating fueling at least 100 feet from other buildings at new facilities.

LEAD AGENCIES:

DNRP-SWD

PARTNER AGENCIES:

DLS-Permitting

EXTERNAL PARTNERS:

Local fire departments; local water districts

EQUITY OBJECTIVES:

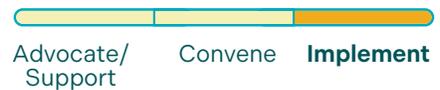
Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

King County Wildfire Risk Reduction Strategy; Solid Waste Climate Change Vulnerability Assessment

EARLY ACTION

KING COUNTY ROLE:



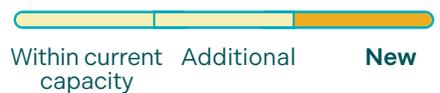
ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:

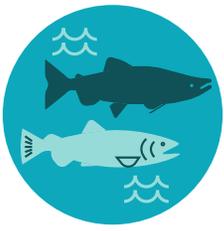


FUNDING DEPENDENCIES:





An aerial view of King County's wildland-urban interface.



SALMON RECOVERY AND HABITAT CONNECTIVITY

In Puget Sound, Chinook salmon, steelhead, and bull trout are listed as threatened under the Endangered Species Act (ESA). Their decline has deeply affected the personal, economic, cultural, and spiritual well-being of Puget Sound tribes while also causing significant losses within the region's commercial and recreational fisheries economy. The loss of salmon is also endangering other species, including southern resident orca, which has been listed as endangered under the ESA since 2005 and relies on Chinook salmon as a primary food source.

WHAT'S AT STAKE

Climate change creates significant challenges for salmon survival. Increasing water temperatures, increased "flashy" stream and river flows from more intense winter rain events, lower summer stream flows, loss of shoreline habitat due to sea level rise, and impacts on marine food webs affect salmon across all life stages.²⁹ For example, more frequent and/or more severe floods in fall and winter can move rocks and gravel along river bottoms, scouring the riverbed and destroying salmon redds (nests). Earlier peak streamflows in spring may force young salmon to migrate out of streams too early, making it harder to compete in the marine environment and potentially creating mismatches with food availability. Lower late spring and summer streamflows may limit habitat available for spawning and rearing. Finally, warmer summer/early fall water temperatures in rivers and lakes can stress stream-rearing juvenile salmon, returning adult salmon, and Lake Sammamish kokanee. These changes collectively reduce the likelihood that salmon will reach adulthood and successfully spawn in natal streams. Salmon habitat protection and restoration efforts are improving conditions for salmon, but more work is needed.

Multiple factors have contributed to the decline of salmonids in King County, including habitat loss, high summer water stream temperatures, insufficient summer streamflow, and water pollution. Climate change is exacerbating these stressors, underscoring the need to act quickly to protect and restore salmon habitat. This includes reconnecting floodplains, restoring stream corridors and shorelines, and reconnecting groundwater with streams to support cool summer streamflows. These nature-based solutions make salmon habitat and human communities more resilient to climate change, protect and improve critical infrastructure, and support local economies by generating jobs and promoting workforce development.

A BETTER OUTCOME

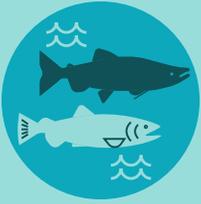
King County envisions a future where native, wild fish populations are thriving and able to access ample healthy habitat in county streams, rivers, lakes, and bays, helping to sustain populations in the face of rising temperatures and more variable stream conditions. A future where tribes have abundant salmon to provide for their personal, economic, cultural, and spiritual prosperity, and all people can enjoy locally caught fish. King County is providing access to high quality, connected habitat for species to adapt their life histories and minimize the potential for local extinctions.

WHAT WE'VE DONE TO GET HERE

- Worked with tribes, federal and state agencies, and local jurisdictions to increase access to high quality upstream habitat by inventorying and strategically removing fish passage barriers in King County streams.
- Enacted emergency actions recommended by regional partners to prevent the possible extinction of Lake Sammamish kokanee, helping kokanee rebound from a low of 19 returning adults in 2017-18 to more than 8,300 returning adults in 2024.
- Completed the 145-acre Fall City Floodplain Restoration Project, improving critical habitat for Chinook salmon and protecting farmland, homes, and businesses along the Snoqualmie River with funding support from the Flood Control District and other sources.
- Converted a former six-acre hotel site on the banks of the Duwamish River to provide critical intertidal habitat for juvenile salmon.
- Restored a nearly mile-long segment of the Cedar River to a more natural state as part of the 52-acre Riverbend restoration project, simultaneously improving salmon habitat and reducing flood risks for people, homes, and infrastructure with funding support from the Flood Control District and other sources.
- Partnered with watershed-based salmon recovery teams and other technical experts to develop climate change and salmon issue papers for major watersheds in King County.

WHAT WE WILL DO NEXT

- **Prep 37.** Accelerate riparian tree planting
- **Prep 38.** Improve water quality and habitat conditions in large lakes and migratory corridors
- **Prep 39.** Integrate climate change into decisions benefiting habitat and agricultural resilience in the Snoqualmie Valley.
- **Prep 40.** Map current and projected wildlife habitat connectivity needs for vulnerable species



PREP 37. ACCELERATE RIPARIAN TREE PLANTING

Mature and resilient riparian plantings provide the shade, food, and habitat complexity needed to support healthy salmon populations in King County rivers and streams. The County will work with partners to accelerate riparian tree planting to meet targets in priority river and stream corridors identified in salmon recovery plans. This includes building partner capacity and funding for this work; utilizing variable width buffers in the Snoqualmie Valley Agricultural Production District to support planting, as recommended by the Snoqualmie Fish, Farm, Flood’s Buffer Task Force; building strategic and durable funding mechanisms for long-term maintenance and coordinated stewardship activities; and working with local and state agencies to explore additional incentives and regulations that support work on private properties.

LEAD AGENCIES:

DNRP-WLRD

EXTERNAL PARTNERS:

Cities; environmental non-governmental organizations; KCD; private landowners; Regional Fisheries Enhancement groups; tribes

EQUITY OBJECTIVES:

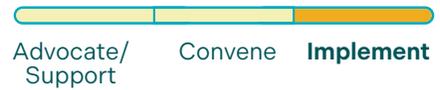
Relationship building

STRATEGIC CONNECTIONS:

30-Year Forest Plan; Clean Water Healthy Habitat Strategic Plan; Our Green/Duwamish; Salmon Recovery Plans; Snoqualmie Fish, Farm, Flood Recommendations

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:

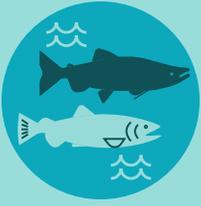


FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 38. IMPROVE WATER QUALITY AND HABITAT CONDITIONS IN LARGE LAKES AND MIGRATORY CORRIDORS

Lake Sammamish, Lake Washington, Lake Washington Ship Canal, and the Sammamish River are key salmon migratory bottlenecks where warm water and low dissolved oxygen can block or delay migration and exacerbate other stresses to salmon, such as predation and disease, that limit recovery efforts. Lake Sammamish is the year-round home for kokanee to rear before returning to spawn in tributary streams, so addressing key survival issues is critical. King County will work with partners to plan, implement, and coordinate actions to improve water quality and habitat conditions in these areas. For large lakes, priority actions include reconnecting and enhancing creek mouths and shallow-water rearing habitat, addressing impacts on the aquatic environment from artificial light at night, reducing predation on juvenile salmon and kokanee by invasive predatory fish, and controlling invasive aquatic weeds in Lake Sammamish. Priority actions in key salmon migratory areas include advancing and funding feasible engineered cold water supplementation solution(s) in the Lake Washington Ship Canal, and implementing cold water refuge and instream flow supplementation project opportunities in the Sammamish River.

LEAD AGENCIES:

DNRP-WLRD

PARTNER AGENCIES:

DNRP-WTD

EXTERNAL PARTNERS:

Ecology; Lake Sammamish Kokanee Work Group; Snoqualmie Tribe; Trout Unlimited; WDFW; WRIA 8 Salmon Recovery Council

EQUITY OBJECTIVES:

Alignment and partnership; relationship building; share benefits

STRATEGIC CONNECTIONS:

Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan; Lake Sammamish Kokanee Blueprint; WRIA 8 Chinook Salmon Conservation Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:

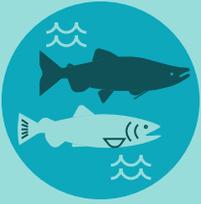


FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 39. INTEGRATE CLIMATE CHANGE INTO DECISIONS BENEFITING HABITAT AND AGRICULTURAL RESILIENCE IN THE SNOQUALMIE VALLEY

The Snoqualmie Valley is a critical location for agriculture, salmon habitat, and natural floodplain processes. King County will work with salmon recovery and agricultural interests in the Snoqualmie Valley to utilize climate change projections in the Snoqualmie Valley 2D hydraulic model to identify locations for improved access to critical off-channel floodplain habitat for juvenile salmon in the Snoqualmie floodplain, and to identify farmland at greatest risk of extreme flooding. Work on this action also includes partnering with Snoqualmie Fish, Farm, and Flood participants to conduct a low-flow threshold assessment for fish and agriculture and non-dam water storage study for the Snoqualmie Basin. Results from the model and this work can also be used to support Snoqualmie Fish, Farm, and Flood prioritization and location of agricultural drainage, habitat restoration, and flood risk reduction projects.

LEAD AGENCIES:

DNRP-WLRD

PARTNER AGENCIES:

DLS-Roads

EXTERNAL PARTNERS:

Snoqualmie Fish, Farm, Flood Implementation Oversight Committee; Snoqualmie Indian Tribe; Snoqualmie Valley Preservation Alliance; Snoqualmie Watershed Forum

EQUITY OBJECTIVES:

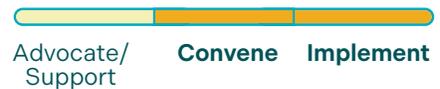
Alignment and partnership; reduce disproportionate impacts; relationship building

STRATEGIC CONNECTIONS:

King County Comprehensive Plan; Snoqualmie Fish, Farm, Flood Recommendations

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:

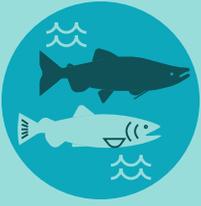


FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 40. MAP CURRENT AND PROJECTED WILDLIFE HABITAT CONNECTIVITY NEEDS FOR VULNERABLE SPECIES

Accounting for climate change in wildlife habitat conservation can help ensure that local species have access to suitable habitat as climate changes, reducing the potential for local extinctions. Key to this work is understanding what and where those projected habitat needs are and how species can access that habitat. King County will work with partners to create a new wildlife connectivity map that accounts for climate change-related habitat connectivity needs for vulnerable species and habitats in the county. The work will utilize connectivity mapping data generated by the Washington Department of Fish and Wildlife to determine potential alignments and set priority areas. Results from the mapping project will support regional efforts related to open space management, land acquisition, and habitat restoration, with the goal of providing the space needed for wildlife species to move seasonally and/or shift ranges to adapt to climate change.

LEAD AGENCIES:

DNRP-WLRD

PARTNER AGENCIES:

DNRP-DO

EXTERNAL PARTNERS:

Conservation Northwest; Forterra; WDFW

EQUITY OBJECTIVES:

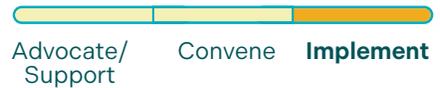
Reduce disproportionate impacts; relationship building; share benefits

STRATEGIC CONNECTIONS:

Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan; Land Conservation Initiative

EARLY ACTION

KING COUNTY ROLE:



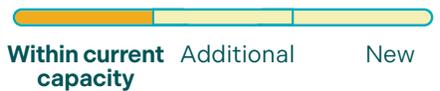
ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





CLIMATE-READY CAPITAL PROJECTS

Climate change affects many decisions regarding where and how King County builds public infrastructure such as roads, bridges, utilities, and buildings. Many of these assets will be in place for 50 years or more. The ability of those assets to provide reliable public services over that lifespan in a changing climate is contingent on the decisions we make today when planning and designing these facilities.

The goal of incorporating climate change into capital planning is to ensure that climate impacts are being accounted for in decision making and that adjustments are made as needed based on anticipated impacts. This process can help reduce existing vulnerabilities, avoid building—both literally and figuratively—new vulnerabilities into a system, and ensure that program goals and objectives can still be met in a changing climate. In most cases, the adjustments we are making today will provide benefit in the near term by reducing the potential for damage or harm related to today's extreme events.



WHAT'S AT STAKE

King County owns, maintains, and operates billions of dollars' worth of physical infrastructure necessary to support thriving communities, a robust economy, and a healthy environment. Failing to account for climate impacts as part of the capital planning process can result in costly damage, disrupted services, reduced asset life and/or performance, increased risks to public health, difficulty meeting environmental goals or regulatory requirements, reputational damage, and higher organizational insurance rates. People living with low incomes and BIPOC communities are disproportionately affected by these impacts.

A BETTER OUTCOME

King County envisions a future where it can continue providing reliable public services with little to no disruption from extreme weather events. Climate change impacts are systematically factored into capital planning processes and agencies are investing in approaches that build long-term resilience into projects. King County communities are healthier, the economy is thriving, and our environment is cleaner as a result of these investments.

WHAT WE'VE DONE TO GET HERE

- Constructed the [Georgetown Wet Weather Treatment Station](#) to account for two feet of sea level rise.
- Completed climate change vulnerability assessments for different impacts (e.g., extreme precipitation, sea level rise) and programmatic areas to better understand how climate change affects operations and infrastructure.
- Initiated cross-departmental discussions on how to adapt capital planning processes to account for climate impacts.
- Incorporated evaluation of projected changes in heavy rain into the design of new culverts, helping to ensure that salmon can access high quality salmon habitat in a changing climate.

WHAT WE WILL DO NEXT

In addition to climate resilient capital planning actions in other focus areas, King County will:

- **Prep 41.** Integrate climate preparedness into shared capital project planning processes
- **Prep 42.** Plan for wastewater climate adaptation investments
- **Prep 43.** Implement measures to minimize climate impacts in wastewater capital projects
- **Prep 44.** Build climate resilience into Metro infrastructure improvements
- **Prep 45.** Increase King County technical capacity for climate-informed decision making
- **Prep 46.** Evaluate how groundwater levels in the Lower Duwamish River Valley respond to climate change
- **Prep 47.** Inform climate resilient infrastructure investments at the King County International Airport



PREP 41. INTEGRATE CLIMATE PREPAREDNESS INTO SHARED CAPITAL PROJECT PLANNING PROCESSES

King County staff have identified the need and opportunity to better integrate climate preparedness into capital projects and programs, to increase accountability for this work, and to do so in a coordinated way across County agencies. King County will identify and implement changes in capital planning and budgeting processes shared across agencies to support early inclusion of climate change in those processes. This includes looking at steps related to project planning, chartering, predesign, and budgeting across and within agency capital planning processes and through the cross-departmental Capital Projects Management Working Group.

LEAD AGENCIES:

ECO

PARTNER AGENCIES:

DES; DLS; DNRP; Metro-Capital; PSB

EQUITY OBJECTIVES:

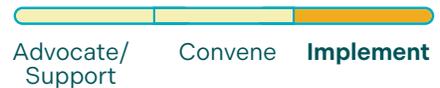
Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

King County Comprehensive Plan; Metro Climate Change Asset Vulnerability Study; Solid Waste Climate Change Vulnerability Assessment

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 42. PLAN FOR WASTEWATER CLIMATE ADAPTATION INVESTMENTS

King County provides regional wastewater services for approximately 1.9 million people, including most urban areas of King County and parts of south Snohomish County and northeast Pierce County. Many of the wastewater system’s fixed assets (e.g., pipes, regulator stations, pump stations, outfalls) are located within climate vulnerable areas. Ensuring that wastewater assets can continue to collect and treat regional wastewater in a changing climate is critical to protecting public health and water quality.

King County will develop a Wastewater Climate Adaptation Investment Plan identifying program, project, and policy investments needed to account for climate impacts in the County’s regional wastewater system over time. The plan will allow King County to strategically scale up climate adaptation work by taking a holistic look at the entire regional wastewater system to characterize potential impacts and risks more fully, and describe solutions to minimizing those risks. The investment plan will provide a cohesive approach to preparing for and adapting to climate change at each step of project planning and delivery by integrating existing activities with new recommendations. The plan will also support communications around funding and resourcing needs for specific work.

LEAD AGENCIES:

DNRP-WTD

PARTNER AGENCIES:

ECO

EXTERNAL PARTNERS:

Cities and sewer districts with local pipes connected to King County’s regional wastewater system

EQUITY OBJECTIVES:

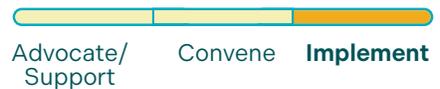
Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

Clean Water Healthy Habitat Strategic Plan

EARLY ACTION

KING COUNTY ROLE:



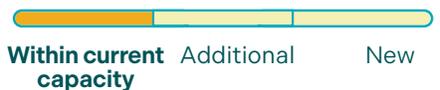
ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 43. IMPLEMENT MEASURES TO MINIMIZE CLIMATE IMPACTS IN WASTEWATER CAPITAL PROJECTS

Updating wastewater infrastructure to be resilient to the impacts of climate change is critical to protecting public health and water quality in Puget Sound, benefiting those who live, work, and play in the region. King County will integrate measures to avoid or minimize climate change impacts into the design and construction of up to two large wastewater infrastructure projects. Project teams for large wastewater projects will identify climate vulnerabilities and adapt projects to account for climate change based on the facilities' useful life, combined sewer overflow facility sizing guidance, engineering best practices, and other best available science. Design considerations include changes in precipitation, sea level rise and its associated groundwater impacts, and/or the need to adapt infrastructure over time. Large projects that may be included within the scope of this action include the Elliott West Wet Weather Treatment Station Upgrade, the Mouth of the Duwamish Wet Weather Facilities, and the Chelan Wet Weather Storage Tank.

LEAD AGENCIES:

DNRP-WTD

EXTERNAL PARTNERS:

Ecology; City of Seattle

EQUITY OBJECTIVES:

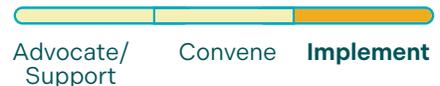
Reduce disproportional impacts

STRATEGIC CONNECTIONS:

Clean Water Healthy Habitat Strategic Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 44. BUILD CLIMATE RESILIENCE INTO METRO INFRASTRUCTURE IMPROVEMENTS

Investing in capital improvements to piers and terminals that account for sea level rise and extreme weather events will protect both internal and external customers from harsh weather conditions while ensuring the resilience of marine infrastructure. King County will build climate resilience into planned infrastructure improvements for Metro-owned piers, docks, and terminals supporting passenger-only ferry service to West Seattle and Vashon Island. This work will focus on mitigating the impacts of extreme weather events and rising sea levels, including upgrading existing pier infrastructure to include shaded areas (where applicable and feasible) to protect both internal and external customers from harsh weather conditions.

LEAD AGENCIES:

Metro-Capital, Marine

EXTERNAL PARTNERS:

City of Seattle; Kitsap Transit; Washington State Ferries

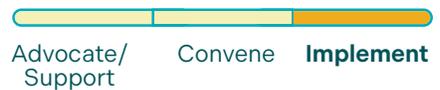
EQUITY OBJECTIVES:

Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

King County Metro Climate Change Asset Vulnerability Study

KING COUNTY ROLE:



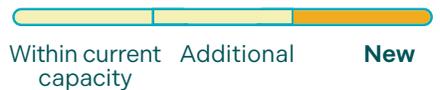
ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 45. INCREASE KING COUNTY TECHNICAL CAPACITY FOR CLIMATE-INFORMED DECISION MAKING

As King County agencies look to systematically integrate climate change into decision making, the need for in-house technical expertise on climate to guide those decisions is growing, particularly in the context of hydrologic impacts. King County will form a new Science Section Climate Change Unit to assess and predict hydrologic impacts of climate change and inform County agency work on implementing and evaluating effective action on climate change. The unit, consisting primarily of existing staff, will provide in-house technical expertise related to climate science, scenario development, watershed modeling, and hydrologic monitoring and evaluation. Planned technical services initially include measuring and modeling the impacts of climate change on King County water resources and stormwater runoff, watershed modeling to inform and evaluate preparedness actions, technical assessments, data analysis in support of integrating climate change into capital planning, and finding optimal ways manage and protect water resources at watershed scales. Opportunities to provide additional types of technical support will also be evaluated and developed over time as appropriate.

LEAD AGENCIES:

DNRP-WLRD Science Section

EXTERNAL PARTNERS:

UW Climate Impacts Group

EQUITY OBJECTIVES:

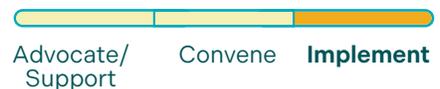
Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

2024 King County Flood Management Plan; Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan; Salmon Recovery Plans

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 46. EVALUATE HOW GROUNDWATER LEVELS IN THE LOWER DUWAMISH RIVER VALLEY RESPOND TO CLIMATE CHANGE

King County has significant infrastructure in the former floodplain of the lower Duwamish River Valley. Sea level rise and projected increases in rainfall are likely to lead to a higher groundwater table in the Valley, putting this infrastructure at risk of groundwater inundation. The ability to accurately assess groundwater inundation risks to County infrastructure is insufficient, however, due to key knowledge gaps regarding how much and how quickly groundwater levels are impacted by tidal events, river flows, and intense rainfall.

King County will continue to partner with U.S. Geological Survey and the King County International Airport to evaluate how groundwater levels in the lower Duwamish River Valley respond to sea level rise, flooding, and tidal fluctuations. The phased study, started in 2024, will improve understanding of how much groundwater levels in the Valley are impacted by tidal events, river flows, and intense rainfall. The work will create a groundwater framework of existing conditions, laying the foundation for additional work that studies projected changes in groundwater levels and groundwater inundation risk assessments for King County infrastructure in the Duwamish Valley.

LEAD AGENCIES:

DNRP-WTD

PARTNER AGENCIES:

DES-KCIA; ECO

EXTERNAL PARTNERS:

U.S. Geological Survey

EQUITY OBJECTIVES:

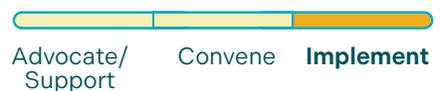
Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

Clean Water Healthy Habitat Strategic Plan; King County Comprehensive Plan; King County Shoreline Master Program

EARLY ACTION

KING COUNTY ROLE:



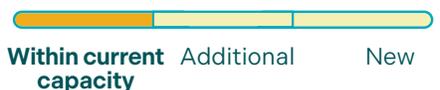
ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 47. INFORM CLIMATE RESILIENT INFRASTRUCTURE INVESTMENTS AT THE KING COUNTY INTERNATIONAL AIRPORT

More information on how a changing climate will impact King County International Airport (KCIA) facilities and operations is needed to support planning for and investment in appropriate climate adaptation measures. King County will conduct three studies related to managing the impacts of extreme precipitation/flooding, extreme heat, and electric grid resilience to guide capital planning investments and preparedness at KCIA. The Stormwater Resilience Study will inform future capital improvements to Basin 3, which currently lacks stormwater management infrastructure. The Extreme Heat Study will investigate how hotter summer temperatures may affect airport infrastructure and operations, identify potential gaps, and implement data-driven capital investments. Finally, the Electrical Resilience Study will evaluate grid reliability at the airport, review current gaps, and determine technologies that can be implemented for safe and secure operation and improved facilities. This includes investigating underground electrical infrastructure and its vulnerability to changing groundwater levels.

LEAD AGENCIES:

DES-KCIA

PARTNER AGENCIES:

ECO

EXTERNAL PARTNERS:

Puget Sound Energy; Seattle City Light

EQUITY OBJECTIVES:

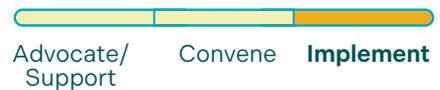
Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

KCIA Capital Improvement Program

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:



FUNDING NEED:

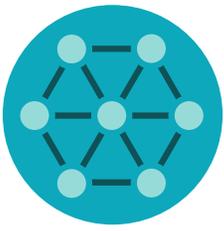


FUNDING DEPENDENCIES:





King County's Georgetown Wet Weather Treatment Station, located in Seattle's Georgetown neighborhood. The station was designed to account for two feet of sea level rise.



REGIONAL CAPACITY ACROSS CLIMATE HAZARDS

Many climate impacts cross jurisdictional boundaries and the resources to prepare and build resilience vary between communities. As both a local government and regional service provider, King County is uniquely positioned to work across jurisdictional and organizational boundaries to

tackle the complex challenges that climate change brings. Building capacity for local action and regional collaboration on climate preparedness can help to leverage limited resources, reduce duplication of effort, facilitate institutional learning, and improve action outcomes.

WHAT'S AT STAKE

Remaining siloed in our work can lead to inefficient use of resources, disjointed planning, missed opportunities, sub-optimal outcomes, and a perpetuation of inequities that disproportionately affect communities living with low incomes and BIPOC communities.

A BETTER OUTCOME

We envision a future where climate preparedness efforts across King County and the Puget Sound Basin have been strengthened through strong internal and external collaborations and partnerships. We are seeing outcomes where the sum of the whole is greater than the parts, and where a person's ability to be safe and thrive in a changing climate is not dependent on whether they happen to live in a community that has the resources to prepare for climate change.

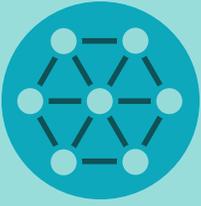
WHAT WE'VE DONE TO GET HERE

- Launched, co-chaired, and secured \$2 million in grant funding to grow the work of the Puget Sound Climate Preparedness Collaborative, a network of local and county governments, tribes, regional agencies, and other organizations in the Puget Sound Basin working together to build community, economic, and environmental resilience to the impacts of climate change.
- Expanded the focus of the King County-Cities Climate Collaboration to include climate preparedness, creating additional opportunities to coordinate local jurisdictional work on climate change.
- Integrated climate change into King County hazard mitigation planning
- Developed a climate change health impacts surveillance system to track the impact of climate change on health and inform future actions.

WHAT WE WILL DO NEXT

In addition to regional capacity building actions specific to other focus areas, King County will:

- **Prep 48.** Expand Puget Sound Climate Preparedness Collaborative support for local and tribal climate preparedness efforts
- **Prep 49.** Seek funding to increase rural community resilience
- **Prep 50.** Provide hazard mitigation grant support for King County departments and local communities
- **Prep 51.** Maintain and expand climate and health data to guide programs and policies
- **Prep 52.** Build climate change into Public Health communicable disease tracking



PREP 48. EXPAND PUGET SOUND CLIMATE PREPAREDNESS COLLABORATIVE SUPPORT FOR LOCAL AND TRIBAL CLIMATE PREPAREDNESS EFFORTS

The Puget Sound Climate Preparedness Collaborative (the Collaborative) serves as a leader and convener of local climate adaptation professionals and facilitates collaboration, learning, and collective action on climate preparedness in the region. In its role as co-chair and organizational host of the Collaborative, King County will expand the Collaborative’s work to reach more communities and support more needs. Planned activities include developing a broader portfolio of engagement activities and technical resources, providing technical support for climate action in smaller and less-resourced jurisdictions and tribes in the Puget Sound Basin, partnering with Coast Salish Tribes to develop and host a Tribal Partnerships Learning Series, partnering with frontline communities to develop and host a Puget Sound Climate Equity Learning Series, and informing and supporting stronger regional alignment in climate preparedness goals and outcomes.

LEAD AGENCIES:

ECO

EXTERNAL PARTNERS:

Point-No-Point Treaty Council; Puget Sound jurisdictions; state agencies; the Tulalip Tribes

EQUITY OBJECTIVES:

Accessibility; alignment and partnership; capacity building; engagement; reduce disproportionate impacts; relationship building

STRATEGIC CONNECTIONS:

King County Comprehensive Plan; NOAA Climate Resilience Regional Challenge grant

EARLY ACTION

KING COUNTY ROLE:



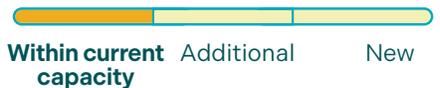
ACTION TYPE:



IMPLEMENTATION FEASIBILITY:

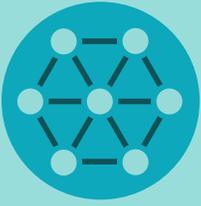


FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 49.

SEEK FUNDING TO INCREASE RURAL COMMUNITY RESILIENCE

Rural areas are more likely to become isolated during extreme weather events or other disasters due to limited access and distance from services. These areas often face longer recovery times as well. King County will seek grant funding to enhance community resilience in rural areas to climate-related events such as extreme weather, wildfire, wildfire smoke, and other emergencies. Initial efforts will be focused on Skykomish and Vashon-Maury Island. Work on this action will include identifying existing structures that can serve as resilience hubs in Skykomish and on Vashon-Maury Island; providing heating, ventilation, and air conditioning upgrades and seismic retrofits to identified structures; and creating wildfire defensible spaces. Additional activities include hosting disaster skills training workshops, helping to equip hubs with emergency supplies and resources, and creating and maintaining partnerships with local organizations.

LEAD AGENCIES:

DES-OEM

PARTNER AGENCIES:

ECO; DLS; PHSKC-DO

EXTERNAL PARTNERS:

Town of Skykomish; Vashon Island; other interested communities

EQUITY OBJECTIVES:

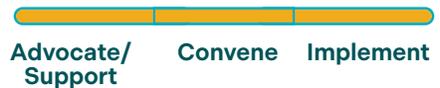
Alignment and partnership; engagement; reduce disparate impacts; relationship building

STRATEGIC CONNECTIONS:

King County Comprehensive Plan; King County Hazard Mitigation Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:

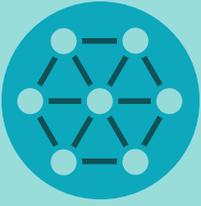


FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 50. PROVIDE HAZARD MITIGATION GRANT SUPPORT FOR KING COUNTY DEPARTMENTS AND LOCAL COMMUNITIES

Climate change is increasing the risks associated with many natural hazards, including flooding, wildfire, landslides, and severe weather events. Federal and state hazard mitigation grants provide important opportunities to fund the preparedness actions needed to prevent or reduce these risks. Securing these highly competitive grants can be difficult for local governments and King County departments, however. King County will assist local governments and County departments with Hazard Mitigation Assistance (HMA) grant applications, providing guidance and support throughout the application process. This includes trainings, webinars, and guidance for King County departments and eligible partners on how to create competitive HMA grants.

LEAD AGENCIES:

DES-OEM

PARTNER AGENCIES:

ECO

EXTERNAL PARTNERS:

FEMA; King County jurisdictions; WEMD

EQUITY OBJECTIVES:

Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

King County Hazard Mitigation Plan

EARLY ACTION

KING COUNTY ROLE:



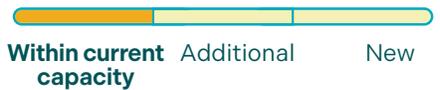
ACTION TYPE:



IMPLEMENTATION FEASIBILITY:

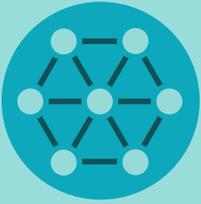


FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 51. MAINTAIN AND EXPAND CLIMATE AND HEALTH DATA TO GUIDE PROGRAMS AND POLICIES

Monitoring the occurrence of climate events and related health outcomes of concern is key to recognizing, responding to, and planning for climate change impacts on community health and well-being, especially for those at higher risk. As part of the 2020 SCAP, King County implemented a climate change and health data dashboard of 12 key indicators. King County will provide routine updates and expand data and staff resources to support more comprehensive reporting on these key indicators of climate exposures and health impacts. The enhanced data resources can be used to inform countywide programs and policies, as well as inform community outreach and education about the risks of climate change to health and actions that can be taken to reduce health risks.

LEAD AGENCIES:

PHSKC—EHS

EXTERNAL PARTNERS:

City of Seattle; community partners; National Syndromic Surveillance Program; Tacoma and Pierce County Health Department; WDOH

EQUITY OBJECTIVES:

Reduce disproportionate impacts

STRATEGIC CONNECTIONS:

King County Comprehensive Plan; King County ERSJ Strategic Plan; Public Health—Seattle & King County 2024–2029 Strategic Plan

EARLY ACTION

KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:

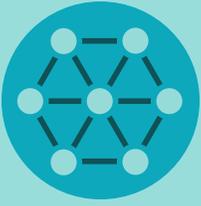


FUNDING NEED:



FUNDING DEPENDENCIES:





PREP 52. BUILD CLIMATE CHANGE INTO PUBLIC HEALTH COMMUNICABLE DISEASE TRACKING

Climate change is impacting transmission of infections leading to frequent, larger and more complex outbreaks in our communities. People who have been historically and disproportionately impacted by communicable disease spread, including those who experience barriers to healthcare access, are likely to be at greater risk for adverse infection related health outcomes brought on by climate change. King County will evaluate and update its communicable disease surveillance approaches and external communications incorporating the One Health framework which acknowledges the health impacts related to the interconnectedness between humans, animals, and the environment. In a One Health approach, climate and environmental data (e.g. temperature, precipitation, humidity, vector abundance, etc.) are integrated into communicable disease surveillance systems to understand and monitor the relationships between climate factors and local/regional disease trends; enhance capacity for early detection of emerging disease threats; increase public and healthcare provider awareness through outreach and education; and implement prevention and control measures to mitigate risk, focusing on vulnerable populations. The expanded surveillance will involve enhancing existing and developing new data systems to incorporate additional data and sample collection, testing, analysis, reporting, and interpretation. Updated communications will support partner agencies to expand adoption and dissemination of the One Health framework, aligning with state and national efforts.

LEAD AGENCIES:

PHSKC-Prev

PARTNER AGENCIES:

DNRP-WTD

EXTERNAL PARTNERS:

CDC; UW; WDOH; WSU

EQUITY OBJECTIVES:

Alignment and partnership; capacity building; engagement

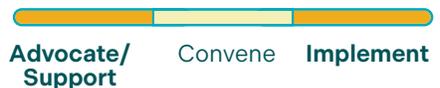
STRATEGIC CONNECTIONS:

WDOH

EARLY ACTION



KING COUNTY ROLE:



ACTION TYPE:



IMPLEMENTATION FEASIBILITY:

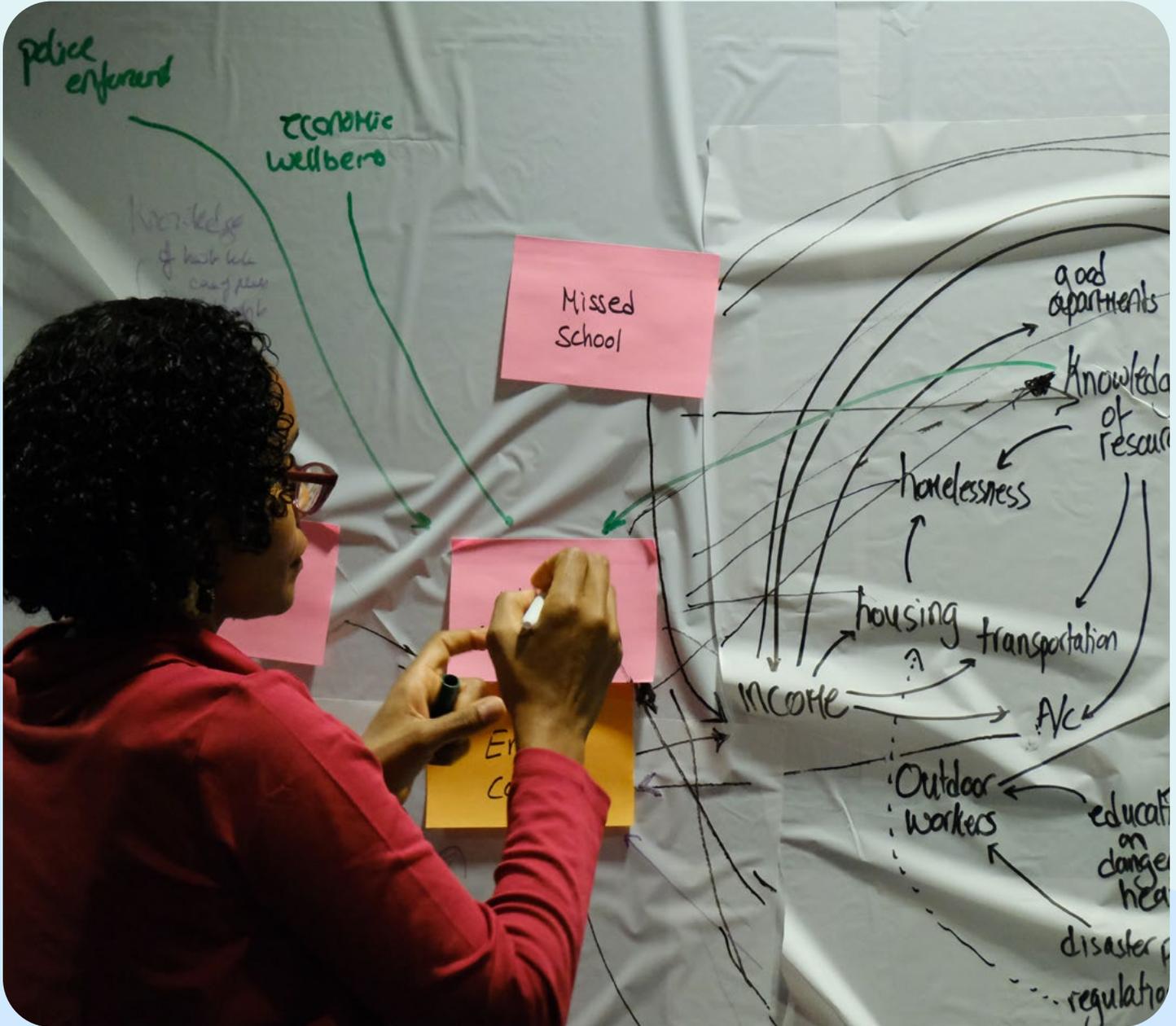


FUNDING NEED:



FUNDING DEPENDENCIES:





Dr. Saria Hassan, faculty from the Emory University School of Medicine, partnered with Public Health-Seattle & King County to facilitate a series of community modeling workshops in the city of Auburn to better understand the local impacts of extreme heat on health and other key factors.



PERFORMANCE MEASURES

Performance measurement is a key component of King County’s action on climate change. Progress on SCAP actions, goals, and targets are regularly reported to the King County Council and the public. This process provides transparency by showing if and how SCAP actions are delivering on intended outcomes. Performance measurement can help identify when it is time to set new goals and targets. Performance measurement can also identify barriers that limit progress. The knowledge gained from performance measurement helps the County know how to move forward with its work to achieve SCAP goals.

The 2025 SCAP includes an updated climate preparedness performance measurement framework based on the section’s new focus area topics. Each focus area includes a limited number of performance measures, using existing measures where possible, to align with related strategic priorities such as the King County Extreme Heat Mitigation Strategy, King County Wildfire Risk Reduction Strategy, Clean Water Healthy Habitat Strategic Plan, 2024 King County Flood Management Plan, King County Hazard Mitigation Plan, King County Comprehensive Plan, Land Conservation Initiative, and 2024 Public Health—Seattle & King County Strategic Plan. This approach minimizes the need for additional data collection and reporting.

The table below organizes performance measures by **Focus Areas**, with each measure detailing objectives, **2030 Targets**, and **Current Status**. The 2030 Target and Current Status data allow for a quick gap analysis to show what the County has planned to achieve, and how much progress has been made. Together, these metrics help the County ensure that climate actions remain data-driven, equitable, and aligned with regional and state climate policies.

Section	Performance Measure	Target
 <p data-bbox="159 352 332 415">Sea level rise preparedness</p>	<p data-bbox="418 184 933 210">Prep PM 1. Reduce shoreline buildings at risk.</p> <p data-bbox="418 216 1182 367">Reduce the number of shoreline buildings considered at risk in the coastal flood hazard zone of Vashon and Maury Island by 12 buildings (net) between 2025-2030 and every five years thereafter and 70 buildings (net) by 2050 (a 10 percent net reduction), relative to a 2010 baseline of 700 buildings.</p>	<p data-bbox="1230 216 1477 304">Current Status: net increase of 6 buildings (2010-2023)</p> <p data-bbox="1230 321 1485 378">2030 Target: 12 buildings (net) removed</p>
 <p data-bbox="159 739 332 802">Sea level rise preparedness</p>	<p data-bbox="418 478 941 504">Prep PM 2. Improve natural shoreline function.</p> <p data-bbox="418 510 1161 632">Protect, restore, and improve the function of natural shorelines in ways that allow marine shoreline habitats to grow and migrate with sea level rise. Relative to a 2018 baseline of 69 miles of marine shoreline in King County with hard armoring, work with partners to:</p> <ul data-bbox="430 651 1169 850" style="list-style-type: none"> • Remove 1.2-miles (net) of marine shoreline hard armoring in King County between 2025-2030 and every five years thereafter, and remove 7-miles (net) by 2050 (a 10 percent net reduction) • Where armoring is necessary, 50 percent of new or replacement armoring installed between 2025-2030 and every five years thereafter is soft armoring 	<p data-bbox="1230 455 1502 577">Current Status: net increase of 364 feet in shoreline armoring (2013-2018);</p> <p data-bbox="1230 594 1502 716">14 percent of new and replacement bulkheads were soft armoring (2013 and 2018)</p> <p data-bbox="1230 732 1477 917">2030 Target: 1.2-mile net reduction in hard armoring; 50 percent of new or replacement armoring is soft armoring</p>
 <p data-bbox="159 1218 332 1281">River flood management</p>	<p data-bbox="418 959 844 984">Prep PM 3. Connect river floodplains.</p> <p data-bbox="418 991 1153 1176">Work with partners to support healthy floodplain ecosystems and reduce flood risk by connecting and restoring fully functional river floodplains in King County. Relative to a 2020 baseline of 21,320 floodplain acres identified as partially functional (12,165 acres) or not functional (9,155 acres), increase the number of fully functional floodplain acres by:</p> <ul data-bbox="430 1192 1079 1291" style="list-style-type: none"> • 500 acres (net) between 2025-2030 and every five years thereafter, and • 3,000 acres by 2050 <p data-bbox="418 1308 1128 1365">Fully functional river floodplains are those with native vegetation where the river is free to inundate and migrate.</p>	<p data-bbox="1230 1110 1453 1167">Current Status: 203 acres (2020-2025)</p> <p data-bbox="1230 1184 1494 1211">2030 Target: 500 acres</p>
 <p data-bbox="159 1684 332 1747">River flood management</p>	<p data-bbox="418 1407 1023 1432">Prep PM 4. Reduce river floodplain properties at risk.</p> <p data-bbox="418 1438 1177 1528">Work with partners to reduce the number of floodplain properties at risk to river flooding and channel migration through home elevations and buyouts by:</p> <ul data-bbox="430 1545 1153 1711" style="list-style-type: none"> • 18 Repetitive Loss or other high-risk Repetitive Loss Area properties between 2025-2030 and every five years thereafter, and • 88 Repetitive Loss or other high-risk Repetitive Loss Area properties by 2050 <p data-bbox="418 1728 1182 1848">relative to a 2023 baseline of 166 Repetitive and Severe Repetitive Loss properties in King County and an additional 396 properties in King County Repetitive Loss Areas that have been identified for flood risk mitigation (562 properties total).</p>	<p data-bbox="1230 1482 1477 1638">Current Status: Risk mitigated for 78 of 166 Repetitive and Severe Repetitive Loss properties (2022)</p> <p data-bbox="1230 1654 1502 1776">2030 Target: 18 Repetitive Loss or other high-risk Repetitive Loss Area properties</p>

Section	Performance Measure	Target
 <p data-bbox="162 367 329 493">Extreme precipitation & drought mitigation</p>	<p data-bbox="430 220 1015 247">Prep PM 5. Decrease stormwater runoff from roads.</p> <p data-bbox="430 254 1136 373">Work with partners to protect salmon from toxic roadway runoff and reduce stormwater flooding. Relative to 2025, increase treatment of stormwater runoff from roads in King County, including incorporated areas, by:</p> <ul data-bbox="441 394 1161 464" style="list-style-type: none"> <li data-bbox="441 394 1161 422">• 5 miles of roadway by 2030 and every five years thereafter, and <li data-bbox="441 436 803 464">• 100 miles of roadway by 2050. 	<p data-bbox="1242 289 1469 346">Current Status: not available at this time</p> <p data-bbox="1242 367 1469 394">2030 Target: 5 miles</p>
 <p data-bbox="162 745 329 871">Extreme precipitation & drought mitigation</p>	<p data-bbox="430 556 885 583">Prep PM 6. Increase stormwater control.</p> <p data-bbox="430 590 1169 709">Work with partners to clean and control stormwater runoff in King County through a mix of Green Stormwater Infrastructure (GSI), new or retrofitted detention ponds, and regional facilities including stormwater parks. Relative to 2025:</p> <ul data-bbox="441 730 1161 892" style="list-style-type: none"> <li data-bbox="441 730 1161 787">• Provide additional flow control to 500 acres in King County by 2030 and 5,000 acres by 2050, and <li data-bbox="441 802 1161 892">• Initiate development and/or build at least three stormwater parks in King County by 2030 and construct a total of 30 stormwater parks by 2050. 	<p data-bbox="1242 577 1485 697">Current Status: 171.5 acres of flow control; 4 stormwater parks in King County</p> <p data-bbox="1242 718 1485 871">2030 Target: 500 acres of additional flow control; 3 or more stormwater parks built or in development</p>
 <p data-bbox="162 1127 329 1186">Extreme heat adaptation</p>	<p data-bbox="430 1008 1088 1035">Prep PM 7. Increase community-trusted cooling locations.</p> <p data-bbox="430 1041 1161 1131">Work with communities to identify and designate five community-trusted cooling locations by 2030 for use during extreme heat events.</p>	<p data-bbox="1242 1035 1437 1062">Current Status: 0</p> <p data-bbox="1242 1077 1404 1104">2030 Target: 5</p>
 <p data-bbox="162 1421 329 1480">Extreme heat adaptation</p>	<p data-bbox="430 1266 982 1293">Prep PM 8. Provide community trainings on heat.</p> <p data-bbox="430 1299 1088 1419">Provide heat preparedness trainings or related heat safety learning opportunities to at least 500 frontline community members, community-based organization staff, and service provider staff by 2030.</p>	<p data-bbox="1242 1314 1437 1341">Current Status: 0</p> <p data-bbox="1242 1356 1437 1413">2030 Target: 500 people</p>
 <p data-bbox="138 1715 349 1841">Forest resilience & urban tree canopy expansion</p>	<p data-bbox="430 1631 933 1659">Prep PM 9/GHG 16. Increase acres restored.</p> <p data-bbox="430 1665 1128 1755">Relative to 2020, restore 2,000 acres of forests and natural areas on Parks-managed properties to improve climate change resiliency and enhance potential for carbon sequestration.</p>	<p data-bbox="1242 1623 1485 1680">Current Status: 1,333 acres (2024)</p> <p data-bbox="1242 1701 1469 1757">2030 Target: 2,000 acres</p>

Section	Performance Measure	Target
 <p>Forest resilience & urban tree canopy expansion</p>	<p>Prep PM 10. Implement forest stewardship plans. Relative to 2025:</p> <ul style="list-style-type: none"> • At least 200 landowners are participating in forest stewardship technical training annually by 2030, and • At least 90 percent of participants are implementing actions included in forest stewardship plans 1-, 3- and 8-years post training. 	<p>Current Status: 166 landowners; 1-year: 86 percent, 3-year: 80 percent; 8-year: 90 percent</p> <p>2030 Target: 200 landowners annually; 90 percent (1,3,8 years)</p>
 <p>Forest resilience & urban tree canopy expansion</p>	<p>Prep PM 11. Expand urban tree canopy. Complete at least 10 urban canopy projects that plant at least 1,000 trees between 2025 and 2030 to enhance and increase tree cover in low-canopy areas and heat islands within urban unincorporated King County.</p>	<p>Current Status: 1 project, 162 trees</p> <p>2030 Target: 10 projects; 1,000 trees</p>
 <p>Wildfire risk reduction</p>	<p>Prep PM 12. Support residential wildfire mitigation. Provide trainings, technical assistance, or related wildfire risk reduction learning opportunities to at least 500 King County residents by 2030.</p>	<p>Current Status: 100 (2024)</p> <p>2030 Target: 500</p>
 <p>Wildfire risk reduction</p>	<p>Prep PM 13. Help neighborhoods be prepared. Work with partners to grow and maintain the number of active neighborhood preparedness groups in unincorporated King County. By 2030, 10 neighborhood groups are actively engaged in wildfire risk reduction.</p>	<p>Current Status: 8</p> <p>2030 Target: 10</p>
 <p>Wildfire risk reduction</p>	<p>Prep PM 14. Wildfire plans and projects are being implemented. Community wildfire protection plans are in place and projects are being implemented. By 2030:</p> <ul style="list-style-type: none"> • 100 percent of wildland-urban interface jurisdictions (12) have or are covered by a current wildfire mitigation plan. • At least 50 percent of priority King County Community Wildfire Protection Plan actions are being implemented. 	<p>Current Status: not available</p> <p>2030 Target: 100 percent (12) jurisdictions; 50 percent of priority CWPP actions</p>

Section	Performance Measure	Target
 <p>Salmon recovery & habitat connectivity</p>	<p>Prep PM 15. Restore habitat access. Work with partners to restore access to salmon and kokanee habitat in King County. Relative to 2020:</p> <ul style="list-style-type: none"> • Access to at least 20 percent of salmon and kokanee habitat blocked by King County-owned barriers has been restored by 2030. • Access to 2/3rds (~67 percent) of King County’s salmon habitat and all the kokanee habitat has been restored by 2050. 	<p>Current Status: 6.2 percent (2025) 2030 Target: 20 percent</p>
 <p>Salmon recovery & habitat connectivity</p>	<p>Prep PM 16. Increase salmon survival. Salmon populations are recovering throughout all major watersheds. Relative to 2020:</p> <ul style="list-style-type: none"> • Juvenile salmon survival numbers are increasing by 2030 • Juvenile salmonid survival is approaching historic healthy levels by 2050 	<p>Current Status: declining overall (varies by watershed) 2030 Target: Increasing</p>
 <p>Climate-ready capital projects</p>	<p>Prep PM 17. Adapt capital planning and projects. Integrate climate change projections into planning for capital infrastructure projects. Relative to 2025:</p> <ul style="list-style-type: none"> • The number capital planning projects designed and built by King County that have accounted for climate change is increasing over time, and • By 2035, 100 percent of projects are accounting for climate change impacts, as appropriate. 	<p>Current Status: not available 2030 Target: increasing</p>
 <p>Regional capacity across climate hazards</p>	<p>Prep PM 18. Empower collaboration. Pursue or otherwise help secure at least \$500,000 in total grant funding by 2030, relative to 2025, for projects that support climate preparedness partnerships in King County and/or the Puget Sound region.</p>	<p>Current Status: \$10,000 2030 Target: \$500,000</p>



Coastal flooding of Quartermaster Drive on Vashon Island during the December 27, 2022 King Tide.



Flooding of the Snoqualmie River Valley, December 2010.

ENDNOTES

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- 11 Philip et al, "Rapid Attribution Analysis of the Extraordinary Heat Wave on the Pacific Coast of the US and Canada in June 2021," Earth System Dynamics, 13, 1689–1713, 2022. [\[LINK\]](#).
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- 15 King County Department of Natural Resources & Parks, "King County Flood Management Plan," 2024. [\[LINK\]](#).
- 16 King County Department of Natural Resources & Parks, "King County Flood Management Plan," 2024. [\[LINK\]](#).
- 17 King County Department of Natural Resources & Parks, "King County Flood Management Plan," 2024. [\[LINK\]](#).
- 18 Raymond & Rogers, "Climate Mapping for a Resilient Washington," Climate Impacts Group, University of Washington, Seattle, and Research Data & Computing Services, University of Idaho, Moscow, 2022. [\[LINK\]](#).
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- 20 Philip et al, "Rapid Attribution Analysis of the Extraordinary Heatwave on the Pacific Coast of the US and Canada June 2021," Earth Systems Change, 13(4): 1689–1713, 2022. [\[LINK\]](#).
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- 22 Isaksen et al, "Increased Hospital Admissions Associated with Extreme-Heat Exposure in King County, Washington, 1990–2010," Reviews on Environmental Health, 30(1), 51–64, 2015. [\[LINK\]](#).
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